

Regulatory Impact Statement

2012 Amendment to the Land Transport Rule: Vehicle Exhaust Emissions 2007

Agency Disclosure Statement

This Regulatory Impact Statement (RIS) has been prepared by the Ministry of Transport.

It provides an analysis of a range of approaches to vehicle emission standards after the current standards for used vehicles expire at the end of 2012.

The costs and benefits of all options have been identified and measured where possible. The analysis relies on Ministry analysis, supported by a separate consultant's report on the likely impact of the amendments for used vehicles. There is, however, considerable uncertainty around the nature and timing of further standards for new and used vehicles. The impact of the global financial crisis and the earthquake in Japan on future standards for used vehicles makes identification of a specific programme of updates challenging. Identification of options that accommodate these uncertainties in future standards has been a priority for the Ministry.

Several of the options under examination would continue existing compliance costs beyond 2012. With respect to used vehicles, the consultant's report suggests that annual compliance costs associated with retaining the existing vehicle emission standards would be similar to those that applied between 2007 and 2012. With respect to new vehicles, emission standards for new vehicles will continue to be set by overseas regulations.

The proposals do have some potential to impact on the relative cost of new and used vehicles and the total costs of vehicles, but have no direct impact on private property rights or common law principles.

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Status quo and problem definition

Background

Land Transport Rules are made by the Minister of Transport under the *Land Transport Act 1998*. Rules contain detailed technical standards and procedures.

The *Land Transport Rule: Vehicle Exhaust Emissions 2003 (Emissions Rule)* was the first Rule to set emissions standards for vehicles entering New Zealand. It set minimum standards for vehicles manufactured after 2004. However, vehicles built before 2004 only had to have been built to a standard applicable at the time of the vehicle's manufacture. Therefore, used imported vehicles were able to meet older and less stringent emissions standards when entering the New Zealand fleet.

New Zealand recognises standards from four jurisdictions: Europe (Euro), Australia (Australian Design Rules (ADR)) Japan and the United States of America.

In general new vehicles are built to comply with European (Euro) standards (or the Australian ADR equivalents). Light vehicle Euro standards are described with a normal (Arabic) numerals and heavy vehicle standards are referred to using Roman numerals). Virtually all used vehicles are built to comply with Japanese standards. For simplicity, standards from Japan and the United States of America are referred to by the year they are introduced in the jurisdiction.

To address the health impacts of vehicle emissions in New Zealand, the Emissions Rule was updated in 2007 to include standards which would increase in stringency over time. For the first time it imposed minimum exhaust emissions standards for all vehicles entering the fleet.

When the Emissions Rule was updated in 2007, in order to signal Cabinet's intent that the inclusion and timing of future standards would be considered again, the final table of approved standards for used vehicles deliberately did not include any minimum standards after 1 January 2013.

In 2010, the then Minister of Transport advised motor vehicle importers of his intention to amend the Emissions Rule to make the changes set out in the proposed amendment Rule. This was included in a letter to the Chief Executive of the Motor Industry Association. This letter was intended to provide sufficient notice to the new vehicle importers that these changes would be made at the first opportunity.

In the 2011 calendar year, 166,319 light vehicles and 3,583 heavy vehicles were registered for use on New Zealand roads.

Problem Definition

An amendment to the emissions Rule is required because the current minimum exhaust emissions standards for used vehicles expire at the end of 2012 and levels of protection from the health impacts of vehicle emissions would revert to pre-2007 levels. Maintaining synchronisation with Australian, Japanese and American standards for new vehicles is also a challenge.

There are a number of minor issues of clarity that could usefully be addressed, but the measures required to address them are minor in their effect and are not further considered in this RIS.

Objective

The objective of the proposed amendment is to continue existing government policy to ensure that there are minimum emissions standards for used vehicles entering the New Zealand fleet after 31 December 2012. It is also intended to continue to follow the policy set out in the preamble to the 2007 Emissions Rule and agreed by Cabinet, that New Zealand will implement new emissions standards for new vehicles at the same time as they are implemented in Australia, or two years after they are implemented in Japan or Europe as appropriate.

