## **Regulation impact statement**

# Harmonisation of standards for motor vehicles, via the "1998 Global Agreement"

## Part 1, Problem identification

Most countries (including Australia) maintain national standards for motor vehicles. Standards make vehicles more safe to use – for occupants, for other road users and for pedestrians. Standards are generally recognised as helping to reduce road deaths. Standards also control the emission levels of vehicles – a major contributor towards cleaner air. Reductions in pollutants provide welfare and health benefits (for example, by reducing respiratory, heart and carcinogenic disease). They also help to achieve wider environmental outcomes, such as reducing greenhouse gases. Finally, standards make vehicles more secure against theft. Types of vehicle standards are described in detail at Attachment 1.

The problem is that national standards can vary from country to country. Fragmented national standards can impose substantial costs on industry.

In some cases, variations in national standards reflect real-world circumstances. These types of differences are intended; they reflect local conditions and community expectations and are determined after an analysis of the costs and benefits. For example, some European cold weather specifications are simply not applicable to countries with warmer climates.

However, in many cases variations in standards merely set out different ways of achieving the same outcome. Variations may be unintended, arising for historical reasons. For example, many standards were originally devised (during the 1950s and 1960s) on a continent-by-continent basis, in isolation from other standards. These variations may not necessarily make vehicles less polluting or more safe to use. That is, the standards may merely be "different" – not necessarily "better".

In particular, national variations in many cases can be traced back to the nature of the vehicle standards themselves – as "performance-based standards".

## Vehicle standards are performance-based

Vehicle standards are generally performance-based. This approach has been adopted around the world as the most cost-effective way of regulating the automotive industry. This approach is also recommended by leading trade liberalisation authorities, such as the WTO (for further details, please see Part 3, Options).

Performance-based standards focus on outcomes (eg, eliminating hazards, minimising or mitigating risks, using results and/or targets to justify government regulatory action). They also ensure that problems do not "fall between the cracks", as may be the case with highly detailed and specific black letter regulation. Outcomes and targets are easier to communicate to industry, compared to the complexity of vehicle design.

The automotive industry is an intensive user of technological innovation. Vehicle and component manufacturers have the resources to develop flexible approaches. Performance-based standards accommodate this flexibility and promote the rapid adoption of new technologies. Manufacturers are able to incorporate standards – such as safety, security and emission outcomes – at the design and development stage.

A more prescriptive approach may risk eliminating this flexibility and impair the ability of industry to innovate. The "one and only" prescribed method may turn out to be old fashioned and not as effective, compared to the latest developments in automotive technology. A classic case involves emission standards. Initial performance goals were met by focussing on vehicle exhaust systems (eg, by using catalytic converters). However, much more substantial gains have been achieved via technological innovation in other areas – in particular, electronic engine management systems, fuel injection systems, improved transmission efficiency and improved vehicle running efficiency.

As a result, vehicle standards usually specify a minimum level of performance that a vehicle must achieve, rather than mandate specific design features. A safety standard for vehicle braking typically requires a defined level of deceleration under prescribed test conditions, rather than requiring that brakes be of a specified size or be constructed of specified materials. A safety standard for the protection of occupants does not require that airbags of a particular type be fitted; rather it specifies an impact condition and imposes maximum limits on the loadings that can be recorded by instrumented dummies.

The downside to this approach is that a wide variety of tests can potentially be used to measure the same vehicle performance. Standards can be based on different technical specifications, or can describe different ways of conducting the same test. These differences may mean that foreign products may not meet local standards even when the products achieve the same general safety or emission outcomes. At minimum, products may need to be re-tested for each market. Manufacturers may need to conduct multiple tests before a vehicle may be sold across markets. More usually, products need to be re-designed to satisfy the different technical specifications.

For example, significant differences currently apply in occupant protection. Variations extend to topics such as the specification of the crash test barriers, the types of test dummies, the dummy injury criteria, the impact speed, the impact direction and the vehicle seat position.

A further example covers the standards for headlamps. Different countries measure light levels at different locations within the headlamp beam. Comparative studies have shown that there is little or no overall difference in safety outcomes between these various sets of standards. Rather, the standards arose due to historical reasons; they were developed in isolation and became entrenched within their respective countries.

As a general principle, the use of different technical standards for like products can impose barriers to international trade. This effect is magnified within the automotive industry. Even minor differences in technical standards between countries can impose substantial costs on industry. This is because vehicle production, over recent years, has become global in nature.

## The global automotive industry

The automotive industry has become increasingly reliant on global supply chains to manufacture and distribute vehicles to consumers. Manufacturers nowadays perform different facets of their operations (such as research and development, engineering and design, component production and assembly) at different international locations. Advances in information and communication technologies (such as computer assisted design and manufacturing, linked to the internet) have redefined the way firms transact. Tasks are being split up and reconfigured without regard to borders, in different parts of the world. In particular, vehicle production has progressively shifted down the supply chain. Vehicle manufacturers are increasingly relying on suppliers (in many cases, international suppliers) to produce a wide range of vehicle components. Component manufacturers are becoming responsible for the design and product development of pre-assembled modules that are ready for final assembly. Vehicles are constructed from standardised, interchangeable components and platforms; these elements are shared across models. Nowadays, over two-thirds of a new vehicle on average is made up of the unseen parts of other models "under the skin".

This approach can offer cost advantages. Decentralised and shared production facilities can provide economies of scale. Vehicle manufacturers are able to focus on core competencies and pass non-core activities onto specialised third parties. Product development costs can be spread across global volumes.

This approach can also offer significant revenue benefits. Globalisation is an effective way for firms to directly access the world's markets; firms can substantially increase their market reach. The same branded products can be sold around the world. At the same time, product variations and options can be tailored for local market characteristics. This can be achieved by intelligent use of global supply chains. This is important because consumer preferences – in certain key aspects – can vary across markets. Manufacturers don't have to completely re-design the vehicle for the new market. Manufacturers are also able to respond flexibly to changes in consumer preferences. Features (such as engine type and size, interior trim and electronic equipment such as on-board navigation) can be selected from global options, depending on which region the vehicle is being marketed in. For example, the Chrysler 300C sedan when distributed in Australia is fitted with a V6 diesel engine sourced from Mercedes, rather than the original V8 petrol engine used for the U.S. market.

In summary, global access ensures that products are competitive, affordable and attractive to consumers. Firms reap the benefit of having multiple product variations while promoting a global brand.

World trade in automotive products has surged over recent years, increasing by over 110 per cent during the ten years from 1994 to 2004. In each year, trade has outpaced output. During 2004, automotive products accounted for a 9.5 per cent share (by value) in world merchandise trade, with an annual growth rate of 16 per cent.<sup>1</sup>

Two factors are evident. First, trade in automotive products is "two-way". The world's major exporting countries are also significant importers. For example, in 2004 the top 5 exporting countries in automotive products (with 57 per cent of global exports) also accounted for 46 per cent of global imports.<sup>2</sup> Second, a significant part of international trade involves the movement of intermediate goods used in vehicle manufacture.

