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**Working Party on Road Traffic Safety** 

**Group of Experts on Road Signs and Signals** 

Fifth session

Geneva, 5-6 November 2015

# Report of the Group of Experts on Road Signs and Signals on its fifth session

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## I. Attendance

- 1. The Group of Experts on Road Signs and Signals (GE.2) held its fifth session in Geneva from 12-13 November 2015, chaired by Mr. Karel Hofman (Belgium). Representatives of the following UNECE member States participated: Belgium, Croatia, Denmark Finland, France, Greece, Italy, Latvia, Lithuania, Luxembourg, Republic of Moldova, Russian Federation, Spain, Sweden and Switzerland.
- 2. The representatives of non-ECE member States also participated: Kuwait and Nigeria. The following non-governmental organizations were represented: Forschungsgesellschaft Strasse-Schiene-verkehr, Easa Husain Al-Yousifi & Sons Company and an independent consultant from the United States of America (A-Mazing Designs) also participated as an Observer.

# II. Adoption of the Agenda (agenda item 1)

3. The Group of Experts adopted the session's agenda (ECE/TRANS/WP.1/GE.2/9).

# III. Programme of Work (agenda item 2)

# A. Assessing internal consistency of the 1968 Convention on Road Signs and Signals

- 4. The Group of Experts discussed Informal document No.1 submitted by the Government of Spain which presents the results of its research on the issue of fixed and variable message signs in the 1968 Convention. The Group noted that it is not necessary to make explicit differences between fixed or electronic road signs in the context of the 1968 Convention.
- 5. Mr. S. Egger, a road sign expert and researcher, made a detailed presentation describing ISO 9186 procedures for the development and testing of graphical symbols as well as the MoA (Minute of Arc) Design Method. Ms. M. Pronin (A-Mazing Designs) delivered a presentation on the results of research into road sign comprehension. Switzerland presented preliminary results of its Project «VERVE» which has developed new proposed designs for road signs in the country. The Group welcomed all presentations and thanked Ms. Pronin and Mr. Egger for their valuable contributions at the session and expressed the hope that both will be attending future sessions.

## B. Taking Stock of National Legislation

6. The Group of Experts continued to discuss the information collected via a web-based Road Signs Management System. In this context, the experts of Denmark, Finland, France, Kuwait, Latvia, Lithuania, Luxembourg, Nigeria, Portugal, Republic of Moldova, Russian Federation, Spain, Sweden, and Switzerland began to present their preliminary analysis of D, 1 to G, 24c signs, as agreed at the last session. At this session, the experts assessed the signs from D, 1 to E, 1 c (see Annex). The Group requested the secretariat to consult with the secretariat of WP.15 (Working Party on the Transport of Dangerous Goods) about a possible use of symbols utilized in the C, 3 m and C, 3 n signs of the 1971 European Agreement in D, 10 signs (of the 1968 Convention on Road Signs and Signals). The Group requested Nigeria and Switzerland to assess the coding of D, 1 a, D, 2 and D, 10

signs and make proposals at the next session. Finally, the Group requested Kuwait to make proposals regarding the use of the pedestrian symbol in signs such as D, 5, D, 11a and D, 11 b as well as pedestrian symbols used in other sign categories and make proposals at the next session. The signs from C, 10 to C, 20 b remain to be discussed.

7. The Group did not discuss the methodology to be used to evaluate "non-Convention" signs.

## IV. Other Business (agenda item 3)

8. To make informed decisions, the Group agreed that it requires scientific data on the comprehensibility of road sign symbols from a worldwide perspective. To this end, the Group supports the "International Road Sign Comprehension Evaluation Project" that is currently being undertaken by road safety researchers. A-Mazing Designs has been acting as an informal liaison between the Group of Experts and this Project. Ms. Pronin (A-mazing Designs) informed the Group that, if funding becomes available, members of the Group of Expert may be invited to join the Project team and the Group will be able to submit even more signs for evaluation by the Project team.

# V. Date and Place of Next Meeting (agenda item 4)

9. The secretariat informed the Group of Experts that the next meeting is scheduled to take place on 1-2 February 2016 in Geneva.

