



**Safe-, sUstainable- and R recyclable-by design P olymeric systems**  
**A guidance towardS next generation of plastics**

Start date of the project: 01/06/2022  
Duration 42 months

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**Deliverable D6.4**

**Report on the contribution to standardization - Initial**

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<b>Work Package</b>	<b>6</b>	DISSEMINATION, EXPLOITATION, STANDARIZATION AND TRAINING
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<b>Lead beneficiary</b>		UNE
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R	Report, document	<input checked="" type="checkbox"/>
DEC	Websites, patents filing, press & media actions, videos, etc.	<input type="checkbox"/>
DMP	Data Management Plan	<input type="checkbox"/>

Dissemination Level		
PU	Public, fully open	<input checked="" type="checkbox"/>
SEN	Sensitive, Restricted to a group specified by the consortium under conditions set out in grant agreement	<input type="checkbox"/>

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### Version history

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2	29/05/2023	CEA – S. Clavaguera	<a href="mailto:Simon.clavaguera@cea.fr">Simon.clavaguera@cea.fr</a>	Final review

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## **Executive summary**

The deliverable D6.4 is produced in the context of SURPASS-WP6, Task 6.3 – Standardisation activities, in particular with regard to the subtask 6.3.2. The standardisation activities of T6.3 are foreseen to be a facilitator of the acceptance and utilisation by the market of the SURPASS solutions, as well as a tool to improve the development and the exploitation strategy of the project. For these purposes, once studied in D6.3 the existing standards and technical committees related to SURPASS, this deliverable D6.4 defines the strategy for the SURPASS contribution to the on-going and future standardization. It includes the steps towards a successful contribution to standardization, the actions for its implementation and a tentative schedule.

D6.4 (initial) will be updated with the progress and outcomes of the different actions resulting in the final version of D.6.5 (interim) at M24 and later in the final version of D.6.6 at M42. The schedule of the actions described in this document is open to changes according to the progress of the project and the standardization landscape.

The Spanish Association for Standardisation (UNE), as a National Standardisation Body, is partner in the SURPASS project to provide support regarding all the standardisation tasks included in the project.

## List of acronyms

CEN	European Committee for Standardization
CENELEC (CLC)	European Committee for Standardization in the Electrical field
CWA	CEN or CENELEC Workshop Agreement
ISO	International Organization for Standardization; International Standard
NSB	National Standardization Body
SC	Subcommittee
TC	Technical Committee
WP	Work Package
UNE	Spanish Association for Standardization

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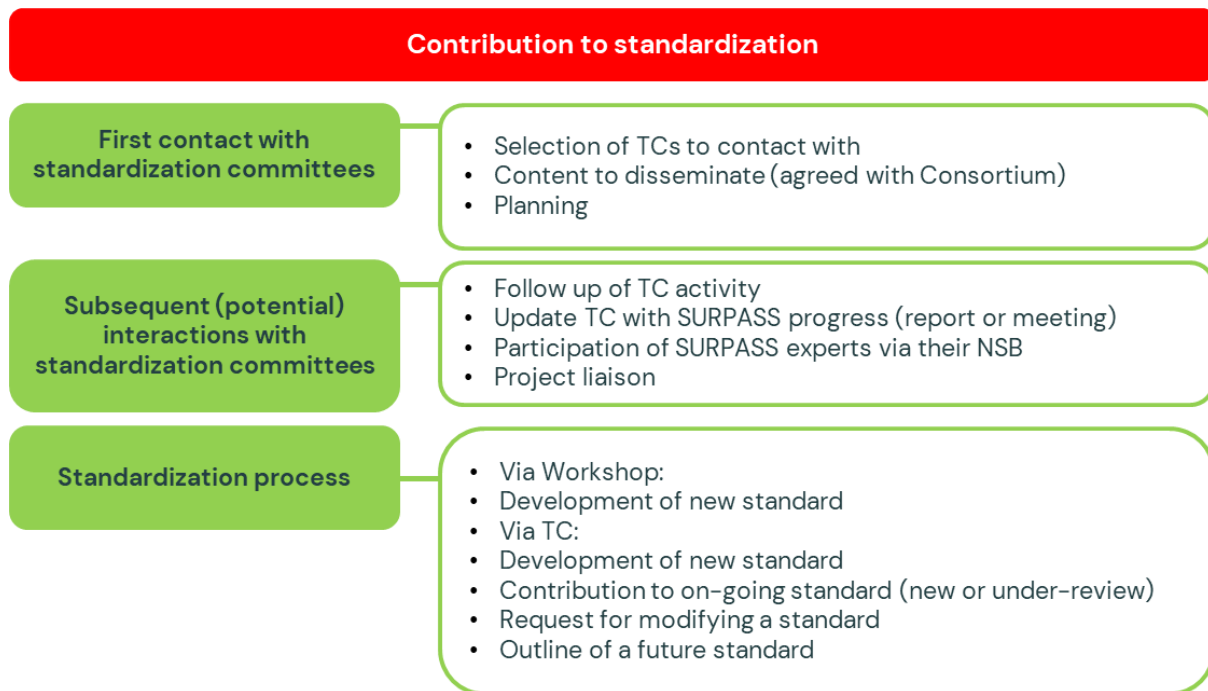
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## 1 Standardization Strategy