The Australian community has derived substantial benefits from an increasingly globalised local vehicle industry. Imports have become more important to Australian consumers, and exports have become more important to Australian vehicle and component manufacturers. In fact, Australia's international trade in automotive products is growing faster than world average – over 130 per cent between 1994 and  $2004.^3$ 

For example, GM Holden uses a range of overseas-sourced components for its locally manufactured vehicles. Components are sourced from China, Thailand and India. Overseas content in the current VE model Commodore averages at 33 per cent (by value). Across the industry, overseas content represents 35 per cent of inputs to production.<sup>4</sup> It is expected that internationally-sourced components will continue to be important to Australia's automotive industry. For example, overseas content for vehicles produced in the U.S. is approximately 60 per cent (by value).<sup>5</sup>

Conversely, Australian exports are also substantial. The industry has restructured over the past decade, from a domestically focussed industry to one positioning itself globally.<sup>6</sup> GM Holden recently opened a global R&D centre for the Asia Pacific region. The firm also supplies engineering products (such as whole engines and engine parts) to affiliates in Europe and the U.S. For example, Holden-built engine blocks are used in Alfa Romeo and Saab models. Similarly, Ford Australia performs an engineering and design role for the Asia Pacific/Africa region, in particular for its China and India affiliates. Toyota Australia performs a design and development role for the Camry and Aurion models. Bosch Australia (a component firm) exports some \$400 million worth of electronic parts annually. The Bishop Technology Group (a Sydney-based component firm) provides steering technology used in vehicles around the world, including many Mercedes models. PBR Technologies (a Melbourne-based component firm) provides braking systems for many GM vehicles globally. Another Melbourne-based firm – Air International – supplies heating and air conditioning systems for GM and other vehicles globally.<sup>7</sup>

New vehicle sales within Australia increased by some 55 per cent between 1994 and 2004. This growth came primarily from imported products. During 2004 some 70 per cent of sales were imports. In fact, local sales of Australian produced vehicles declined slightly over this period – by 8 per cent. Despite this, vehicle production within Australia increased by 25 per cent. That is, growth in exports has more than offset a loss of share in the domestic market; exports accounted for some 30 per cent of total production during 2004.<sup>8</sup>

Similar growth rates have been achieved for vehicle components. Imports (by value) have increased by some 65 per cent over the decade from 1994 to 2004; exports have increased by some 74 per cent over the same period.

Major Australian export markets include the Middle East and New Zealand (primarily for vehicles), North America (both vehicles and components) as well as Korea and Japan (primarily for components). Major sources for imports include Japan, North America and Germany (both vehicles and components).

## A globally-focussed industry provides benefits for Australia

The automotive industry has become Australia's single largest exporter of manufactured products (now leading other manufacturing industries such as pharmaceuticals, IT, telecommunications and textiles). During 2004, exports in automotive products totalled \$4.67 billion; comprising 3 per cent of Australia's total exports in goods and services.<sup>9</sup> Automotive products now exceed a number of more traditional Australian exports such as wheat, wool and wine. Automotive exports have more than tripled in value over the decade from 1994 to 2004.<sup>10</sup>

These trends have continued in 2005 (based on provisional statistics). Automotive exports totalled some \$5.14 billion, an increase of 9 per cent over 2004. Vehicle exports reached 140,000 (an increase of 6 per cent). The proportion of local vehicle production taken up by exports rose to 36 per cent.<sup>11</sup>

All this has been good for the Australian consumer. Global production has allowed earlier access to innovative products. Vehicles are increasingly adopting advanced features, as soon as they become standardised and accepted within the Australian market. Recently adopted features include side and curtain passenger airbags and vehicle traction and stability controls. In addition, global competition has contributed towards more affordable vehicles, together with other local factors (such as lower tariffs and lower taxes through the introduction of the GST). Real vehicle prices have declined by some 13 per cent over the decade from 1994 to 2004. An "affordability index" developed by industry shows that Australian vehicles on average have become 75 per cent more affordable over the same period.<sup>12</sup>

Notwithstanding these benefits, a number of regulatory impediments remain. These impediments prevent the full benefits of international trade from being realised. In particular, three problems exist.

## Problem 1, Differing national standards can impose unnecessary costs on industry

Harmonisation allows all of the component parts of a vehicle (sourced from different locations) to fit together. On the other hand, fragmented national standards constitute an impediment to modern production practices. Manufacturers need to design, produce and distribute multiple, short-run variations of the same product, whenever a market has a fragmented or a unique national standard.

For example, in the case of locally made vehicles, variations between Australian standards and international standards represent an impediment to the use of overseas components. The choice of suppliers becomes limited to those that are able to comply with the Australian standards.

For imported vehicles, variations in standards represent an impediment to overseas models being distributed within Australia. Vehicles need to be manufactured specially for the Australian market.

A similar situation exists for Australian exported products. Variations in standards represent an impediment to locally manufactured models being distributed overseas. Vehicles or components need to be manufactured specially for the export market.

In each case, these variations add to the cost of manufacture. Products need to be modified or re-designed and manufactured via special, short-run production lines. Firms face duplicated development, tooling and production costs. By restricting choice, variations in standards also deter manufacturers from offering the latest advanced features that are demanded by consumers.

The difficulty is that – to Australian exporters and importers – these costs can be prohibitive. Amortisation of the (development, tooling and production) costs can require production volumes that are higher than currently available within the Australian market. The Australian market is relatively small; volumes are low in global terms. Australia represents only 1.5 per cent of the world vehicle market.<sup>13</sup> Export or import of the product may simply become uneconomic.

A recent example covers the DaimlerChrysler Smart car. The manufacturer initially declined to offer the vehicle in Australia. Importation was considered uneconomic simply because the Australian standard for the dashboard dimmer switch varied from international standards. (The unique Australian standard was subsequently repealed, and the import of the vehicle was able to proceed.) Importantly, the variation affected a component with a value of a dollar or two per unit. That is, the cost to industry goes beyond the direct cost of the gadget or feature in question; it is the cost of changing the firm's international production and supply chain.

Despite recent efforts in harmonisation, variations in standards alone are still estimated to add up to 5 to 10 per cent to the overall cost of producing a vehicle.<sup>14</sup> For example, Ford Australia estimated in 2002 that variations in standards alone result in increased costs to Australian firms of around \$1-2 million for each new vehicle model.<sup>15</sup>

## Problem 2, Australia has no "voice" in the development of international standards

In order to avoid the costs of fragmented national standards (as outlined above), countries around the world are taking action to harmonise their standards. In particular, the world's predominant vehicle standards – the European, U.S. and Japanese standards – are slowly evolving together. The mechanism used for achieving this harmonisation is outlined in greater detail under Part 3, Options. In short, countries have established a world forum and have negotiated two multilateral treaties. The treaties are known as the "1958 Agreement" and the "1998 Global Agreement".

The problem is that Australia is currently "locked out of" discussions on the evolution of the international standards; there is no mechanism for Australian conditions and requirements to be reflected in the evolution of international standards. This is because Australia is not a full participant to the treaties.

## Part 2, Objectives

## **Objective 1, Harmonisation**

The first objective is to remove unnecessary costs from Australia's automotive industry; to minimise differences in vehicle standards between countries; to reduce barriers to trade and maximise trade facilitation. In particular, the focus is on minimising differences in standards that are historical or technical in nature; that do not produce improvements in vehicle performance but nevertheless impose costs on industry.

## Objective 2, Unique Australian standards, where appropriate

On the other hand, a second objective is to retain unique Australian standards where they reflect Australian real-world requirements and characteristics – such as driving conditions, operating constraints or consumer preferences. The automatic application of overseas standards may, in some cases, impose more costs (when applied to Australian conditions) than are saved via harmonisation.

That is, in certain instances it is sensible for Australian standards to deviate from international standards if it is of net benefit to the Australian community. In these cases, it is legitimate for Australia to pursue a unique standard. The strict observance of harmonisation could impair local vehicle performance or produce unsafe conditions.

For example, some types of heavy vehicles used in this country – such as road trains – are unknown in Europe. Similarly, the day-to-day operating conditions for these vehicles can vary considerably from European conditions. Distinctive local factors include road and bridge dimensions, road construction profiles and pavement strength limitations. Australian highways – especially in remote and outback areas – can differ markedly from European autobahns. These types of heavy vehicles and their operating conditions are simply not accommodated within the international standards. In particular, road "wear and tear" can represent a significant cost to the community.

Conversely, some international standards – such as extreme cold weather testing required for European conditions – are not applicable to Australian conditions.

By accurately reflecting local conditions, Australian standards are able to provide cost effective outcomes. That is, this second objective is based on the underlying purpose of the vehicle standards. Australia's scheme of vehicle standards is set out in greater detail at Attachment 2; it is known as the "MVSA scheme". In short, the purpose of the MVSA scheme is to make road vehicles safe to use; to control the emission levels of road vehicles; to secure road vehicles against theft; and to promote the saving of energy.

This objective potentially conflicts with the first objective.

