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

GB/T 44130.3-2025

**Charging and battery swap service information exchange for
electric vehicles - Part 3: Business information exchange
specification**

电动汽车充换电服务信息交换 第3部分：业务信息交换规范

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1 Scope

This document specifies the application architecture, business data models, business information exchange interface protocols, application scenarios for business information exchange within electric vehicle's charging and battery-swapping services.

It establishes business information exchange processes and describes verification methods.

This document applies to information exchange between service platforms of different operators, as well as information exchange between electric vehicle's charging and battery-swapping service platforms and third-party service platforms.

2 Normative references

GB/T 19596

GB/T 20234.1

GB/T 27930

GB/T 29317

GB/T 44130.1-2024

GB/T 44130.2-2025

GB/T 44130.4-2025

GB/T 44130.5-2025

ISO 10646

3 Terms and definitions

The terms and definitions defined in GB/T 19596, GB/T 20234.1, GB/T 29317, GB/T 44130.1-2024, as well as the following terms and definitions, apply to this document.

3.1 Charging and battery swap service platform

A support system that collects, processes, manages the operation of electric vehicle information and electric vehicle charge station information; provides users with functions such as charging and battery swapping services, business management, information services.

Note. Referred to as "service platform" in this document.

[Source. GB/T 44130.1-2024, 3.3.2]

3.2 Third-party services platform

An independently operated platform that exchanges information with electric vehicle

charging and battery swapping service platforms; it may function as a third party to provide a series of professional services to customers.

Note. In this document, a third-party services platform specifically refers to a type of "third-party service and management platform" (defined in GB/T 44130.1-2024, 3.11), namely, a third-party charging and battery swapping service platform.

[Source. GB/T 44130.1-2024, 3.3.2]

3.3 Charge station operator platform

A platform that provides service management for charging and battery swapping facilities to charge station operators.

A digital or physical service authorization tool provided by the user.

3.10 Electric vehicle charging and battery swapping service credential

A digital or physical service authorization tool, which is automatically provided by the vehicle.

3.11 Vehicle unique identification number

A code capable of uniquely identifying the vehicle's identity information within business processes. Note. For example, the VIN.

4.1.1 The business information exchange specified in this document encompasses the

exchange of business information among charge station operator platforms, customer-affiliated operator service platforms, third-party service platforms, electric vehicle operation service platforms, parking information service platforms.

4.1.2 The business information exchange interfaces for electric vehicle charging and

battery-swapping services shall comply with the requirements for the lserv interface specified in 4.6.4 of GB/T 44130.1-2024, the lev interface specified in 4.6.6 of GB/T 44130.1-2024, the lpark interface specified in 4.6.7 of GB/T 44130.1-2024.

4.1.3 Following the exchange of electric vehicle charging and battery-swapping service

business information among the various platforms, the information exchange between the platforms and the charging/battery-swapping charge station shall be completed, via the ldev interface specified in 4.6.8 of GB/T 44130.1-2024. The implementation of the ldev

interface shall comply with the provisions of GB/T 44130.4-2025.

4.1.4 The interaction framework for electric vehicle charging and battery-swapping

service business information shall comply with the provisions shown in Figure 1.

Figure 1 -- Interaction framework for charging and battery-swapping services

4.2.1 Primary business roles

The primary business roles participating in the information exchange for electric vehicle's charging and battery-swapping services shall include.

- a) Charge station operator platform. A platform that provides electric vehicle's charging and battery-swapping charge station services to electric vehicle users;
 - b) Customer-affiliated operator service platform or third-party service platform. A platform that provides services such as user registration/network access, account management, information services, customer support to electric vehicle users;
- collectively defined in this document as "operation service platform".

4.2.2 Related business roles

The related business roles participating in the information exchange for electric vehicle's charging and battery-swapping services include.

- a) Charge station. Equipment that provides energy exchange for electric vehicles;
- b) Electric vehicle user terminal. A software terminal provided for energy replenishment of electric vehicles.

4.3.1 Transmission requirements for business information exchange shall comply with

the provisions of 7.1 in GB/T 44130.5-2025.

4.3.2 Message formats for business information exchange shall comply with the provisions of 7.1 in GB/T 44130.5-2025.

4.3.3 Interaction mechanisms for business information exchange shall comply with the

provisions of 7.1 in GB/T 44130.5-2025.