

The data presented have a value for research and not a legal value.

ID 45 **4213** -

Specification Assessment of Machine learning classification performance

Relationship with Ai Act **Article 006** (Classification)

Link <https://www.iso.org/obp/ui/en/#iso:std:iso-iec:ts:4213:ed-1:v1:en>

Scope TS This document specifies methodologies for measuring classification performance of machine learning models, systems and algorithms.

Terms	Variant	Complementary	AI Act
269 Machine learning			45
253 Classification		Article 006	45

OPTIONAL INFORMATION

Name and Surname	Affiliation and Qualification	Linkedin ... other
Observations		

ID 15 **5259** - **1**

Specification Overview, terminology and exampslpe

Relationship with Ai Act **Article 015, Article 010** (Data collection processes); **Article 017** (Data life cycle); **Article 010** (Data quality); **Article 009** (Measurement)

Link https://www.iso.org/search.html?PROD_isoorg_en%5Bquery%5D=5259-1

Scope This document provides the means for understanding and associating the individual documents of the ISO/IEC 5259 series and is the foundation for conceptual understanding of data quality for analytics and machine learning. It also discusses associated technologies and examples (e.g. use cases and usage scenarios).

Terms	Variant	Complementary	AI Act
30 Data life cycle		Article 017	15
29 Data collection processes		Article 015, Article 010	15
162 Data user			15
116 Data quality		Article 010	15
163 Data quality model			15
153 Measurement		Article 009	15
164 Analytics			15
165 Data quality management			15
166 Data governance			15
167 Data provenance			15

OPTIONAL INFORMATION

Name and Surname	Domenico Natale	Affiliation and UNI CT 533 (member) Qualification UNI CT 504 (president)	Linkedin https://www.linkedin.com/in/domenico-natale-a9b99612/?originalSubdomain=it
Observations			

The data presented have a value for research and not a legal value.

ID 3

5259 - 2

Specification

Data quality measures

Relationship with AI Act

Article 017, Article 005 (Accessibility); Article 015 (Accuracy); Article 015, Article 010, Article 017 (Bias detection and correction); Article 017 (Compliance); Article 017 (Data holder); Article 017 (Identifiability); Article 010 (Consistency); Article 015 (Data quality reporting); Article 015, Article 010 (Origin of data); Article 010 (Quality criteria); Article 012 (Traceability); Article 010 (Training, validation, testing datasets)

Link

<https://www.iso.org/standard/81860.html>

Scope

This document specifies a data quality model, data quality measures and guidance on reporting data quality in the context of analytics and machine learning (ML).
This document is applicable to all types of organizations who want to achieve their data quality objectives.

Terms	Variant	Complementary	AI Act	
21 Compliance	complete		Article 017	3
1 Accessibility	access		Article 017, Article 005	3
22 Data holder	identifiability		Article 017	3
25 Consistency			Article 010	3
11 Balance				3
20 Completeness				3
63 Resilience regarding errors, faults,	dataset			3
13 Bias detection and correction	dataset		Article 015, Article 010, Article 017	3
26 Credibility		complementary		3
75 Understandability		complementary		3
27 Currentness		complementary		3
76 Validation		complementary		3
39 Efficiency		complementary		3
57 Quality criteria		complementary	Article 010	3
74 Training, validation, testing datasets		complementary	Article 010	3
56 Precision		complementary		3
60 Relevance		complementary		3
12 Benchmark and measurement methodologies		complementary		3
69 Synthetic or anonymised data		complementary		3
37 Documentation of the access, to avoid misuse		complementary		3

OPTIONAL INFORMATION

Name and Surname: Domenico Natale | Affiliation and UNI CT 533 (member) | Qualification UNI CT 504 (president) | LinkedIn: <https://www.linkedin.com/in/domenico-natale-a9b99812/?...otheroriginalSubdomain=it>

Observations

ID 16

5259 - 3

Specification

Data quality management requirements and guidelines

Relationship with AI Act

Article 017, Article 009, Article 012, Article 006, Article 007 (Risk management); Article 043 (Management)

Link

<https://www.iso.org/standard/81092.html>

Scope

This document specifies requirements and provides guidance for establishing, implementing, maintaining and continually improving the quality of data used in the areas of analytics and machine learning.
This document does not define a detailed process, methods or metrics. Rather it defines the requirements and guidance for a quality management process along with a reference process and methods that can be tailored to meet the requirements in this document.
The requirements and recommendations set out in this document are generic and are intended to be applicable to all organizations, regardless of type, size or nature.

Terms	Variant	Complementary	AI Act	
168 Data quality plan				16
165 Data quality management				16
169 Data quality culture				16
170 Management			Article 043	16
172 Audit and assessment				16
171 Data quality management lifecycle				16
173 Horizontal aspects				16
101 Risk management			Article 017, Article 009, Article 012, Article 006, Article 007	16
174 Data format				16
175 Managing of data quality dependencies				16
176 Management system integration				16

OPTIONAL INFORMATION

Name and Surname: Domenico Natale | Affiliation and UNI CT 533 (member) | Qualification UNI CT 504 (president) | LinkedIn: <https://www.linkedin.com/in/domenico-natale-a9b99812/?...otheroriginalSubdomain=it>

Observations

The data presented have a value for research and not a legal value.

ID 17 **5259 - 4**

Specification Data quality process framework

Relationship with AI Act **Article 017** (Data life cycle)

Link <https://www.iso.org/obp/ui/en/#iso:std:iso-iec:5259-4:ed-1:v1:en>

Scope This document establishes general common organizational approaches, regardless of the type, size or nature of the applying organization, to ensure data quality for training and evaluation in analytics and machine learning (ML). It includes guidance on the data quality process for:

- supervised ML with regard to the labelling of data used for training ML systems, including common organizational approaches for training data labelling;
- unsupervised ML;
- semi-supervised ML;
- reinforcement learning;
- analytics.

This document is applicable to training and evaluation data that come from different sources, including data acquisition and data composition, data preparation, data labelling, evaluation and data use. This document does not define specific services, platforms or tools.

