

**Submission to:** The National Transport Commission

**Title:** 2014 Heavy Vehicle Charges Determination Draft RIS

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Note: At time of writing, NTC figures provided to stakeholders were draft and conclusions made on those numbers are subject to review pending the final NTC RIS.

## 1. Introduction

The National Transport Commission (NTC) Draft Regulatory Impact Statement (RIS) paper accurately reflects the issues industry raised with the NTC in the charges determination. The recommendations the NTC have proposed in the RIS are the result of transparent and respectful consultation with all stakeholders.

The proposed options, such as increasing the variable fuel component, are consistent with the ATA's approach and the findings of the PwC report into road supply and charging. This would improve the PayGo model by reflecting use of infrastructure, easing cash flow constraints and making operating costs easier to pass on to clients.

Simplifying the charges schedule for industry by treating trailers consistently as one class supports the modular use of different trailers and operator desire to use high productivity vehicle combinations, which are safer than traditional combinations.

Axle group charging for trailers would improve the PayGo model by recognising that sharing loads over a greater number of axles reduces pavement wear.

The technical updates of the model and methodology will increase the accuracy of the PayGo model and should extend the life of PayGo into the future.

The ATA provided evidence to the then opposition Transport Minister the Honourable Warren Truss MP, about the over-recovery the PayGo model was causing to industry. This resulted in a road user charge (RUC) disallowance motion being presented in Parliament, which was narrowly defeated. However, the NTC's open and agnostic approach to reviewing the model has now vindicated the ATA and the Transport Minister's efforts to push for reform of the PayGo model.

This reform also offers a way to make sure that the PayGo charges are once again nationally consistent, as Western Australia, South Australia and the Northern Territory did not adopt the 2012-2013 NTC charges recommendations due to industry concerns.

## 2. Australian Trucking Association

The Australian Trucking Association (ATA) is the peak body that represents the trucking industry. Its members include state and sector based trucking associations, some of the nation's largest transport companies, and businesses with leading expertise in truck technology.

## 3. Recommendations

### ATA recommendation 1

The ATA recommends all the NTC proposed technical updates to the PayGo model, except the NHVR funding allocation methodology, be implemented by 1 July 2014, given industry feedback on the assumptions behind the proposed weightings of the allocation.

### ATA Recommendation 2

The ATA rejects the NTC proposal for a three year staged implementation to option A, given the \$200 million over-recovery it will cause.

### ATA recommendation 3

The ATA recommends option A be implemented by 1 July 2014, moving to Option B on 1 July 2015 given government timeframes for implementing the road user charge revenue redistribution necessary with option B.

## 4. Technical improvements

### 4.1 Calculating the cost base

#### *Seven year cost base*

The PayGo model uses a seven year average of historical road expenditure inflated to the current year. The rationalisation for the seven year cost base is to smooth the total recoverable costs from year to year and is designed to avoid price shocks due to short term changes.

The NTC investigated whether a three year averaging period for the PayGo model was viable. Three year averaging was in place before 2007. However, the NTC found that while a shorter averaging period reduced the over and under-recovery in the model, it increased the volatility of the charges. The NTC argued there is also limited economic efficiency to be gained from shortening the period of expenditure recovery.

Given that industry needs to have certainty with charges and if the outcome of changing the averaging period does not promote further economic efficiency, the justification of continuing to use a seven year average is valid. However, the most recent year's population data rather than the midpoint population needs to be adopted with the seven year cost base retention.

#### *Indexing*

The ATA raised concerns with the NTC about the appropriateness of using the BITRE road construction and maintenance price index (RCMPI), given its volatility and magnitude above the consumer price index (CPI). The RCMPI includes inputs common with other industries. For example, the mining boom has had the effect of increasing the RCMPI, which has little relation to the trucking industry and road infrastructure provision and maintenance. The index is too susceptible to outside influences.

The NTC recommendation of dropping indexing and moving to an exponential moving average (EMA) with an alpha value (which determines each year's weighting in the series) to be set during the determination is a sensible approach.

The NTC have shown the ATA the workings of the alpha value calculation. The 0.5 alpha value that is being recommended strikes a balance between full cost recovery over time, limiting over and under recovery, smoothness, and being simple and transparent. The 0.5 value also weighs the more recent years as having a higher influence on the cost base. The NTC note the EMA produces similar outcomes to the indexing but will avoid the noise of outside influences present in the RCMPI. The ATA supports the use of an EMA with the alpha value of 0.5 to calculate the cost base.

### 4.2 Usage data

The PayGo cost base includes lagged expenditure from the previous 7 years that has been adjusted for inflation before it is averaged to derive the current years cost base. Industry pays for charges based on a vehicle population that is taken from the mid-point of the PayGo model. Therefore while the expenditure to be recovered is current, the population expenditure is shared over is different to the current operating population, leading to an over-recovery.

