

Land Transport Rule

Vehicle Dimensions and Mass Amendment [(No 2) 2009]

Rule 41001/5

Overview

Land Transport Rules are a form of legislation made by the Minister of Transport. Rules go through an extensive consultation process and are refined in response to consultation.

*This overview accompanies, and sets in context, the yellow (public consultation) draft of **Land Transport Rule: Vehicle Dimensions and Mass Amendment [(No 2) 2009] (Rule 41001/5)**. The draft Rule amendment proposes changes to Land Transport Rule: **Vehicle Dimensions and Mass 2002 (Rule 41001)**.*

*If you wish to comment on this draft Rule amendment, please see the page headed 'Making a submission'. The deadline for submissions is **24 July 2009**.*

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Introduction

What are Land Transport Rules?

The NZ Transport Agency (NZTA) is contracted to produce Land Transport Rules, in collaboration with the Ministry of Transport (the Ministry), under an agreement for Rule development services made with the Secretary for Transport. Rules are delegated legislation, with a similar status to that of regulations. The Minister of Transport signs Rules into law under the authority of the *Land Transport Act 1998* (the Act).

Rules are made in respect of a wide range of matters covered by the New Zealand Transport Strategy and Government Policy Statements. These include safeguarding and improving land transport safety and security, improving access and mobility, assisting economic development, protecting and promoting public health and helping to ensure environmental sustainability.

Land Transport Rules aim to:

- **clarify,**
- **consolidate,** and
- **create**

land transport law.

Rules are developed by means of extensive consultation, and each Rule is drafted in plain language to be understood by a wide audience and to help ensure widespread compliance with its requirements.

About this proposed Rule

This overview outlines proposals to make changes under the Act to *Land Transport Rule: Vehicle Dimensions and Mass 2002* ('the Vehicle Dimensions and Mass Rule' or 'the Rule'), which sets standards and requirements for vehicles, including their mass and dimensions.

What is the consultation process for this Rule

The Government is committed to ensuring that legislation is sound and robust and that the consultation process takes account of the views of, and the impact on, people affected by changes proposed in a Rule.

This publication, for your comment, has two parts:

(a) an overview which sets the proposed Rule changes in context; and

(b) the yellow draft of *Land Transport Rule: Vehicle Dimensions and Mass Amendment [(No 2) 2009]* ('the proposed amendment Rule') for public comment.

This overview provides the context for the proposed amendments to the Vehicle Dimensions and Mass Rule. Please consider the effects that those changes would have on you or your organisation, in particular, the benefits and costs that would result from their implementation.

You will note that the yellow draft amendment Rule contains only the proposed Rule changes. If you do not have a copy of the Vehicle Dimensions and Mass Rule, please read the information about obtaining Land Transport Rules in *Publication and availability of Rule* (page 17). However, to assist in setting the proposed amendments in context, the web versions of the amendment Rule and the Vehicle Dimensions and Mass Rule are linked.

The issues that are raised in submissions on the yellow draft of the amendments will be analysed and taken into account in redrafting the proposed amendment Rule.

Following completion of the public consultation phase, the final draft of the amendment Rule will be submitted to the Ministry for Government scrutiny. The final draft will then go to Cabinet for noting and will be submitted to the Minister for signature.

Making a submission

We would welcome your comments on the Rule amendment proposals. If you wish to make a submission on the proposed Rule amendments, please read the material headed *Making a submission* at the front of this document.

The deadline for submissions is Friday, 24 July 2009.

Proposed timetable for implementation of the Rule

Subject to Government approval, it is proposed that the amendment Rule will come into force in February 2010.

Why is this amendment Rule being proposed?

Background to the proposals

The Vehicle Dimensions and Mass Rule prescribes maximum limits for heavy motor vehicles regarding:

- weight, including a vehicle's total weight, and permitted weights for each axle or axle set;
- length;
- width; and
- height.

The Rule currently provides for two permit systems to allow unusually heavy and/or large loads to be moved where the loads are not reasonably able to be made lighter and/or smaller. Road controlling authorities can allow vehicles to exceed the prescribed weight limits (overweight permits), and the NZTA can allow vehicles to exceed the prescribed dimension limits (overdimension permits). These permits are issued to specific vehicles, which must generally use specified routes.

Why are changes being proposed?

The amount of freight to be moved on New Zealand's roads is projected to double over the next 20 years. This freight needs to be moved as efficiently as possible.

