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

GA/T 2151-2024

**General technical requirements for road traffic
vehicle-infrastructure cooperative information service**

道路交通车路协同信息服务通用技术要求

(English Translation)

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Foreword

This document is in accordance with the provisions of GB/T 1.1-2020 "Guidelines for standardization work Part 1: Structure and drafting rules for standardization documents" Drafting is required.

1 Scope

This document specifies the road traffic control and information service system, roadside edge control terminal, and vehicle-to-vehicle communication based on Internet of Vehicles/Internet technology.

The overall architecture, security, interactive information content and interface implementation requirements for the use of road collaborative information services.

This document applies to the design, development, testing and application of Internet of Vehicles and vehicle-road collaborative information service products.

2 Normative references

The contents of the following documents constitute the essential clauses of this document through normative references in this document.

For referenced documents without a date, only the version corresponding to that date applies to this document; for referenced documents without a date, the latest version (including all amendments) applies to this document.

GB 5768.2-2022 Road traffic signs and markings Part 2: Road traffic signs GB/T 22239 Information security technology Network security level protection basic requirements GB/T 29100-2012 Classification and coding of traffic events in road traffic information services GB/T 31418 Terminology of road traffic signal control systems GB/T 33171-2016 Specification for evaluation of urban traffic operation status GB/T 39900-2021 General technical requirements for road traffic signal control systems GA/T 16.4 Road Traffic Management Information Code Part 4: Motor Vehicle Type Code GA/T 543.5 Public Security Data Element (5) GA/T 543.6 Public Security Data Element (6) GA/T 543.9 Public Security Data Element (9) GA/T 543.10 Public Security Data Element (10) GA/T 1049.2-2024 Public Security Traffic Integrated Command Platform Communication Protocol Part 2: Traffic Signal Control System GA/T 1049.4-2013 Public Security Traffic Integrated Command Platform Communication Protocol Part 4: Traffic Flow Information Collection System GA/T 1743-2020 Road traffic signal controller information release interface specification

3.1 Terms and Definitions

The terms and definitions defined in GB/T 31418 and the following apply to this document.

3.1.1

Vehicle-infrastructure cooperative information service system Gather information on road traffic control, traffic flow, traffic events, etc., and provide vehicle-road collaborative information services for the Internet of Vehicles application service platform Central system.

3.2 Abbreviations

The following abbreviations apply to this document.

HTTP. Hyper Text Transfer Protocol