The NTC modelling for 2012-2013 charges was based upon 392,453 heavy (motor) vehicles, while the ATA has used actual registration database information provided by road agencies, which identifies 570,294 heavy motor vehicles (being trucks, prime movers, buses and special purpose vehicles, but not including trailers). Information from road agencies showed the actual registered heavy vehicles as at 31 December 2011 was 789,489 (this number includes trailers)<sup>1</sup>.

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<sup>1</sup> See ATA submission: Assessment of Actual Heavy Vehicle Registration Population Data against the NTC PayGo Model, 2011, for further details

The ATA has calculated over-recovery for 2013-2014 by comparing the PayGo cost base to be recovered in 2013-2014 (\$2.9 billion) with the estimated revenue taken in the 2013-2014 period using actual registration figures from December 2011. Estimated revenue is calculated using 2013-2014 heavy vehicle charges and the RUC for 2013-2014. In this calculation industry is projected to pay \$3.7 billion, meaning an over-recovery of over \$800 million.

	<b>Expenditure cost base to be recovered in 2013-2014</b>	<b>Estimated registration revenue collected in 2013-2014 (excludes concessions given by states)</b>
<b>NSW</b>	\$ 421,800,000	\$ 280,897,664
<b>VIC</b>	\$ 177,600,000	\$ 335,809,104
<b>QLD</b>	\$ 359,300,000	\$ 301,135,332
<b>SA</b>	\$ 61,700,000	\$ 109,273,288
<b>NT</b>	\$ 14,000,000	\$ 20,811,748
<b>TAS</b>	\$ 15,000,000	\$ 22,449,544
<b>ACT</b>	\$ 13,000,000	\$ 3,104,519
<b>WA</b>	\$ 116,600,000	\$ 218,425,747
<b>Commonwealth (RUC)</b>	\$ 1,703,179,408	\$ 2,408,946,662
<b>Total revenue</b>	<b>\$ 2,882,179,408</b>	<b>\$ 3,700,853,608</b>
<b>Difference</b>		<b>\$ 818,674,200</b>

Source:

- Expenditure cost base to be recovered 2013-2014: NTC annual report 2011-2012 page 93
- Commonwealth (RUC): based on SMVU figures from Table 15. Scenario B usage and cost allocation data (for recalculated 2012/13 charges) page 37 of the NTC Heavy vehicle charges – Report to the Standing Council on Transport and Infrastructure February 2012 multiplied by 0.2614 cpl for 2013-2014.
- Estimated registration revenue collected in 2013-2014 (excludes concessions given by states): from December 2011 registration figures multiplied by 2013-2014 heavy vehicle charges
- Commonwealth (RUC) revenue: 2011 December registration figures allocated to NTC vehicle classes multiplied by 0.2614 cpl for 2013-2014. See appendix A for further information.

In the charges determination co-design workshops the ATA questioned the accuracy and reliability of the Survey of Motor Vehicle Use (SMVU) data used in the PayGo model. The SMVU is a survey and has unrecorded years, causing a trended estimate to be used in its place. The SMVU records vehicle population, Vehicle Kilometres Travelled (VKT), Gross Tonne Kilometres (GTK) and fuel consumption.

Given this difference between SMVU heavy vehicle population figures and the jurisdictional figures, the ATA advised the NTC to investigate alternative sources of data for the PayGo model. The NTC investigated alternative data sets to use in the PayGo model for parameters such as heavy vehicle population, fuel usage and vehicle kilometres travelled. However, they found the SMVU still provides an integrated data set superior to other sources.

The ATA also recommended that most recent actual state registration figures should be used in the PayGo model, instead of the mid-point SMVU. The NTC compared SMVU heavy vehicle population figures against jurisdictional heavy vehicle registration figures for the same period and found that after statistical testing SMVU data was shown to be a reliable estimate to vehicle usage. However, for some vehicle classes there were high relative standard errors, meaning for some less populated vehicle classes the data was not as accurate as it could be.

While no changes have been recommended for the data set, the NTC are recommending the latest SMVU figures be trended to the most recent PayGo year using a transparent methodology instead of the midpoint population.

The NTC have recommended using the EMA method using the same alpha value as the cost base calculation, 0.5. The EMA justification is that it produces fewer relative standard errors than the Ordinary Least Squares (OLS) method of trending. The EMA will produce parameter figures that stay within the bounds of the lowest and highest recorded figures (VKT, GTK and fuel consumption).

The ATA has also suggested that actual state registration data and other indicative data should be used to cross-check the figures produced in the SMVU inputs in order to make sure it remains consistent with actual registration data. The NTC are recommending ensuring the figures produced from the EMA are scaled to changes in total jurisdictional figures.

