BSI Standards Publication

Data quality

Part 2: Vocabulary

bsi.

INTERNATIONAL STANDARD

ISO 8000-2

Data quality —

Part 2:
Vocabulary

Qualité des données —

Partie 2: Vocabulaire

Contents

Page

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*.

This fourth edition cancels and replaces the third edition (ISO 8000-2:2018), which has been technically revised.

The main changes compared to the previous edition are as follows:

— addition and modifications of terms and definitions.

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 the vocabulary for the ISO 8000 series of parts.

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

This page deliberately left blank

INTERNATIONAL STANDARD   **ISO 8000-2:2020**

Data quality —

Part 2:
Vocabulary

1   Scope

This document defines terms relating to data quality used in the ISO 8000 series of parts.

2   Normative references

There are no normative references in this document.

3   Terms and definitions

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

—   IEC Electropedia: available at http://www.electropedia.org/

3.1   Terms relating to quality

3.1.1
process
set of interrelated or interacting activities that use inputs to deliver an intended result

[SOURCE: ISO 9000:2015, 3.4.1, modified — Notes to entry have been removed.]

3.1.2
requirement
need or expectation that is stated, generally implied or obligatory

[SOURCE: ISO 9000:2015, 3.6.4, modified — Notes to entry have been removed.]

3.1.3
quality
degree to which a set of inherent characteristics of an object fulfils *requirements* (3.1.2)

Note 1 to entry: The term "quality" can be used with adjectives such as poor, good or excellent.

Note 2 to entry: "Inherent", as opposed to "assigned", means existing in the object.

[SOURCE: ISO 9000:2015, 3.6.2]

3.1.4
quality management system
part of a management system with regard to *quality* (3.1.3)

[SOURCE: ISO 9000:2015, 3.5.4]

3.1.5
nonconformity
non-fulfilment of a *requirement* (3.1.2)

[SOURCE: ISO 9000:2015, 3.6.9, modified — Note to entry has been removed.]

3.2   Terms relating to data and information

3.2.1
information
knowledge concerning objects, such as facts, events, things, *processes* (3.1.1), or ideas, including concepts, that within a certain context has a particular meaning

[SOURCE: ISO/IEC 2382:2015, 2121271, modified — Field of application and notes to entry have been removed.]

3.2.2
data
reinterpretable representation of *information* (3.2.1) in a formalized manner suitable for communication, interpretation, or processing

[SOURCE: ISO/IEC 2382:2015, 2121272, modified — Notes to entry have been removed.]

3.2.3
data exchange
storing, accessing, transferring, and archiving of *data* (3.2.2)

[SOURCE: ISO 10303-1:—, 3.1.31]

3.2.4
data set
logically meaningful grouping of *data* (3.2.2)

EXAMPLE 1   Computer-aided design (CAD) files.

EXAMPLE 2   Electronic data interchange (EDI) transactions.

3.2.5
metadata
data (3.2.2) defining and describing other data

[SOURCE: ISO/IEC 11179-1:2015, 3.2.16, modified — The words "that defines and describes" have been replaced with "defining and describing".]

3.2.6
objective evidence
data (3.2.2) supporting the existence or verity of something

Note 1 to entry: Objective evidence can be obtained through observing, *measuring* (3.4.1), testing or other means.

[SOURCE: ISO 9000:2015, 3.8.3, modified — Note 1 to entry has been modified and Note 2 to entry has been removed.]

3.3   Terms relating to identifier

3.3.1
identifier
string of characters created by an organization to reference a *data set* (3.2.4)

3.3.2
identifier resolution
process (3.1.1) that, when applied to an *identifier* (3.3.1), returns an associated *data set* (3.2.4)

3.3.3
entity
concrete or abstract thing in the domain under consideration

[SOURCE: ISO 19439:2006, 3.29, modified — The word "any" has been removed at the start of the definition.]

