

# Economic and Social Council

Distr. GENERAL

TRANS/WP.1/1999/9 25 January 1999

ENGLISH Original: FRENCH

### ECONOMIC COMMISSION FOR EUROPE

INLAND TRANSPORT COMMITTEE

Working Party on Road Traffic Safety
(Thirty-second session, 13-16 April 1999,
agenda item 2 (d))

#### SIGNS FOR ROUNDABOUTS

#### Transmitted by the Government of Germany

The WP.1 Working Party at its thirty-first session decided to continue the discussion on the reorganization of the rules governing roundabouts. Pursuant to the mandate referred to in document TRANS/WP.1/62, paragraph 24, the representative of the Government of Germany presents as an annex alternative proposals which take existing road signs and legal reflections of a general nature into account.

The proposals deliberately do not include advance warning signs, nor do they take into account any technical variants of roundabouts. These questions should be the subject of additional considerations, if required.

#### 1. Preliminary comments

The complexity and disparity of signs for roundabouts have given rise to a wide-ranging discussion to find a simple, uniform and legally unquestionable solution. Several approaches exist to date which may be divided between proposals for amending the Convention on Road Signs and Signals and proposals for amending the Convention on Road Traffic. Since road signs take precedence over general rules it has been necessary to begin by discussing the first-mentioned proposals, for which purpose document TRANS/SC.1/WP.1/1998/6, <u>inter alia</u>, was used as a basis. The WP.1 Working Party has not, however, kept the proposal to introduce a new sign combining signs A,22 and B,1, nor

GE.99-20136 (E)

TRANS/WP.1/1999/9 page 2

the proposal to expand sign D,3 by associating the notion of "priority in the roundabout" with it. It was agreed not to amend the Convention on Road Signs and Signals and to concentrate efforts on the amendments to be made to the Convention on Road Traffic.

#### 2. Legal relevance and economy of regulations

We should begin by recalling that this is a question of regulating how two actors react to each other, one in the roundabout and the other entering it. This proves relatively simple if the instruction to the user makes use of the same mechanisms of notification. This makes it quite easy to find an opposite for any given road sign. However, difficulties may arise if the obligations and prohibitions come from different regulatory documents which furthermore use different expressions, e.g., the Convention on Road Traffic which comprises general requirements and the Convention on Road Signs and Signals which defines road signs.

The behaviour of drivers <u>in the roundabout</u> is regulated in three ways by the Contracting Parties:

(a) By a specific road sign;

An additional sign confirms the priority of the driver in the roundabout; in accordance with current practice, in most cases it is the opposite of the mandatory sign indicating that the driver entering the roundabout should give way.

Some milieux, however, claim that the number of signs introduced should be kept to a minimum. According to the argument adopted, the result may be obtained just as easily by a general rule, thus economizing on the confirmatory sign. All in all, this is a question of general strategy.

(b) No specific road sign;

Legal reservations must be made on this point. For the driver in the roundabout, the general rule of priority to the right remains valid. As a result the road sign at the approach to the roundabout misleads the driver entering the roundabout in believing that the driver in the roundabout has priority, which is absolutely not the case. This solution may be accepted for practical reasons, but for a transitional period at most.

(c) By a specific requirement;

Priority is given to the roundabout by means of a specific requirement; in certain cases, the sign informing the driver entering the roundabout that he must give way is the factor constituting the requirement.

In order to inform the driver <u>approaching</u> the roundabout that he must give way use is made of road signs of types B and D. These signs are sufficiently precise although hardly economical. Many people think that a single sign would be sufficient.

These are the legal and economic aspects of the discussion.

#### 3. Rules applicable in the roundabout

#### 3.1. Existing rules defined by the Conventions

At the present time, only the Convention on Road Signs and Signals defines a requirement for roundabouts. Annex 1, Section D of the Convention stipulates:

"Sign D,3, 'COMPULSORY ROUNDABOUT', shall notify drivers that they must comply with the rules concerning roundabouts."