### **4.3 Expenditure template and expenditure accountability**

The current state heavy vehicle road expenditure and maintenance inputs into the PayGo model are unaudited. Industry has raised the issue of possible inefficient spending due to the fact that the expenditure industry pays for is not subjected to independent audits.

The findings in the Deloitte's Review of Reported Jurisdictional Road Expenditure Data report showed inconsistency in what some states included in categories, some including costs which were not listed in the guidelines.

State heavy vehicle expenditure inputs should have the same level of accountability and scrutiny as other public and private entities. Expenditure should also be benchmarked to give states an incentive to provide the road users with value for money.

The ATA previously stated disappointment that the NTC issues paper did not raise the issue of independent audit of state road expenditure figures. We raised issues over the accuracy and consistency of the reported expenditure. The ATA has also asked how road agencies could demonstrate they were spending heavy vehicle charges efficiently and maintaining the network.

It was highlighted that the cost categories in the expenditure template differ to how jurisdictions record their financial costs. This has given rise to a number of reporting issues. In the co-design workshops the ATA also supported the states view that the expenditure templates cost categories were vague and needed refining.

The RIS stated that designing an appropriate framework for the scrutiny of costs can deliver significant efficiency benefits for road users. The ATA shares this view.

The NTC have recommended a commitment to investigate the possibility of introducing procedural style audits for completion on the returned expenditure templates. This would increase the transparency and accountability of reported costs.

An independent external consultant designed a range of audit options that could be implemented to increase the transparency and accountability of reported costs.

The audit option recommended by the NTC (option 4) would involve a team of auditors that comprehensively examine the data inputs and calculation of figures reported in the NTC expenditure template via an onsite visit with detailed testing. This option would give industry a high level of confidence in terms of oversight, as it would look at the consistency of reporting to the guidelines as well as a range of in-depth checks and balances.

The total cost associated with this level of audit is estimated to be \$115,000 to \$125,000. The cost of the audit being recovered from industry is not ideal, given that the audit process is an established procedure that should have already been in place years ago. However, if the audit is done correctly and provides industry with more understanding about the reported costs and leads to an improvement in road agency recording practices it will be a benefit for all.

The NTC are recommending a one off audit/review of expenditure data modelled on option 4 should be implemented from the next financial year.

The ATA supports this recommendation with the expectation that the audit process becomes an established practice road agencies carry out in order for industry to have more confidence that what they are paying for is appropriate and approved.

The ATA supports the NTC recommendation of introducing benchmarking reporting of jurisdictional business, as part of the broader accountability measures. This will help highlight cost differences between states and will provide industry with some idea of cost drivers in different states and the relative levels of access provided.

This is the first step in road agencies providing transparent information on where and what they are spending on heavy vehicle infrastructure. The PwC report: A future Strategy for Road Supply and Charging recommends this step as a key short term reform necessary for the improvement of road agencies.

‘State, territory and local government road owners should report investment and maintenance on each tier of the road freight network. The information should be compared with cost benchmarks and the level of access achieved relative to targets to increase transparency and accountability.

This detailed data should be published and will enable refinement of unit cost estimates of road maintenance and investment (e.g. by lane-kilometres on a given network tier.) These estimates can be further developed into efficient benchmarking investment and maintenance costs that could be used to inform the amount of expenditure that is recovered from heavy vehicle road users.’<sup>2</sup>

## 4.4 Charges for articulated trailers

The NTC are recommending the charges schedule be refined to class trailers by axle group. The ATA supports this approach to treating trailers as a single class.

While A-trailer registration halved last year it has had limited effects given it is still treated separately and has a larger charge than semi-trailers. The proposed new approach would make charges reflect how industry uses trailers because heavy vehicles rarely stay in tied combinations. The modularity of the articulated fleet is custom and practice; trailers are interchanged as a matter of routine business practices across the nation.

The ATA has also argued that longer combinations cause less pavement wear, given they complete the freight task in fewer trips than smaller combinations.

The NTC endorsement of axle group charging is superior to a per axle charge because it promotes using the most productive vehicle for the freight task, compared to simple per axle charge which promotes no distinctive price signals.

Additionally, work undertaken by the NTC into examining axle grouping ESA supports the use of axle group charging, as one would expect the ESA of a tri-axle carrying the same mass to be the same in any configuration. Therefore, charges would reflect impact more accurately than the current system does, which measures single combinations not components.

Axle group charging supports the use of high productivity vehicles. In the standard axle charge, the total trailer costs are spread equally over all trailer axles, whereas under the axle grouping charge, the cost allocation will depend on a number of axles in each group and their respective impact on road wear better matching true impacts.

Reforming the charges structure to recognise trailers as a single class will also fit into the WA charges schedule, as WA already charges trailers as a single class.

## 4.5 Estimating relative levels of pavement wear

### *Heavy vehicles*

The ATA has argued that the equivalent standard axle (ESA) figures since 2007 have overestimated the impact of high productivity vehicles and underestimated the lighter end of the fleet. This was due to the line of best fit being forced through the origin.