3.3.4
organization identifier
reference that can be resolved unambiguously to the legal name, the location and the administrator of the organization

3.3.5
legal entity
physical or juridical person granted legal status by the governing body of a nation, state or community

3.3.6
authoritative identifier
identifier ([3.3.1](#)) issued by an organization that is the originator of the object identified or that is a legal authority

EXAMPLE   The original part manufacturer issues the authoritative identifier for that part. Distributors can also assign identifiers, which are *proxy identifiers* ([3.3.8](#)) (not authoritative identifiers).

Note 1 to entry: An *authoritative legal entity identifier* ([3.3.7](#)) is an authoritative identifier issued by an organization that is a legal authority.

3.3.7
authoritative legal entity identifier
ALEI
identifier ([3.3.1](#)) that identifies a *legal entity* ([3.3.5](#)) and is issued by the administrative agency for a governing body of the nation, state, or community with the authority to grant legal status

EXAMPLE   For the State of Delaware (in the United States), the Division of Corporations is the administrative agency that issues identifiers for juridical persons represented on documents of formation. This agency issued the authoritative legal entity identifier "3031657" to identify the formation of the Code Management Association as a legal entity.

3.3.8
proxy identifier
identifier ([3.3.1](#)) issued by an organization that is not the originator of the object identified

3.3.9
proxy legal entity identifier
identifier ([3.3.1](#)) that identifies a *legal entity* ([3.3.5](#)) and is issued by an organization that is not the administrative agency for a government and, thus, has no authority to grant legal status

3.3.10
vital record
record of life events kept under governmental authority

EXAMPLE   Birth certificates, marriage licenses and death certificates.

3.3.11
free decoding
identifier resolution ([3.3.2](#)) that, without the need to pay a fee, returns an associated *data set* ([3.2.4](#))

3.3.12
fee-based decoding
identifier resolution ([3.3.2](#)) that, only after paying a fee, returns an associated *data set* ([3.2.4](#))

3.3.13
free encoding
without the need to pay a fee, using terms and definitions to discover concept *identifiers* (3.3.1)

3.4   Terms relating to measurement

3.4.1
measure
ascertain or determine the magnitude or quantity of something

3.4.2
measurement
result of *measuring* (3.4.1) something

3.4.3
measurement data
data (3.2.2) representing a *measurement* (3.4.2)

3.4.4
measurement requirement
textual description of how a criterion is *measured* (3.4.1), including any necessary additional attributes and rules to control the test and the element or elements to be tested, and which plays the role of an external specification for a reliable measuring algorithm

Note 1 to entry: It is important to take care that the measurement requirement does not provide an algorithm for the measuring *process* (3.1.1), since it is understood that algorithm development is a competitive arena for engineering system vendors and where standardization is not possible.

3.5   Terms relating to industrial data

3.5.1
product
thing or substance produced by a natural or artificial *process* (3.1.1)

[SOURCE: ISO 10303-1:—, 3.1.49]

3.5.2
product data
representation of *information* (3.2.1) about a *product* (3.5.1) in a formal manner suitable for communication, interpretation, or processing by human beings or by computers

[SOURCE: ISO 10303-1:—, 3.1.50]

3.5.3
application
one or more *processes* (3.1.1) creating or using *product data* (3.5.2)

[SOURCE: ISO 10303-1:—, 3.1.5]

3.5.4
application protocol
AP
part of ISO 10303 that specifies an application interpreted model satisfying the scope and *information* (3.2.1) *requirements* (3.1.2) for a specific *application* (3.5.3)

Note 1 to entry: This definition differs from the definition used in open system interconnection (OSI) standards. No part of ISO 8000, however, contains content referring specifically to OSI communication, so this definition applies in all parts of ISO 8000.

[SOURCE: ISO 10303-1:—, 3.1.17, modified — Note 1 to entry has been modified.]

3.5.5
application reference model
ARM
information ([3.2.1](#)) model that describes the information *requirements* ([3.1.2](#)) and constraints of an *application* ([3.5.3](#)) within an *application protocol* ([3.5.4](#)) or module

[SOURCE: ISO 10303-1:—, 3.1.18]

3.6 Terms relating to data dictionary

3.6.1
data dictionary entry
description of an *entity* ([3.3.3](#)) type containing, at a minimum, an unambiguous *identifier* ([3.3.1](#)), a term and a definition

Note 1 to entry: In the ISO 8000 *data* ([3.2.2](#)) architecture, a property need not be associated with a specific data type in a *data dictionary* ([3.6.2](#)). The association between a property and a data type can be made in a *data specification* ([3.6.3](#)).

