

BSI Standards Publication

Data quality

Part 62: Data quality management: Organizational process maturity assessment: Application of standards relating to process assessment



BS ISO 8000-62:2018 BRITISH STANDARD

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National foreword

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A list of organizations represented on this committee can be obtained on request to its committee manager.

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Data quality —

Part 62:

Organizational process maturity assessment: Application of standards relating to process assessment

Qualité des données —

Partie 62: Gestion de la qualité des données: Évaluation de la maturité organisationnelle des processus: Application des normes relatives à l'évaluation des processus



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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 of the voluntary nature of standards, 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 www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 184, *Automation systems and integration*, Subcommittee SC 4, *Industrial data*.

 $ISO\ 8000$ is organized as a series of parts, each published separately. The structure of $ISO\ 8000$ is described by $ISO\ 8000-1$.

Each part of ISO 8000 is a member of one of the following series: general data quality, master data quality and product data quality. This document is a member of the general data quality series but applicable to all of the three data quality series.

A list of all parts in the ISO 8000 series, published under the general title *Data quality*, can be found on the ISO website.

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.

Introduction

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

ISO 8000 defines characteristics of information and data that determine its quality, and provides methods to manage, measure and improve the quality of information and data.

When assessing the quality of data, it is useful to perform the assessment in accordance with documented methods. It is also important to document the tailoring of standardized methods with respect to the expectation and requirements pertinent to the business case at hand.

ISO 8000 includes parts applicable to all types of data and parts applicable to specific types of data. ISO 8000 can be used independently or in conjunction with quality management systems.

There is a limit to data quality improvement when only the nonconformity in data is corrected, since the nonconformity can recur in other data. However, when the root causes of the data nonconformity and their related data are traced and corrected through data quality management processes, recurrence of the same type of data nonconformity can be prevented. Therefore, a framework for process-centric data quality management is required to improve data quality more effectively and efficiently. Furthermore, data quality can be improved by assessing processes and changing underperforming processes found during that assessment.

This document specifies how organizations can use a maturity model in assessing their process maturity with respect to data quality management as specified in ISO 8000-61.

NOTE Future editions of this document will specify appropriate assessment indicators and, therefore, provide a complete maturity model.

This assessment requires the use of assessment indicators and can use the measurement stack specified by ISO 8000-63 to determine these indicators.

This document can be used on its own or in conjunction with other parts of ISO 8000.

This document is intended for use by those actors that have a vested interest in information or data quality, with a focus on one or more information systems both inter- and intra-organization views, throughout all data life cycle phases.

Annex A contains an identifier that unambiguously identifies this document in an open information system.



Data quality —

Part 62:

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1 Scope

This document specifies particular elements of a maturity model. These elements conform to ISO/IEC 33004.

Organizations can use these elements in combination with their own assessment indicators to determine the maturity level of processes for data quality management as specified by ISO 8000-61.

The following are within the scope of this document:

- some of the elements of a model for assessing organizational process maturity;
- identifying those elements that exist in other standards (process capability levels, process attributes, ordinal scale for measuring process attributes and the scheme for derivation of process capability levels from process attribute rating);
- specifying six maturity levels and process profiles to indicate when organizations have achieved each of the maturity levels;
- providing guidance on how to assess the maturity level of an organization.

Methods or procedures to improve organizational maturity are outside the scope of this document.

This document can be used by the organization itself or by another party (including certification bodies) to perform assessment of the maturity.

This document can be used in conjunction with, or independently of, quality management systems standards.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 8000-2, Data quality — Part 2: Vocabulary

ISO 8000-61, Data quality — Part 61: Data quality management: Process reference model

ISO/IEC 33001, Information technology — Process assessment — Concepts and terminology

ISO/IEC 33002:2015, Information technology — Process assessment — Requirements for performing process assessment

ISO/IEC 33004:2015, Information technology — Process assessment — Requirements for process reference, process assessment and maturity models