## VI. Adoption of the Report (agenda item 5)

10. The Group of Experts adopted the report of its fifth session.

#### Annex

## A sign-by-sign assessment by the Group of Experts

The Group of Experts on Road Signs and Signals analysed the implementation of the 1968 Convention on Road Signs and Signals on the basis of information provided by 28 Contracting Parties (Albania, Azerbaijan, Belgium, Bosnia and Herzegovina, Croatia, Czech Republic, Denmark, Finland, France, Greece, Hungary, Islamic Republic of Iran, Italy, Kuwait, Latvia, Lithuania, Luxembourg, Montenegro, Netherlands, Nigeria, Poland, Russian Federation, Serbia, Sweden, Switzerland, Ukraine, Uzbekistan, Viet Nam) in the Road Signs Management System.

#### General recommendations/observations:

The group recommended adopting a schematic approach (i.e. by striving to remove unnecessary details such as hats and clothing) for all symbols used in the signs in the 1968 Convention. This will promote a universal understanding of road signs around the world.

#### Aa Danger warning signs

A few countries appear to use a rim, rather than a border. It is necessary to consider definitions of rims and borders.

#### Ab Danger warning signs

The group noted that very few Contracting Parties use this sign.

Secretariat to rectify an erroneous entry (to not applicable).

#### A, 1a Dangerous bend or bends

All signs examined appeared to convey the danger of "left bend" message.

A few countries use a strong curved (90 degree angle) bend and an arrowhead, not a curved pointed bend. The group was divided as to whether it was worth considering matching the extent of the bend indicated on the sign to the local road conditions.

There was no agreement regarding whether the symbol used for C,11a should not also be used for A,1a.

#### A, 1b Dangerous bend or bends

All signs examined appeared to convey the danger of "right bend" message.

A few countries use a strong curved (90 degree angle) bend and an arrowhead, not a curved pointed bend. The group was divided as to whether it was worth considering matching the extent of the bend indicated on the sign to the local road conditions.

There was no agreement regarding whether the symbol used for C,11b should not also be used for A,1b.

Secretariat to verify/delete N/A responses for the Czech Republic and Ukraine.

## A, 1c Dangerous bend or bends

No comment.

Kuwait to rectify its input.

#### A, 1d Dangerous bend or bends

No comment.

Secretariat to delete the extra signs from Kuwait.

#### A, 2a Dangerous descent

A few countries use the image of a vehicle in addition to a percentage within the sign. A few countries use an arrow instead of a vehicle. Both approaches appear to contravene the Convention.

The group did not agree on the most appropriate symbol or combination of symbols to indicate how dangerous the descent is and its direction (percentage, vehicle with or without a driver, arrow). However, the group believed that indicating the direction of the descent was as important as indicating the degree of the descent.

#### A, 2b Dangerous descent

No comment.

#### A, 2c Dangerous descent

The group did not agree on the most appropriate symbol or combination of symbols to indicate how dangerous the descent is and its direction (percentage, vehicle with or without a driver, arrow). However, the group believed that indicating the direction of the descent was as important as indicating the degree of the descent.

#### A, 2d Dangerous descent

No comment.

#### A, 3a Steep ascent

A few countries use the image of a vehicle in addition to a percentage within the sign. A few countries use an arrow instead of a vehicle. Both approaches appear to contravene the Convention.

The group did not agree on the most appropriate symbol or combination of symbols to indicate how dangerous the ascent is and its direction (percentage, vehicle with or without a driver, arrow). However, the group believed that indicating the direction of the ascent was as important as indicating the degree of the ascent.

#### A, 3b Steep ascent

No comment.

#### A, 3c Steep ascent

The group did not agree on the most appropriate symbol or combination of symbols to indicate how dangerous the ascent is or its direction (percentage, vehicle with or without a driver, arrow). However, the group believed that indicating the direction of the ascent was as important as indicating the degree of the ascent.

#### A, 3d Steep ascent

No comment.

#### A, 4a Carriageway narrows

Kuwait to replace its input and include an additional non-Convention sign.

No comment.

#### A, 4b Carriageway narrows

No comment.

#### A, 5 Swing bridge

The group noted slight differences in the symbol of the bridge, the direction of the bridge opening (right side), the water underneath the bridge (waves replaced by solid half circles), and the use of two different colours on the same symbol (black and blue). Notwithstanding, the group believed that the essential characteristics of the symbol have been retained.

#### A, 6 Road leads on to a quay or river bank

Russian Federation to indicate that the black rim around all of its signs is not part of the symbol in the Aa "Comments" box.

The group noted that a few countries used two different colours on the same symbol (black and blue). Notwithstanding, the group believed that the essential characteristics of the symbol have been retained.

#### A, 7a Uneven road

No comment.

#### A, 7b Uneven road

Belgium to replace its input.

The group agreed that the definition of 7b requires elaboration.