Note 2 to entry: In order to exchange a value corresponding to a data dictionary entry, more *information* ([3.2.1](#)) than an identifier, a name and a definition could be needed. For a property, a data type is needed. Depending on the kind of property, other data elements (e.g. unit of measure, language) could also be needed. These elements can be given in the data dictionary, in a data specification that references the data dictionary entry, or directly associated with the data.

Note 3 to entry: In the ISO 13584 data architecture, the dictionary entry for a property is required to reference a specific data type. Thus, an ISO 13584 dictionary entry is a special case of the more general concept, as it includes elements of a data specification.

[SOURCE: ISO 22745-2:2010, B.2.17, modified — The spelling of "datatype" has been changed to "data type" to be consistent with other terms in this document and Note 2 to entry has been modified.]

3.6.2
data dictionary
collection of *data dictionary entries* ([3.6.1](#)) that allows lookup by *entity* ([3.3.3](#)) *identifier* ([3.3.1](#))

[SOURCE: ISO 22745-2:2010, B.2.16]

3.6.3
data specification
set of *requirements* ([3.1.2](#)) covering the characteristics of *data* ([3.2.2](#)) being fit for one or more particular purposes

Note 1 to entry: ISO 8000-110 requires a data specification to describe how items belong to a particular class by using entries from a *data dictionary* ([3.6.2](#)).

Note 2 to entry: In collaborative relationships, the supplier of data and the user of that data agree the content of the data specification in order to ensure the collaboration will be successful (i.e. the supplier can supply conforming data and the user is able to exploit the data for the intended purposes).

Note 3 to entry: An effective data specification is one where the creator of the specification intends for the requirements to be necessary and sufficient for the data to meet the particular purposes.

Note 4 to entry: All stakeholders will be able to understand the data specification more effectively if there is an explicit statement of the intended purposes for the data.

3.7 Terms relating to characteristic data

3.7.1
property value
instance of a specific value together with an *identifier* ([3.3.1](#)) for a *data dictionary entry* ([3.6.1](#)) that defines a property

3.7.2
characteristic data
description of an *entity* ([3.3.3](#)) by the class to which it belongs and a set of *property values* ([3.7.1](#))

EXAMPLE 1   ISO 13584, ISO 15926, ISO 22745, ISO 13399 and ISO/TS 29002 all include characteristic data in their *data* ([3.2.2](#)) models.

EXAMPLE 2   The item "Hex Cap Screw — A193 Grade B7,.250-20 X 1.250" appears in a manufacturer's catalogue. It can be described as:

— class: hexagon cap screw;

— property values: [material specification, A193 Grade B7]; [diameter, 0.250 in]; [thread pitch, 20/in]; [length, 1.250 in].

In actual characteristic data, the first element of each bracketed pair would be an *identifier* ([3.3.1](#)) for a *data dictionary entry* ([3.6.1](#)). The elements are shown decoded here for clarity.

3.8   Terms relating to data quality

3.8.1
data quality
degree to which a set of inherent characteristics of *data* ([3.2.2](#)) fulfils *requirements* ([3.1.2](#))

Note 1 to entry: See also *quality* ([3.1.3](#)).

3.8.2
data quality management
coordinated activities to direct and control an organization with regard to *data quality* ([3.8.1](#))

3.8.3
data error
non-fulfilment of a *data* ([3.2.2](#)) *requirement* ([3.1.2](#))

Note 1 to entry: In this term, "error" is synonymous with *nonconformity* ([3.1.5](#)).

3.8.4
data provenance record
record of the ultimate derivation and passage of a piece of *data* ([3.2.2](#)) through its various owners or custodians

Note 1 to entry: A data provenance record can include *information* ([3.2.1](#)) about creation, update, transcription, abstraction, *validation* ([3.8.6](#)), and transferring ownership of data.

