TECHNICAL SPECIFICATION

ISO/TS 8000-65

First edition 2020-06

Data quality —

Part 65:

Att meas. Data quality management: Process





© ISO 2020

mentation, no part of vical, including p' vuested from All rights reserved. Unless otherwise specified, or required in the context of its implementation, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office CP 401 • Ch. de Blandonnet 8 CH-1214 Vernier, Geneva Phone: +41 22 749 01 11 Email: copyright@iso.org Website: www.iso.org

Published in Switzerland

Contents				Page
For	eword			iv
Intr	oductio	on		v
1		pe		
2	Normative references			
3	Tern	erms and definitions		
4	Data	Data quality management		
5	Process measurement questionnaire			2
	5.1	Questionnaire overview		
		5.1.1 Questionnaire structure		
		5.1.2 Guiding principles for generating questions		3
		5.1.3 Indicators and measurement scale		3
		5.1.4 Questionnaire content		3
	5.2	Data quality planning		
		5.2.1 Requirements management		
		5.2.2 Data quality strategy management		
		5.2.3 Data quality policy/standards/procedures manage		
	= 0	5.2.4 Data quality implementation planning		
	5.3	Data quality control		
		5.3.1 Provision of data specifications and work instruction		
		5.3.2 Data processing		
	5.4	5.3.3 Data quality monitoring and control		
	5.4	Data quality assurance 5.4.1 Review of data quality issues		
		5.4.1 Review of data quality issues 5.4.2 Provision of measurement criteria		
		5.4.3 Measurement of data quality and process performa		
		5.4.4 Evaluation of measurement results		
	5.5	Data quality improvement		
	5.5	5.5.1 Root cause analysis and solution development		
		5.5.2 Data cleansing		
		5.5.3 Process improvement for data nonconformity prev		
	5.6	Data-related support		
		5.6.1 Data architecture management		
		5.6.2 Data transfer management		
		5.6.3 Data operations management		13
		5.6.4 Data security management		14
	5.7	Resource provision		
		5.7.1 Data quality organization management		
		5.7.2 Human resource management		15
6	Details of the process measurement questionnaire			16
•	6.1	Measurement scale		
	6.2	Weighting of the questions		
	6.3	Visualizing the results		
7	Conf	Conformance		
		nformative) Information object registration		
Ann	ex B (in	nformative) The collated questions of the process measurer	nent questionnaire	20
Rih	liogranh	hv		33

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*.

A list of all parts in the ISO 8000 series 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 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.

This document establishes a simple measurement method, based on the high-level reference processes of ISO 8000-61. Evaluating the data quality management implementation of an organization. Each question has been derived from the outcomes of every process in ISO 8000-61.

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

This document is a previous general ded by tills

Data quality —

Part 65:

Data quality management: Process measurement questionnaire

1 Scope

This document specifies a questionnaire to audit the performance of the processes specified by the process reference model in ISO 8000-61.

NOTE 1 This questionnaire is applicable to all types of business process, technology, information system, data and data processing. This questionnaire can be used as part of a continuous improvement process.

The following are within the scope of this document:

- guiding principles for generating questions from the process outcomes specified by ISO 8000-61;
- one or more questions for each outcome of every process in ISO 8000-61;
- a measurement method based on a simple indicator and measurement scale for each question;
- guidance on how to present the results generated by the questionnaire.

NOTE 2 The questions and corresponding indicators in this document conform to the requirements of ISO 8000-63.

The following is outside the scope of this document:

defining how the questions relate to models of organizational process maturity.

NOTE 3 Such models define an overall scale by which to understand the degree to which an organization is performing effectively and efficiently.

EXAMPLE ISO 8000-62 and ISO 8000-64 ¹⁾specify how to use maturity models with ISO 8000-61.

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

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 8000-2 apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

ISO Online browsing platform: available at https://www.iso.org/obp

¹⁾ Under preparation.