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REPORT OF THE WORKING PARTY ON ROAD TRAFFIC SAFETY ON ITS FIFTIETH SESSION

Addendum

Revision of the consolidated resolution on road traffic (R.E.1)

Increasing the use of seat belts and child restraints

Note by the secretariat

The members of WP.1 will find below the text on increasing the use of seat belts and child restraints (basis ECE/TRANS/WP.1/2006/5/Rev.1/Add.1) as modified by the Working Party at its fiftieth session (see ECE/TRANS/WP.1/106, paragraphs 17-19).

The contents of this text will be incorporated into chapter 1 of the Consolidated Resolution R.E.1 as section 1.3, according to the draft structure of R.E.1 contained in document ECE/TRANS/WP.1/2005/15/Rev.3.

R.E.1

Chapter 1 General rules for behaviour in traffic

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1.3 Seat belts and child restraint systems

1.3.1 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.

A) The level of seat belt use is influenced by

- Mandatory legislation
- Enforcement accompanied by publicity campaigns

B) 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.

1.3.2 Recommendations

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

1.3.2.1 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.

1.3.2.2 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.

1.3.2.3 Legislation

A) *Fitting vehicles with seat belts and anchorages*

Seat belts should be fitted in all seating positions in all motor vehicles equipped with anchorage points in accordance with the most current **adopted** technical standards, **such as,** for example, **those contained in** UNECE Regulations 14 and 16).[1] In addition,

[1] Regulations No. 14, 16 and 44, annexed to the 1958 Agreement concerning the Adoption of Uniform Technical Prescriptions for Wheeled Vehicles, Equipment and Parts which can be Fitted and/or Used on Wheeled Vehicles and the Conditions for the Reciprocal Recognition of Approvals Granted on the Basis of these Prescriptions, define uniform technical prescriptions for approval:

- Regulation No. 14: for vehicles with regard to safety-belt anchorages, ISOFIX anchorage systems and ISOFIX top tether anchorages. It includes in particular the obligation for category M_1 vehicles to be equipped with at least two ISOFIX positions, each composed of two rigid vehicle anchorages for fixing ISOFIX child restraint devices and a means of preventing the rotation of the child restraint device.
- Regulation No. 16: for safety-belts and restraint systems intended for installation in vehicles. It also concerns the approval of vehicles as regards the installation of safety-belts, restraint systems, child restraint systems or ISOFIX child restraint systems.
- Regulation No. 44: for child restraint systems which can be fitted in power-driven vehicles.

motor vehicles in category M_1[2] should be fitted with at least **two positions**, **each composed of two** rigid anchorages **and an anti-rotation system** for securing child restraint systems. Similarly, child restraint systems should have **at least** two **rigid** connection points for attachment to the vehicle anchorage **points** (see for example UNECE Regulations 14 and 44).[1] Most vehicle manufacturers already install anchorages and seat belts in new vehicles.

For vehicles already registered, which are equipped with anchorage points but not seat belts, Governments should phase in the retroactive fitting of these devices

B) *On the use of restraint systems*

Governments should take all measures within their responsibility to protect persons transported in motor vehicles by legislating the use of appropriate restraint systems for adults and children, and establishing responsibility for the use of such systems.

(i) Seat belts

Seat belt wearing should be required **in all motor vehicles** in all seating positions (forward- and rear-facing) where seat belts are installed (as is required, for example, by Article 7.5 of the Vienna Convention on Road Traffic). Enforcement and penalties should be sufficiently credible to have a deterrent effect.

While a few exemptions may have to be considered, **for example** for medical reasons, Governments should be cautious about allowing them.

It is recommended that countries should recognise the validity in their territory of the official document or medical certificate, **delivered by another country,** exempting the bearer from wearing a seat belt. This document should contain the bearer's name, the period of validity **of the exemption** and display an international symbol corresponding to the one below:

To this end, Governments should publicize this symbol widely among their medical services and police.

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[2] Category M_1: Vehicles used for the carriage of passengers and comprising not more than eight seats in addition to the driver's seat (see the Consolidated Resolution on the Construction of Vehicles (R.E.3), document TRANS/WP.29/78/Rev.1/Amend.2).

(ii) Child restraint systems

Countries should enact legislation to require children to be properly secured in a child restraint system and **placed** in the proper seating position (forward or rear facing). Children should be required by law to be restrained in a child restraint system taking into account the child's age, height and weight. Governments may consider phasing the introduction of such systems according to their own needs.

Governments should ensure that, when transporting children, only approved child restraint systems are used in vehicles. In addition, they **should consider the possibility of prohibiting** the sale of child restraints that do not meet the standard for use in vehicles.

(iii) Carriage of children in the front seats of vehicles

Governments should regulate the carriage of children in the front seats of category M_1 vehicles. Many countries have already introduced regulations of this nature, either prohibiting the carriage of children below a certain age or size in front seats, or permitting them to be carried only in specified restraint systems or under certain conditions.

1.3.2.4 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.

1.3.2.5 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.

1.3.2.6 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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