3.8.5
verification
confirmation, through the provision of *objective evidence* ([3.2.6](#)), that specified *requirements* ([3.1.2](#)) have been fulfilled

[SOURCE: ISO 9000:2015, 3.8.12, modified — Notes to entry have been removed.]

3.8.6
validation
confirmation, through the provision of *objective evidence* ([3.2.6](#)), that the *requirements* ([3.1.2](#)) for a specific intended use or *application* ([3.5.3](#)) have been fulfilled

[SOURCE: ISO 9000:2015, 3.8.13, modified — Notes to entry have been removed.]

3.8.7
authoritative data source
owner of a *process* (3.1.1) that creates *data* (3.2.2)

EXAMPLE   The Department of Transportation of the Commonwealth of Pennsylvania, USA, is the authoritative data source for Pennsylvania motor vehicle registration records.

3.8.8
accepted reference value
value that serves as an agreed-upon reference for comparison

Note 1 to entry: The accepted reference value is derived as:

a)   a theoretical or established value, based on scientific principles;

b)   an assigned or certified value, based on experimental work of some national or international organization;

c)   a consensus or certified value, based on collaborative experimental work under the auspices of a scientific or technical group;

d)   the expectation, i.e. the mean of a specified set of *measurements* (3.4.2), when a), b) and c) are not available.

[SOURCE: ISO 3534-2:2006, 3.2.7]

3.8.9
true value
value that characterizes a characteristic perfectly defined in the conditions that exist when the characteristic is considered

Note 1 to entry: The true value is a theoretical concept and, in general, cannot be known exactly.

[SOURCE: ISO 3534-2:2006, 3.2.5, modified.]

3.8.10
data accuracy
quality (3.1.3) of *data* (3.2.2) in respect of the represented value agreeing with the corresponding *true value* (3.8.9) to a degree necessary for an intended purpose

EXAMPLE 1   When creating a *data specification* (3.6.3) to address data accuracy considerations, an organization decides to include in the specification a *requirement* (3.1.2) for a length value to have three decimal places.

EXAMPLE 2   An inherent characteristic of some data is the use of three decimal places to represent a length value.

Note 1 to entry: For data accuracy, the relevant inherent characteristics of the data are those that determine how to interpret the value.

Note 2 to entry: No universal specification for data accuracy exists. Data accuracy depends on the details of the data representation, the subject matter of the data and the purpose to which the user intends to put the data.

Note 3 to entry: In practice, when assessing data accuracy, an organization can make use of an *accepted reference value* (3.8.8) rather than the true value.

Note 4 to entry: Not all aspects of data accuracy can be *verified* (3.8.5) by just assessing, as a closed system, the consistency of the data and the applicable data specification. If the data, for example, represents the length of a particular screw in a warehouse then the screw is in the real world, requiring an appropriate test to look beyond the content of the data set and the data specification. Such testing is addressed by ISO 8000-8.

Note 5 to entry: ISO 8000-130 specifies the mechanisms by which an organization can state the accuracy of data (including identification of the method that has assessed the data) or assert the accuracy of data (including identification of the remediation that the organization will perform if the data in fact fails to meet the asserted level of accuracy).

3.8.11
data accuracy record
record of the *information* (3.2.1) provided about the *data accuracy* (3.8.10) of a specified *data set* (3.2.4)

Note 1 to entry: A data accuracy record can include representations and warranties of the data's accuracy.

3.8.12
data completeness
quality (3.1.3) of a *data set* (3.2.4) in respect of the content being all that is necessary for an intended purpose

EXAMPLE 1   When creating a *data specification* (3.6.3) that addresses data completeness considerations, an organization includes in the specification a *requirement* (3.1.2) for a data set to identify explicitly the applicable unit of measure for each physical quantity in the set.

EXAMPLE 2   When calculating the average speed of a journey, a user decides to use the start and end times of the journey and the total distance travelled. This decision determines the basis for data completeness of the required data set.

