ROAD USER CHARGES: CHANGE TO THE DEFINITION OF LICENCE WEIGHT

Proposal

1. This paper seeks agreement that the definition of vehicle weight for the purpose of road user charges (RUC) licences be changed from actual gross weight to a definition based on maximum permissible on-road weight.

2. This is the second of five related Cabinet papers setting out proposals for new RUC legislation to replace the Road User Charges Act 1977 and Road User Charges Regulations 1978.

Executive summary

3. The RUC system currently requires vehicle operators to purchase, in advance, RUC licences in multiples of 1,000 kilometres. The cost per 1,000 kilometres varies by vehicle type and weight.

4. The Road User Charges Act 1977 defines weight for licence purposes as the actual gross weight of the vehicle. Operators need to nominate a licence weight sufficient for the maximum that their vehicle will weigh, at any time during the distance covered by the licence.

5. The Independent Review of the New Zealand Road User Charging System (the Review) concluded that charging for actual gross weight involves significant compliance and administration costs, and contributes to evasion of RUC by heavy vehicles. The Review recommended that the definition of weight for RUC licence purposes be changed, to one based on the maximum permissible on-road weight of a vehicle.

6. This paper proposes that the definition of weight for RUC licence purposes in the RUC Act be changed to a new “RUC weight”, based on the lesser of the:

   6.1. manufacturer’s specified gross vehicle mass; or

   6.2. gross vehicle mass under the Vehicle Dimension and Mass Rule 2002 (the VDAM Rule).

7. The current RUC system provides for operators to purchase supplementary licences to increase the licence weight of their vehicles for short distances. The proposed RUC weight definition makes this provision redundant in most circumstances. Additional payments will still apply for vehicles that are issued with permits to operate above their normal gross mass under the VDAM Rule.

8. The new definition of weight will have no significant impact on charges for light vehicles (those under 3.5 tonnes gross vehicle mass).
9. For heavy vehicles (those over 3.5 tonnes), the general effect of the proposed change is that RUC licences will cost more for vehicles that carry lighter loads than the average for similar vehicles, and less for vehicles that carry heavier than average loads.

10. The impacts on vehicle operators will vary, depending on the nature of their vehicles and the loads carried. Total charges for heavy combination vehicles (trucks and trailers, or articulated vehicles) will depend on the charges for each component of the combination. As vehicles used in combinations cannot usually be loaded to their maximum individual weights, the total charges may not alter greatly compared with the current system.

11. This paper proposes that the classification of vehicle types for RUC purposes and the weight bands for each vehicle type, at present set out in schedules to the Act, be prescribed in regulations. RUC rates would continue to be set by Order in Council and confirmed by Parliament.

12. The Ministry of Transport has consulted organisations representing road users and other interested stakeholders on the proposals. The majority of stakeholders support the Review recommendation to remove operator nomination of RUC licence weight. Further consultation will take place with stakeholders on the definition of vehicle types and weight bands, prior to drafting the new regulations.

13. Implementing the new definition of vehicle weight requires changes to New Zealand Transport Agency administrative and computer systems. If a new RUC Bill is passed in 2011 it is envisaged that charges set under the new Act will take effect in mid 2012.

**Background**

14. In its March 2009 report, the Review recommended that the definition of weight for the purpose of RUC licences be changed from actual gross weight, as nominated by vehicle operators, to a definition based on maximum permissible on-road weight.

15. The Review concluded that moving away from operator nominated weight would simplify administration and enforcement of RUC, and reduce compliance costs for operators. It should also largely eliminate evasion that results from the purchasing of RUC licences at weights lower than those actually carried.

16. As a corollary to this proposal, the Review also recommended that supplementary RUC licences be abolished. Supplementary licences enable operators to increase the licence weight of their vehicles for short distances.

17. The government accepted these recommendations in principle in August 2009 [EGI Min (09)16/8 refers], and I directed officials from the Ministry of Transport to develop proposals for simplifying the RUC system.

**Rationale for change**

18. The RUC Act defines vehicle weight, for the purpose of RUC licences, as actual weight transmitted to the road surface. This requires vehicle operators to estimate what the maximum gross weight of their vehicle will be during the distance covered by a RUC licence (standard licences are sold in multiples of 1,000 kilometres).
19. If an operator finds that the current RUC licence on a vehicle is insufficient to allow for a particular load, a supplementary licence can be purchased for the distance required. These licences are sold in multiples of 50 kilometres. Use of supplementary licences varies between operators. Some find that the nature of their business requires them to always buy licences at or near the maximum legal weight for their vehicle. Others attempt to optimise their RUC purchases by buying a standard licence for a relatively low weight, and using supplementary licences as required for heavier loads. Some who could vary the licence weights of their vehicles choose not to, due to the inconvenience, transaction costs, and risk of error involved.