This notification is addressed to drivers entering the roundabout. The Convention on Road Signs and Signals, however, does not make provision for rules defining the rights and obligations applicable to drivers in the roundabout. This provision thus refers to general rules. The Convention on Road Traffic, however, is also silent on the subject and no specific rules govern it. A specific requirement regulating the behaviour of drivers in the roundabout is thus lacking and creates a gap which needs to be filled.

#### 3.2. Proposal by ECMT (TRANS/SC.1/WP.1/R.140/Add.1)

As a first step towards a restructuring of the rules applicable to roundabouts ECMT proposed that the confirmation of priority in the roundabout should be abandoned. It then proposed that an addition should be made to article 18,4 (a) of the Convention on Road Traffic to read, in essence, as follows:

Priority shall be from the right,

"Unless:

(a) road signs or signals indicate otherwise;

(b) in the case of roundabouts, road signs or signals require drivers entering the roundabout to give way or stop even if the sign priority road, or danger warning sign showing the intersection where the driver has priority, is not placed."

#### 3.2.1. Appreciation of the ECMT proposal

The ECMT proposal has the advantage of putting an unequivocal end to the conflict between drivers entering the roundabout and drivers in the roundabout. Insofar as a road sign informs drivers entering the roundabout to give way, the driver in the roundabout has priority even if it is not explicitly indicated by specific signs.

The proposal is also a prudent solution. This is because the Contracting Parties are not all prepared systematically to grant priority in the roundabout.

The solution permits of a double system in that in the future there can be roundabouts where the roundabout itself either has or does not have priority. However, this does not prove very useful since optimum traffic safety will not be possible unless situations which are comparable from the users' standpoint are the subject of identical regulations. The requirements applicable to roundabouts must be homogeneous. It would, however, be possible to consider whether and to what extent the disadvantage of the ECMT proposal could be removed and the proposal itself readapted.

#### 3.3. A road sign indicating a specific system for roundabouts

On the basis of the ECMT proposal it would be possible, for example, to define a type of roundabout which, by its nature, would require priority within the roundabout by the rejection of other regulations. This implies a set of criteria to be defined by the Contracting Parties. In the last instance it would be a question of defining the minimum characteristics for a model type of roundabout which would justify a specific system.

The criteria to be established would be fairly complex. They would certainly include technical parameters and very probably parameters concerning the traffic, particularly the flow of traffic; in the event of doubt, a combination of the two would be used since in the considerations aimed at increasing traffic safety, the two factors - technical design and traffic flow - depend on each other.

These criteria, however, would be of no use to individual users since they are not obvious and would be primarily addressed to the administration to facilitate a standard implementation. Such criteria would thus systematically be the subject of administrative provisions which would only have indirect repercussions on users, i.e. in being implemented in standard form. The user needs obvious, intelligible and easily understood points of reference, particularly as priority is one of the most fundamental requirements. Since the technical design of roundabouts varies very considerably, it cannot always be used as an indication of the presence of a roundabout. This function can only be fulfilled by a road sign.

For the user already in the roundabout, in the absence of other appropriate natural indications, this road sign would only serve, in the context of the Convention on Road Traffic, to indicate the existence of a specific system of priority in roundabouts. It would not in itself constitute such a system.

#### 3.4. Advantages of a road sign indicating the specific rules

Using a road sign to indicate the rules specific to roundabouts would have several advantages: users would be dealing with clear and easily understood rules, directly designed for the purpose and exclusively addressed to users approaching a roundabout.

In addition, this solution

- would make it possible to avoid discussions on the idea of the roundabout; this is not a negligible advantage given the different points of view on the technical design of roundabouts, e.g. the question of the status of mini-roundabouts;
- would give Contracting Parties the possibility of making intersections which they regard as unsuitable for this specific system subject to other regulations. This seems particularly important because, in the context of considerations of utility,

the Contracting Parties could have an interest in taking account of other factors which are not explicitly set out in the specific requirement, such as available space, existing infrastructure, degree to which users have become accustomed to the situation, attitude of the population, role of road construction in the philosophy of road traffic safety.

