

Increase for Gross Vehicle Mass of 2-axle Buses from 16 tonne to 18 tonne for General Access Purposes

Submission by the Bus Industry Confederation



February 2007

6 February 2007

Dear Minister,

Attached to this letter is a submission prepared by the Bus Industry Confederation of Australia and represents the views of both bus and coach operators and manufacturers. The enclosed submission relates to an increase of gross vehicle mass for 2-axle buses from 16 tonne to 18 tonne. The industry is not seeking an increase in seating capacity, only to carry existing passenger numbers at 18t to ensure that vehicles are not inadvertently illegal, even though carrying the right passenger numbers at 16t. The submission is comprehensive and looks at the history of this issue and the reasons the bus and coach industry believe that each of the state jurisdictions should allow 2-axle buses to operate at 18t GVM.

It is important to recognise that at the most recent ATC meeting it was agreed that trucks be given a .5t increase on the steer axle to take into account the increased mass attributed to the introduction of Euro 4 emission standards and front underrun protection. Buses it seems were overlooked and we seek your support to have the .5t increase applied immediately in the same manner but on the rear axle where the engine is positioned. Further comment is made on this in the subject matter of the attached position paper.

The Bus Industry Confederation hopes that this receives yours and your Department's thorough attention and that we are able at last to come to some agreeable outcome in relation to this important issue.

I look forward to your reply.

Yours sincerely

Michael Apps

Executive Director

Bus Industry Confederation

Introduction

In June 1999, the National Transport Commission announced the start of Australia's biggest ever review of national bus weight and dimension limits.

The aim of the review was to boost the productivity and the safety of the nation's bus and coach fleet.

A further objective was to harmonise Australian bus regulations with international standards to reduce compliance costs for local importers and manufacturers.

The Chairman of the National Transport Commission at the time, Mr Stuart Hicks, stated "the study is an important investment in Australia's public transport systems and the future of our multi-million dollar tourism industry".

The changes being investigated could lead to buses and coaches being more productive and safer and being operated at a lower cost. Mr Hicks went on to say that a comprehensive review of the national regulations governing bus and mass dimensions is well overdue.

Most 2-axle bus chassis are imported from Europe where they are built to weigh 18 tonnes. Adopting this mass limit in Australia will fit more passengers and would reduce road wear and emissions through fewer buses needed for the same transport task.

The study, in the context of increased GVM investigated the feasibility of:

- Increasing the weight of 2-axle buses from 16 to 18 tonnes in line with European limits. European Economic Community (EEC) limits for 2-axle buses are 18 tonnes. As most buses made or imported into Australia conform with these ECC limits, increasing the limit should not increase costs locally.
- A marginal increase in road wear is likely to be offset by reduced bus travel through higher productivity of buses.

The Reports Recommendations

The review was undertaken by Road User International and Satin Corporate Resources on behalf of the NRTC and made the following recommendations:

- Bus mass and dimension limits be controlled via a new set of general 2-axle bus limits which involves increasing the mass limit from 16 tonne to 18 tonne and retaining the current national length and width limits.
- Both axles of the vehicle be fitted with road-friendly suspensions in compliance with VSB11, to be eligible for the increased 18 tonne mass limit.
- Buses with manufacturer's ratings less than 18 tonne should not be eligible for the increase to 18 tonne mass limit.
- Consideration be given to appropriate cost recovery in relation to the pavement effects of the increased mass limit.
- The maximum individual axle loads to be set at seven tonne for the steer axle and twelve tonne for the dual tyre driven axle, permitting an appropriate degree of flexibility and load distribution between the axles, while the gross mass of 18 tonne is not exceeded.

Despite these recommendations, the increase in mass limits has not been adopted and little progress has been made since the end of 1999 in the context of addressing issues of gross vehicle mass of 2-axle buses.

It is in this context that the industry would like to present its arguments to be taken into account in the context of an agreed move to 18 tonne gross vehicle mass as soon as practically can be achieved by the jurisdictions.

The Australian Bus and Coach Industry – The Safest in the World

The Australian bus and coach industry is recognised as one of the safest in the world.

Following serious accidents on the Pacific highway in 1989, a range of unique Australian Design Rules were agreed by industry and government in relation to the safety performance of buses and coaches on the road.

These Australian Design Rules were:

- ADR 58 which related to step and aisle widths, seating requirements and emergency exits etc
- ADR 59 which related to roll-over strength of vehicles
- ADR 66 which related to seat and seat anchorages and
- ADR 68 which related to occupant protection and the mandating of seat belts in all coaches.