EXAMPLE 3   When calculating the maximum speed during a journey, a user decides to use a list of points in time and, for each point, the distance travelled to that point. The user decides an appropriate duration between each point in time. This duration being longer makes the calculation less accurate but prevents the data set becoming inappropriately large. These decisions determine the basis for data completeness of the required data set.

EXAMPLE 4   A buyer wants a supplier to send a list of all *products* (3.5.1) that are available for purchase. The supplier uses ISO 8000-140, which specifies how to provide a statement to confirm the supplier has created a data set representing a list that meets the buyer's requirement.

Note 1 to entry: For data completeness, the relevant inherent characteristics of the data set are those that determine which *data* (3.2.2) exist as part of the data set.

Note 2 to entry: No universal specification for data completeness exists. Data completeness depends on the content of the data set, the subject matter of the data and the purpose to which the user intends to put the data set.

Note 3 to entry: Not all aspects of data completeness can be *verified* (3.8.5) by just assessing, as a closed system, the consistency of the data set and the applicable data specification. If the data set claims, for example, to be a complete list of the employees of an organization then the actual human beings are in the real world, requiring an appropriate test to look beyond the content of the data set and the data specification. Such testing is addressed by ISO 8000-8.

Note 4 to entry: ISO 8000-140 specifies the mechanisms by which an organization can state the completeness of a data set (including identification of the method that has assessed the data) or assert the completeness of a data set (including identification of the remediation that the organization will perform if the data in fact fails to meet the asserted level of completeness).

3.8.13
data completeness record
record of the *information* (3.2.1) provided about the *data completeness* (3.8.12) of a specified *data set* (3.2.4)

Note 1 to entry: A data completeness record can include representations and warranties of the data's completeness.

3.9   Terms relating to syntax and semantics

3.9.1
formal syntax
specification of the valid sentences of a formal language using a formal grammar

EXAMPLE 1   An XML document type definition (DTD) is a formal syntax.

EXAMPLE 2   ISO 10303-21 contains a formal syntax in Wirth Syntax Notation (WSN) for ISO 10303 physical files.

Note 1 to entry: A formal language is computer-interpretable.

Note 2 to entry: Formal grammars are usually Chomsky context-free grammars.

Note 3 to entry: Variants of Backus-Naur Form (BNF) such as Augmented Backus-Naur Form (ABNF) and Wirth Syntax Notation (WSN) are often used to specify the syntax of computer programming languages and *data* (3.2.2) languages.

3.9.2
semantic encoding
technique of replacing natural language terms in a message with *identifiers* (3.3.1) that reference *data dictionary entries* (3.6.1)

3.9.3
semantically coded data specification
data requirements statement
data specification (3.6.3) that uses entries from a *data dictionary* (3.6.2)

EXAMPLE 1   An ISO/TS 22745-30 compliant identification guide.

EXAMPLE 2   ISO 13584-501.

Note 1 to entry: A semantically coded data specification can be used to specify rules for describing items belonging to a particular class using *semantic encoding* (3.9.2).

3.10 Terms relating to transaction data

3.10.1
business transaction
completion of a business action or a course of action

3.10.2
transaction data
data (3.2.2) representing a *business transaction* (3.10.1)

3.11 Terms relating to master data

3.11.1
master data
data (3.2.2) held by an organization to describe the *entities* (3.3.3) that are both independent and fundamental for that organization, and referenced in order to perform its transactions

EXAMPLE   A credit card transaction is related to two entities that are represented by master data. The first is the credit card account at the issuing bank and is identified by the credit card number, with the master data representing *information* (3.2.1) required by the issuing bank about that specific account. The second is the merchant account at the accepting bank and is identified by the merchant number, with the master data representing information required by the accepting bank about that specific merchant.

Note 1 to entry: Types of master data include records that describe customers, *products* (3.5.1), employees, materials, suppliers, services, shareholders, facilities, equipment, and rules and regulations.

Note 2 to entry: The determination of what is considered master data depends on the viewpoint of the organization.

Note 3 to entry: The term "entity" is used in the general sense, not as used in data modelling.