Terms	Variant	Complementary	AI Act	
177 Outsourcing				17
178 Cloud service				17
179 Segmentation				17
180 Data quality process principles				17
30 Data life cycle			Article 017	17
181 Data quality process validation				17
182 Data requirements				17
183 Data labelling				17
184 Data quality assessment				17
185 Data decommissioning				17

OPTIONAL INFORMATION

Name and Surname Domenico Natale Affiliation and UNI CT 533 (member) Qualification UNI CT 504 (president) LinkedIn [https://www.linkedin.com/in/domenico-natale-a9b99812/?](https://www.linkedin.com/in/domenico-natale-a9b99812/?...) ... other originalSubdomain=it

Observations

ID 18 **5259 - 5**

Specification Data quality governance framework

Relationship with AI Act **Article 010** (Governance)

Link <https://www.iso.org/obp/ui/en/#iso:std:iso-iec:5259-5:dis:ed-1:v1:en>

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.

Terms	Variant	Complementary	AI Act	
166 Data governance				18
111 Governance			Article 010	18
146 Governance of information security				18
186 Data quality risk management				18
187 Responsibility of governing body				18
188 Establish enabling environment for data				18

OPTIONAL INFORMATION

Name and Surname Domenico Natale Affiliation and UNI CT 533 (member) Qualification UNI CT 504 (president) LinkedIn [https://www.linkedin.com/in/domenico-natale-a9b99812/?](https://www.linkedin.com/in/domenico-natale-a9b99812/?...) ... other originalSubdomain=it

Observations

The data presented have a value for research and not a legal value.

ID **20** **5338** -

Specification AI System life cycle process

Relationship with AI Act Article 003, Article 002, Article 004, Article 006, Article 007, Article 043 (AI systems); Article 015, Article 017, Article 009 (Lifecycle)

Link <https://www.iso.org/obp/ui/en/#iso:std:iso-iec:5338:ed-1:v1:en>

Scope This document defines a set of processes and associated concepts for describing the life cycle of AI systems based on machine learning and heuristic systems. It is based on ISO/IEC/IEEE 15288 and ISO/IEC/IEEE 12207 with modifications and additions of AI-specific processes from ISO/IEC 22989 and ISO/IEC 23053. This document provides processes that support the definition, control, management, execution and improvement of the AI system in its life cycle stages. These processes can also be used within an organization or a project when developing or acquiring AI systems. When an element of an AI system is traditional software or a traditional system, the software life cycle processes in ISO/IEC/IEEE 12207 and the system life cycle processes in ISO/IEC/IEEE 15288 can be used to implement that element.

Terms	Variant	Complementary	AI Act	
189 Knowledge acquisition				20
49 Lifecycle			Article 015, Article 017, Article 009	20
122 System				20
4 AI systems			Article 003, Article 002, Article 004, Article 006, Article 007, Article 043	20
190 Human resource management process				20
191 Quality management process				20
192 Knowledge management process				20
49 Lifecycle			Article 015, Article 017, Article 009	20
193 Maintenance process				20

OPTIONAL INFORMATION

Name and Surname Domenico Natale Affiliation and UNI CT 533 (member) Qualification UNI CT 504 (president) LinkedIn <https://www.linkedin.com/in/domenico-natale-a9b99812/?...otheroriginalSubdomain=it>

Observations

ID **52** **5339** -

Specification Guidance for AI application

Relationship with AI Act Article 015, Article 017, Article 009 (Lifecycle)

Link <https://www.iso.org/obp/ui/en/#iso:std:iso-iec:5339:ed-1:v1:en>

Scope This document provides guidance for identifying the context, opportunities and processes for developing and applying AI applications. The guidance provides a macro-level view of the AI application context, the stakeholders and their roles, relationship to the life cycle of the system, and common AI application characteristics and considerations.

Terms	Variant	Complementary	AI Act	
235 Processes				52
113 Stakeholder				52
49 Lifecycle			Article 015, Article 017, Article 009	52
178 Cloud service				52

OPTIONAL INFORMATION

Name and Surname Affiliation and Qualification LinkedIn ... other

Observations

The data presented have a value for research and not a legal value.

ID **31**

5469 -

Specification TR Functional safety and AI systems

Relationship with AI Act Article 001, Article 073, Article 006, Article 007, Article 043 (Safety)

Link <https://www.iso.org/obp/ui/en/#iso:std:iso-iec:tr:5469:ed-1.v1.en>

Scope This document describes the properties, related risk factors, available methods and processes relating to:
— use of AI inside a safety related function to realize the functionality;
— use of non-AI safety related functions to ensure safety for an AI controlled equipment;
— use of AI systems to design and develop safety related functions.

Terms	Variant	Complementary	AI Act
214 Safety			Article 001, Article 073, Article 006, Article 007, Article 043 31
242 Risk factors			31
244 Explainability			31
243 Transparency			31

OPTIONAL INFORMATION

Name and Surname	Affiliation and Qualification	Linkedin ... other
Observations		

ID **43**

6254 -

Specification Objective and approaches for explainability and interpretability of ML models and AI systems

Relationship with AI Act Article 003, Article 002, Article 004, Article 006, Article 007, Article 043 (AI systems)

Link <https://www.iso.org/standard/82148.html>

Scope CD This document describes approaches and methods that can be used to achieve explainability objectives of stakeholders with regards to ML models and AI systems' behaviours, outputs, and results.

Terms	Variant	Complementary	AI Act
244 Explainability			43
276 Interpretability			43
113 Stakeholder			43
4 AI systems			Article 003, Article 002, Article 004, Article 006, Article 007, Article 043 43

OPTIONAL INFORMATION

Name and Surname	Affiliation and Qualification	Linkedin ... other
Observations		

The data presented have a value for research and not a legal value.

