



# **ROAD TRANSPORT FORUM NEW ZEALAND INC**

## **SUBMISSION ON LAND TRANSPORT RULE (RULE 41001) VEHICLE DIMENSIONS AND MASS JULY 2016**

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**August 2016**

## **Road Transport Forum NZ Submission on the Vehicle Dimensions and Mass Rule**

**(Rule 41001) 2016 (Yellow Draft) released July 2016**

### **REPRESENTATION**

Road Transport Forum New Zealand (RTFNZ) is made up of several regional trucking associations for which the Forum provides unified national representation. The Forum members comprises of Road Transport Assns.NZ, National Road Carriers, and NZ Trucking Assn. The affiliated membership of the Forum consists of about 3,000 individual road transport companies which in turn operate 16-18,000 trucks involved in road freight transport as well as companies that provide services allied to road freight transport.

The Forum is the authoritative voice of New Zealand's road freight transport industry which employs 22,600 people (3.0% of the workforce), has a gross annual turnover of \$6 billion and transports about 80% of New Zealand's land based freight.

The Forum members are predominately involved in the operation of commercial freight transport services both urban and inter-regional. These services are entirely based on the deployment of trucks both as single units for urban delivery and multi-unit combinations that may have one or more trailers supporting rural or interregional locations.

### **RTF SUPPORT FOR THE DRAFT MASS AND DIMENSIONS POLICY CHANGES AND COMMENTS ON THE GENERAL OUTLINE AND OVERVIEW**

RTF has been a leading advocate of mass and dimension policy development and welcomes many of the key policy changes outlined in the draft rule some of which reflect the RTFNZ submission on the December 2015 VDAM discussion document. Examples include the increase in mass for 7 axle and 8 axle combinations within prescribed wheel bases, revised mass limits for twin steer and single axle steer axle sets, an interesting approach for rear axle set mass on specified specialist vehicles, an increase in mass for truck and simple trailer combinations, steer axles for HPMV B trains, increases in width and height for improving vehicle supply options and productivity, concessions toward bulk permitting for HPMVs, and movement without permits for the recovery of broken down or accident damaged HPMVs and for the processes associated with certifying HPMVs and a simplified tolerance regime for vehicle enforcement weighing.

The Overview mentions the weighing tolerance changes (Proposal 4) taking a position of unifying all weighing tolerances across all heavy vehicles which is step forward. Interestingly the accompanying changes to redirection orders (10km reduced from the 20km originally proposed) and reduced offloading tolerances (RIS para 52) are not mentioned in the draft rule Overview yet they are an important aspect of the Rules compliance objectives.

The Overview refers to the delay in the development and release of the PBS framework however the draft does include some cues toward the general direction of the PBS influencing decisions around vehicle performance and road fit.

## COMMENTS ON THE DRAFT RULE

The Draft Rule presents a number of interpretational challenges particularly related to its application to various vehicles types. We have identified what we would describe as a few disconnected clause cross references and ambiguous statements and in response to these we present questions and comment in an effort to draw out the correct application and interpretation. We suspect these problems are due to a variety of issues in the drafting process but could also be the result of the draft being designed for three audiences'; drivers, operators, and manufacturer/suppliers.

Our approach is to submit comment on the clauses for which we seek clarification or amendment and refer to the applicable proposal from the Overview where appropriate. We use the annotation of 2002 Rule for references to the existing rule and draft rule or Rule when referring to the current draft. We have also focussed our comments on the clauses of the Rule and not the proposals set out in the Overview. We suspect the complexity of the document might mean it is not possible to keep to this approach in every circumstance. It is also unlikely we will identify all the issues. The Rule is a complex document as mentioned. Issue 1 Overview page 29 asks whether explanatory notes should be included or retained. We fully support the use of explanatory notes for reasons already alluded to above.

### CLAUSE 2.1 AND RELATIONSHIP TO OBJECTIVES OF THE RULE

The section on Objectives of the rule has a number of important signals for readers and in our view parts of this should be imported into Clause 2.1 to be within the body of the draft rule as per the 2002 Rule. We suggest the section on responsibilities (paras 7 and 8) of the Objectives could sit equally well in Clause 2.1. In 2.1(2) there is a statement relating to fit on the road and the need to interact safely with other road users but the intent is not complete because the responsibility to exercise good judgement sits in the Objectives. We would have thought these two elements are mutually desirable aspirations.

