

Vehicle Dimensions and Mass Review

Summary of Submissions Report

November 2016

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Introduction

The proposed revised Vehicle Dimensions and Mass Rule (Land Transport Rule: Vehicle Dimensions and Mass 2016) is designed to deliver productivity improvements, greater regulatory efficiency and reduced compliance costs without compromising the road transport system and road user safety outcomes.

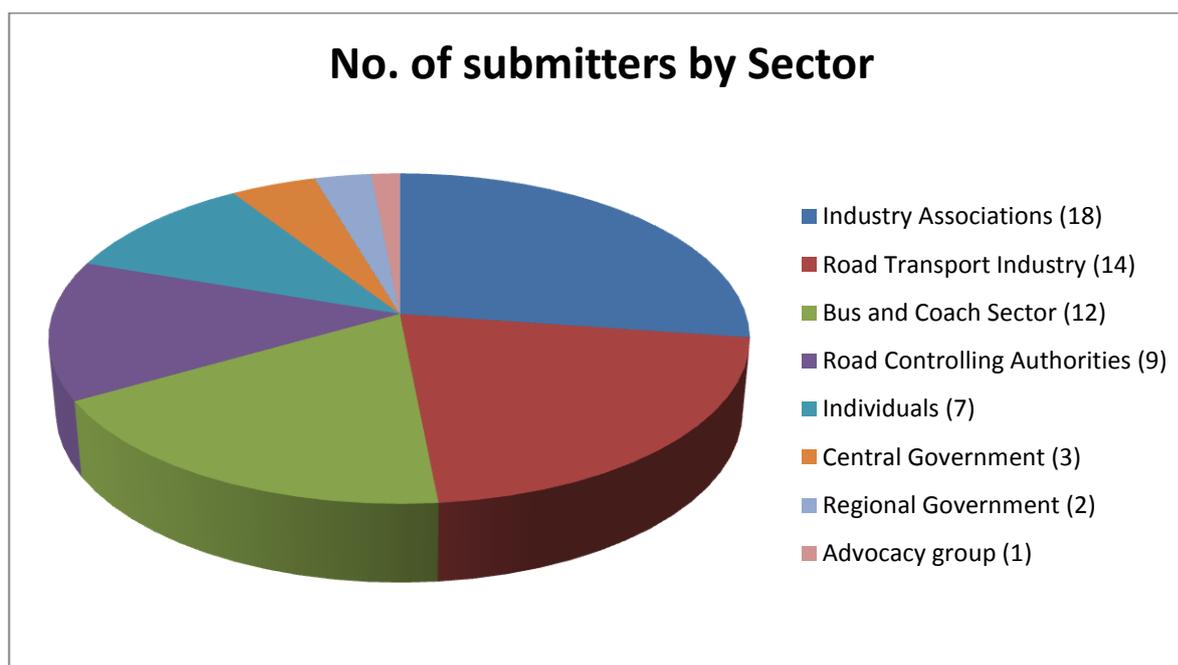
Consultation on the yellow draft rule commenced on 8 July 2016 and closed on 12 August 2016. The yellow draft consultation was preceded by a public discussion document which was open for consultation from December 2015 to February 2016. During this period seven regional and sector workshops were held. The workshops were attended by about 210 road transport industry representatives and other interested groups and individuals.

A total of 66 submissions were received that may be broken down as follows:

Submitter type	No. of submitters
Industry Associations	18
Road Transport Industry	14
Bus Sector	12
Road Controlling Authorities	9
Individuals	7
Central Government	3
Regional Government	2
Advocacy group	1

Industry associations that made submissions included:

- Road Transport Forum
- Automobile Association
- Heavy Haulage Association
- Bus and Coach Association
- Federated Farmers
- Motor Industry Association.



The Proposed 2016 Rule

This section summarises what the New Zealand Transport Agency (Agency) proposed in the draft Rule. Note that this was a fully revised Rule, not a set of amendments to the existing (2002) Rule.

Gross mass increases for combination vehicles

The gross mass proposals provide for small increases to the maximum gross mass for 7 axle vehicles with a wheelbase of at least 16.8m to 45,000kg and increasing the maximum gross mass for 8 axle vehicles with a wheelbase of at least 17.4m to 46,000kg. This is compared to the current maximum gross mass limit of 44,000kg.

Indivisible loads

The current Rule provides a general definition of 'indivisible load'. The only items specifically identified as being indivisible are customs-sealed import/export ISO containers. The Transport Agency's permit manual lists 10 types of load which it notes that the Axle Weights and Loading Group (an informal industry group convened by the Transport Agency) has determined should be considered as indivisible. The list placed in the proposed Rule is:

- transformer oil
- platform trailers
- construction equipment
- load dividers
- ballast
- towing of disabled vehicles
- fire-fighting vehicles carrying water
- slurry sealing.

Specialist vehicles

It is proposed that higher axle limits be available, under permit, for vehicles other than buses. These other vehicles typically also have heavy rear axle loads and the load cannot be easily redistributed. The higher axle limits would be available to rubbish trucks, concrete mixers and ground-spread fertiliser trucks.

Dimensions (width and height)

This section proposed extending the maximum allowable width to 2.55m, inclusive of load securing devices and extending maximum allowable height to 4.30m, inclusive of load securing devices.

Overdimension (mainly focussed on management of the largest loads)

Defined roles in the VDAM Rule would require the permit-holder (operator) to be responsible for ensuring conditions of a permit are met, and the lead pilot to be responsible for the safe management of the overdimension load from origin to destination, and in ensuring the vehicle is no wider than allowed for in the permit.

The key changes proposed would:

- Establish in the Rule obligations on the Transport Agency, when issuing a permit, to give due consideration to the capability of the vehicle and the safety of road users. The intention is to align overdimension permits with considerations that already apply to permit applications for increased mass.
- Transport Agency would be able to have regard to the traffic offending history of the person who applied for the permit, including breaches of condition of any permit issued under the Rule.

Other overdimension issues (including new definitions)

- Critical conditions. This is to be supported by establishing penalties for breaching critical conditions. Breaching a critical condition would create a liability for a greater fine and a standard breach of permit condition, i.e. \$2,000 compared to \$350.
- Crane booms. It is proposed crane booms that can be disassembled to be stacked to 3.1m wide and 4.5m high (i.e. within Category 1 overdimension parameters). Piloting and other conditions linked to Category 1 travel would apply to these vehicles.

Lighting and signage

A number of changes were proposed to improve the operation of the provisions regarding signage and lighting for overdimension vehicles. These changes were designed, in particular, to accommodate the uptake of new technologies.

- Flags for Category 4. At present, the Rule requires flags on the very largest vehicles and loads. This appears to be an error since these vehicles also have to be piloted, and display signs and hazard panels
- Sound warning device- the Rule clarifies that these devices may be used to warn oncoming traffic of the presence of the overdimension load
- Frangible signs. Currently the Rule requires all hazard signs to be frangible – easily broken off if hit by another vehicle or roadside object. The Rule will continue to require frangible signs but only where these project outside the dimensions of the vehicle.

Piloting

- The Rule will allow some (limited) travel by over-dimension vehicles in convoy, provided that additional piloting requirements are met. This is similar to the process allowed for specialised agricultural vehicles since 2013
- The removal of the maximum rim requirement for Class 2 pilot vehicles.

Travel zones and times for overdimension loads

- Proposed changes to travel zones and motorways restrictions reflect changes in road layouts and road use patterns since the Rule was established
- It is also proposed to apply travel restrictions when ANZAC Day falls on a Saturday (consistent with other holiday restrictions).