#### A, 7c Uneven road

No comment.

#### A, 8 Dangerous shoulders

Secretariat to check the symbol of Uzbekistan

The group noted slight differences in the symbols used and agreed that gravel should be clearly made part of the symbol.

#### A, 9 Slippery road

The group noted that most countries used a slightly different symbol and that one country had an upright vehicle. Notwithstanding, the group believed that the essential characteristics of the symbol have been retained.

#### A, 10a Loose gravel

France to rectify numbering.

The group noted that most countries used a slightly different symbol and that the loose gravel was not clear in some symbols. The group agreed that the loose gravel should be clearly shown in the symbol and that for the countries which drive on the right hand side of

the road, that the vehicle should be on the left hand side given that the danger will come from the left.

#### A, 10b Loose gravel

No comment.

#### A, 11a Falling rocks

The group noted that some countries included rocks on the carriageway which provide additional warning that fallen rocks are the main hazard. The group agreed that having the rocks on the carriageway do not alter the essential characteristics of the symbol. The symbol as it presently is in the Convention should be retained.

#### A, 11b Falling rocks

No comment.

#### A, 12a Pedestrian crossing

Secretariat to move current Lithuanian sign to non Convention signs.

The group noted that many countries used a symbol of a person and a zebra crossing (stripes).

The group recommended that a new A, 12c symbol comprised of a person and zebra crossing be added to the existing symbol in the Convention, and is the preferred symbol to be used. The expert group also recommended using the symbol of a person already existing in E, 12c to replace the symbol in A, 12a.

#### A, 12b Pedestrian crossing

Secretariat to move current Lithuanian sign to A, 12a, and remove current Albanian sign (as it replicates the current Albanian one in A, 12a).

The group recommended using the symbol of a person already existing in E, 12c to replace the symbol in A, 12b.

#### A, 13 Children

The group suggested modernizing the children symbol.

## A, 14 Cyclists entering or crossing

The group noted that some countries did not include a person as part of the symbol.

The group also noted that there was a possibility that a symbol without a person sitting on the bicycle could be used. The group recommended that the relevant text in the Convention be amended to stipulate that symbol without a person sitting on the bicycle could be used.

The group recommended that a Contracting Party should use this symbol consistently (i.e. with or without a cyclist such as in the C,3c and D,4 symbols).

#### A, 15a Domestic animal crossing

Sweden to replace the current "moose" sign.

No comment.

#### A, 15b Wild animal crossing

No comment.

#### A, 16 Road works

The group recommended modernizing the symbol and that within each Contracting Party, the same symbol should be used consistently.

The group also recommended that the relevant text in the Convention be amended to allow for the reversal of this symbol.

#### A, 17a Light signals

No comment.

#### A, 17b Light signals

No comment.

#### A, 17c Light signals

No comment.

#### A, 18a Intersection where the priority is prescribed by the general priority rule

One country uses a "plus" symbol instead of the "X" shaped symbol but under the Convention, the "plus" symbol is to be used with the Ab model. The group agreed that the current "X" shaped symbol should be the only symbol used with Aa model.

#### A,18b Intersection where the priority is prescribed by the general priority rule

No comment.

#### A, 18c Intersection where the priority is prescribed by the general priority rule

Secretariat to remove the symbols from Albania, Lithuania and Montenegro. It will also request France and Hungary to modify their current symbols.

The group stressed that all Contracting Parties must ensure that their general priority rule symbol should be indicated by the same width of all of the elements comprising the symbol.

## A, 18d Intersection where the priority is prescribed by the general priority rule

Secretariat to remove the symbols from Lithuania, France and Serbia (or verify if it is one of the A,19 symbols).

No comment.

#### A, 18e Intersection where the priority is prescribed by the general priority rule

Secretariat to remove the symbol from Albania.

No comment.

### A, 18f Intersection where the priority is prescribed by the general priority rule

Secretariat to remove the symbol from Albania.

No comment.

#### A, 18g Intersection where the priority is prescribed by the general priority rule

Secretariat to remove the symbols from Albania and Ukraine (to be moved to A, 19 symbol). Kuwait will move its current symbol to A, 19.

No comment.

#### A, 19a Intersection with a road the users of which must give way

Some countries do not use the arrow head or the "V" shape at the bottom. The group recommended using the symbol in the Convention without altering it (that is, having the arrow head and the "V" shape at the bottom). The group clarified that the arrow head and the "V" shape at the bottom, and the differences in the proportion of the line widths, are essential characteristics of the symbol.