3.11.2
master data message
data message used to exchange *master data* (3.11.1)

3.12 Terms relating to product data

3.12.1
product data quality
consistency, completeness, and suitability for the purpose of the *product data* ([3.5.2](#))

[SOURCE: ISO 10303-59:2014, 3.1.5.5, modified — The word "its purpose" have been replaced with "the purpose".]

3.12.2
quality criterion
criterion for evaluating *product data quality* ([3.12.1](#))

[SOURCE: ISO 10303-59:2014, 3.1.5.8]

3.12.3
product shape data
data ([3.2.2](#)) representing *product* ([3.5.1](#)) shape with geometric and topological information in accordance with ISO 10303-42

[SOURCE: ISO 10303-59:2014, 3.1.5.7]

3.12.4
threshold
allowance used for the assessment of shape *data quality* ([3.8.1](#)) by numerical test

EXAMPLE   A distance threshold is the basis on which to evaluate the gap between a base surface and bounding curves for trimming the effective portion of the surface. This threshold specifies that if the maximum distance between the surface and the curves is greater than or equal to the specified minimum value then the gap is a *quality* ([3.1.3](#)) defect.

[SOURCE: ISO 10303-59:2014, 3.1.5.9, modified — Note to entry has been replaced with Example.]

3.12.5
inspection
determination of conformity to specified *requirements* ([3.1.2](#))

[SOURCE: ISO 9000:2015, 3.11.7, modified — Notes to entry have been removed.]

3.12.6
inspection result
result of *inspection* ([3.12.5](#)) which indicates whether, or not, *quality* ([3.1.3](#)) defects exist within the inspected *product shape data* ([3.12.3](#))

Note 1 to entry: Such results can also include detailed *information* ([3.2.1](#)) on what type of quality defects exist, and how serious the defect is, together with the shape element *data* ([3.2.2](#)) where the problem is detected.

[SOURCE: ISO 10303-59:2014, 3.1.5.3, modified — The words "the product shape data inspected contains quality defects" have been replaced with "quality defects exist within the inspected product shape data".]

3.12.7
accuracy
specification to control precision of an approximate solution

Note 1 to entry: The intended interpretation of the accuracy is that an approximate solution is acceptable if the difference between that approximate solution and any other approximate solution obtained by calculation with a finer distribution of sampling points is smaller than the given accuracy. There are two types of accuracy:

— general accuracy applied to all the *measurements* ([3.4.2](#)), and

— specific accuracy applied only to specified measurements.

[SOURCE: ISO 10303-59:2014, 3.1.5.1, modified — Note 1 to entry has been modified.]

3.13 Terms relating to item of production and item of supply

3.13.1
item of production
goods or service that conforms to a specification defined by a supplier

Note 1 to entry: Items of production are commonly tracked by *part numbers* (3.13.4), model numbers, or procedure codes.

[SOURCE: ISO 22745-2:2010, 22.2, modified — The word "good" has been replaced with "goods".]

3.13.2
serial number
asset tracking number
asset number
number used to identify an individual occurrence of an *item of production* (3.13.1)

EXAMPLE   Company A makes an item of production with *part number* (3.13.4) 253144-22, which has the following description: two piece ball valve, size 1/2 in, FNPT connection, max. pressure 600 PSI (pounds per square inch) WOG (water, oil, and gas), 150 PSI WSP (working steam pressure), full port, material of construction forged brass, ball material polytetrafluoroethylene, temperature range −40 °F to 400 °F. Company A assigns serial number 31552984 to the particular valve (physical object) with part number 253144-22 that comes off the production line at 2009-04-16T15:51:31.

3.13.3
item of supply
class of substitutable goods or services that fulfil a fit, form or function defined by a buyer

[SOURCE: ISO 22745-2:2010, 22.1]

3.13.4
part number
unique alphanumeric designation assigned to an object in a manufacturing system

[SOURCE: ISO 22745-2:2010, 22.4, modified — Notes to entry have been removed.]

3.13.5
stockkeeping unit
sku
identifier (3.3.1) of a set of *product* (3.5.1) characteristics for the purpose of inventory control or procurement

EXAMPLE 1   A NATO stock number is a stockkeeping unit.

EXAMPLE 2   A material identifier in an enterprise resource planning system is a stockkeeping unit.