Comments by Sector

The section below sets out comments made sector by sector:

Bus and coach sector

- The bus sector was 'bitterly disappointed with the failure to address the weight issues for 2-axle buses in the draft VDAM Rule'
- Supportive of the simplification of weighing tolerances, and notes that in the absence of changes to the general access mass limits for 2-axle buses the reduction of tolerances will only compound the current weight issues
- Road controlling authorities should be mandated to issue a permit if the applicant does not breach s4.2 (1) of the Rule - safety/suitability of the vehicle, safety of road users and durability

of roads and bridges which the vehicle may operate. The sector argued if a permit is rejected the road controlling authority must be mandated to provide reasons for the rejection

- The sector strongly supports proposals to increase the general access maximum width and height of vehicles in the VDM Rule as this allows access to a wider range of vehicles, also supports allowances for the installation of close proximity monitoring systems (CPMS)
- The sector supports the simplification and increase of mass limits for 3-axle buses, they stated it would be of significant benefit to the bus and coach industry
- The sector proposes a new approach to mass limits distinguishing between urban buses and other buses with urban buses given a higher mass limit.

Road Controlling Authorities

- Road controlling authorities (RCAs) stated that large changes in axle loading will have a significant impact on weaker pavements that have been constructed in shallow pavements and with marginal aggregates, and may even result in rapid failure on some sections of road especially on the local authority network.
- The proposed gross mass limits should apply only to HPMV and 50MAX routes as published by the Transport Agency until a far better understanding of the potential benefits and probable costs of the increased Gross Vehicle Mass and lengths is available and a discussion of how those costs should be met has been had
- The RCAs were opposed to increases in dimensions citing safety issues and this proposal would increase pavement degradation through heavy vehicles travelling closer to the edge of the seal as they pass
- Central government should provide for funding of local roads subject to 'rapid failure' from heavy bus and goods vehicle use for the next 5 years on the same basis as special funding for pavement damage due to natural disasters
- More conditions should be added to overdimension loads when considering applications for overdimension loads travelling in their area.

Regional Councils

- Supported increasing maximum width to 2.55m (including securing devices) on the basis that it would better align with international standards, therefore improving access to international supply markets for heavy vehicle cabs and bus fleets, and encouraging uptake of the latest vehicles with better technologies
- Supported increases in height as it allows regional council access to a greater range of vehicles (buses) to purchase.

Road Transport Industry

- Supportive of increase to mass limits suggesting the higher mass limits would see greater productivity and lower procurement costs
- Also supportive of higher mass on specialist vehicles. However, most submitters who commented thought the list of specialist vehicles receiving higher mass limits should be broadened to include agricultural vehicles and logging trucks
- Submitters were concerned how road controlling authorities (in the case of overdimension loads this would be the Transport Agency) would apply the history of traffic offending in practice
- Questions were also raised as whose previous offending would be considered, i.e. the operator, person applying for the permit or some other entity
- Mixed views were expressed on weighing tolerances. Some submitters commented the changes to tolerances would encourage the uptake of new technologies while others were

concerned agricultural commodities were too variable and existing technology was not accurate enough to lower the tolerance

- Most of the submissions were highly detailed with a particular emphasis on axle weights and axle configurations.

Individual Submitters

Individual submitters mostly agreed with the proposed changes. However, a small number of submitters were opposed to the changes, citing the environment and pavement damage. Selected comments include:

- Changes keep in line with overseas jurisdictions, allowing relatively freer trade in commercial vehicles, and improving the productivity and efficiency of the heavy vehicle fleet
- Proposals allow the take up of new safety and environmental technologies that will improve our heavy vehicle fleet far beyond the status quo and reductions in diesel consumption, far outweigh any costs in roading construction and maintenance
- One submitter however, argued that New Zealand roads are narrow and winding; with sharp corners which vehicles of current sizes cannot negotiate compromising oncoming traffic. Larger vehicles with more wheels are likely to aggravate this problem.

Advocacy group (cyclists)

- One submission was received from this group, the Cycling Action Network (CAN).
- Did not support any increase in mass limits as heavier vehicles pose a greater risk to cyclists
- Did not support the proposed increase in permitted vehicle width stating cyclists are vulnerable to vehicles striking them
- Argued that mandatory side under-run protection is an urgently-needed measure to protect cyclists, pedestrians and motorists in the event of side impact with HV trailers
- Requiring or incentivising the fitting of blind zone mirrors, CPMS, or CCTV systems must be considered.

Industry Associations

- These submitters consisted of representatives of industry groups such as the Automobile Association (AA), Motor Industry Association, and Road Transport Forum. Those industry associations representing the road transport industry generally followed the views of their members as did those associations representing road controlling authorities. The bus sector's industry association submission was used as a base for submissions by the bus sector.

Additional Issues

A number of additional matters were also raised by submitters, including:

Funding and System changes

- Extra incentives for operators to purchase safer vehicles
- A special mechanism to allocate necessary additional funds to councils to cover unexpected extra costs
- Funds for the "rapid failure" of local roads over the next 5 years should be specifically provided for by central government
- Consider impact on public health of the proposals on District Health Boards funding
- More attention be given to alternative freight transport methods, such as rail for bulk goods

- Mandate cyclist awareness training for heavy vehicle drivers.

Vehicles and Technology

- Following Europe and the USA in having compulsory contour markings (e.g. conspicuous reflective tape on all extremities of the vehicle)
- Restricting heavy vehicles from certain areas if they don't have specific safety features for busy urban roads - specific high visibility mirrors and highly visible side shielding
- Using smart safety systems (similar to technology developed for self-driving cars) for both goods vehicles and buses. The systems use cameras, radar etc. to detect vulnerable users and alert drivers.
- Re-write the Rule in a manner that accommodates and encourages the uptake of new technologies
- Adoption of environmental technologies such as selective catalytic reduction to reduce cost and vehicle emissions.

Methodologies

During the yellow draft consultation we sought feedback on whether three methodologies for calculating Static Roll Threshold (SRT) and swept path characteristics (Schedules 1, 8 and 9 in the current Rule) should be removed from the Rule. We noted that the Transport Agency would still be responsible for authorising and publishing any methodology linked to the Rule.

We have been advised by technical consultants that the existing methodologies in the Rule particularly the SRT are challenging to interpret and use. The existing methodologies are currently contained in the body of the Rule, making them difficult to update and correct. However, methodologies must be constrained by performance standards to ensure they are fit for purpose. Further changes to the methodologies will be considered after consultation with key stakeholders.

Recommendation: Retain performance standards but remove methodologies from the Rule.

Analysis by Proposals

Proposal 1	Agree	Disagree
1A. Increase the gross mass limit for 7-axle combinations with a minimum wheelbase of 16.8m from 44,000kg to 45,000kg	16	12
1B. Increase the gross mass limit for 8-axle combinations with a minimum wheelbase of 17.4m from 44,000kg to 46,000kg	16	12

The road transport industry largely supported both proposals as they saw these proposals as providing more choice in the heavy vehicle market, boosting productivity and moving the freight by fewer truck trips. Those who were opposed identified pavement wear, reduced safety for certain road users and higher costs from heavier trucks as reasons.

Submitters who supported the proposals noted the benefits of increased mass without compromising road safety.

Fonterra is very supportive of both proposals 1A and 1B. Fonterra will certainly be able to take advantage of Proposal 1A, which will deliver significant benefit once implemented. We estimate that enabling our existing fleet to move from 44 to 45 tonne limit will: Allow a reduction in the number of tanker loads by an estimated 100 per day, the equivalent of 11170 km or 1.5-2 million kms per annum-Fonterra

Millions of dollars of capital savings, thousands of tonnes of avoided emissions, and perhaps billions of litres of reductions in diesel consumption, far outweigh any costs in roading construction and maintenance. – Individual submitter

One road transport industry submitter argued the increases in mass limits would only benefit a limited number of combinations:

Only a proportion of 7 axle combinations will be able to take advantage of proposed 45 tonnes because of current vehicle dimensions and lengths. Adding a longer draw-bar as suggested in the rule summary is not possible in most cases, as trailers are now at, or near to current maximum trailer length (trailer length includes drawbars- J Swap & Co

The AA and several councils gave qualified support for the proposals. The AA stated incremental increases should improve freight efficiency, and mean the same freight task could be performed by fewer truck movements than the status quo. The AA added their support for all proposals was conditional on improvements to the safety of heavy vehicles. The Log Transport Safety Council (LTSC) proposed an alternative gross mass limit for 9-Axle combinations of 50,000 kg with a minimum wheelbase of 20 m.

