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Artificial intelligence — Data quality for analytics and machine learning (ML)

Part 5: Data quality governance framework



AS ISO/IEC 5259.5:2025

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(a) "should" means that something is recommended.

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Structure of Standards

A Standard always has the following parts:

(i) The Preface states who developed the Standard, what the Standard is aiming to do, and how it relates to other documents.

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(iii) The Normative references clause lists other documents that are referenced in the Standard as part of requirements.

(iv) The Terms and definitions clause defines important terms to help with understanding the Standard.

A Standard may also include other parts, such as the following:

(1) A normative appendix sets additional requirements that need to be conformed to.

(2) An informative appendix provides additional information or guidance. They usually do not contain requirements. If an informative appendix does contain requirements, the Standard will explain when those requirements apply

(3) A Bibliography lists documents referenced in the Standard but not as part of requirements.

Many Standards include notes. Notes provide recommendations and/or guidance only. They never contain requirements.

Preface

This Standard was prepared by the Standards Australia Committee IT-043, Artificial Intelligence.

The objective of this document is to provide a data quality governance framework for analytics and machine learning (ML) to enable governing bodies of organizations to direct and oversee the implementation and operation of data quality measures, management, and related processes with adequate controls throughout the data life cycle (DLC) model according to AS ISO/IEC 5259.1:2024.

This document is identical to, and has been reproduced from, ISO/IEC 5259-5:2025, *Artificial intelligence — Data quality for analytics and machine learning (ML) — Part 5: Data quality governance framework.*

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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. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives or www.iec.ch/members_experts/refdocs).

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This document was prepared by Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 42, *Artificial intelligence*.

A list of all parts in the ISO/IEC 5259 series can be found on the ISO and IEC websites.

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Introduction

To address data quality properly without wasting critical resources, the organization's governing body can set the strategic direction for the use of analytics and machine learning (ML) and can oversee the quality of the needed data.

The data quality governance framework for analytics and ML assists the governing body in establishing a data quality governance within its organization with adequate controls across different layers of the organization throughout the data life cycle (DLC).

The framework can be used by both the governing body and management to interact and ensure the establishment of an effective data quality governance for analytics and ML at all levels in the organization.

The framework can be applicable regardless of an organization's size and type; and used in conjunction with other parts of the ISO/IEC 5259 series.

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Australian Standard®

Artificial intelligence — Data quality for analytics and machine learning (ML)

Part 5: Data quality governance framework

Section 1 Scope

This document provides a data quality governance framework for analytics and machine learning (ML) to enable governing bodies of organizations to direct and oversee the implementation and operation of data quality measures, management, and related processes with adequate controls throughout the data life cycle (DLC) model according to ISO/IEC 5259-1.

This document can be applied to any analytics and ML. This document does not define specific management requirements or process requirements according to ISO/IEC 5259-3 and ISO/IEC 5259-4 respectively.

Section 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/IEC 5259-1, *Artificial intelligence — Data quality for analytics and machine learning (ML) — Part 1: Overview, terminology, and examples*

ISO/IEC 22989:2022, *Information technology — Artificial intelligence — Artificial intelligence concepts and terminology*

ISO/IEC 38505-1, *Information technology — Governance of IT — Governance of data — Part 1: Application of ISO/IEC 38500 to the governance of data*

ISO/IEC 38507:2022, *Information technology — Governance of IT — Governance implications of the use of artificial intelligence by organizations*

Section 3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO/IEC 5259-1, ISO/IEC 22989, ISO/IEC 38505-1 and ISO/IEC 38507, and the following apply.

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

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

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

3.1
data creator
role within an organization responsible for generating, collecting and curating data from data sources

3.2
data owner
organization that is in the position to obtain, create, and have significant control over the content, access and distribution of data

Note 1 to entry: A data owner does not necessarily have a legal status with respect to data.

[SOURCE: ISO/TR 14872:2019, 3.4 — modified, Note 1 to entry replaced]

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