ID 39

8000 - 1

Specification

Overview

Relationship
with
AI Act[Article 010](#) (Data quality)

Link

<https://www.iso.org/obp/ui/en/#iso:std:iso:8000:-1:ed-1:v1:en>

Scope

This document provides an overview of the ISO 8000 series

Terms	Variant	Complementary	AI Act	
116 Data quality			Article 010	39
165 Data quality management				39
174 Data format				39
166 Data governance				39
235 Processes				39
261 Master data				39
113 Stakeholder				39
262 Industrial data				39
79 Organization				39

OPTIONAL INFORMATION

Name and Surname Affiliation and Qualification LinkedIn ... other

Observations

ID 11

8183 -

Specification

Data life cycle

Relationship
with
AI Act[Article 017](#) (Data life cycle), [Article 010](#) (Governance)

Link

<https://www.iso.org/obp/ui/en/#iso:std:iso-iec:8183:ed-1:v1:en>

Scope

This document defines the stages and identifies associated actions for data processing throughout the artificial intelligence (AI) system life cycle, including acquisition, creation, development, deployment, maintenance and decommissioning. This document does not define specific services, platforms or tools. This document is applicable to all organizations, regardless of type, size or nature, that use data in the development and use of AI systems.

Terms	Variant	Complementary	AI Act	
31 Data processed are secured, protected,				11
93 Preparation				11
30 Data life cycle		Article 017		11
94 Decommissioning				11
88 Support				11
109 Business requirements				11
110 Verification and validation				11
111 Governance		Article 010		11

OPTIONAL INFORMATION

Name and Surname Domenico Natale Affiliation and UNI CT 533 (member) Qualification UNI CT 504 (president) LinkedIn <https://www.linkedin.com/in/domenico-natale-a9b99812/> ... other originalSubdomain=it

Observations

The data presented have a value for research and not a legal value.

Terms	Variant	Complementary	AI Act	
95 Controllability				44
277 Ontology				44
266 Autonomy			Article 007	44
278 Controller				44
95 Controllability				44
275 Functional safety				44

OPTIONAL INFORMATION

Name and Surname	Affiliation and Qualification	Linkedin ... other
Observations		

ID 44 **8200** -

Specification Controllability of automated AI systems

Relationship with AI Act Article 007 (Autonomy)

Link <https://www.iso.org/standard/83012.html>

Scope TS This document specifies a basic framework with principles, characteristics and approaches for the realization and enhancement for automated artificial intelligence (AI) systems' controllability. The following areas are covered:
 — state observability and state transition;
 — control transfer process and cost;
 — reaction to uncertainty during control transfer;
 — verification and validation approaches.

Terms	Variant	Complementary	AI Act	
290 Biometric data			Article 003, Article 005	51
291 Biometric identification				51
292 Biometric characteristic				51
265 Algorithm				51
15 Bias in AI system				51
66 Security			Article 015	51
170 Management			Article 043	51

OPTIONAL INFORMATION

Name and Surname	Affiliation and Qualification	Linkedin ... other
Observations		

ID 51 **9868** -

Specification Biometric identification systems involving passive capture

Relationship with AI Act Article 015 (Security); Article 043 (Management); Article 003, Article 005 (Biometric data)

Link <https://www.iso.org/obp/ui/en/#iso:std:iso-iec:9868:dis:ed-1:v1:en>

Scope DIS This document establishes recommendations and requirements for the design, development, use and maintenance of biometric identification systems involving passive capture subjects including pre and post deployment evaluation. While the emphasis is on surveillance systems, other types of biometric identification systems involving passive capture subjects are in scope, regardless of biometric characteristic or sensing technology. This includes systems involving passive capture of subjects where some capture subjects enrolled voluntarily. Biometric verification systems and biometric identification systems only involving capture subjects deliberately taking part in the capture are not in scope of this document. This document does not define specific services, platforms or tools.

The data presented have a value for research and not a legal value.

ID 35 **12182** - **12182**

Specification Framework for categorization of IT systems and software, and guide for applying it

Relationship with AI Act Article 002, Article 006 (Service)

Link <https://www.iso.org/obp/ui/en/#iso:std:iso-iec:tr:12182:ed-2:v1:en>

Scope This TR specifies the manner in which categorizations of IT systems and software are organized and expressed

Terms	Variant	Complementary	AI Act	
252 Categorization	Classification			35
122 System				35
254 Software				35
255 Service			Article 002, Article 006	35
113 Stakeholder				35
257 IT system				35
118 Quality-in-use				35

OPTIONAL INFORMATION

Name and Surname Trenta Affiliation and CT 504 Qualification LinkedIn ... other

Observations

ID 30 **14971** - **14971**

Specification Application of risk management to medical devices

Relationship with AI Act Article 009 (Residual risk); Article 009 (Risk evaluation); Article 043 (Management); Article 001, Article 073, Article 006, Article 007, Article 043 (Safety); Article 005 (Market for medical or safety reasons)

Link <https://www.iso.org/obp/ui/en/#iso:std:iso:14971:ed-3:v1:en>

Scope This document specifies terminology, principles and a process for risk management of medical devices, including software as a medical device and in vitro diagnostic medical devices. The process described in this document intends to assist manufacturers of medical devices to identify the hazards associated with the medical device, to estimate and evaluate the associated risks, to control these risks, and to monitor the effectiveness of the controls. The requirements of this document are applicable to all phases of the life cycle of a medical device. The process described in this document applies to risks associated with a medical device, such as risks related to biocompatibility, data and systems security, electricity, moving parts, radiation, and usability. The process described in this document can also be applied to products that are not necessarily medical devices in some jurisdictions and can also be used by others involved in the medical device life cycle.

Terms	Variant	Complementary	AI Act	
159 Risk management process				30
170 Management			Article 043	30
156 Risk analysis				30
158 Risk evaluation			Article 009	30
238 Risk estimation				30
154 Residual risk			Article 009	30
239 Market for medical or safety reasons			Article 005	30
214 Safety			Article 001, Article 073, Article 006, Article 007, Article 043	30
240 Safety components of devices				30

OPTIONAL INFORMATION

Name and Surname Affiliation and CT 504 Qualification LinkedIn ... other

Observations

The data presented have a value for research and not a legal value.