Paragraph 6 of the Objectives implies that cycles are to respect the criteria relating to projecting loads but there are probably more important issues around cycles than just projecting loads. We suggest including, 'cyclists must be cognisant of the need to interact safely with other road users' as a specific statement even though we accept Clause 1.3(1) makes it clear the rule applies to pedal cycles and power cycles.

The seventh paragraph in the objectives has also weakened the emphasis on responsibilities set out in the sections 6, 7 and 8 of the Land Transport Act 1998 by substituting in the second line the word 'duties'. We suggest the wording should read: This is consistent with the general *responsibilities* stated in section 6,7,8 and 9 of the Land Transport Act 1998 (which relate to vehicle safety, driver responsibility and duties, and the need to secure loads)

The approach we have suggested places more importance on the on the responsibilities aspect of the draft rules obligations and inter-relates better with the public policy

expectations set out in Clause 2.1 and more specifically to the fit on the road and interaction with other road users as set out in Clause 2.1(2).

## **Section 2 Vehicle Requirements**

### **Clause 2.2 Dimension requirements**

Clause 2.2(3) in (a) refers to 'slow' speed but there is no definition for what constitutes slow in respect of temporarily lowered or raised vehicles. The discussion in Overview-24 gives a signal that about 20kph represents slow speed but for clarity the draft rule should be explicit. We suggest the word slow be followed with 20kph in parenthesis so there is no ambiguity with the expectation required by this clause.

Clause 2.2(4) refers to a heavy motor vehicle but we assume the provisions in (a) relate to a partially constructed, or a completed HPMV or proforma, or an individual component vehicle from one of those combinations since the basis of this clause is to facilitate the movement of these vehicles between the different aspects of the build, certification and supply process. However, (a) doesn't quite say that explicitly and there is no limit on mass other than the vehicle must be unladen. As an example it could be possible to move an articulated unladen but overweight Moxy dump truck (a heavy motor vehicle by definition) around for certification and final delivery to the customer on the basis of this clause. We are not sure the drafters intended this possibility.

In offering the travel concession mentioned above assuming it enables an unpermitted HPMV vehicle movement between various stages of manufacture, certification and the operator and given it is an over-dimension vehicle there is no specific reference to night time travel or day time travel requiring any form of vehicle delineation or lighting as required for other over-dimension vehicles. By definition a vehicle that exceeds the table 1 dimensions is an overdimension vehicle and all proformas would fall within the scope of that definition.

Clause 2.2(4)(b) is a statement of fact confirming that the appropriate permit issued to an over-dimension HPMV effectively confers approval to operate on a road. There is a view that the present scheme of proformas shouldn't need an over-length permit and 23m should be approved as of right and table 1 amended accordingly. There is considerable merit in this view. However, the discussion on the tracking performance expectations and lane fidelity is unable to be verified for these vehicles to be considered general access because there is no new PBS framework menu of measures. It would appear increasing the length in Table 1 without adjusting internal effective wheel base lengths would likely compromise access and the safety and the performance objectives outlined in the draft rule's objectives. That being the case the Agency should not lose sight of the opportunity to remove the proformas from the necessity of having over-dimension permits.

Clause 2.2(5) (a) and (b) talks exclusively about loads extending beyond the body of some vehicles but appears to assume the vehicle and load do not exceed the maximum dimensional limits set out in Table 1. This clause covers both day and night travel and load delineation relevant to the outer (maximum) dimensional characteristics of the load carrying vehicle.

Clauses 2.2(7)(8)(9) and (10) then outlines the requirements to cover off overdimension vehicles or loads, overdimension being either of the two, vehicle or load, exceeding the maximums of Table 1. It could also be argued that clause 2.2(7) is a modest repeat of clause 5.4(2). In fact, clause 2.2(7) could be rewritten as;

An overdimension motor vehicle that is required to display a flag **or** hazard warning panel to indicate a projecting load during **daylight** must instead display during **night-time** travel hazard warning flags **and** panels as required by 5.4, or at least this is what we think it is trying to say.

