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Item 3 of the provisional agenda

Cycling infrastructure definitions and standards

Possible modifications to 1968 Convention on Road Signs and Signals

Note by the European Cyclists' Federation and the secretariat

I. Introduction

1. The Group of Experts on cycling infrastructure module (GE.5) recognized in its work on elaborating common definitions for various types of cycling infrastructure that modifications to the provisions of the 1968 Convention on Road Signs and Signals may be desired. GE.5 agreed already to proposing modifications to Articles 23 and 24 of the 1968 Convention on Road Signs and Signals on traffic light signals. This proposal is contained in ECE/TRANS/WP.5/GE.5/2023/1. Moreover, GE.5 noted possible modifications to the Convention regarding (i) signposting and markings for preselection lane for a selected group of road users, (ii) markings for sharrows, and (iii) signposting and marking for advanced stop line/bike box/bike lock and indirect/hook/two-stage turn provision.

2. While GE.5 decided to seek the opinion of the Group of Experts on Road Signs and Signals on the signposting and markings for the three mentioned-above types of infrastructure, at the same time, it requested the secretariat and the European Cyclists' Federation to appraise if the accepted and considered definitions would necessitate making further proposals for additions or modifications to the provisions of the 1968 Convention on Road Signs and Signals.

3. Further to this request, this document provides such an appraisal and makes modification proposals in section II. It further consolidates the proposals on which consultation is held in Section III.

II. Appraisal and proposals for provisions modification

Cycle track/greenway

The agreed definition for cycle track refers to a non-compulsory cycle track. Also, the agreed definition for a greenway refers to a non-compulsory cycle track. At the same time, the 1968 Convention on Road Signs and Signals does not refer to the non-compulsory cycle track. Therefore, it is proposed that a sign for a non-compulsory cycle track is added to the Convention.

It is noted that the Group of Experts on Road Signs and Signals at its twenty second session (Geneva, 3-4 November 2022) agreed on the recommendation for a non-compulsory cycle track and end of non-compulsory cycle track to be introduced in the Convention on Road Signs and Signals, in section E, Special Regulation Signs, as follows:

“Non-compulsory cycle track

E-XX.0 notifies cyclists about entry to a track that is reserved for them, and notifies drivers of other vehicles that they are not entitled to use this track. Cyclists are not required to use this track. The inscription “cycle track” or its equivalent in the national language may be displayed on the sign.”

It prepared the following design for the sign:



“End of non-compulsory cycle track

E-XX.0 notifies cyclists of the end of a non-compulsory cycle track. This sign shall be identical to sign (insert code here) except that it shall be crossed by an oblique red band or, preferably, red parallel lines forming such a band sloping down from right to left. The band can be interrupted when crossing the symbol. If not interrupted, the red band shall be placed over the symbol.

Notwithstanding the provisions of article 6, paragraph 1 of this Convention, this sign may be placed on the reverse side of sign (insert code here) for cyclists coming in from the opposite direction.”

It prepared the following design for the sign:



GE.5 may wish to support this recommendation of the Group of Experts on Road Signs and Signals, including for road sign designs, to the Global Forum for Road Traffic Safety (WP.1).

GE.5 may also suggest that two categories of road users, e.g. cycle and horse riders or pedestrians, could be depicted on the sign, which could be used in situations when the non-compulsory track would be open to use also by other specific road users (horse riders/pedestrians). Such sign could be especially useful for signposting greenways.

Cycle street

The agreed definition for a cycle street refers to signposting section of road which is designated as such. A road sign is therefore necessary for signposting cycle streets and end of cycle streets, and it is proposed that such signs are introduced in the Convention on Road Signs and Signals.

It is noted that the Group of Experts on Road Signs and Signals at its twenty second session agreed on the recommendation for cycle street and end of cycle street to be introduced in the Convention on Road Signs and Signals, in section E, Special Regulation Signs, as follows:

“Cycle street

E-XX.0 notifies cyclists and drivers of other vehicles about entry to a road where special traffic rules apply to enhance the safety of cyclists. The inscription “cycle street” or its equivalent in the national language may be displayed on the sign.”