<sup>2</sup> Page 32 – PricewaterhouseCoopers: A future strategy for road supply and charging in Australia 2013

The NTC have tested the strength of using modularity charges by examining ESAs for a given set of axles in a combination, not the combination itself. There is a strong justification for this move based on an engineering perspective. This method of ESA by axle group would simplify the cost allocation for heavy vehicle impact, which many would support. The modular ESA work was reviewed by the ATA and found to be a sound approach for estimating the modular ESA.

The NTC has addressed the issues the ATA presented with the ESA data, including the limitation of AGM and ESA analysis (removing some unrealistic AGMs from the data set) and making sure that steer axle ESAs were consistent through classes.

ESAs were refined to better reflect fleet dispersions, including a VKT adjustment per state and per vehicle class.

The further ESA investigation recommended by the NTC, including the examination of PBS truck and dog vehicle combinations, which are required to have road friendly (airbag) suspensions, is crucial to the understanding of road wear. It would be beneficial to assess whether the ESA values for these vehicles is likely to be lower because of their widespread use of airbag suspensions. The wear reduction from air suspension is not currently fully accounted for in the charges model. This is an area where the NTC may wish to undertake further research work.

The NTC examination of 2 axle rigid trucks, including those less than 4.5 tonnes which have significantly narrower tyres on their front steer axles similar to light vehicles, is also of note. The tyre width is not reflected in the calculation of ESA estimates for these vehicles. The ESA methodology could therefore be refined by updating the value of the reference load used to calculate narrow tyre ESAs.

The ATA supports the NTC recommendation of the use of modular ESA's for the purpose of calculating heavy vehicle charges and the further research conducted into refining the ESA measurement and consideration of the impacts of light commercial vehicles.

#### *Busses and coaches*

The recasting of the bus and coach ESAs has refined the inputs into the PayGo model, making cost recovery from all vehicles over 4.5 tonnes more accurate.

The NTC detailed work on coach and bus ESAs is supported by the ATA

#### *Light vehicles*

In the previous submission to the NTC the ATA recommended that light vehicle ESAs be examined as a contributor to road wear given their volume. Road wear is currently attributed to weathering and heavy vehicles only. The ATA believes that light vehicle passes over a road will eventually lead to deterioration.

The NTC investigated the matter, contacting national and international bodies to see if there was any current study on the matter of light vehicle ESAs. The conclusion of that examination was that there is no current research that supports attributing road deterioration costs to light vehicles.

However, given the dearth of research on the topic and the fact that there is a considerable number of light vehicles reaching 3.5 tonnes (see SMVU numbers), and tyre contact pressure calculations reveal impacts similar to steer tyres in heavy trucks, the topic for investigation is not without merit.

## **4.6 Annual Adjustment**

The ATA raised the issue that some of the important parameters in the annual adjustment formula have not been updated since 2007. The road use factor (RUF) is currently fixed at -1; however, the inputs into the calculation such as GDP chain volume, Vehicle population and vehicle kilometres travelled have changed. The ATA recommended the RUF be updated annually.

The NTC response to the issues presented by the ATA is to recommend a new annual adjustment formula that is dynamic and simpler than the existing fixed component formula. The outcome of the new annual adjustment formula also provides relatively similar figures to the current formula.

The NTC was tasked with making the annual adjustment more accurate, dynamic and easier to understand. The new formula fulfils these desires of government and the industry. It uses heavy vehicle specific usage data from the SMVU, road expenditure data from jurisdictional expenditure templates and ABS statistics for local road expenditure. Since the annual adjustment is meant to reflect changes in heavy vehicles expenditure, while also reflecting changes in the overall fleet size and mix between light and heavy vehicles these parameters would better reflect this mix than the CPI or the current annual adjustment formula.

In previous submissions to the NTC the ATA has favoured using the CPI as an annual adjustment factor, however given that the new formula focuses on solely heavy vehicle related cost drivers it is superior to the current annual adjustment formula and would be more reflective of accurate costs than CPI. While CPI is a simpler system to understand making sure the PayGo model is accurate is a very important aim of the determination.

## 4.7 Rebate/Concessions/National Charges

The ATA Council requested the NTC ensure that the outcomes of the NTC's Charges Review achieved equity between combinations, such as B-doubles, B-triples and BAB quads, with vehicles of similar characteristics such as 9 axle truck and dog combinations, and road trains.

The ATA Council also stated that this should occur without disadvantaging particular sectors or regions, including rural, regional and remote operators and their communities, by maintaining the recognition of community service obligations (CSO) and current outcomes and applying them as appropriate to safer combinations.