#### Objective 3, Australia as part of the international system

Finally, a third objective also arises – to minimise those instances where Australian requirements and characteristics vary markedly from the international standards. That is, to ensure that Australian conditions are reflected – as far as possible – within the international standards.

The practical effect of this objective is to ensure that the international standards themselves do not act as an impediment or a hurdle to local firms; to ensure that the international standards do not exclude or ignore Australian operating conditions. This will ensure that Australia is able to participate fully in the global automotive marketplace.

#### Part 3, Options

The options available for future action are largely influenced by current arrangements. In particular, future international standards for motor vehicles will be largely influenced by a multilateral treaty – the "1998 Global Agreement".

The full title of the 1998 Global Agreement is the *Agreement concerning the Establishing of Global Technical Regulations for Wheeled Vehicles, Equipment and Parts which can be Fitted and/or be Used on Wheeled Vehicles*, [1998] ATSD 4616. The treaty was made at Geneva on 25 June 1998; it came into force on 25 August 2000.

In practice, the agreement works in tandem with a second multilateral treaty, the "1958 Agreement". Australia has already formally acceded to the 1958 Agreement with effect from 25 April 2000.

#### Why two treaties?

Both treaties are administered by the United Nations World Forum for Harmonization of Vehicle Regulations. When originally founded in the 1950s – as the Working Party on the Construction of Vehicles – the forum was European in focus. It was created as

one of the transport subsidiary bodies of the *United Nations Economic Commission for Europe* (UN/ECE). While the forum has retained its original name "Working Party 29", or more informally "WP.29", it has evolved in function since that time.

Nowadays, WP.29 is recognised as the single leading forum for international cooperation on vehicle standards. The forum's success in facilitating trade in automotive products throughout Europe has led other countries to use the European model as the basis for world-wide vehicle standards.

WP.29 became officially recognised as a "world forum" in March 2000. Non-European participation was pioneered by the U.S., Canada and Japan. Participants nowadays also include Korea, China, India, Malaysia, Thailand, South Africa and New Zealand, as well as Australia. The Philippines and Singapore intend to join in 2007; Indonesia and Vietnam are considering joining. Argentina and Brazil have attended as observers. Non government organisations also regularly attend; these include a number of manufacturing, standard-setting, consumer and motoring peak bodies from around the world.

The two treaties reflect the different governmental compliance systems used to regulate vehicles. The 1958 Agreement is based on the European system of compliance. This system is by far the most commonly used scheme of regulation around the world. In addition to being adopted across the E.U., it is also used within a number of major (non-European) manufacturing countries, such as Japan, as well as Australia. The system is known as "type approval". Vehicles and their constituent components are approved (as meeting standards) by government regulators prior to the vehicle entering the market. These approvals are mutually recognised by other participating countries.

In contrast, in a minority of cases countries use regulatory systems that are incompatible with the European approach. The foremost example is the U.S., which uses a system based on "self-certification". The manufacturer or importer "self-certifies" that the vehicle meets the standards. After the vehicle is introduced into the market, the regulator (in the U.S., the National Highway Traffic Safety Administration) selectively purchases and tests sample vehicles. Those vehicle types that fail the regulator's tests are then recalled. In summary, the U.S. is unable to recognise the approvals of other countries. This is because vehicles or components in the U.S. are not approved.

A small number of other countries also adopt incompatible regulatory systems. In some cases, the countries mirror the U.S. system. An example is Canada – where the local automotive industry is closely aligned with the U.S. industry. In other cases, the countries operate other, unique schemes. An example is China, which implements its own "China Compulsory Certification", or "CCC" system.

These countries are unable to join the 1958 Agreement as they lack a "type approval" scheme. Rather, to cater for these economies, a separate treaty – the 1998 Global Agreement – was negotiated under the leadership of the U.S., Japan and the E.C. In particular, the 1998 Global Agreement is silent on compliance aspects.

The 1958 Agreement and the 1998 Global Agreement operate simultaneously. It is possible for countries with European-based compliance systems to join both agreements. Many countries have done so. For example, Japan, Korea, Malaysia, New Zealand, France, Germany, Italy, Spain, Sweden and the U.K.

### How the treaties work

Both treaties are part of the United Nations trade liberalisation system. In particular, the treaties use the same (WTO-endorsed) mechanism to achieve harmonisation.

The treaties acknowledge and support the goals of member countries to enhance vehicle safety, energy efficiency and environmental performance. These topics are recognised as common, world-wide problems. At the same time, the treaties are designed to harmonise the underlying national standards that are used to achieve these performance goals.

In particular, the treaties allow contracting parties to develop international "technical regulations" to govern the design and performance of motor vehicles. These regulations are developed via consultation between contracting parties. Once established, the regulations are then available for "adoption" by contracting parties. In this manner, the same set of vehicle performance standards can potentially apply across-the-board, for all contracting parties. For the 1958 Agreement, the regulations are known as "UN/ECE Regulations". For the 1998 Global Agreement, the regulations are known as "global technical regulations".

## UN/ECE Regulations vs. global technical regulations

UN/ECE Regulations cover the field; they regulate the range of features and components necessary for vehicle safety and security, energy efficiency and environmental performance. Some 123 regulations are annexed to the agreement. (There are a further two regulations, but these remain provisional for the next few months as they were made less than 6 months ago.)<sup>16</sup>

The regulations are longstanding; many can date their origins back as far as the 1960s. The regulations are also regularly updated to reflect current conditions and expectations. As societies become more wealthy, consumers demand vehicles that offer better performance and that offer more features. Today's mainstream vehicles are in many cases better equipped than yesterday's supercars. Similarly, community expectations on environmental performance also tend to rise, as societies become more wealthy and as motor vehicles become more widespread within society. As a result, emission controls also become progressively more stringent over time.

Finally, UN/ECE Regulations are widely adopted. Out of the 123 regulations, some 90 regulations have been adopted by three-quarters (or more) of contracting parties. For most practical purposes, European contracting parties are fully harmonised with the UN/ECE Regulations. This reflects the original purpose of the regulations – as vehicle standards for the continent of Europe.

On the other hand, countries such as the U.S., Canada and China are unable to adopt UN/ECE Regulations; they operate exclusively through the 1998 Global Agreement. Global technical regulations are a recent development; they are only now starting to have an impact. To date, only five global technical regulations have been developed; all cover minor topics. The first two date from mid-2005; the remaining were agreed in November 2006. To date, some 19 countries have adopted the first regulation, and only 1 country has adopted the second regulation.<sup>17</sup>

Nevertheless, the standards of the world's major trading blocs – Europe, the U.S. and Japan – are progressively evolving together and moving towards a single global set of standards. This is generally considered a long-term process.

For example, Japan has adopted 29 UN/ECE Regulations to date. When Japan first joined the 1958 Agreement in November 1998, it initially adopted only 5 regulations. By 2001, it had adopted 12 more regulations, and since then has adopted a further set of 12 regulations. Japan has indicated informally that it will phase in the bulk of the UN/ECE Regulations over the next 5-10 years.

Importantly, the intention is for the UN/ECE Regulations and the global technical regulations to ultimately cover the same content, to specify the same technical standards and to mandate the same performance. That is, the two sets of regulations will harmonise.

## The twin-track approach

In practice, the 1958 Agreement and 1998 Global Agreement can be seen as a "twin-track" approach. The 1958 Agreement provides a "fast-track" for establishing international standards, and in making early progress in removing barriers to trade. This is because there are already regulations in place that may be adopted immediately.

The 1998 Global Agreement provides the longer-term solution of a single set of harmonised global standards, arrived at through unanimous voting. As global technical regulations are proposed and finalised, the U.S. (and other countries with unique regulatory systems, such as Canada and China) will be progressively brought "into the fold" (ie, into the same system for vehicle standards as the rest of the world).

It is widely expected that the number of global technical regulations will increase substantially in the future. Various regulations are under development. For example, the UN/ECE Regulations represent the starting point for many global technical regulations. This process was envisaged under the terms of the 1998 Global Agreement. The UN/ECE Regulations are considered as automatic "candidates". That is, the UN/ECE Regulations form the basis of negotiations between contracting parties on the development of global technical regulations that are proposed to cover the same topic.