### 1.1 Definition of the strategy

The contribution to standardization of SURPASS is based in the interaction with the relevant Standardization Technical Committees identified in D6.3 and in the initiation of a standardization process. The strategy comprises the actions represented in the next figure:



**Figure 1. SURPASS Strategy for the contribution to standardization.**

The different steps are explained below.

#### 1.1.1 First contact with the standardization technical committees

The objective of this first contact is to raise awareness about SURPASS among the relevant standardization committees and to ease subsequent contacts. Different categories of stakeholders at European/international level are present in these committees, so the standardization system is used as a targeted dissemination channel. Feedback will be asked to gather any view, opinion or advise about the project and the standardization possibilities or needs. Additionally, this first contacts will be useful to determine the best path towards the initiation of a standardization process, moreover this first step will ease future contacts if this process is launched within a standardization committee.

#### 1.1.2 Subsequent interaction with the standardization technical committees

Different relationships can be established with the selected technical committees. Two factors determine the more suitable interactions: the impact/relevance for SURPASS of the standardization works within the committees and the feasibility of initiating a standardization process within a standardization committee (versus initiating the standardization process within a workshop created

ad hoc, details are given below). The ways of interaction of the SURPASS project with the standardization committees can include:

- Follow-up the activity of the relevant standardization committees. This allows to detect the initiation of standardization works that can be relevant for SURPASS and the progress of significant existing under-development standards. This is achievable through a periodical monitoring of the standardization activity resulting in updates of the D6.3.
- Further contact with the standardization committees to update the progress of SURPASS. This is achievable by delivering reports, by attending relevant technical committees' meetings or by joint events. On the one hand, this action contributes to further dissemination of the project and can guide the initiation of the standardization process.
- The participation of one or more SURPASS partners in the standardization technical committees. Standardization is an open activity and all interested parties may participate in the technical committees through the designation of their National Standardization Body (NSB). This option allows for a deeper follow-up of the activity of a standardization committee and it is valuable if the standardization process is going to be initiated within the standardization committee.
- The establishment of a formal liaison of SURPASS with the standardization committees. It is recommended only when the work of the standardization committee is closely linked with the main goals of the project and a direct technical contribution from the project is expected.

### 1.1.3 Standardization process

The main objective of the standardization activities in SURPASS is to facilitate the market acceptance of the results by transferring these results and findings to standards that have a wide recognition in the market. With the collaboration of the relevant partners the feasible results to go through a standardization process will be identified. Different options to contribute to standardization shall be considered depending on the kind of the results (nature, availability and intellectual property rights) and the standardization context (existence of closely related standards and reactions of the standardization committees).

The different options for SURPASS to contribute to standardization can include:

- Development of a new standard within a standardization workshop. A standardization workshop is a group of entities with a common interest in developing a standard about a specific issue. It is the equivalent figure to the standardization committee, but the number of participants is typically smaller and the working procedures are faster and more flexible. A standardization workshop is created when there is a need of developing a precise standard in an innovative field that is not covered by the existing standardization committees or when the standard does not fit into the committees' work program. If the subject is close to the field



covered by a standardization committee, it shall be informed and it shall allow to launch the standardization workshop.

In the European environment, the standardization workshop is named CEN-CENELEC Workshop and the corresponding developed standard is called CEN-CENELEC Workshop Agreement (CWA). The nature and timeline for the development of CWAs is very suitable for R&I projects.

- Standardization within a standardization committee. To standardize the SURPASS results within a standardization committee may be interesting or needed. The possible scenarios are:
  - a. New standard development within a standardization committee. This option applies to new standards with scopes covered by an existing standardization committee, which decides to include it in its work program. The resulting standard would have the support of the standardization committee, but the work shall be adapted to the internal timeline of such standardization committee and could go beyond the timeframe of the project.
  - b. Contribute to an on-going standard. As a consequence of the monitoring of the standardization landscape, it may be found that the SURPASS results are covered by a standard under development but that these results do not fit in the current standard draft. Gaps in standards may be found in both: 1. standards that are being developed from a new initiative and 2. standards already published that are going under a review process towards a new version.
  - c. Request the modification of a standard that is not under development or review. The gap may be found also in published standards that are not under any work within the standardization committee. In this case, a fully justified modification request can be made to the standardization committee.
  - d. Outline of a future standard. Only when there is not a clear view on a full roadmap for the contribution to standardization (like lack of agreement within the Consortium or lack of the expected results).