Similarly, Taupo District Council staff submission gave qualified support if the effect of increasing the gross mass and reducing the tolerance is neutral. However, they were opposed if the proposal to reduce weighing tolerances is not implemented. Traffic Institute of New Zealand (Trafinz) and the Kapiti Coast District Council expressed opposition to proposal 1A but were prepared to partially support Proposal 1B (increase to 45,000kg) if lower weighing tolerances, were implemented.

The Cycling Action Network (CAN), Road Controlling Authorities Forum (RCA Forum) and several RCAs gave the following reasons for opposing the gross mass limits:

- Cyclists are particularly sensitive to road surface quality and smoothness. Increased loadings can affect pavement wear exponentially, up to the fourth power depending on substrate and surfacing. This potential damage to road surface quality and smoothness contributed to CAN's decision not to support this provision
- An increase in wheelbase will make the vehicles less manoeuvrable in many urban streets and at intersections and windy rural roads.
- RCAs considered that the increase in gross mass will increase damage to pavements and bridge structures. A number of urban streets have been traffic calmed to reduce the number and size of vehicles for safety and amenity purposes.

RCA Forum members are not satisfied that the potential benefits and potential costs of Proposal 1 are known adequately to allow general access for the proposed GVM limits. RCA Forum

Analysis and Conclusions

The changes to gross mass for 7 and 8-axle vehicles is expected to only have minimal effect on pavement wear as many vehicles already operate at 45,000kg and 46,000kgs. The required lengths to use the additional gross mass ensures the heavier weight is distributed in a way that mitigates the risk of damage to bridges. Some trailers will need extended drawbars to use the increased weight at an estimated one-off cost of \$4,000 per trailer.

A staggered approach is being taken to bringing in the new gross mass limits. From 1 December 2016 until 31 November 2017, vehicles operating at the new gross mass limits can utilise the State Highway HPMV and 50MAX networks. This allows time for the completion of bridge inspections to identify any future route restrictions required.

Recommendation: No change

Proposal 2	Agree	Disagree
Rationalise general access axle mass limits for many individual vehicles	19	5

Comments in support of the proposals indicated these submitters welcomed the simplified mass limits and improved ease of compliance. While those submitters who opposed the proposal identified increase pavement wear and prescriptiveness of the proposed axle limits.

I support proposal 2. The current system is more complex than it really needs to be and as long as bridge limits are adhered to by road transport operators, this makes sense. Individual submitter

Increased weight on Twin Steer axles is supported, and will allow better loading with easier compliance. For some full HPMV combinations, this will allow an increase from 57.8 to 58 tonnes, whilst small increase, will help productivity - J Swap & Co

The bus sector also endorsed Proposal 2 changes noting the reforms represent a major simplification of the mass limits for 3-axle buses, and a significant increase to the mass limit for certain designs of 3-axle bus.

The RCA Forum stated they were unable to support the increase of the allowable total mass for front steer axles, as these axles already cause a disproportionate amount of pavement damage due to the loads being carried on single standard-tyred axles.

One road transport industry submitter called for more flexibility in the mass limits to allow for more product choice.

Prescriptive ratios limit the availability of standard specification vehicles which means that as a supplier we are not be able to offer some products / options to the market, this results in reduced choice for operators. Road industry submitter

Bus Sector mass limit comment

Due to the significant number of bus sector submissions on axle mass limits the following section outlines some of their concerns.

The Bus and Coach Association (BCA) was 'bitterly disappointed with the failure to address the weight issues for 2-axle buses in the draft VDAM Rule'. A number of bus sector submitters said it is no longer possible to build a medium size 2-axle bus which complies with the VDAM Rule. They argued this means New Zealand has lower bus axle ratings than overseas markets leading to higher cost for compliance to effect local changes and depart from the manufacturer's specification stifling innovation. The effect of this means fewer seats, fewer passengers and the inefficient movement of people, during a time of population and vehicle growth particularly in Auckland and Wellington.

The BCA proposed a new approach to mass limits distinguishing between urban buses and other buses with urban buses given a higher mass limit. They claim the increase for 3-axle buses will significantly benefit the bus and coach industry as it allows the sector a wider variety of these types of vehicles.

Analysis and Conclusions

Increased mass limits for buses have been carefully considered by the Transport Agency and the Ministry of Transport during the preparation of the new Rule. We believe the new mass limits provide the bus sector with access to cost effective vehicles which help to alleviate congestion and encourage the use of public transport. However, currently there is not enough information about the safety of certain bridges to immediately allow increases to mass limits for buses.

For this reason the timeframes for the introduction of revised mass limits for buses have been delayed until December 2018. The key issue in allowing buses freer access to the networks without

permits is to ensure the network, especially bridges and culverts are safe to handle the increased axle weights. This cannot be done implemented immediately so approval for additional weights will be undertaken by permits for the next three years. After this period, 2 axle buses with rear axle weights of up to 9,000kg will be permitted on public transport routes as specified in regional land transport plans.

Phasing in new mass limits will give Road Controlling Authorities time to assess and strengthen bridges on their network that currently cannot support the increased mass limit. In addition, if mass limits were immediately increased a significant number of bridges would be subject to weight restrictions.

The mass limits for buses will only apply in certain urban areas, which will limit the impact of the new mass limits on bridges and culverts.

Recommendation: Increase general mass limits for public transport service buses to 9,000kg from 1 December 2018 (limited to specified public transport routes).

Proposal 3	Agree	Disagree
Provide an indicative list of indivisible loads	14	1

Most submitters were in favour of the proposals; however some expressed concern that the list of indivisible loads needed more detail and could be more descriptive. This view was supported by the Heavy Haulage Association (HHA) which recommended the inclusion of building removals as an indivisible load. The HHA said it is not feasible to cut up houses as this causes structural damage requiring a disproportionate effort to deconstruct and reconstruct them after they are moved.

The RCA Forum despite expressing general support for the intent of the proposal did not give full support; they believed the terminology used was insufficient for enforcing the Rule with terms such as transformer oil needing more clarity. They believe as written the provision is open to abuse by road transport operators.

Some other suggestions for indivisible loads from the road transport industry included:

- Off road earth mover tyres which can be loaded, unloaded, and secured for road transport
- Fire fighting vehicles carrying water
- Towing of disabled vehicles, a disabled HPMV unit, with a partial lift, putting variable loads on the rear towing rig axles and a highly variable gross all up weight
- Log hauler and log harvesting equipment.

Analysis and Conclusions

The reason formalising the list is that, while their treatment as indivisible is accepted practice, there remains a legal risk for operators in that the practice does not have formal legal standing.

The list of indivisible loads is not intended to be definitive or even indicative of the types or classes of allowable indivisible loads for overweight permits. The test for indivisibility for all other loads must remain consistent with the definition of an indivisible load in the rule. This is a matter of judgment by the RCA, subject to appeals under section 106 of the Land Transport Act 1998.

It should be noted that loads falling within the list are not guaranteed an overweight permit. The list simply sets out some specific loads that can be considered eligible for an overweight permit. Whether or not a permit is granted will depend on the weight, the route and any other considerations

for assessing a permit application provided for in the Rule.

We agree it would be helpful for some additional detail to be provided for a number of the provisions particularly around specific detail on the list of indivisible loads and we have amended the list to provide more clarity and detail.

One road transport submitter argued for log-hauler and log hauler harvesting equipment to be added to the list. It is not recommended this be done. This is because they are a type of equipment rather than a load as such. However, depending on the equipment they may benefit from the new 'ancillary items' being included.