The Rule currently restricts the ability of road controlling authorities to issue overweight permits for divisible loads (ie, a load that can be divided into two or more sections). Furthermore, the Rule does not allow the NZTA to issue overdimension permits for longer vehicles to transport divisible loads.

In December 2007, the Government agreed that the Ministry should proceed with the development of an enhanced permit system to allow vehicles to operate outside the currently prescribed mass and dimension limits on specific (ie, suitable) routes.

The Ministry has been conducting trials, since mid 2008, allowing heavier and longer vehicles to operate on specified routes. These trials have shown that significant productivity benefits would result from allowing vehicles to operate more freely at mass and dimension limits above those currently prescribed in the Vehicle Dimensions and Mass Rule.

Improving the productivity of the heavy vehicle fleet under the right conditions will enable a given amount of freight to be carried on fewer trucks. In turn, this will help to reduce road congestion, operating costs for transport operators and vehicle emissions. It will also be beneficial to road safety overall by reducing risk exposure for more vulnerable road users including passenger car users, cyclists and pedestrians (see *Issues considered in proposing changes to the Rule*, page 9).

What would be the effect of the proposed changes?

The proposed amendments to the Rule will broaden the grounds on which a vehicle can operate in terms of weight and, in some cases, length. The changes would also introduce a third type of permit – the high-productivity motor vehicle permit. The changes would:

- increase allowable overall length on certain types of vehicle configuration;
- increase weight limits on certain axle sets;
- allow vehicles to operate up to 44 tonnes with shorter first-to-last axle spacings than is currently permitted; and
- allow high-productivity motor vehicles to operate at gross masses above 44 tonnes (for divisible loads).

What changes are proposed?

Proposed Rule amendments

Details of the proposed changes to the Rule, and a discussion of related issues are set out below.

Proposal 1

Increase the maximum mass and certain dimension limits for vehicles operating up to 44 tonnes without the need for a permit. Some examples of proposed increases are: an increase in the allowable mass for a tri-axle set from 18 to 20 tonnes, and an increase in the overall length of truck-simple trailer combinations from 20 to 22 metres, with a corresponding maximum allowable mass increase from 32 to 36 tonnes. The main change would be to allow a greater gross mass for a given first-to-last axle spacing (see proposed new *Schedule 2* in the draft Rule).

Proposal 2

Allow road controlling authorities to issue permits (ie, high-productivity motor vehicle permits) for standard size vehicles to operate above 44 tonnes and up to 53 tonnes on specified routes that have been assessed by the road controlling authority, with conditions of operation (such as acceptable methods of route compliance) specified in the permits.

Proposal 3

Allow the NZTA to issue permits (high-productivity motor vehicle permits) for increased overall vehicle length and associated dimensions for vehicles to operate above or below 53 tonnes gross mass on specified routes that have been assessed by the NZTA with conditions of operation (such as acceptable methods of route and mass compliance) specified in the permits.

Issues considered in proposing changes to the Rule

The likely impacts of implementing these proposed changes have been taken into account in developing the proposals and in the related trials commissioned by the Ministry.

Overall, it is considered that the benefits of the changes will outweigh any costs. (See also *Costs of the proposed changes*, page 15.)

An increase in the mass and dimension limits for heavy vehicles has been shown in trials to improve productivity by increasing load capacity and reducing the number of vehicle movements required to distribute a given amount of freight. This, in turn, reduces fuel consumption and vehicle emissions, improves safety by lowering risk exposure and, overall, will contribute to the Government's efficiency and productivity objectives. (See *Assisting achievement of strategic objectives*, page 14.)

Impact of increased weight and length of heavy vehicles

Under the proposed changes, most trucks will not be any larger than current standard size trucks, but will operate at slightly increased mass. The trucks will have the safety features needed for the greater mass, such as brakes that can cope with the extra energy that needs to be dissipated when slowing and stopping. In a collision with a car, for instance, the additional mass of a truck would make a negligible difference. The reduced number of trucks on the road, however, will have a beneficial outcome in terms of the number of crashes involving trucks and cars.

Longer trucks will be limited in number and will be confined to routes that have been assessed for safety and other factors. In some quarters, the public perception is that bigger trucks equates with reduced safety, but longer trucks are, in fact, more stable due to their lower centre of gravity, making them less susceptible to roll over. This is an important factor because New Zealand has a winding, and often mountainous, road network making roll-over crashes more common than in most other countries.