Of the aspects proposed by ECMT, it would be advisable in any case to keep the idea of a road sign for a specific rule giving priority in the roundabout.

#### 3.5. Road sign D,3 indicating a specific system

According to the circumstances described, the D,3 sign is entirely appropriate for this purpose. Other signs, such as type D,1 signs, used for the purpose by some Contracting Parties, are not suitable since they contain no indications relating to the specific features of roundabouts. They could, however, be used to indicate roundabouts where the local authority does not want priority to be given in the roundabout. The D,3 sign would therefore be the constituent factor of a specifically regulated roundabout. This solution would also have the advantage of considerably reducing the number of road signs to be set up.

It seems unnecessary to provide for a type B sign in addition to the D,3 sign. The sign for the specific regulations for roundabouts is only intended to indicate, in the absence of other appropriate signs, the presence of a roundabout; the type B sign does not contain any similar indication.

#### 3.6. Proposal

In view of the foregoing, it would perhaps be appropriate to simplify two points in the ECMT proposal; firstly, the condition contained in (a), "unless road signs or signals indicate otherwise", could be deleted. Since under article 5 of the Convention on Road Traffic the requirements indicated by road signs take precedence over general rules, the above condition is not essential; the legibility of the requirement, already lessened in some respects, would be improved. In addition, for a specific system not only should a reference be made to sign D,3 but it should be referred to explicitly.

The following is therefore proposed:

The following text should be added to article 18, 4, (a) of the Convention on Road Traffic, immediately after "from the right":

"Unless this roundabout is indicated by the sign D,3, in which case the driver in the roundabout has priority."

#### 4. Rule of behaviour applicable on approaching the roundabout

At the present time, the behaviour of users entering the roundabout is governed solely by road signs, i.e. type D and B signs. It should be studied whether it would not be possible to do away with this duplication of signs; sign D,3 should be the subject of some reflections of principle.

#### 4.1. Sign D,3 indicating mandatory direction

In the Convention on Road Traffic, sign D,3 appears among the mandatory signs. Generally speaking, the sign is interpreted as indicating an obligation like type D,1 signs indicating mandatory direction; this, at least, is what its appearance suggests: sign D,3 similarly carries arrows within a circle on a blue background. Although the "mandatory direction" is not explicitly stated, no one would question this meaning. However, if the authors had intended to assign only this meaning to this sign it would have been more useful and indeed more pertinent to make it a type D,1 sign; but they did not do so and attempted by this means to give it another purpose.

#### 4.2. Sign D,3 with a specific sense

By putting sign D,3 on a level with type D mandatory signs such as D,2 "Pass this side", D,4 "Compulsory cycle track" and D,7 "Compulsory minimum speed", the Convention on Road Signs and Signals attributes a specific feature to it which is intended to go further than the mere obligation to follow the direction prescribed. The Convention does not, however, define this additional function but refers - as mentioned in paragraph 3.1 - to the Convention on Road Traffic. This enables two essential aspects to be brought out:

(a) In order to apply a specific system to roundabouts of any type the authors of the Convention on Road Signs and Signals consider that they cannot abandon the principle whereby a driver entering a roundabout must be notified visibly of any requirement. The Convention thus confirms the need to make a system specific to roundabouts visible by means of a road sign.

(b) The type B sign governing priority introduced by the Contracting Parties for a driver entering the roundabout to ensure that he will respect the priority within the roundabout is only a substitute, which can be explained by the fact that the Convention on Road Traffic does not provide for a specific rule.

Consequently, if the Convention on Road Traffic were to introduce priority in the roundabout, the sign notifying the driver entering the roundabout that he must give way or stop could be abolished.

## 4.3. Proposal concerning signs and signals to be placed at the approaches to roundabouts

The approach to intersections using the system specific to roundabouts is indicated by the D,3 sign. The type B sign may be put up in addition, in particular in places where it has been used previously. The purpose of this sign would be to stress to users the fact that the roundabout has priority, and more particularly to familiarize users with the new regulations over a transitional period.

\_ \_ \_ \_ \_