It prepared the following design for the sign:



“End of cycle street

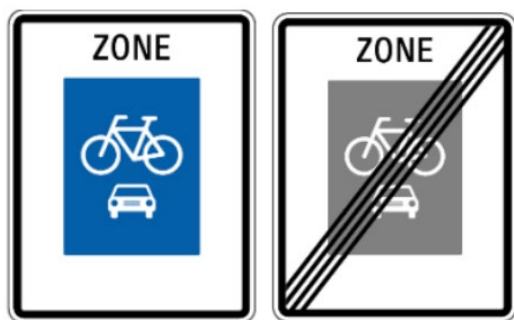
E-XX.0 notifies cyclists and drivers of other vehicles of the end of a cycle street. This sign shall be identical to sign (insert code here) except that it shall be crossed by an oblique red band or, preferably, red parallel lines forming such a band sloping down from right to left. The band can be interrupted when crossing the symbols. If not interrupted, the red band shall be placed over the symbols.

Notwithstanding the provisions of Article 6, paragraph 1 of this Convention, this sign may be placed on the reverse side of sign (insert code here) for drivers coming in from the opposite direction.”

It prepared the following design for the sign:



The Group of Experts on Road Signs and Signals also designed zonal validity signs for cycling street as follows:



GE.5 may wish to support these recommendations of the Group of Experts on Road Signs and Signals, including for road sign designs, to the Global Forum for Road Traffic Safety (WP.1).

Cycle lane/advisory cycle lane

The agreed definitions for both type of regular and advisory cycle lanes refer to longitudinal road markings. At the same time, the Convention on Road Signs and Signals does not distinguish in its Annex 2, Chapter II, Longitudinal markings on the application of these markings for cycle lanes. To this end, it may be proposed to introduce specific provision that would distinguish markings for cycle lane versus advisory cycle lane, as section H, para 28 ter. GE.5 may wish to consider if elaboration of such provision be useful.

Cycle crossing

The agreed definition for cycle crossing refers to signposting and marking cycle crossing. While the markings for cyclist crossing is defined in the Convention on Road Signs and Signals (Annex 2, Chapter III, section E, para 38.), this is not the case for a road sign.

It is noted that the Group of Experts on Road Signs and Signals at its twenty second session agreed on the recommendation for cyclist crossing and pedestrian crossing and cyclists crossing in close proximity and equivalent danger warning signs to be introduced in the Convention on Road Signs and Signals, respectively in section E, Special Regulation Signs and Section A, Danger Warning Signs, as follows:

“Cyclist crossing

E-XX.0 notifies road users of the position of a cyclist crossing. The ground of this sign shall be blue with a white or yellow triangle. The symbol shall be black or dark blue. This symbol shall display a cycle on a cyclist crossing marked by squares or parallelograms. The symbol on this sign may be reversed. The cyclist crossing signs shall be placed at cyclist crossings when the competent authorities consider it advisable.

It prepared the following design for the sign:



“Pedestrian crossing and cyclist crossing in close proximity

E-XX.0 notifies road users of the position of a pedestrian crossing and a cyclist crossing which are in close proximity. The ground of this sign shall be blue with a white or yellow triangle. The symbol shall be black or dark blue. The symbol shall display a pedestrian on a pedestrian crossing marked by broad stripes above a cycle on a cyclist crossing marked by squares or parallelograms. The symbol on this sign may be reversed. This sign shall be placed

where a pedestrian crossing and a cyclist crossing are in close proximity when the competent authorities consider it advisable.

It shall be open to Contracting Parties to use separate pedestrian crossing (EXX.0) and cyclist crossing (EXX.0) signs together.”

It prepared the following design for the sign:



“Cyclist crossing

A-XX.X gives warning of a cyclist crossing.”

It prepared the following design for the sign:



“Pedestrian crossing and cyclist crossing in close proximity

A-XX.X gives warning of a pedestrian crossing located in close proximity to a cyclist crossing.”

