

From the Parliamentary Under Secretary of State

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## **CONSIDERATION OF PETITION PE1098**

Petition by Lynn Merrifield on behalf of Kingseat Community Council calling for the Scottish Parliament to urge the Scottish Government to make provision for every school bus to be installed with three point seatbelts for every school child passenger and to ensure that, as part of a Local Authority's consideration of 'best value' in relation to the provision of school buses, proper regard is give to the safety needs of the children.

Thank you for your letter of 20 December addressed to Ruth Kelly regarding a petition by Lynn Merrifield on behalf of Kingseat Community Council. I am replying as I have Ministerial responsibility for Road Safety issues.

It may help if I start by setting out the legal position. The requirements concerning the fiting of seat belts to buses and coaches are contained within the "Road Vehicles (Construction and Use) Regulations 1986". Under these regulations coaches and minibuses used on organised school trips (including dedicated home to school transport) are required to provide a forward facing seat equipped, as a minimum, with a lap (two-point) seat belt for each child (aged 3 to 15 years). This requirement took effect in February 1998 and is applicable independent of the age of the vehicle.

Where buses are used for school transport, the requirements are not so straightforward. Legislation, that took effect in October 2001, requires new buses to be equipped with either an inertia reel three-point seat belt fitted in all forward facing seats and an inertia reel three-point seat belt or retractable lap belt in all rearward facing seats. Although, buses with a gross weight exceeding 3,500 kgs must be fitted with an inertia reel three-point or retractable lap belt in all forward and rearward facing seat. However, there is no requirement to modify those vehicles that were in service prior to October 2001 and the requirements do not apply to urban buses (either single or double-decked) designed for use with standing passengers.

The decision not to require the retrospective fitting of seat belts to these vehicles was taken primarily on technical grounds. In the event of an accident, the forces in the seat belt can be high and therefore impose significant loads on the seat belt's mounting points on the vehicle structure. A review of the design of the older bus fleet and of the materials used in their construction concluded that seat belts could not be easily installed in such a way as to be effective without very significant changes being made to the vehicle's construction.

The decision to exempt urban buses from the provision of seat belts was a pragmatic one. By definition, passengers on buses used for urban transport usually travel very short distances and it was considered unlikely that they would routinely wear seat belts even if they were provided. Similar consideration was given to the risk associated with not requiring seat belts on these vehicles. Generally, the distance between bus stops is short and therefore the vehicle speed is relatively low; these two factors mean that casualties are quite rare. Therefore, it was concluded that the cost of the installation and maintenance of the seat belts far outweighed any safety benefits that might accrue.

It is therefore clear that the double-decked fleet is available for use under contract for local authorities and schools. Nevertheless, the responsibility for choosing an appropriate vehicle for a particular journey must rest with those who are making the arrangements. Independent of any legislation governing the construction of vehicles, schools and local authorities can, as Moray Council has shown, specify within their contracts with school transport providers that they will only accept vehicles fitted with seat belts. They should ensure that the vehicles being used are appropriate for the type of journeys planned. This consideration should include the distance to be travelled, the nature of the roads to be used and their safety record. Safety should be a factor in any value for money assessment that is made.

The petition refers specifically to the use of three-point safety belts. The argument for two-point versus three-point belts was considered as part of a technical review for the Secretary of State in 1994. While the study is quite old the fundamental issues remain unchanged. The review concluded that ejection of coach and minibus passengers in accidents is a major cause of death and serious injury; and there is no technical doubt that seat belts are an effective means of prevention. An extract from the technical review is attached for your interest.

I hope this helps.

JIM FITZPATRICK

Yours Sincen

## EXTRACT – SUMMARY OF THE TECHNICAL IMPLICATIONS OF THE FITMENT OF SEAT BELTS IN MINI-BUSES AND COACHES

A technical review into the implications of the fitment of seat belts in coaches and minibuses was carried out by officials for the then Secretary of State in 1994. The safety case concluded that ejection of coach and minibus passengers in accidents is a major cause of death and serious injury; and there is no technical doubt that seat belts are an effective means of prevention. Three point belts (lap and diagonal) offer a cost effective means of passenger protection in road vehicles generally; but there is not yet a technical solution for all seating positions in larger passenger vehicles which would not create an undue burden on industry in terms of the time and cost of development and some increase in vehicle weight. A simple two point retractable lap belt is currently, therefore. the most suitable technical solution. These are available as an option for coaches and are fitted to many new minibuses as standard. While not as effective as three point belts. United States experience with lap belts in cars estimates a potential to reduce fatalities by 32% (as opposed to 43% with lap and diagonal belts). If we take into account the differing accident types experienced by coaches (ie, more rollover accidents and relatively fewer frontal collisions) then the gap between the effectiveness of the two types of belt is likely to be reduced for these vehicles.

The coach industry has for some time opposed lap seat belts on the basis that increased head and spinal injuries may result. Whilst these concerns are valid in severe frontal impact accidents, such accidents are not the dominant mode of fatal and serious injuries in minibuses and coaches. Even in frontal impact accidents ejection from the vehicle can still occur (as in some recent accidents) particularly when the impact is off-set. Concerns over lap belt safety can be addressed to some degree by requiring any seat or surface in front of the lap belted occupant to be energy absorbing.

As an alternative to seat belts the coach industry has favoured an energy absorbing seat into which an unrestrained passenger is projected. This type of seat was developed specifically for coaches to project passengers in frontal impact accidents. The assumption is, the passenger will slide forward until knees and chest contact a padded area on the seat in front, followed by limited collapse of that seat thereby reducing injuries to the passenger. The technical requirements are defined in United Nations Economic Commission for Europe Regulation 80. The limitation of this type of seat is that it is only effective in direct full frontal impact accidents. There are many accidents where the initial impact is frontal; but few are direct and severe whereas other impacts and roll-over where ejection can occur result in a significant number of fatalities. On balance the lap belt offers better prospects of reducing fatal and serious injuries than the energy absorbing seat alone, although as suggested in the paragraph above, the two may be used in combination.