In addition, the U.S. has proposed a number of its own national standards as further candidates for harmonisation. Other proposals are "in the pipeline"; in the early stages of committee consideration.

The U.S. has recently described the first global technical regulations as "test cases". The regulations "taught us how to work together and highlighted the difficulties we will face with every GTR". In acknowledging these initial steps, the U.S. called for a continuation of the momentum toward effective global harmonisation:<sup>18</sup>

Coming to agreement on the common wording of regulations saves money; that's vitally important for manufacturers and consumers.

Various options exist for harmonising vehicle standards. Contracting parties could adopt a "direct" approach. For example, the contents of a global technical regulation could be copied directly into a new or revised UN/ECE Regulation. Alternatively, parties could adopt a "transposition" approach based on the stated equivalence of standards. One regulation could simply reference the other regulation as an alternative standard. Whichever mechanism is adopted, once harmonisation is complete, automotive products would be tested once and then automatically accepted by all other markets around the world.

In summary, the 1958 Agreement is still needed. For example, it provides today's international standards. However, the 1998 Global Agreement is the mechanism to provide tomorrow's harmonised global standards.

## Australia's accession to the 1958 Agreement

The Australian Government has already taken major steps towards harmonisation. Australian vehicle standards (called Australian Design Rules, or ADRs) have been aligned with existing international standards. For example, early Australian standards were primarily derived from U.S. national standards – due to the focus of the local automotive industry during the 1960s and 1970s. More recently, the focus has been towards the UN/ECE Regulations.

In order to capture the benefits of harmonisation, Australia formally acceded to the 1958 Agreement with effect from 25 April 2000. Nevertheless, the Government also recognised that before proceeding further it needed to reconcile the two, potentially conflicting, objectives of harmonisation:

- on the one hand, to remove unnecessary costs from Australia's automotive industry, to remove barriers to trade and to maximise trade facilitation via the adoption of international standards; and
- on the other hand, to retain Australian standards where they reflect distinctive Australian conditions and expectations.

That is, the Government recognised that it needed to reconcile the first and second objectives (as outlined in this RIS).

For example, Australia's accession was made subject to a reservation.<sup>19</sup> In addition, for each UN/ECE Regulation that came into effect after accession, Australia lodged a separate "notification of disagreement" – indicating that it did not intend to adopt the specific regulation. The overall effect is that – to date – Australia has not formally adopted any of the UN/ECE Regulations.

Rather, Australia indicated that each vehicle standard would first be subject to detailed economic assessment, reviewed jointly by the Commonwealth, State and Territory Governments and endorsed by the relevant Ministerial Council, the Australian Transport Council. This ADR Review was commenced under the Government's regulatory efficiency program.

## Australia's ADR Review is nearing completion

The ADR Review is underway; it is expected to be complete by mid 2007.

Assessments involve a range of stakeholders – such as industry members, peak bodies, motoring, consumer and industry associations and the Australian community. Assessments highlight the costs and benefits of aligning Australian standards with international standards. In particular, assessments identify variations between Australian and international standards and consider whether these variations are

necessary for Australian transport conditions and community expectations – or whether Australia could benefit by harmonising.

The review is being conducted in accordance with COAG principles.<sup>20</sup> In particular, assessments take the form of a Regulation Impact Statement. They:

- identify why government action is necessary (eg, imperfect information, manufacturer myopia, externalities); evaluate the costs and benefits of regulatory options; and ensure that decision-making is fully documented, explicit and transparent;
- ensure that Australian standards are relevant (against ongoing technological development), provide community gains (in terms of social, economic, environmental and safety benefits), and do not result in a barrier to the importation of safe vehicles and components; and
- ensure that Australian standards are cost-effective and do not impose excessive or unnecessary burdens on business. For example, harmonisation is designed to lower costs to the Australian community, remove trade barriers and boost Australian export competitiveness.

This approach was approved by the Joint Standing Committee on Treaties, when Australia originally acceded to the 1958 Agreement. The Committee noted that:<sup>21</sup>

It is ... a prudent step not to adopt all ECE Regulations at the outset. It is important that the Australian community be allowed to review all existing Australian Design Rules and all proposed ECE Regulations to ensure that our safety and emission rules are not diluted and that individual ECE Regulations are appropriate to Australian conditions. The proposal that Australian Design Rules be aligned with ECE Regulations progressively and only after thorough and public review is sensible. It is important that this review process involve not just the relevant Commonwealth, State and Territory ministers but also involve as many motoring, consumer and industry related organisations as possible. Only by wide public involvement will community confidence in the outcome be engendered.

The approach is in accordance with past governmental reviews of the Australian automotive industry. As noted by the Productivity Commission:<sup>22</sup>

Where it is thought to be in the public interest for Australian standards to diverge from international standards, this should be assessed on the basis of costs versus benefits, and the calculation of this assessment should be transparent.

Australia's automotive industry, the States and Territories, while strongly supporting the need to harmonise Australian and international standards, also strongly support the need for Australian regulations to be subject to due process under the COAG requirements.

At the beginning of the review process, there were 66 separate Australian vehicle standards. Of these, 12 were already based on concepts outlined within the UN/ECE Regulations. Arising out of the review:

- a further 12 new standards have been created. Of these, 9 are harmonised with the UN/ECE Regulations;
- 12 pre-existing standards have become harmonised; and
- 17 pre-existing standards have been either superseded or repealed.

That is, as a result of the review, a total of 33 standards have been harmonised, out of 61 standards overall. Examples of harmonised standards include seat belts, seats and anchorage points and vehicle lamps.

On the other hand, a number of unique Australian standards will be retained. For example, unique Australian standards will continue to apply to various "special purpose" vehicles such as road trains. These standards cover mechanical features such as trailer couplings, braking systems, electrical connections and speed limiting devices.

## **Options**

Two options are available.

## Option 1, The status quo

Under this option, Australia continues current arrangements. In short, Australia continues to align its standards with UN/ECE Regulations where appropriate. Importantly, Australia operates solely through the 1958 Agreement. Australia does not participate in the 1998 Global Agreement.

This option only partially addresses the objectives. Australia has already made early progress in removing barriers to trade, by aligning with the currently available international standards – namely, the UN/ECE Regulations. However, Australia would not be able to address or incorporate future international standards – namely, as standards are developed and finalised as global technical regulations.

## Option 2, Accede to the 1998 Global Agreement

Under this option, Australia would continue to align its standards with currently available international standards (of the 1958 Agreement), in accordance with the ADR Review. In addition, Australia would also embrace "the longer-term solution" in the harmonisation process. That is, Australia would accede to the 1998 Global Agreement.

Under this option, Australia would become a contracting party to both treaties that govern vehicle standards, and would participate fully in the treaty's administering body, the *United Nations World Forum for Harmonization of Vehicle Regulations*.

Importantly, Australia would be a part of a harmonisation process with the world's largest producer and consumer of automotive products – the U.S. – and also the world's leading emerging economy – China.

Australia would adopt specific global technical regulations. Initially, Australia would not be subject to any regulations. However, Australia would be able to adopt one or more regulations by incorporating them in domestic law and providing notice to the United Nations. The decision to adopt a regulation would be the subject of a cost-benefit assessment in accordance with COAG principles, following consultation with stakeholders. In effect, the assessment would represent an extension to the current ADR Review. Option 2 addresses all three objectives.