Any amendment needs to be in place by 1 January 2013 if continuity of standards is to be maintained.

Regulatory impact analysis

Standards for new vehicles

The options for new vehicle standards are constrained by the timing and content of standards in Europe, Australia, the United States of America and Japan.

Standards from Europe and Australia

Around 97 percent of new vehicles entering New Zealand are certified to comply with either Euro or ADR emissions standards. Currently New Zealand is largely treated as a branch of Australia by vehicle manufacturers. Remaining in synchronisation with Australia with the implementation of emissions standards reduces costs to importers.

The dates on which Australia will adopt new European standards are as follows:

Legislated dates for implementing Euro 5 and ADR equivalent standards in Australia

| <i>Euro standard for light vehicles</i> | <i>Australian Design Rules (ADR)</i> | <i>Date of introduction in Australia</i> |
|---|--------------------------------------|--|
| <i>Euro 5 (New models)</i> | <i>ADR 79/03</i> | <i>1 November 2013</i> |
| <i>Euro 5 (All models)</i> | <i>ADR 79/04</i> | <i>1 November 2016</i> |

Proposed dates for implementing Euro 6 and ADR equivalent standards in Australia

| <i>Euro standard for light vehicles</i> | <i>Australian Design Rules (ADR)</i> | <i>Date of introduction in Australia</i> |
|---|--------------------------------------|--|
| <i>Euro 6 (New models)</i> | <i>ADR 79/05</i> | <i>1 July 2017</i> |
| <i>Euro 6 (All models)</i> | <i>ADR 79/05</i> | <i>1 July 2018</i> |

Any adoption of new standards by New Zealand would sensibly take account of these Australian introduction dates.

Standards from Japan and from the United States of America

Less than 3 percent of new vehicles entering the New Zealand fleet are declared to standards from the United States of America and Japan. Updating the standards from these other justifications at the same time that Australian and Euro standards are updated would retain consistency.

At present the Emissions Rule allows existing model vehicles certified to United States (US) standards to be certified to the relatively old US 2004 standard. The ability for new vehicle importers to certify vehicles to a standard older than that required for used vehicles (Japan 05) is an anomaly. In 2011 approximately 350 heavy vehicles out of around 3,200 heavy vehicles are declared to US standards. Virtually all of these were manufactured by Japanese companies.

Sensible dates for introduction of updated United States of America standards are as follows:

Proposed date of introduction of new standards from United States of America

| Standard (all fuel types) | Light vehicles | Heavy vehicles |
|---------------------------|----------------|----------------|
| US 2007 (New models) | 1 January 2014 | 1 January 2014 |
| US 2007 (Existing models) | 1 January 2015 | 1 January 2014 |

Updating the US standards would have little effect on vehicle importers other than those importing heavy diesel vehicles. No new light diesel vehicles have been registered as complying with a US standard since 2008 and only around 30 new vehicles per year have been certified to US petrol standards and these generally have exceeded the 2004 standard.

Sensible dates for introduction of updated Japanese standards are as follows:

Proposed date of introduction of new standards from Japan

| Standard (all fuel types) | Light vehicles | Heavy vehicles |
|----------------------------|----------------|----------------|
| Japan 09 (New models) | 1 January 2014 | 1 January 2014 |
| Japan 09 (Existing models) | 1 January 2015 | 1 January 2015 |

Approximately 1,000 new vehicles (both light and heavy) are certified to Japanese standards each year. As at 1 January 2012, no new vehicles had been certified to the Japan 09 standard.

Any option to recognise new Japanese vehicles certified to Japan 09 would sensibly take effect for new models from 1 January 2014. Although this is later than the existing policy would require (this would have seen the standard implemented from 1 January 2012), it recognises that importers have not been previously advised of the proposed change and need time to alter their importing patterns.

Costs

Previous changes to new vehicle standards in 2010 were relatively minor in impact as they implemented existing policy previously agreed by Cabinet and set out in the Rule's preamble.