20. Much of the current potential for evasion of RUC relates to the purchase of licences for incorrect weights. The weight purchased will depend on the operator’s assessment of the weight of the loads to be carried. Roadside checks show that this is often underestimated. My officials know of no other heavy vehicle charging system worldwide that uses this approach to weight licensing.

21. Charging on the basis of actual weight incentivises operators to purchase the lowest value of RUC licence that they anticipate requiring. Aside from the risk of under-purchase, reinforced by low probability of detection, this can also inhibit efficient utilisation of vehicles.

22. In theory, the advantage of charging on actual weight is that operators pay according to the impact their vehicles have on the road surface, and take that into account when determining how to load their vehicles. In practice, operators usually seek to maximise payloads, irrespective of RUC.

23. The Review also found that the relationship between RUC rates and roading costs is subject to a number of broad assumptions and approximations. There is uncertainty around many of the assumptions. Actual road network impacts of vehicles will also vary considerably with patterns of vehicle use, and the characteristics of particular roads. The impression of precise cost recovery in the current highly differentiated RUC scale is likely to be misleading.

**Proposed definition of “RUC weight”**

24. Adoption of a new definition of weight is not straightforward. There is no single existing definition of maximum vehicle weight that is appropriate for this purpose, and that is applicable to all vehicles.

25. Analysis of information from the motor vehicle register indicates that for the majority of RUC paying vehicles (light diesel vehicles and two-axle trucks), the gross vehicle mass specified by the manufacturer is the appropriate measure of maximum carrying capacity. Larger multiple axle vehicles, however, tend to be rated by manufacturers for a higher gross mass (sometimes much higher) than the operating limits under the VDAM Rule1.

26. Charging vehicles solely on the basis of their manufacturer’s gross mass would lead to inequities between vehicles that have different manufacturers’ ratings, but are limited to the same maximum operating mass by the VDAM Rule.

---

1 The VDAM Rule determines maximum operating weight limits on New Zealand roads on the basis of vehicle characteristics such as number and spacing of axles. It also provides for the usual limits to be increased under permits issued for specific vehicles on specific routes.
27. Consequently, I propose that the “RUC weight” of a vehicle would be set as the lower of either the:

27.1. manufacturer’s specified gross vehicle mass; or

27.2. usual gross vehicle mass under the VDAM Rule.

28. Switching to charging on a fixed RUC weight\(^2\) for each vehicle will remove the need for supplementary licences in their present form. There will remain a need for additional charges where vehicles have permits enabling them to run at weights above the usual limits under the VDAM Rule.

29. Appendix A provides an illustration of the effect of the new weight definition if applied to existing vehicle types on a revenue neutral basis. The charges that would apply under the new system have been calculated using two different scenarios. Scenario one is based on a scale with one tonne increments in each vehicle type and scenario two uses broader weight bands, leading to a higher degree of averaging.

30. Consultation with the industry has confirmed that a scale with one tonne increments would be likely to lead to significant inequities between operators with vehicles performing the same tasks, but with slightly differing maximum weights. It could also lead to disputes around the definition of individual vehicle weights, and requests for vehicles to be re-classified at more advantageous weights.

31. In addition, for some vehicle types the vast majority of vehicles have the same maximum legal on road weight, rendering a graduated one tonne scale largely redundant.

32. I envisage, therefore, that under the proposed system, charges will be set for relatively broad weight bands. This would be similar to practice in other jurisdictions, where heavy vehicle charges are usually differentiated primarily by vehicle type, with a small number of weight classes within the type definition. For example, two-axle rigid trucks are divided into just two different weight classes for charging purposes in Australia, and there are only three rates of charge for such vehicles in the United Kingdom.

33. Definitions of vehicle types and weight bands, at present contained in schedules to the RUC Act 1977, will in future be set out in regulations. These regulations will be made after the new RUC Bill has been enacted, and following further consultation with stakeholders on these definitions.

**Impacts on users**

34. All operators will benefit from reduced compliance costs, in terms of time required to determine the correct RUC licence weight and removal of the need to purchase supplementary licences for vehicles within normal weight limits.