## Part 4, Impact analysis

Both options impact directly on Australia's automotive industry. The industry has been described as a "microcosm of the global industry".<sup>23</sup> It covers a hierarchy of firms:<sup>24</sup>

- four firms produce vehicles locally Toyota Australia, GM Holden, Ford Australia and Mitsubishi Motors Australia. All are large firms; they are the local agents of global corporations. In particular, three (of the four) represent the world's top 3 automotive groups. The fourth (Mitsubishi) represents one of Japan's largest general trading companies. In addition to producing vehicles, the firms are also major importers and exporters of automotive products. They produce the most popular vehicle brands within Australia;
- some 250 firms (of varying sizes) comprise the local automotive component sector. These firms manufacture vehicle components, such as brake and clutch assemblies, suspension systems, exhausts, transmissions, rear axles, air-conditioning units, vehicle instrumentation / electronics, lighting units, mirrors, wheels and tyres. Once again, these firms are significant importers and exporters of automotive products; and
- some 50 (mainly small) firms import and distribute whole vehicles. These firms are independent, in that they are not affiliated with the major vehicle producers. The firms handle the spectrum of vehicle types: passenger, four-wheel-drive, commercial vehicles and motorcycles. In many cases, these firms are franchised with overseas vehicle manufacturers.

The industry accounts for some 0.7 per cent of GDP; and employs some 55,000 people comprising some 0.5 per cent of the Australian workforce. Of this, 26,000 people are employed directly in vehicle manufacturing. Some 29,000 people are employed within the component sector.

Consumers will not be directly affected. However, consumers may derive indirect benefits from lower prices, from products that are more attractive and from earlier access to innovative products – to the extent that regulatory action promotes a more internationally competitive motor vehicle industry.

Similarly, members of the general community will not be directly affected. However, Australians may derive indirect benefits from safer roads and cleaner air – to the extent that regulatory action supports the safety, security and environmental (ie, emission) performance goals of the MVSA scheme.

## Costs to industry

A discussion of the types of compliance costs faced by industry and the wider community, under options 1 and 2, is at Attachment 4. The discussion is based on the format of the Business Cost Calculator developed by the Office of Small Business, Department of Industry, Tourism and Resources.

In summary, option 2 does not impose any additional costs. Rather, option 2 offers significant opportunities to reduce costs currently borne by industry – by removing barriers to trade and maximising trade facilitation.

Under the status quo, Australia is in the process of aligning the ADRs with the UN/ECE Regulations. Some 33 ADRs (out of a total of 61) will be aligned in this manner. Australia is harmonising its standards with a number of major trading nations, such as Japan, Korea, France, Germany and Italy.

That is, the Australian Government has already taken a number of steps to reduce the need for products to be modified or re-designed via short-run production lines. These benefits apply whether products are imported into Australia or exported from Australia. By remaking the ADRs, the Government has reduced the number of instances where firms face duplicated development, tooling and production costs, when aiming for a global market.

Nevertheless, the approach has been focussed on Europe. This is because the European standards are immediately available. In contrast, option 2 allows Australia to incorporate future international standards – namely, the global technical regulations, as and when they are developed. Importantly, Australia would be harmonising with those countries that are unable to participate in the 1958 Agreement. This includes the world's largest producer and consumer of automotive products – the U.S. – and other related economies such as Canada. This also includes other countries with unique regulatory systems, such as the world's leading emerging economy – China.

These countries are becoming increasingly important to Australia's automotive industry. For example, North America (ie, the U.S. and Canada) alone accounted for 22 per cent of Australia's automotive exports during 2004 - \$1.0 billion. Similarly, the same region accounted for 15 per cent of automotive imports -\$3.2 billion.<sup>25</sup>

## **Option 2 reflects Australia's trade objectives**

Option 2 embraces Australia's trade liberalisation objectives. In particular, option 2 reflects the detailed trade liberalisation regime of the World Trade Organization (WTO). Australia has been instrumental within the WTO since its inception (in 1995). The WTO is the central global body dealing with international trade; it provides a rules-based, multilateral system for trade liberalisation.<sup>26</sup>

The WTO's *Agreement on Technical Barriers to Trade* promotes the use of international standards – which the WTO calls "technical regulations" – to ensure that national rules do not create unnecessary obstacles to international trade. In effect, the global technical regulations meet all the WTO requirements; the 1998 Global Agreement is part of the WTO system of trade liberalisation.

As mentioned by the WTO:<sup>27</sup>

The Agreement encourages Members to use existing international standards for their national regulations, or for parts of them, unless their use would be ineffective or inappropriate to fulfil a given policy objective. This may be the case, for example, because of fundamental climatic and geographical factors or fundamental technological problems ... The TBT Agreement takes into account the existence of legitimate divergences of taste, income, geographical and other factors between countries ...

Costs (of not harmonising) arise from the translation of foreign regulations, hiring of technical experts to explain foreign regulations, and adjustment of production facilities to comply with the requirements ... Specifying, whenever appropriate, product regulations in

terms of performance rather than design or descriptive characteristics will also help in avoiding unnecessary obstacles to international trade.

The WTO also promotes the full participation by countries in international standard-setting bodies:

Widespread participation in international standardizing bodies can ensure that international standards reflect country-specific production and trade interests. The TBT Agreement encourages Members to participate, within the limits of their resources, in the work of international bodies for the preparation of standards and guides or recommendations for conformity assessment procedures.

#### **Option 2 supports Australia's commitment to APEC**

Similarly, option 2 reflects the trade liberalisation goals of APEC in general and its Bogor Declaration in particular. These APEC principles encourage free and open trade for Asia-Pacific economies. As with the WTO, Australia has been instrumental in APEC since its inception (in 1989).<sup>28</sup> By adopting the "full range" of harmonising measures – including future global standards – Australia can more fully implement the Bogor Goals.

The topic of vehicle standards was considered by APEC Transportation Ministers in 2002, who endorsed:<sup>29</sup>

the efforts of economies to harmonize their vehicle regulations, in a manner consistent with improved safety and environmental protection

In particular, APEC Ministers recognised the U.N. World Forum as the focal point for harmonisation and the development of international standards. The Ministers encouraged:

participation in the activities of the United Nations' World Forum for the Harmonization of Vehicle Regulations, including accession to the 1958 Agreement and/or the 1998 Global Agreement

#### The second benefit, an increased international role for Australia

A further benefit is that Australia will gain enhanced access to the international community, once it becomes an active party to the 1998 Global Agreement. It will no longer be "locked out of" discussions on the continuing evolution of global technical regulations.

Australia will have the opportunity to mould future standards – as an equal partner with other contracting parties. For example, Australia will have the opportunity to vote on proposed amendments to regulations, and to introduce its own proposals.

In particular, this will provide an important mechanism for Australian conditions and requirements to be reflected in the international standards. This will provide considerable benefits to industry – in matching Australian and international standards, in reducing the need for unique Australian standards, and in reducing the costs (to Australian industry) of re-designing components to meet the international standards when exporting.

## Part 5, Consultation

Australia's scheme for motor vehicles is oversighted by a Ministerial Council, the Australian Transport Council. The Council is supported by a formal committee structure at Department/Agency level. In particular, the relevant consultative forum is the Technical Liaison Group (TLG).

The TLG hosts regular consultations – between Australian jurisdictions, and with industry and consumer bodies – at the technical level. For example, the TLG hosts consultations on the development of motor vehicle standards such as ADRs, and canvasses new initiatives in vehicle safety.

Ongoing consultation is critical to the operation of the federal scheme for motor vehicle standards. For example, ADR requirements often determine the nature of the "in-service" vehicle regulations that are administered within the State and Territory jurisdictions. Regular consultations ensure that standards are applied in a nationally-consistent manner.

The TLG is chaired by DOTARS and includes representatives from all States and Territories, the New Zealand Government and the National Transport Commission. The TLG also includes representatives from:

- Australia's automotive industry (such as the Federal Chamber of Automotive Industries, the Commercial Vehicle Industry Association of Australia, the Australian Road Transport Suppliers Association, the Australian Trucking Association, the Truck Industry Council and the Bus Industry Confederation); and
- motoring and consumer bodies (such as the Australian Automobile Association and the Australian Motorcycle Council).

The TLG meets every six months. Subcommittees (called "single issue working groups") provide separate input where specialist expertise is required on stand-alone technical issues.

TLG members strongly supported the original decision to accede to the 1958 Agreement in 2000; the topic was formally raised with industry during 1998.

Similarly, TLG members strongly support option 2, to accede to the 1998 Global Agreement and begin the process of adopting global technical regulations. TLG members have also been involved in the continuing assessments as part of the ADR Review. These topics, under the heading "harmonisation", have become established as a standing agenda item for discussion at each TLG meeting since 1998.

