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Working Party on Road Traffic Safety

**REPORT OF THE WORKING PARTY ON ROAD TRAFFIC SAFETY ON ITS
THIRTY-NINTH SESSION**

Addendum 1

**REVISION OF THE CONSOLIDATED RESOLUTION
ON ROAD SIGNS AND SIGNALS (R.E.2)**

Signing for roadworks

Note by the secretariat

Delegations will find below the recommendation on roadworks resulting from the discussions and decisions of WP.1 at its thirty-ninth session. The amendments adopted or made to the text of document TRANS/WP.1/2002/33 appear in bold. **Since this recommendation will later be incorporated into Consolidated Resolution R.E.2 as the new Chapter 3**, the numbering of the relevant paragraphs has already been adopted with this in view.

RECOMMENDATION FOR ROAD WORKS SIGNING AND SAFETY

(New Chapter 3 to be incorporated into R.E.2)

3. Roadworks

3.1 General requirements

- 3.1.1** Road signs, horizontal and vertical delineation devices, electrical lighting installations, traffic lights and protective barriers shall be made of high performance materials, capable of resisting the rough conditions of use in roadworks zones, and be easy to install and remove.
- 3.1.2** *The safety of the persons working on roads as well as the road users passing through the works zone shall be ensured by mobile barriers, fences or guardrails or any other suitable devices.*
- 3.1.3** The wearing of safety garments described in Recommendation No. 4.2 of the Consolidated Resolution on Road Traffic **should be obligatory** in all roadworks zones **when the roadworks zone is not completely separated from the traffic.**
- 3.1.4** Vehicles used in roadworks zones **should, when their presence on the road constitutes a danger or an inconvenience to other users**, be equipped with special amber warning lights and preferably **carry at** the front and the rear red and white **or yellow** bands of a retroreflective material.
- 3.1.5** Slow moving vehicles, in particular those which by construction cannot exceed the speed of 30 km/h, should also be marked with additional rear markings as recommended in the Consolidated Resolution on Road Traffic.

3.2 Technical requirements

- 3.2.1** The photometric and colorimetric properties of all road signs, markings and additional markings of vehicles should comply with the provisions set out in publication 39-2 (TC-1.6) 1983 of the International Commission on Illumination (CIE), "Recommendations for Surface Colours for Visual Signalling".
- 3.2.2** **The minimum retroreflective level for temporary signs should correspond to the class required for permanent signs for the road category in question or when conditions are similar. It is, however, recommended, in view of the additional danger to which the presence of road works gives rise, that use should be made of retroreflective materials in fluorescent colours for signs indicating particularly dangerous sections of road.**

3.3 Advance warning signs

- 3.3.1 Advance warning that work is in progress on the section of road ahead shall be given by the sign A, 16 with the shape A^a according to the 1968 Convention on Road Signs and Signals and the European Agreement supplementing it.
- 3.3.2 This sign shall be placed at sufficient distance ahead of the roadworks, allowing drivers to adapt their driving early enough to the particular situation they will encounter.
- 3.3.3 Any other additional signs, such as speed reduction indications (C, 14); narrow carriageway (A, 4) width, height, weight or axle load restrictions (C, 5 – 6 – 7 - 8); prohibition on overtaking (C, 13); indication of lane changes, etc. **shall** be placed in such a way that drivers can clearly distinguish them from other road traffic.

3.4 On-site road signs

Use of only a certain number of significant road signs should be encouraged. **The most frequently used signs are reproduced in the appendix to this recommendation.** (In the amended R.E.2 this will become: *“to Annex 6 of this Resolution”*).

3.5 Vertical on-site delineation

- 3.5.1 All delineation devices should show red and white or red and yellow retroreflective markings in such a way that they have the same aspect by day and by night.
- 3.5.2 Cones, vertical lane separators, barrels and barriers should also have these retroreflective bands in order to comply with the requirements in paragraph 3.5.1.
- 3.5.3 Electrically illuminated vertical delineators may be used whenever necessary in addition to the devices mentioned above.