The group suggested that the Convention should have as many examples of symbol A, 19 as it does for symbol A,18.

#### A, 19b Intersection with a road the users of which must give way

Some countries do not use the arrow head or the "V" shape at the bottom. The group recommended using the symbol in the Convention without altering it (that is, having the arrow head and the "V" shape at the bottom). The group clarified that the arrow head and the "V" shape at the bottom, and the differences in the proportion of the line widths, are essential characteristics of the symbol.

The group suggested that the Convention should have as many examples of symbol A,19 as it does for symbol A,18.

#### A, 19c Intersection with a road the users of which must give way

Some countries do not use the arrow head or the "V" shape at the bottom. The group recommended using the symbol in the Convention without altering it (that is, having the arrow head and the "V" shape at the bottom). The group clarified that the arrow head and the "V" shape at the bottom, and the differences in the proportion of the line widths, are essential characteristics of the symbol.

The group suggested that the Convention should have as many examples of symbol A,19 as it does for symbol A,18.

#### A, 20 Intersection with a road to whose users drivers must give way

Secretariat to delete the incorrect images for the A,20 symbol. The B,1 symbol with additional panel is the equivalent of the A,20 symbol. There are many reservations by Contracting Parties to article 10 paragraph 6 (which are now covered by the European Agreement).

The group recommended creating a subgroup (comprising of France, Italy, Latvia and the Russian Federation) to consider the apparent repetition of the relevant articles in the Convention and the European Agreement, and to propose a solution to the group at the next session as to the continued validity of the A,20 symbol.

#### A, 21a Intersection with a road to whose users drivers must give way

Secretariat to delete the incorrect images for the A,21a symbol. Same issue as A,20 symbol.

The group made the same recommendation as for symbol A,20.

#### A, 22 Roundabout

Switzerland, Belgium, Kuwait and Montenegro to rectify their current symbols.

The group recommended that the symbol in the Convention be modified by providing greater space between the arrows and enlarging the arrow heads.

#### A, 23 Two-way traffic

The group recommended that the symbol in the Convention be modified by enlarging the arrow heads.

#### A, 24 Traffic congestion

Italy to move their current sign to the non Convention sign category.

The group noted that many countries used slightly different symbols and in many cases, more than three vehicles were included in the symbol and the vehicles have red lights. Nevertheless, the group believed that the essential characteristics of the symbol have been retained.

#### A, 25 Level crossings

Secretariat to advise the group regarding preliminary feedback from the expert group on improving safety at level crossings at the next session.

The group anticipates receiving feedback from the Group of Experts on Improving Safety at Level Crossings (GE.1) to modernize the current symbol.

#### A, 26a Other level crossings

Secretariat to advise the group regarding preliminary feedback from the expert group on improving safety at level crossings at the next session.

The group anticipates receiving feedback from GE.1 to modernize the current symbol.

#### A, 26b Other level crossings

No comment.

#### A, 27 Intersection with a tramway line

No comment.

#### A, 28a Signs to be placed in the immediate vicinity of level-crossings

Secretariat to advise the group regarding preliminary feedback from the expert group on improving safety at level crossings at the next session.

The group anticipates receiving feedback from GE.1 on the continuing validity of the current symbol.

#### A, 28b Signs to be placed in the immediate vicinity of level-crossings

Secretariat to advise the group regarding preliminary feedback from the expert group on improving safety at level crossings at the next session.

The group anticipates receiving feedback from GE.1 on the continuing validity of the current symbol.

### A, 28c, A, 29a, A, 29b and A 29,c

Discussion to be deferred pending outcome of the work of GE.1 on this aspect.

#### A, 20, A, 21a and A, 21b

When the analysis of the subgroup on this topic is completed, its findings will be included under, and adapted for these signs. A recommendation that an additional panel stop with an indication to the distance of the stop sign is anticipated.

#### A30 Airfield

The group also noted that some countries have the airplane symbol in a downward direction. Nevertheless, the group believed that the essential characteristics of the symbol have been retained.

Switzerland will insert the symbol into the danger sign.

#### A31 Cross-wind

The group noted that one country uses red colour for the symbol and recommended that the colour used be the same as in the Convention. For the other countries, the group believed that the essential characteristics of the symbol have been retained.

#### A32 Other dangers

The group noted that one country does not use an exclamation point and recommended that that country changes its symbol to be the same as in the Convention. For the other countries, the group believed that the essential characteristics of the symbol have been retained.