The NTC paper indicates that road trains will continue to receive a subsidy which is recoverable from the rest of the fleet. The value of the road train cost redistribution is some \$19 million, which is recovered from other classes of heavy vehicles. The NTC claims the zero charge for converter dollies is the only way this subsidy can be implemented without threatening the single trailer class system for all trailers. Accordingly, the ATA accepts the NTC proposed approach for this determination. This process is not ideal as it leaves some safer combinations at a disadvantage. However, in the absence of transparent CSO for all vehicle types operating in CSO regions, it is at least recognition of the need for CSO adjustments. In the future, these equity issues need to be reconsidered.

The Australian Livestock and Rural Transport Association have a different position to the ATA on the issue of road train concessions<sup>3</sup>:

The Australian Livestock and Rural Transporters Association (ALRTA) is a member of the ATA and has contributed to the drafting of this submission.

While the ALRTA supports the NTC's proposal that the roads component of the converter dolly registration charge be reduced to zero the ALRTA does not share the ATA view that the discount represents cross-subsidisation of road trains by other heavy vehicle classes.

As noted by the NTC, the proposed adjustment is made to compensate road trains for the distance they travel on poorer quality unsealed roads and in acknowledgement of the service road trains provide to remote communities.

PAYGO is a cost recovery model. Total monies spent by road providers are pooled, attributed proportionally to heavy vehicles and then charged across the heavy vehicle fleet. A simplistic charging approach in which all vehicles of an equivalent class are charged the same flat registration fee is not entirely equitable. For this reason industry is broadly supportive of an increased proportion of fuel based charging to ensure that those carrying greater mass or travelling longer distances pay a greater proportion of the total cost.

The ALRTA considers that an inherent inequity also arises when a heavy vehicle class which is largely restricted to travelling on unsealed roads is required to pay the same registration fee (on a 'per axle' or 'axle grouping' basis) as vehicle classes predominantly travelling on sealed roads. Given that it is generally less expensive to build and maintain an unsealed road (as compared with sealing the very same road) the ALRTA concludes that a flat registration structure results in 'off road' vehicles effectively cross subsidising the construction of sealed roads elsewhere on the network.

<sup>3</sup> The views expressed by the ALRTA in this section do not represent the general views of the ATA membership.

In line with the ATA position, the ALRTA supports the NTC's proposal to apply a discount to the roads component of the converter dolly registration charge. However, the ALRTA considers that this approach will reduce (rather than increase) the level of cross subsidisation that would otherwise occur.

The ATA supports states' prerogative to implement concessions outside the NTC's charging model. However, a national approach to concessions would support improvements to the PayGo model, given the myriad of concessions in different states leads to a divergence in revenue recovered and heavy vehicle expenditure, as well as equity concerns for operators in different states. The ATA supports the NTC request to collate and make public a list of the concessions currently available.

An agreed set of principles for concessions would aim to provide operators with the same outcome for the same situation; the ATA supports the NTC recommendation to establish these agreed principles.

## 4.8 NHVR funding

The NTC have noted implications for charges with the introduction of the NHVR and HVNL. These include the treatment of compliance cost currently included in the cost base, IGA agreed costs, and the creation of a single set of registration charges.

The ATA previously requested to see the NHVR provide content and consult with the industry and the NTC in the review on the implications of NHVR operations and HVNL.

The NHVR have not been forthcoming with a breakdown of the costs recoverable from industry and the ATA has been disappointed with the lack of NHVR engagement with industry to clarify these costs.

The NTC have been clear about delineating the NHVR regulator proportion of the charges industry pays, however, industry questions whether it is appropriate that for some vehicle categories the regulator component equates to a third of the charges industry will pay.

It is also worrying that the removal of over-recovery presented by the technical adjustments to the PayGo model will be negated by the inclusion of the NHVR costs, which are considered excess and unexplained.