These vehicle standards are unique in the world and imposed a high cost of implementation because these standards were not available off the shelf anywhere else in the world and they required local manufacturers to meet the Australian Design Rules which imposed increased costs on the industry.

Despite industry's willingness to adopt these new vehicle standards, it received no offset in the form of productivity or other trade-offs.

The bus and coach industry raises this issue as it has become evident that in the past few years the Australian trucking industry has been able to gain mass and dimension concessions in a range of areas based on issues relating to improved safety and productivity. Examples of this are concessions given in regard the application of front underrun protection systems to receive a .5t increase on the steer axle and the increase in b-double length from 25 meters to 26 meters, or the increase in B Double length to 27.5 in West Australia based on the benefits associated with bonneted prime movers, as opposed to cab over prime movers in the management of fatigue.

Similar principles should be applied to the bus and coach industry. The application of ADR 58, 59, 66 and 68 which provide Australia with the highest level of bus and coach vehicle safety in the world should be considered retrospectively as part of the reasons to increase vehicle weights to 18 t.

It should also be noted that the bus and coach industry has for many years applied underrun protection around the entire bus. The recent decision to provide a .5T increase on the steer axle of trucks should also take this into account for buses and coaches on the rear axle. (Also see section on New Vehicle Standards below).

The European Economic Community (EEC) Harmonisation

Australia, as part of its global approach to vehicle standards, is harmonising with European vehicle standards.

As outlined above on occasion Australia does adopt unique vehicle standards which relate to safety or the unique operational requirements that exist in Australia.

However, whilst we are harmonising largely with EEC vehicle standards, we have failed to harmonise with EEC mass and dimensions.

This situation has several implications. Whenever unique Australian vehicle standards are required, this impacts on the cost of manufacturing and compliance in Australia as vehicles need to be built on a largely European chassis (95% of buses in Australia are built on European chassis) which need to be engineered and squeezed into a 16 tonne GVM mass limit.

This is a critically important issue as it has the potential to compromise the safety gains made after the 1989 bus accident mentioned above.

It needs to be understood that the European chassis that we are predominantly building on in Australia are designed to accommodate vehicles built to European standards. Most countries in the EEC allow up to the GVM of

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the chassis which can be as much as 19.5 tonne. This is also dependant on the types of tyres fitted. However, 18t GVM is accepted across Europe for 2 axle buses. These chassis' are not designed to accommodate a total vehicle solution that will keep beneath 16t while laden. Australian bus body manufacturers have to do their best to produce a vehicle solution that meets the evolving emission and noise standards, accessible transport standards, and air conditioning requirements etc which all add mass to the vehicle upon a platform that does not allow for such a limited laden mass.

Every weight increase to the vehicles chassis (Euro 4, ADR 83) or body (air conditioning units) or both (DDA requirements), and taking into account the fuzzy science of imputed passenger weights of passenger 65kg, and with bags (when baggage bins are fitted) at 80kg requires the body manufacturer to construct lighter bodies and fittings to meet the 16t GVM. It is clear that this challenge has the capacity to compromise safety and still not ensure that the bus, when fully laden, is in fact legal on the road. For operators the issues of mass becomes more difficult when school children with bags get on route service buses where the weight of the bags is not taken into account in the construction of the vehicle as the route service vehicles have no luggage bins.

New Vehicle Standards

An example of new vehicle standards that will add extra weight are;

ADR 80/02 and ADR 80/03 in relation to Euro 4 and Euro 5 emission standards and ADR 83 in relation to vehicle noise standards.

Both these standards will increase the overall tare weight of a bus and coach resulting in the need to reduce the overall weight of the bus by either reducing productivity of the vehicle, i.e. removing seats and reducing carrying capacity or by building lighter bodies and fittings. Neither of which are a good outcome.

This is ironic in the context of the emission standards and safety standards outcomes being sought by Governments. The loss in seating capacity to meet the 16t limit reduces the overall emission benefit or environmental friendliness of the vehicle and reducing the weight of the body has the capacity to compromise safety.

As mentioned earlier the trucking industry has received a concession of .5T on the steer axle for Euro 4 vehicles with front under run, the same should apply for buses on the rear axle.

Accessible Transport Standards

The introduction of accessible transport standards as part of the Commonwealth Disability Discrimination Act (DDA) has and will continue to add mass to the chassis and mass of the body and fittings as compliance timeframes of the Act need to be met to 2021. The move to low floor chassis to accommodate greater access for wheelchairs and the elderly in itself has increased the mass of the chassis.

