



ISO Form 4 NEW WORK ITEM PROPOSAL (NP)

Circulation date: 2024-10-29	Reference number: ISO/IEC NP TS 25566 ISO/IEC JTC 1/SC 42
Closing date for voting: 2025-01-22	
Proposer ISO/IEC JTC 1/SC 42	N 1947
Secretariat ANSI	

A proposal for a new work item within the scope of an existing committee shall be submitted to the secretariat of that committee.

A proposal for a new project committee shall be submitted to the Central Secretariat, which will process the proposal in accordance with ISO/IEC Directives, Part 1, Clause 2.3.

Guidelines for proposing and justifying new work items or new fields of technical activity (Project Committee) are given in ISO/IEC Directives, Part 1, Annex C.

IMPORTANT NOTE: Proposals without adequate justification and supporting information risk rejection or referral to the originator.

- The proposer confirms that this proposal has been drafted in compliance with Annex C of ISO/IEC Directives, Part 1.

PROPOSAL

(to be completed by the proposer, following discussion with committee leadership if appropriate)

TITLE**English title:**

Terminology and concepts for domain engineering of AI systems

French title:

Terminologie et concepts pour l'ingénierie des domaines des systèmes d'IA

(In the case of an amendment, revision or a new part of an existing document, show the reference number and current title)

SCOPE

This document provides terminology and concepts of domain engineering of AI systems. This document is intended for use by organizations developing, providing or using AI systems, regardless of the organisations' size, type or sector.

PURPOSE AND JUSTIFICATION

The project will provide terminology and concepts supporting domain engineering. Terms and concepts defined in this document can be extended and further refined and complemented to fit sectorial needs. The term "domain" is used in many standards and in many different forms ("context", "environment" ...) leading to a risk of confusion. Examples of such terms are:

- Intended use,
- intended domain of use,
- data domain,
- operational domain,
- validation domain,
- context of use,
- operating conditions,
- design envelope,
- ...

Providing terminology for "domain" would be valuable for organizations wishing to establish an AI system's design envelope in the context of relevant characteristics (e.g., robustness) or approaches (e.g., system safety engineering, impact assessment) and be able to clearly communicate this to other interested parties.

Some terms in some SC 42 documents are used without clear definitions, or with not necessarily the same meaning across different documents (e.g., domain), or that different terms can be used with the same meaning (e.g., intended use, intended domain of use, context of use...). Clarification and disambiguation of terms and concepts are, therefore, needed.

In addition, horizontal relevance of new terms coming from verticals can be considered.

Clarification and disambiguation of terms related to domain can support regulatory needs on robustness, data governance, accuracy, human oversight, transparency, risk management and can support the development of product-oriented conformity assessment standards.

Sustainable Development Goals (SDGs)

Goal 3: Good Health and Well-Being for People
Goal 4: Quality Education
Goal 6: Clean Water and Sanitation
Goal 7: Affordable and Clean Energy
Goal 8: Decent Work and Economic Growth
Goal 9: Industry, Innovation, and Infrastructure
Goal 11: Sustainable Cities and Communities
Goal 12: Responsible Consumption and Production
Goal 13: Climate Action
Goal 14: Life Below Water
Goal 15: Life on Land
Goal 16: Peace, Justice and Strong Institutions

Preparatory work

A draft is attached An outline is attached An existing document serving as the initial basis is attached

The proposer is prepared to undertake the preparatory work required:

Yes No

If a draft is attached to this proposal:

Please select from one of the following options:

The draft document can be registered at Preparatory stage (WD – stage 20.00)
 The draft document can be registered at Committee stage (CD – stage 30.00)
 The draft document can be registered at enquiry stage (DIS – stage 40.00)

If the attached document is copyrighted or includes copyrighted content:

The proposer confirms that copyright permission has been granted for ISO to use this content in compliance with the ISO/IEC Directives, Part 1 (see also the Declaration on copyright).

Is this proposal for an ISO management System Standard (MSS)?

Yes No

Note: If yes, this proposal must have an accompanying justification study. Please see the Consolidated Supplement to the ISO/IEC Directives, Part 1, Annex SL or Annex JG

Indication of the preferred type to be developed

International Standard Technical Specification
 Publicly Available Specification *

* While a formal NP ballot is not required to start developing a PAS (no eForm04), the NP form may provide useful information for the committee P-members to consider when deciding to initiate a Publicly Available Specification.

Proposed Standard Development Track (SDT – to be discussed by the proposer with the committee manager or ISO/CS)

18 months 24 months 36 months

Draft project plan (as discussed with committee leadership)

Proposed date for first meeting: [2025-02-02](#)

Dates for key milestones: Circulation of 1st Working Draft (if any) to experts: [2025-09-01](#)

Committee Draft consultation (if any): [2025-12-01](#)

DIS submission*: [2025-12-01](#)

Publication*: [2026-12-01](#)

* Target Dates for DIS submission and Publication should be set a few weeks ahead of the limit dates automatically determined when selecting the SDT.

NOTE: [ISO/Meetings](#) and [ISO/Projects](#) allow you to register and continuously update the meeting dates and project target dates during the development of the project.

<p>Known patented items (see ISO/IEC Directives, Part 1 for important guidance)</p> <p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p>If "Yes", provide full information as annex</p>																					
<p>Co-ordination of work: To the best of your knowledge, has this or a similar proposal been submitted to another standards development organization?</p> <p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p>If "Yes", please specify which one(s):</p>																					
<p>Listing of relevant documents (such as standards and regulations) at international, regional and national level</p>																					
<p>Identification and description of relevant affected stakeholder categories (Please see ISO CONNECT)</p> <table border="1"> <thead> <tr> <th></th> <th>Benefits/Impacts/Examples</th> </tr> </thead> <tbody> <tr> <td>Industry and commerce - large industry</td> <td>Provide clarity and disambiguation of terminology and concepts</td> </tr> <tr> <td>Industry and commerce - SMEs</td> <td>Provide clarity and disambiguation of terminology and concepts</td> </tr> <tr> <td>Government</td> <td>Support the development of product-oriented conformity assessment standards</td> </tr> <tr> <td>Consumers</td> <td>Identify domain-specific risks of AI systems</td> </tr> <tr> <td>Labour</td> <td>Identify domain-specific risks of AI systems</td> </tr> <tr> <td>Academic and research bodies</td> <td>Stimulate research activities related to the various aspects of domains of AI systems</td> </tr> <tr> <td>Standards application businesses</td> <td></td> </tr> <tr> <td>Non-governmental organizations</td> <td>Identify domain-specific risks of AI systems</td> </tr> <tr> <td>Other (please specify)</td> <td></td> </tr> </tbody> </table>			Benefits/Impacts/Examples	Industry and commerce - large industry	Provide clarity and disambiguation of terminology and concepts	Industry and commerce - SMEs	Provide clarity and disambiguation of terminology and concepts	Government	Support the development of product-oriented conformity assessment standards	Consumers	Identify domain-specific risks of AI systems	Labour	Identify domain-specific risks of AI systems	Academic and research bodies	Stimulate research activities related to the various aspects of domains of AI systems	Standards application businesses		Non-governmental organizations	Identify domain-specific risks of AI systems	Other (please specify)	
	Benefits/Impacts/Examples																				
Industry and commerce - large industry	Provide clarity and disambiguation of terminology and concepts																				
Industry and commerce - SMEs	Provide clarity and disambiguation of terminology and concepts																				
Government	Support the development of product-oriented conformity assessment standards																				
Consumers	Identify domain-specific risks of AI systems																				
Labour	Identify domain-specific risks of AI systems																				
Academic and research bodies	Stimulate research activities related to the various aspects of domains of AI systems																				
Standards application businesses																					
Non-governmental organizations	Identify domain-specific risks of AI systems																				
Other (please specify)																					
<p>Liaisons:</p> <p>A listing of relevant external international organizations or internal parties (other ISO and/or IEC committees) to be engaged as liaisons in the development of the deliverable.</p> <p>SAE, EUROCAE, CEN-CENELEC/JTC 21, IEC/TC 65, IEC/SC 65A, ISO/TC 22/SC 32, ISO/TC22/SC33, ISO/TC 204, JTC 1/AG 19, TC 20/SC 16 (UAS), ISO/TC 215, SC 40, SC 7...</p>	<p>Joint/parallel work:</p> <p>Possible joint/parallel work with:</p> <p><input type="checkbox"/> IEC (please specify committee ID)</p> <p><input checked="" type="checkbox"/> CEN (please specify committee ID)</p> <p>CEN/CENELEC JTC 21</p> <p><input type="checkbox"/> Other (please specify)</p>																				

<p>A listing of relevant countries which are not already P-members of the committee.</p> <p>This item is especially relevant for countries of the European Union because of the European Commission standardization request in support of the EU regulation on AI. Similarly, this should support emerging regulation in other regions (e.g., Canada AIDA).</p> <p>Note: The Committee Manager shall distribute this NP to the ISO members of the countries listed above to ask if they wish to participate in this work</p>	
<p>Proposed Project Leader (name and e-mail address)</p> <p>Arnault Ioualalen ioualalen@numalis.com</p>	<p>Name of the Proposer (include contact information)</p> <p>Heather Benko hbenko@ansi.org</p>
<p>This proposal will be developed by:</p> <p><input checked="" type="checkbox"/> An existing Working Group: ISO/IEC JTC 1/SC 42/WG 3 Trustworthiness</p> <p><input type="checkbox"/> A new Working Group:</p> <p>(Note: establishment of a new Working Group requires approval by the parent committee)</p> <p><input type="checkbox"/> The TC/SC directly</p> <p><input type="checkbox"/> To be determined:</p>	
<p>Supplementary information relating to the proposal</p> <p><input checked="" type="checkbox"/> This proposal relates to a new ISO document</p> <p><input type="checkbox"/> This proposal relates to the adoption as an active project of an item currently registered as a Preliminary Work Item</p> <p><input type="checkbox"/> This proposal relates to the re-establishment of a cancelled project as an active project</p> <p>Other:</p>	
<p>Maintenance agencies (MA) and registration authorities (RA)</p> <p><input type="checkbox"/> This proposal requires the designation of a maintenance agency. If so, please identify the potential candidate:</p> <p><input type="checkbox"/> This proposal requires the designation of a registration authority. If so, please identify the potential candidate:</p> <p>NOTE: Selection and appointment of the MA or RA are subject to the procedure outlined in ISO/IEC Directives, Part 1, Annex G and Annex H.</p>	
<p><input checked="" type="checkbox"/> Annex(es) are included with this proposal (provide details)</p>	
<p>Additional information/question(s)</p>	