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

GB/T 31455.1-2025

Replacing GB/T 31455.1-2015

**Intelligent system of bus rapid transit (BRT) - Part 1: General
technical requirements**

快速公交（BRT）智能系统 第1部分：总体技术要求

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Foreword

This document complies with the provisions of GB/T 1.1-2020 "Standardization Work Guidelines Part

1.Structure and Drafting Rules of Standardization Documents". Drafting. This document is Part 1 of GB/T 31455 "Intelligent Systems for Bus Rapid Transit (BRT)". GB/T 31455 has been published with the following... part.

- 1.General Technical Requirements;
- 2.Technical Requirements for the Dispatch Center System;
- 3.Technical Requirements for Vehicle-Mounted Intelligent Terminals and Peripheral Equipment;
- 4.Technical Requirements for Station Platform Control Systems and Peripheral Equipment;
- 5.Communication Data Interface Specification between Dispatch Center and Vehicle-Mounted Intelligent Terminal;
- 6.Communication Data Interface Specification between Dispatch Center and Station Platform Control System;
- 7.Specification for Communication Data Interface between Bus Priority Equipment and Traffic Signal Controllers This document supersedes GB/T 31455.1-2015 "Intelligent Systems for Bus Rapid Transit (BRT) - Part

1.General Technical Requirements", and is consistent with... Compared with GB/T 31455.1-2015, apart from structural adjustments and editorial changes, the main technical changes are as follows:

- a) The following terms have been removed. "road sign," "front road sign," "rear road sign," "side road sign," "coin-operated machine," "electronic fare collection machine," "stop

announcement display screen," and "public transportation priority." "Public transport priority equipment", "Public transport priority equipment onboard unit", "Public transport priority equipment roadside unit", "Public transport route", "Vehicle" "Station", "Starting Station", "Ending Station", "Starting and Ending Stations", "First Station", "Last Station", "Stations Along the Route", "Upbound", "Downbound", "Upbound and Downbound Lines", "Circular", "Circular" "Route", "Station Number", "Station Number", "Train Number", "Abandoned Train", "Stop Operation", "Electronic Station Sign", "Vehicle Location Display" "Signboard", "First Bus Time", "Last Bus Time", "Early", "Late", "Station Delay", "Interchange of Buses", "Public Transportation Parking", "Station", "Platform" Terms and definitions for "data element", "data frame", "sequence", "message frame", "data item", "session", "in-vehicle information terminal", and "transfer". (See 3.2-3.5, 3.7-3.9, 3.12, 3.15-3.36, 3.38-3.53, 3.56, and

3.58 in the 2015 edition);

b) Added terms and definitions for "vehicle-road cooperative equipment," "vehicle-mounted unit of vehicle-road cooperative equipment," and "roadside unit of vehicle-road cooperative equipment" (see...). 3.7~3.9);

c) The terms and definitions for "passenger counter," "dispatch center," and "station platform control system" have been changed (see 3.4, 3.11, and 3.13). (2015 editions 3.11, 3.54, 3.57)

1 Scope

GB/T 31455.1-2025 is the Chinese national standard covering the intelligent system of a BRT line as a whole - the dispatch centre, the vehicles, the stations and the signal priority, and how the subsystems relate to one another. Part 1 of the series. It replaces GB/T 31455.1-2015, one of four parts revised together. It was issued on 31 December 2025 and has been in force since 1 July 2026, replacing GB/T 31455.1-2015. The document is under the responsibility of the Standardization Administration of China. This page is published from the official record of the 2025 edition; the clause text of a standard this recent is not yet in circulation, and the figures, limits and tables it contains are those of the document itself, delivered in full with the English translation.

This document specifies the overall technical requirements for intelligent bus rapid transit systems, including the physical framework and business framework, as well as the internal requirements of each component. Requirements for tolerance and relationships. This document applies to the construction and management of intelligent bus rapid transit systems.

2 Normative references

The contents of the following documents, through normative references within the text,

constitute essential provisions of this document. Dated citations are not included. For references to documents, only the version corresponding to that date applies to this document; for undated references, the latest version (including all amendments) applies. This document.

GB/T 31455.2 Intelligent Bus Rapid Transit (BRT) Systems - Part

3 Terms and Definitions

The terms and definitions defined in GB/T 32852.1 and GB/T 32852.2, as well as the following terms and definitions, apply to this document.

3.1 Effectively integrating and utilizing information technology, data transmission technology, electronic sensing technology, electronic control technology, and computer processing technology. A real-time, accurate, and efficient integrated intelligent system built for Bus Rapid Transit.

3.2 Attendance devices installed on public buses and trolleybuses for drivers to sign in and out.

3.3 Media Player Devices installed on public buses and trolleybuses for playing audio and video information.