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

**GB/T 43529.5-2023**

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**Standardized product ontology register and transfer by  
spreadsheets - Part 5: Interface for activity description**

利用电子表格标准化产品本体的注册和传递 第5部分：活动描述接口

**(English Translation)**

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## Foreword

This document complies with the provisions of GB/T 1.1-2020 "Standardization Work Guidelines Part 1: Structure and Drafting Rules of Standardization Documents" Drafting:

This document is Part 5 of GB/T 43529 "Registration and Delivery of Standardized Product Ontologies Using Electronic Forms": GB/T 43529 has been the following sections have been published:

---Part 3: Public Information Model Interface;

---Part 5: Activity description interface:

This document is equivalent to IEC 62656-5:2017 "Registration and delivery of standardized product ontologies using spreadsheets - Part 5: Activities" Describe the interface:

Please note that some content in this document may be subject to patents: The publisher of this document assumes no responsibility for identifying patents:

## Introduction

GB/T 43529 "Registration and Delivery of Standardized Product Ontologies Using Electronic Forms" is based on GB/T 17564 (all parts) and the public data dictionary model registration and application information of GB/T 17645 (all parts) defines the registration and delivery of various product and service information Methods: The IEC Common Data Dictionary, referred to as IEC CDD, is an online maintained database:

This document supplements the procedures specified for the IEC database based on ISO/IEC Guidelines: The IEC Common Data Dictionary is an inter-the data dictionary in the field covers products and services in all electronic technology fields and is maintained based on the database managed by the IEC Central Office:

Protect and update:

GB/T 43529 "Registration and Delivery of Standardized Product Ontologies Using Electronic Forms" is intended to consist of the following parts:

---Part 1: Logical structure of data blocks: The purpose is to define the logical structure of data blocks used to define, transfer and register products ontology:

---Part 2: Application Guide for use with the Common Data Dictionary (CDD): The purpose is to provide guidance on the application of data blocks and Used to define data dictionaries that can be imported and exported from CDD:

---Part 3: Common Information Model Interface: The purpose is to define the mapping specification of data blocks to the Common Information Model (CIM) so that for importing

CIM ontology into the public data dictionary:

---Part 5: Activity description interface: The purpose is to define activity model blocks (PAM), which are used to represent activities and relationships within activities:

---Part 8: Network service interface for data blocks: The purpose is to provide data exchange between server and client or between servers:

Data block network service interface specification:

Standardize registration of product ontologies using spreadsheets and Delivery Part 5: Activity Description Interface

## 1 Scope

This document specifies a method for representing activities and relationships within activities in a spreadsheet, called the "Activity Model Nugget", or PAM for short:

defined ontology model piece (POM): This document can describe activities included in an enterprise, an organization in whole or in part, through the exchange of A series of services, a set of events or a process formed by physical or non-physical entities: This document also defines a method for only Identify activities or events that occur in a specific sequence: In addition, this document identifies the information flows, objects or materials exchanged during the event, which each activity is represented by a class, and each flow is represented by a relationship:

This document supports the characterization, classification and identification of a set of activities as part of a standardized ontology: This allows events to be registered as meta the data set is uploaded to the IEC Public Data Dictionary as an online database for electrotechnical technology for maintenance:

This document also provides a method for integrating the product ontology and the activities containing the service in a single model, where users can Analyze products in operational scenarios: Such a comprehensive perspective helps people with different technical backgrounds learn and share an enterprise's Relevant knowledge, because usually this knowledge requires understanding of the company's products and services at the same time: When users need to make changes to external conditions in a short period of time in response to emergencies or natural disasters, such data representation helps users analyze an enterprise and its resources key functions, and clarify their definitions, limitations and internal interactions:

This document does not involve a detailed algorithmic description of the information flow necessary to handle activities or events during the design or programming phases of information systems software:

description, process sequence diagram, or sequence of events: The detailed specification

of these algorithms and the construction of data structures will be provided by methodological tools from the field of software engineering:

There are many tools for these methods, such as UML (Unified Modeling Language), BPMN, SysML, DFD, IDEF and other CASE (computer-aided software engineering) tools:

This document is not concerned with standardizing or introducing a new method of graphically describing activities or processes: Ideally, this paper models Activity ontology can be expressed by using existing graphical description tools and process description languages:

Graphical descriptions of these tools and languages are used in this document to help people understand the content of PAM: exist in most cases, IDEF-0 is preferred because it describes both the activity and the flow of events within the activity, but any other method can be used:

suitable and relevant tools or languages:

## **2 Normative reference documents**

The contents of the following documents constitute essential provisions of this document through normative references in the text: Among them, the dated quotations for undated referenced documents, only the version corresponding to that date applies to this document; for undated referenced documents, the latest version (including all amendments) applies to this document:

ISO 13584-24 Industrial automation systems and integrated parts libraries Part 24: Logical resources: Logical model of supplier libraries Note: GB/T 17645.24-2003 Industrial automation system and integrated parts library Part 24: Logical resources: Logical model of supplier library (ISO 13584-24:2002,IDT) ISO 13584-42 Industrial automation systems and integrated parts libraries Part 42: Description methodology: Methodology for constructing part families