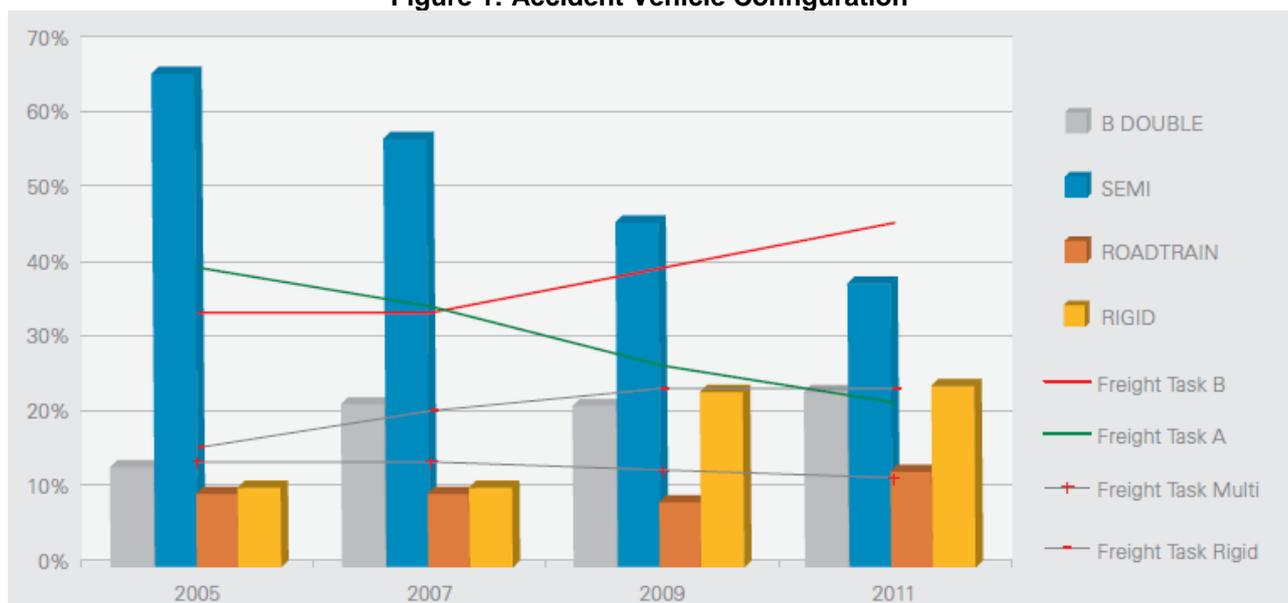
While the NTC simply plugs in the NHVR number the NTC need to be aware that the imposition of NHVR costs including their composition may present unintended consequences to the PayGo model and to the industry's response to the charges.

The NTC present a range of allocation methodologies for the NHVR costs to be recovered from industry through registration charges. The NTC recommended option is a multiple factor allocation (including a fixed proportion and partial allocation by VKT and AGM).

The NTC have argued that heavier vehicles impose a higher risk in that they will cause more wear and tear on roads if they are overloaded than a smaller vehicle and the consequences of overloading a heavier vehicle are likely to be more significant from a safety perspective because crash outcomes are more severe for heavier vehicles. Similarly vehicles travelling larger distances should arguably contribute more to the cost of the NHVR regulatory operations than those that travel less. Over time this could be based on data underpinning a future risk management approach aimed at better targeting compliance and enforcement activities.

However, the ATA disagrees with the assumption that heavier vehicles pose a higher risk, because there is evidence suggesting that the heavier end of the fleet (Including B-doubles and semi trailers) are accounting for a smaller percentage of crashes whereas rigid truck freight task accidents are increasing. National Transport Insurance (NTI) have looked into these figures and believe the underlying reason for the figures reflects vehicle stability of the different configurations. Further, over loading is of a greater consequence in smaller vehicles in our view as there is less safety margin. A single axle rated at 10 tonnes, legal at 9, does not have the safety margin of a tri-group rated at 36 tonnes carrying a legal load of 20 tonnes.

**Figure 1: Accident Vehicle Configuration**



Source: page 19 National Transport Insurance 2013 Major Accident Investigation Report

While the ATA supports the use of a sophisticated and sensitive method to allocate regulatory costs across the fleet, the assumptions behind the proposed weightings of the allocation may need to be reviewed given industry crash data. Additionally, given that the regulatory costs are intended to reflect enforcement costs, which will not solely reflect mass enforcement costs the AGM should not be a primary parameter in the allocation methodology. Therefore, a VKT allocation may be fairer given that category G2/enforcement costs is meant to reflect regulatory costs.

Given the estimated timing for the implementation of the separately identified NHVR regulatory portion of registration charges varies between states (it could take as long as 17 months), there is considerable time to make sure the allocation of charges across the fleet are reasonable.

**ATA recommendation 1**

The ATA recommends all the NTC proposed technical updates to the PayGo model, except the NHVR funding allocation methodology, be implemented by 1 July 2014, given industry feedback on the assumptions behind the proposed weightings of the allocation.

**5. NTC Heavy vehicle charging options**

The ATA has promoted increasing the variable component of the PayGo model through a fuel based charge for many years. The current RUC and registration split is 62:38. Increasing the variable charge reduces the cash constraint that a large fixed registration charge presents. It also promotes paying for use, as fuel burn is a proxy for mass, distance and road condition. Fuel consumption increases with increased combination mass and distance travelled. Fuel consumption also increases with congestion, road roughness and adverse terrain. These parameters will be important in future charging options.

Increasing the proportion of charges made by fuel also advances the energy efficiency agenda of the Government, as operators become more conscious of fuel usage.

The NTC has produced 36 case studies from a variety of operators, estimating the monetary effects of the proposed options. The case studies indicate that where operators sit either side of the average SMVU average kilometres travelled or average fuel usage for the vehicle class will indicate their preference for a higher variable charge and a lower fixed charge. Those sitting above the average will find that under a higher variable charge they will be worse off and those sitting below or on the average will be either better off or unaffected by the increase in the RUC share.