Any policy that requires vehicles to meet higher standards will result in some change in price for vehicles incorporating the new technologies. International literature suggests the new emissions standards may increase the price of a new vehicle by between half and one percent of the value of the vehicle. However, because manufacturers usually upgrade more than one feature on a new model vehicle, any change in price of an individual vehicle is likely to reflect a range of design changes, including additional safety or comfort features.

Options for new vehicles entering the fleet

There are three options for including new emissions standards for new vehicles.

Option 1: Do nothing

The first option is to leave the Rule unchanged.

Allowing the standards to lapse would create ambiguity regarding what is expected after 1 January 2015. Leaving the Rule unchanged could be interpreted as either no vehicles can be imported, or vehicles of any standard can be imported.

New vehicle importers and especially heavy vehicle importers, advise that they prefer several years notice of changes in standards. Delaying amendments would not assist planning by vehicle importers, especially if standards were subsequently required to be updated at short notice.

The lack of minimum standards would allow entry of vehicles from jurisdictions where new vehicles are not built to the same high standard. It would also result in a non-level playing field for importers of new vehicles.

Not amending the rule to include further standards would be contrary to existing government policy.

This option is not recommended.

Option 2: Implement the full suite of current and future international standards

This option is to implement anticipated European and Australian standards *and* include further standards from the United States of America and Japan.

This option is not preferred because of the risk that the Australian government does not implement the ADR equivalent of Euro 6 standard for light vehicles on the indicated date. Because it will be necessary to make further amendments to adopt other standards, including Euro VI for heavy vehicles, these additional changes can be made at a later date as part of a further package of amendments.

Option 3: Amend the Emissions Rule to bring in existing standards, with a review in 2014

The third option, which is the preferred option, is the same as option 2 above, but would only amend the Emissions Rule for new vehicles to adopt the Australian ADR

standards and their equivalent Euro standards that have already been implemented in Australia, on the same day as Australia.

This approach is preferred as the majority of new vehicles entering the fleet are sourced from Australia, and it is important to ensure updated standards for new vehicles are implemented on the same day as Australia.

This option also proposes a review in 2014 of the timing of the introduction of any new vehicle standards, including Euro 6 for light vehicles and Euro VI for heavy vehicles and relevant higher standards from the United States of America and Japan. This review would be conducted at the same time as any review of used vehicle standards.

Options for used vehicles entering the fleet

There are three options for amendments to the minimum emissions standards for used vehicles. These are:

Option 1: Do nothing

The option of doing nothing would allow the requirements for used vehicles to meet minimum emissions standards to lapse on 31 December 2012, allowing importers to bring vehicles of any emissions standard into New Zealand.

This is not desirable as past experience is that in the absence of minimum standards, importers will import ever older vehicles. This would defeat the purpose of the existing Emissions Rule, which is to achieve improvements in air quality by reducing the level of harmful emissions from motor vehicles entering the New Zealand fleet.

Currently the Emissions Rule is ambiguous regarding what is expected after 31 December 2012 and could be interpreted as either no vehicles, or used vehicles of any standard could be registered for use on New Zealand roads. Should the emissions Rule not be amended, then this is likely to cause disruption and confusion to the vehicle import market.

Additionally, both new and used vehicles are currently required to meet emissions standards. Allowing the standards for used vehicles to lapse would mean that only new vehicles would be required to meet minimum standards. Not amending the Rule would therefore create an unfair playing field for the vehicle import industry.

This option is not recommended.

Option 2: Amend the Emissions Rule

This option would extend the current exhaust emissions requirements indefinitely.

The current standards for used vehicles were only introduced on 1 January 2012 for petrol vehicles and 1 January 2010 for diesel vehicles. They were an important improvement over the earlier standards they replaced.

The benefit of continuing the current standards for used vehicles is that it will ensure quality vehicles continue to be brought into New Zealand. These vehicles would not only have updated technology resulting in lower emissions, but will also generally have modern safety features too.