Terms	Variant	Complementary	AI Act	
110	Verification and validation			48
235	Processes			48
4	AI systems		Article 003, Article 002, Article 004, Article 006, Article 007, Article 043	48
282	Formal method			48
90	Evaluation			48
49	Lifecycle		Article 015, Article 017, Article 009	48

OPTIONAL INFORMATION

Name and Surname	Affiliation and Qualification	LinkedIn ... other
Observations		

Terms	Variant	Complementary	AI Act	
250	Societal concerns			50
249	Ethical concerns			50
49	Lifecycle		Article 015, Article 017, Article 009	50
4	AI systems		Article 003, Article 002, Article 004, Article 006, Article 007, Article 043	50

OPTIONAL INFORMATION

Name and Surname	Affiliation and Qualification	LinkedIn ... other
Observations		

ID **48** **17847** -

Specification: Verification and validation Analysis of AI systems

Relationship with AI Act: Article 003, Article 002, Article 004, Article 006, Article 007, Article 043 (AI systems); Article 015, Article 017, Article 009 (Lifecycle)

Link: <https://www.iso.org/standard/85072.html>

Scope: AWI TS This document describes approaches and provides guidance on processes for the verification and validation analysis of AI systems (comprising AI system components and the interaction of non-AI components with the AI system components) including formal methods, simulation and evaluation. This document is applicable for AI systems verification and validation in the context of the AI system life cycle stages described in ISO/IEC 22989.

ID **50** **22443** -

Specification: Guidance on addressing societal concerns and ethical considerations

Relationship with AI Act: Article 003, Article 002, Article 004, Article 006, Article 007, Article 043 (AI systems); Article 015, Article 017, Article 009 (Lifecycle)

Link: <https://www.iso.org/standard/87119.html>

Scope: AWI TS This document provides guidance on how an organization can identify and address societal concerns and ethical considerations during the life cycle of AI systems that can potentially harm individuals and society. The document expands existing AI system governance, management system and impact assessment standards.

The data presented have a value for research and not a legal value.

ID 26

22989 -

Specification Artificial intelligence concepts and terminology

Relationship with AI Act Article 015 (Data quality reporting); Article 003, Article 001 (Artificial intelligence); Article 015 (Cybersecurity); Article 004 (Knowledge)

Link <https://www.iso.org/obp/ui/en/#iso:std:iso-iec:22989:ed-1:v1:en>

Scope This document establishes terminology for AI and describes concepts in the field of AI. This document can be used in the development of other standards and in support of communications among diverse, interested parties or stakeholders. This document is applicable to all types of organizations (e.g. commercial enterprises, government agencies, not-for-profit organizations).

Terms	Variant	Complementary	AI Act	
194 Artificial intelligence			Article 003, Article 001	26
64 Terms related to AI				26
206 Terms related to computer vision				26
201 Terms related to data				26
202 Terms related to machine learning				26
205 Terms related to natural language processing				26
203 Terms related to neural networks				26
204 Terms related to trustworthiness				26
28 Data quality reporting			Article 015	26
215 Cybersecurity			Article 015	26
231 Knowledge			Article 004	26
76 Validation				26

OPTIONAL INFORMATION

Name and Surname Domenico Natale Affiliation and UNI CT 533 (member) Qualification UNI CT 504 (president) LinkedIn <https://www.linkedin.com/in/domenico-natale-a9b99812/?...otheroriginalSubdomain=it>

Observations

ID 24

23894 -

Specification Guidance on risk management

Relationship with AI Act Article 010, Article 017 (Design); Article 017 (Leadership); Article 017, Article 009, Article 012, Article 006, Article 007 (Risk management); Article 006 (Products)

Link <https://www.iso.org/obp/ui/en/#iso:std:iso-iec:23894:ed-1:v1:en>

Scope This document provides guidance on how organizations that develop, produce, deploy or use products, systems and services that utilize artificial intelligence (AI) can manage risk specifically related to AI. The guidance also aims to assist organizations to integrate risk management into their AI-related activities and functions. It moreover describes processes for the effective implementation and integration of AI risk management. The application of this guidance can be customized to any organization and its context.

Terms	Variant	Complementary	AI Act	
101 Risk management			Article 017, Article 009, Article 012, Article 006, Article 007	24
86 Leadership			Article 017	24
34 Design			Article 010, Article 017	24
90 Evaluation				24
91 Improvement				24
160 Risk treatment				24
112 Monitoring				24
235 Processes				24
236 Products			Article 006	24

OPTIONAL INFORMATION

Name and Surname Domenico Natale Affiliation and UNI CT 533 (member) Qualification UNI CT 504 (president) LinkedIn <https://www.linkedin.com/in/domenico-natale-a9b99812/?...otheroriginalSubdomain=it>

Observations

The data presented have a value for research and not a legal value.

ID 13 **24027** - **ISO/IEC TR 24027-1:2024**

Specification Bias in AI systems and AI aided decision making

Relationship with AI Act Article 010, Article 017 (Design); Article 015, Article 017, Article 009 (Lifecycle)

Link <https://www.iso.org/obp/ui/en/#iso:std:iso-iec:tr:24027:ed-1:v1:en>

Scope This document addresses bias in relation to AI systems, especially with regards to AI-aided decision-making. Measurement techniques and methods for assessing bias are described, with the aim to address and treat bias-related vulnerabilities. All AI system lifecycle phases are in scope, including but not limited to data collection, training, continual learning, design, testing, evaluation and use.

Terms	Variant	Complementary	AI Act	
51	Functional correctness			13
16	Characteristics of the data sets may be met at			13
14	Bias			13
106	Data bias			13
34	Design		Article 010, Article 017	13
49	Lifecycle		Article 015, Article 017, Article 009	13
107	Software testing			13
108	Social responsibility			13

OPTIONAL INFORMATION

Name and Surname Domenico Natale **Affiliation and UNI CT 533 (member)** **Qualification** UNI CT 504 (president) **Linkedin** <https://www.linkedin.com/in/domenico-natale-a9b99812/?...otheroriginalSubdomain=it>

Observations

ID 42 **24028** - **ISO/IEC TR 24028-1:2024**

Specification Overview of trustworthiness in AI

Relationship with AI Act Article 003, Article 002, Article 004, Article 006, Article 007, Article 043 (AI systems); Article 010 (Consistency); Article 015 (Security); Article 003, Article 001 (Artificial intelligence); Article 060 (Testing); Article 001, Article 073, Article 006, Article 007, Article 043 (Safety); Article 004 (Training); Article 007 (Autonomy); Article 060 (Personal data)

Link <https://www.iso.org/obp/ui/en/#iso:std:iso-iec:38507:ed-1:v1:en>

Scope This document surveys topics related to trustworthiness in AI systems

Terms	Variant	Complementary	AI Act	
4	AI systems		Article 003, Article 002, Article 004, Article 006, Article 007, Article 043	42
135	Trustworthiness			42
265	Algorithm			42
266	Autonomy		Article 007	42
25	Consistency		Article 010	42
260	Data			42
39	Efficiency			42
267	Human Factor			42
268	Information			42
269	Machine learning			42
270	Neural network			42
271	Personal data		Article 060	42
274	Robot			42
119	Risk			42
214	Safety		Article 001, Article 073, Article 006, Article 007, Article 043	42
66	Security		Article 015	42
113	Stakeholder			42
233	Training		Article 004	42
76	Validation			42
194	Artificial intelligence		Article 003, Article 001	42

OPTIONAL INFORMATION

Name and Surname natale **Affiliation and CT 533** **Qualification** **Linkedin** ... other

Observations

The data presented have a value for research and not a legal value.