The extra cost presented by those above the average under option B and C needs to be weighed against the benefit a higher variable charges presents to the cash flow problem, which is significant, especially for smaller operators. Operators have also stressed that a larger portion of charges being recovered through the use related RUC, rather than through a fixed registration charge, makes it far easier to recover their costs

*Base case (annual adjustment)*

The ATA does not support this option because it would continue the over-recovery that the current system presents due to using the midpoint population data. It would also use the current annual adjustment formula which is flawed (see above).

This option would raise \$232 million more than the cost base of \$2.9 billion for the other options. This over-recovery is due to the correction in the vehicle figures from 420,000 to the latest figures based on jurisdictional figures, which shows 496,000 vehicles were registered on 30 June 2013.

The NTC have also recognised the over-recovery occurring in the model by illustrating the effect current PayGo parameters have:

The result of the previous approach was that charges were set higher than was necessary to recover the cost base. For example, to recover a cost base of \$3 billion would require an average contribution of \$7,317 if spread across an estimated vehicle fleet of 410,000 vehicles. However, if such an average contribution is collected on 496,000 vehicles actually registered, it would raise just over 3.6 billion.<sup>4</sup>

This option fails the PayGo charging principle of 'full cost recovery', as it underestimates the number of vehicles and therefore sets charges higher than is necessary to cover the cost base.

*Updated status quo*

This option involves updating the road expenditure and usage data, which will re-estimate the cost base according to the most recent vehicle numbers. While this option is a slight improvement on the PayGo model it does not go far enough to have any real changes to the PayGo model and is not supported by the ATA as the preferred option.

Under this option 42% of the industry has increased costs. However, the increases are directly linked the refined ESA figures and updated usage data. It should also be noted that in the case of the truck class with the highest increase in charges under this option, the regulatory charge makes up 42% of the total charge.

*Option A*

This option includes all of the technical updates that the ATA supports. Under this option 62.1% of the revenue is collected through the RUC while 37.9% of revenue is collected through registration charges. Road trains and B-doubles/B-triples have the same roads component costs, as the converter dolly used in a road train would be a zero dollar charge.

Viewing the case study results, 70% of industry will see a decrease in the registration charges. The small number of increases is due to increased ESA values or higher VKT usage data raising the attributable cost for these vehicle types to a level where the registration charge had to be increased in order to achieve full cost recovery.

All vehicles classes recover, on average, their attributable costs, meaning that no cross subsidies exist under option A (other than the road train adjustment).

When examining the impact on regional and remote communities, option A appears to be more equitable than the status quo because registration charges no longer discriminate between trailer types. The road train converter dolly is maintained as a zero dollar charge under all the options the NTC are presenting.

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<sup>4</sup> Page 85 – NTC Heavy vehicle charges determination – Draft RIS

The NTC also assesses the options against the pricing principles and conclude that option A achieves full allocated cost recovery for all vehicle types, whereas under option B and C, two heavy vehicle classes do not recover their allocated costs, which clashes with the principle of full recovery of allocated infrastructure costs while minimising over and under recovery from any class of vehicle. These departures are minor and must be considered in light of the benefits of a higher portion of charges being collected through a use related mechanism.

#### *Option B*

This option has a recalculation of the RUC and registration shares to 71.7% and 28.3%, which is a moderate shift away from the current shares. The ATA supports a higher reliance on variable charges than a large fixed fee.

Viewing the case studies, registration charges will fall for the majority due to the higher RUC share, while 11% see an increase. The lower end of the fleet sees a smaller reduction in registration charges due to the need to not have truck registration charges less than that of a light vehicle. All vehicles recover on average their attributable costs, except heavy truck trailers above 45 tonnes and triple road trains. This means a small level of cross subsidy may exist. However, as cautioned earlier the case studies must be viewed with care and considered against the SMVU data that is modelled by the NTC.

When moving to option B or C equity concerns become more noticeable as those who travel further distances will face higher charges. However, the lower registration charge in these options removes the cash flow constraint that a large fixed registration presents to operators, especially smaller operators, who make up the majority of the trucking industry.

The NTC examined the theoretical most efficient level is for the RUC. Taking the governmental resources available to meet the deadlines of implementing revenue redistribution agreements into account, the NTC indicate that option B would be the most theoretically efficient level to set the RUC and registration split. The ATA concurs with this assessment. However, being concerned about sharing revenue between governments is really outside of the true PayGo model's parameters. That said, we do understand governments' interest in this space and believe there should be a revenue distribution model that will support increased reliance on variable charges as the recovery mechanism and a better position for the future.

