

## **Synopsis of responses to public consultation on the fitment of fire extinguishers in motor vehicles**

### **Background**

There has been a mandatory requirement for over thirty years in Northern Ireland for public service vehicles (buses, coaches and taxis) and minibuses to be fitted with fire extinguishers. The requirement for public service vehicles is contained in regulation 42 of the Public Service Vehicles (Conditions of Fitness, Equipment and Use) Regulations (NI) 1995; the requirement for minibuses is contained in regulation 51 of the Motor Vehicles (Construction and Use) Regulations (NI) 1999.

During periodic vehicle inspections fire extinguishers are checked to ensure that they have the correct approval markings ie., to the specified British Standard or corresponding European standard, known as the “EN3” standard, which requires water-based foam extinguishers to have a minimum capacity of at least 2 litres.

However, in late 2010 Driver and Vehicle Agency examiners became aware of a wide variation in the wording of the approval markings and when DVA examiners carried out further research it was discovered that some 99% of fire extinguishers currently fitted in taxis had less than the required 2 litre capacity. They did not therefore fully comply with the approval markings required by the 1995 Regulations.

The research also highlighted changing attitudes in the fire-fighting community to the effectiveness of vehicle fire extinguishers in the hands of untrained users. In response to this, and in light of a commitment in the current NI Road Safety Strategy to consider the mandatory fitment of fire extinguishers in all motor vehicles (action measure 69), it was decided to seek the views of the public on this issue.

The consultation detailed four possible options for action:

Option 1: Do nothing;

Option 2: Amend legislation to update requirements for approval markings on fire extinguishers fitted to public service vehicles and minibuses;

Option 3: Amend legislation to remove the current mandatory requirement to have fire extinguishers fitted to public service vehicles and minibuses; and

Option 4: Amend legislation to extend the mandatory requirement to have fire extinguishers fitted to all motor vehicles.

The Department did not express a preferred option in the consultation.

## **Synopsis of responses**

A total of 5 responses were received from the following organisations:

- The British Standards Institution (BSI)
- The Fire Industry Association (FIA)
- Northern Ireland Fire and Rescue Service (NIFRS)
- 2 fire safety companies

The fire safety companies recommended that the Department pursue option 3, which is to remove the current mandatory requirement to have a fire extinguisher fitted to public service vehicles and minibuses.

To support their recommendation they made the following points -

- Effective use of a fire extinguisher is dependent on relevant training.
- The location and operation of a fire extinguisher can waste time which could be better used in exiting the vehicle.
- Vehicle fires can spread quickly.
- There are risks from noxious smoke and fumes from engine bay fires.
- There are risks to persons preoccupied with fire extinguishing from other traffic on the road.
- Drivers are often alone when fires start and no-one should fight a fire on their own.
- Materials used in modern vehicles require specialised extinguishing techniques (eg., magnesium and titanium).
- There are risks from unexpected airbag deployment while a person is using an extinguisher.

The BSI highlighted the safety risk of untrained individuals attempting to combat vehicle fires through use of extinguishers but did not express a preferred option.

The FIA met with officials to discuss the consultation results and made the following points:

- FIA research carried out when used extinguishers were returned for refilling indicated that in 90% of instances the extinguisher was successful in putting out the fire and emergency services were not involved.

- Whilst water-based foam fire extinguishers can be expensive, there are dry powder equivalents available at much reduced cost which also meet the EN3 standard;
- Dry powder is more effective at fighting vehicle fires than foam.
- The perception that dry powder removes oxygen from the air in a vehicle is a misconception – it merely displaces oxygen from around the seat of the fire.
- Dry powder does decrease visibility but in the majority of cases first response fire fighting is carried out once the driver has left the car; and
- Public perception of the removal of an existing safety device may be negative, in that any extinguisher is better than no extinguisher.

FIA therefore felt that the safest course of action was to require mandatory fitment of BS EN3 approved fire extinguishers but to provide a choice of foam or powder based extinguishers. This would allow purchase of slightly cheaper extinguishers - powder based extinguishers retail at around £30 compared with water based foam extinguishers which cost about £60 each.

FIA also expressed the view that, whilst portable fire extinguishers in vehicles may not be instrumental in the reduction of casualties in vehicle fires, their presence could prevent expensive financial losses to a taxi driver/operator. They also suggested that to minimise cost impact on the taxi industry, any changes to the mandatory requirements could be phased in over 18 months.

NIFRS indicated that it was content to retain the requirement for fire extinguishers to be fitted in public service vehicles, provided it is enforced to the BS EN3 standard, but advised against use of dry powder extinguishers. They warned that whilst dry powder fire extinguishers are able to extinguish a greater range of transport related fires compared with water based foam extinguishers, they could cause severe respiratory difficulties for passengers within the passenger cabin or even asphyxiation due to the resultant hazardous atmosphere.