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

GB/T 35381.4-2017

**Tractors and machinery for agriculture and forestry -- Serial
control and communications data network -- Part 4: Network
layer**

农林拖拉机和机械 串行控制和通信数据网络 第4部分：网络层

(English Translation)

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Foreword

GB/T 35381 "agriculture and forestry tractors and machinery serial control and communication data network" is divided into the following 14 sections.

- Part 1. General standards for data communications;
- Part 2. Physical layer;
- Part 3. Data link layer;
- Part 4. Network layer;
- Part 5. Network Management;
- Part 6. Virtual terminal;
- Part 7. Machine information application layer;
- Part 8. Powertrain news;
- Part 9. Tractor ECU;
- Part 10. Task controller and management information system data exchange;
- Part 11. Data element dictionary;
- Part 12. Diagnostic Services;
- Part 13. File server;
- Part 14. Sequence control.

This section GB/T 35381 Part 4.

This section drafted according to GB/T 1.1-2009 given rules.

This section uses the translation method identical with ISO 11783-4:2011 "agriculture and forestry tractors and machinery serial control and communication data network Part 4.

Network layer. " the documents of our country that are consistent with the corresponding international documents that are normative references in this standard are as follows.

--- GB/T 35381.1-2017 Agriculture, Forestry and Tractors and Machinery Serial Control and Communication Data Network Part 1. Data Communications Common Criteria (ISO 11783-1:2007, IDT)

--- GB/T 35381.2-2017 Tractors and machinery for agriculture and forestry - Serial control and communication data networks - Part 2. Physical layer (ISO 11783-2:2012, IDT)

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

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

--- GB/T 35381.7-2017 Tractors and machinery for agriculture and forestry Serial control and communication data network Part 7. Machine tool news Application Layer (ISO 11783-7:2015, IDT)

--- GB/T 35381.9-2017 Agriculture, Forestry and Tractor and Machinery Serial Control and Communication Data Network Part 9. Tractors ECU (ISO 11783-9:2012, IDT) this part is proposed by China Machinery Industry Federation.

This part of the National Agricultural Machinery Standardization Technical Committee (SAC/TC201) centralized.

This part of the drafting unit. China Agricultural Mechanization Research Institute, China First Tractor Group Co., Ltd., Henan University of Science and Technology, Shandong Province Agriculture Mechanical Science Institute, Luoyang Xiyuan Vehicle and Power Testing Co., Ltd.

1 Scope

GB/T 35381 provides for agriculture and forestry tractors and suspension, semi-suspension, traction or self-propelled equipment, serial control and communication data network, its purpose is to standardize the methods and formats of data transfer between sensors, actuators, control elements, information storage and display units, these devices Standard on or on tractors or suspension equipment. Network layer described in this section GB/T 35381, defined GB/T 35381 network of different network control functions (CFs) between the communication requirements and services required to define the network interconnection unit Types of.

2 Normative references

The following documents for the application of this document is essential. For dated references, only the dated version applies to this article Pieces. For undated references, the latest edition (including all amendments) applies to this document.

ISO 11783-1 Tractors and machinery for agriculture and forestry - Serial control and communication data networks - Part 1. General standards for data communications (Tractors and machinery for agriculture and forestry - Serial control and communications data network - Part 1: General standard for mobile data communication) ISO 11783-2 Tractors and machinery for agriculture and forestry - Serial control and communication data networks - Part 2. Tractors and machinery for agriculture and forestry - Serial control and communications data network - Part 2.

Physical layer

ISO 11783-3 Tractors and machinery for agriculture and forestry - Serial control and communication data network - Part 3. Data link layer (Tractors and machinery for agriculture and forestry - Serial control and communications data network - Part 3.

Data link layer)

ISO 11783-5 Agriculture, Forestry and Tractor and Machinery Serial Control and Communication Data Network Part 5. Network Management (Tractors and machinery for agriculture and forestry - Serial control and communications data network - Part 5: Network management) ISO 11783-7 Tractors and machinery for agriculture and forestry - Serial control and communication data network - Part 7.

Tractors and machinery for agriculture and forestry - Serial control and communications data network - Part 7: Implement messages application layer) ISO 11783-9 Tractors and machinery for agriculture and forestry - Serial control and communication data network - Part 9. Tractors ECU and machinery for agriculture and forestry - Serial control and communications data network - Part 9.

Tractor ECU Single-user licence only, copying and networking)

3 Terms and definitions

ISO 11783-1 and defined by the following terms and definitions apply to this document.

Address space the range of addresses allowed on a particular subnet.