The nature of the proposed amendment to the Emissions Rule means that no new costs will be imposed. This is due to it being a continuation of existing requirements. The independent consultant's¹ review of the Emissions Rule, commissioned as part of preparing this document, was unable to identify any new costs arising from maintaining the status quo.

Over time the current standards will go out of date, which will not achieve longer term improvements to the fleet, which is the aim of the Rule. For this reason this option is not recommended.

Option 3: Amend the Emissions Rule with a review in 2014

This option proposes that, in addition to continuing the current minimum emissions standards for used vehicles, the Government also carry out a review in 2014 of the need for further minimum emissions standards for used vehicles.

2014 is the earliest that data will be available on the effects of the most recent changes. When the Emissions Rule was introduced in 2007, the intention was that a review should take place in 2012 to consider when to introduce the standard known as Japan 09, for used vehicles. However, because the most recent requirement for used petrol vehicles (which are the bulk of imports) only came into effect on 1 January 2012, there is not yet sufficient data on which to measure the effects of this standard. In addition, the effects of the global financial crisis and the earthquakes in both New Zealand and Japan mean that it is not possible to provide a sound cost benefit analysis as to if, or when further standards should be adopted.

This option has the same advantages as Option 2, but with the review to ensure future standards are considered so that the standards do not unintentionally go out of date.

This option is the preferred option.

¹ A copy of the report completed by Covec titled: *Brief Economic Assessment of Proposed Updates to Vehicle Exhaust Emissions Rule* was made available on the NZ Transport Agency's website: www.nzta.govt.nz

Consultation

Sixteen submissions were received on the draft amendment to the emissions Rule. With one exception they were supportive of the proposed changes. A copy of the draft RIS was also made available for consultation and where submissions chose to mention it, they were supportive of its conclusions. A copy of the submissions analysis is attached.

Two submissions expressed concern that the amendment Rule did not set a date for the adoption of the Japan 09 emissions standard for used vehicles. This was noted, but considered out of scope as it will be addressed by the planned review in 2014.

The only other specific concern raised was a submission from a company that assembles between 40 and 70 large trucks using engines from the United States of America in New Zealand each year. The company argued that the proposal to raise the minimum acceptable emissions standard from the US2004 standard to the US2007 standard with only twelve months notice was too short and would pose economic difficulties for them. Around 3,200 heavy diesel vehicles are registered each year. No other importer of trucks expressed similar concerns.

Officials accept that this individual manufacturer may face direct costs from the change, but that there are options to use existing administrative flexibility and exemptions processes to mitigate these.

Several submissions made comments expressing concern that the amendment Rule did not address tampering with emissions controls in in-service vehicles. This was considered to be out of scope of the amendment Rule, but can be considered as part of the planned review in 2014.

Implementation

The Rule amendment will follow a normal land transport Rule process.

The proposed Rule amendment involves continuation of existing processes with no new procedures proposed at this point. These changes are expected by the motor-vehicle import industry.

The Minister of Transport will inform Cabinet of his proposal to approve any final Rule amendment. A press release is likely to be prepared to announce the Rule amendment following any Cabinet item. The Ministry of Transport and the NZ Transport Agency's websites will be updated to include advice on the Rule amendment.

The target audience is already aware of and well informed about this issue and knows where to obtain information relating to the amendment. Transport officials will continue to work with industry to convey the proposed changes to the Emissions Rule.

Monitoring, evaluation and review

The effectiveness of the Emissions Rule will be monitored through the Motor Vehicle Register (MVR). Specifically, the MVR will be used to monitor the standards and volumes of vehicles entering the New Zealand fleet. These statistics will give a clear

indication of any changes in import patterns. The MVR has been used for an ongoing monitoring of the emissions Rule standards since the 2007 emissions Rule came into effect in 2008.

Planned Review of the Emissions Rule

The application of further standards for new vehicles and the adoption of the Japan 09 emissions standard to imported used vehicles will be considered in a proposed review of emissions standards in 2014.

The timing for inclusion of other existing standards, mainly for heavy vehicles, will also be considered at that time.