#### *Exceptions to width limits*

Clause 2.2(11) (a) states side marker and indicator lamps are not included when determining vehicle width. This seems a bit generous when there are no specific design obligations or limitations such as frangibility. We accept this same statement is in the 2002 Rule and arguably there hasn't been any evidence of lamps fitted being excessively wide. We assume the drafters are relying on the OEM country of origin vehicle standards to manage the vehicle width. In NZ there is a large heavy vehicle assembly and domestic manufacturing industry that should be provided with some guidance on what is an acceptable outer dimension beyond the vehicle covering off specific dimensional characteristics for these lighting arrangements.

Clause 2.2(11)(h) limits camera mountings to 70mm on the left side only for passenger vehicles. We suggest the use of blind side cameras should not be passenger vehicle exclusive and should be accessible to heavy vehicles of any service or application.

Clause 2.2(12) refers to specific loads that may be carried overwidth but the list does not include a demountable grit or aggregate spreader that fits on the tailgate section of a tipping body. These would be unlikely to exceed the same 2.7m vehicle width although the drive assembly is usually biased to the left. The requirements for the projection to be equidistant from the longitudinal centre line set out in 2.2(12)(b)(ii) would not be able to be met therefore any change would have to be incorporated into subclause(a).

Furthermore, there is no mention of any concession for swing back tailgates or drop down tray side boards. It appears the new width concession of 2.55m may have compromised consideration of these for some form of exception. We suggest the exceptions to width should be explored further to determine whether there is some sort of wording that could accommodate these two options.

By interpretation a vehicle loaded and described in clause 2.2(12) is overdimension (Category 1) and is arguably required to be operated according to the general requirements set out in clause 5.3 and in particular the requirements of 5.3(7) and 5.3(10)

Unfortunately, readers of the rule won't pick up the connection between the relevant clauses and therefore would be unlikely to seek the required swept path compliance assessment or make the lane width checks to overcome the travel time limitations. This raises the question of whether there is continued merit in insisting on swept path assessments for the vehicles with loads described in Clause 2.2(12). It would be a lot simpler to let these vehicles access routes on the basis of the simple application of the over width concession of 2.7m and the assumption the vehicle remains in the lane it is travelling in than having to have this verified.

The current wording raises a serious question around the comparison with Clause 5.3(10)(b) which exempts an agricultural vehicle, which includes both the agricultural tractor and agricultural trailer attached or operated separately.

This could be interpreted to mean a substantially sized overwidth tractor towing a tatty old ex-transport trailer travelling at 40kph poses less risk than a fully certified laden 2.7m wide truck and trailer suitably lit and delineated.

#### *Exceptions to length limits*

Clause 2.2(14) covers ferry attachment points that extends 50mm beyond the vehicles front and rear vehicle perimeters. A compliance approach would suggest that if these exceed the 50mm then the whole measurement value meaning the 50mm and the balance would be considered to be additional vehicle length. The best approach to resolve this conundrum would be to state the first 50mm of any front or rear ferry tie down is not included in determining the overall length of the vehicle.

#### *Exceptions and limits relating to height*

Clause 2.2(16) covers the relationship between SRT and vehicle load height yet it is not as simple as referencing an open deck. There are any number of open deck arrangements such as bulk tipping bins that qualify as an open deck so the statement and its application could be a bit ambiguous. We suggest an alternative approach could be considered such as; *The load height of a towing vehicle and of a trailer that has an open load platform **or that has a load platform or body that does not fully enclose the load (in a vertical orientation)** may be restricted if necessary to ensure that the vehicle complies with the SRT requirements in 2.5.*

### **Vehicle configuration requirements**

#### *General vehicle requirements*

Clause 2.3(1) refers to an inner radius of 5.3m for an articulated bus completing a 360 degree turn. It is interesting because in NZ the 25m turn is based on wall to wall whereas overseas jurisdictions such as the EU commonly provide for the 25m turn based on kerb to kerb. We see the inner radius value being a proxy for the truck PBS but that hasn't been confirmed. However, with the constant changes in vehicle design and vehicle frontal treatments it might appropriate to consider going the whole way and adopting an

international convention relating to basic turning performance instead of having a unique NZ specific option.