Recommendations:

Amend the list of indivisible loads to provide:

- a transformer including the oil contained within it;
- platform trailers carried on another platform trailer;
- construction equipment being transported with attachments that are required for use with that equipment;
- a load dividers being carried with another overweight load;
- ballast being carried with an overweight load;
- towing of a disabled vehicles being towed or carried;
- water being carried by fire-fighting vehicles carrying water;
- slurry being carried to or used at sealing sites;
- a converter dolly being carried with another overweight load;
- ancillary items associated with the indivisible load or vehicle;
- buildings

Proposal 4	Agree	Disagree
Replace the existing weighing tolerances with a weighing tolerance of 500 kg (axles and gross mass) and 1,000 kg (axle sets and groups) for all heavy vehicles. Note: the tolerances will be included in the Land Transport Regulations and not in the VDAM Rule.	25	8

Those submitters who were in favour of the proposal to replace the existing weighing tolerances with a lower weighing tolerance, asserted modern weighing technology meant loading accuracy had improved and the additional weight compromised road pavements. Those who disagreed with the proposal, cited difficulties with the accuracy of measuring devices, variations in the weight of commodities and difficulty in estimating loads.

One road transport industry submitter stated reduced tolerances, when introduced with weight increases, will level the playing field to mean all vehicles are subject to the same tolerances, resulting in investment in accurate weighing technologies. Trafinz supported this view stating modern load technology has accuracy well below 500kg and the RCA Forum claimed most operators are currently able to load very accurately to 45,500kg. The RCA Forum argued for reducing the tolerance to 250kg as this would place the onus on the operators to exercise diligence in loading and create a stronger incentive for operators to comply with the limits.

One RCA thought tolerances should be completely removed as the additional weight compromised road pavements beyond their design standard.

Supports the reduction of the overall tolerance to 500kg but submit that this tolerance should also be applied to the individual axle groups as well. This submission is on the basis that it is the individual axle group weights that cause the damage. Southland District Council

Some submitters, however, gave qualified support for the proposed weighing tolerances. For instance, the BCA supported the simplification of weighing tolerances, but noted the compounding impact of tighter tolerances should the mass limits for 2-axle buses not change.

Those opposed to the proposal generally were concerned with issues around accuracy of weighing devices and the difficulties of weighing particular commodities. An individual submitter claimed problems with weighing accuracy had not changed since the Rule's introduction in 2002 and reducing tolerances could compromise productivity.

Federated Farmers believed their members may struggle with reduced tolerances as most farmers were located in remote areas without access to weighing facilities. This made on-farm weight estimates difficult and farmers liable for enforcement action. Agricultural Transport Federation observed that agricultural products varied in weight so much it was difficult to accurately assess the weight of an animal, weight of a bale of balage or the weight of a maize silage.

The LTSC gave partial support, proposing a 2% tolerance or 1000kg on axle limits with a 500kg tolerance on steer and single axles. They stated the current proposal would require the logging industry to underload, thereby forfeiting any productivity increase in mass and reduction of units on the road.

Rotorua Forest Haulage commented weight limits were still susceptible to product, technology and environment factors and failure results in significant enforcement penalties.

The legislators have made an assumption that roadside weighing devices are accurate, however, we have evidence to show that there are discrepancies between third party certified weigh bridges and weigh devices used by Police. Dynes Transport

Analysis and Conclusions

The tolerances are not intended to establish additional legal limits above those in the Rule. In practice, however, many operators, especially of larger vehicles do incorporate much of the tolerances when loading their vehicles. The Transport Agency's weigh in motion data shows that approximately 11 percent of heavy vehicles are overloaded. Assuming that return trips are empty, this suggests that of laden heavy vehicles approximately 20 percent are overloaded. Within this average the incidence of overloading will vary depending on vehicle type and load.

Loading to the tolerance gives operators a competitive advantage over those who choose to stay within the Rule's limits. Not only are they carrying more, they are paying road user charges at a lesser rate than they should for their loads.

Recommendation: No change

Proposal 5	Agree	Disagree
5A. Expand the current ability to apply for permits for additional axle limits for passenger service vehicles (buses) to include specified specialist vehicles: concrete mixers; rubbish trucks; and ground-spreader trucks	22	7
5B. Provide increased axle mass limits, on permit only, for these specialist vehicles.	23	10

The majority of those in favour of both proposals believed the list of specialist vehicles should be broadened to include a wider range of vehicles such as logging trucks and towing vehicles. On the other hand, those submitters opposed stated concrete mixers and rubbish trucks types of vehicles already cause severe stress to pavements and this will get worse if the axle mass limits are raised. These views were expressed by Trafinz and most RCAs.

J Swap & Co, for example, advocated for specialist vehicles to be available for any vehicle category, should be open to any sector where congestion and numbers of trips could be reduced, and where an economic gain could be proven. The RTF promoted concrete and rubbish trucks as specialist vehicles as they believe these types of vehicles had the greatest chance of being permitted by RCAs.

An individual submitter contended that recovery or tow truck class vehicles should be included as a specialist vehicle. This submitter said these vehicles are often called upon to clear truck crash sites when lifting loaded heavy vehicles to clear or open roads. Weight limits apply to these vehicles at present and an increase will allow them to take advantage as with concrete trucks. This submitter maintained recovery vehicles are purely specialist vehicles, i.e. they are used solely for recovery purposes.

Other suggestions for specialist vehicles included:

- Knuckle boom cranes
- Heavy recovery trucks (salvage, recovery and the e Agency of damaged trucks and trailers)
- Fire engines carrying water
- Cranes
- Specialist Logging trucks (e.g. 6x6, 8x6, and 8x8).

The Log Transport Safety Council and Rotorua Forest Haulage submitted that a provision be embedded in the Rule allowing logging trucks of 23.8m long (the truck being 23m with an additional 0.8m allowed for log overhang) not to require a permit for being overlength. A permit would still be required or general mass limits of 50 tonne.

A road transport submitter observed that any list of vehicle applications would always be incomplete. They argued for each application to be considered on a case by case basis rather than through a set list of vehicle types. They also questioned if the specialist vehicle category should be extended to emergency service vehicles (e.g. fire trucks), emergency recovery vehicles (specialist tow or crane types) and other specialist applications.

RCAs and a smaller number of individual submitters were concerned the proposals would cause more damage to pavements. An individual submitter suggested concrete mixers and ground spreader trucks are most commonly used on country back roads and cause disproportionate damage to pavement. Equally, Taupo District Council and Hamilton City Council stated these vehicles already cause severe stress to pavements which would only get worse if the axle mass limits are raised.

The bus sector firmly disagreed with using permits for specialist vehicles including buses. They argued permits are costly, inconvenient, and create major operational issues for bus and coach

companies. These submitters further argued for the current mass limit for 2-axle buses to be increased from 8,200 kg to 10,000kg.

Analysis and Conclusion

Specialist vehicles have been restricted to those vehicles that have heavy rear axle loads and where the load cannot be easily redistributed such as rubbish trucks, dump trucks, concrete mixers and ground-spread fertiliser trucks.

The decision on whether or not to approve a specific vehicle on a specific route will continue to stay with the relevant RCA. The RCA may also provide for lower limits (but not below general access limits) than the maximum allowed by the Rule where access to weaker roads is sought.

The proposal to broaden the list of specialist vehicles is not supported. In considering the balance of giving RCAs greater flexibility in permitting overweight divisible loads at less than HPMV limits, it was considered that limiting the types of vehicles and the upper bounds of axle weights was necessary to manage the risk of significantly high numbers of heavy axle weights on the road network.

The proposal for logging trucks up to 23.8m not to require an overlength permit (i.e. have general access) is not supported. This is because allowing lengths greater than 22.0m (the maximum allowed under the rule for general access for logging vehicles) for general access would be dangerous on parts of the road network as trucks would have to cross the centre line going around bends, placing on-coming traffic in significant danger.

The NZTA approves permits for logging vehicles up to 23.0m long (based on a proforma vehicle design) on suitable routes. A very limited number of route-specific permits have been trialled beyond that limit. The NZTA expects to enable a new set of performance standards (PBS). The purpose of this is to reduce the emphasis on length and instead focus on the performance of the vehicle (irrespective of its length within traffic engineering boundaries) on the network. This would include considering factors such as how well the vehicle tracks around corners, how it manages under run risk, its safe handling attributes and how stable it is.

Recommendation: No change

Proposal 6	Agree	Disagree
Increase the gross mass limits for approved over-length simple trailer combinations from 36,000kg to 40,000kg	13	5

In general, industry submissions favoured increasing gross mass limits for simple trailer combinations, while RCAs were divided on whether to support this proposal.