## 1.2 Implementation

The actions and approach to be performed for the implementation of each step of the strategy are detailed below.

### 1.2.1 First contact with the standardization technical committees

For the first contact implementation, it is necessary to previously select the relevant standardization committees to contact with, among those that were identified in the standardization landscape related to the SURPASS project (D6.3).

Among the standardization technical areas identified in D6.3, standardizable innovative outcomes from SURPASS are expected mainly in the following areas:

- Polymeric materials and composites new design and formulations:
  - Bio-based polyurethane foams with enhanced vitrimer properties
  - Fire-resistant epoxy resins and composites
  - MNL films for Packaging
  
- Plastics reprocessing and recycling, SSRbD Assessment

Regarding the rest of technical areas identified in D6.3, their consideration is useful in terms of compliance with requirements and in terms of information for the SURPASS R&D developments.

According to this, the standardization committees proposed for contacting with the objectives described in 1.1.1 are indicated in the following Table:

Table 1 – Identification of standardization committees to be contacted	
Technical area	Standardization Technical Committees
Polymeric materials and composites new design and formulations	ISO/TC 61 - Plastics CEN/TC 249 - Plastics
<ul style="list-style-type: none"> <li>• Bio-based polyurethane foams with enhanced vitrimer properties</li> </ul>	CEN/TC 411 - Bio-based products ISO/TC 163 Thermal performance and energy use in the built environment
<ul style="list-style-type: none"> <li>• Fire-resistant epoxy resins</li> </ul>	ISO/TC 61/SC 4 Plastics - Burning behaviour
<ul style="list-style-type: none"> <li>• MNL films for Packaging</li> </ul>	ISO/TC 122/SC 4 Packaging and the environment CEN/TC 261/SC 4 Packaging and Environment
Plastics reprocessing and recycling, SSRbD Assessment	ISO/TC 61/SC 14 Plastics - Environmental aspects CEN/CLC/JTC 10 - Material efficiency aspects for products in scope of Ecodesign legislation

UNE will contact the Secretary/Convenor of each selected standardization committee and subcommittee. The support of the Coordinator/Partners of SURPASS will be needed to summarize the relevant progress and validate the information to disseminate avoiding any confidential content.

This first contacts are foreseen at M18 (november 2023).

### 1.2.2 Subsequent interaction with the standardization technical committees

The monitoring of the relevant standardization activity will be continuous during the duration of SURPASS project but tentative formal dates can be set:

- M18 (prior to the first contact with the standardization committees)
- M24 (to be aligned with the needs of the standardization process)
- M34 (to be aligned with the needs of the standardization process)

The standardization committees included in Table 1 will be updated with the relevant progress in SURPASS, if this is considered valuable by the committees. This will be done by updating the report/information provided in the first contacts and, at the same time, keeping open the possibility of having a face-to-face interaction (e.g., attending to a meeting of the standardization committee if feasible). The implication of the Coordinator/Partners will be needed for presenting SURPASS technical details to the committee.

Further interactions with the standardization committees (participation of members of SURPASS in committees and the consideration of a project liaison) will be determined as a function of the interaction with the technical committees and the standardization approach.

### 1.2.3 Standardization process

Based on the standardizable SURPASS results, on the standardization landscape, on the interaction with the standardization committees and on the progress of the project, the most suitable roadmap among the options described in 1.1.3 will be selected and conducted.

A standardization SURPASS session for the standardizable results identification and the roadmap selection is foreseen. This session could take place during a project meeting. A tentative date for this standardization session is M24.

The standardization process is considered very valuable for the market uptake of the SURPASS results and for the impact of the project beyond the financing period.

### 1.2.4 Summary of the implementation

The summary of the tentative dates and the actors involved is included in the following table:

Table 2 – Summary of the actions in the strategy for the SURPASS contribution to standardization		
Action	Actors involved	Month
First contacts with the standardization committees in Table 1	UNE (content of the communication agreed with Coordinator)	M18
Updates on the standardization landscape	UNE	Continuous but formally at M24 M34
Provision of updated report/information to the standardization committees identified in Table 1	UNE (content of the communication agreed with Coordinator)	When convenient

Face to face interaction with the relevant standardization committees	UNE and Coordinator/Partners	When convenient
Standardization SURPASS session	UNE	M24 (preferably during a project meeting)
Standardization process	UNE and Coordinator/Partners	M24-M42

## **2 Deviations from the workplan**

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No deviations from the work plan have occurred.

## **3 Conclusions and perspectives**

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The draft standardization strategy for the SURPASS contribution to standardization has been developed and the technical committees for initiating a contact have been proposed by UNE. This deliverable will be updated along the whole project duration.