



ISO/IEC JTC 1/SC 42 "Artificial intelligence"
Secretariat: ANSI
Committee manager: Benko Heather Ms.



WG 5 Convenor Closing Report - October 2024

Document type	Related content	Document date	Expected action
Meeting / WG report	Meeting: Le Chesnay-Rocquencourt (France) 7 Oct 2024	2024-10-11	INFO

SC 42 (Artificial Intelligence) WG 5 (Computational Approaches and Computational Characteristics of AI Systems)

Closing Plenary Report, Versailles, October 2024



SC 42 – Artificial Intelligence

WG 5 meeting during plenary week

- October 8 Morning session 0900 - 1230
 - Opening and general review, roadmap review
 - TS 25258 NP ballot disposition of comments discussion continue
 - TS 42111 NP ballot disposition of comments discussion
 - 4213 contribution discussion
- October 8 Afternoon session 1330 - 1800
 - New proposal discussion - Guidance for knowledge enhancement on pretrained machine learning models
 - TS 42111 NP ballot disposition of comments discussion continue
 - WG 5 recommendations to SC 42 if any and action items within WG 5

WG 5 recommendations for SC 42 approval

RECOMMENDATION 1 – Authorization for Changes to Projects

WG 5 requests the SC 42 Committee Manager to seek authorization from JTC 1 to implement the following changes to existing standards projects:

Note: The following change requests will be forwarded to the SC 42 Plenary for approval, and then submitted to JTC 1 for a default ballot.

a) Change to Scope/Purpose and Justification of Project

PROJECT #	OLD SCOPE	NEW SCOPE	REASON
TS 42111	This document provides guidance on developing and deploying lightweight AI systems optimized for limited resource utilization. The optimization approach for AI model training efficiency is not within the scope of this document.	This document provides guidance on developing and deploying lightweight AI systems optimized for limited resource utilization. The optimization approach for AI model training efficiency is not within the scope of this document.	Editorial change to drop the “the” in the second sentence.

- Note: There is no intention to accept technical comments to change title and scope after NP ballot approval for rebalot. Editorial change for scope was considered on meeting. The recommendation was created after confirmed with SC 42 committee manager which could be made without rebalot the project.

WG 5 recommendations for SC 42 approval

RECOMMENDATION 2– Appointment of Liaison Officers/Editors

WG 5 approves the appointment of the experts listed below as Editors and Liaison Officers through the January Plenary meeting.

Note: Please indicate changes as follows:

Highlight **additions**/Strikethrough **deletions** since the last meeting

NAME	POSITION
Young Im Cho (KR)	Editor of TS 25258
Young Im Cho (KR)	Editor of TS 42111
Michael Thieme (US)	Editor of 4213
Lingzhong Meng (CN)	Editor of 4213

- Note: Juan Deng as editor of TS 42112 was confirmed to step down. SC 42 N 1890 indicated the next step for editor changing.

TS 25258 NP ballot DoC discussion

- Continue process after Sep 24 virtual meeting
- Major comments from IN, CA, RU discussed, however no corresponding expert attend meeting for confirmation
- DoC file may not reflect how the change were made since editor update content directly into the draft
- Comments received on meeting for further action:
 - 1) clarify different meanings for “framework” since at least three meanings are presented in the draft
 - 2) differentiate “learning” and “training” in the draft for clarification
- No recommendation from WG 5 related to TS 25258

TS 42111 NP ballot DoC discussion

- Majority NB comments are discussed without corresponding expert attend meeting for confirmation
- DoC file may not reflect how the change were made since editor update content directly into the draft
- No intention for technical change on scope, but editorial change is made with a recommendation confirmed after meeting
- Comments received on meeting for further consideration:
 - 1) reconsider to add new definition on “AI modeling”, “optimization”, “deployment”
 - 2) inconsistent expression in “AI modeling” definition and Figure 2 in draft
 - 3) training efficiency mentioned several time in the draft which conflict the scope
 - 4) be careful for specific number presented in the draft, i.e. parameters in ChatGPT number more than 1 trillion to 100 trillion in Introduction

4213

- Editor withdraw the contribution as WG 5 N 1328
- Editor would like to re-implement the ballot title and scope and re-propose all of the other proposed changes in WG 5 N 1328 for a new contribution after plenary
- There is no intention to change title and scope to replace “performance measurement” to “functional correctness”
- No recommendation from WG 5 related to 4213

TS 42112

- No discussion or recommendation from WG 5 related to TS 42112 since previous editor step down
- Development of project will continue once editor confirmed

Discussion on new proposal - Guidance for knowledge enhancement on pretrained machine learning models

- Presentation was provided by the proposer with following comments and concerns received. The proposal will be incubated in WG 5 for further consideration.
 - 1) provide definition on “knowledge enhancement”
 - 2) change title to “Framework of knowledge enhancement on pretrained machine learning models”
 - 3) scope change for not mentioning “main concerns”
 - 4) description needed for the relationship and difference among the new proposal and 5392, TS 25258 and other relevant projects
 - 5) alignment with terms and definition with 22989 AMD version
 - 6) requirement for retrieval-augmented generation (RAG) would not be covered



SC 42 – Artificial Intelligence