Clauses 2.3 (3) and (4) include reference to underrun for truck and trailer combinations over 21m but compliant with all the dimensions in Table 1 where the height of any substantive overhang is more than .55m above the ground.

From our recollection this provision was put in place for a certain type of log loading on log truck trailer combinations. The question that now arises, is this provision still valid as its application is very narrow. For instance, the new generation of proforma log trucks trailers don't comply with Table 1 so this provision has no impact for that vehicle group. In some cases, triaxle semis with long rear overhangs probably present a similar rear end crash risk to light vehicle occupants but the provision doesn't apply to semis either. The provisions covered in 2.2(5) concerning load delineation for rear over hanging loads probably are sufficient to manage the risk. Therefore, while nothing is really gained by keeping 2.3(3) and (4) and it should be removed.

#### *Axle requirements for heavy motor vehicles*

Clause 2.3(14) doesn't seem to deal with supplier obligations to ensure the load sharing requirements are met nor does it make it clear that even though twin steer sets are non-load sharing there is no requirement for them to actually meet some level of load equalisation. The load distribution over the twin steer set also isn't required to be validated as notionally equalising the load over each axle when the set is at maximum legal load. This is an important factor that needs to be recognised and addressed by adopting a different approach to twin steer set enforcement weighing. (See below). The enforcement regime has moved to employ axle weighers that invariably find the second axle of a twin steer set over weight when the set is at or close to maximum load.

#### *Enforcement weighing of twin steer set*

The lack of load sharing or load equalisation within a twin steer group is cause for concern when the weighing process is considered in this context. It is not inconceivable to have one axle, invariably the second axle weigh out substantially more than the foremost axle and although the new mass limits of 5.5 tonnes per axle and 11 tonnes for the set accommodate the variance better than the current mass limits they don't deal with the overall approach to enforcement weighing any better than the present weights. Even increasing the tolerances to 500kg don't deal fully with this issue. The 10% off loading tolerance has little merit in this context as well. If we look at the situation of the front twin steer set, ideally they should be able to load equalize but they don't. Therefore, we propose a different process for enforcement weighing. We suggest that where the tyres and rims of the twin steer set are the same if the one or other of the axles exceeds the axle mass limit of 5.5t but the sum of the two axles mass doesn't exceed the set mass limit then there is no offence. This means one axle could be 6.0 t but conversely the other would have to be lower so the axle set remains within the set tolerance limit of 11.5 tonnes. Interestingly the off-loading tolerance is 10% for each axle (500kg) which is the same as the weighing tolerance that might be applied to a single axle in this set so it is going to be interesting to see how things pan out around decision making on the enforcement action. It might be preferable to apply the 10%

offloading tolerance to the set limit only. This keeps everything within a logic process chain instead of trying to grapple with the intricacies of the weighing tolerance and off-loading tolerances being one and the same. We have discussed our suggested weighing and front steer set enforcement approach with senior CVIU staff and there is some sympathy for the situation that twin steer truck operators find themselves in.

#### *Retractable axles*

Clause 2.3(25) refers to retractable axles prohibiting their application in B train semis. However 2.3(11)(b) allows a steer axle in B train semi rear set and we suggest the same axle position should enable the use of a lift axle or lift/steer axle under the same criteria of the vehicle being specified in an HPMV permit and that the dimensional characteristics of Table 1 are met as set out in subclause (c).

### **Clause 2.5 Stability performance requirements: SRT**

#### *Compliance with minimum SRT*

Clause 2.5(1) is about compliance with SRT and offers a series of exceptions but fails to carry over the 2.8m and below vehicle height and load scenario from the 2002 rule. While it might appear an unwarranted option given the passage of time we still think it justified. It could be imported from the 2002 rule as 2.5(1)(j).

