

SC 42 Summary of Plenary Outcomes

October 2023 Plenary

Wael William Diab, SC 42 Chair



SC 42 – Artificial Intelligence

Purpose of this Document

Informational document summarizing externally impactful outcomes of the plenary as they to the work program and key outreach initiatives.

The items listed are exemplary and not intended to be exhaustive. Items in collaboration with the SC 42 CM. Document covers the last plenary.

Key Activities and Initiatives

Organization, membership and governance structure

- Membership and attendance
 - Participation: 60 nations (37P/23O). 33% developing countries
 - ~250 delegates/experts (~67% face to face)
- Project summary
 - 39 active (15 added within last year)
 - 20 published
 - 3 NP Ballots
 - New study items being discussed
- New groups
 - JWG 4 (with IEC TC 65/SC 65A) on Functional Safety and AI Systems, administered by SC 42
 - Successful initial meeting of the JWG
 - JWG 5 (with ISO TC 37) on natural language processing systems, administered by SC 42
 - All approvals complete and SC 42 officers confirmed
 - JWG to be stood up over the next cycle and anticipate initial meeting prior to next plenary
- 5 new liaisons identified and established

Key Activities and Initiatives

Program of work

- New study items approved by the plenary*
 - “AI maturity model and related concepts “ assigned to WG 1
 - “Guidance for Generative AI Applications” assigned to WG 4
- New PWIs
 - “Artificial intelligence — Operational design domain (ODD)” assigned to WG 3
 - “Information technology — Artificial intelligence — Human-machine teaming” assigned to WG 4
 - “Artificial intelligence — Evaluation metrics for AI use cases and applications” assigned to WG 4
 - “Information technology – Artificial intelligence – Guidance on model training efficiency optimization of machine learning system” assigned to WG 5
- New Amendments
 - Amendments of base documents, ISO/IEC 22989:2022 Information technology — Artificial intelligence — Artificial intelligence concepts and terminology and ISO/IEC 23053 Framework for Artificial Intelligence (AI) Systems Using Machine Learning (ML), **to add generative AI**
- New horizontal deliverables identified: ISO/IEC 5338, 5339, 25058, 12791, 8200
- New NP Ballots to be launched
 - Revision of ISO/IEC 25059 “Software engineering — Systems and software Quality Requirements and Evaluation (SQuaRE) — Quality models for AI systems”
 - Technical specification “Information technology – Artificial intelligence – AI inference framework for AI systems”
 - “Information technology – Artificial intelligence — Guidance on artificial intelligence (AI) lightweight modelling”

* Note: This does not include study items initiated within SC 42 subgroups as part of their strategic planning

Key Activities and Initiatives

Keynotes at Opening Plenary

- Remarks from Austrian State Secretary of Digital Affairs
- Remarks from Austrian Standards CEO
- Chair opening remarks
- European Commission
- IEC CAB Chair
- Remarks by IEC President
- Remarks by ISO President and LDE Award video

Workshop

- Kick off - AI Ecosystem Approach, SC 42 (Wael William Diab)
- Beauty lies in the eyes of the beholders - Beneficial AI Systems, WG 4 (Fumihiro Maruyama)
- International standards portfolio to enable responsible and certifiable AI systems, WG 1 (Kim Lucy and Marta Janczarski)
- AI Quality and Testing, JWG 2 (Adam Smith)
- Functional safety for AI systems, WG 3/JWG 4 (Riccardo Mariani, Takashi Egawa)
- It is all about Data, WG 2 (Dave Boyd)
- Standardized Approaches to Assessing Machine Learning Classification Performance, WG 5 (Mike Theime)
- Overview on the road to interoperability for AI enabled Health Informatics, JWG 3 (Takeshi Imai)

ISO/IEC AI Workshop Series

Fourth Workshop on 4th and 6th December 2023 (Online)

4 Content Tracks

AI Applications Roundtable – Streams, screens and synthetic dreams: how AI is transforming media and photography

This track will look at emerging AI applications, public projects, use cases and case studies with the goal of identifying insights relating to AI application requirements, providing an overview of supporting horizontal standardization work and discuss roadmaps of application domain verticals.

