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

GB/T 35381.7-2017

**Tractors and machinery for agriculture and forestry -- Serial
control and communications data network -- Part 7: Implement
messages application layer**

农林拖拉机和机械 串行控制和通信数据网络 第7部分：机具消息应用层
(English Translation)

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Foreword

GB/T 35381 "Serial Forestry and Tractor 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 7 of GB/T 35381.

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

This section uses the translation method equivalent to the use of ISO 11783-7:2015 "Agricultural forestry tractors and machinery serial control and communications data network Part 7. Implement Message Application Layer.

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

---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 35381.5-2017 Agricultural and Forestry Tractors and Machinery Serial Control and Communication Data Network Part 5. Network Management (ISO 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 35381.9-2017 Agricultural and forestry tractors and machinery - Serial control and communications data network - Part 9. Tractors ECU (ISO 11783-9:2012, 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 data network for tractors and suspension, semi-suspension, traction or self-propelled implements for control and communication of agricultural and forestry tractors.

The purpose of the network is to standardize the data transmission methods and formats between sensors, actuators, control elements, information storage and display units.

The device is mounted or suspended on the tractor. This part of GB/T 35381 describes the network application layer tool message, the specified message group and the the message used to communicate between the tractor and the connected equipment.

2 Normative references

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

GB/T 35381.1-2017 Agricultural and forestry tractors and machinery serial control and communications data network - Part 1. General data communications Standard (ISO 11783-1:2007, IDT) ISO 639 (all parts) Codesfortherepresentationofnamesoflanguages
ISO 11783-3 Tractors and Machinery for Agriculture and Forestry Serial Control and Communication Data Network Part 3. Data Link Layers (Tractors)
andmachineryforagricultureandforestry-Serialcontrolandcommunicationsdatanetwork-Part 3.

Datalinklayer)

ISO 11783-5 Tractors and machinery for agriculture and forestry - Serial control and communication data network - Part 5. Network management (Tractors and machinery for agriculture and forestry - Serial control and communication data network - Part 5: Net-Work management) ISO 11783-6 Tractors and machinery for agriculture and forestry - Serial control and communication data network - Part 6. Virtual terminals (Tractors and machinery for agriculture and forestry - Serial control and communication data network - Part 6: Virtual terminal) ISO 11783-9 Tractors and machinery for agriculture and forestry - Serial control and communication data network - Part 9. Tractor ECUs (Tractors and machinery for agriculture and forestry - Serial control and communication data network - Part 9.

Tractor ECU)

ISO 11783-10 Tractors and machinery for agriculture and forestry - Serial control and communication data network - Part 10. Task controllers and information systems Management system for data exchange (Tractors and machinery for agriculture and forestry - Serial control and communication data network - Part 10: Task controller and management information system data interchange) ISO 11783-12 Tractors and machinery for agriculture and forestry - Serial control and communication data network - Part 12. Diagnosis services (Tractors and machinery for agriculture and forestry - Serial control and communication data network - Part

12 Diagnostic services)

IEC 61162-3 Digital interface for maritime navigation and radiocommunication equipment and systems - Part 3. Serial data tool network