Clause 2.5(1)(g) and (2) sets a speed with raised tipping body that is difficult to justify as the 10Km per hour as mentioned in the rule is too slow and is not a practical speed to spread aggregates. Speeds vary depending on many things like product type, work place conditions, and depth of spreading requirements. This is clause though it is carried over from the 2002 rule, needs amending.

Clause 2.5(2) states HPMVs must comply with minimum SRT but then makes no mention of the minimum SRT at HPMV operating mass being 0.4g instead of the default value of 0.35g stated in the draft, although we accept the 0.4g is what is stated on the permit. For simplicity and completeness, the HPMV requirement should be incorporated into clause 2.5(1) so that the same menu of exceptions applies to both general access and HPMV vehicles. In respect of SRT compliance for HPMVs (and other heavy vehicles) there is reference under clause 2.5 to suitably calibrated and certified active roll stability control as an alternative for meeting the 0.35 and 0.4g SRT performance values.

#### *Methods of determining SRT*

Clause 2.5(3) RTF recommends all four options remain within the rule.

#### *Determining the appropriate loading of a vehicle for different load types*

In Clause 2.5(4) to (8) there is arrange of guidance for determining various load characteristics for calculating SRT. We applaud the Agency's effort to provide this level of guidance. Unfortunately, there is no guidance for calculating SRT for loads in shipping containers although the Agency spent considerable resources sorting out the various load profiles of shipping containers under engineer memo 70C which grew out of a rash of

container truck rollers in early 2013. We believe not providing advice for container loads within the scope of this Rule is an oversight and needs to be corrected.

Clause 2.5(6) is a little bit unclear. It can be read on face value that if the vehicle load platform under goes fundamental change or redesign allowing for different load types then the recertification requirement is straight forward. On the other hand, if the vehicle has different applications of demountable bodies changing the load type and load characteristics how does the recertification sit? Is it displayed on the COL or does this section provide for a supplementary SRT certificate to support the alternative load as only one set of SRT coordinates can be displayed on the COL?

Clause 2.5(7) refers to vehicles with lift axles having their SRT determined with the axle in a non-retracted position. However, the fact that some vehicles with lift axles can now carry a load as allowed for by section 9(4A) of the RUC Act 2012 suggests that these vehicles should be SRT evaluated in both loading scenarios even though there is a high level of confidence they should pass OK under both loading options.

#### *Certifying results of SRT test*

Clause 2.5(10) states the SRT test results must be on the COL but an option should be provided for that would allow a supplementary certificate for an alternative load to be carried to be produced forthwith on request by an enforcement officer.

### **Section 3 Mass limits**

#### *Gross mass limits*

By and large this section has no real surprises and there for apart from the few clauses commented on below the compliance statements are clear.

Clause 3.1(2)(b) makes a good attempt at defining gross mass as being limited to lowest rated component. This is useful step forward in that it provides clarity. From our reading clause 4.5 related to permit compliance critical conditions is equally is reliant on the on the same component ratings but connection is in our less clear is less clear. We question whether there is a case for 4.5 to be expanded to include failure to comply with component ratings as a critical condition. Alternatively, this section could be read in such a way as the reference to gross mass in clause 4.5 is covered adequately by the outline of gross mass in clause 3.1(2)(b).

Clause 3.1(9) has an incorrect reference showing Schedule 2 when the correct reference should be Schedule 1

Clause 3.1(10) is attempting to cover off the gross mass weight references for both 7 axle combinations and 8 axle combinations by using what we would call a subtle application and interpretation of the English language. For practical reasons i.e. the three audiences, it would be better for the rule to be explicit in this section and explain simply what gross limits apply to what vehicle combinations.

It would be much clearer if a second part to the sentence was added which read after 16.8m or more ***and a vehicle with at least 8 axles and a centre of first axle to centre of last axle of 17.4m or more---***

This same clause has raised some concern with the sector in that short wheel base vehicles particularly those used in the aggregates sector and bulk fertilizer sector will not be able to access the new weights due to the lack of first to last axle spacing distance although this can be overcome by lengthening the draw bar. However, the 4m intervehicle maximum spacing is somewhat limiting. It would be helpful if these vehicles could be granted an increase in the maximum intervehicle spacing length to at least 4.25m with appropriate safety highlighting on the draw bar. 4.25m is longer than the current 4m specified in Table 1 dimensional requirements. This concession would be specific to the vehicles mentioned, e.g. manufactured and first registered before the date of introduction of the final rule and only for the 7 and 8 axle truck trailer combinations.