#### *Option C*

This option has the highest possible share of RUC to registration the NTC can reasonably be allowed to recommend, given future annual adjustments and the remote possibility of a carbon tax being imposed. Under this option 79.2% of revenue is recovered via the RUC while 20.8% is recovered through registration charges.

Under this option, more classes of particular vehicles do not on average recover their attributable costs to a more significant extent than under option B. However, the ATA fuel based model adopted two fuel tariffs to better model fuel usage by different vehicle types to improve the fit. The ATA asks NTC to consider this option in future determinations.

## **5.1 Transitional arrangements**

### *RUC redistribution*

Under options B and C money collected from the RUC will have to be redistributed to the states. The ATA supports the use of a formula, similar to Federal Interstate Registration scheme (FIRS), which is based on a freight task survey and works very effectively. Updating the freight task movements from the most recent SMVU, would reflect heavy vehicle movements accurately. Similarly, a revenue distribution based on a network level of service, focusing on heavy vehicle access levels to concentrate investment and define the service standard of infrastructure for users, would also be preferable.

Under options that would require redistribution the NTC have suggested calculating the estimate receipts states would have received under option A and redistributing the revenue in order to make sure that there is fiscal neutrality between the states.

*Three year transition*

On 15 November the Standing Council on Transport and Infrastructure (SCOTI) requested the NTC investigate and provide advice on possible phased implementation arrangements as part of the determination.

The NTC indicate that moving from the current charging system to option A will result in a total net decrease in registration revenue received by states and territories of \$144.9 million.

The NTC have provided advice on a 3 year transition to implementing option A using linear interpolation. The target charges to be implemented in year 3 are re-calculated throughout the process to ensure a smooth transition and avoid any over-or-under-recovery at the end of the transition process.

While the NTC methodology is sound, the principle and impact of this slow transition, even just correcting internal flaws in the PayGo model, would be seen as states accepting the over-taxing of the heavy vehicle industry in order to please state Treasury's forward projections of revenue.

States have been receiving excessive registration revenue since 2007 and have not been under the standard audit approaches of many other utilities. The industry have been wearing year on year increases in the registration and RUC charges with little confidence that money is going to be spent efficiently or on heavy vehicle related maintenance and provision.

It should be noted that last year the industry was hit with an extra \$144 million in reference to flood monies that were put back into the PayGo model. Heavy vehicle charges on vehicle components increased between 6 and 32% in 2012-2013, and the RUC increased by 10%. The industry did not have a transition in those costs being included; the industry is paying and has had to wear that cost.

The NTC have provided estimates of the effect the three year transition would have on industry. Over the three years the industry would pay an additional \$200 million tax that it should not be paying for. There has been historic over-recovery in the PayGo model, as noted above, from 2013-2014 \$800 million was over-recovered from industry. Any short fall in projected revenue for governments is a relatively small dip in their revenues; however, \$200 million is a punitive amount for the trucking industry to pay.

Arguably, since 2007 the industry has been overcharged purely because of the model's mid-point population. If states and the commonwealth agree to a three year transition it is an unashamed money grab from the heavy vehicle industry in moving to a system that unfairly favours state treasuries to a fair system of charges for industry to pay for its road impact costs.

It was discussed at length that moving to a higher RUC share component option would require an intergovernmental agreement (IGA) between the states and the Commonwealth. While the states have provided indicative timeframes for when an IGA would be settled, the timeframes are simply too long.

We must remember this is a 7 year averaging model, where total expenditure will be recovered in the 7 years. Any hysteria that appears from the government about cuts in revenue, which they should not have automatically expected would be disappointing. We also note a road has a design life that is a multiple of the 7 year pay-back period currently achieved in PayGo. In more traditional economic models, capital would either be excluded or recovered over the whole life of the asset.

## **5.2 ATA proposed transition**

The ATA strongly believes the technical changes to the PayGo model should be implemented in 1 July 2014. Option A does not require the states and territories to negotiate any changes in their relationship and only requires a rescaling of the predicted revenue.

While the ATA does support a higher reliance on the variable charge component of the PayGo model, we understand that there are communications that need to take place between the commonwealth and the states to arrange redistribution of funds.

Options A, B and C still have the same estimated costs base to be recovered from industry and the correction of the vehicle population figures has the largest effects on the proposed charges.

The Marsden Jacob and Associated work on indicative timelines indicate that there is no reasonable defence to not implement option A in July 2014, with the adoption of option B in July 2015. By 2015 the new freight survey would be available to inform the redistribution agreement. Absence of a revenue distribution agreement should not prevent the adoption of option B in 2015.

### **ATA Recommendation 2**

The ATA rejects the NTC proposal for a three year staged implementation to option A, given the \$200 million over-recovery it will cause.

### **ATA recommendation 3**

The ATA recommends option A be implemented by 1 July 2014, moving to Option B on 1 July 2015 given government timeframes for implementing the road user charge revenue redistribution necessary with option B.