35. Users who currently meet their RUC obligations in full will benefit from the reduction in opportunities for evasion of RUC as a result of the proposal. These users at present carry the burden of the higher fees necessary to compensate for revenue lost through evasion.

\(^2\) The RUC weight would be recorded on the motor vehicle register and would not vary during the life of the vehicle, unless there was a relevant change in the VDAM Rule, or a modification was made altering the vehicle’s carrying capacity.
Records of RUC purchases indicate that some heavy vehicles (between four and fifteen percent depending on type) only carry RUC licences sufficient to cover their unladen weight. The Ministry of Transport considers it likely that in most cases these vehicles are carrying significant loads, and should be licensed for higher weights.

36. The proposal will result in operators being charged on the basis of their vehicles’ capacities, rather than the actual loads they carry. All vehicles of a given type and weight class will pay the same amount per kilometre at all times, unless subject to an over-weight permit under the VDAM Rule, in which case an additional RUC payment will apply.

37. Some operators will pay lower charges as a result of the change, and others will face higher charges than under the current system. Operators who currently purchase RUC licences at weights lower than the average weight purchased for similar vehicles are likely to face higher charges under the RUC weight system. Conversely, operators who currently purchase licences at weights greater than the average will face lower charges than they pay under the current system.

38. There will be a relative increase in the cost of carrying loads that are large but light, as compared to those that are small and heavy. As RUC are only about a tenth of heavy vehicle operating costs, this is not expected to have any significant economic impact. The relative increase is also likely to be more marked in relation to non-articulated trucks.

39. The heaviest loads are generally carried in combination vehicles (trucks or prime movers towing one or more trailers). The effects of the new charging system for these vehicles are more complex, and will depend on the individual characteristics of the component vehicles in the combination, each of which will continue to require a separate RUC licence. The maximum legal weight of an individual truck or trailer will usually be greater than the amount it is able to weigh as part of a combination. This is likely to limit the extent of any reduction in charges for maximum weight combinations.

40. The most common heavy combination vehicles are eight axle truck and trailer combinations (e.g. milk tankers and logging trucks). These combinations are usually licensed to carry the legal maximum of 44 tonnes. Under a system where charges were set in broad weight bands all of these vehicles would pay exactly the same RUC and there would be little difference in the amount paid compared to charges under the existing system.

41. The scenarios modelled so far indicate that some combination vehicles could be advantaged by the new charging system, relative to others (for specific examples see Appendix B). It would be anomalous, however, for combination vehicles of similar total weights, and with similar numbers of axles, to pay substantially different charges. It is also important to avoid perverse incentives to use vehicles that cause more road damage, or disincentives to choice of safer vehicle configurations. These issues will receive further attention during the development of new RUC rates.

**Enforcement of overloading offences**

42. Under the proposed new RUC weight system it will no longer be possible for operators to purchase licences for an incorrect vehicle weight, unless they are operating above usual vehicle mass limits under the VDAM Rule. In that case they will need an over-weight

---

3 One effect of this will be to discourage use of vehicles that are larger than necessary for the task.
permit, as well as an additional RUC licence. Apart from those vehicles, the need for separate enforcement of RUC weight compliance, as distinct from enforcement of overloading generally, disappears.

43. This change, however, means that in general the only penalties for overloading will be those provided in regulations made under the Land Transport Act 1998 for exceeding maximum weights set for safety and for road and bridge protection purposes.

44. The current provisions of the RUC Act include substantial penalties for operating a heavy vehicle with an insufficient licence weight. My officials will carry out a review of the offence and penalty provisions relating to overloading under the Land Transport Act 1998 in order to ensure that these provide adequate incentives for compliance in the absence of the current RUC weight enforcement provisions. I will make a separate submission to Cabinet after the review for any necessary amendments to the regulations.

Consultation

45. The following government departments and agencies have been consulted on this paper: the Treasury; the NZ Transport Agency; the New Zealand Police; Ministry of Economic Development; Ministry of Justice; and Department of Labour. The Department of the Prime Minister and Cabinet has been informed of this paper.

46. The following industry stakeholders have been consulted on the proposals discussed in this paper: the Road Transport Forum New Zealand; the New Zealand Automobile Association; the New Zealand Forest Owners Association; the Bus and Coach Association New Zealand; the Motor Trade Association; the Motor Industry Association; Federated Farmers; the Crane Association; the New Zealand Heavy Haulage Association; and the New Zealand Motor Caravan Association.

