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Information technology — GS1 Core Business Vocabulary (CBV)



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Preface

This Standard was prepared by the Standards Australia Committee IT-034, Automatic Identification and Data Capture Techniques.

The objective of this document is to define the Core Business Vocabulary (CBV) and to specify various vocabulary elements and their values for use in conjunction with the EPCIS standard [EPCIS2.0], which defines mechanisms to exchange information both within and across organization boundaries.

This document is identical with, and has been reproduced from, ISO/IEC 19988:2024, *Information technology — GS1 Core Business Vocabulary (CBV)*.

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The terms “normative” and “informative” are used in Standards to define the application of the appendices or annexes to which they apply. A “normative” appendix or annex is an integral part of a Standard, whereas an “informative” appendix or annex is only for information and guidance.

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Foreword

ISO (the International Organization for Standardization) and IEC (the International Electrotechnical Commission) form the specialized system for worldwide standardization. National bodies that are members of ISO or IEC participate in the development of International Standards through technical committees established by the respective organization to deal with particular fields of technical activity. ISO and IEC technical committees collaborate in fields of mutual interest. Other international organizations, governmental and non-governmental, in liaison with ISO and IEC, also take part in the work.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of document should be noted (see www.iso.org/directives or www.iec.ch/members_experts/refdocs).

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This document was prepared by GS1 [as the Core Business Vocabulary (CBV) Standard, Release 2.0] and drafted in accordance with its editorial rules. It was adopted, under the JTC 1 PAS procedure, by Joint Technical Committee ISO/IEC JTC 1, *Information technology*.

This third edition cancels and replaces the second edition (ISO/IEC 19988:2017), which has been technically revised.

The main changes are as follows:

— support for GS1 Web Vocabulary, URI semantic equivalence by means of owl:sameAs relationships;

— new "How" event dimension;

— overview of EPCIS event "dimensions" with cross-references to relevant sections in EPCIS (ISO/IEC 19987) and CBV (this document);

— new Persistent Disposition indicating non-transient business state of an object;

— use of new prefix 952 in all examples;

— new business step values: sampling, sensor_reporting;

— clarified definitions of business step values: commissioning, encoding, inspecting, removing;

— addition of new disposition values: available, completeness_verified, completeness_inferred, conformant, container_open, mismatch_instance, mismatch_class, mismatch_quantity, needs replacement, non_conformant, unavailable;

— clarified definition and example of disposition value in_progress, recommending omission;

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— deprecated disposition value: no_pedigree_match;

— new business transaction types cert, testprd, testres, upevt;

— clarified definition of business transaction type poc to make it clear that Purchase Order Confirmation is also used to represent Sales Order;

— sensor measurement types now supported;

— clarification of HTTPS URLs as a recommended approach alongside HTTP URLs;

— introduced support for constrained set of GS1 Digital Link URIs supported alongside generic HTTP URLs for identification of object instance, class, location, business transaction, source/destination, and transformation;

— clarification preference for PGLN to identify owning and possessing parties;

— introduction of Hash URI as business transaction identifier;

— introduction of EPCIS Event Hash ID as an event Identifier;

— introduction of chemical substance identifiers;

— introduction of microorganism identifiers;

— restriction of date types to specific subset of W3C primitive datatypes;

— extended support for QNames to express master data attributes;

— incorporation of additions published previously as CBVCNs 17-339 (Tax ID), 18-108 (Fish Attributes);

— inclusion of certification attributes in Certification List;

— additionalTradeItemId now as additionalTradeItemIDList;

— deprecation of latitude and longitude from location/party master data;

— addition of geoLocation and geoFence to location/party master data;

— addition of AdditionalPartyIDList;

— example event data moved to machine-readable artefacts;

— introduction of https://ref.gs1.org/cbv namespace, to underpin CBV 2.0 support for Linked Data.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html and www.iec.ch/national-commit1tees.

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NOTES

Australian Standard®

Information technology — GS1 Core Business Vocabulary (CBV)

1 Introduction – Core Business Vocabulary

This GS1 standard defines the Core Business Vocabulary (CBV). The goal of this standard is to specify various vocabulary elements and their values for use in conjunction with the EPCIS standard [EPCIS2.0], which defines mechanisms to exchange information both within and across organisation boundaries. EPCIS and the CBV are developed, maintained and published by GS1; EPCIS and the CBV are also published within ISO's PAS process as ISO/IEC 19987 and ISO/IEC 19988, respectively. The vocabulary identifiers and definitions in this standard will ensure that all parties who exchange EPCIS data using the CBV will have a common understanding of the semantic meaning of that data.

This standard is intended to provide a basic capability that meets the above goal. In particular, this standard is designed to define vocabularies that are *core* to the EPCIS abstract data model and are applicable to a broad set of business scenarios common to many industries that have a desire or requirement to share data. This standard intends to provide a useful set of values and definitions that can be consistently understood by each party in the supply chain.

Additional end user requirements may be addressed by augmenting the vocabulary elements herein with additional vocabulary elements defined for a particular industry or a set of users or a single user. Additional values for the standard vocabulary types defined in this standard may be included in follow-on versions of this standard.

This standard includes identifier syntax and specific vocabulary element values with their definitions for these *Standard Vocabularies*:

— Business step identifiers

— Disposition identifiers

— Business transaction types

— Source/Destination types

— Error reason identifiers

— Sensor measurement types

— Sensor alert types

This standard provides identifier syntax options for these *User Vocabularies:*

— Objects

— Locations

— Business transactions

— Source/Destination identifiers

— Transformation identifiers

— Event identifiers

— Chemical substance identifiers

— Microorganism identifiers

This standard provides *Master Data Attributes and Values* for describing Physical Locations including:

— Site Location

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