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

GB/T 30290.1-2025

Replacing GB/T 30290.1-2013

**BeiDou satellite positioning vehicle information service system
(VISS) - Part 1: Function description**

北斗卫星定位车辆信息服务系统 第1部分：功能描述

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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 30290 "BeiDou Satellite Positioning Vehicle Information Service System". GB/T 30290 has been published. The following section.

- 1.Functional Description;
- 2.Information Exchange Protocol between Vehicle Terminal and Service Center;
- 3.Information Security Specifications;
- 4.Performance Requirements and Test Methods for Vehicle-Mounted Information Terminals;
- 5.Recorder Performance Requirements and Test Methods;

6. Performance requirements and test methods for emergency rescue terminals. This document replaces GB/T 30290.1-2013 "Satellite Positioning Vehicle Information Service System Part

1. Functional Description", and is consistent with... Compared with GB/T 30290.1-2013, apart from structural adjustments and editorial changes, the main technical changes are as follows:

a) The terms "vehicle information service system", "vehicle information service system communication network", "vehicle terminal", and "vehicle terminal communication unit" have been changed. Definitions of "Yuan", "Satellite Positioning Unit", and "Vehicle Terminal Main Control Unit" (see 3.1, 3.4, 3.5, 3.7, 3.8, 3.9, 2013 edition) 3.1, 3.6, 3.7, 3.8, 3.9, 3.10);

b) Added the terms "Vehicle Information Service Center", "Vehicle Information Center Gateway", "User Application Service", and "On-board Terminal Bus Control Sheet". "Yuan", "Vehicle Terminal Security and Confidentiality Module", "Non-volatile Memory", "Power Supply Unit" and their definitions (see 3.2, 3.3, 3.6, 3.10,...). 3.11, 3.12, 3.13);

c) The terms "Information Service Center," "Vehicle Information Service System Center," "Information Service Center Gateway," and "Information Service Center Computing" have been removed. "Computer system", "Vehicle terminal encryption/decryption unit", "Location data", "Location information", "Refresh method", "Time interval", "Timing method" "Fixed Distance Mode", "Fixed Position Mode", "Fixed Time Mode", "Fixed Speed Mode", "Fixed State Mode", "Fixed Time Slot Mode", "System Functions" "System services" and their definitions (see sections 3.2, 3.3, 3.4, 3.5, 3.11, 3.12, 3.13, 3.14, 3.15, 3.16, and 3.17 of the 2013 edition). (3.18, 3.19, 3.20, 3.21, 3.22, 3.23, 3.24)

d) The abbreviations ISCSCE, SPS, and VTSCE (see

1 Scope

GB/T 30290.1-2025 is the Chinese national standard covering what the vehicle tracking service system does - the positioning and reporting, the dispatching and the geofencing, the driver behaviour and the alarms, the historical playback, and the roles of terminal, service centre and user. Part 1 of the series. It replaces GB/T 30290.1-2013, in force from 1 February 2026. Issued on 5 October 2025, it has been in force since 1 February 2026, replacing GB/T 30290.1-2013.

This document establishes the architecture of the BeiDou satellite positioning vehicle information service system and provides a functional description. This document applies to applications using BeiDou satellite positioning technology, employing public or dedicated mobile communication networks, and possessing vehicle information. The design, construction, and application of the service center's information processing system. This

involves utilizing other positioning technologies, employing other communication networks, and possessing vehicle information. The design, construction, and application of the service center's information processing system should refer to this guide.

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 30290.2 Beidou Satellite Positioning Vehicle Information Service System - Part

3 Terms and Definitions

The following terms and definitions apply to this document.

3.1 Based on providing vehicle location and information, it offers remote information services to users such as vehicle drivers, passengers, and managers. Functions include a comprehensive information system for managing and controlling vehicles within its service area.

3.2 The functional entity that provides information processing and human-machine service interfaces for vehicles and users is the vehicle and user service entity in the vehicle information service system. The management center and information processing center.

3.3 The entity that connects the vehicle information service center with external systems in the vehicle information service system.

Note. The vehicle information center gateway provides application services for vehicles and users, and also provides secure routing and forwarding services for third-party information service centers.

3.4 To realize the integration of vehicle information service center, in-vehicle terminal, third-party information service center, emergency rescue service center, user application service and middle The communication network interconnected by the information security support system.

Note. The vehicle information service system communication network consists of a mobile communication network and a data wide area network.