Sweden to consider the Convention in this regard and advise at the fifth session.

### B1 "GIVE WAY" sign

The group noted that one country included the text "Give way" within the sign. The group noted that, for the countries wishing to include the text "Give way", there is the possibility that this could be done in an additional panel or within the sign itself (Article 8, paragraph 3).

#### B, 2a "STOP" sign

The group recommended that, in relation to the signs used by the countries, the size of "Stop" should be in conformity with the size specified in the text of the Convention. The group also recommended that the sign used in the Convention should be in conformity with the size specified in the text of the Convention.

#### B, 2b "STOP" sign

The group noted that very few countries use this sign (refer to Part IV of the Convention).

Secretariat to look into the background regarding the earlier history (if this was the case) to remove this little used sign and advise at the fifth session.

#### B3 "PRIORITY ROAD" sign

The group noted that some countries do not use the black rim for the yellow square in the centre, and recommended that they do so.

#### **B4 "END OF PRIORITY" sign**

The group noted that some countries do not use the black rim for the yellow square in the centre, and recommended that they do so.

#### B5 Sign indicating priority for oncoming traffic

The group noted that some countries do not use the arrows (ie length, width, positioning) as they appear in the Convention. The group recommended that the arrowheads in the symbol used in Annex 3 of the Convention be enlarged, and that the signs of countries be in line with the revised symbol. The group also recommended that the following additional words be inserted at the start of the article related to sign B,5: "The sign indicating priority for oncoming traffic shall be sign B, 5."

#### **B6** Sign indicating priority over oncoming traffic

The group noted that some countries do not use the arrows (ie length, width, positioning) as they appear in the Convention. The group recommended that the arrowheads in the symbol used in Annex 3 of the Convention be enlarged, and that the signs of countries be in line with the revised symbol. The group also recommended that the following additional words be inserted at the start of the article related to sign B, 6: "The sign indicating priority over oncoming traffic shall be sign B, 6." To assist colour-blind drivers, the group recommended that a white rim should be inserted around the red arrow.

#### C, 1a "NO ENTRY"

The group noted that one country included the text "No Entry" within the sign. The group noted that, for the countries wishing to include the text "No Entry", there is the possibility that this could be done in an additional panel or within the sign itself (Article 8, paragraph 3).

## C, 1b "NO ENTRY"

The group noted that only one sign (C, 1a or C, 1b) could be used (Article 5, paragraph 2(a)).

#### C, 2 "CLOSED TO ALL VEHICLES IN BOTH DIRECTIONS"

The group noted some visual differences in the width of the border of the red circle, but believed that the essential characteristics of the symbol have been retained.

### C, 3a "NO ENTRY FOR ANY POWER DRIVEN VEHICLE EXCEPT TWO-WHEELED MOTOR CYCLES WITHOUT SIDE-CAR"

The group noted some visual differences in the car symbol, but believed that the essential characteristics of the symbol have been retained.

The secretariat to look into section D paragraph 2 of the Convention (page 43) and point 20 of the European Agreement, and advise at the fifth session.

#### C, 3b "NO ENTRY FOR MOTOR CYCLES"

The group noted that there were many differences in the motor cycle symbol, including the presence or absence of a motor cycle driver, but believed that the essential characteristics of the symbol have been retained. The group emphasized that it should be clear that the symbol is referring to a motorcycle.

#### C, 3c "NO ENTRY FOR CYCLES"

The group noted that there were differences in the bicycle symbol, but believed that the essential characteristics of the symbol have been retained. The group emphasized that it should be clear that the symbol is referring to a bicycle.

#### C, 3d "NO ENTRY FOR MOPEDS"

The group noted that there were differences in the moped symbol, but believed that the essential characteristics of the symbol have been retained. The group emphasized that it should be clear that the symbol is referring to a moped.

#### C, 3e "NO ENTRY FOR GOODS VEHICLES"

The group noted that there were differences in the goods vehicles symbol, but believed that the essential characteristics of the symbol have been retained.

# C, 3f "NO ENTRY FOR ANY POWER DRIVEN VEHICLE DRAWING A TRAILER OTHER THAN A SEMI-TRAILER OR A SINGLE AXLE TRAILER"

The group noted that some countries used a different symbol (entire goods vehicle with single axle trailer), this is considered as a change of the essential characteristics of the symbol. Some countries also use a symbol with two axles which the group believes better reflects the meaning of this provision. The group recommends altering the symbol of the convention to make it clearer that the prohibition is aimed at other than single axle trailers by adding a second axle on the trailer.