Note 1 to entry: A stockkeeping unit is usually assigned by the buyer of products.

3.14 Terms relating to data quality role

3.14.1
data technician
person who creates, reads, modifies, and deletes *data* (3.2.2) in accordance with the guidelines for *data quality management* (3.8.2), and *measures* (3.4.1) *data quality* (3.8.1) and corrects *data errors* (3.8.3) found as a result of *measuring* (3.4.1) data quality

Note 1 to entry: The *data administrator* (3.14.2) sets the guidelines for data quality management.

3.14.2
data administrator
person who controls and coordinates the work of *data technicians* ([3.14.1](#)) by defining criteria needed to maintain *data quality* ([3.8.1](#)), by designing *data* ([3.2.2](#)) schemata, and by analysing the causes of errors to prevent their recurrence

Note 1 to entry: By providing supporting resources and guidelines to data technicians, the data administrator puts the data quality plan into practice.

3.14.3
data manager
person who establishes plans for *data quality* ([3.8.1](#)) improvement in an organization, grants *data administrators* ([3.14.2](#)) the authority to trace and correct *data* ([3.2.2](#)) over the *information* ([3.2.1](#)) systems or organization, and maintains data consistency in individual information systems through the organization-wide data architecture

3.14.4
data steward
person or organization delegated the responsibility for managing a specific set of *data* ([3.2.2](#)) resources

[SOURCE: ISO 15143-1:2010, 3.3.21]

3.15 Terms relating to process assessment

3.15.1
process assessment model
model suitable for the purpose of assessing a specified *process* ([3.1.1](#)) *quality* ([3.1.3](#)) characteristic, based on one or more process reference models

Note 1 to entry: Process assessment models addressing a specific process quality characteristic can include the identification of the characteristic in the title; for example, a process assessment model addressing *process capability* ([3.15.15](#)) can be termed a "process capability assessment model".

[SOURCE: ISO/IEC 33001:2015, 3.3.9]

3.15.2
process dimension
set of elements in a *process assessment model* ([3.15.1](#)) explicitly related to the *processes* ([3.1.1](#)) defined in the relevant process reference model(s)

Note 1 to entry: For example, in ISO/IEC 33063, the elements of the process dimension include processes, process purpose statements, *process outcomes* ([3.15.17](#)), and process performance indicators.

[SOURCE: ISO/IEC 33001:2015, 3.3.10, modified — In Note 1 to entry, "ISO/IEC 33061" has been replaced with "ISO/IEC 33063".]

3.15.3
maturity model
model derived from one or more specified *process assessment models* ([3.15.1](#)) that identify the *process* ([3.1.1](#)) sets associated with the levels in a specified scale of organizational process maturity

[SOURCE: ISO/IEC 33001:2015, 3.3.7, modified — The words "model(s) that identifies" have been replaced with "models that identify".]

3.15.4
organizational unit
identified part of an organization that deploys one or more *processes* ([3.1.1](#)) that operate within a coherent set of business goals and which forms the basis for the scope of an assessment

Note 1 to entry: An organizational unit is typically part of a larger organization, although in a small organization, the organizational unit can be the whole organization.

[SOURCE: ISO/IEC 33001:2015, 3.2.14]

3.15.5
maturity level
point on an ordinal scale of organizational *process* ([3.1.1](#)) maturity that characterises the maturity of the *organizational unit* ([3.15.4](#)) assessed in the scope of the *maturity model* ([3.15.3](#)) used

[SOURCE: ISO/IEC 33001:2015, 3.4.1]

3.15.6
process assessment
disciplined evaluation of an *organizational unit's* ([3.15.4](#)) *processes* ([3.1.1](#)) against a *process assessment model* ([3.15.1](#))

[SOURCE: ISO/IEC 33001:2015, 3.2.15]

3.15.7
assessment input
information ([3.2.1](#)) required before a *process assessment* ([3.15.6](#)) can commence

[SOURCE: ISO/IEC 33001:2015, 3.2.3, modified — Note 1 to entry has been removed.]