ID 21

24029 - 1

Specification Assessment of the robustness of neural networks - Part 1 Overview

Relationship with AI Act Article 015 (Robustness); Article 010 (Training, validation, testing datasets); Article 003, Article 001 (Artificial intelligence); Article 060 (Testing)

Link <https://www.iso.org/obp/ui/en/#iso:std:iso-iec:tr:24029-1:ed-1:v1:en>

Scope This document TR provides background about existing methods to assess the robustness of neural networks.

Terms	Variant	Complementary	AI Act	
194 Artificial intelligence			Article 003, Article 001	21
195 Artificial neural network				21
196 Testing			Article 060	21
18 Robustness			Article 015	21
74 Training, validation, testing datasets			Article 010	21

OPTIONAL INFORMATION

Name and Surname Affiliation and Qualification LinkedIn ... other

Observations

ID 22

24029 - 2

Specification Assessment of the robustness of neural networks - Part 2 Methodology for the use of formal methods

Relationship with AI Act Article 015 (Robustness)

Link <https://www.iso.org/obp/ui/en/#iso:std:iso-iec:24029-2:ed-1:v1:en>

Scope This document provides methodology for the use of formal methods to assess robustness properties of neural networks. The document focuses on how to select, apply and manage formal methods to prove robustness properties.

Terms	Variant	Complementary	AI Act	
197 Domain				22
198 Bounded domain				22
199 Architecture				22
200 Time series				22
18 Robustness			Article 015	22

OPTIONAL INFORMATION

Name and Surname Affiliation and Qualification LinkedIn ... other

Observations

The data presented have a value for research and not a legal value.

Terms Variant Complementary AI Act

ID **23** **24029** - **3**

Specification AWI Assessment of the robustness of neural networks - Part 3 Methodology for the use of formal

Relationship with AI Act

Link <https://www.iso.org/standard/86901.html>

Scope This document AWI provides methodology for the use of statistical methods to assess robustness properties of neural networks. The document focuses on how to select, apply and manage statistical methods to assess robustness properties.

AWI is not fully considered

Terms	Variant	Complementary	AI Act

OPTIONAL INFORMATION

Name and Surname	Affiliation and Qualification	Linkedin ... other
------------------	-------------------------------	--------------------

Observations

ID **36** **24030** -

Specification Use cases

Relationship with AI Act **Article 003, Article 002, Article 004, Article 006, Article 007, Article 043 (AI systems); Article 003, Article 001 (Artificial intelligence); Article 007 (Use-cases)**

Link <https://www.iso.org/obp/ui/en/#iso:std:iso-iec:tr:24030:ed-2:v1:en>

Scope This document TR provides a collection of representative use cases of AI applications in a variety of domains.

Terms Variant Complementary AI Act

Terms	Variant	Complementary	AI Act
258 Use-cases			Article 007 ³⁶
194 Artificial intelligence			Article 003, Article 001 ³⁶
4 AI systems			Article 003, Article 002, Article 004, Article 006, Article 007, Article 043 ³⁶

OPTIONAL INFORMATION

Name and Surname	Affiliation and Qualification	Linkedin ... other
------------------	-------------------------------	--------------------

Observations

New

STANDARD

Standard

AI Act

Mapping

Terminology

UNINFO UNI

Technical Committee 533 AI

aiopenmind Hosting and developing

The data presented have a value for research and not a legal value.

ID 34 24368 -

Specification Overview of ethical and societal concerns

Relationship with AI Act Article 001, Article 073, Article 006, Article 007, Article 043 (Safety)

Link <https://www.iso.org/standard/78507.html>

Scope TR This document provides a high-level overview of AI ethical and societal concerns.

Terms	Variant	Complementary	AI Act
249 Ethical concerns			34
250 Societal concerns			34
251 Ethical framework			34
214 Safety		Article 001, Article 073, Article 006, Article 007, Article 043	34

OPTIONAL INFORMATION

Name and Surname Affiliation and UNI CT 533 Qualification LinkedIn

Observations

ID 32 24970 -

Specification AI system logging

Relationship with AI Act Article 012 (Traceability); Article 017, Article 009, Article 012, Article 006, Article 007 (Risk management); Article 012 (Logging)

Link <https://www.iso.org/standard/88723.html>

Scope This document describes common capabilities, requirements and a supporting information model for logging of events in AI systems. This document is designed to be used with a risk management system.

Terms	Variant	Complementary	AI Act
245 Logging		Article 012	32
73 Traceability		Article 012	32
101 Risk management		Article 017, Article 009, Article 012, Article 006, Article 007	32

OPTIONAL INFORMATION

Name and Surname Affiliation and UNI Qualification LinkedIn

Observations

The data presented have a value for research and not a legal value.

ID 27 **25010** - 

Specification **SQuaRE - Product quality model**

Relationship with AI Act **Article 015 (Security); Article 001, Article 073, Article 006, Article 007, Article 043 (Safety)**

Link <https://www.iso.org/obp/ui/en/#iso:std:iso-iec:25010:ed-2:v1:en>

Scope

This document defines a product quality model, which is applicable to ICT (information and communication technology) products and software products. The product quality model is composed of nine characteristics (which are further subdivided into subcharacteristics) that relate to quality properties of the products. The characteristics and subcharacteristics provide a reference model for the quality of the products to be specified, measured and evaluated.