# C, 3g "NO ENTRY FOR ANY POWER DRIVEN VEHICLE DRAWING A TRAILER"

No comment.

# C, 3h "NO ENTRY FOR VEHICLES CARRYING DANGEROUS GOODS FOR WHICH SPECIAL SIGN PLATING IS PRESCRIBED"

The group noted that countries are using different colours (yellow, orange and red) for the symbols of the vehicles carrying dangerous goods. The group recommended that the colour used should be orange (as per the symbol in the Convention). The group was advised that only UNECE member States that have acceded to the 1968 Convention on Road Signs and Signals are able to accede to the 1971 European Agreement Supplementing the 1968 Convention. The group tentatively (subject to the examination of Consolidated Resolution on Road Signs and Signals as per drafting note below) agreed to recommend that the 1968 Convention should be amended to include signs C, 3m and C, 3n of the 1971 European Agreement.

The secretariat will inform the group at the fifth session about the dangerous goods signs which have recently been included in the Consolidated Resolution on Road Signs and Signals (RE.2).

#### C, 3i "NO ENTRY FOR PEDESTRIANS"

The group noted that one country used a slightly different symbol (person standing). The group believes that the symbol of a pedestrian has to reflect movement. The group recommended that the symbol of a person as it exists in E, 12 c should be used for this sign.

#### C, 3j "NO ENTRY FOR ANIMAL-DRAWN VEHICLES"

The group noted that some countries used a different symbol of the animal-drawn vehicles (entire animal and half of the vehicle being drawn), and considered this as a change of the essential characteristics of the symbol. The group believed that the entire symbol as it appears in the Convention should be used.

#### C, 3k "NO ENTRY FOR HANDCARTS"

The group noted that there were differences in the symbols, but believed that the essential characteristics of the symbol have been retained. The group recommended that the symbol of a person as it exists in E, 12 c and pushing a handcart should be used for this sign.

#### C, 31 "NO ENTRY FOR POWER DRIVEN AGRICULTURAL VEHICLES"

The group noted that there were differences in the symbols, but believed that the essential characteristics of the symbol have been retained.

#### C, 4a "NO ENTRY FOR POWER DRIVEN VEHICLES"

The group believed that a horizontal bar was not in conformity with Section C.I, paragraph 2. The group recommended that a small group (comprising of Portugal and Switzerland) be established to consider the question as to whether an oblique diagonal bar is mandatory for all C signs except for the C, 3 signs where countries are given a choice (see Note on page 39).

# C, 4b "NO ENTRY FOR POWER DRIVEN VEHICLES OR ANIMAL-DRAWN VEHICLES"

The group agreed to defer discussion on this sign until the fifth session (after receiving feedback from the small group on C, 4a).

# C, 5 "NO ENTRY FOR VEHICLES HAVING AN OVERALL WIDTH EXCEEDING ... METRES"

The group believed that the sign in the Convention is appropriate. However, the group intends to discuss a proposal at the next session to be prepared by A-mazing Designs.

Kuwait to rectify its sign which was erroneously entered. A-mazing Designs to provide the proposed image.

# C, 6 "NO ENTRY FOR VEHICLES HAVING AN OVERALL HEIGHT EXCEEDING ... METRES"

The group believed that the sign in the Convention is appropriate. However, the group intends to discuss a proposal at the next session to be prepared by A-mazing Designs.

A-mazing Designs to provide the proposed image.

#### C, 7 "NO ENTRY FOR VEHICLES EXCEEDING ... TONNES LADEN MASS"

The group noted that one country used a sign with the image of a goods vehicle, and believe that this was a change of the essential characteristics of the symbol. The group also noted that there was a difference in the casing of the symbol "T" (ie some countries use lower casing "t") as well as its positioning within the sign, and also that some countries used commas and period marks. The group believed that the symbol in the Convention should be modified from upper to lower casing ("t") and that the positioning of the symbol "t" should appear where it currently appears in the Convention.

The group also believed, that where a comma or period mark is used, that the second digit should be two-thirds the size of the first digit, and that the lower casing "t" should appear immediately after the second digit and at the same level, and be proportionately visible. If a fraction is required, the group believed that it should be to the nearest tenth (ie 3.5t, 7.8t). If it is an integer (i.e. 7.00t), it should appear without any zeros or period marks (ie 7t).

Kuwait to rectify its sign.

