

HJ

INDUSTRY STANDARD OF THE PEOPLE'S REPUBLIC OF CHINA

HJ 1239.2-2021

**Technical specification for emission remote supervision system
of heavy-duty vehicles - Part 2: Enterprise platform**

重型车排放远程监控技术规范 第2部分 企业平台

(English Translation)

Issued on: December 27, 2021

Implemented on: July 1, 2022

Issued by: Ministry of Ecology and Environment

Table of Contents

Foreword...	3
1 Scope...	4
2 Normative references...	4
3 Terms and definitions...	4
4 General requirements...	5
5 Enterprise platform registration...	5
6 Data flow...	6
7 Enterprise platform...	6
Appendix A (Normative) Static data...	8
Appendix B (Informative) Self-assessment report of enterprise platform...	10

1 Scope

This standard specifies the general requirements, enterprise platform registration, data flow and functional requirements, for the enterprise platform for remote monitoring of heavy vehicle emissions.

This standard applies to the construction and operation of enterprise platforms for remote monitoring of heavy-duty vehicle emissions.

2 Normative references

This standard refers to the following documents or clauses thereof. For the dated documents, only the versions with the dates indicated are applicable to this document;

for the undated documents, only the latest version (including all the amendments) is applicable to this standard.

GB 17691 Limits and measurement methods for emissions from diesel fueled heavy-duty vehicles (CHINA VI)

GB/T 22239 Information security technology - Baseline for classified protection of cybersecurity

3 Terms and definitions

The terms and definitions, which are defined in GB 17691, as well as the following terms and definitions, apply to this standard.

3.1

Enterprise platform for emission remote monitoring of heavy-duty vehicles

A platform, that is organized and constructed by heavy-duty vehicle production/import enterprises, in accordance with the technical requirements of this standard; directly collects and manages the remote monitoring data of heavy-duty vehicle emissions; transmits data to the Ministry of Ecology and Environment. It is referred to as "enterprise platform".

3.2

Data packet loss rate

The proportion of lost data packets in the total amount of sent data packets, during data transmission.

3.3

Fine-grained permission management

In addition to the rights management of data types, the platform also has rights management for data entities, such as the management of different users' access rights to different vehicle data.

4 General requirements

4.1

The enterprise platform shall have the function of receiving remote monitoring data of emissions, from the vehicle terminal, AND transmitting the data to the Ministry of Ecology and Environment.

4.2

The enterprise platform shall ensure data security. It shall receive and store the data, from the vehicle terminal, in an encrypted way. The enterprise platform shall ensure that the data has not been modified in any way AND transmitted to the Ministry of Ecology and Environment, in accordance with the prescribed communication protocol.

4.3

The enterprise platform shall meet the requirements of GB/T 22239, for security protection level 3 and above.

4.4

Enterprises can use two or more enterprise platforms, OR they can entrust other institutions to build and operate enterprise platforms.

5 Enterprise platform registration

5.1

Enterprises shall register, by filling in the basic information of the enterprise platform, through the vehicle environmental protection information disclosure system.

5.2

The basic information of the enterprise platform includes

The name of the enterprise platform, the number of current servers of the enterprise platform, the storage capacity (TB), the current bandwidth capacity (Mbps), etc.

5.3

After the enterprise platform is successfully registered, the data port can be obtained, which is used for the transmission of remote emission monitoring data of the vehicle of the enterprise information disclosure.

be greater than 5 s. The enterprise platform shall have sufficient storage space, to receive real-time vehicle data.

7.1.4 The enterprise platform shall transmit the received data to the Ministry of Ecology and Environment, according to the specified communication protocol. The data forwarding delay shall not exceed 10 s; the maximum data transmission period shall not exceed 10 s; the data transmission packet loss rate shall not exceed 1%.

7.1.5 The enterprise platform shall have the functions of self-check and pre-alarm, according to the relevant technical requirements of this standard.

7.1.6 If the activated on-board terminal is damaged and needs to be replaced, the enterprise platform records and transmits the vehicle static data to the Ministry of Ecology and Environment.

7.2 Security requirements

7.2.1

The enterprise platform shall have the authentication function, to prevent malicious access and attacks. It shall have fine-grained rights management.

7.2.2

The enterprise platform shall have a high availability mechanism, which can prevent task failure and data loss, which is caused by machine failure.

7.3 Assessment of platform compliance

The enterprise platform shall be subject to compliance testing, according to the platform requirements. See Appendix B for the self-assessment report template.

The platform compliance inspection can be carried out EITHER by the vehicle manufacturer itself OR by a third-party inspection agency.

.....