NOTE 1 In this document, a product refers to an ICT product that is part of an information system. ICT product components include subsystems, software, firmware, hardware, data, communication infrastructure, and other elements that are part of the ICT product.

This model can be used for requirements specification and evaluation of the target products' quality throughout their lifecycle by several stakeholders, including developers, acquirers, quality assurance and control staff and independent evaluators.

Terms	Variant	Complementary	AI Act	
207	Functional suitability			27
208	Performance efficiency			27
98	Compatibility			27
210	Interaction capability			27
211	Reliability			27
66	Security		Article 015	27
99	Maintainability			27
213	Flexibility			27
214	Safety		Article 001, Article 073, Article 006, Article 007, Article 043	27

OPTIONAL INFORMATION

Name and Surname	Domenico Natale	Affiliation and Qualification	UNI CT 504 (president)	Linkedin	iso25000.it ... other
------------------	-----------------	-------------------------------	------------------------	----------	-----------------------

Observations

ID 38 **25012** - 

Specification **Data quality model**

Relationship with AI Act **Article 017, Article 005 (Accessibility); Article 015 (Accuracy); Article 017 (Compliance); Article 010 (Consistency); Article 012 (Traceability); Article 010 (Data quality)**

Link <https://www.iso.org/obp/ui/en/#iso:std:iso-iec:25012:ed-1:v1:en>

Scope

This International Standard defines a general data quality model for data retained in a structured format within a computer system.

This International Standard focuses on the quality of the data as part of a computer system and defines quality characteristics for target data used by humans and systems.

Terms	Variant	Complementary	AI Act	
2	Accuracy		Article 015	38
20	Completeness			38
27	Currentness			38
21	Compliance		Article 017	38
26	Credibility			38
1	Accessibility		Article 017, Article 005	38
25	Consistency		Article 010	38
39	Efficiency			38
75	Understandability			38
73	Traceability		Article 012	38
56	Precision			38
116	Data quality		Article 010	38
163	Data quality model			38
259	Quality characteristics			38
23	Confidentiality			38
141	Availability			38
55	Portability			38
59	Recoverability			38

OPTIONAL INFORMATION

Name and Surname		Affiliation and Qualification		Linkedin	... other
------------------	--	-------------------------------	--	----------	-----------

Observations

The data presented have a value for research and not a legal value.

ID 25

25019

Specification

Quality-in-use model

Relationship with AI Act

Article 017, Article 005 (Accessibility); Article 017 (Compliance); Article 017 (Post-market); Article 010 (Data quality); Article 004 (Experience)

Link

<https://www.iso.org/obp/ui/en/#iso:std:iso-iec:25019:ed-1:v1:en>

Scope

This document defines a quality-in-use model composed of three characteristics (which are further subdivided into sub-characteristics) that can influence stakeholders when products or systems are used in a specified context of use. This model is applicable to the entire spectrum of information system and IT service system, including both computer systems in use and software products in use. This document provides a set of quality characteristics for specifying, measuring, evaluating and improving quality-in-use. In this document, because context of use is specified as prerequisite of quality-in-use, context of use is necessary to be re-specified to change prerequisite when a product or service intend to fulfill to context of use changes.

Terms	Variant	Complementary	AI Act	
100 Post-market			Article 017	25
112 Monitoring				25
113 Stakeholder				25
90 Evaluation				25
1 Accessibility			Article 017, Article 005	25
97 Usability				25
116 Data quality			Article 010	25
115 Customer				25
117 Information system				25
79 Organization				25
118 Quality-in-use				25
119 Risk				25
120 Society				25
121 Software quality				25
122 System				25
123 Target entity				25
125 Direct user				25
124 User				25
126 Beneficialness				25
128 Freedom from risk				25

OPTIONAL INFORMATION

Name and Surname: Domenico Natale | Affiliation and UNI CT 504 (president) Qualification | LinkedIn: iso25000.it ... other

Observations

ID 2

25024

Specification

Measurement of data quality

Relationship with AI Act

Article 017, Article 005 (Accessibility); Article 015 (Accuracy); Article 017 (Compliance); Article 010 (Consistency); Article 015 (Measurement and method); Article 010 (Quality criteria); Article 012 (Traceability); Article 010 (Training, validation, testing datasets)

Link

<https://www.iso.org/obp/ui/en/#iso:std:iso-iec:25024:ed-1:v1:en>

Scope

This International Standard defines data quality measures for quantitatively measuring the data quality in terms of characteristics defined in ISO/IEC 25012. This International Standard contains the following:

- a basic set of data quality measures for each characteristic;
- a basic set of target entities to which the quality measures are applied during the data-life-cycle;
- an explanation of how to apply data quality measures;
- a guidance for organizations defining their own measures for data quality requirements and evaluation.

It includes, as informative annexes, a synoptic table of quality measure elements defined in this International standard (Annex A), a table of quality measures associated to each quality measure element and target entity (Annex B), considerations about specific quality measure elements (Annex C), a list of quality measures in alphabetic order (Annex D), and a table of quality measures grouped by characteristics and target entities (Annex E). This International Standard does not define ranges

Terms	Variant	Complementary	AI Act	
2 Accuracy	free of errors		Article 015	2
21 Compliance	complete		Article 017	2
1 Accessibility	access		Article 017, Article 005	2
50 Measurement and method			Article 015	2
23 Confidentiality	personal data			2
11 Balance				2
26 Credibility		complementary		2
25 Consistency		complementary	Article 010	2
27 Currentness		complementary		2
76 Validation		complementary		2
40 Eliminate or reduce biased output		complementary		2
57 Quality criteria		complementary	Article 010	2
74 Training, validation, testing datasets		complementary	Article 010	2
56 Precision		complementary		2
60 Relevance		complementary		2
50 Measurement and method			Article 015	2
10 Auditability				2
142 Non-repudiation				2
73 Traceability			Article 012	2
20 Completeness				2

OPTIONAL INFORMATION

Name and Surname: Domenico Natale | Affiliation and UNI CT 504 (president) Qualification | LinkedIn: iso25000.it ... other

Observations

The data presented have a value for research and not a legal value.