The RCA Forum commented the increase has been assessed as safe for simple trailer combinations that meet performance and design standards set by the Transport Agency. This enables the productivity benefits from this proposal to extend from car transporters to other applications of simple trailer.

J Swap & Co argued for expanding over length trailers without the need for an over length permit to be extended to all truck and trailer combinations that meet pro-forma requirements, and up to 23 metres in length. The LTSC agreed with the proposal and advocated for extending the proposal include to log truck applications where similar designs can be shared.

On the other hand, Southland District Council stated car transporters are already too long for many of the urban locations and cause issues when they are loading and unloading. Allowing additional mass will lead to a demand for even longer vehicles. One individual submitter stated the proposals amounted to an 11% increase on already stressed pavements and bridges, with little apparent improvements in safety or reductions in remissions. This submitter said these increases would require larger engines, or put existing undersized engined units to more stress and slower speeds.

Analysis and Conclusions

When assessing this proposal, it was identified that simple trailer combinations equipped with a roll-coupled hitch, met higher safety requirements when compared with other simple trailer combinations. Furthermore, simple trailer combinations with higher tare weight and longer wheelbase also have better dynamic handling at speed, while maintaining superior tracking at low speed.

This would enable the productivity benefits from this proposal to extend from car transporters to other applications of simple trailer combinations.

While this is a significant increase in gross mass limits, the individual axle mass limits are still within current limits and are not expected to have significant impacts on road infrastructure. For safety purposes, the 36,000kg gross mass limit would still be the default mass limit for simple trailer combinations that do not meet the performance and design standards required to obtain an over-length permit.

Recommendation: Amend Rule to make the Transport Agency responsible for approving roll-coupled hitches

Proposal 7	Agree	Disagree
Allow a new tyre size category (444mm or wider) and define standard tyres as tyres narrower than 355mm	17	3

The road transport industry welcomed moves to allow a new tyre category with some minor alterations suggested. For example, a road transport submitter recommended the definition for single-large-tyre needs to be adjusted so that 355mm tyres are included, as 355mm currently falls between two definitions. The definition should read single large-tyred axle means a single tyred axle where the manufacturer's designated tyre section width is 355 mm or more but less than 444 mm. NZ Truck and Trailer Federation supported the proposal and suggested the weights allowed, to be listed and the weight for tandem axle sets to be the same as a dual wheel set. One road transport submitter stated the proposed axle mass limit tables do not accommodate the use of single-mega-tyres in a tri-axle set.

RCA Forum submitted the maximum axle masses being proposed for axles with single mega tyres of 444mm or wider are excessive. They suggested they should be amended to:

- in a twin-steer axle set, 5,000kg
- in a single-steer axle set, 6,000kg
- in any other axle set, 6,700kg.

Analysis and Conclusions

We agree that boundary statements for tyre sizes need to be clarified so a tyre is clearly in (or out) of the particular category

We agree the lack of a table allowing mixed axle sets does mean that these options are not available. However, the Rule is already complex and it is possible to envisage a very wide range of "mix and match" options (see other comments on this issue). We believe it is better to allow the Transport Agency to consider variations and manage them than to keep adding to mass tables

Recommendations:

Amend rule to eliminate the exclusion between tyre sizes

Amend rule to add mega tyres to tri axle and quad axle sets.

Proposal 8	Agree	Disagree
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Extend maximum allowable width to 2.55m, inclusive of load securing devices	25	10
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Submitters in support of the proposals noted the changes would allow a broader range of vehicles, so lowering the cost of procurement particularly for buses. Those not in favour claimed the proposed width limits would add costs to RCAs as heavy vehicles increasingly strike roadside furniture and bridges.

The bus sector strongly supported amending the current limits asserting the existing width limits are inconsistent with overseas jurisdictions and create issues for procuring buses in New Zealand. The proposal to increase the width limit to 2.55m will bring New Zealand into line with other countries and enable a wider selection of buses to be purchased.

An individual submitter added the changes enable buses to be imported directly from Europe, reducing the cost of public transport tenders for regional government. This view was reinforced by the Waikato and Greater Wellington Regional Councils who added their procurement costs would decrease and their choice of vehicles will increase if the proposals were implemented.

This is a small difference, but a very significant one for vehicle procurement, especially in the passenger service vehicle sector. Directive 2002/7/EC has allowed a maximum width of 2.55 m since it was passed in 2002, making 2.55 m a de facto global standard outside North America. Individual submitter

The RTF suggested the use of blind side cameras should not be passenger vehicle exclusive and should be accessible to heavy vehicles of any service or application.

However, RCAs were in the main opposed to increasing width. Southland District Council acknowledged while this proposal gives more flexibility in what can be imported into New Zealand, going wider posed several problems for their network. Southland District Council identified the following issues:

- Lack of room for vehicles on some narrow roads
- Bridge end strike on narrow bridges with curved approaches
- Edge break on narrow sealed roads as truck (and especially trailer) tyres ride the edge of the seal.

Trafinz suggested retaining the status quo as the proposal would result in all vehicles becoming slightly wider with a greater likelihood of impact with council owned street furniture. They stated in urban streets many trucks are already out of scale with their surroundings and councils cannot widen to accommodate them properly. On winding rural roads wider vehicles will have tyres closer to the edge of seal, increasing the probability of edge break. Moreover, one individual submitter contended vehicle width has been gradually increasing over of the last few years.

Damage to the approaches and safety rails of bridges with curved approaches is already a significant cost for member authorities. Wider heavy vehicles will only increase the incidence, severity and cost of this problem. RCA Forum

A small number of submitters advocated for a wider width limit of 2.6 metres, principally to obtain access to a greater range of overseas vehicles. New Zealand imports numerous heavy vehicles from all parts of the world, including the United States, where the maximum width of highway vehicles is 102 inches or 2.6 metres. They continued to argue increasing the width to 2.6 metres will improve productivity more than going to 2.55 metres and will not compromise safety. These submitters asserted a 2.6 metre width limit would ensure that vehicles imported from almost any jurisdiction will have access to New Zealand roads without (sometimes very expensive) modification.

The LTSC argued for specific exemptions for logging trucks to width limits similar to those exemptions given to hay and wool bales, concrete pipes and car carriers. The LTSC also advocated

for vehicle length (for the logging industry only) to be written into the rule to meet productivity and modern safety criteria regardless of mass.

Analysis and Conclusions

There is no effective increase in permitted width, but rather allowing more vehicles to access the allowable 2.55m width limit. The proposed changes will not require roads to be widened as a consequence.

Pavement degradation should not increase due to vehicles travelling closer to the edge, as vehicles at 2.55m are still utilising the same axle sets at 2.5m, which would mean the tyres are not closer to the edge.

We do not support increasing the width limit to 2.6 metres as we consider this to be too wide for most of the network and will impose significant costs on RCAs and potentially increase risk for other road users such as pedestrians and cyclists.

The magnitude of risk in any given situation depends on a range of factors. These include lane width, the existence of mitigation devices such as separation barriers and the size and number of other vehicles using the road. The overall safety risk may also be mitigated if the increased width results in fewer vehicle kilometres travelled needed to transport an equivalent transport task.

The HPMV process allowing new proforma vehicles under PBS is a good way to cater for sector specific requirements for dimensions. There is already a specific log truck proforma and there is an ability to add others in future that meet the criteria.

Recommendation:

No change

Proposal 9	Agree	Disagree
9A. Allow close proximity monitoring devices	24	8

9B. Constrain mirror width to current limits	18	4
9C Allow up to 25mm on either side of a vehicle for aerodynamic tabs	13	7

Proposal 9 was broadly supported by a cross section of road transport industry, individual and industry association submitters. However, some RCAs were concerned the fitting of such devices would cause similar issues as the increased width limits, in terms of more strikes to roadside furniture and bridges.