47. Most stakeholders generally support the Review recommendation to remove operator nominated weights, and agree with the proposed definition of “RUC weight”. The Motor Caravan Association has indicated that members who have commented on the proposals do not support the change in approach. Comments from other stakeholders tended to focus on secondary issues, including:

47.1. a suggestion from several stakeholder groups that there should be greater differentiation of charges for light vehicles, aimed at rewarding more fuel efficient light diesel vehicles;

47.2. a concern that the averaging effect of the proposal could reduce the cost of carrying the heaviest loads on road, to the disadvantage of competing modes (rail and coastal shipping);

47.3. a concern that additional charges for vehicles with higher than normal weights should adequately reflect the additional costs imposed on the road network;

47.4. proposals that there should be changes to the definition of vehicle types to distinguish between trucks and other vehicles that might have similar chassis configurations, but different body types (eg buses and mobile cranes).

48. Currently, there is only a slight difference between the RUC rates for the smallest light diesel vehicles and larger light vans or SUVs weighing up to 3 tonnes. This is because
differences in roading costs generated by these vehicles are minimal. Changing to charging on the basis of maximum legal weight does not alter this position.

49. Rewarding fuel efficiency is not a purpose of the RUC Act. To enable charges to reflect fuel use would add significant complexity to the RUC system. It would also be of limited benefit as an incentive, as RUC amount to a very minor part of light vehicle operating costs. Therefore I believe that it is preferable to keep the RUC system focused on recovering transport system costs, and use fuel price related measures such as the Emissions Trading Scheme to incentivise fuel economy.

50. As noted in paragraph 39, any reduction in RUC for heavy combination vehicles at maximum loads is likely to be relatively limited. Bearing in mind that RUC are only one component of heavy vehicle operating costs; any changes in the charges for individual vehicles are unlikely to have a major impact on the economics of road freight as compared to other modes.

51. There is no evidence that changes in the RUC licence charges for heavy vehicles are likely to have a noticeable impact on the overall use of those vehicles. A recent study by the NZ Institute for Economic Research on Road User Charge Demand showed that the demand for RUC licences is driven almost entirely by broader economic conditions, rather than the level of charges.

52. At the same time, it is important to ensure that the heaviest vehicles make an appropriate contribution to road network costs. This will be taken into account in fixing the additional RUC payments for vehicles that have been issued with over-weight permits, including permits for high productivity motor vehicles. The level of these payments will be set to recover a similar level of revenue as under the existing system. The change in weight definition is not therefore expected to have any effect on the uptake of high productivity vehicle permits.

53. As noted in paragraph 37, the averaging inherent in charging for maximum carrying capacity disadvantages operators who cannot fully utilise the rated capacity of their vehicles. This may apply particularly for bus and coach operators, but could also be relevant for mobile cranes and other vehicles that do not carry any payload. I have therefore asked my officials to further investigate the possibility of placing such vehicles in separate categories from freight vehicles for RUC purposes.

Financial implications

54. The transition to a new definition of RUC weight is intended to be revenue neutral, with reductions and increases in RUC paid by vehicle operators cancelling each other out. Any subsequent shifts in the composition or utilisation of the heavy vehicle fleet will be taken into account in the course of regular reviews of RUC rates.

55. In the medium term, there will be savings to the Crown from reduced enforcement activity and lower ongoing administrative costs.

56. In the short term, the NZ Transport Agency will incur one-off costs of $1.485 million to implement all of the proposed changes to the RUC system. Details of these costs, and a proposal for a fiscally neutral adjustment to appropriations in Vote: Transport, are included in the accompanying Cabinet Paper “Road User Charges: Overview and Introduction to Legislative Proposals”.

Page 7 of 14
Human rights implications

57. No inconsistencies have been identified between the proposals in this paper and either the Bill of Rights Act 1990 or the Human Rights Act 1993.

Legislative implications

58. The proposals outlined in this paper require amendments to the RUC Act. Those amendments will include providing for revised definitions of vehicle types and weight classes (at present in Schedules One to Three of the RUC Act) in new regulations. The level of charges (at present specified in Schedule Three of the RUC Act) will also be contained in the regulations but, as a form of taxation, will remain subject to parliamentary confirmation.

59. The associated review of penalties for overloading offences may also result in amendment of the Land Transport Act 1998 and related regulations.

60. [withheld]

Regulatory Impact Analysis

Regulatory Impact Analysis requirements

61. The Ministry of Transport confirms that the principles of the Code of Good Regulatory Practice and the Regulatory Impact Analysis requirements, including the consultation requirements, have been complied with. A Regulatory Impact Statement (RIS) has been prepared and is attached to this paper.