ID 47 **25058** -

Specification Guidance for quality evaluation of AI systems

Relationship with AI Act Article 017, Article 009, Article 012, Article 006, Article 007 (Risk management)

Link <https://www.iso.org/obp/ui/en/#iso:std:iso-iec:ts:25058:ed-1:v1:en>

Scope TS This document provides guidance for evaluation of artificial intelligence (AI) systems using an AI system quality model.

Terms	Variant	Complementary	AI Act	
35	Quality model			47
90	Evaluation			47
51	Functional correctness			47
78	Functional adaptability			47
280	Functional appropriateness			47
279	Functional completeness			47
208	Performance efficiency			47
97	Usability			47
207	Functional suitability			47
101	Risk management		Article 017, Article 009, Article 012, Article 006, Article 007	47
250	Societal concerns			47
131	Societal risk			47
132	Health risk			47
130	Environmental risk			47
129	Economic risk			47
281	Satisfaction			47

OPTIONAL INFORMATION

Name and Surname: _____ Affiliation and Qualification: _____ LinkedIn ... other: _____

Observations

ID 19 **25059** -

Specification Quality model for AI System

Relationship with AI Act Article 017, Article 005 (Accessibility); Article 017 (AI models); Article 003, Article 002, Article 004, Article 006, Article 007, Article 043 (AI systems); Article 010 (Annotation); Article 015 (Security)

Link <https://www.iso.org/obp/ui/en/#iso:std:iso-iec:25059:ed-1:v1:en>

Scope This document outlines a quality model for AI systems and is an application-specific extension to the standards on SQuARE. The characteristics and sub-characteristics detailed in the model provide consistent terminology for specifying, measuring and evaluating AI system quality. The characteristics and sub-characteristics detailed in the model also provide a set of quality characteristics against which stated quality requirements can be compared for completeness.

Terms	Variant	Complementary	AI Act	
5	Annotation		Article 010	19
35	Quality model			19
4	AI systems		Article 003, Article 002, Article 004, Article 006, Article 007, Article 043	19
3	AI models		Article 017	19
1	Accessibility		Article 017, Article 005	19
95	Controllability			19
78	Functional adaptability			19
64	Terms related to AI			19
66	Security	Cybersecurity	Article 015	19
97	Usability	Interaction capability		19
98	Compatibility			19
243	Transparency			19

OPTIONAL INFORMATION

Name and Surname: Domenico Natale Affiliation and Qualification: UNI CT 533 (member) Qualification UNI CT 504 (president) LinkedIn: [https://www.linkedin.com/in/domenico-natale-a9b99812/?... other originalSubdomain=it](https://www.linkedin.com/in/domenico-natale-a9b99812/?...)

Observations

The data presented have a value for research and not a legal value.

ID 46

26514 -

Specification: Design and development of information for users

Relationship with AI Act: Article 010, Article 017 (Design)

Link: <https://www.iso.org/obp/ui/en/#iso:std:iso-iec:26514:ed-1:v1:en>

Scope: This document covers the development process for designers and developers of information for users of software. It describes how to establish what information users need, how to determine the way in which that information should be presented, and how to prepare the information and make it available. It is not limited to the design and development stage of the life cycle, but includes information on design throughout the life cycle, such as design strategy and maintaining a design.

Terms	Variant	Complementary	AI Act
34 Design			Article 010, Article 017
124 User			
268 Information			

OPTIONAL INFORMATION

Name and Surname	Stazi	Affiliation and UNI TC 504 Qualification	Linkedin ... other
Observations			

ID 28

27000 -

Specification: Information security management system - Overview and vocabulary

Relationship with AI Act: Article 015 (Measurement and method); Article 017, Article 009, Article 012, Article 006, Article 007 (Risk management); Article 003, Article 043 (Conformity); Article 009, Article 011 (Documented information); Article 008 (Compliance with the requirements); Article 009 (Measurement); Article 009 (Residual risk); Article 009 (Risk evaluation)

Link: <https://www.iso.org/obp/ui/en/#iso:std:iso-iec:27000:ed-5:v1:en>

Scope: This document provides the overview of information security management systems (ISMS). It also provides terms and definitions commonly used in the ISMS family of standards. This document is applicable to all types and sizes of organization (e.g. commercial enterprises, government agencies, not-for-profit organizations). The terms and definitions provided in this document — cover commonly used terms and definitions in the ISMS family of standards; — do not cover all terms and definitions applied within the ISMS family of standards; and — do not limit the ISMS family of standards in defining new terms for use.

Terms	Variant	Complementary	AI Act
137 Access control			
138 Attack			
139 Authentication			
140 Authenticity			
10 Auditability			
105 Competence			
23 Confidentiality			
143 Consequence			
144 Conformity			Article 003, Article 043
143 Consequence			
145 Documented information			Article 009, Article 011
146 Governance of information security			
148 Governing body			
91 Improvement			
117 Information system			
79 Organization			
150 Internal context			
151 Level of risk			
152 Management system			
153 Measurement			Article 009

OPTIONAL INFORMATION

Name and Surname	Affiliation and Qualification	Linkedin ... other
Observations		

The data presented have a value for research and not a legal value.

ID 49

29119 - **11**

Specification **Guidelines on the testing of AI-based systems (2020)**

Relationship with AI Act **Article 015 (Accuracy); Article 060 (Testing); Article 007 (Autonomy); Article 043 (Assessment)**

Link <https://www.iso.org/obp/ui/en/#iso:std:iso-iec:tr:29119:11:ed-1:v1:en>

Scope This document TR (2020) provides an introduction to AI-based systems. These systems are typically complex (e.g. deep neural nets), are sometimes based on big data, can be poorly specified and can be non-deterministic, which creates new challenges and opportunities for testing them.

AWI TS under development
This document describes testing techniques (including those described in ISO/IEC/IEEE 29119-4) applicable for AI systems in the context of the AI system life cycle model stages defined in ISO/IEC 22989. It describes how AI and ML assessment metrics can be used in the context of those testing techniques. It also maps testing processes, including those described in ISO/IEC/IEEE 29119-2, to the verification and validation stages in the AI system life cycle.