## Part 6, Conclusion

This RIS is about trade liberalisation for automotive products. In particular, it highlights those trade restrictions that "lie beyond the border" – namely, variations in technical standards. Most countries around the world maintain mandatory standards for vehicles. The problem is that these technical standards can vary from country to country. As a general principle, the use of different technical standards for like products can impose barriers to international trade. This effect is magnified within the automotive industry. Even minor differences in technical standards between countries can impose substantial costs on industry. This is because vehicle production, over recent years, has become global in nature.

For Australian exporters and importers, these costs can be prohibitive. To recover these types of costs, firms may require production or sales volumes that are larger than currently available within the Australian market. The Australian market is relatively small in global terms.

The status quo (option 1) is an unsatisfactory option. The Australian Government has achieved early progress in removing barriers to trade. The Government's ADR Review has modernised Australian vehicle standards by aligning them with UN/ECE Regulations (through Australia's participation in the 1958 Agreement). Nevertheless, this approach has been focussed on Europe. This is because the European standards are immediately available.

On the other hand, option 2 represents the wider, "longer-term approach" in the harmonisation process. Under option 2, Australia would accede to the 1998 Global Agreement. In effect, option 2 represents the "next stage" in harmonisation.

Many countries have already joined both treaties. For example, Japan, Korea, the E.C. It is expected that most countries currently participating in the 1958 Agreement will also join the 1998 Global Agreement. The proposal is for Australia to do the same.

	European contracting parties	Non-European contracting parties
members of both agreements (24 parties)	Azerbaijan, Cyprus, the E.C., Finland, France, Germany, Hungary, Italy, Lithuania, Luxembourg, the Netherlands, Norway, Romania, the Russian Federation, Slovakia, Spain, Sweden, Turkey, the U.K.	Japan, Korea, Malaysia, New Zealand, South Africa
members of the 1958 Agreement exclusively (22 parties)	Austria, Belarus, Belgium, Bosnia and Herzegovina, Bulgaria, Croatia, the Czech Republic, Denmark, Estonia, Greece, Ireland, Latvia, the Former Yugoslav Republic of Macedonia, Malta, Poland, Portugal, Serbia and Montenegro, Slovenia, Switzerland, Ukraine	Australia, Thailand <sup>1</sup>
members of the 1998 Global Agreement exclusively (4 parties)	nil	Canada, China, India <sup>2</sup> , Moldova <sup>3</sup> , the U.S.

Contracting Parties, the 1958 and 1998 Global Agreements

- 1. Thailand's entry to the 1958 Agreement effective from 1 May 2006. Thailand is also proposing to join the 1998 Global Agreement.
- 2. India's entry to the 1998 Global Agreement effective from 22 April 2006. India is also proposing to join the 1958 Agreement.
- 3. Moldova is scheduled to join the 1998 Global Agreement effective from 17 March 2007.

Source UN/ECE. Current as at January 2007.

In particular, option 2 allows Australia to incorporate future international standards – namely, the global technical regulations – as and when they are developed. In addition,

option 2 embraces those countries that are unable to participate in the 1958 Agreement, namely the U.S., Canada and China.

Importantly, Australia would be allowed an effective voice within the international community on the development of future global standards. It would be a full participant to the world forum – WP.29 – and have the opportunity to mould future standards as an equal partner with other contracting parties. This would provide an important mechanism for Australian conditions and requirements to be reflected in the global standards.

Option 2 is consistent with the COAG principles for regulatory action, in that it reduces barriers to trade, recognises international standards, lowers costs and increases flexibility for industry. Option 2 will provide enhanced market opportunities for Australian automotive manufacturers, especially for "niche" products not currently exported.

Importantly, option 2 will promote the overall viability of the Australian automotive manufacturing industry. Over recent years, industry has compensated for domestic sales lost to imports by ramping up exports. During 2005, exports of automotive products totalled some \$5.14 billion. Option 2 will facilitate further growth in exports; this will assist the overall local manufacturing capability.

Option 2 is recommended.

## Part 7, Implementation

The proposal is for Australia to become a contracting party to the 1998 Global Agreement. Australia would formally adopt selected global technical regulations.

Initially, Australia would not be subject to any regulations. However, Australia would be able to adopt one or more regulations by incorporating them in domestic law and providing notice to the U.N.

Importantly, any decision to adopt a global technical regulation would be the subject of a future cost-benefit assessment, in accordance with COAG principles. The assessment would take the form of a Regulation Impact Statement, and involve consultation with a range of stakeholders – such as industry members, peak bodies, motoring, consumer and industry associations and the Australian community. In effect, the assessment would represent an extension to the current ADR Review. It would provide an open and transparent means of ensuring that the international standards are appropriate to Australian conditions and expectations, including public and Parliamentary scrutiny.

Australia would remain involved in day-to-day administrative tasks. These tasks are necessary for the operation of the 1998 Global Agreement, and include:

- consultations with other contracting parties;
- voting within the World Forum, on the upkeep of existing regulations and the development of new regulations; and
- lodging notices and reports with the U.N.

These ongoing, day-to-day tasks are not separate "treaty actions" but are "implementation actions". This has been cleared with the Treaty Secretariat, Department of Foreign Affairs and Trade.<sup>30</sup>













Figure 6: Australian international trade in automotive products, major destinations and sources (2004)

Australian exports of automotive products, by destination (2004)		Australian imports of automotive products, by source (2004)	
Region	Share (%)	Region	Share (%)
Middle East	37.6	Japan	44.8
North America	21.8	North America	14.7
New Zealand	16.3	Germany	10.0
South Korea	6.9	Thailand	5.4
Japan	1.8	South Korea	4.4
Indonesia	1.7	U.K.	2.6
U.K.	1.5	Sweden	1.5
South America	0.9	Italy	1.3
Singapore	0.7	Austria	1.0
Rest of world	10.8	Rest of world	14.3

Source: DITR Automotive Statistics 2004

## Attachment 1 - Types of safety and emission standards for motor vehicles

Most countries (including Australia) maintain national standards for motor vehicles. These standards are generally designed to enhance vehicle safety, vehicle security and environmental performance.

## Vehicle safety

Vehicle safety measures are designed to benefit communities by reducing road trauma. Road crashes are a major cause of human death and injury. Vehicle design – and the incorporation of various safety features – can reduce the incidence and severity of road trauma and hence increase road safety.

Regulators make extensive use of crash statistics to identify the most frequent types of injuries and the cost of these injuries. A proper risk-based, cost/benefit approach is important, as the most effective preventive measures may not be immediately obvious. Road crashes can potentially cover a wide variety of circumstances.

In particular, vehicle safety is generally divided into two complementary categories – active and passive safety.

## Active safety (crash avoidance)

Standards in this area seek to decrease the likelihood of a road crash.

Some standards are designed to increase the ability of drivers to detect hazardous circumstances. Examples include minimum standards on vehicle lamps and rear view mirrors.

Other standards are designed to increase the ability of drivers to maintain control of their vehicles, and hence avoid hazardous circumstances. Examples include minimum standards on braking systems and tyres. This area of technology is rapidly changing; advanced technologies are making a significant impact. Nowadays vehicles are increasingly adopting new and improved methods, such as computerised braking, traction and stability control systems.

## Passive safety (crashworthiness)

Standards in this area seek to minimise the chance and severity of injury – for the occupants of the vehicle, for other road users and for pedestrians – in the event of a crash. That is, assuming that a crash occurs, these standards seek to reduce the frequency, and mitigate the extent, of injuries.

Examples include minimum standards on vehicle crash resistance and crash intrusion, occupant restraint and vehicle safety glazing. Standards can also cover vehicle compatibility – that is, how different types of vehicles can inflict different levels of damage when they collide. This area of technology is also changing rapidly. Nowadays, protective devices (such as air bags and seat belts) are designed to adjust their performance in response to the severity of a crash.

## Vehicle security

Vehicle security measures are designed to protect vehicles against unauthorised use.