The bus sector firmly supported this option stating CPMS could prove valuable, particularly for urban buses. Urban buses can be expected to have more interactions with vulnerable road users, such as pedestrians and cyclists. As a result the potential benefit of such systems will likely be greater for urban buses than for other vehicles in the fleet. BCA said this change poses minimal safety risks, and enables closed body vehicles to also utilise this space on the side of buses.

The AA believed fitting CPMS enhanced the safety of vulnerable road users, and they also supported constraining mirror width limits and allowing for aerodynamic tabs. The RTF suggested the use of blind side cameras should not be passenger vehicle exclusive and should be accessible to heavy vehicles of any service or application. The NZ Motor Caravan Association supported the proposal to allow up to 25mm on either side of the vehicle for aerodynamic tabs saying trials have shown them to improve fuel efficiency and vehicle stability.

The fitment of close proximity monitoring devices will help drivers of heavy vehicles to see cyclists and pedestrians as well as small vehicles which are frequently out of sight in normal mirrors. NZ Motor Caravan Association.

One individual submitter commented there was no definition in the draft of aerodynamic tabs. This submitter said the use of the term 'tab' could be unduly limiting and prevent the fitting of other devices which would have the same effect. He recommended changing the term 'tab' to 'devices' and insert a definition of aerodynamic device in the Rule. His suggested definition was: any device fitted to a vehicle that is designed to improve the aerodynamic flow of air around the vehicle such as tabs and flarings.

Cycling Action Network (CAN) gave qualified support for CPMS noting they had the potential to save lives in urban areas where heavy vehicles and cyclists share the road. However they believe a blanket exception to width restrictions for CPMS may introduce the risk of equipment fouling or snagging on cyclists' clothing or equipment and cause impact with heavy vehicles. Consideration of setting a minimum height for such protrusions, to keep them above cyclist head level, should be given. In addition, CAN stated they were unable to support the exceptions for 25mm aerodynamic tabs, marker lamps, cameras without some consideration of a height restriction.

Trafinz along with some RCAs opposed proposals 9A and 9C if the proposed 2.55m width limit was introduced. However, they did support and encourage the mounting of CPMS devices on the outside of 2.5m wide vehicles, where the devices did not exceed 25mm on each side. They did support mounting aerodynamic tabs on a 2.5m wide vehicle.

Any increase in width creates the same problems raised in proposal 8, (to a greater or lesser extent depending on width) particularly on narrow roads. This is can affect both on-going maintenance such as edge break and / safety (lack of clearance between passing vehicles. Southland District Council.

Analysis and Conclusions

We do not support Trafanz and the RCAs proposals as they are not a practical option. 2.55m is the standard in many countries. If it becomes the NZ standard width, all projections must be measured from that dimension.

At this stage, we consider the benefits of CPMS and reversing cameras have not been sufficiently proven and do not support making them mandatory. It should be noted that as part of the Safer Journeys Third Action Plan, one of the Actions is to investigate mandating under-run protection on heavy vehicles.

Most of the proposed fittings should normally be placed well up on the vehicles, and do not create a hazard for cyclists.

Recommendation: Retain the proposals and amend rule to allow warning devices either side of the vehicle with a simpler (common 70mm) allowance

Proposal 10	Agree	Disagree
10A. Extend maximum allowable height to 4.30m, inclusive of load securing devices	25	9
10B. Allow operators with suitable technology to temporarily exceed the height limit when raising the vehicle to clear obstacles	23	4

Greater Wellington Regional Council and the bus sector supported this proposal as it will provide them more choice when purchasing double decker buses from overseas.

The increased height limit will allow greater flexibility when procuring and designing double decker buses. Bus and Coach Association.

One industry submitter cautiously welcomed the proposals stating a minor increase of height will have some benefit for stock and curtain side vehicles; however they did not know what affect this may have on Static Rollover Threshold calculations.

The AA gave conditional support to the height increase to be subject to a height assessment of all structures on the road network and the posting of limited clearances before the amendment is enacted. An individual submitter called for a 4.4 metre limit to allow double decker buses to be imported from the United Kingdom.

RCA's were opposed to amending height limits citing potential increased risks of strikes to tunnels and bridges and the proposals may substantially reduce the available margin for reseals under overhead structures. According to RCA's the combination of both higher and longer vehicles would increase the risk of either overhead strikes or vehicles becoming stuck under structures.

Trafinz on behalf of several RCA's also said the urban environment includes multiple height constraints - e.g. overbridges, overhead utility lines trees and cantilever signs, streetlights and traffic signals. Strikes occur on a relatively frequent basis. Any increase in maximum vehicle height is likely to result in an increase to the number of or severity of strikes and subsequent damage to structures.

Increasing the general access height to 4.3m has the potential to significantly increase the risk of overhead strikes on tunnels, bridges and overpasses, and verandas of roadside premises where the camber causes too great a lean for a vehicle near the kerb. RCA Forum

Analysis and Conclusions

Under the proposed height limit strikes will occur as they do at present – but the increase is marginal and only a few structures will need additional posting. It should be noted the increase is small and where there are problems with overhanging verandas, these are likely to be problems now (even conventional buses frequently collide with these in urban settings).

Recommendation: No change

Proposal 11	Agree
11A- Allow bulk permits for HPMV	16
11B- Allow heavy vehicle temporary exceptions from over-dimension permitting for towing or obtaining certification	16

All sixteen who responded to proposal 11 agreed with the proposal to allow heavy vehicle temporary exceptions from overdimension permitting for some HPMVs for towing or obtaining certification. In addition, the submitters were in unanimous agreement about the proposals to allow bulk permitting.

An industry submitter stated they strongly supported the proposal to allow identified prime movers to be mixed and matched, allowing operational efficiencies.

Taupo District Council expressed limited support for Proposal 11A for towing only, conditional on the use of approved routes. For Proposal 11A, the Council requested that the temporary permit should specify route and dates where they can travel between manufacture or compliance certifier and operators to show evidence of an emergency. They said many heavy goods vehicles are not complying with the present Rule so allowing exceptions will not assist in compliance.

LTSC supported proposals 11A and 11B and argued there should be temporary exceptions for forestry-specific for 23.8 metre trailers. Rotorua Forest Haulage wanted the ability to renew identical HPMV permits without having to undertake a first principle assessment. They said allowing this would reduce permit workloads for new equipment or routes. They also suggested the opportunity for bulk permits for type approved vehicles should be explicitly outlined in the Rule.

Analysis and Conclusions

The intention of Proposal 11A is to allow the movement of vehicles that require certification without the requirement to obtain a permit. The constraint included (no load) should ensure that operators work within the intended limits of this provision.

The provision from LTSC implied that they seek some form of automatic grant/renewal of permits for over-length combinations. We note that approval of length variations has now been separated from 'permits' as such (the approval stays with the vehicles concerned). We do not, however, support some industries being partially exempted from the permit process, which is designed to create appropriate controls on vehicles and routes.

The clause does not provide for a temporary permit – the intent is to reduce unnecessary compliance costs.

The 2016 Rule enables bulk permitting; both the body of the Rule and the permit forms provide no impediments to its implementation. However, the Motor Vehicle Register does not distinguish between types of heavy vehicle trailers which would be necessary to ensure an effective bulk permitting system. The Transport Agency will consult with key stakeholders soon after this Rule is put into effect to consider how to introduce bulk permitting.

Recommendation: No change

Proposal 12	Agree	Disagree
12A- Allow the Transport Agency to have regard to traffic offending history in considering a permit application	9	2
12B- Create critical conditions for overdimension permits	9	2
12C- Make explicit in the VDAM Rule matters that may be included as conditions	9	2
12D- Clarify the responsibilities of operators and pilots	9	2
12E- Allow crane booms to be disassembled and moved as an overdimension load	11	2

This section is concerned with the management of overdimension loads. Proposals 12A and 12B attracted the most comment from submitters with comments particularly focussed on clarifying critical conditions and the traffic offending history for applicants of overdimension loads.