This installment of the workshop will focus on AI's transformative effect on media and photography

Beneficial AI

AI promises to change how we live, work and play for the better. Moreover, some applications of AI stand to have an unprecedented societal impact. This track will focus on advances to humanity that would otherwise not be possible without AI

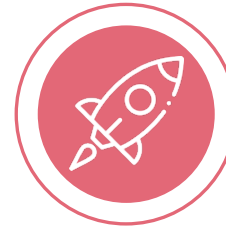
Novel AI Standardization Approaches (Horizontal and Vertical)

In addition to building on well established information and operational technologies, standards and open-source efforts, AI introduces technology-specific challenges through its learning nature. This track will look at such challenges and discuss the innovative standards approaches to address them

Emerging AI Technology Trends and Requirements

AI technology and capability is evolving at a rapid pace. This track will look the combination of emerging technology trends and requirements through a diverse set of perspectives ranging from those luminaries driving innovation to those looking to ensure responsible adoption

Benefits



Innovation

workshop will focus on state of the art, priorities and requirements



Market Intelligence

identify emerging trends, requirements, insights and opportunities



Thought Leadership

participating in this interactive event will help to position your organization as an industry leader



Enhanced

Enhanced networking opportunities



Stakeholders

Attract new stakeholders to join standardization activities



Information

Gain insight into alternative POVs and needs through Q&A and panel discussion

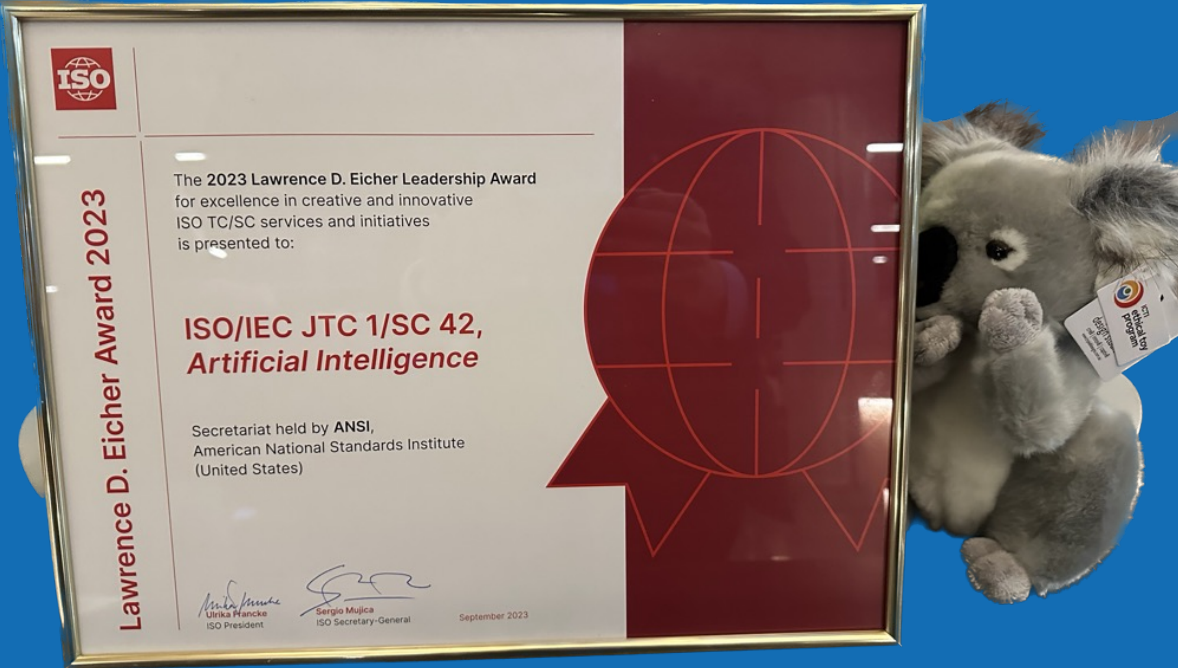
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SC 42 – Artificial Intelligence



Prestigious ISO LDE  Awarded to SC 42!!!

[Read more](#) about the award and how SC 42's international standards are enabling broad responsible AI adoption

