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INLAND TRANSPORT COMMITTEE

Working Party on Road Traffic Safety

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# **REVISION OF THE CONSOLIDATED RESOLUTION R.E.1**

## Increasing the use of seat belts and child restraint systems

## Note by the secretariat

Members of WP.1 will find below a draft recommendation on increasing the use of seat belts and child restraint systems revised by the small group made up of Spain, United Kingdom, USA (chair) and the FIA Foundation. Once adopted by WP.1, the recommendation will be inserted in chapter 1, paragraph 1.3 of the new structure of R.E.1 (see document ECE/TRANS/WP.1/2005/15/Rev.2).

## Increasing the use of seat belts and child restraint systems

(modifications appear in bold)

### Introduction

Road traffic accidents are a major cause of injury and death in both the industrialised world and emerging countries. Over 50% of these fatalities are people in the age range of 15-44 years, which is the most economically active age group. Of the estimated 1.2 million people killed on the roads world-wide each year, 85% die in low and middle-income countries, where the use of injury protection devices such as seat belts and child restraints is very low.

Failure to use a seat belt and improper use of a child restraint system are major risk factors for motor vehicle occupants.

Seat belts and child restraint systems have been shown to be effective in reducing death and serious injuries in road traffic crashes. Studies have shown that, when used, seat belts reduce serious and fatal injuries by 40-65%. Crash research in various countries has found that the rates of seat belt wearing are lower in fatal collisions than in the general population. The cost-benefit ratio of mandatory seat belt use has been estimated at between 1:3 and 1:8, while the cost-benefit of seat belt enforcement programmes is at least 1:3.

The level of seat belt use is influenced by

- Mandatory legislation
- Enforcement accompanied by publicity campaigns

The level of child restraint use is influenced by

- Laws mandating use of child restraints
- Public information and enforcement
- Incentive and education programmes to support enforcement
- Child restraint loan schemes

Consequently, a combination of legislation, police enforcement, education and information campaigns is necessary to achieve and maintain significant increases in seat belt and child restraint use.

### **Recommendations:**

It is recommended that an ideal occupant protection programme should consist of the following:

#### Programme management

There should be leadership and resources for a comprehensive programme to protect vehicle occupants of all ages. The programme should be coordinated across the various stakeholders in road safety (road safety department, traffic police, health, education, insurance sector, communication, vehicle manufacturers and seat belt and child restraint manufacturers).

Governments should consider the economic benefits generated by seat belt wearing and child restraint use.

#### Data

Accurate data are important to assess the effectiveness of a road safety programme. Information on **road accident (i.e., collision)** data and seat belt and child **restraint** use are very helpful to allow public and private sector stakeholders to identify shortfalls in legislation, enforcement and other seat belt/child restraint promotion activities.

A good data programme should include information on collision and casualty data, seat belt and child restraint usage rates, and public awareness and attitudes towards injury protection devices. Such data can be used to establish reasonable performance targets for the seat belt/child restraint programme and determine whether casualties have been reduced over time. An evaluation of programme activities should be undertaken to establish whether these targets have been met and should also include cost effectiveness data for different policies, programmes and strategies.

#### Legislation

Seat belts should be fitted in all seating positions in all motor vehicles to the most current agreed technical standard (for example current regulations on anchorage points, seat belts, and child restraint systems). Governments may need to consider phasing in the introduction of seat belt fitting. Most vehicle manufacturers already install seat belts in new vehicles.

Seat belt wearing should be required by law in all motor vehicles in all seating positions where seat belts are installed. Enforcement and penalties should be sufficiently credible to have a deterrent effect. While a few exemptions may have to be considered for medical reasons and for certain occupational groups, Governments should be cautious about allowing them. When medical exemptions are allowed, they should be accompanied by a medical certificate with the appropriate international symbols (for example, the EU symbol).

Children under **150 cm** (and under the age of twelve) should be required by law to be restrained in [...] the proper seating position using the proper child restraint system for their weight group. Governments may consider phasing the introduction according to their own needs. Governments should consider carefully legal responsibility to ensure children are properly restrained.

#### Enforcement

Seat belt and child restraint use should be enforced as part of regular traffic police duties. Governments should also consider the benefits that would come from regular high profile seat belt enforcement campaigns, particularly to coincide with publicity campaigns. Police officers responsible for road safety should receive training in regulations requiring restraint use and also in educating motorists about the benefits of wearing seat belts and correctly using child restraint systems.

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#### Education and public information

Education and public information can serve several purposes such as improving public awareness and supporting enforcement policies. It is recommended to consider educational approaches ranging from national media campaigns to education via health authorities, schools and employers.

Public information campaigns can be used to raise awareness about the need for seat belts and child restraints, to educate and inform, and to support policies (e.g. legislation) and enforcement efforts. Depending on the national situation and resources, consideration should be given to targeting of public information campaigns (e.g. all occupants, rear seat occupants or high risk, young males).

Where possible, research should be conducted to develop the most effective key messages and delivery strategies (TV, radio, printed media) suitable for the targeted group (e.g., feature TV spots in sports programmes to reach young males). Consideration should be given to cooperation with respected members of the local community who can overcome cultural barriers to seat belt and child restraint use. At a minimum, it is recommended to carry out evaluation of the effectiveness of the campaign in terms of effects on knowledge, attitudes and behaviour change. Some intermediate evaluation measures that may be considered include tracking the effectiveness of the campaign message and whether it reached the targeted audience. Depending on local circumstances and target groups, campaign messages should include the reasons for using seat belts and child restraints.

Besides teaching and health professionals, other stakeholders should be involved in educational efforts. For example, employers should be encouraged to consider the economic benefits of reducing the effects of road traffic injuries by requiring use of seat belts among their employees. Casualty insurers should be encouraged to actively support road safety and seat belt wearing through information campaigns and other appropriate strategies.

Parents and caregivers should be carefully educated about the need to correctly use a child restraint system appropriate for their child (through schools, hospitals, media, etc.). For some countries and groups, the purchase of child safety restraints may constitute an economic burden. In such cases, loan schemes could be considered, whereby for a small or no fee, caregivers can borrow the child restraint for a period of time. Besides encouraging use, an added benefit of such a scheme is the opportunity to educate caregivers in the proper use of the child restraint system.

Finally, Governments should consider public information and education efforts regarding the placement of rear-facing child restraint systems in vehicles with frontal airbags. Children in rear-facing child restraint systems should not be placed in a seating position with an active frontal airbag.

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### Monitoring and evaluation

Governments are advised to routinely measure the effectiveness of the seat belt/child restraint programme and individual interventions, ideally through observational seat belt and child restraint use surveys and through analysis of casualty data. This allows Governments to better target effective use of resources, to sustain the increased seat belt/child restraint use, to reduce the number of road traffic fatalities and injuries, and to defend their programme resources.

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