A survey of motorists' perceptions of heavy vehicles¹ was undertaken in 2008 and the results of this showed that 71% of motorists surveyed viewed sharing the road with trucks either positively or were neutral in their response.

Vehicle emissions

Concerns have been raised over the impact on health of increased emissions from heavier vehicles. To assess the health impacts, a study² was commissioned to measure the level of emissions from vehicles operating at increased mass. The emissions that were measured included carbon dioxide, carbon monoxide, sulphur dioxide, nitric oxide, nitrogen dioxide, total oxides of nitrogen, hydrocarbons and oxygen.

¹ *Heavy Vehicles Productivity Project Research Amongst Truck Drivers and the General Motoring Public. A Quantitative Report.* UMR Research. September 2008 (Accessible at www.transport.govt.nz/Documents/Final-HeavyVehiclesRpt-Sept08.pdf)

² *Heavy Vehicle Productivity Project Emissions Monitoring Programme: October 2008 Summary Report.* Wellington Institute of Technology. March 2009. (Accessible at www.transport.govt.nz/ourwork/Land/Documents/Emissions%20Monitoring%20Report.pdf)

The study concluded that, when emissions were considered on the basis of the movement of a tonne-per-kilometre of freight, there was no indication of a significant worsening in emission rates with vehicles travelling at 50 tonnes compared with those travelling at 44 tonnes and, therefore, there should be little or no impact on public health. It should also be noted that a reduction in the number of vehicles needed for a given freight task would result in a reduction of emissions (about 25,000 tonnes of CO₂ annually) and a reduced rate of increase of heavy vehicle activity over time to meet the forecast freight demand.

The possibility of increased noise has also been considered. Noise and vibration level tests³ were carried out and the tests indicated that there should be no noticeable noise and vibration effects by increasing vehicle weight in the range being considered.

Infrastructure impacts

The trials undertaken in 2008 showed that a number of bridges required strengthening before they could carry the higher mass vehicles regularly. While the economic benefits of the Rule change are compelling, it is likely that the availability of routes will initially be limited until the necessary strengthening of the most important structures is undertaken.

How permits will be administered

Subject to final approval of the Rule amendment this year, it is expected that it will be possible to apply for permits from 1 February 2010. However, permit approval will be conditional on route assessments and the ability of the route infrastructure to accommodate heavier or longer vehicles.

It is expected that, while some permits will be able to be approved reasonably quickly, full implementation of the permit regime is likely to occur over time as infrastructure improvements are made. (See also *Costs of the proposed changes*, page 15.)

³ *Quantification of Noise and Vibration Effects Arising from Higher Mass Limits for Heavy Vehicles*. OPUS International Consultants Ltd. 2008. (Accessible at www.transport.govt.nz/ourwork/Land/Documents/Noise%20and%20vibrations%20effects.pdf)

Suggestion for comment

Establishment of single permit authority

At present, permits for overweight vehicles are issued by the NZTA for State Highways (and for some local roads on behalf of other road controlling authorities), and some road controlling authorities issue their own permits for their roads. The NZTA issues all overdimension permits.

A single permit issuing authority may be more cost-effective and simpler than the current system.

Your comments on this suggestion would be welcome.

Matters to be taken into account

The Act provides the legal framework for making Land Transport Rules. *Section 161* of the Act states the procedures by which the Minister of Transport may make ordinary rules. These include the obligation to consult, which has been developed into a series of formal and informal discussion procedures.

Section 164 of the Act states the matters to be taken into account in making Rules. In making ordinary rules, the Minister is required to give such weight as he or she considers appropriate in each case to the matters discussed below.

Application of Rule-making criteria

Proposed activity or service and risk to land transport safety

Section 164(2) (a), (b) and (c) of the Act requires that appropriate weight be given to the nature of the proposed activity or service for which the Rule is being established and that the Minister take into account, respectively, the level of risk existing to land transport safety in general in New Zealand and the level of risk to land transport safety in each proposed activity or service.

The proposed activity for which the Rule is being established is the operation on New Zealand roads of heavy vehicles that exceed the currently prescribed mass and dimension limits.

Vehicles operating up to the proposed amended mass and dimension limits would have to meet the braking performance requirements of *Land Transport Rule: Heavy-vehicle Brakes 2006*, and the towing connection and load securing requirements of *Land Transport Rule: Heavy Vehicles 2004*.

