

Trustworthy Artificial Intelligence



- National level -

ILNAS/NSC 04 – Artificial Intelligence

National delegates

23

Abstract

The national commission offers Luxembourgish market players a unique platform to follow and participate in standardization work in the field of artificial intelligence (AI). The members have the opportunity to contribute to the global development of standards for AI with the privileged access to both European (CEN/CLC JTC 21) and international (ISO/IEC JTC 1/SC 42) standardization activities in the field.

- International level -

ISO/IEC JTC 1/SC 42 – Artificial intelligence

Standards

39

Projects

46

Scope

Standardization in the area of Artificial Intelligence

- Provide guidance to JTC 1, IEC, and ISO committees developing Artificial Intelligence applications
- Serve as the focus and proponent for JTC 1's standardization program on Artificial Intelligence

Relevant working groups

WG 1 Foundational standards

WG 2 Data

WG 3 Trustworthiness

JWG 2 Joint Working Group ISO/IEC JTC1/SC 42 - ISO/IEC JTC1/SC 7

JWG 4 Joint Working Group ISO/IEC JTC1/SC42 - IEC TC65/SC65A: Functional safety and AI systems

JWG 5 Joint Working Group ISO/IEC JTC1/SC42 - ISO/TC 37 WG: Natural language processing

Main “ISO/IEC JTC 1/SC 42” Standards for Trustworthy AI

Published standards

- **ISO/IEC 24029 series:** Assessment of the robustness of neural networks
- **ISO/IEC TS 6254:2025:** Objectives and approaches for explainability and interpretability of machine learning (ML) models and artificial intelligence (AI) systems
- **ISO/IEC 5259 series:** Data quality for analytics and machine learning (ML)
- **ISO/IEC TS 8200:2024:** Controllability of automated artificial intelligence systems
- **ISO/IEC TS 12791:2024:** Treatment of unwanted bias in classification and regression machine learning tasks
- **ISO/IEC 25059:2023:** Quality model for AI systems
- **ISO/IEC 23894:2023:** Artificial Intelligence – Guidance on risk management
- **ISO/IEC 42001:2023:** Artificial Intelligence – Management system
- **ISO/IEC TR 24368:2022:** Artificial Intelligence – Overview of ethical and societal concerns

Standards under development

- **ISO/IEC CD 4213:** Performance measurement for AI classification, regression, clustering and recommendation tasks
- **ISO/IEC 12792:** Transparency taxonomy of AI systems
- **ISO/IEC TS 22440 series:** Functional safety of AI systems
- **ISO/IEC 23282:** Evaluation methods for accurate natural language processing systems
- **ISO/IEC 24970:** AI system logging
- **ISO/IEC TS 25568:** Guidance on addressing risks in generative AI systems
- **ISO/IEC 42105:** Guidance for human oversight of AI systems
- **ISO/IEC 42119 series:** Testing of AI

- European level -

CEN/CLC JTC 21 – Artificial Intelligence

Standards

15

Projects

27

Scope

The JTC shall produce standardization deliverables in the field of Artificial Intelligence (AI) and related use of data, as well as provide guidance to other technical committees concerned with Artificial Intelligence. The JTC shall also consider the adoption of relevant international standards and standards from other relevant organisations, like ISO/IEC JTC 1 and its subcommittees, such as SC 42 Artificial intelligence. The JTC shall produce standardization deliverables to address European market and societal needs and to underpin primarily EU legislation, policies, principles, and values.

Relevant working groups

WG 2 Operational aspects

WG 4 Foundational and societal aspects

WG 3 Engineering aspects

WG 5 Joint standardization on cybersecurity for AI systems

Main “CEN/CLC JTC 21” Standards for Trustworthy AI

Published standards

- **CEN/CLC/TR 18115:2024**: Data governance and quality for AI within the European context

Standards under development

- **prEN 18229 series**: AI trustworthiness framework
- **prEN 18228**: AI risk management
- **prCEN/TS**: Guidelines on tools for handling ethical issues in AI system life cycle
- **prCEN/CLC/TR**: Impact assessment in the context of the EU Fundamental Rights
- **prEN 18282**: Cybersecurity specifications for AI Systems
- **prEN 18283**: Concepts, measures and requirements for managing bias in AI systems
- **prEN 18286**: Quality management system for EU AI Act regulatory purposes

ETSI TC SAI – Securing Artificial Intelligence

Standards

17

Projects

10

Scope

The aim of Technical Committee Securing Artificial Intelligence (TC SAI) is to develop technical specifications that mitigate against threats arising from the deployment of AI, and threats to AI systems, from both other AIs, and from conventional sources. Whilst in the short to medium term the focus of TC SAI will be on the application of Machine Learning (ML) the group shall also give guidance and evaluation reports to ETSI and its stakeholders on the wider developments of AI.

Main “ETSI TC SAI” Standards for Trustworthy AI

Published standards

- **ETSI TS 104 223 (2025)**: Baseline Cyber Security Requirements for AI Models and Systems (ETSI EN 304 223 under approval)
- **ETSI TR 104 030 (2025)**: Critical Security Controls for Effective Cyber Defence; Artificial Intelligence Sector
- **ETSI TS 104 224 (2025)**: Explicability and transparency of AI processing
- **ETSI TR 104 225 (2024)**: Privacy aspects of AI/ML systems
- **ETSI TR 104 048 (2025)**: Data Supply Chain Security

Standards under development

- **ETSI TR 104 159**: Understanding and Preventing Harm from Generative AI
- **ETSI 104 158 series**: AI Common Incident Expression (AICIE)
- **ETSI TR 104 029**: Global AI Security Ecosystem
- **ETSI EN 304 223**: Cyber Security Requirements for AI
- **ETSI TS 104 033**: AI Computing Platform Security Framework