There is no mention of the need for these vehicles to have their SRTs recalibrated or their brake systems upgraded for the new mass but inevitably many vehicles will be captured by these requirements. Without a note to this effect, operators may overlook these requirements.

The clause also refers to these vehicles as general access but then states a requirement for them to be limited to HPMV routes until November 2017. The draft appears to be silent on how this will be controlled or monitored. Clause 3.1(10)(b) almost points toward these vehicles having permits as per HPMV vehicles but doesn't actually say so. If we take a cue from clause 4.7, anything over 44 tonnes is defined as an HPMV.

#### **Section 4 permits for overweight vehicles and divisible loads**

##### *Criteria for issuing permits*

Clause 4.2(1) lists the criteria for consideration of a permit. These are listed as (a), (b) and (c). one missing is social and economic benefit which with the right consideration (within context) might swing a decision however we accept road and bridge durability will carry significantly weight in the decision making process.

Clause 4.2(4) criteria for issuing permits provides the road controlling authority to assess permit applicants for their historical compliance and safety performance. However, there is very little guidance on how this process will work or about the disclosure to the applicant of what details might be used to determine an adverse decision or refusal by an RCA to issue a permit. We accept an RCA probably has a right to refuse an applicant a permit but the process must be fully disclosed for reasons of legal and procedural fairness. There is also no framework on how RCAs might choose to interpret this clause and we could end up with a variety of processes and grounds for decisions. This section should require a single approach determined or approved by the Director to ensure a high level of consistency and mathematical rigour. 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).

Clause 4.2(4) includes a provision for electronic surveillance. We see this clause being permissive but it lacks any detail on who collects the data or how information is managed or who deals with exceptions and whether sanctions can be applied based on the information collected. This clause could be taken as being benign and be read as part of an operator managed system. On the other hand, we suspect the new ANPR system and real time weigh in motion reporting could be bundled up in this proposal allowing mass surveillance of the trucking fleet by any RCA once all the weigh stations are established across the network. There is no doubt which ever version emerges there will be privacy issues to be resolved. This clause also lacks cohesion and reference standards and it's been drafted loosely for some reason. It should include a reference that requires adherence to specific standards determined by the Director in consultation with end users.

#### *A permit may be revoked*

Clause 4.4(1)(a) provides for an 'RCA can revoke permit if any condition has not been complied with. This should be if critical breaches have occurred or there is evidence the permit vehicle/holder is continually not being compliant and/or an imminent safety risk.

Clause 4.4(1)(b) makes reference to **extraordinary** damage. The difficulty in practice will be in deciding what is extraordinary means in a road damage context. It is word that is very context defined and in this context and the fact that it is associated with an adverse decision process almost suggests the phrase **extraordinary damage** warrants its own definition in the draft.

Clauses 4.1(2) and (3) cover off the revocation of permits but the process differs from that outlined in clauses 5.2(16) (17) and (18). If the revocation is about risk to public safety the two processes should be the same for consistency.

#### *Operating under a permit*

Clause 4.5(2)(a) can be read as applying only to the paper based copy of the permit. The RUC policy contains provision for the RUC licence to be readily readable on an electronic display device. This approach should be included in this clause of the rule to avoid ambiguity and future problems at the roadside.

Clause 4.5(2)(b) requires the permit to be carried in the vehicle for the period of travel covered by the permit. What the clause is attempting to cover is the that the permit shall be carried in the vehicle when the vehicle is being operated pursuant to that permit. The word **period** if it is to be retained needs some more contextual detail to cover all the bases.

#### **Clause 4.6 Permits for overweight vehicles transporting indivisible loads**

Under clause 4.6 there is no mention of an ISO or shipping container being transported defined as an indivisible load. We are not sure if this is an oversight or simply that an overweight container vehicle design approach is still to be determined. It could appear that

the assumption that the new 7 and 8 axle mass options (45/46 tonnes) in Table 3b somehow relieve the Agency of coming forward with another option for higher weights. The 45/46 tonne options also exceed the current 44 tonne overweight policy cap of 44 tonnes.

