"Break barrier" sign proposal for rail/road level crossings

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Introduction

After decisions taken by the Expert Group at the 15th session, the sign proposal presented at the 9th session was developed further, results are provided in the following.

1 General characteristics

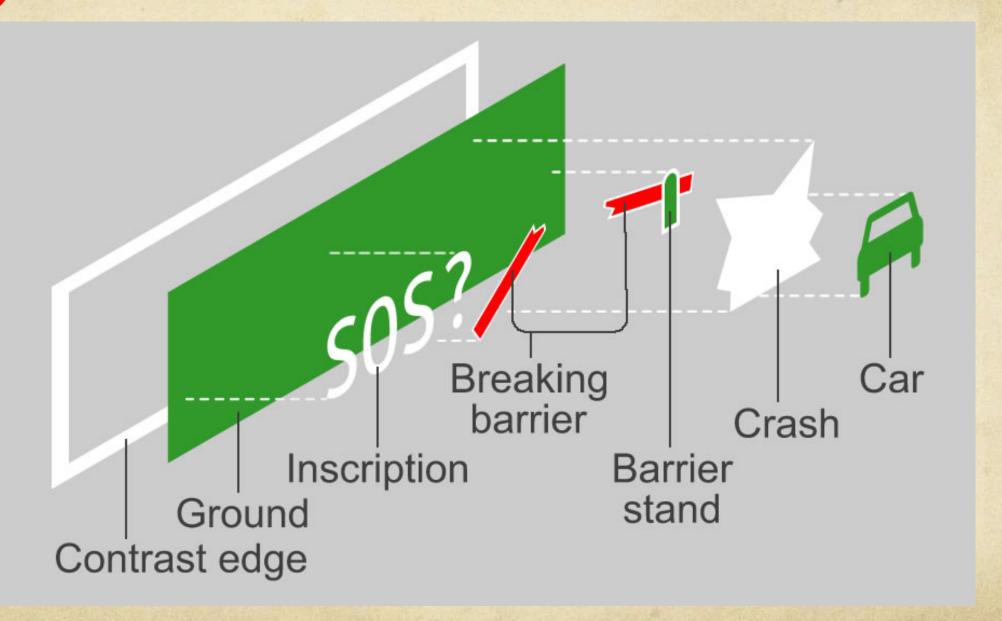
- Sign is of the emergency escape category, therefore of green main colour
- Horizontal rectangular shape to fit on barrier without protruding
- Distinctive white contrast rim for maximum conspicuity
- Design for maximum discriminability (legibility).
 Prepared for use on screen displays.

2 Comprehension

Number of graphical components kept low for easy understanding and learning.

Almost all components are familiar to road user, supporting comprehension of sign's meaning.

Graphical components



3 Graphical components

"SOS": Known from facilities to provide support in case of need or danger. Typeface scientifically tested for legibility.



"?": To further emphasize the meaning, an question mark is added ("Are you in need to escape? - then break gate")



3 Graphical components

"Crash": Known from indications on emergency escape windows that need to be broken to pass through.

"Breaking barrier": Entirely red design chosen. Other designs of 2 alternating colours possible. Element "Barrier stand" of lesser importance, therefore rendered in outlines



"Car": Known from various signs in the convention.

4 Dimension

Every component is calculable for discriminability distance. Drivers of eyesight of visus 0,73 clearly distinguish the smallest graphical detail (SGD) of importance (in "inscription" an "car") from a distance of 8,36 m, leading to a sign dimension of 232,5 mm (max.) x 75 mm.

Since obtaining a driving permit requires a lower eyesight (visus 0,5 both eyes added when glasses are worn), a greater dimension should be chosen:

At 465 mm (max.) x 150 mm, SGD is discriminated from 16,72 m (visus 0,73).

8 of 11

4

Decisions to be taken by the Expert Group

- 1) Chose sign model A) B) or C)
- 2) If B) or C) is chosen, decide if inscription should be abandoned 10 years after introduction (reverting to A)
- 3) Chose design of component "breaking gate": mono coloured, as in A) B) or C), or two coloured as in D).

Comment: The Convention should state that the sign's dimension should be 15 cm in height.



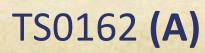
TS0164 (C)





TS0164 (B)

TS0164 (D)





Thank you!

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