Other existing safety requirements, for example, Static Roll Threshold (SRT) limits, would continue to apply to vehicles operating at greater mass and dimension limits. The increase in the mass of existing vehicles could have an impact on their centre of gravity and the operational SRT and, in some cases, this may require adjustments to driving techniques, especially in relation to cornering. The NZTA will work with the transport sector to ensure any driver education or training issues are addressed.

Assisting achievement of strategic objectives

Section 164(2)(d) and (e) of the Act requires that the Minister must have regard to, and give such weight as he or she considers appropriate in each case, to the need to maintain and improve land transport safety and security, including personal security, and to whether a proposed Rule:

- (i) assists economic development;
- (ii) improves access and mobility;
- (iii) protects and promotes public health; and
- (iv) ensures environmental sustainability.

Assists economic development

The proposed changes to dimension and mass limits will have a positive effect on the economy through the increases in productivity that the new limits will allow. Several trials have been carried out of heavy vehicles carrying loads in excess of 44 tonnes to measure environmental and economic benefits. These trials revealed significant productivity benefits including an increase in productivity of approximately 16%, a 16% reduction in the number of trips and a 21% reduction in fuel use.

A study⁴ commissioned by the Ministry in 2007 suggested that an increase in allowable mass and dimensions could have an overall positive effect on New Zealand's GDP of between \$250 and \$500 million per annum.

Improves access and mobility

The proposed Rule amendments will have a negligible impact on access and mobility.

Protects and promotes public health

It is expected that the proposed changes will have a positive impact on public health (see *Vehicle emissions*, page 10).

Ensures environmental sustainability

The proposals will promote greater utilisation of existing vehicles and will reduce the rate of growth of the heavy vehicle fleet. This will improve the sustainability of road transport and reduce the pressure on the demand for more road network and the associated land use.

⁴ Ministry of Transport report. *Review of the potential for increasing productivity through concessions on heavy vehicle mass and dimension characteristics*. May 2007.

Costs of the proposed changes

Section 164(2)(e) of the Act requires that the Minister have regard to the costs of implementing measures proposed in a Rule.

The proposed amendments to the Rule relax the restrictions on the current issuing of permits to over-weight and overdimension vehicles. It is expected that the overall costs associated with the permit-issuing process and route assessments will be covered by the application fees charged by the road controlling authority issuing the permit or the single permit authority.

Concern has been expressed by road controlling authorities that any increase in the mass of heavy vehicles will cause accelerated pavement deterioration. This is a very complex issue. The reduced number of heavy vehicle trips and the slower rate of increase will have positive benefits for the road infrastructure. Concern has also been expressed at the ability of some bridges to accommodate heavier vehicles.

It is expected that road controlling authorities will address the infrastructure issues in their submissions and in consultation with the Ministry. The implications of these issues will be revised for the Minister to take into account.

International considerations

Sections 164(1) and *164(2)(f)* of the Act, respectively, require that Rules may not be inconsistent with New Zealand's international obligations concerning land transport safety, and that international circumstances in respect of land transport safety be taken into account in making a Rule.

International circumstances have been taken into account in developing the proposed amendment Rule. This has involved taking into account how other countries such as Australia and some European countries have introduced 'high-productivity motor vehicles' to improve vehicle utilisation in their fleets, with positive safety outcomes.

How the proposed amendment Rule fits with other legislation

The proposed Rule amendment will have an impact on the *Heavy Motor Vehicle Regulations 1974*, as it is envisaged that a new fee will need to be introduced for the issuing of permits.

It is not envisaged that the offences and penalty provisions in the *Land Transport (Offences and Penalties) Regulations 1999* will require amendment.

Publication and availability of Rule

Copies of this document may be obtained by contacting the NZTA Contact Centre on 0800 699 000. A copy of this document is also available on the NZTA's website at www.nzta.govt.nz/consultation/vehicle-dimensions-and-mass-amendment/index.html.

If you have not registered your interest to receive drafts related to this Rule (or other draft Rules and amendments in the Rules programme), you can do so by contacting the NZTA at the address shown on the *Making a submission* page at the front of this publication, or at www.landtransport.govt.nz/rules/reg-interest-rules.html.

Information about the Rules programme and process can be found on the website at www.landtransport.govt.nz/legislation. An electronic form is provided for registering an interest in Rules.

Final published Land Transport Rules can be purchased from selected bookshops throughout New Zealand that sell legislation. Queries about the availability and price of Rules can be made to the Rule printers and distributors, Wickliffe Ltd, telephone (06) 358 8231.

Final Rules, together with related information material, are also available on the website at www.landtransport.govt.nz/rules.