This is further impacted by the fact that under the DDA Act the ramps, entryways and wheelchairs spaces must be able to accommodate mobility devices and the user, up to a weight of 300kgs.

For coaches the requirements for a wheel chair lift, increases mass by 350kgs or greater.

Passenger Weights

The rate of obesity has almost doubled amongst Australian adults over the last two decades with Australia now being ranked as one of the fattest developed nations closely following USA rates. 67% of adult men and 52% of women were overweight or obese in 2000 or around 7 million Australian adults. Males are more likely than females to be overweight with almost 48% of adult males estimated to be overweight compared to 30% of females. The levels of obesity are higher in females with 22% of females estimated to be obese compared to 19% of males.

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In just over 10 years the proportion of Australian adults who were overweight or obese increased by around 25%. If this trend continues, it is estimated that at least 60% of Australians aged 18 years and over will be overweight or obese by 2010 and that this will increase to 65% by 2020.

It is estimated that 20-25% of Australian children are either overweight or obese. In the 10-year period 1985-1995 the combined level of overweight and obesity in children would have more than doubled while the level of obesity approximately tripled in all age groups for both sexes.

Between 1985 and 1995 amongst children aged 7 to 15 the prevalence of overweight children almost doubled and obesity more than tripled.

Bus Association Victoria a member organisation of the BIC undertook an exercise to assess the weight of students in 2006 and found that a large percentage were above the imputed passenger weights upon which the 16t limit is based.

The BIC believes that the increasing weight of both children and adults mean that that the imputed passenger weights of the past are no longer relevant and provide a further case for gross vehicle mass to be increased for 2-axle vehicles from 16t to 18t. As previously mentioned BIC is not seeking an increase in passenger numbers allowed.

Legal Issues

The Bus Industry Confederation is concerned that the current 16 tonne limit, in the context of the increased mass of vehicles as a result of;

- new vehicle standards
- accessible transport standards
- the increase in weight of children over the last 10 to 15 years based on the 65kg imputed passenger weight and 15kg baggage, (80kg total)
- the carriage of standees on route service and school service buses
- and the inability of coach operators to be able to accurately measure the weight of each individual and amount of baggage that passengers may wish to transport on the vehicle sees these vehicles operating above 16 tonne without the driver or operator having any control over this factor.

The amount of time that route and school services would be over the 16 tonne GVM is in the last 10-25% of the journey when the vehicle is full. In the context of coaches, it is difficult to assess. A review of weight infringement notices provided by Murray's Coaches Australia and Foggs of Newcastle shows that this is a matter out of the bus and coach operator's control but results in infringement penalties that impacts on the tourism sector and of greater concern is the legal liability consequences in the event of an accident.

From all advice received vehicles are not exceeding the 18t GVM and are being caught between the 16t and 18t range. An 18t limit would solve all concerns.

The BIC believes that in the context of legal liability consequences and the minimal amount of time that these vehicles operate above 16 tonne, that an 18 tonne mass limit would provide legal protection for the bus operator and government who provide contracted services, should an accident occur.

Road Wear

In the context of road wear and road damage the Bus Industry Confederation believes that bus and coach dimensions should be looked at quite separately from other modes due to the community and essential service role that school and route services provide and the important contribution that the coach sector contributes to the tourism industry.

BIC believes that the externality benefits provided in relation to the use of public transport and bus and coach services as alternatives to the car and the benefits this provides in relation to health, emissions and reduced congestion (and by default less road wear by cars) be considered in the context of the proposed mass increase and not looked upon as a straight-line road wear/pricing issue.

Air-Conditioning

A further issue that should be considered is the fact that air-conditioning has become a fact of life for all buses over the last 10 years and is in fact part of government vehicle specifications for their own fleet and contracted services. This has added 235kgs on average to the GVM of buses.

Inconsistent Mass Approaches

In the context of various state jurisdictions approaches to the 16 tonne GVM issue, there are also areas of inconsistency.

For example, in NSW on one particular type of bus you are allowed 11 tonne on the rear axle and on another type of bus 6.5 tonne on the front axle, the combined weight if these were allowed on the same vehicle would be 17.5 tonne. This begs the question, if the two limits outlined were on the same bus would the road damage be greater than them being on two separate buses.

Conclusion

The Bus Industry Confederation and the industry is frustrated that this issue has not progressed since 1999 particularly in the context of the issues which we have raised above. BIC believes that for these reasons, it is in the interests of the bus and coach industry, bus and coach operators, the tourism sector and government to move to an 18 tonne gross vehicle mass limit.

I look forward to your reply.

Yours sincerely,

Michael Apps

Executive Director

Bus Industry Confederation