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#### **Economic Commission for Europe**

Inland Transport Committee

#### **Global Forum for Road Traffic Safety**

Group of Experts on Road Signs and Signals Sixteenth session Geneva, 4-5 September 2018 Item 2 (a) of the provisional agenda Program of Work: Taking Stock of National Legislation: Sign to communicate the need to crash through gates (barriers) by a vehicle when trapped at a level crossing

# Sign to communicate the need to crash through gates (barriers) by a vehicle when trapped at a level crossing

#### Submitted by the Government of Italy

1. This document aims at contributing to improving road safety at level crossing, by proposing a crash through the gates (barriers) sign, in an emergency situation should vehicles become trapped at level crossing.

2. The proposed pictogram follows the approach of emergency exit sign (G, 23), as decided by the Group of Experts at its Fifteenth Session.

#### I. Background

1. Level crossing areas are not an ordinary road intersection, they are areas where two different transport modes, namely road and rail infrastructure, interact.

2. Although there are appropriate provisions in the Convention and in the national Traffic Codes, there still is lack of knowledge of appropriate remedial action in case of vehicle entrapment between the LC gates.

3. Undoubtedly investment in infrastructure (bridges and underpasses) as well as deployment of digital technology could significantly improve safety at level crossing. Railways agencies, both worldwide and at EU level, are making significant progress in this direction with a view to minimizing the number of accidents. The Italian national railway infrastructure manager is also developing -at the same time- advanced solutions in its safety improvement program.

4. In order to address this critical issue with appropriate measures at UNECE level, the Global Forum for Road Traffic Safety together with its Groups of Experts1 2 decided to address additional safety measures which could usefully be implemented at level crossing.

5. To this end, at the fifteenth session of the Group of Experts for Road Signs and Signals, Italy3 express the importance to working on a specific sign catering for an emergency situation in which a driver may find his vehicle trapped in between level crossing barriers. It was therefore agreed that a sign "crash through gates" should have been developed and eventual proposed pictogram should follow the approach of emergency exit sign (G,23).

<sup>&</sup>lt;sup>1</sup> Group of Experts for improving road safety at level Crossing; Group of Experts on Road Signs and Signals;

<sup>2</sup> Assessment of safety at level crossings in UNECE member countries and other selected countries and strategic framework for improving safety at level crossings "ECE/TRANS/WP1/2017/4

<sup>3</sup> http://www.unece.org/fileadmin/DAM/trans/doc/2018/wp1/ECE-TRANS-WP1-GE2-INF-May-2018-1e.pdf

### **II.** Proposal for a sign to communicate the need to crash through gates barriers by a vehicle when trapped at a level crossing

The sign as shown below<sup>4</sup>, to be purposefully validated by a panel (language/s to be used will be decided at domestic level) referring to the prescriptive emergency maneuver (IN CASE OF ENTRAPMENT BRAKE THE BARRIERS) has taken into account several operational factors (railway –road visibility, compliance with existing regulations for the affected infrastructures) as well as the visual, cognitive behavioral aspects of road users.



## EN CAS D'IMMOBILISATION BRISER LES BARRIÈRES

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# IN CASE OF ENTRAPMENT BREAK THE BARRIERS

<sup>4</sup> Sign resulting from a technical / behavioral assessment elaborated by the RFI, Rete Ferroviaria Italiana, Technical Department, "Operational and Safety rules" Unit, Gruppo Ferrovie dello Stato Italiane.