Proposal 12A

The HHA believed ‘the operator’ rather than the ‘person applying for the permit’ should be assessed as this proposal only creates potential confusion about which traffic offending history the Transport Agency is interested in. The HHA claimed it was uncertain if the Transport Agency wanted to know the traffic offending history of the operator or a specific person in the transport company applying for the permit. In addition, the Association believes that this assessment should be more strongly focused on offences relating to permits – rather than overall traffic offending.

Similar concerns were expressed by Rural Contractors NZ. They stated it should only relate to the specific heavy vehicle and not speed camera tickets. They said this created a potentially unfair outcome as owners of many vehicles are burdened by the actions of employees or family members who drive vehicles outside work hours.

The HHA further argued for a reduction in what could be considered by the Transport Agency in determining a permit, the Association argued for the retention of only two considerations: adequacy of risk management measures identified by the applicant and the traffic offending of the applicant should only include breaches of permits.

This section according to the RTF should require a single approach determined or approved by the Transport Agency to ensure a high level of consistency and mathematical rigour. The RTF suggested one key element missing from the current process is the exposure measurement of the vehicle fleet being assessed (distance travelled of the powered units of the applicant’s fleet for a specified period).

Proposal 12B & 12C

Overall, submitters agreed with the proposals in this section with the RCA Forum and HHA making comments supporting the changes. The RCA Forum stated critical conditions for overdimension permits should include:

- load and vehicle dimensions;
- piloting requirements;
- specific travel times;
- specific routes;
- axle weights on each axle set;
- number and size of tyres on each axle set;
- tyre pressures and suspension type; and
- strength and capacity of the roads being used.

Hamilton City Council (HCC) proposed that permits should specify only a limited number of conditions to increase likelihood of compliance, so ideally should only include ‘critical’ conditions. According to HCC critical conditions should include:

- maximum dimensions.
- specific piloting requirements.
- specified approved route.
- specified approved travelling times.
- requirement to report to RCA, within 24 hours, any incident resulting in damage to infrastructure or property.

Similarly, HCC advised the following conditions that should be included are:

- dimensional clearances at origin and destination (gateways, vehicle crossings, culverts, etc).
- truck waiting time and location at origin and destination (waiting for access to site, waiting for loading/unloading, overnight arrangements, etc).
- route.
- time of travel.

The RTF articulated some doubts about the criteria for considering permit applications; they believe social and economic benefit should be taken into account. Although the Forum did accept road and bridge durability will carry significantly more weight when deciding to approve permit applications.

The Agricultural Transport Federation thought the proposal for revocation of permits requires careful consideration as overdimension loads are different and need to be managed on a case by case basis. Rotorua Forest Haulage sought a different approach that permit revocation should be different for permits for mass and length. They argued revocation of permits should only be for breaches of mass limits and not for length unless the vehicle breaches route or pro-forma provisions. They also consider that any permit revocation needs to be carefully considered with legal appeal rights.

Proposal 12D

The HHA stated that the terminology used in this clause needs to be standardised to “the operator” using the overweight permit rather than referring to an individual person. The definition of the term ‘operator’ can include a body corporate as well as an individual. They suggested an alternative wording of ‘A permit may only be used by the operator identified in the permit’. Specialist Transport Services considered that having lead pilot responsibilities was not practical from a legal or qualification perspective as operator as already liable for legal prosecutions from Police for having insecure loads.

Proposal 12E

The HHA agreed with Proposal 12E to the transport of crane booms side by side or above one another within the requirements of a Category 1 load. The HHA stated it enables efficiency and reduces the risk for other traffic on the road as there will be fewer trucks transporting crane boom sections.

Analysis and Conclusions

We agree that the operator’s history should be considered rather than the person applying for the permit. We also agree that the emphasis of consideration should be on offences relating to permits rather than general traffic violations, although with operators who are bodies corporate other traffic violations are likely to be uncommon. It should be noted that this proposal still allows the Transport Agency flexibility to investigate an operator as appropriate. In addition, the Transport Agency will still take into account traffic offending history.

To be effective it is important that critical conditions are limited in number (there are only three critical conditions for overweight loads). A number of these (tyre pressure, strength of road, axle weights) are not relevant for overdimension safety, although would be addressed indirectly in the overweight permit process.

The current rule contains a general provision allowing the Transport Agency to include in a permit special conditions that it considers necessary for the safety and convenience of road users. By contrast, the permit provisions for overweight vehicles set out specific conditions along with a more general provision.

Changing the title of 'person in control' to 'on-road supervisor' would give a better description of this role. We agree the section relating to additional conditions requires clarification. There is some confusion in the drafting between engineering assessment (only applies to Category 4 overdimension permits) and the need to control bridge crossings for specified structures (generally overweight only).

Recommendations:

Amend Rule to clarify the following conditions may be specified as an additional condition:

- restrictions on vehicle's speed.
- the route to be followed
- pilots and pilot vehicles additional to those required by the Rule
- any additional conditions, under which the vehicle may be operated, that the Transport Agency considers necessary

Amend Rule to state a permit is invalid if:

- is altered without the authority of the Transport Agency or the road controlling authority which issued the permit
- the load or specialised overdimension vehicle are not those described on the permit
- the load is not being carried out under the direction or managed by the operator named on the permit.

Amend Rule to state the following :

- the vehicle or its load must not exceed the category limits stated in the permit, or exceeds width by 0.5m if width stated on permit
- the operator must ensure pilots are provided as specified on the permit or if not specified on the permit as required by the Rule

Amend Rule to:

- insert a new provision of 'on-road supervisor' as it is a better description of this role. The yellow draft used the term 'person in control of the overdimension vehicle or load'. If there is no 'on-road supervisor' designated this defaults to load/vehicle driver.

Proposal 13	Comments
13A- Remove duty to use flags to mark edges for Category 4 loads	13
13B- Allow pilots to use sound warning devices	13
13C- All agricultural tractors between 2.5m and 3.1m to have the option to use a warning light or hazard panels to signify width	13
13D- Provide for the Transport Agency to be able to establish alternative warning signs and layouts for hazard panels for vehicles and pilots	13
13E- Remove requirement for all warning panels/signs to be frangible.	13
13F- Define lighting by effect, not watts	13

This section proposed a number of changes to improve the operation of the provisions regarding signage and lighting for overdimension vehicles. These changes are designed in particular to accommodate the uptake of new technologies.

Almost all of these proposals were supported by submitters who suggested several minor amendments in order to improve the operation of the section. Only one submitter disagreed with the proposals stating they did not agree with removing flags or tractors being required to have warning lights fitted. The submitter did not give reasons for their opinion.

The RCA Forum stated they were aware of recent reports of crashes and near misses with overdimension loads indicating some drivers pay insufficient attention to piloting vehicles. Allowing the use of audible warnings was welcomed. Similarly HHA supported the intent of Proposal 13B noting using horns and other sound devices is already a common industry practice among pilots.

Proposal 13C attracted comment from the rural sector in particular the Rural Contractors NZ and Federated Farmers. Rural Contractors NZ stated Proposal 13C would help farmers comply with the Rule as they are only on the road occasionally and their tractors are normally fitted with beacons instead of panels.

The RTF suggested a minor amendment to clarify that when displaying a hazard warning panel, an agricultural tractor with a width exceeding 2.55m but less than <3.1m must be fitted with an amber beacon when operated on the road. The reason for taking this view is the alternative approach of hazard panels or a beacon does not fully cover all of the risks on rural roads.

The RCA Forum agreed with Proposal 13D stating it would helpful to provide more flexibility in providing information to drivers. They contended messages such as what the nature of the load is and what to do when the load is approaching would ensure drivers are given consistent information by overdimension loads.

Specialist Transport Services' submission made detailed suggestions about the use of lights by pilot vehicles including:

- Class one pilot travelling as the lead pilot should be approved to use all purple lights (no amber) on both sides of the vehicle light bar
- Class two pilot vehicle lighting should be modified to allow for the effective use of LED lighting
- The position of the alternately flashing auxiliary lights should be better defined- The lights should be mounted in a line between the headlights and be clearly visible to oncoming motorists
- 100 metre distance is inconsistent with the distance relating to fog or adverse weather - both distances should be the same
- High beam head lights should only be used during the day as they remain standard Halogen technology on all vehicles.

