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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB 5768.6-2017

Replacing GB 5768-1999

**Road traffic signs and markings - Part 6: Highway-railway grade
crossing**

道路交通标志和标线 第6部分：铁路道口

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Foreword

All technical contents of this part of GB 5768 are mandatory. GB 5768 "Road traffic signs and markings" is divided into eight parts. - Part 1. General; - Part 2. Road traffic signs; - Part 3. Road traffic markings; - Part 4. Work zone; - Part 5. Speed limit; - Part 6. Highway railway grade crossing; - Part 7. Non-motorized vehicles and pedestrians; - Part 8. School area. This part is the part 6 of GB 5768. This part was drafted in accordance with the rules given in GB/T 1.1-2009. This part replaces the setting part of the traffic signs and markings of the railway-highway grade crossings of GB 5768-1999 "Road traffic signs and markings". As compared with the corresponding parts of GB 5768-1999, the main changes in this part are as follows: - CHANGE the "Marking for near railway grade crossing marking" into "marking for railway-highway grade crossing"; ADD the dimension of the "railway" marking and grade crossing when the lane width is less than or equal to 3 m (see clause 3.3); - ADD the requirements for the setting of the markings for railway-highway grade crossings (see clauses 3 and 4); - ADD the examples for the arrangement of the traffic signs and marking for railway-highway grade crossings (see Appendix A). From the date of implementation of this part, the traffic signs and markings of newly-built or currently-implemented railway-highway grade crossings shall be implemented in accordance with the provisions of this part. The traffic signs and markings that have been set up according to the old standards shall be gradually replaced during the period of use. This part was proposed by the Ministry of Transport of the People's Republic of China, the Ministry of Public Security of the People's Republic of China. This part shall be under the jurisdiction of the National Traffic Engineering Facilities (Highway) Standardization Technical Committee (SAC/TC 223). Drafting organization of this part. Highway Science Research Institute of the Ministry of Transport. The main drafters of this part. Chen Yu, Tang Zhengzheng, He Yong, Gao Hailong, Hou Dezao, Jiang Ming, Zhang Fan, Wang Dan, Guo Yan. This standard replaces the standard previously issued as follows: - GB 5768-1986, GB 5768-1999. Road traffic signs and markings - Part 6. Highway-railway grade crossing

1 Scope

GB 5768.6-2017 is the Chinese national standard on road traffic signs and markings - part 6: highway-railway grade crossing, in the field of services and company organization. It carries no /T suffix, which in the Chinese system means compliance is mandatory: a product or a practice within its scope has to meet it to be lawfully made, sold or carried out in China. It was issued on 31 July 2017 by the General Administration of Quality Supervision, Inspection and Quarantine of the People's Republic of China; Standardization Administration of China, and has been in force since 1 February 2018. Classification: ICS 03.220.20, CCS R80. This page is published from the official record of the standard held by the Chinese standards administration: the identification, the dates, the classification and the issuing body are taken from there. The clause text, the tables and the numeric limits are in the document itself, which is delivered complete in English translation.

This part of GB 5768 specifies the requirements for the setting of road traffic signs and markings for the road segments nearby the railway-highway grade crossings. This part applies to the setting of the road traffic signs and markings close to the railway-highway grade crossings for all kinds of roads including highway, urban roads, roads which is under the jurisdiction of the unit but allows social vehicles to pass. The setting of the road traffic signs and markings close to the railway-highway grade crossing where motor vehicles pass can make reference to this part.

2 Normative references

The following documents are essential to the application of this document. For the dated documents, only the versions with the dates indicated are applicable to this document; for the undated documents, only the latest version (including all the amendments) are applicable to this standard.

GB 5768.2 Road traffic signs and markings - Part 2. Road traffic signs

GB 5768.3-2009 Road traffic signs and markings - Part 3. Road traffic markings

3 General provisions

3.1 The color, shape, size and icon of the road traffic sign on the railway- highway grade crossing shall comply with the relevant provisions of GB 5768.2; the color, shape, size and icon of the road traffic marking on the railway-highway grade crossing shall comply with the relevant provisions of GB 5768.3.

3.2 If a multi-lane railway intersects the road, it shall set a fork symbol above the sign of the attended railway-highway grade crossing or the sign of the unattended railway-highway grade crossing.