#### **Clause 4.7 permits for high productivity motor vehicles**

The overview in Overview proposal 11A states the Rule allows for bulk permitting. Unfortunately, the opportunity to bulk permit type approved vehicles is somewhat undetectable within the text of the rule and the only clue is the use of plurals in brackets in the Schedule 2 permit format. We suggest the opportunity for bulk permits for type approved vehicles should be explicitly outlined in the body text. This also raises the question of dimensional variations or differences in measurement around what might be considered type approved or notionally dimensionally the same vehicles.

Clause 4.7(1) provides 3 independent definitions for an HPMV however under clause 4.7(1)(b) an HPMV that is only 44 tonnes GCM will be confined to HPMV routes as stated in Clause 4.7(8)(d). This will prevail unless there is a clause added as (f) which allows an HPMV described in Clause 4.7(1)(b) not exceeding the mass limits in Schedule 1 Table 2 and 3 including Table 3B to operate as general access.

#### *High productivity motor vehicle sign*

Clause 4.7(10)(c) covers off the display position for the HPMV H sign but isn't sufficiently detailed on where it is placed on the vehicle front. Too many signs are on the windscreen protector or placed in the windscreen itself partially obscuring the drivers full field of vision.

This subsection should prohibit the sign being place anywhere above the lower perimeter of the windscreen thereby ensuring it is on the front face of the vehicle at a level that the vehicle can be easily identified as an HPMV.

The discussion on 4.7(10) raises the whole issue of whether there is ongoing merit in retaining the H sign. If HPMVs in all guises are as prevalent on the road as NZTAs economic analysis says they are, then they are part of the background variation of vehicles and probably shouldn't be required to carry a distinguishing identifier.

#### **Clause 4.8 permits for specialist vehicles**

This clause provides for significant increases in rear axle set mass for the defined specialist vehicles which is a response to the RTFs request for parallel access to the weight thresholds approved for passenger vehicles. It is a bold step but in reality a ground spread truck operating on the secondary road network or rural network is very unlikely to be approved to operate at 17/18 tonnes on the rear axle set by an RCA. However, 16 tonnes at HPMV weights in our view should not be seen as an unrealistic option.

Concrete mixer trucks and rubbish trucks probably have greater chance of being permitted at the higher weights. This clause should be retained as an opportunity for these specialist vehicles because there may be circumstances where it might be possible to access the

higher weights under RCA authorisation. However, the general sense is that creating an environment for specialist vehicle applications is only going to result in equity issues.

One of the likely disadvantaged groups is the rural petroleum delivery vehicle group predominantly operated as single unit vehicles. This approach is required to enable access to some farms. The routes are likely to be the same although not exclusively as would be used by the ground spread vehicles. These vehicles typically operate at HPMV axle mass as they are part of an HPMV combination so the single unit function is required solely to facilitate delivery of the product not too dissimilar from the operation of a HPMV stock truck that goes directly to a farm to pick up the stock and then is reunited with its trailer for further travel. Interestingly we note there is no definition for concrete mixer or ground spreader truck but there is one for a rubbish truck.

### **Section 5 Overdimension motor vehicles and over dimension loads**

The operation of overdimension vehicles is a specialist area and we will be guided by our colleague organisation, the Heavy Haulage Association. We understand they have some concerns and reservations about the various responsibilities assigned to different individuals within the scope of overdimension load management.

We do however have a few comments on this section of the Rule.