It prepared the following design for the sign:



GE.5 may then wish to recognize the practice in many of the countries with significant experience in managing cycle traffic. These countries do not use dedicated road signs to indicate cycle crossings. Location of the crossing is indicated with horizontal markings or colour of the surface, and the right of way is established with regular traffic signs for vehicular traffic. This is in line with the logic of the Convention (a cycle is a vehicle) and allows the traffic administration to clearly sign the cycle crossing with priority depending on the relative significance (role in the network, volume of traffic) of the road and the cycle track crossing it. For example, on a local cycle route cyclist should yield to vehicle travelling on national road when crossing it; on the other hand, on a local road motorised vehicles should yield to cyclists travelling on a cycle highway.

GE.5 might also consider that the Convention already includes a sign “cyclists entering or crossing” which warns other road users about the presence of cyclists.

GE.5 may wish to discuss further the proposal on the cyclist crossing sign and related signs and agree whether or not it wishes to support this specific recommendation from the Group of Experts on Road Signs and Signals, including for road sign designs, to the Global Forum for Road Traffic Safety (WP.1).

Traffic light exemption for cyclists

The considered definition for this type of infrastructure refers to a dedicated panel underneath or next to traffic light signals to indicate in which directions cyclists might go without observing the general traffic light signals. Should this type of infrastructure be agreed by GE.5 and recommended for international use, the design of a dedicated panel might be prepared, and a definition elaborated for inclusion in section H, Additional Panels, in the 1968 Convention on Road Signs and Signals.

Cycle highway

The currently considered definition of the cycle highway does not refer any specific road sign or markings. It suggests that cycle highways are clearly named and own a visual identity (logo). In this case, GE.5 may consider whether it would find it useful to include under Section G, point 3 Road identification signs (see further ECE/TRANS/WP.1/2020/5/Rev.1), a specific proposal for a cycle route identification sign, e.g as follows:

Road identification signs

“ROAD IDENTIFICATION

G, 8 a (G-08.01) identifies the road by its number or name. This sign is an example of a road identification sign having a rectangular shape bearing a road number.

CYCLE ROUTE IDENTIFICATION SIGN

G, 8 b (G-08.02) identifies the cycle route by its number, name or logo. It bears a symbol of a cycle in addition to the name, number or logo to distinguish it from the road identification sign. The symbol of the cycle shall not be placed on this sign if it is to be used on advance direction, direction or confirmatory signs applicable to cyclists only and so bearing already the cycle symbol. The symbol of the cycle may be omitted from this sign if it is to be used on a cycle track. This sign is an example of a cycle route identification sign having a rectangular shape bearing a cycle route number.

An example of the road sign should be developed.

Given the formulation above for the cycle route identification sign, and in particular the references to the advance direction, direction or confirmatory signs applicable to cyclists, it might be useful to propose inclusion of a sign that shows a Convention’s solution to this end.

GE.5 may therefore propose to include such an example for a diagrammatic advance direction sign, as G, 2 d (G-02.4) and a direction sign, as G, 6 c (G-06.3):

DIAGRAMMATIC ADVANCE DIRECTION SIGN FOR CYCLISTS

G, 2 d (G-02.4) notifies of advance directions applicable to cyclists only. This sign is an example of an advance direction sign (intersection).

An example of the road sign should be developed. The proposed solution to indicate the sign’s applicability to cyclists is presented below. The applicability to cyclists is denoted by placing the symbol of a cycle in the upper part of the sign.

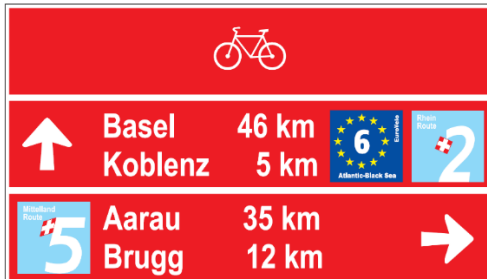


Source: Aleksander Buczyński, ECF.

DIRECTION SIGN FOR THREE DIRECTIONS FOR CYCLISTS

G, 6 c (G-06.3) notifies of directions applicable to cyclists only. This sign is an example of a direction sign showing directions with arrows.

An example of the road sign should be developed. The proposed solution to indicate the sign's applicability to cyclists is presented below. The applicability to cyclists is denoted by placing the symbol of a cycle in the upper part of the sign.