# C, 8 "NO ENTRY FOR VEHICLES HAVING A MASS EXCEEDING ... TONNES ON ONE AXLE"

The group noted that there was a difference in the casing of the symbol "T" (ie some countries use lower casing "t"), its positioning within the sign, and also that some countries used commas and period marks. The group also noted differences in the arrowheads and axles. The group believed that the symbol in the Convention should be modified from upper to lower casing ("t") and that the positioning of the symbol "t" should appear where it currently appears in the Convention. The group also believed that the arrow should be deleted, replaced by one arrowhead and that the number used for the first digit in the Convention symbol should be larger.

Finally, the group believed, that where a comma or period mark is used, that the second digit should be two-thirds the size of the first digit, and that the lower casing "t" should appear immediately after the second digit and at the same level, and be proportionately visible. If a fraction is required, the group believed that it should be to the nearest tenth (ie 3.5t, 7.8t). If it is an integer (ie 7.00t), it should appear without any zeros or period marks (ie 7t).

# C, 9 "NO ENTRY FOR VEHICLES OR COMBINATIONS OF VEHICLES EXCEEDING ... METRES IN LENGTH"

The group noted that there was a difference in the casing of the symbol "m" (ie some countries use upper casing "M" where the Cyrilic alphabet is used) and that one country did not use the symbol of a truck. The group believed that the symbol "m" should be placed immediately after the number, and not below the number, that the arrows be replaced by arrowheads, and that the number used in the Convention symbol should be larger.

#### C, 10 "DRIVING OF VEHICLES LESS THAN METRES APART PROHIBITED"

C, 11a "NO LEFT TURN"

C, 11 b "NO RIGHT TURN"

C, 12 "

General observation for D category

The group noted that many countries use a white rim to enhance the sign's conspicuity.

### D, 1a (directions left, right, straight, etc.)

There are minor differences in shape of arrow heads, arrow tails, proportions of arrows within the sign and in the presence/absence of the white rim. However, the group considers all signs to conform to the Convention. The Group recommends Contracting Parties to pay closer attention to the design details, in particular, to the shape of the arrow head (by making it wider to improve the legibility). Arrows used in the same category of signs should be of the same width. The tail of the arrow should not touch the edge of the sign.

In addition, for the sign arrow turning left/right, there are differences in the arrow's curvatures. The Group considers this conforming to the Convention, however, it

recommends Contracting Parties to ensure the arrow's curvature is placed towards the centre of the sign.

The Group recommends that each sign should have its own name code and requested Nigeria and Switzerland to make a proposal to that end (including D, 2; and assessing a possibility of including in the Convention the variation of D, 2 which allows left or right direction).

#### D, 2

There are minor differences in shape of arrow heads, arrow tails, proportions of arrows within the sign and in the presence/absence of the white rim. However, the group considers all signs to conform to the Convention. The Group recommends Contracting Parties to pay closer attention to the design details, in particular, to the shape of the arrow head (by making it wider to improve the legibility). The tail of the arrow should not touch the edge of the sign.

#### D, 3

There are minor differences in shape of arrow heads, arrow tails, proportions of arrows within the sign and in the presence/absence of the white rim. However, the group considers all signs to conform to the Convention.

The group recommended that the symbol in the Convention be modified by enlarging the arrow heads.

#### D. 4

There are minor differences in symbol and in the presence/absence of the white rim. However, the group considers all signs to conform to the Convention. The group recommends to simplify the symbol to enhance its legibility.

The group notes that Vietnam should rectify its input.

#### D, 5

There are differences in symbol (two persons versus one person) and in the presence/absence of the white rim. The group considers that having a one person symbol is not in conformity with the Convention.

The group recommends to simplify the symbol to enhance its legibility. The group agreed to review the pedestrian symbol used across all sign categories. To this end, Kuwait will report on its findings at the next session.

### D, 6

There are minor differences in symbol and in the presence/absence of the white rim. However, the group considers all signs to conform to the Convention.

#### D, 7

The number should be centred and there should be reasonable amount of distance between the digits (applicable to the Convention's sign).

### **D**, 8

The number should be centred and there should be reasonable amount of distance between the digits (applicable to the Convention's sign).

The Group decided that too much space between the digits (ie, Czech Republic) is not in conformity with the Convention. The red oblique bar should be in front of the number and not behind.

#### D, 9

The group noted differences in the illustration of the symbol but conforming with the Convention. The group recommended Czech Republic, Montenegro and Serbia to use wider black lines illustrating the chains on the tyre.

