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

GB/T 30269.401-2015

**Information technology -- Sensor networks -- Part
401: Collaborative information processing: Services and
interfaces supporting collaborative information processing**

信息技术 传感器网络 第401部分：协同信息处理：支撑协同信息处理的服务及接
□

(English Translation)

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Foreword

GB/T 30269 in the "Information Technology Sensor Networks," the general title, planned or published the following sections.

- Part 1. Reference architecture and general technical requirements;
 - Part 2. Terminology;
 - Part 301. Communication and information exchange. Low-speed wireless sensor networks at the network layer and application support sub-layer specification (GB/T 30269.301-2014);
 - Section 302. Communication and information exchange. high-reliability applications for wireless sensor networks MAC and Physical Layer specification;
 - Part 303. Communication and information exchange. IP-based network layer specification;
 - Part 304. Communication and information exchange. MAC layer and physical layer specifications for video;
 - Part 401. Information Processing Cooperative. support services and interface information processing;
 - Part 501. Identification. The rule for sensor node identifier;
 - Part 502. ID. sensor node identifier resolution and management practices;
 - Part 503. ID. ID sensor node registration procedure;
 - Part 601. Information Security. General technical specifications;
 - Part 602. Information Security. Network transmission security specifications;
 - Part 701. Sensor Interface. signal interface;
 - Part 702. Sensor Interface. data interface;
 - Part 801. Test. General requirements;
 - Section 802. Test. Low-speed wireless sensor networks MAC and physical layer;
 - Part 803. Test. Low-speed wireless sensor networks at the network layer and application support sub-layer;
 - Part 901. Gateway. General Requirements;
 - Part --- 1001. Middleware. sensor network node data exchange specification;
- This section is GB/T Part of 40,130,269.

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

This part of the country as the main editor of ISO/IEC 20005:2013 international standard synchronous project preparation.

This section uses the translation method identical with ISO/IEC 20005:2013 "Information technology Intelligent sensor networks branched sensor networks Collaborative information processing support services and interfaces "international standards.

And ISO/IEC 20005:2013 as compared to, do the following editorial changes.

- To the GB/T 30269 national standards harmonized standard name change;
- Chapters 6 and 7 defines the services and interfaces to facilitate understanding of standards, 6.2,6.3,6.4,6.5,6.6,6.7,6.8,7.2,7.3 Articles 7.4 and the heading "and interface";
- Added the informative appendix NA and informative appendix NB. Appendix NA gives GB/T 30269.1-2015 relevant sensor Network node functional model; and Appendix NB electric vehicle energy information collection and management system for the application of operational background, support Sensor networks cooperative information processing services will be described.

Please note that some of the content of this document may involve patents. Release mechanism of the present document does not assume responsibility for the identification of these patents.

This part of the National Information Technology Standardization Technical Committee (SAC/TC28) and focal points.

This part mainly drafted by. Wuxi Things Industry Research Institute was, China Electronics Standardization Institute, Shanghai Institute of Microsystem Department Institute of Information Technology and System, Hangzhou home and IOT Technology Co., Ltd., Chinese Academy of Sciences Institute of Acoustics, Zhejiang University.

1 Scope

This section GB/T 30269 specifies the sensor network to support collaborative information processing services and interfaces, including.

- Collaborative information processing functions and functional model;
- Collaborative common service support information processing;
- Support a collaborative interface common information processing services.

This section is adapted to provide coordinated information processing application of sensor network node equipment service layer protocol.

2 Normative references

The following documents for the application of this document is essential. For dated references, only the dated version suitable for use herein Member. For undated references, the latest edition (including any amendments) applies to this document.

GB/T 9387.1-1998 Information technology - Open Systems Interconnection - Basic Reference Model - Part 1. Basic model (idt ISO/IEC 7498-1:1994)

3 Terms and Definitions

The following terms and definitions apply to this document.

Actuator

In a predetermined manner to produce a physical response to the input signal of the apparatus.

[ISO/IEC 29182-2:2013, Definition 3.1] 3.2 Collaborative Information Processing collaborativeinformationprocessing in order to enhance efficiency and improve the quality and reliability of the output, a plurality of sensor network elements involved in a coordinated manner, an information processing form.

[ISO/IEC 29182-2:2013, 3.2 Definition] 3.3 Data Alignment dataregistration the process of conversion of different data sets in the same reference coordinate system.

Data combination datagrouping Between different data sources to determine a common time interval, and merge data within the time interval procedure.

Event event

Infer anything happen in the event of the interior point or period of time or a certain time interval.