3.3 The size of the marking of railway-highway grade crossing shall comply with the provisions of clause

6.4 of GB 5768.3-2009, as shown in Figure 1. When the lane width is less than or equal to 3 m, the dimensions of the "railway" label and cross line can use the value in brackets in Figure 1. Unit is centimeters Figure 1 -- Marking of railway-highway grade crossing

3.4 When setting up the marking of railway-highway grade crossing for multi-lane roads, each lane of motor vehicle shall be provided with a set of markings of railway-highway grade crossing.

3.5 When there are two lanes near the railway-highway grade crossing, it shall provide the median line which prohibits crossing the lane of the opposite direction. When there are multi-lanes, it shall also set the median line which prohibits crossing the lanes of the same direction. Except for the intensive segments of the urban road intersections, calculated from the stop-line, the length of the median line which prohibits crossing the lane of opposite direction or the median line which prohibits crossing the lane of same direction is not less than 30 m. The example is as shown in Figure 2 and Figure 3. Figure 2 -- Example of median line which prohibits crossing the lane of opposite direction Lane's centreline Lane's edge-line Figure 3 -- Example of median line which prohibits crossing the lane of same direction

3.6 If it needs to set the cross hatch, it shall be set behind the stop line and cover the railway, as shown in Figure 4. The highway-railway grade crossing which has a small traffic volume and a small range may use the simplified cross hatch. Figure 4 -- Example for setting cross hatch at railway-highway grade crossing

4.1 Unattended railway-highway grade crossing

4.1.1 For unattended railway-highway grade crossings that are not signal-controlled and have no fencing bar, at the position where the driver of motor vehicle can view the motor vehicles at the lateral line-of-sight as defined in Table 1 at the point 50 m away from the crossing, it shall set the deceleration & give-way sign. Otherwise, it shall set the stop & give-way sign. The schematics of the lateral line-of-sight is as shown in Figure 5. Table 1 -- Lateral line-of-sight of railway-highway grade crossing Figure 5 -- Schematics of lateral line-of-sight of railway-highway grade crossing

4.1.2 When the road conditions permit, it shall set the marking of railway-highway grade crossing in front the railway-highway grade crossing.

4.1.3 It shall set the unattended railway-highway grade crossing sign. For the Speed limit of train / (km/h) Lateral line-of-sight / m

Note. When the speed limit of train exceeds 40 km/h, it shall determine the lateral line-of-sight through calculation. Lateral line-of-sight Lateral line-of-sight road segments

which have a design speed of 60 km/h and above, the distance between the unattended railway-highway grade crossing sign and the parking line shall be selected according to the pre-position distance of the warning sign in GB 5768.2. For the road segments which have a design speed of 60 km/h below, the distance between the unattended railway-highway grade crossing sign and the parking line should be 30 m. For the railway-highway grade crossings at the intensive road segments at the urban road crossing, the unattended railway-highway grade crossing sign may be set at the crossing upstream of the railway-highway grade crossing, as shown in Appendix A.

4.1.4 It shall provide a speed limit sign about 30 m upstream of the railway- highway grade crossing, the speed limit value shall be 30 km/h; the speed limit shall be released beyond 5 m downstream. At the railway-highway grade crossing of the intensive segment of the urban road crossing, the speed limit sign can be set at the crossing upstream of the railway-highway grade crossing.

4.1.5 When the railway-highway grade crossing marking is not set, it shall comply with the following provisions.

- a) Set a stop line 5 m from the intersection of the crossing.
- b) Set the slash symbol under the unattended railway-highway grade crossing sign. Totally set three slash symbols. The first slash symbol, the second slash symbol, the third slash symbol shall be set at positions 50 m, 100 m, and 150 m from the railway-highway grade crossing, respectively.
- c) It may not set the slash symbol intensive segments at the urban road crossing, as shown in Appendix A.

4.2 Attended railway-highway grade crossing

4.2.1 For the attended railway-highway grade crossings which are hard to view by the driver, it should set the attended railway-highway grade crossing sign. For the road segments which have a design speed of 60 km/h and above, the distance between the attended railway-highway grade crossing sign and the stop line shall be selected according to the pre-position distance of the warning sign in GB 5768.2. For the road segments which have a design speed of 60 km/h below, the distance between the attended railway-highway grade crossing sign and the stop line should be 30 m. For the railway-highway grade crossings at the intensive road segments at the urban road crossing, the attended railway-highway grade crossing sign may be set at the crossing upstream of the railway- highway grade crossing, as shown in Appendix A.

4.2.2 When the road conditions permit, it should set the marking of railway- highway grade crossing in front of the railway-highway grade crossing.

4.2.3 The setting of the speed limit sign is the same as that specified in 4.1.4.