#### D, 10 a, b, c

The group noted that some countries are using different colours (yellow, orange and red) for the symbols of the vehicles carrying dangerous goods. The group recommended that the colour used should be orange (as per the symbol in the Convention) with a black internal rim. The symbol should show the rear part of the truck and be placed in the upper part of the sign.

The group considers that countries using a different symbol of the vehicles carrying dangerous goods than an orange rear part of truck are not in conformity with the Convention.

Some countries placed the truck symbol and the direction sign in a reverse order (e.g. Albania), which the group considers not to be in conformity with the Convention.

Some countries placed the wrong direction sign respectively to D, 10 a (e.g. Belgium, Bosnia and Herzegovina, Lithuania, Montenegro, Poland and Serbia), to D, 10 b (e.g. Belgium, Bosnia and Herzegovina, Italy, Poland and Sweden) and to D, 10 c (e.g. Hungary, Lithuania, Serbia and Sweden).

The Group notes that the symbols used in signs C, 3m and C, 3n of the European Agreement could be used within the D, 10 signs. The group further requested the secretariat to consult with the WP.15 secretariat whether it is desirable and report back at the next session. Should it be desirable and legitimate, the group would propose a revision to the definition and examples of the signs of the D,10 signs in the Convention.

The Group noted that Greece uses the E category sign with the C, 3 n symbol instead of the proper D, 10 sign and arrows instead of the proper D,1 a signs, which is not in conformity with the Convention.

#### D, 11 a and b

The group recommends that the symbols of D, 4 and D,5 should be exactly replicated in the D, 11 sign (e.g. the direction of the bicycle symbol). The actual format of the symbols will be determined at the future session.

The group noted a white horizontal line in the D, 11 b sign separating symbols (e.g. Poland). The group notes that when there is a separation of the path or track for different road users (by physical means or road markings), the sign D, 11 a should place the symbols side by side and separate them by a vertical line through the centre of the sign. If there is no separation of the path or track (by physical means or road markings), the symbols should be placed one above the other without any lines.

The group agreed that using a white horizontal line is not in conformity with the Convention.

Denmark and Kuwait are requested to replace their sign accordingly.

#### E, 1

The group recommended to revise the definition of E sign category (Section E, SPECIAL REGULATIONS SIGNS, General Characteristics and symbols) to say:

"Special regulation signs are usually square or rectangular with a dark coloured ground and a light coloured symbol or inscription, or with a light coloured ground and a dark coloured symbol or inscription."

Note by the secretariat: Applicable to all E signs or to only Special Regulation Signs E,1 a, E,1 b and E, 1,c.

#### E, 1 a

Azerbaijan, Hungary, Montenegro, Moldova, Russian Federation, Ukraine and Uzbekistan wrongly used examples for E, 1 b instead of E, 1 a.

Many countries use road markings (broken line) on this sign. The Group recommended the symbols on this sign not to include road markings ie., broken lines, as the arrows indicate the "lanes".

The group recommends that for the E, 1 a sign the sign D, 7 is used with a white rim.

#### E, 1 b

Albania, Croatia and Greece wrongly used examples for E, 1 a instead of E, 1 b.

Many countries use road markings (broken line) on this sign. The Group recommended the symbols on this sign not to include road markings ie., broken lines as the arrows indicate the "lanes".

The group recommends that for the E, 1 b sign the sign D, 7 is used with a white rim.

### E, 1 c

Azerbaijan used a wrong example for E,1 c sign (truck entry prohibition sign instead of speed limit sign).

The group recommends that the E, 1 c sign is improved by placing the sign C, 14 on the arrows and adding a white rim.

#### E, 2 a (Note: TENTATIVE)

Azerbaijan, Belgium, Croatia, Latvia, Luxembourg, Montenegro and Ukraine wrongly used examples for E, 2 a and the group requested the countries to move these signs to the non-Convention section of the Road Signs Management System.

Many countries use road markings (broken or continuous line) on this sign. The Group recommended the symbols on this sign not to include road markings as the arrows indicate the "lanes".

#### E, 2 b (Note: TENTATIVE)

Belgium, Croatia, Finland, Latvia, Montenegro, Poland and Ukraine wrongly used examples for E, 2 b and the group requested the countries to move these signs to the non-Convention section of the Road Signs Management System.

Many countries use road markings (broken or continuous line) on this sign. The Group recommended the symbols on this sign not to include road markings as the arrows indicate the "lanes".

The Group noted a spelling mistake in Article 26 bis paragraph 2. Second sentence should read "The sign indicating such a  $\underline{\text{lane}}$  ...."