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**NATIONAL STANDARD OF THE
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**Internet of things - Interoperability for systems - Part 2: Network
connectivity**

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foreword

This document is in accordance with the provisions of GB/T 1.1-2020 "Guidelines for Standardization Work Part 1. Structure and Drafting Rules of Standardization Documents" drafted.

This document is part 2 of GB/T 41782 "Internet of Things System Interoperability". GB/T 41782 has published the following parts.

--- Part 1. Framework;

--- Part 2. Network connectivity.

This document refers to ISO /IEC 21823-2:2020 "Internet of Things System Interoperability Part 2. Transport Interoperability" starting from

Grass, the degree of consistency is non-equivalent.

Please note that some content of this document may be patented. The issuing agency of this document assumes no responsibility for identifying patents.

Introduction

GB/T 41782 "Internet of Things System Interoperability" aims to specify the Internet of Things system interoperability framework, network connectivity, data semantics,

The requirements of the syntax of data and the behavior of entities have enabled the IoT system to be applied on a larger scale. GB/T 41782 is proposed to consist of five

Partial composition.

--- Part 1. Framework. The purpose is to guide the framework design of the interoperability between the IoT system and its internal entities.

--- Part 2. Network connectivity. The purpose is to guide the internal network of the Internet of Things system and between different networks of the Internet of Things system

interoperability and interconnection.

--- Part 3. Semantic interoperability. The purpose is to specify interoperability requirements for implementing data semantics in IoT systems.

--- Part 4. Syntax interoperability. The purpose is to specify interoperability requirements for implementing data syntax in IoT systems.

--- Part 5. Behavioral interoperability. The purpose is to guide the behavioral norms of entities in the Internet of Things system.

IoT System Interoperability

Part 2. Network Connectivity

1 Scope

This document specifies IoT network connections that support network connectivity, network connectivity requirements between IoT systems, and IoT systems

Internal network connectivity requirements.

This document applies to the interconnection and interoperability between networks within the IoT system and between different networks in the IoT system.

2 Normative references

There are no normative references in this document.

3 Terms and Definitions

The following terms and definitions apply to this document.

3.1

networkconnectivity

The ability of IoT systems to exchange information in the form of bits and bytes.

3.2

domain

A collection of entities with a specific purpose.

Note. The domains included in the IoT conceptual model are. perception control domain, target object domain, user domain, operation and maintenance management domain, resource exchange domain, and service provider domain.

[Source. GB/T 33745-2017, 2.2.1]

4 Abbreviations

The following abbreviations apply to this document.

QoS. quality of service

5 Internet connection

IoT network connectivity is supported by two types of networks. one is the network connection between IoT systems, and the other is the network connection within the IoT system.

network connection.

The schematic diagram of network connection between IoT systems is shown in Figure 1. This type of connection is connected through an external network, which supports the interconnection between networked systems

Intercommunication. The external network is realized through various functional components and related interfaces.