Source: Consolidated Resolution on Road Signs and Signals, UNECE 2010

Also, for consistency reason, and given the reference made to other signs in the formulation for the cycle route identification sign, it is proposed that a rule such as “The signs may also indicate the categories of vehicles to which they apply” included already in section G, item II, Definitions and images, sub-item 2 Direction Signs (ECE/TRANS/WP.1/2020/5/Rev.1), is repeated also under sub-item 1 Advance direction signs and sub-item 5 Confirmatory signs.

In addition, separately to cycle route identification sign, in case, GE.5 would consider any particulars relevant for cycle highway, e.g., a requirement for a relevant width so that overtaking can be done safely, or a requirement for a minimal interaction with motor vehicles or pedestrians to minimise stopping, this approach may suggest elaboration of a specific road sign for this type of infrastructure. Further consideration is thus needed.

III. Proposals for provisions modification in consultation

Lane preselection

It is proposed to include a road sign indicating directions to be followed by specific groups of users such as cyclist. This would require proposing further adjustments to modifications worked out by the Group of Experts on Road Signs and Signals in ECE/TRANS/WP.1/2020/5/Rev.1, e.g. as follows (bold for addition, strikethrough for deletion):

E-03.0 notifies road users about directions to follow for each lane of a multi-lane carriageway at the intersection in order for them to preselect the required lane before the intersection. Lane markings may be included. **This sign may include directions to follow only reserved for specific category of vehicles (e.g., cycles) if they differ from the directions to follow by other vehicles. In this case, the symbol depicting the vehicle category shall be placed on the arrow indicating the direction reserved for it.**

An example of the sign depicting direction reserved for cycle/cyclist should be prepared.

It is also proposed to introduce specific markings for lane preselection for cyclists. To this end, para 39 of Annex 2, Chapter IV of the Convention on Road Signs and Signals could be expanded as follows (bold for addition):

On roads having sufficient traffic lanes to separate vehicles approaching an intersection, the lanes to be used may be indicated by lane selection arrow markings on the surface of the carriageway (diagrams A-39 to A-41). Lane selection arrows may also be used on a one-way road to confirm the direction of traffic. The lane selection arrows should be not less than 2 m (6 ft. 7 in.) long. They may be supplemented by word markings on the carriageway. **The lane selection arrows supplemented by word markings or symbols of category of users/vehicles may be used in addition on the same lane as another lane selection arrow**

to indicate that the lane may be used by the indicated category of users/vehicles differently (diagram A-...)"

An example of a diagram depicting the markings should be developed. In doing so, it should be considered whether only the additional direction or all the directions applicable to the specific user/vehicle are shown from the given lane.

Sharrows

It is proposed to introduce into the Convention on Road Signs and Signals the markings for sharrows in Annex 2. The markings are to indicate a recommended position of cyclist on a carriageway. The relevant para may read: **A symbol of a cycle in combination with two chevrons above [or below] it may be used (diagram ...) to indicate the recommended position of a cyclist on a carriageway.**

An example of a diagram depicting the markings should be developed. In doing so, it should be considered whether the chevrons are put above or below the cycle symbol.

Advanced stop line/bike box/bike lock

It is proposed to include a sign in the Convention on Road Signs and Signals indicating the advanced stop line. It should be further discussed whether this sign should belong to section E or G of the Convention. This classification should depend on whether this sign should be associated with specific regulation to be observed, and so it should belong to section E, or it should only indicate the presence of this type of infrastructure, thus G section sign.

An example of the road sign should be developed.

It is also proposed to introduce into the Convention the markings for advanced stop line in Annex 2. The markings are to indicate an area on an entry arm of an intersection that reserves space for cyclists and either makes it easier for a cyclist to perform a turn manoeuvre or increase the cyclists' visibility for vehicle drivers. The relevant para may read: **Continuous lines may indicate the area with a symbol of a cycle placed inside it on an entry arm of an intersection across one or several lanes (diagram ...) to indicate that area is reserved for cyclists to stop at the intersection at the red light. This area must not be used for stopping by other vehicles than cycles.**

An example of a diagram depicting the markings should be developed.

Indirect/hook/two-stage turn provision

It is proposed to include in the Convention on Road Signs and Signals a sign indicating the two-stage turn provision.

An example of the road sign should be developed.

It should be further considered whether developing markings is necessary for this type of infrastructure.