3.15.8
assessment output
all of the tangible results from a *process assessment* ([3.15.6](#))

Note 1 to entry: See also *assessment record* ([3.15.13](#)).

[SOURCE: ISO/IEC 33001:2015, 3.2.4, modified — The words "an assessment" have been replaced with "a process assessment" and Note 1 to entry has been added.]

3.15.9
assessment team
one or more individuals who jointly perform a *process assessment* ([3.15.6](#))

[SOURCE: ISO/IEC 33001:2015, 3.2.10]

3.15.10
process attribute
process quality attribute
measurable property of a *process* ([3.1.1](#)) *quality* ([3.1.3](#)) characteristic

[SOURCE: ISO/IEC 33001:2015, 3.4.3]

3.15.11
process attribute rating
judgement of the degree of achievement of the *process attribute* ([3.15.10](#)) for the assessed *process* ([3.1.1](#))

[SOURCE: ISO/IEC 33001:2015, 3.4.5]

3.15.12
process profile
set of *process attribute ratings* ([3.15.11](#)) for an assessed *process* ([3.1.1](#))

[SOURCE: ISO/IEC 33001:2015, 3.2.18]

3.15.13
assessment record

orderly documented collection of the *information* ([3.2.1](#)) which is pertinent to a *process assessment* ([3.15.6](#)) and adds to the understanding and *verification* ([3.8.5](#)) of the *process profiles* ([3.15.12](#)) generated by the assessment

[SOURCE: ISO/IEC 33001:2015, 3.2.7, modified — The words "pertinent to the assessment" have been replaced with "pertinent to a process assessment".]

3.15.14
assessment indicator

sources of *objective evidence* ([3.2.6](#)) used to support the assessor's judgement in rating *process attributes* ([3.15.10](#))

[SOURCE: ISO/IEC 33001:2015, 3.3.1 — Note 1 to entry has been removed.]

3.15.15
process capability

characterization of the ability of a *process* ([3.1.1](#)) to meet current or projected business goals

[SOURCE: ISO/IEC 33020:2019, 3.4]

3.15.16
process capability level

characterization of a *process* ([3.1.1](#)) on an ordinal *measurement* ([3.4.2](#)) scale of a *process capability* ([3.15.15](#))

[SOURCE: ISO/IEC 33020:2019, 3.5]

3.15.17
process outcome

observable result of the successful achievement of *process* ([3.1.1](#)) purpose

Note 1 to entry: An outcome statement describes one of the following: production of an artefact; a significant change in state; meeting of specified constraints, e.g. *requirements* ([3.1.2](#)), goals, etc.

[SOURCE: ISO/IEC 33001:2015, 3.3.11]

3.16 Terms relating to data governance

3.16.1
data governance

development and enforcement of policies related to the management of *data* ([3.2.2](#))

Note 1 to entry: ISO/IEC 38500 specifies six principles of *information* ([3.2.1](#)) technology governance: responsibility; strategy; acquisition; performance; conformance; human behaviour. These principles also apply to data.

Annex A
(informative)

Document identification

To provide for unambiguous identification of an information object in an open system, the object identifier

```
{ iso standard 8000 part (2) version (4) }
```

is assigned to this document. The meaning of this value is defined in ISO/IEC 8824-1 and is described in ISO 10303-1.

Annex A
(informative)

Document identification

To provide for unambiguous identification of an information object in an open system, the object identifier

```
{ iso standard 8000 part (2) version (4) }
```

is assigned to this document. The meaning of this value is defined in ISO/IEC 8824-1 and is described in ISO 10303-1.

Annex A
(informative)

Document identification

To provide for unambiguous identification of an information object in an open system, the object identifier

```
{ iso standard 8000 part (2) version (4) }
```

is assigned to this document. The meaning of this value is defined in ISO/IEC 8824-1 and is described in ISO 10303-1.

Annex A
(informative)

Document identification

To provide for unambiguous identification of an information object in an open system, the object identifier

```
{ iso standard 8000 part (2) version (4) }
```

is assigned to this document. The meaning of this value is defined in ISO/IEC 8824-1 and is described in ISO 10303-1.