Theft prevention measures make the theft of the vehicle more difficult to accomplish. Locking systems are designed to counter unauthorised access. Immobilisers are designed to isolate (and hence prevent activation of) the vehicle's main engine power. These systems also isolate or lock (ie, into a single position) other features of the vehicle that are essential to its operation, such as the steering, transmission or gearshift control. These systems can be linked to a variety of driver recognition systems, such as keyless smart cards.

On the other hand, theft deterrence measures are designed to discourage theft. These measures use vehicle alarms and identification systems. For example, identification plates and numbers ensure that vehicles can be uniquely identified. They assist in the detection and recovery of stolen vehicles.

## Environmental standards

Environmental standards contribute to the health and welfare of communities. They address questions of air pollution, noise disturbance and the conservation of energy (eg, fuel consumption).

Vehicles are a major contributor to overall levels of air pollution. Pollutants of concern include nitrogen oxides, hydrocarbons, heavy metals and particulate matter. For example, pollutants can cause adverse welfare effects (eg, decreased air visibility, odour, sediment, vegetation damage, corrosion). Specific atmospheric contaminants – via mechanisms such as photochemical smog – can also have an adverse effect on human health (eg, respiratory/pulmonary disease, heart disease, allergies, mutagenic and carcinogenic disease). Finally, greenhouse gases can have an effect on global air quality and bring about wider adverse environmental outcomes such as climate change. Reducing these types of damaging emissions can provide significant community benefits.

## Attachment 2 – The MVSA scheme

Australia maintains a federal scheme of safety and emission standards for motor vehicles. The scheme is underpinned by an Inter-Governmental Agreement between the Commonwealth, the States and Territories.<sup>31</sup> The Inter-Governmental Agreement recognises Australia's commitment to harmonise with international standards.

The scheme is oversighted by a Ministerial Council, the Australian Transport Council. The Council is the central forum for the Commonwealth, States and Territories on transport and road policy matters; it operates a consensus model for decisions on general topics and has a voting model to decide specific transport issues. The Council is supported by a formal committee structure at Department/Agency level, to provide advice on policy and technical matters.

The Council is chaired on behalf of the Commonwealth by the Minister for Transport and Regional Services. The Minister is advised by the Department of Transport and Regional Services. Industry-specific regulation is provided under the *Motor Vehicle Standards Act* 1989 (the "MVSA"); the Act came into effect on 1 August 1989. Under the scheme, the Commonwealth maintains jurisdiction over motor vehicles up to the point of first supply to the Australian market (ie, manufacture or importation). Once a vehicle has been supplied to the market, it is "in-service". State and Territory Governments are then responsible for continued regulation (eg, vehicle registration, licensing and roadworthiness).

Discrepancies between jurisdictions are minimised by the use of uniform, national standards for vehicle design; these standards are called the Australian Design Rules (ADRs). The ADRs are established under the terms of the MVSA. The use of national standards was a key recommendation of the Inter-State Commission inquiry into vehicle regulation.<sup>32</sup> In particular, the MVSA replaced a system of separate State and Territory schemes. Under the MVSA, once vehicles have demonstrated compliance with the national standards, they can be sold and distributed anywhere in Australia. The ADRs are generally recognised as contributing towards safer roads and cleaner air.

## Goals of the MVSA

The MVSA scheme is designed to achieve specified safety and emission performance goals and targets. These are the fundamental, underlying goals of the scheme. Under the terms of the Act, these goals are:<sup>33</sup>

- to make road vehicles safe to use;
- to control the emission levels of road vehicles;
- to secure road vehicles against theft; and
- to promote the saving of energy.

As mentioned within the Minister's Second Reading Speech introducing the MVSA:<sup>34</sup>

The principal objective of this Bill, then, is to establish and apply nationally uniform standards for motor vehicle safety and environmental quality expected by the community.

## An example of a wider goal, road safety

The first of these long-term goals (making vehicles safe to use) is contained in greater detail in Australia's *National Road Safety Strategy 2001-2010*. The Strategy was adopted by the Australian Transport Council in November 2000. The Strategy target is to reduce the annual number of road deaths (per 100,000 people) by 40 per cent – from 9.3 per cent in 1999 to no more than 5.6 per cent in 2010. Achieving this target is estimated to save 3,600 lives by 2010 and permanently reduce annual road deaths by 700.

Since 1970, the death rate has more than halved, despite a doubling of distances travelled, a threefold increase in vehicle registrations, and a threefold increase in the number of people holding drivers licences. Currently, per capita road deaths are at their lowest levels since recordkeeping began in 1925.<sup>35</sup>

Vehicle standards are among many initiatives designed to reduce road crash deaths. Others have included the compulsory wearing of seat belts (1970) and random breath testing (1989). Nevertheless, vehicle standards are estimated to contribute a reduction of some 10 percentage points in the fatality rate. Translating this estimate into lives saved (or deaths avoided), 175 of the 700 lives are expected to be attributable to safer vehicles.

As mentioned by a House of Representatives Inquiry into National Road Safety:<sup>36</sup>

The Committee believes that vehicle safety measures have great potential to make a significant reduction in the road toll, a contribution that as yet has only been partly realised.

Contracting Party (UN/ECE symbol)	with effect from		
Canada			
United States of America			
Japan	ũ		
France	25 August 2000		
United Kingdom	25 August 2000		
European Community			
Germany	25 August 2000		
Russian Federation	25 August 2000		
People's Republic of China	9 December 2000		
Republic of Korea	1 January 2001		
Italy			
South Africa	17 June 2001		
Finland	7 August 2001		
Hungary	21 August 2001		
Turkey	1 September 2001		
Slovakia	6 January 2002		
New Zealand			
Netherlands			
(Netherlands Antilles with			
Azerbaijan			
Spain			
Romania	24 June 2002		
Sweden			
Norway			
Cyprus			
Luxembourg			
Malaysia	1		
India	1		
Lithuania			
Moldova*			
Total of 28 contracting parties, with an additional contracting party to join shortly.			

Attachment 3 - Contracting Parties to the 1998 Global Agreement

\* Moldova is scheduled to join in accordance with article 11(3) of the agreement. Source UN/ECE. Current as at January 2007. This RIS develops two viable options for consideration. "Option 1" is the status quo. Australia continues to operate exclusively via the 1958 Agreement. Australian standards are aligned (where appropriate) with the currently available international standards – namely, the UN/ECE Regulations. In contrast, "option 2" allows Australia to incorporate future international standards – namely, the global technical regulations, as and when they are developed. Under option 2, Australia would accede to the 1998 Global Agreement.

The types of compliance costs faced by industry and the wider community in general have been identified by the Office of Small Business, Department of Industry, Tourism and Resources. These costs are highlighted within the Business Cost Calculator. The Calculator is a model used to measure and analyse the costs of policy options in an objective and standardised manner. When assessing costs, the Business Cost Calculator uses the following cost categories:

# Notification

This cost involves reporting transactions or events (eg, to a central authority). Neither option contains this requirement.

# Education

This cost involves maintaining awareness of legislation and regulations, and of keeping abreast of changes to regulatory details.

The cost applies in some form under both options. Automotive firms are required to be familiar with the international standards and, depending on the market, national standards (such as U.S. standards). Where these standards differ, industry faces a duplication in cost. Australia has already taken significant steps to mitigate the impact of this cost. By aligning a number of Australian standards with the (European-based) UN/ECE Regulations, Australia has made early progress in removing barriers to trade.

Option 2 offers further advantages. Australia would have the opportunity to help mould future international standards, to minimise those instances where international standards exclude or ignore Australian operating conditions. Importantly, this process would also involve the major automotive markets of the U.S. and Canada (and other emerging countries with unique regulatory systems, such as China). This will further enhance the opportunities for harmonisation.

# Permission

This cost involves applying for and maintaining permits and licences to conduct an activity. Neither option contains this requirement.

# Purchase Cost

This cost involves the payment of a regulatory fee. Neither option contains this requirement.

## **Record Keeping**

This cost involves keeping statutory documents or maintaining records for later audit. Neither option contains this requirement.