Quality of the Impact Analysis

62. A Principal Adviser in the Aviation and Maritime Group of the Ministry of Transport has reviewed the RIS. The reviewer considers that the information and analysis in the RIS meets the quality assurance criteria.

Consistency with Government Statement on Regulation

63. I am satisfied that the proposals outlined in this paper will materially reduce the regulatory impact of the RUC system, relative to the current arrangements, and are consistent with our commitments in the Government statement “Better Regulation, Less Regulation”.

Publicity

64. I intend to issue a media statement announcing a package of reforms that will simplify and modernise the RUC system.
Recommendations

65. I recommend that the Committee:

1) **note** that this is the second of five related Cabinet papers setting out proposals for new road user charges legislation to replace the Road User Charges Act 1977 and Road User Charges Regulations 1978;

2) **note** that the Independent Review of the New Zealand Road User Charging System recommended that the definition of weight for the purpose of road user charges licences be changed from actual gross weight, as nominated by vehicle operators, to a definition based on maximum permissible on-road weight;

3) **agree** that all vehicles subject to road user charges should have a defined “RUC weight” based on the lesser of gross vehicle mass as specified by the manufacturer, or gross vehicle mass under the Vehicle Dimensions and Mass Rule 2002;

4) **agree** that the current system of supplementary road user charges licences be replaced with a system of additional charges applicable only to vehicles, or combinations of vehicles, issued with permits to operate at a total mass greater than their usual maximum under the Vehicle Dimensions and Mass Rule 2002;

5) **agree** that the Road User Charges Bill should empower the making of regulations to cover the following matters, at present prescribed in schedules to the Road User Charges Act 1977:
   a) definition of vehicle types for road user charges purposes
   b) definition of weight bands for each vehicle type
   c) levels of charges by vehicle type and weight band (subject to confirmation by Parliament);

6) **note** that there will be further consultation with stakeholders on the definition of vehicle types and weight bands prior to the making of regulations implementing the simplified road user charges system;

7) **note** that a review of penalties for overloading offences under the Land Transport Act 1998 and related regulations will be carried out in conjunction with the development of new road user charges legislation;

8) **[withheld]**

9) **invite** the Minister of Transport to issue drafting instructions to Parliamentary Counsel for legislative amendments to give effect to recommendations 2 to 6 above.

10) **note** that the NZ Transport Agency will incur additional one-off operating costs totalling $1.485 million to implement the proposed modernisation and simplification of the road user charges system;
11) note that a proposal to meet these costs, through a fiscally neutral adjustment of appropriations in Vote: Transport, is included in the Cabinet paper “Road User Charges: Overview and Introduction to Legislative Proposals”.

Hon Steven Joyce  
Minister of Transport  
Dated: _________________________
Appendix A: Comparison of RUC for common vehicles

The following table shows a selection of the most common “RUC weights” for the main vehicle types; the core range of licence weights at present nominated for these vehicles; and the current charges payable for those weights, as compared to two RUC weight scenarios.

Scenario one is based on a “RUC weight” scale with one tonne increments. Scenario two is based on a scale with between one and four weight bands per vehicle type. Both scenarios are revenue neutral overall and within vehicle types. Scenario Two is also revenue neutral within weight bands.

The average RUC weight for a vehicle type is higher than the average currently nominated weight, but some operators already buy licences for the maximum possible legal weight of their vehicles. They will pay lower rates under a RUC weight based scale, whereas those who now buy relatively low licence weights compared to the RUC weight of their vehicles will pay more.

<table>
<thead>
<tr>
<th>Vehicle Type¹</th>
<th>Vehicle Weight (tonnes)</th>
<th>RUC rate per 1,000 km ($ incl GST)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>“RUC weight” (max capacity)</td>
<td>Operator nominated (core range of licences²)</td>
</tr>
<tr>
<td>POWERED VEHICLES</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>2-3</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>3-4</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>6</td>
<td>4-6</td>
</tr>
<tr>
<td></td>
<td>10</td>
<td>7-10</td>
</tr>
<tr>
<td></td>
<td>15</td>
<td>10-14</td>
</tr>
<tr>
<td>5 (3 axle other than type 6)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>16</td>
<td>14-15</td>
</tr>
<tr>
<td></td>
<td>18</td>
<td>14-18</td>
</tr>
<tr>
<td>Vehicle Type</td>
<td>“RUC weight”</td>
<td>Operator nominated (core range)</td>
</tr>
<tr>
<td>--------------</td>
<td>--------------</td>
<td>---------------------------------</td>
</tr>
<tr>
<td>6</td>
<td>21</td>
<td>16-21</td>
</tr>
<tr>
<td>14</td>
<td>26</td>
<td>22-26</td>
</tr>
</tbody>
</table>

