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

GB/T 32588.1-2016

**Railway applications -- Automated urban guided transport
(AUGT) -- Safety requirements -- Part 1: General
(English Translation)**

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Foreword

GB/T 32588 "rail traffic automation of urban rail transit (AUGT) safety requirements" is divided into two parts.

- Part 1. General;

Part 2. System level hazard analysis.

This part is part 1 of GB/T 32588.

This part is drafted in accordance with the rules given in GB/T 1.1-2009.

This section uses the re-drafting method to amend IEC 62267.:2009 "Rail Transit Automation for Urban Rail Transit (AUGT) Safety Claim".

This section has more structural changes compared to IEC 62267.:2009, with the addition of sub-section numbers to the suspension section, Appendix B A comparison of the changes to this chapter and IEC 62267.:2009 is made.

This section has technical differences compared to IEC 62267.:2009, and the terms involved in these differences have passed through the margin in its outer margin the vertical single line (|) is identified, as follows.

--- on the normative reference documents, this part has made a technical differences in the adjustment to meet China's technical conditions, adjust the situation the situation is reflected in Chapter 2, "Normative references", as follows.

Replace GB 62825 with GB/T 28809;

Replace GB 62290-1 with GB/T 32590.1.

--- delete the "pet" items, due to the current domestic pets are not allowed to avoid misleading (see 6.2.2);

--- to modify the site staff and OCC operating staff contact requirements, to accept the platform staff and vehicle control room operation Personnel contact, due to the operation of the control room staff directly responsible for the management of the site staff (see 8.3.2.1);

- Increased check-in requirements to improve safety (see 8.4.6.2).

The editorial changes made in this section are.

--- modified IEC 62267.:2009 original title

"Railway applications-Automated urban guided transport (AUGT) -Safety requirements ", Part 2 has been added to IEC 62267;

--- modified the normative reference document IEC 62278, to determine the version number, and with the same standard GB/T 21562-2008 generation for the specific terms (see 8.2.4.7);

- the consideration of cultural factors in other countries and regions was removed from the implementation factor, which could be applied to the country (see Chapter 1, paragraph 5);

- the suspension position of the original paragraph 8.2.1 has been modified (see 8.3.2.1);

- Added Appendix B description of the chapter number comparison list;

Revised some of the references in the literature, using the relevant national standards.

This section is made by the National Railway Administration.

This part is headed by the National Technical Committee for Standardization of Electrical Equipment and Systems (SAC/TC278).

This part of the main drafting unit. Shenzhen Metro Group Co., Ltd.

This part participates in the drafting unit. China Railway Fifth Survey and Design Institute Group Co., Ltd., Beijing Subway Operation Co., Ltd., CSR Zhuzhou Electric Locomotive Research Institute Co., Ltd., Beijing CSR Times Information Technology Co., Ltd.

This part of the main drafters. Long Yucai, Pan Jianying.

This part participates in the drafters. Wang Jijian, Zhu Hengguo, Zeng Xianjun, Dai Xiaofeng.

Introduction

This section provides general safety requirements for transport management organizations to assist the relevant organizations in automating their respective management the Urban Rail Transit (AUGT) defines the appropriate safety requirements rules, which are divided into two parts.

This section gives basic requirements based on the experience gained by AUGT, which has been operating in the world. Can be in accordance with GB/T 21562-2008 into the Line system risk analysis, combined with the local conditions, the risk acceptance to determine the specific AUGT project safety requirements.

Based on the diversity of the AUGT system technical solutions and the operating environment, the requirements of this part shall be considered as a minimum requirement. Every part of this section the full requirements are the minimum requirements for using this measure to control the associated risks. For risk analysis, consider certain circumstances, may modify the safety requirements of the selected safety measures, any technical program

or special geographical, environmental, social, legal conditions may also be Resulting in the addition of special safety requirements, it is necessary to carry out risk assessment of modified or new security requirements.

So this section does not and can not be specific, can completely eliminate the risk of the method. This part is only for the use of AUGT system in the generation for the traditional orbital traffic system by the officers and men of the functional functions of the automatic function or other measures, lists the foreseeable risks. Headquarters the new AUGT project is given a reference risk so that the risk analysis is more comprehensive.

In addition to the general hazards, this section also gives a risk analysis, can be widely used in automated urban rail transit system Security measures.

This section is not intended to cover all of the relevant risks identified by the operating AUGT system. This section can not be described and described specifically all possible security requirements for the AUGT project.

This section does not provide for the establishment of safety measures for each identified hazard situation, since the risk of some hazard is assessed as Acceptable, do not take security measures. According to the provisions of GB/T 21562-2008, tolerance to each risk in the AUGT system the need for specific safety measures shall be determined by the competent department of communications and the safety authority in accordance with the specific risk tolerance and legal requirements.

Rail transit automation of urban rail transit (AUGT) safety requirements - Part 1. General

1 Scope

This part of GB/T 32588 specifies the system safety requirements applicable to the use of unmanned or unmanned Pre - traction trains of various types of urban rail transit systems.

When equipped with officers and crews, the corresponding staff is responsible for part or all of the train operating functions according to the degree of automation of the system (see Table 1) Section and 3.1 on the definition of automation level). This section sets out the necessary safety requirements for the absence of officers and crews (see Table 1).

This part of the requirements applies only to the systems defined in Chapter 5, the Unmanned Driving (DTO) model defined in 3.1.4, and the unmanned as defined in 3.1.20 Intervention (UTO) mode (see Table 1, shaded).

Table 1 Automation level

Train operation basic function requirements	Artificial train running	Non-automated Train running	semi-automatic Train running	unmanned Train running	no intervention Train running
GOA0	GOA1	GOA2	GOA3	GOA4	Guarantee the train Running safe to ensure the safety of the road sqrt (turnout control) by the system instruction /Control to achieve)
System Safety					