## Enforcement

This cost involves cooperating with audits, inspections and enforcement activities. Neither option contains this requirement.

## **Publication and Documentation**

This cost involves producing statutory documents for third parties. Neither option contains this requirement.

## Procedural

This involves non-paperwork costs.

In order to keep up-to-date with the international standards, Australia regularly attends meetings of the body that administers the 1998 Global Agreement – the *United Nations World Forum for Harmonization of Vehicle Regulations*. The forum holds three regular meetings a year at Geneva, Switzerland. Additional informal meetings are also scheduled as necessary. Attendance is met within existing Departmental budgets.

Forum meetings are also open to observers. Many non government organisations elect to attend forum meetings, mainly peak bodies (representing manufacturing, standard-setting, consumer and motoring organisations). Importantly, these costs are voluntary; attendance is not mandatory. These organisations meet their own costs of attending. Industry members find value in keeping up-to-date with the international standards.

In summary, forum attendance would continue irrespective of action taken under this RIS. Costs would be the same under either option 1 or 2.

ADRs	. Australian Design Rules
APEC	Asia-Pacific Economic Cooperation. APEC is the premier forum for facilitating economic growth, cooperation, trade and investment in the Asia-Pacific region
COAG	Council Of Australian Governments. COAG is the peak intergovernmental forum in Australia, comprising the Prime Minister, State Premiers, Territory Chief Ministers and the President of the Australian Local Government Association (ALGA)
DOTARS	Australian Department of Transport and Regional Services
GDP	. Gross Domestic Product
GM	. General Motors Corp., a major vehicle manufacturer. It is the parent company of GM Holden, a local vehicle manufacturer
GST	goods and services tax
MVSA	Motor Vehicle Standards Act 1989
RIS	regulation impact statement
TLG	. Technical Liaison Group, a government / industry consultative forum on vehicle standards
U.N	United Nations
UN/ECE	. U.N. Economic Commission for Europe
VCA	.U.K. Vehicle Certification Agency
WTO	. World Trade Organization

## List of sources

List of abbreviations

<sup>1</sup> WTO International Trade Statistics Database 1990-2004

<sup>2</sup> WTO *International Trade Statistics Database* 1990-2004. The top 5 exporting countries of automotive products in 2004 were Germany, Japan, the U.S., France and Canada

<sup>3</sup> see figures 2-6, extracted from the Department of Industry, Tourism and Resources *Key Automotive Statistics* and the WTO *International Trade Statistics Database* 1990-2004

<sup>4</sup> Australian Bureau of Statistics, Year Book Australia 2005

<sup>5</sup> OECD Trade Policy Working Paper No. 25, *Intertwined: FDI In Manufacturing And Trade In Services*, December 2005

<sup>6</sup> Department of Industry, Tourism and Resources, *Driving the future: Australia's automotive action agenda*, 2000

<sup>7</sup> information supplied by firms

<sup>8</sup> see figure 1, extracted from the Department of Industry, Tourism and Resources *Key Automotive Statistics* 1990-2004

<sup>9</sup> WTO International Trade Statistics Database 1990-2004

<sup>10</sup> Australian Bureau of Agricultural and Resource Economics, *Australian Commodities Statistical Tables* 

<sup>11</sup> the Minister for Industry, Tourism and Resources, The Hon Ian Macfarlane MP, speech to the Federal Chamber of Automotive Industries, 30 March 2006

<sup>12</sup> see figure 5, extracted from the Department of Industry, Tourism and Resources *Key Automotive Statistics* 1990-2004

<sup>13</sup> International Organization Of Motor Vehicle Manufacturers, 2004 statistics

<sup>14</sup> Charles D. Uthus, Senior International Analyst, American Automobile Manufacturers Association, speech to the APEC Early Voluntary Sector Liberalization Automotive Initiative Seminar, Kuala Lumpur, 20 April 1998

<sup>15</sup> Productivity Commission, *Review of Automotive Assistance, August 2002*, p. 88. "Ford argued that, notwithstanding the alignment that has already occurred, compliance with unique ADRs currently costs those supplying vehicles to the Australian market around \$1 million to \$2 million a model without providing any safety benefits."

<sup>16</sup> UN/ECE, current as at January 2007

<sup>17</sup> UN/ECE, current as at January 2007

<sup>18</sup> remarks made by the U.S. to the November 2006 meeting of WP.29, *Informal Document No. WP.29-140-23* 

<sup>19</sup> the full text of the reservation is as follows: "The Government of Australia hereby declares, pursuant to Article 1, paragraph 5, and Article 11, paragraph 3, that it will not be bound by any of the Regulations annexed to the Agreement, as amended, until further notification is given"

<sup>20</sup> Council of Australian Governments, *Principles and Guidelines for National Standard Setting and Regulatory Action by Ministerial Councils and Standard-Setting Bodies*, April 1995 (last updated June 2004)

<sup>21</sup> Joint Standing Committee on Treaties Report 25, 21 September 1999, *Adoption of Uniform Technical Prescriptions for Wheeled Vehicles*, paragraphs 7.24-25

<sup>22</sup> Productivity Commission, *The Automotive Industry*, May 1997, page 295

<sup>23</sup> Productivity Commission, *Review of Automotive Assistance, August 2002*, page 19

<sup>24</sup> several sources provide summaries of Australia's automotive industry: Department of Industry, Tourism and Resources, *Automotive Industry Snapshot 2006*; Federal Chamber of Automotive Industries, *Key Facts 2006*; Productivity Commission, *Review* of Automotive Assistance, August 2002, The Automotive Industry, October 1990, The Automotive Industry, May 1997; Australian Bureau of Statistics, Year Book Australia 2005 <sup>25</sup> Department of Industry, Tourism and Resources Key Automotive Statistics 1990-2004

<sup>26</sup> Australia is a contracting party to the *Marrakesh Agreement establishing the World Trade Organization (WTO Agreement)*, and its *Agreement on Technical Barriers to Trade*, [1995] ATS 8. The concept of a "technical regulation" is defined under the agreement; the concept covers mandatory requirements relating to product characteristics – such as size, shape, design, function and performance

<sup>27</sup> WTO, Technical Information on Technical Barriers to Trade, 2006

<sup>28</sup> the Asia-Pacific Economic Cooperation (APEC) was established in 1989 as a forum for Pacific Rim economies to improve economic and political ties. APEC economies adopted the Bogor Declaration in 1994

<sup>29</sup> Joint Statement, 3rd Transportation Ministerial Meeting, APEC Transportation Working Group, *Connecting APEC: Pathways to Prosperity*, Lima, 6-9 May 2002

<sup>30</sup> the Joint Standing Committee on Treaties noted: "We accept the Minister's proposition that each action to adopt an ECE Regulation should be considered to be implementation action within the overall framework of the treaty, rather than a separate treaty action. This acceptance is given on the proviso that community participation in the regulation review process is wide and effective and that the usual Regulation Impact Statement and parliamentary scrutiny opportunities are available for each regulatory action." Please see *Joint Standing Committee on Treaties Report 25*, 21 September 1999, *Adoption of Uniform Technical Prescriptions for Wheeled Vehicles*, paragraph 7.27

<sup>31</sup> the Agreement is called the *Inter-Governmental Agreement for Regulatory and Operational Reform in Road, Rail and Intermodal Transport*, and was signed by all jurisdictions in 2003

<sup>32</sup> the Efficiency of Interstate Transport Arrangements, Harmonisation of Road Vehicle Regulation in Australia, Inter-State Commission, June 1988

<sup>33</sup> section 5 of the MVSA, definition of "vehicle standard"

<sup>34</sup> Hansard HR 23 May 1989, p. 2688

<sup>35</sup> National Road Safety Strategy 2001-2010, and regular data from the Australian Transport Safety Bureau (Road Deaths Australia Monthly Bulletins and the Fatal Road Crash Database)

<sup>36</sup> *National Road Safety – Eyes on the Road Ahead*, House of Representatives Standing Committee on Transport and Regional Services, 21 June 2004, paragraph 6.1