**TRAILERS**

| 29           | 15           | 11-15                           | 90-235         | 173.25      | 104.01      |
| 30           | 17           | 10-16                           | 78-345         | 300.91      | 179.91      |
| 33           | 18           | 14-18                           | 88-165         | 126.73      | 135.72      |
| 37           | 24           | 18-23                           | 190-420        | 339.39      | 219.97      |
| 43           | 29           | 22-24                           | 178-228        | 259.81      | 185.02      |

---

1. Diagrams show examples of configuration for common types. Vehicle types with very small numbers of vehicles are excluded. These include 5 axle powered vehicles, one axle trailers, and some two axle trailers. For definitions of all vehicle types please refer to the RUC booklet published by the NZ Transport Agency, available online at [http://www.nzta.govt.nz/resources/road-user-charges/index.html](http://www.nzta.govt.nz/resources/road-user-charges/index.html)

2. The full range of licence weights currently nominated that relate to each RUC weight is wider than shown. The current system allows for a vehicle to be licensed for any weight between the unladen weight and the maximum legal gross weight. There are a small number of vehicles in each class for which licence weights currently nominated are close to unladen weight. On the other hand, a large proportion carry RUC licences for their maximum allowable weight. The range of operator nominated weights shown for each “RUC weight” value covers the great majority of vehicles of that weight.

3. Rounded to nearest dollar
Appendix B: Comparison of RUC for common heavy combination vehicles at maximum weights

The table below illustrates the effects of the proposed change to the definition of weight for the most common truck and trailer, or semi-trailer, combinations used on New Zealand roads. The comparison is based on the assumption that charges will be set in broad weight bands (scenario two in Appendix A).

The examples assume that vehicles are loaded to the legal maximum for the combination, which is usual. Current charges are lower for vehicles not laden to maximum weights. This would be more likely to apply to operators carrying loads that are bulky but relatively light.

Higher weights are possible if a combination is issued with a High Productivity Vehicle permit. Those vehicles will be subject to additional charges over and above the normal licence to be carried under the proposed simplified RUC system.

As shown in the table, B trains would be disadvantaged by scenario two charges relative to other eight axle combinations loaded to 44 tonnes. The rates shown are purely illustrative and in setting actual rates every effort will be made to avoid unfairly penalising particular vehicle configurations.

<table>
<thead>
<tr>
<th>vehicle</th>
<th>Current RUC licence (cheapest option)</th>
<th>Scenario two licence</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Weights</td>
<td>$ 000km</td>
<td>$ 000 km</td>
</tr>
<tr>
<td>Seven axle truck and trailer</td>
<td>18 + 26 = 44</td>
<td>555.99</td>
<td>503.79</td>
</tr>
<tr>
<td>Eight axle truck and trailer</td>
<td>20+24 = 44</td>
<td>440.87</td>
<td>480.72</td>
</tr>
<tr>
<td>Six axle semi-trailer</td>
<td>21+18 = 39</td>
<td>587.85</td>
<td>453.89</td>
</tr>
<tr>
<td>Combination</td>
<td>Weight</td>
<td>RUC 1</td>
<td>RUC 2</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>--------</td>
<td>-------</td>
<td>-------</td>
</tr>
<tr>
<td>Seven axle semi trailer</td>
<td>21+20=41</td>
<td>562.00</td>
<td>503.19</td>
</tr>
<tr>
<td>Eight axle semi trailer</td>
<td>24+20=44</td>
<td>489.82</td>
<td>480.72</td>
</tr>
<tr>
<td>Eight axle B-train</td>
<td>16+18+10=44</td>
<td>428.04</td>
<td>557.90</td>
</tr>
</tbody>
</table>

|   |   |   |   |   |   |

4 These are the most common combination vehicles currently use in New Zealand, based on observations at weigh-in-motion stations on State Highways.

5 The cheapest RUC option is not necessarily the most common choice. Other considerations may lead operators to license for slightly more expensive weight combinations. The penalty for doing so is quite small at the margin (e.g., licensing an 8 axle truck & trailer at 22+22 tonnes costs only 2.5% more than licensing at 20+24 tonnes).