Clause 5.2(15) covers off critical beaches of over dimension permits and here we are refereeing to (a). in this clause. This approach seems to mirror the expectations about lane compliance and safe operation of the vehicle covered in Clause 2.1 particularly in respect of OD vehicles. In our reading, the fact that HPMVs are by definition a vehicle that is operating overdimension (as they are likely to be outside Table 1 limits in a number of vehicle attributes) suggests this critical aspect equally applies to them. Because there are no tolerances or orders of magnitude of error that relate to vehicle accuracy measurement mentioned that relate to OD compliance, this raises an interesting issue around measuring vehicles from two perspectives. Firstly, the initial measuring that forms the attribute sheet and permit application process and secondly the road side enforcement process. The relative accuracy in either case might differ by some undisclosed margin which could lead to grounds for a dimensional critical breach. A frame work of acceptable variations needs to be sorted out for this section and for the concept of bulk permits

### **Clause 5.3 Requirements for all overdimension vehicles**

#### *General operating requirements for all over dimension motor vehicles*

Clause 5.3(4) makes reference to OD vehicles and the need to avoid damage to various types of structures and plant life. One of the structures mentioned is tunnels and the obligation not to cause damage or interference is obvious. However, one of our members has mentioned the Lyttelton tunnel has vehicle length limit prohibition of 21m on the movement of vehicles through the tunnel. This is the main route from Port of Lyttelton to and from the Canterbury state highway system. The length limit compromises the travel of HPMVs including stinger steer container recovery trucks as well as the laden 23m B trains with quad steer sets now provided for in the draft rule. The question raised is whether

NZTA could influence the tunnel control authority to provide access for the HPMV vehicles at proforma or HPMV lengths.

Clause 5.3(10) relieves an agricultural motor vehicle in (b) from having to undergo a swept past analysis for road fit but then in (c) takes what might appear a conservative approach to ground spread vehicles and requires anything over 2.55m wide to undergo the swept path performance assessment. If we refer back to the 2.7m wide concession for pipe, baled hay, and wool we suggested removing the swept path performance analysis for those vehicles due to the revised lighting and delineation requirements offsetting the width risk for other road users. We suggest the ground spread vehicles be considered in the same group if the trailer is not more than 2.55m wide.

Looking at Clause 5.3(10) (c) from a different perspective it could be read that a ground spread vehicle up to 3.1m wide towing a trailer of 2.55m wide does not need a swept path analysis and we suspect that is more likely the case. I think for clarity this statement needs some tweaking to ensure it is interpreted correctly.

#### **Clause 5.4 Hazard warning equipment for overdimension vehicles**

##### *Hazard warning panels*

Clause 5.4(11) should be amended to state the following requirement: 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 reasons for taking this view is the alternative approach of hazard panels or a beacon doesn't full cover the risks evident on rural roads

It is the view of many rural RTF members that 5.4(11) that Agriculture tractors with a width exceeding 2.55m. but less than 3.1m present an elevated risk to road safety when relying on just hazard panels for delineation and they should comply with the general provisions of 5.4(4).one of the critical aspects of whether a beacon is visible in its-self relates to where it is mounted on the tractor and its visibility against contrasting background and changing patterns of light typical, of the rural environment. Our rural members have also noted the placement of beacons is seldom on the top of the tractor cab or protection frame and a recent tendency has been to place them lower to avoid them being struck by low branches.

Apparently many tractor owners prefer the comfort of having the hazard panels and beacon knowing they will be more easily noticed and if the beacon fails they have at least some rudimentary delineation system for warning other road users

It does not make sense to allow agricultural tractors options, when there are many other types of agricultural equipment on the road that take up the same road space, but

employing different applications and combination of delineation devices to different but similar agricultural vehicles may well be confusing for road users.

*Lighting requirements for overdimension motor vehicles*

Clause 5.4(15) requires overdimension motor vehicles to use head lights during daylight hours when traveling on the road. The repeated reference to headlights on for OD loads needs amending to allow the use of approved daytime running lamps that are located adjacent to the head lights. The key change here is driven off the greater reliability of the daytime running lamp compared to daylight use of the headlamp that potentially has a higher failure rate due the warmer daytime air flow over heating the filament bulb.

**Concluding comments**

As mentioned in our opening comments the draft rule is a significant step forward but like a lot of legislative frameworks it still presents some challenges readers will find difficult to interpret correctly. We have attempted to highlight some of these as well as raising questions around some aspects of the Rule that warrant further amendment but there is no doubt we will have missed some things.

The Forum (RTF) would be happy to discuss our comments with officials if required.