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

GB/T 35381.1-2017

**Tractors and machinery for agriculture and forestry -- Serial
control and communications data network -- Part 1: General
standard for mobile data communications**

农林拖拉机和机械 串行控制和通信数据网络 第1部分：数据通信通用标准
(English Translation)

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Foreword

GB/T 35381 "Serial Forestry Tractors and Machinery Serial Control and Communication Data Network" is divided into the following 14 parts.

- Part 1. General standards for data communications;
- Part 2. The physical layer;
- Part 3. Data Link Layer;
- Part 4. Network layer;
- Part 5. Network Management;
- Part 6. Virtual Terminals;
- Part 7. Tool message application layer;
- Part 8. Powertrain messages;
- Part 9. Tractor ECU;
- Part 10. Data exchange between task controllers and management information systems;
- Part 11. Data Meta Dictionary;
- Part 12. Diagnostic services;
- Part 13. File Servers;
- Part 14. Sequence Control.

This part is part 1 of GB/T 35381.

This section was drafted in accordance with the rules given in GB/T 1.1-2009.

This section uses the translation method equivalent to the use of ISO 11783-1:2007 "agricultural forestry tractors and machinery serial control and communications data network Part 1. General Data Communication Standards.

The Chinese documents that are consistent with the normatively quoted international documents in this section are as follows.

---GB/T 35381.2-2017 Agricultural and Forestry Tractors and Machinery Serial Control and Communication Data Network Part 2. Physical Layer (ISO 11783-2:2012, IDT)

---GB/T 35381.3-2017 Agricultural and Forestry Tractors and Machinery Serial Control and Communication Data Network Part 3. Data Link Layer (ISO 11783-3:2014, IDT)

--- GB/T 35381.4-2017 Agricultural and forestry tractors and machinery serial control and communications data network - Part 4. Network layer (ISO 11783-4:2011, IDT)

--- GB/T 35381.5-2017 Agricultural and Forestry Tractors and Machinery Serial Control and Communication Data Network Part 5. Network Management (ISO 11783-5:2011, IDT)

---GB/T 35381.6-2017 Agricultural and Forestry Tractors and Machinery Serial Control and Communication Data Network Part 6. Virtual Terminals (ISO 11783-6:2014, IDT)

--- GB/T 35381.7-2017 Agricultural and forestry tractors and machinery serial control and communications data network - Part 7. Tooling messages Application layer (ISO 11783-7:2015, IDT)

--- GB/T 35381.8-2017 Agricultural and forestry tractors and machinery serial control and communications data network - Part 8. Power transmission Department news (ISO 11783-8:2006, IDT)

--- GB/T 35381.9-2017 Agricultural and forestry tractors and machinery - Serial control and communications data network - Part 9. Tractors ECU (ISO 11783-9:2012, IDT)

---GB/T 35381.11-2017 Agricultural and Forestry Tractors and Machinery Serial Control and Communication Data Network Part 11. Data Elements Dictionary (ISO 11783-11:2011, IDT)

--- GB/T 35381.13-2017 Agricultural and forestry tractors and machinery serial control and communications data network - Part 13. Document services Server (ISO 11783-13:2011, IDT) this part is proposed by China Machinery Industry Federation.

This section is under the jurisdiction of the National Agricultural Machinery Standardization Technical Committee (SAC/TC201).

1 Scope

GB/T 35381 specifies a serial control and communication data network for tractors for agriculture and forestry, and suspension, semi-suspension, traction, or self-propelled implements.

Its purpose is to standardize the data transfer methods and formats between sensors, drivers, control elements, information storage and display units.

Standard on or in tractors or suspensions. And provide an open system interconnection

reference for the electronic control system of agricultural and forestry equipment Model Support (OSI). This part of ISO/IEC 785-1 is an overview of ISO 11783, and its appendix includes the elimination of the requirements for implementing a compatible network.

Information, address, control functions, implements, and manufacturers' identifiers.

2 Normative references

The following documents are indispensable for the application of this document. For dated references, only dated versions apply to this article Pieces. For undated references, the latest version (including all amendments) applies to this document.

ISO 11783 (all parts) Agriculture and forestry tractors and machinery serial control and communication data network (Tractorsandmachinery
foragricultureandforestry-Serialcontrolandcommunicationsdatanetwork) ISO 11898-1 Road Vehicle Controller Area Network (CAN) Part 1. Data Link Layer and Physical Signaling [Roadvehi-cles-Controlerareanetwork(CAN)-Part 1: Datalinklayerandphysicallsignaling] ISO 11898-2 Road Vehicle Controller Area Network (CAN) Part 2. High Speed Media Access Units [Roadvehicles-Controlerareanetwork(CAN)-Part 2: High-speedmediumaccessunit]

3 Terms and Definitions

The following terms and definitions apply to this document.

Activation mask activemask the set of display elements selected by the workgroup displayed on the virtual terminal.

Note: The activation mask can be displayed or not.

Address

The 8-bit field used to define the source or destination of the message.

Alarm mask the object used to define the alarm message displayed on the virtual terminal.

Auxiliary input unit an electronic control unit that provides universal auxiliary control.

Note: It can be hardware on the virtual terminal.