3.6 Temporary horizontal markings

- 3.6.1 To the extent possible, where vertical delineation devices are used in roadworks zones, temporary horizontal markings should be used to provide continuous visual guidance to drivers under all conditions both by day and at night. The choice of use of horizontal markings should depend on the importance and duration of a roadwork zone.
- 3.6.2 Temporary horizontal markings shall be designed in such a way that road users can clearly distinguish them from any normal horizontal markings which may be left in place. Any normal horizontal markings which could cause confusion should be either erased or blacked out.
- 3.6.3 If temporary horizontal markings are used they shall be made of materials easily removable and visible by day and by night.

3.7 Diversion signing

3.7.1 If a part of a road is temporarily closed to traffic **because of roadworks**, signs as described in Recommendation 1.5 of R.E.2 (*in the amended R.E.2 this will become: “of this Resolution”*) should be applied to indicate **relevant** diversions and detours.

3.7.2 **For these signs, the materials used should have** a yellow or orange retroreflective background in accordance with the Convention on Road Signs and Signals, Annex 1, Section G, Chapter I, paragraph 4.

3.8 End of restrictions

3.8.1 All temporary restrictions should always be cancelled at the end of a roadworks zone.

3.8.2 Should permanent restrictions to traffic remain applicable also after the end of roadworks, they should be repeated as soon as possible after the above-mentioned sign.

3.9 Traffic light signals

3.9.1 Traffic light signals used to regulate traffic flow at a roadworks zone should preferably be of the three-light type.

3.9.2 When possible, vehicle detectors should allow for traffic-operated regulation, especially in the case of large variations in the traffic flow.

3.10 Removal of unnecessary restrictions

3.10.1 All unnecessary restrictions, obstacles and barriers to traffic flow in roadworks zones should be removed when work is not in progress on weekends and public holidays and also at the time of peak traffic if some traffic lanes are closed because of the work.

3.10.2 Only the necessary warning signs and temporary horizontal markings and vertical delineation devices should be maintained under these conditions.

Appendix
(Future Annex 6 of R.E.2)

(Recommendation 3.4)

Most frequently used signs for roadworks

1. Danger warning signs



A, 16



A, 4a



A, 4b



A, 7a



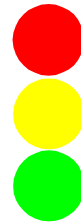
A, 8



A, 9



A, 10a



A, 17a

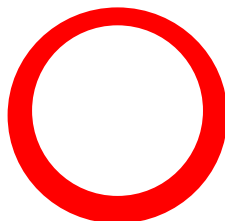


A, 23

2. Prohibitory or restrictive signs



C, 1a



C, 2



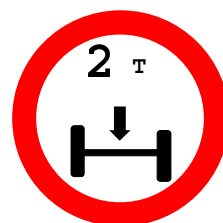
C, 5



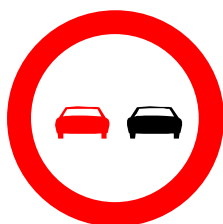
C, 6



C, 7



C, 8

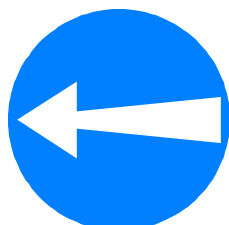


C, 13aa

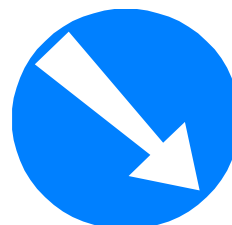


C, 14

3. Mandatory signs

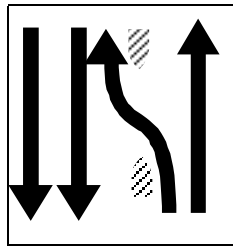


D, 1a

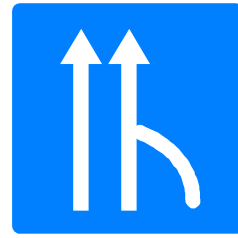


D, 2

4. Indication signs

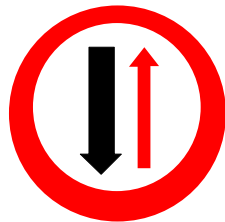


G, 11c

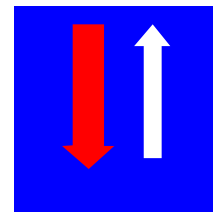


G, 12a

5. Signs indicating priority on narrow sections of road



B, 5



B, 6