Terms	Variant	Complementary	AI Act
2 Accuracy			Article 015
128 Freedom from risk			
265 Algorithm			
266 Autonomy			Article 007
14 Bias			
283 Deep learning			
244 Explainability			
276 Interpretability			
56 Precision			
274 Robot			
284 Test data			
285 Metrics			
196 Testing			Article 060
286 Assessment			Article 043

OPTIONAL INFORMATION

Name and Surname Affiliation and Qualification LinkedIn ... other

Observations

ID 37

31000 -

Specification **Guidelines**

Relationship with AI Act **Article 017, Article 009, Article 012, Article 006, Article 007 (Risk management)**

Link <https://www.iso.org/obp/ui/en/#iso:std:65694:en>

Scope ISO 31000 provides guidelines on managing risks faced by organizations.

Terms	Variant	Complementary	AI Act
79 Organization			
101 Risk management			Article 017, Article 009, Article 012, Article 006, Article 007
113 Stakeholder			

OPTIONAL INFORMATION

Name and Surname Affiliation and Qualification LinkedIn ... other

Observations

The data presented here have a value for research and not a legal value.

ID 29

31010 -

Specification [Risk assessment techniques](#)

Relationship with AI Act [Article 015, Article 010](#) (Data collection processes)

Link <https://www.iso.org/obp/ui/en/#iso:std:iec:31010:ed-2:v1:en,fr>

Scope Not available

Terms	Variant	Complementary	AI Act	
237 Risk assessment techniques				29
79 Organization				29
112 Monitoring				29
29 Data collection processes			Article 015, Article 010	29

OPTIONAL INFORMATION

Name and Surname
 Affiliation and Qualification
 LinkedIn ... other

Observations

ID 40

38500 -

Specification [Governance of IT for the organization](#)

Relationship with AI Act [Article 010](#) (Governance); [Article 043](#) (Management)

Link https://www.iso.org/search.html?PROD_isoorg_en%5Bquery%5D=38500

Scope This document provides guiding principles for members of governing bodies of organizations and those that support them on the effective, efficient and acceptable use of information technology (IT) within their organizations.

Terms	Variant	Complementary	AI Act	
111 Governance			Article 010	40
170 Management			Article 043	40

OPTIONAL INFORMATION

Name and Surname
 Affiliation and Qualification
 LinkedIn ... other

Observations

The data presented have a value for research and not a legal value.

ID 41

38507

-

Specification Governance implications of the use of AI by organizations

Relationship with AI Act Article 010 (Governance); Article 003, Article 001 (Artificial intelligence); Article 006 (Decision-making)

Link https://www.iso.org/search.html?PROD_isoorg_en%5BQuery%5D=38507

Scope This document provides guidance for members of the governing body of an organization to enable and govern the use of Artificial Intelligence (AI), in order to ensure its effective, efficient and acceptable use within the organization.

Terms	Variant	Complementary	AI Act
111 Governance			Article 010 41
194 Artificial intelligence			Article 003, Article 001 41
79 Organization			41
256 Decision-making			Article 006 41

OPTIONAL INFORMATION

Name and Surname	Affiliation and Qualification	Linkedin ... other
Observations		

ID 14

42001

-

Specification Management system

Relationship with AI Act Article 015 (Measurement and method); Article 010, Article 017 (Cleaning); Article 017 (Leadership); Article 017 (Planning); Article 017, Article 009, Article 012, Article 006, Article 007 (Risk management)

Link <https://www.iso.org/obp/ui/en/#iso:std:iso-iec:42001:ed-1:v1:en>

Scope This document specifies the requirements and provides guidance for establishing, implementing, maintaining and continually improving an AI (artificial intelligence) management system within the context of an organization. This document is intended for use by an organization providing or using products or services that utilize AI systems. This document is intended to help the organization develop, provide or use AI systems responsibly in pursuing its objectives and meet applicable requirements, obligations related to interested parties and expectations from them. This document is applicable to any organization, regardless of size, type and nature, that provides or uses products or services that utilize AI systems.

Terms	Variant	Complementary	AI Act
80 Cleaning			Article 010, Article 017 14
87 Planning			Article 017 14
88 Support			14
89 Operation			14
90 Evaluation			14
91 Improvement			14
92 Acquisition			14
50 Measurement and method			Article 015 14
79 Organization			14
86 Leadership			Article 017 14
101 Risk management			Article 017, Article 009, Article 012, Article 006, Article 007 14
105 Competence			14
152 Management system			14

OPTIONAL INFORMATION

Name and Surname	Affiliation and Qualification	Linkedin ... other
Domenico Natale	Affiliation and UNI CT 533 (member) Qualification UNI CT 504 (president)	Linkedin https://www.linkedin.com/in/domenico-natale-a9b99612/ ... other originalSubdomain=it
Observations		

The data presented have a value for research and not a legal value.

ID 53 **62304** -

Specification [Software life cycle processes](#)

Relationship with AI Act [Article 015, Article 017, Article 009 \(Lifecycle\)](#)

Link <https://www.iso.org/obp/ui/en/#iso:std:iec:62304:ed-1:v1:en>

Scope IEC This standard defines the life cycle requirements for medical device software. The set of processes, activities, and tasks described in this standard establishes a common framework for medical device software life cycle processes.

Terms	Variant	Complementary	AI Act	
49	Lifecycle		Article 015, Article 017, Article 009	53
235	Processes			53

OPTIONAL INFORMATION

Name and Surname: Affiliation and Qualification: LinkedIn ... other:

Observations:

ID 33 **82079** - **1**

Specification [IEC Part 1: principles and general requirements](#)

Relationship with AI Act [Article 010, Article 017 \(Design\), Article 011, Article 043 \(Technical documentation\)](#)

Link <https://www.iso.org/obp/ui/en/#iso:std:iec:ieee:82079:-1:ed-2:v1:en,fr>

Scope ISO/IEEE 82079-1 provides general principles and detailed requirements for the design and formulation of all type of instruction for use that will be necessary or helpful for users of products

Terms	Variant	Complementary	AI Act	
247	Documentation			33
34	Design		Article 010, Article 017	33
248	Information quality			33
247	Documentation			33
246	Technical documentation		Article 011, Article 043	33

OPTIONAL INFORMATION

Name and Surname: Affiliation and UNI Qualification: LinkedIn ... other:

Observations: