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Deliverable

D7.3 Report on the contribution to standardization-initial version

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Executive Summary

UNE is in charge of T7.3: Standardization Activities [M1-M36], which includes T7.3.1: Standardization Landscape and T7.3.2: Contribution to Standardization, as part of WP7: Communication, Dissemination, and Standardization.

This task's primary objective is to facilitate market acceptance and utilization of the developed solutions. Other goals include providing starting information for other WPs, ensuring compatibility and interoperability with what already exists on the market through standards, and utilizing the standardization system as a tool for disseminating project results and interacting with market stakeholders. The standardization activities planned in this task to achieve the aforementioned objectives will be categorized into two interdependent activities: the identification and analysis of related existing standards and the contribution to ongoing and future standardization developments based on the s-X-AIPI project results. The participation of a Standardization Body, representing CEN and CENELEC, gives the standardization system and its internal procedures relevance, knowledge, and experience.

The first deliverable D7.2 developed in the task T7.3.1 Standardization landscape has been an analysis of the applicable standardization landscape to identify standards that can be utilized throughout the project (submitted at M6).

The second (D7.3), third (D7.6) and final deliverable (D7.7), are developed in the T7.3.2 “Contribution to the ongoing and future standardization developments”, allowing the project to communicate and collaborate with the relevant Technical Committees and organizations (such as CEN/CLC JTC21 and ISO/IEC JTC/SC42 Artificial Intelligence, ISO/IEC JTC 1/SC 27 and CEN/CLC JTC 13 Cybersecurity and Data Protection), Lastly, the principal outcome will be to contribute to new or ongoing standards in topics related to the project's objectives and, based on the project's results, relevant to their exploitation. In the context of such a HE project, the development of fast-track standards, such as CEN-CENELEC Workshop Agreements (CWA), is usually an option.

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Summary and Scope

The standardization activities of T7.3.2 "Contribution to ongoing and future standardization developments" are foreseen to be a facilitator of market acceptance and use of s-X-AIPI solutions, as well as a tool to improve the development and exploitation strategy of the project. To this end, once studied in D7.2 ("Standardization landscape and applicable standards") the existing Standards and Technical Committees (TC) related to s-X-AIPI, the D7.3 provides a brief summary of D7.2 regarding the International/European standardization landscape that is related to the s-X-AIPI objectives and outlines the Initial Planning of T7.3.2 "Contribution to standardization developments"; D7. 6 shall describe the actions carried out and their results in relation to the interaction of the s-X-AIPI project consortium with those Technical Committees identified as relevant, and the actions to be carried out, in order to disseminate the project towards potential standardization activities in the same field; Parallel to this deliverable, D7.7 is expected to develop a proposal for a new or revised standard related to the s-X-AIPI system or elements.

D7.3 Report on contribution to standardization-initial version (M7-M9), which describes the initial planning of T7.3.2 "Contribution to standardization developments".

D7.6 Report on the contribution to standardization-intermediate version (M10-M18), which includes Communication and Interaction with relevant TCs, including actions taken and to be taken, in order to disseminate the project towards future standardization activities in the same field.

D7.7 Report on the contribution to standardization-final version (M19-M36), which includes the activities to be carried out such as participation in working sessions on standardization, identification of standardizable topics, creation and design for a Future Standardization Proposal, and contributions to the development of standardization.

In this document, D7.3, its objective is preparing the Initial Planning for the Contribution to standardization developments (T7.3.2), which is the first Phase of T7.3.2. It contains the proposed actions to be carried out for future standardization activities and it establishes a schedule for the development of the proposed actions, also specifying responsible.

I. Introduction

The objective of the D7.3 is preparing the Initial Planning for the Contribution to standardization developments (T7.3.2), which is the first phase of T7.3.2. It determines the strategy of the activity of “Contribution to standardization”, the proposed actions to be carried out for possible future standardization activities and, it establishes a schedule for the development of the proposed actions, also specifying responsible.

This section provides a brief summary of D7.2, "Overview of standardization."

In the D7.2 an overview of the AI standardization landscape was briefly provided. A detailed analysis was carried out to map the existing standards onto the **14 relevant Standardization Areas** of the project. The following conclusions may be drawn:

- There are a huge number of International and European Technical Committees (TC), as well as standards and standards under development, relating to the s-X-AIPI project that may be relevant for its development and future dissemination. Two distinct types of the aforementioned Technical Committees can be differentiated. On the one hand, there are Technical Committees that can serve as a source of relevant information for the project's development, but where dissemination activities are not foreseen. On the other hand, Technical Committees that may be directly interested in the project's findings and where dissemination activities can be conducted.
- The Technical Committees which can be more interested in the results of the s-X-AIPI project are the following:
 - **ISO/IEC JTC 1/SC 42 (CEN/CLC JTC 21)** – Artificial Intelligence
 - **ISO/IEC JTC 1/SC 40** – IT service management, IT and Data Governance
 - **ISO/IEC JTC 1/SC 27 (CEN/CLC JTC 13)** – Cybersecurity, Privacy and Data Protection
 - **ETSI ISG SAI** – ETSI Industry Specification Group on Securing Artificial Intelligence
 - **ISO/IEC JTC 1/SC 7** – Software and systems engineering
 - **IEC TC 65 and ISO/TC 184** – Industrial-process measurement, control and automation
- **10** Technical Committees (TC) connected to the s-X-AIPI project have been identified.
 - To be able to use the standardization system as a tool to disseminate project outcomes and connect/interact with market stakeholders.
 - It will be important to determine the communication/interaction strategy of s-X-AIPI with relevant TCs. UNE would provide the technical assistance required for the communication/interaction.
- Several standards relevant to the s-X-AIPI project have been identified as a result of the study of the standardization landscape using the methodology outlined above.
- Approximately **40** standards are highly pertinent/relevant and could be viewed as requirements for compliance with the project results; they refer to WP1, WP2, WP3, WP4, WP5, and WP6.
 - WP1 Coordination and Management
 - WP2 – Design and Architecture of self-X AI solutions integration in process industry plants
 - WP3 – Self-X abilities in AI Data pipeline components for human support
 - WP4 – Integrated technology of self-X components and autonomic managers
 - WP5 – Self-X AI apps prototype demo, user training and performance improvement in process industry
 - WP6 – Replicability and exploitation
 - In the future, it may be able to contribute to these standards via disseminating standards usage information and the s-X-AIPI framework, which may contain these standards.
 - It will also be possible to report recommendations for improvement, and other types of feedback.
 - It may also be feasible in the future to contribute by providing new expertise of AI integration, Big Data analytics, use case process understanding, modelling and digital platforms, industry automation, etc.

- These applicable standards, including Standardization Technical Specifications (TS) or Technical Reports (TR), could be utilized as guidelines or manuals for WP1, WP2, WP3, WP4, WP5, and WP6. They could be used for design guidelines and usability analysis and evaluation.
- This study will contribute to the establishment and development of guidelines for the Standardization of AI technologies, AI data, AI systems and applications, not just for the s-X-AIPI project, but for the entire continent of Europe.

Table 1 Summary of relevant Standards and TCs for the s-X-AIPI's Key Standardization areas

Key concept/Standardization areas	Relevant Standards	TCs
AI concepts, terminology and AI system framework	ISO/IEC 22989, ISO/IEC 23053	ISO/IEC JTC 1/SC 42 (CEN/CLC JTC 21)
Data and Data Governance	ISO/IEC TS 4213, ISO/IEC 5259-2, ISO/IEC 5259-3, ISO/IEC 5259-4, ISO/IEC 5338, ISO/IEC 5339, ISO/IEC 5469, ISO/IEC 23894, ISO/IEC 24027, ISO/IEC 24029-1, ISO/IEC 24029-2 , ISO/IEC 24668, ISO/IEC 38507, ISO/IEC 42001, ETSI SAI 002, ETSI SAI 005	ISO/IEC JTC 1/SC 42 (CEN/CLC JTC 21) ISO/IEC JTC 1/SC 40
Accuracy robustness and Cybersecurity (Data Security)	ISO/IEC TS 4213, ISO/IEC 5338, ISO/IEC 5469, ISO/IEC 5059, ISO/IEC FDIS 23894, ISO/IEC 24028, ISO/IEC 24029-1, ISO/IEC DIS 24029-2 , ISO/IEC 24668, ISO/IEC 25024, ISO/IEC 25059, ISO/IEC 42001, ISO/IEC 20547-4, ISO/IEC TR 27563, ISO/IEC AWI 27090 , ETSI SAI 002, ETSI SAI 003, ETSI SAI 005 , ETSI SAI 006	ISO/IEC JTC 1/SC 42 (CEN/CLC JTC 21) ISO/IEC JTC 1/SC 27 (CEN/CLC JTC 13) ETSI ISG SAI
Risk management system	ISO/IEC 5338, ISO/IEC 5469, ISO/IEC 23894, ISO/IEC 25059, ISO/IEC 38507, ISO/IEC 42001	ISO/IEC JTC 1/SC 42 (CEN/CLC JTC 21)
Data Quality management system	ISO/IEC 5259-1, ISO/IEC 5259-2, ISO/IEC 5259-3, ISO/IEC 5259-4, ISO/IEC 5259-5, ISO/IEC 5338, ISO/IEC 23894, ISO/IEC 24029-1, ISO/IEC DIS 24029-2 , ISO/IEC 25059, ISO/IEC 38507, ISO/IEC 42001	ISO/IEC JTC 1/SC 42 (CEN/CLC JTC 21) ISO/IEC JTC 1/SC 40 ISO/IEC JTC 1/SC 7
Technical documentation	ISO/IEC FDIS 23894, ISO/IEC 24027, ISO/IEC 42001	ISO/IEC JTC 1/SC 42 (CEN/CLC JTC 21)
Record keeping	ISO/IEC FDIS 23894	ISO/IEC JTC 1/SC 42 (CEN/CLC JTC 21)
Transparency and information to users	ISO/IEC FDIS 23894, ISO/IEC 24027, ISO/IEC 24028 , ISO/IEC 38507, ISO/IEC 42001	ISO/IEC JTC 1/SC 42 (CEN/CLC JTC 21) ISO/IEC JTC 1/SC 40
Human oversight	ISO/IEC FDIS 23894, ISO/IEC 38507, ISO/IEC 42001	ISO/IEC JTC 1/SC 42 (CEN/CLC JTC 21)
Ethical aspects and societal considerations	ISO/IEC TR 24368, ISO/IEC PWI 17866	ISO/IEC JTC 1/SC 42 (CEN/CLC JTC 21)
AI use cases and applications	ISO/IEC TR 24030, ISO/IEC 5339, ISO/IEC 5338	ISO/IEC JTC 1/SC 42 (CEN/CLC JTC 21)

Computational aspects and machine learning	ISO/IEC TS 4213, ISO/IEC 5392, ISO/IEC TR 24372, ISO/IEC AWI TR 17903	ISO/IEC JTC 1/SC 42 (CEN/CLC JTC 21)
Open source	ISO/IEC 5230, ISO/IEC/IEEE 41062:2019	ISO/IEC JTC 1 ISO/IEC JTC 1/SC 7
Industrial-process measurement, control and automation	IEC TS 62443-1-1, IEC 62443-2-1, IEC 62443-2-4, IEC 62443-3-2, IEC 62443-3-3, IEC 62443-4-1, IEC 62443-4-2	IEC TC 65C ISO/TC 184 (CEN/TC 310)

2. Strategy

The s-X-AIPI project contribution to standardization is based on the communication/interaction with relevant TCs. The main objectives of s-X-AIPI are to contribute to new standards developments in specific topics, promote the inclusion of the outcomes of the project in new or future standards that can be easily used by the International/European industry and increase by this way the impact of the project.

Therefore, the s-X-AIPI Strategy includes 3 main Phases: (i) Planning, (ii) Communication and Interaction, and (iii) Standardization Development as depicted in the figure 1. Each phase is explained in the next sub-sections, resp. 2.1, 2.2. and 2.3.

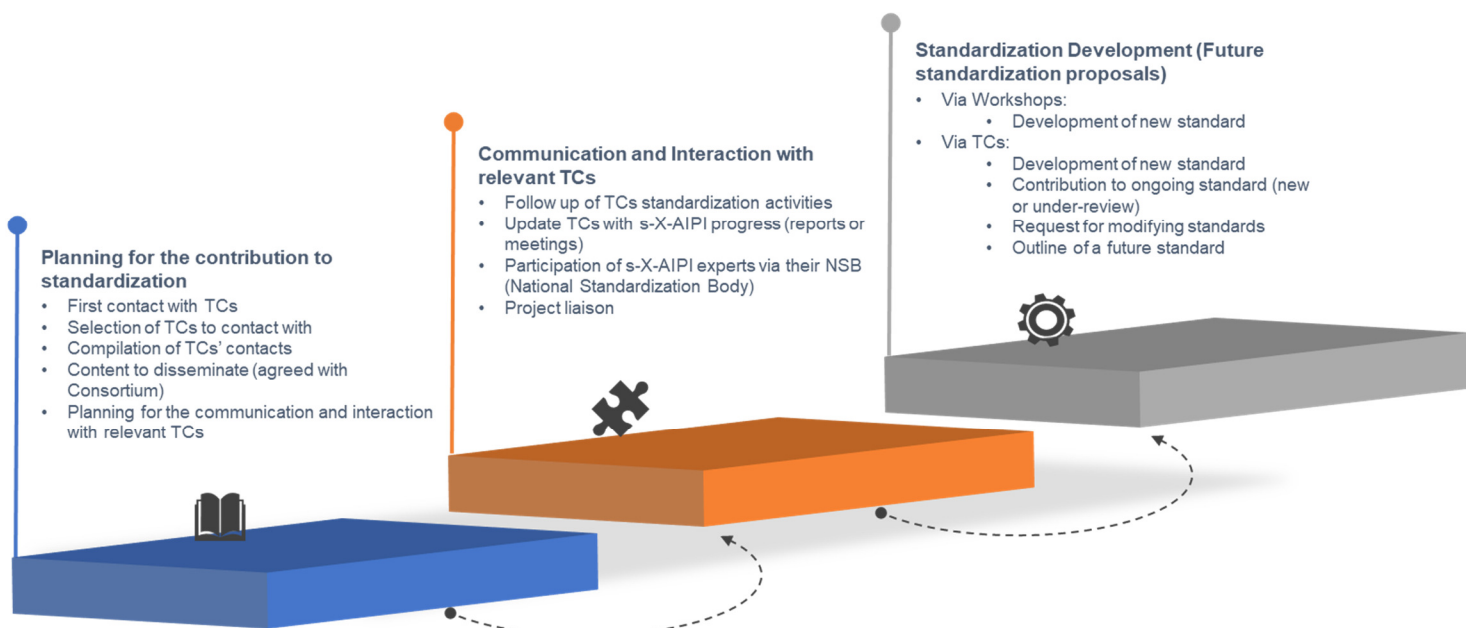


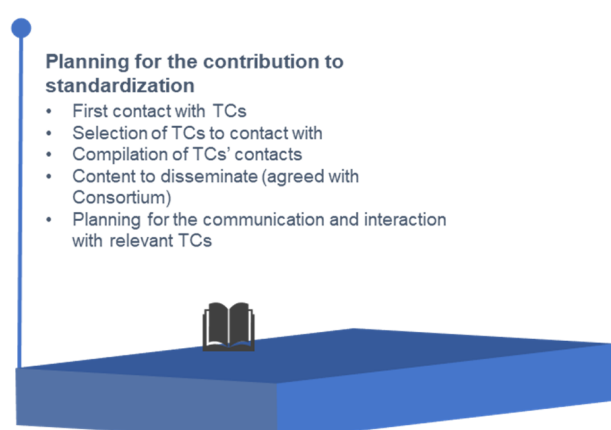
Figure 1 Strategy of the Contribution to standardization

2.1 s-X-AIPI standardization strategy: Planning phase

The first phase aims at initiating Standardization Development mainly by gathering initial information about the project's standardization possibilities or needs, and establishing objectives for the standardization with a view to planning the communication and interaction with the s-X-AIPI related TCs,

So in this phase, **first contact will be established with TCs**, to raise awareness among the TCs about s-X-AIPI and to facilitate further communication.

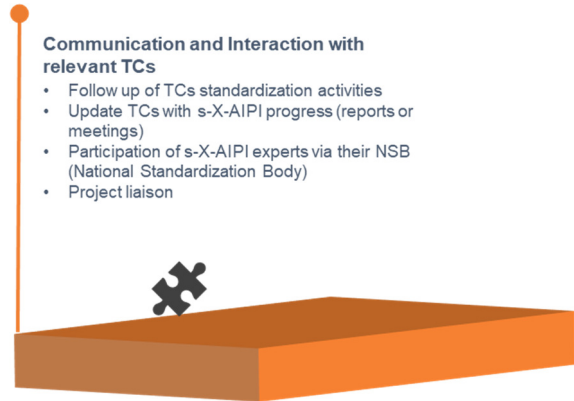
These TCs have different categories of stakeholders at International/European level, so the standardization system is used as a targeted channel of dissemination to disseminate the content. **Feedback will be asked to gather any views, opinions or advice regarding the project and the possibilities or needs for standardization.** In addition, these first contacts will be useful in determining the best path to starting the Standardization Development, and this first step will also facilitate future communication between s-X-AIPI and TCs if this process is initiated within a TC.



2.2 s-X-AIPI standardization strategy: Communication and Interaction with relevant TCs

s-X-AIPI will endeavour to establish different relationships between the s-X-AIPI and the relevant CEN, CENELEC, ISO, IEC Technical Committees (TCs). To conduct/build those relationships, s-X-AIPI will use two factors to determine the most appropriate interactions: the impact / relevance of standardization work on the TCs and the feasibility of starting the Standardization Development within a TC (compared to starting the Standardization Development in a Workshop, details are given below).

The ways to interact with the TCs include:



- 1- **Monitoring/Following up** of the activities of the relevant TCs.

This allows the launch of standardization works which may be relevant to s-X-AIPI and the progress of significant existing underdevelopment standards to be **detected**. This can be achieved through a periodic monitoring of the standardization activity resulting in D7.7 updates.

- 2- **Further communication** with the TCs to **track implementation of the s-X-AIPI** and **update the s-X-AIPI's progress**.

This may be achieved by reporting, holding meetings with related TCs or through joint events. On the one hand, this action contributes to further dissemination of the project and can guide the start of the Standardization Development, on the other hand this further contact is mandatory towards the TCs directly covering (if applicable) the subject that s-X-AIPI will be promoting to undergo the Standardization Development.

- 3- **Involvement/participation of s-X-AIPI Partners in TCs**;

Standardization is an open activity and all stakeholders may be involved in the TCs by designating their National Standardization Body. This option allows **deeper monitoring** of a TC 's standardization activity and is valuable if the Standardization Development is to be initiated within the standardization TC. Some of s-X-AIPI Partners are already involved/participating in one or more of these identified TCs.

- 4- **Establishment of a formal s-X-AIPI [Project Liaison](#) with the TCs**.

It is recommended only when the standardization TC's work is closely linked to the project's main goals, and a direct technical contribution from the project is expected. The project liaison figure is recognized in CEN / CENELEC, but it is not remarkably effective in ISO / IEC, this is to be taken into account since, according to the D7.2 conclusions, there is no formal standardization activity at European level in several of the relevant topics.

- 5- **Informing TCs**

Other specific actions are related to informing the relevant TCs about the project. The aim is to familiarize the TCs with s-X-AIPI project, trying to involve them and considering possible opinions. For these purposes, the possible actions are:

- Dissemination of the s-X-AIPI's progress by delivering reports to the relevant TCs Secretaries/Convenors. This could be the case of the product or system related TCs and UNE can easily perform this task due to its knowledge of standardization contact information.
- Attending relevant TC meetings to show the project and to establish personal contacts with relevant industry representatives. This would be very advisable in the case of **CEN/CLC JTC 21 'Artificial Intelligence'** and/or **CEN/CLC/JTC 13 'Cybersecurity and Data Protection'**, and it can also be managed by UNE, being also interesting the participation of s-X-AIPI Coordinator and Partners to present the technical aspects of the project.

- 6- **Requesting information to TCs**

This may help to involve the TCs in s-X-AIPI project and, also to make s-X-AIPI project closer to European standardization system. This is a way to ease collaboration between both parts. For example, this action may include general and specific questions to a TC regarding s-X-AIPI project issues, and questions about the possibility of standardization.

#	Dissemination Action	Involved partner(s)
1	Follow up of TCs standardization activities	UNE
2	Participation in a TC	Coordinator, Partners
3	Delivering reports to TCs	UNE
4	Presentation of the project in TCs meetings	UNE, Coordinator, Partners
5	Information requests to TCs	UNE
6	Information to TCs on Workshops and conferences	UNE

Table 2 Summary of possible actions for the project dissemination

2.3 s-X-AIPI standardization strategy: Standardization Development

The final objective of s-X-AIPI's standardization activities is to facilitate the market acceptance of the results by transferring these results and findings to standards that have broad market recognition. The feasible results to go through a standardization development process will be identified with the collaboration of the respective Partners. Depending on the type of results (nature, availability and IPR) and the standardization context (existence of closely related standards and TC reactions), different options for contributing to standardization are considered:

- 1- Standardization Development: Developing a new standard **within a Workshop**.

A Workshop on standardization is a group of entities with a common interest in developing a standard for a specific issue. It is the equivalent figure to standardization TC but, typically, the number of participants is smaller, and the working procedures are faster and more flexible. A standardization Workshop is created when there is a need to develop a precise standard in an innovative field that is not covered by the existing TCs or when these committees are not interested in developing such standard (e.g. it does not fit into their Work Programme). If the subject is close to the field covered by a standardization TC it will be informed and allow the standardization Workshop to be launched.

The standardization Workshop will be named hereafter as CEN Workshop or CENELEC Workshop, considering that the standardization Workshop option is of interest to s-X-AIPI mainly in the European environment. The standard produced by a CEN / CENELEC Workshop is referred to as CEN Workshop Agreement or CENELEC Workshop Agreement, typically referred to as CWA. The nature and timeline for CWAs development is very suited to the R&I project framework.

- 2- Standardization Development: Developing a new standard **within a TC**.

It may be interesting or necessary that the s-X-AIPI results are standardized within a TC in order to go through a standardization development process. Possible scenarios include:

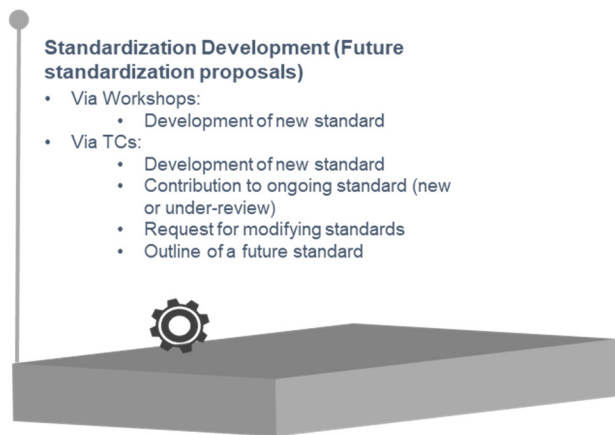
- a. Developing a new standard within a TC.

When a result of s-X-AIPI is to be promoted to a standard in a field that is covered by a standardization TC and that committee decides to include this development in its Work Programme. The resulting standard would have the support of standardization TC, but the work must be adapted to the internal timeline of such standardization TC and could go beyond the project's timeframe.

- b. Contributing to an ongoing standard.

As a result of monitoring the standardization landscape, it may be found that s-X-AIPI results are covered by an ongoing standard but that these results do not fit in with the current standard draft. Standard gaps can be found in both standards that are being developed from a new initiative and already published standards that are moving into a new version under review process.

- c. Request an amendment/modification to a standard not under development or review.



The gap can also be found within the standardization TC, in published standards that are not under any work. In this case, the standardization TC may be subject to a fully justified request for modification.

d. A Future Standard outline.

Only when there is no clear view of the contribution to standardization on a full roadmap (such as lack of agreement within the Consortium or lack of expected results).

3. Strategy Implementation

Next, the actions and approach to be carried out for the implementation of each of the steps of the strategy are detailed in this section.

3.1 Implementation of the Planning step

The relevance of the TCs identified in D7.2 'Standardization Landscape' shall be considered for the implementation of the actions described in 2.1. It should be noted that s-X-AIPI will innovate in the following among the standardization Areas/Topics identified in D7.2:

Key (concept) Standardization Areas

1	AI concepts, terminology and AI system framework
2	Data and Data Governance
3	Accuracy, robustness (trustworthiness), and Cybersecurity(Data Security)
4	Risk management system
5	Data Quality management system
6	Technical documentation
7	Record keeping
8	Transparency and information to users
9	Human oversight
10	Ethical aspects and societal considerations
11	AI use cases and applications
12	Computational aspects and machine learning
13	Open source
14	Industrial-process measurement, control and automation

Table 2 covers the Topics and TCs identified in **D7.2** and the relevant TCs proposed to contact with (defined in Chapter 2.1):

Key concept/Standardization areas	Relevant Standards	TCs	To be contacted
AI concepts, terminology and AI system framework	ISO/IEC 22989, ISO/IEC 23053	ISO/IEC JTC 1/SC 42 (CEN/CLC JTC 21)	YES
Data and Data Governance	ISO/IEC TS 4213, ISO/IEC 5259-2, ISO/IEC 5259-3, ISO/IEC 5259-4, ISO/IEC 5338, ISO/IEC 5339, ISO/IEC 5469, ISO/IEC 23894, ISO/IEC 24027, ISO/IEC 24029-1, ISO/IEC 24029-2 , ISO/IEC 24668, ISO/IEC 38507, ISO/IEC 42001, ETSI SAI 002, ETSI SAI 005	ISO/IEC JTC 1/SC 42 (CEN/CLC JTC 21) ISO/IEC JTC 1/SC 40	YES
Accuracy robustness and Cybersecurity (Data Security)	ISO/IEC TS 4213, ISO/IEC 5338, ISO/IEC 5469, ISO/IEC 5059, ISO/IEC FDIS 23894, ISO/IEC 24028, ISO/IEC 24029-1, ISO/IEC DIS 24029-2 , ISO/IEC 24668, ISO/IEC 25024, ISO/IEC 25059, ISO/IEC 42001, ISO/IEC 20547-4, ISO/IEC TR 27563, ISO/IEC AWI 27090 , ETSI SAI 002, ETSI SAI 003, ETSI SAI 005 , ETSI SAI 006	ISO/IEC JTC 1/SC 42 (CEN/CLC JTC 21) ISO/IEC JTC 1/SC 27 (CEN/CLC JTC 13)	YES

		ETSI ISG SAI	
Risk management system	ISO/IEC 5338, ISO/IEC 5469, ISO/IEC 23894, ISO/IEC 25059, ISO/IEC 38507, ISO/IEC 42001	ISO/IEC JTC 1/SC 42 (CEN/CLC JTC 21)	YES
Data Quality management system	ISO/IEC 5259-1, ISO/IEC 5259-2, ISO/IEC 5259-3, ISO/IEC 5259-4, ISO/IEC 5259-5, ISO/IEC 5338, ISO/IEC 23894, ISO/IEC 24029-1, ISO/IEC DIS 24029-2 , ISO/IEC 25059, ISO/IEC 38507, ISO/IEC 42001	ISO/IEC JTC 1/SC 42 (CEN/CLC JTC 21) ISO/IEC JTC 1/SC 40 ISO/IEC JTC 1/SC 7	YES
Technical documentation	ISO/IEC FDIS 23894, ISO/IEC 24027, ISO/IEC 42001	ISO/IEC JTC 1/SC 42 (CEN/CLC JTC 21)	YES
Record keeping	ISO/IEC FDIS 23894	ISO/IEC JTC 1/SC 42 (CEN/CLC JTC 21)	YES
Transparency and information to users	ISO/IEC FDIS 23894, ISO/IEC 24027, ISO/IEC 24028 , ISO/IEC 38507, ISO/IEC 42001	ISO/IEC JTC 1/SC 42 (CEN/CLC JTC 21) ISO/IEC JTC 1/SC 40	YES
Human oversight	ISO/IEC FDIS 23894, ISO/IEC 38507, ISO/IEC 42001	ISO/IEC JTC 1/SC 42 (CEN/CLC JTC 21)	YES
Ethical aspects and societal considerations	ISO/IEC TR 24368, ISO/IEC PWI 17866	ISO/IEC JTC 1/SC 42 (CEN/CLC JTC 21)	YES
AI use cases and applications	ISO/IEC TR 24030, ISO/IEC 5339, ISO/IEC 5338	ISO/IEC JTC 1/SC 42 (CEN/CLC JTC 21)	YES
Computational aspects and machine learning	ISO/IEC TS 4213, ISO/IEC 5392, ISO/IEC TR 24372, ISO/IEC AWI TR 17903	ISO/IEC JTC 1/SC 42 (CEN/CLC JTC 21)	YES
Open source	ISO/IEC 5230, ISO/IEC/IEEE 41062:2019	ISO/IEC JTC 1 ISO/IEC JTC 1/SC 7	YES
Industrial-process measurement, control and automation	IEC TS 62443-1-1, IEC 62443-2-1, IEC 62443-2-4, IEC 62443-3-2, IEC 62443-3-3, IEC 62443-4-1, IEC 62443-4-2	IEC TC 65C ISO/TC 184 (CEN/TC 310)	TBD

Table 3 Identification of the relevant TCs to be contacted

UNE shall contact the *Committee Manager/Secretary* and/or *Chair/Convenor* of each relevant TC. Support from the s-X-AIPI Coordinator and Partners will be needed to summarize the relevant progress and validate the information to avoid any confidential content being disseminated.

These first contacts are anticipated at M10.

3.2 Implementation of Communication and Interaction with relevant TCs step

Implementing the actions outlined in 2.2 begins with monitoring the work of the relevant TCs identified in Deliverable **D7.2**. This monitoring will also include the analysis of Workshops for European standardization. Monitoring of the relevant standardization activity will be continuous over the duration of the s-X-AIPI project, but it is possible to set tentative formal dates:

- ✓ M10-18 (prior to the first contact with the TCs)
- ✓ M24 (to be aligned with the needs of the standardization development process described in 2.3)
- ✓ M36 (to be aligned with the needs of the standardization development process described in 2.3)

The standardization TCs listed in Table 1 will be updated in s-X-AIPI with the relevant progress. This will be done by updating the report/information provided in the first contacts while keeping the possibility of **virtual/face-to-face interaction** open (e.g. attending a TC meeting if feasible).

The programming of these updates depends on how the reactions to the first contacts proceed and on when the relevant results of s-X-AIPI are delivered.

The relevant s-X-AIPI project planning dates to be considered for providing the TCs with updated report/information:

Review number	Tentative timing	Planned venue of review	Comments
RV1	M18	Demonstrator's location	Review Meeting 1
RV2	M24	Demonstrator's location	Review Meeting 2
RV3	M36	Demonstrator's location	End of the project

Table 4 Tentative schedule of project reviews

Note: It is important to know very well the s-X-AIPI project planning, for taking advantage of the moment. For example, there will be some Workshops and conferences that could be interesting to disseminate. According to the planning there are also some especially important dates along the development of the project that could be interesting to take into account for dissemination purposes. It is also important to know when the relevant TCs are going to meet, in order to foresee any relevant action that could be carried out.

Simultaneously, if an opportunity arises for a **virtual/face-to-face interaction**, it would be done when and where feasible. The Coordinator / Partners' involvement will be required in explaining the technical details.

Further interaction with relevant TCs (participation of s-X-AIPI members in these TCs and consideration of a Project Liaison) will be determined based on the results of the Communications/interactions described in 2.2 and the approach of the Standardization Development described in 2.3.

3.3 Implementation of Standardization Development step

Based on the identification of standardizable results, the standardization landscape at the moment (the result of the interaction with TCs and the monitoring of their standardization work) and the progress of the project, the most appropriate roadmap will be selected and conducted among the options described in 2.3.

s-X-AIPI provides for a dedicated **standardization work session** to work on identifying standardizable outcomes and deciding the roadmap. This session could take place during a project meeting, virtual or face-to-face. M18 is a tentative date for this standardization work session.

The Standardization Development is considered valuable for the market uptake of the s-X-AIPI results and for the project's impact beyond the financing period. The decisions taken, the actions carried out and the results obtained will be duly recorded in D7.7.

4. Conclusion: Summary of the Strategy Implementation

With all the information previously presented, a schedule can be made for implementing the strategy presented in this document to develop the deliverable **D7.6** (Report on Contribution to standardization-intermediate version (Communication and Interaction with TCs)) and **D7.7** (Report on Contribution to standardization-final version (Future Standardization Proposals)) to be completed on M18/32 and M36, respectively.

No.	Action	Technical Committee	Responsible	Date
1	First contacts with TCs in Table 1	All selected TCs	UNE (content provided by the Coordinator)	M10
2	Monitoring/Following up of TCs standardization activities	All selected TCs	UNE	Continuous (M1-M36)
3	Participation in a TC	Most relevant TC, (e.g. CEN/CLC JTC 21, CEN/CLC JTC 13, etc.)	Coordinator/Partners	If relevant, when TC meets
4	Delivering report to TCs	All selected TCs	UNE (content provided by the Coordinator)	M9(RV1) M18 (RV2) M24 (RV3) M36 (RV4) Whenever it is demanded
5	Presentation of the project in TCs meetings	Most relevant TC, (e.g. CEN/CLC JTC 21, CEN/CLC JTC 13, etc.) other if requested	UNE and Coordinator/Partners	M18-M24 (expected: 2023 Oct/Nov)
6	Requesting information to TCs	All relevant TCs	UNE, in the basis of Partners requests	When relevant
7	Information to TCs on Workshops and Conferences	All relevant TCs	UNE	M18-M24 When relevant
8	Virtual / Face-to-face interaction with relevant TCs	All relevant TCs	UNE and Coordinator/Partners	M10-M24 When relevant
9	Standardization work session (Workshop, TC involved and interested)	Implicated and interested TCs	UNE	M18-M24
10	Standardization Development (Preparation of CWA-CEN Workshop Agreement)	Implicated and interested TCs	UNE and Coordinator/Partners	M24-M36

Table 5 Summary of the strategic actions towards the Contribution to standardization

Deliverable	Title	Due date
D7.3	Report on Initial Planning of T7.3.2 “Contribution to standardization developments”	M9
D7.6	Report on the Communication and Interaction with relevant TCs	M18
D7.7	Future Standardization Proposals	M32
Final D7.7	Report on the Contribution to Standardization (Final report on the Communication/interaction with relevant TCs)	M36

Table 6 Schedule for delivering D7.3, D7.6 and final D7.7