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

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**Internet of things - Interoperability for systems - Part 1:
Framework**

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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 1 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 was drafted with reference to ISO /IEC 21823-1.2019 "Internet of Things System Interoperability Part 1. Framework", consistent with

The degree of sexuality is not 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 1.Framework

1 Scope

This document describes the IoT system interoperability framework with various types of interoperability as components.

This document applies to data exchange and interoperability between IoT systems and the various entities within them.

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

operation

An object can be invoked to perform a transformation or query the behavior.

3.2

interoperability

The ability of two or more systems or applications to exchange information and to process the exchanged information with each other.

3.3

framework

Presents a high-level description of an object's organizational structure from a perspective. Even if the same object is observed from different perspectives, there may be

different frames.

3.4

networkconnectivity

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

3.5

The ability of IoT entities exchanging information to understand the meaning of a data model in the context of a specific domain.

3.6

IoT entities that exchange information understand the ability to exchange information.

3.7

Interoperability between actual results and expected results.