The Log Transport Safety Council argued lighting should be defined by lumens and effect. The HHA sought to change the 100 watt lighting requirement to a performance requirement where the front of the load must be visible to oncoming traffic.

Analysis and Conclusions

We agree broadening the provision for sound devices would be helpful although this might be implied by the current provision. It is not intended that sound devices be required at certain situations but rather that their use is explicitly allowed for (the current Rule is silent on their use and therefore has created doubt as to their use, although they are increasingly used).

There may be circumstances where variable message panels may not be appropriate. This could be dealt with by allowing the Transport Agency to also set the conditions for their use. This would be consistent with the current Rule which provides for the Transport Agency to approve alternative hazard panels and the circumstances or conditions under which the alternative panel may be used.

The term 'sound device' has been revised to 'audible warning device' to better reflect the purpose of these devices.

100 metres is considered too short for daylight restriction and therefore we propose this is amended to 350 metres. We also propose to amend the visibility requirements for fog, heavy rain to hail to 350 metres.

Further consideration of the lighting proposal would be needed before it could be made mandatory. This is partly a matter for the Land Transport Vehicle Lighting Rule.

Lumens may be more difficult to assess on the roadside. The rule currently provides for some aspects of lighting based on a performance standard – e.g. visible in clear weather at a distance of at least 200 metres during hours of darkness.

Recommendations:

Define by lighting effect lights must be visible to within 200 metres of oncoming traffic

Amend to provide that panels must be frangible if they exceed the limits of the vehicle or overdimension load

Amend the visibility requirements from 500m to 350m during fog, heavy rain or hail

Amend rule to add the load must be visible to oncoming motorists

Amend rule by adding (beacons) or flashing lights or of equivalent effect

Amend clauses to provide that conditions of use are also to be set by the Transport Agency

Require that separate audible warning devices to be carried in all Class 1 pilot vehicles

Amend Rule to not require or restrict the use of audible warning devices in specific circumstances.

Proposal 14	Comments
14A- Allow vehicles to travel in convoy, subject to piloting and traffic flow requirements	12
14B- Remove limitations on tyre rim size for Class 2 pilot vehicles	13

Key submissions were made by HHA, RCA Forum and Specialist Transport Services. All of these submitters gave overall support to the proposals subject to minor changes. However, one individual submitter believed proposal 14A should be amended so convoys can only travel at certain times of the day due to heavier traffic loads in cities.

HHA proposed that the requirement to travel in convoy is deleted and the additional clause about varying the pilots depending on whether the load is a tandem (or more) is advantageous. They said it is actually preferable to transport loads as a convoy, as the overdimension vehicles only need to be pull over once to let other traffic go past.

Furthermore, the HHA stated the proposal would allow limited travel by overdimension vehicles in convoy, provided that additional piloting requirements were met. This is similar to the process allowed for specialised agricultural vehicles since 2013.

These proposed changes are supported subject to recognition that traffic flow management would become critical with a long row of slow moving vehicles in a convoy, adding to safety issues to pass this train of continuous vehicles, the HHA stated. They also argued for marking pilot vehicles in a distinctive yet universal way.

The RCA Forum also supported the removal of the maximum rim requirement for Class 2 pilot vehicles leading loads as it will give a greater range of vehicles to choose from and so potentially reducing costs for new and replacement vehicles.

However, HCC opposed proposal 14A on the grounds that in an urban environment, intersections and other traffic controls are likely to separate the convoy vehicles from pilot vehicles and opportunity to reform the convoy may be restricted.

Analysis and Conclusions

The time and zone restrictions will still apply for overdimension vehicles moving in convoy. Traffic flow is a matter to be considered before moving in convoy. The convoy proposal extends the convoy provision in the current rule from 'two' to 'two or more'.

Recommendation: Amend clause to allow for the Transport Agency to set alternative signage to mark pilot vehicles in a distinctive way.

Proposal 15	Comments
15A- Minor changes to zone descriptions and motorway restrictions for Category 3 and 4 vehicles	10
15B- Apply travel restrictions when ANZAC Day falls on a Saturday	11
15C- Make explicit in the VDAM Rule matters that may be included as conditions	11

Travel zones and times were addressed by a small number of submitters from local government, the road transport industry and industry associations.

Specialist Transport Services suggested creating a travel restriction for level 1 category loads out of a city area on a Saturday or Sunday was unnecessary as traffic volumes are lighter than at the same time on a working day as well as making practically impossible to complete any long distance travel.

Similar views were outlined by the HHA who argued that restricted travel times for Category 3 and 4 loads can be maintained in city areas and restricting travel away from city areas does not lead to greater safety outcomes for overdimension loads in rural areas. They further argued it was unnecessary to prohibit Category 3 and 4 because of low traffic volumes in rural areas. Auckland Motorways Alliance made a detailed submission recommending changes for loads of a certain width and height on the Auckland motorway network.

Analysis and Conclusions

Travel restrictions recognise that overdimension loads, especially larger loads, create risks for road users and potentially slow traffic. The time restrictions in the Rule become stricter the larger the vehicle.

There is a general requirement that overdimension loads are not to travel when there are unusually heavy traffic volumes. Relying on this provision alone is unlikely to be satisfactory.

There is a growing demand for access to the road network due to increased population and freight. This is especially so in larger urban areas. Any relaxing of time travel restrictions needs to be considered in light of this. In a number of areas, the middle periods of the day during weekends have a higher traffic count than during the week.

Changes are recommended for Category 3 and 4 loads in Christchurch and Canterbury to reflect the shift in traffic and population patterns since the 2011 Canterbury earthquakes. South Island Mountain routes do not need to be specifically mentioned in the Rule and can be managed by the general requirement dealing with travel in poor visibility. The SH1 Rakaia Bridge can be managed by other means that do not necessarily place demand on the Transport Agency due to the sheer number of loads on the road.

Recommendations: Amendments to the boundaries for Category 4 times in the Christchurch and Canterbury area
Delete SH1 Rakaia Bridge and South Island Mountain routes
Amend travel zones on Auckland Motorways.

List of Submitters

Submitter
Agricultural Transport Forum
Allan Aitken
Auckland Transport
Bruce Chappell
Bus & Coach Association New Zealand
Cable Price
Cable Price NZ Ltd
Christchurch City Council
Civil Contractors New Zealand Inc
Clutha Valley Transport
Crane Association of New Zealand Inc
Cycling Action Network
Dynes Transport
Federated Farmers of New Zealand
Fonterra
Gary Douglas Engineers
Greater Wellington Regional Council
Greg Cox
Hamilton City Council
Hire Frankton Ltd
Ian Gordon
Imported Motor Vehicle Industry Association
Insurance Council of New Zealand
J Swap & Co Ltd
John Harris
John Petrie
Kapiti Coast District Council
Log Transport Safety Council

Michael Vash
Motor Industry Association (Inc)
Motor Trade Association Inc
Murphy Buses Ltd
New Zealand Bus Ltd
New Zealand Motor Caravan Association Inc
New Zealand Police
New Zealand Ready Mixed Concrete Association Inc
New Zealand Truck-Trailer Manufacturers Federation Inc
NZ Heavy Haulage Association
NZ Traffic Institute(TRAFINZ)
Oliver Nees
Palmerston North City Council
Paul Chapman
Paul Clutterbuck
Penske Commercial Vehicles NZ
Ritchies Murphys Transport Solutions Ltd
Ritchies Transport Holdings Ltd
Road Controlling Authorities Forum (NZ) Inc
Road Transport Forum New Zealand Inc
Robert McIntosh
Rotorua Forest Haulage Ltd
Rural Contractors New Zealand
Russell Walsh
Southland District Council
Specialist Transport Services
Stray Ltd
Taupo District Council
Tauranga City Council

TERNZ Ltd
The New Zealand Automobile Association Inc
The Party Bus Company Ltd
Timothy Tyler
Trackaxle Ltd
Transit Systems
Transtech Dynamics Ltd
VTNZ
Waikato Regional Council