# **Proposal for establishment of New Regulation for Various Safety Issues**

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"Regulation No. XXX

Uniform provisions concerning the approval of:

## I Vehicles with regard to reversing devices

## II Vehicles with regard to their reversing sound warning devices

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#### 1. Scope

- 1.1. This regulation applies to:
  - (a) Part I: the approval of vehicles of category M, N<sup>(1)</sup>.
  - (b) Part II: the approval of vehicles of category  $M_2$ ,  $M_3$ ,  $N_1$  with a reference mass exceeding 1,760 kg,  $N_2$ ,  $N_3$ .

### **Part I: Reversing Devices**

#### 2. Definitions

For the purpose of Part I of this regulation,

- 2.1. "Approval of a vehicle" means the approval of a vehicle type with regard to its reversing devices.
- 2.2. "Vehicle type" means vehicles which do not essentially differ in such aspect as:

the characteristics of the reversing device.

## 3. Approval

- 3.1. If the vehicle submitted for approval pursuant to this Regulation meets all the requirements of paragraph 4. below, approval of that vehicle type shall be granted.
- 3.2. An approval number shall be assigned to each vehicle type approved. Its first two digits (at present 00, corresponding to the Regulation in its original form) shall indicate the series of amendments incorporating the most recent major technical amendment made to the Regulation at the time of issue of the approval.

## 4. Specifications

#### 4.1. General Specifications

4.1.1. All vehicles shall be equipped with a device for reversing which can be operated from the driver's position.

<sup>&</sup>lt;sup>1</sup> As defined in the Consolidated Resolution on the Construction of Vehicles (R.E.3.), document ECE/TRANS/WP.29/78/Rev.4/Amend.1, Paragraph 2.

#### **Part II: Reversing Sound Warning Devices**

#### 5. Definitions

For the purpose of Part II of this regulation,

- 5.1. "Approval of a vehicle" means the approval of a vehicle type with regard to its reversing sound warning devices.
- 5.2. "Reference mass" means the mass of the vehicle in running order less the uniform mass of the driver of 75 kg and increased by a uniform mass of 100 kg.
- 5.3. "Reversing Sound Warning Device" means a device which provides sound signal to vehicle's presence to pedestrians and other road users.
- 5.4. "Vehicle type" means vehicles which do not essentially differ in such aspects as:
  - (a) Principle of operation of the reversing sound warning devices fitted on the vehicle;
  - (b) Position of the reversing sound warning devices fitted on the vehicle; and
  - (c) Number of the reversing sound warning device on the vehicle.

## 6. Approval

- 6.1. If the vehicle submitted for approval pursuant to this Regulation meets all the requirements of paragraph 7. below, approval of that vehicle type shall be granted.
- 6.2. An approval number shall be assigned to each vehicle type approved. Its first two digits (at present 00, corresponding to the Regulation in its original form) shall indicate the series of amendments incorporating the most recent major technical amendment made to the Regulation at the time of issue of the approval.

## 7. Specifications

#### 7.1. General Specifications

- 7.1.1. All vehicles shall have reversing sound warning device.
- 7.1.2. The operation of reversing sound warning device shall not adversely affected the magnetic or electrical fields. This shall be demonstrated by compliance with Regulation No. 10.

### 8. Transitional Provisions

8.1. As from the official date of entry into force this Regulation, no Contracting Party applying this Regulation shall refuse an application for approval under this Regulation.

8.2. As from 12 months after entry into force of this Regulation, Contracting Parties applying this Regulation shall grant approvals to a type of vehicle with regard to the installation of reversing sound device only if the type of vehicle meets the requirements of this Regulation.

#### II. Justification

- While motor technology is improving for environmental benefits, the noise level of vehicle when vehicle is moving with at lower speeds to both of forward and reverse is reducing. Especially reduction in reversing has removed an important source of an audible signal that is relied upon by blind and visually impaired pedestrians and cyclists, amongst other road users, to become aware of the approach, presence or departure of those vehicles.
- Accidents have been occurred while reversing when pedestrians and other road users behind of the vehicle, due to of lack of vision area and carefulness of the driver and/or unprotected road users.
- 3. According to statically evidences, accidents involving death or personal injury while reversing have increased in recent years.

In Turkey, statistical data of the last 3 years:

Year	Category	Numbers of accidents	Numbers of accidents	Numbers of	Numbers of
i ear		involving death	involving personal injury	dead	injures
	$\mathbf{M}_2$	0	110	0	133
	$M_3$	0	36	0	47
2013	$N_1$	2	505	2	559
2013	$N_2$	2	39	2	49
	$N_3$	4	69	4	88
	Total	8	649	8	743
	$\mathbf{M}_2$	2	141	2	155
	$M_3$	2	44	2	54
2014	$N_1$	5	706	5	784
2014	$N_2$	1	35	1	42
	$N_3$	3	66	3	75
	Total	13	992	13	1110
	$M_2$	0	210	0	225
	$M_3$	1	45	1	52
2015	$N_1$	6	908	6	1022
2015	$N_2$	1	35	1	38
	$N_3$	8	77	10	105
	Total	16	1275	18	1442

As a consequence, reversing sound warning device shall be fitted on the vehicles of category  $M_2$ ,  $M_3$ ,  $N_1$  with a reference mass exceeding 1,760 kg,  $N_2$ ,  $N_3$ .

4. There is lack of corresponding regulation with regard to its reversing devices.

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