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Data quality —

Part 120:

Master data: Exchange of characteristic data: Provenance

Qualité des données —

*Partie 120: Données permanentes: Échange des données
caractéristiques: Provenance*



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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

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 ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see the following URL: www.iso.org/iso/foreword.html.

The committee responsible for this document is Technical Committee ISO/TC 184, *Automation systems and integration*, Subcommittee SC 4, *Industrial data*.

This first edition of ISO 8000-120 cancels and replaces ISO/TS 8000-120:2009, which has been technically revised.

ISO 8000 is organized as a series of parts, each published separately. The structure of ISO 8000 is described in ISO/TS 8000-1.

Each part of ISO 8000 is a member of one of the following series: general data quality, master data quality, transactional data quality, and product data quality. This part of ISO 8000 is a member of the master data quality series.

A list of all parts in the ISO 8000 series can be found on the ISO website.

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Introduction

The ability to create, collect, store, maintain, transfer, process and present data to support business processes in a timely and cost effective manner requires both an understanding of the characteristics of the data that determine its quality, and an ability to measure, manage and report on data quality.

ISO 8000 defines characteristics that can be tested by any organization in the data supply chain to objectively determine conformance of the data to ISO 8000.

ISO 8000 provides frameworks for improving data quality for specific kinds of data. The frameworks can be used independently or in conjunction with quality management systems.

ISO 8000 covers industrial data quality characteristics throughout the product life cycle from conception to disposal. ISO 8000 addresses specific kinds of data including, but not limited to, master data, transaction data, and product data.

ISO 8000-110 specifies requirements that can be checked by computer for the exchange, between organizations and systems, of master data that consists of characteristic data. It provides requirements for data quality, independent of syntax. This part of ISO 8000 specifies requirements for capture and exchange of data provenance information and supplements the requirements of ISO 8000-110. This part of ISO 8000 includes a conceptual data model for data provenance.

Data provenance information can be used to detect data echoes, and can be used to determine the credibility, currency or value of data. Data provenance information provides a necessary capability to support claims of data accuracy.

NOTE Requirements regarding claims of data accuracy are covered in ISO 8000-130.

Any claim of conformance to this part of ISO 8000 implies a claim of conformance to ISO 8000-110.

This part of ISO 8000 can be used with any other standard that specifies a formal syntax for a data set.