

Deliverable Report

Deliverable Title:

Report on the contribution to the standardisation

Deliverable No.	Deliverable 8.5
Deliverable nature	PU
Work Package (WP)	WP 8
Task	Task 8.2
Dissemination level ¹⁾	Public
Number of pages	74
Keywords	Standards, European Committee for Standardization, CEN or CENELEC Workshop Agreement, European Standard
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Due date of deliverable	April 30 th , 2024
Actual submission date	April 29 th , 2024

1) PU = Public

PP = Restricted to other programme participants (including the Commission Services)

RE = Restricted to a group specified by the consortium (including the Commission Services)

CO = Confidential, only for members of the consortium (including the Commission Services)



Technical References

Project acronym	SALEMA
Project full title	Substitution of Critical Raw Materials on Aluminium Alloys for electrical vehicles
Call	H2020-SC5-2020-2
Grant number	101003785
Project website	salemaproject.eu
Coordinator	Fundacion Eurecat

Document history

V	Date	Author (Affiliation)	Actions& Approvals
V1	20.01.2022	Isabel Linares (UNE)	First draft (M9)- Strategy
V2	14.03.2022	Isabel Linares (UNE)	Second draft (M10)- Reviewed by the SALEMA coordinator
V3	26.04.2024	Isabel Linares (UNE)	Full report on the contribution to standardisation (M36)
FINAL	29.04.2024	Manel da Silva Hannah Arpke (EUT)	Review and finalisation

Summary

D8.5 “Report on the contribution to the standardisation” collects the actions performed for the contribution to standardisation from SALEMA and the results obtained. The contribution to standardisation seeks to transfer selected results of SALEMA to standards (EN/ISO). The due date for D8.5 is M36. However, a previous version (D8.5 v1-M9 and revised by the consortium in M10) was considered necessary to define the standardisation strategy to be carried out. D8.5 is part of Task 8.2 “Standardisation activities” and it is based on the conclusions of D 8.4 “Report on the standardisation landscape and applicable standards” that included the information on the relevant existing and ongoing standards and the relevant standardisation technical committees to facilitate the use of existing knowledge and the compatibility and the interoperability of the results.

To facilitate the partners' understanding of the standardisation processes in the Horizon 2020 projects, we published the “Technical Support Document for D8.5 (in M24)”. In addition to future Work Items of standardisation related to the deliverables of the SALEMA project, this report included the relevant aspects of the European Standardisation Organizations (ESOs): the principles of transparency, openness and coherence, the platform for stakeholders, and the kinds of published deliverables in CEN-CENELEC, among others. It also included the CEN Workshop concept and the development process to elaborate the CEN Workshop Agreements (CWA) following CEN-CENELEC GUIDE 29.



These reports were delivered to the Consortium and presented at the monthly monitoring meetings of the SALEMA project. This final Deliverable (D8.5 v2- M36) includes the results of the standardisation processes originated by SALEMA. The most relevant result achieved is the development of a CEN-CENELEC workshop agreement and the publication of The CWA 18112:2024 “Aluminium and aluminium. Fluidity evaluation via multi-strip testing moulds”.

The transfer of SALEMA results to standards widely recognized by the industry and developed in a system external to the Consortium will facilitate the market acceptance of these results and their impact beyond the project term. It should be noted that the standardisation system is used as a dissemination channel aimed at the actors represented in the technical standardisation committees.

The Spanish Association for Standardisation (UNE), as National Standardisation Body (NSB), member of CEN-CENELEC and of ISO-IEC, is a member of SALEMA to provide support regarding the standardisation tasks included in the project (WP8 “Boosting SALEMA impact”).

The Spanish Association for Standardisation, UNE, a European Standardisation Body, is a partner in the SALEMA project to provide support regarding the standardisation tasks included in the project.

UNE has participated until 2020 in about 60 H2020 projects, with similar tasks either as a partner or subcontracted. 40 of them are still ongoing or starting. This places UNE as the first European standardisation body by a number of participants. UNE has worked with other standards organizations in the framework of the EU funded Standards+Innovation initiative. One of the outcomes was a practical guide for considering standardisation in R&I programmes, targeted to the officers of the European Commission and related Executive Agencies, when preparing the calls, evaluating the submitted proposals and monitoring the ongoing projects. Up to now, as a result of projects participated by UNE, sixteen CEN-CENELEC Workshop Agreements (CWA) have been published and further four are currently under preparation, on the most varied topics. One of them is being considered as starting port to issue a new ISO standard. A technical report (CEN/TR) has been published in the European Committee for Standardisation, CEN. Moreover, comments and contributions have been submitted to several ongoing standardisation works.



Disclaimer

This publication reflects only the author's view. The Agency and the European Commission are not responsible for any use that may be made of the information it contains.

Abbreviations

Abbreviation / Acronyms	Description
EC	European Commission
GA	Grant Agreement
AWI	Approved Work Item
CD	Committee Draft
CEN	European Committee for Standardisation
CENELEC	European Committee for Standardisation in the Electrical Field
CWA	CEN or CENELEC Workshop Agreement
DIS	Draft International Standard
EN	European Standard
EOTA	European Organisation for Technical Assessment
ESO	European Standardisation Organisation
ETAG	European Technical Approval Guideline
ETSI	European Telecommunications Standards Institute
EU	European Union
FDIS	Final Draft International Standard
hEN	Harmonised European Standard
IEC	International Electrotechnical Commission
ISO	International Organization for Standardisation; International Standard
NMC	National Mirror Committee
NSB	National Standardisation Body
NWIP	New Work Item Proposal
PWI	Preliminary Work Item
SC	Subcommittee
TC	Technical Committee
TR	Technical Report
TS	Technical Specification
UNE	Spanish Association For Standardisation
WD	Working Draft



Abbreviation / Acronyms	Description
WG	Working Group
WI	Work Item
WP	Work Package



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1. INTRODUCTION

The Spanish Association for Standardisation, UNE, as National Standardisation Body member of the European Standardisation Organizations, participates in SALEMA consortium to provide advice, support and guidance regarding the standardisation, being responsible for Task 8.2 “Standardisation activities” included in the project.

In the SALEMA project specific standardisation activities are included:

- Facilitate the subsequent contribution to standardisation allowing the related standardisation committees an advanced knowledge of SALEMA and to comment about the standardisation possibilities.
- Ensure compatibility and interoperability with what already exists in the market based on existing standards.
- Use the standardisation system as a tool for dissemination of the project results and interaction with the market stakeholders.

One of the aims of Standardisation activities is at investigating the standardisation potential in the field allowing the project to interact with the related standardisation technical committees, assessing to what extent the relationship should be established (monitoring their information, attending to TC meetings, establishing formal liaisons, organizing joint events, etc.), to capture their inputs as stakeholders and to use the standardisation system as a fast and much-focused dissemination tool to the market stakeholders.

UNE is aimed to facilitate the inclusion of the outputs obtained from the SALEMA project in new or future standards in the fields related to the project and the expected products. Therefore, the SALEMA consortium will contribute to the development of standards that include the results achieved. Potential outputs like developing recycled aluminium alloys with improved mechanical performance, taking into account the key challenges in the different levels of the value chain: improving scrap classification and sorting systems to turn scrap into a valuable raw material; demonstrating the feasibility to substitute Critical Raw Materials (CRMs) in alloying systems; optimizing High Pressure Die Casting, sheet metal Stamping and Extrusion processes in a timely and cost-efficient manner in order to ensure the adoption of the developed alloys; etc.

The inclusion of project outcomes in new or future standards, external to the consortium of SALEMA, that can be easily used by the European or international industry and public administrations, will increase the impact of the project and will positively contribute to the transfer of the knowledge generated within the project to the industry and society.

Deliverable D8.4 “Report on the standardisation landscape and applicable standards” showed in an orderly way the standardisation landscape related to SALEMA. D8.5 “Report on the contribution to the standardisation” is based on the conclusions of D8.4. The purpose of this deliverable D8.5 is to report on the progress on standardisation activities under Task 8.2 “Standardisation activities” and the proposed path forward.

This final Deliverable D8.5 establishes a strategy for the interaction with the European standardisation system and the proposal of standards related to the SALEMA project and indicates the actions that may be carried out in order to disseminate the project towards possible future standardisation activities in the same field. The most relevant result achieved is the development of a CEN Workshop Agreement.



2. STANDARDISATION

2.1. Subject of standardisation

Standards are voluntary technical documents that set out requirements for a specific item, material, component, system, or service, or they describe in detail a particular method, procedure or best practice. Standards are developed and defined through a process of sharing knowledge and building consensus among technical experts nominated by interested parties and other stakeholders - including businesses, consumers and environmental groups, among others. These experts are organised in Technical Committees (TCs), which are subdivided in subcommittees (SCs) or working groups (WGs). These TCs are included in the structure of the standardisation organizations (National, European and International, with the respective mirror committees) and work following their internal regulations.

The standardisation bodies operate at National (UNE, AFNOR, BSI, DIN, etc.), Regional (CEN, CENELEC, ETSI) or International (ISO, IEC, ITU) level. Sometimes there are different standardisation bodies at the same level but covering different fields. This is the case of ISO (general), IEC (electrical) and ITU (telecommunications) at international level, or CEN, CENELEC and ETSI at European level in the same way.

There are also different kinds of standardisation documents. The most widespread is the standard, which has a different code depending on the organization under which it was developed, e.g., EN for European Standards, ISO or IEC for International standards. Other types of documents are technical specifications (TS), technical reports (TR) and workshop agreements (CWA). Further amendments to the standards are identified by adding A1, A2, etc. at the end of the standard code. At European level, all the members of CEN and CENELEC shall adopt EN standards as national standards and have to withdraw any existing national standards which could conflict with them. A summary of the characteristics of the different standardisation documents could be found in the following Table 1.



Table 1: Characteristics of different standardisation documents

Type	Main characteristics	European code	International code	National code
Standard [Revision: every 5 years]	<ul style="list-style-type: none"> Elaboration: 3 years 2 steps of member approval European: compulsory national adoption 	EN	ISO IEC	UNE, NF, BS, DIN, etc. When adopting: UNE-EN, NF-EN, UNE ISO, NF-ISO, etc.
Technical Specification [Revision: at 3 years (upgrading to EN or deletion)]	<ul style="list-style-type: none"> Elaboration: 21 months 1 step of member approval or internal approval in TC European: optional national adoption 	CEN/TS CLC/TS	ISO/TS IEC/TS	When adopting: UNE-CEN/TS, NF-CEN/TS, UNE-ISO/TS, NF-ISO/TS, etc.
Technical Report [No revision required]	<ul style="list-style-type: none"> Elaboration: free timeframe Internal approval in TC European: optional national adoption 	CEN/TR CLC/TR	ISO/TR IEC/TR	When adopting: UNE-CEN/TR, NF-CEN/TR, UNE-ISO/TR, NF-ISO/TR, etc.
Workshop Agreement [Revision: at 3 years (upgrading to EN or deletion)]	<ul style="list-style-type: none"> Elaboration: free timeframe (usually few months) Internal approval in the Workshop European: optional national adoption 	CWA	IWA	Variable

European and International standardisation organizations (e.g., CEN and ISO) have signed formal agreements in order to avoid duplication of efforts and promote global relevance of standards, which allow to adopt or develop in parallel each other's standards with the same content and code.

The technical collaboration between ISO and CEN was formalized through the Vienna Agreement (VA). European standards developed through the Vienna Agreement have EN ISO codification while International Standards developed through the Vienna Agreement remain only with ISO code.

2.2. Background to D8.5

Regarding the dissemination activities and based on the conclusions of Deliverable D8.4, the technical committees of this report have relation to the SALEMA project. Information on the most relevant Technical Committees (TCs) has been provided, listing standards references for the main topics identified for the fields related to the SALEMA project:



- Materials and Tests. It includes aluminium alloys, light metals, raw materials, methods of testing, mechanical testing, chemical analysis, and corrosion testing,
- Automotive sector and Industrial process. It includes automotive sector, electric vehicle, recyclability, industrial processes, and automation processes.
- Horizontal topics. It includes Life Cycle Assessment (LCA), environment management, and circular economy.

Table 2 shows the list of European and international committees based on these key concepts and related to the SALEMA project.

Table 2. List of European and international committees related to the SALEMA project

Subject (Key concepts)	European TC	Title	
MATERIALS AND TESTS: aluminium alloys light metals raw materials methods of testing mechanical testing chemical analysis corrosion testing	CEN/TC 121	Welding and allied processes	
	CEN/TC 132	Aluminium and aluminium alloys	
	CEN/TC 138	Non-destructive testing (NDT)	
	CEN/TC 250/SC 9	Eurocode 9: Design of aluminium structures	
	CEN/TC 262	Metallic and other inorganic coatings, including for corrosion protection and corrosion testing of metals and alloys	
	CEN/TC 459/SC 1	ECISS. Test methods for steel (other than chemical analysis)	
	International TC	Title	
	ISO/TC 79	Light metals and their alloys	
	ISO/TC 135	Non-destructive testing (NDT)	
	ISO/TC 156	Corrosion of metals and alloys	
	ISO/TC 164	Mechanical testing of metals	
	Subject (Key concepts)	European TC	Title
	AUTOMOTIVE SECTOR AND INDUSTRIAL PROCESS: automotive sector electric vehicle recyclability automation processes industrial processes	CEN/WS 113	Framework linking dismantled parts with new design components for the automotive industry in a circular economy model
		CLC/TC 65X	Industrial-process measurement, control and automation
CEN/TC 310		Road vehicles	
International TC		Title	
ISO/TC 22		Road vehicles	
ISO/TC 22/SC 37		Electrically propelled vehicles	
Subject (Key concepts)	European TC	Title	
HORIZONTAL TOPICS: Life Cycle Assessment (LCA) circular economy environment management	CEN/SS S26	Environmental management	
	CEN/CLC/JTC 10	Material efficiency aspects for products in scope of Ecodesign legislation	
	International TC	Title	
	ISO/TC 207	Environmental management	
	ISO/TC 323	Circular economy	

Following the conclusions of deliverable D8.4, the technical committees with which we have carried out dissemination activities and contribution to standardisation are shown in Table 3 "List of the most relevant technical committees for dissemination activities".

Table 3. List of the most relevant technical committees for dissemination activities

European TC	Title
CEN/TC 132	Aluminium and aluminium alloys
CEN/TC 250/SC 9	Eurocode 9: Design of aluminium structures
CEN/WS 113	Framework linking dismantled parts with new design components for the automotive industry in a circular economy model
CEN/SS S26	Environmental Management
International TC	Title
ISO/TC 79	Light metals and their alloys
ISO/TC 207	Environmental management
ISO/TC 323	Circular economy



3. DEFINITION OF THE STRATEGY

Considering the conclusions obtained in Deliverable D8.4 and for the development of Deliverable D8.5, which includes the interaction with the standardisation system and the future standardisation proposals, it seems necessary to define a strategy. This strategy is based on:

1- Screen existing standards

By screening existing standards on national, European, and international levels, partners will be able to access leading knowledge and resources on the topic SALEMA is working on. This includes European product standards across various industries related to materials, processes and products.

2- Join an existing standardisation community

Joining a standardisation community (i.e., CEN/TC 132 Aluminium and aluminium alloys) allows SALEMA to exchange ideas and perspectives on ongoing work, and access relevant information that will inform and support SALEMA results entrance into the market.

3- Revise an existing European standard or develop a new one

If SALEMA has identified a need to revise an existing standard or to develop a new one, SALEMA will need to follow the process set by European standards organizations CEN or CENELEC.

4- Fast track to new standardisation

Developing a new standard into a CEN-CENELEC Workshop Agreement (CWA), a specific document designed for R&I projects that forms the basis for new standards. The drafting time is about 12-18 months, after which the CWA could become an European standard or be integrated into an existing one.

Taking into account the previous points, we can infer that the contribution to the standardisation of the SALEMA project is based on the interaction with the relevant Technical Standardisation Committees (TC) and the initiation of a standardisation process for achieving the aim. Figure 1 includes a global vision of the strategy.



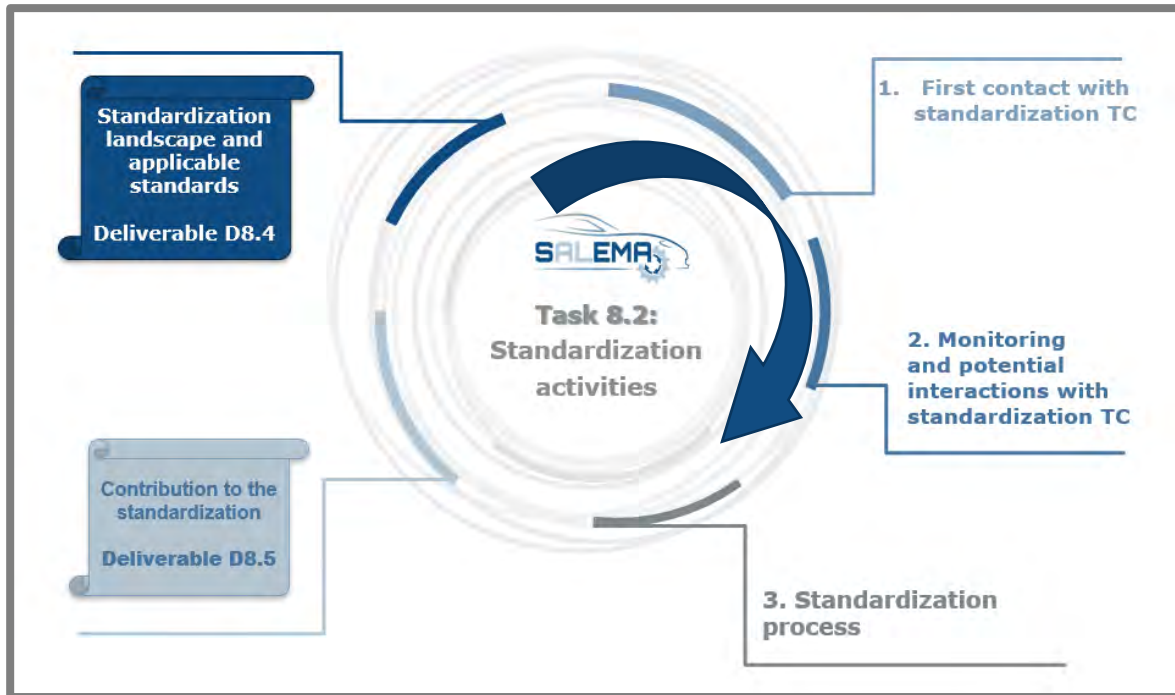


Figure 1: Standardisation activities for SALEMA project

Note that the demand for interaction may be limited due to the time constraints of the SALEMA project if made not possible to produce public deliverables that can be submitted to the relevant TCs as an innovative input to their standardisation works.

In this regard, partners are advised that Intellectual Property Rights (IPRs) on the SALEMA outcomes should be carefully considered for further contribution to the standardisation work, as standards organizations have implemented a Patent Policy that encourages the early disclosure and identification of Patents that may relate to standards under development. In doing so, greater efficiency in standards development is possible and potential patent rights problems can be avoided. Annex A gives guidance on the Patent Policy for CEN-CENELEC and for ISO/IEC/ITU.

Another aspect related to innovation is gender. Gender equality contributes to faster economic growth, productivity, and innovation. Equal access to education, employment, entrepreneurship, trade opportunities, and leadership positions enlarges the pool of labour and talent available to the economy and contributes to productivity and innovation. Annex B includes information about Gender in Standardisation

4. ACTION PLAN: STEP BY STEP

4.1. General

The strategy should allow interaction with the technical standardisation committees and establish an action plan to be as effective and efficient as possible. The actions to be carried out are defined in the following clauses. See Figure 2.

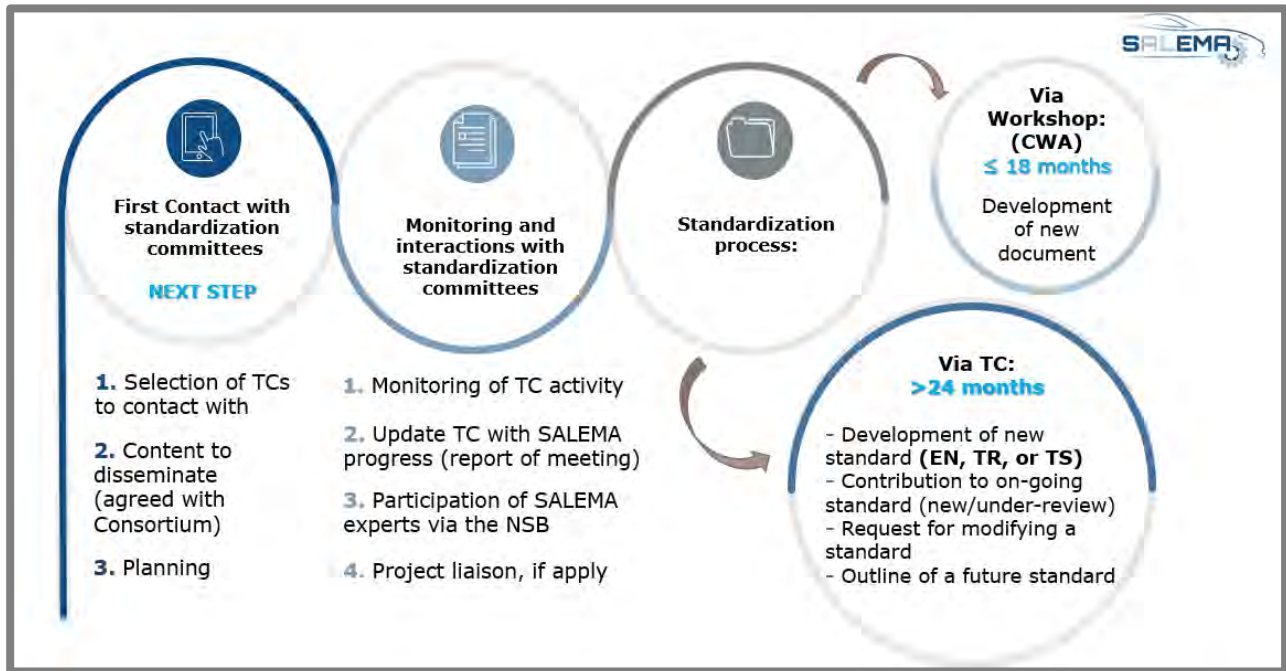


Figure 2: Actions for the contribution to standardisation of SALEMA

4.2. First contact with the standardisation technical committees

Document D8.4, issued in M6, provided an assessment of the standardisation environment, including information regarding the state of the art in the standardisation field and a brief evaluation of regulations related to standards and other constraints for the project.

Once the TCs involved in the SALEMA project have been identified, they must be contacted. The main aim of this first contact is to raise awareness about SALEMA among the relevant standardisation committees and to ease subsequent contacts. Different categories of stakeholders at the European/international level are present in these committees, so the standardisation system is used as a targeted dissemination channel. Feedback will be asked to gather any view, opinion or advice about the project and the standardisation possibilities or needs. Additionally, these first contacts will be useful to determine the best path towards the initiation of a successful standardisation process. This first step will ease future contacts if this process is launched within a standardisation technical committee.

1- Selection of TCs to get in contact with.

Deliverable D8.4 gave a landscape of technical committees developing standards. For the next steps it may be advisable to focus on standardisation technical committees taking into account the existence of a technical committee dealing with a similar subject to the SALEMA and the project dissemination and exploitation plans. UNE has contacted with relevant TC (i.e. CEN/TC 132, ISO/TC 79)

2- Content to disseminate.

Contents to be disseminated, taking into account the list of technical committees related to the SALEMA project and the differentiation that is made between committees, it seems convenient to make different approaches to them, either more informative or more direct. In principle, the content of the project to be disseminated to the TCs will be a General Presentation of the SALEMA Project. Nevertheless, the dissemination will be the most up to date at each moment of contact.

3- Planning.

Once the technical committees and the content to disseminate to each are selected a schedule for the development of the proposed actions will be established (e.g., UNE has participated in the plenary meeting of CEN/TC 132, June 2023. For further details see Annex G)

4.3. Monitoring and interaction with the standardisation technical committees

Regarding the collaboration and communication to be carried out with the relevant CEN-CENELEC and ISO/IEC technical committees, the main factors that determine the more suitable interactions and relationships are:

- the impact/relevance of the standardisation works of the technical committees; and
- the viability of initiating a standardisation process within a technical committee.

In this step of the process, the ways of interaction of the project with the standardisation committees include:

1- Monitoring of the activity of the relevant standardisation technical committees.

This allows detecting the initiation of standardisation works that can be relevant for SALEMA and the progress of significant existing under-development standards. This is achievable through regular monitoring of the standardisation activity resulting in updates of D8.4 "Report on the standardisation landscape", which has produced a first analysis of the technical standardisation committees and the standards identified as relevant to the SALEMA project.

2- Further contacts with the standardisation committees to update the progress of SALEMA.

Some of the activities carried out jointly with the TCs are, for example, to attend relevant technical committees' meetings, to deliver reports with summaries of updated of project, or joint events. On

the one hand, this action contributes to further dissemination of the project and can guide the initiation of the standardisation process. On the other hand, this later contact is mandatory towards the standardisation committees directly covering (if it were the case) the subject that will be promoted by SALEMA to undergo a standardisation process.

3- Participation of one or more SALEMA partners in the standardisation technical committees.

Standardisation is an open activity, and all interested parties may participate in the technical committees through the designation of their National Standardisation Body (NSB). This option allows for a deeper follow-up of the activity of a standardisation committee and is valuable if the standardisation process is going to be initiated within the standardisation committee. Annex C gives a list of National Standardisation Bodies for CEN-CENELEC.

4- Establishment of a formal liaison of SALEMA with the standardisation committees.

Under the roll of “formal liaison”, the consortium can participate in the TC works as an observer, without voting rights. This implies an economic cost, and it is recommended only when the work of the standardisation committee is closely linked with the main goals of the project and a direct technical contribution from the project is expected. The figure of project liaison is recognized in CEN-CENELEC, but it doesn’t exist in ISO/IEC.

At this point, it is worth recalling that, besides the cooperation between European and International TCs already explained in Deliverable D8.4, there are several mechanisms for cooperation between European Technical Committees: Informative relation, Contributively relation, Sub-contracting relation, Collaborative relation, and Integrated relation.

4.4. Plan for standardisation process

According to Task 8.2, the main objective of the standardisation activities in SALEMA is to facilitate the acceptance and utilization by the market of the developed solutions by transferring these results and findings to standards that have wide recognition in the market.

For getting this objective is fundamental the collaboration among all partners. First, the collaboration of the relevant partners the feasible results to go through a standardisation process will be identified. After, different options to contribute to standardisation shall be considered depending on the kind of the results and the standardisation context (existence of closely related standards and reactions of the standardisation committees):

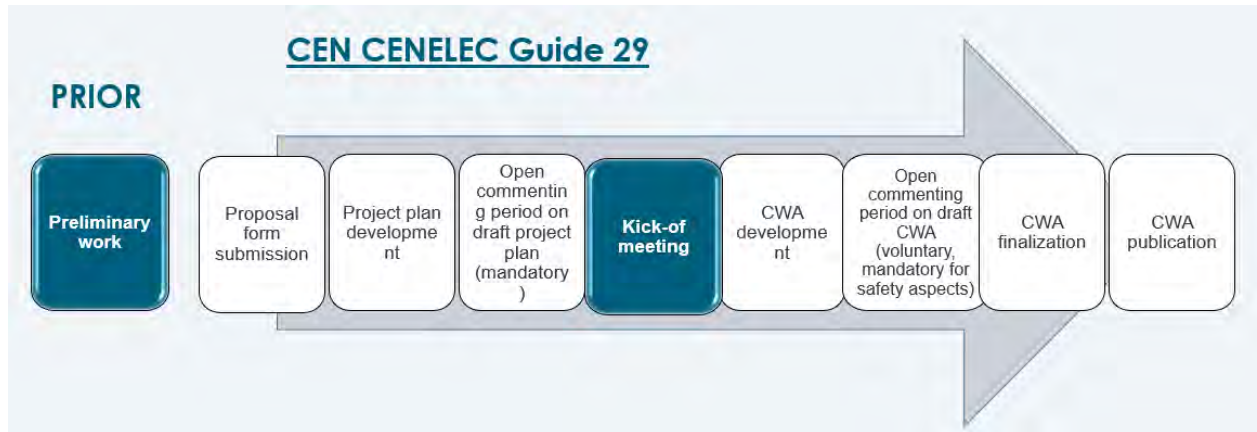
1- Development of a new standard within a Standardisation Workshop

A standardisation 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 standardisation committee, but the number of participants is typically smaller and the working procedures faster and more flexible. A standardisation workshop is created when there is a need of developing a precise standard in an innovative field that is not covered by the existing standardisation committees or when these committees are not interested in developing such standard (e.g., it does not fit in their work programme). If the subject is

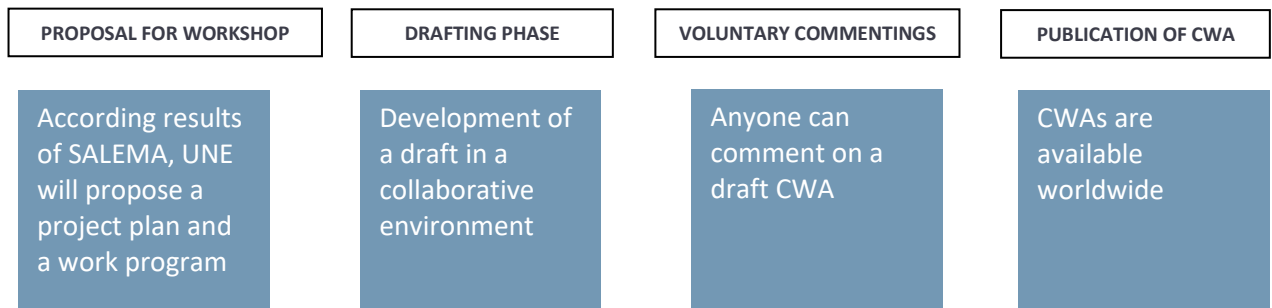


close to the field covered by a standardisation committee it shall be informed and allow for the launching of the standardisation workshop.

Considering that the standardisation workshop option is interesting for SALEMA mainly in the European environment, the standardisation workshop will be named from now on as CEN Workshop. The standard produced by a CEN Workshop is called the CEN Workshop Agreement, typically named CWA. The nature and timeline for developing CWAs are very suitable for the framework of the Research & Innovation (R&I) projects.



Towards the middle of the project (18 -24 months), the proposal for elaborating a "CWA" based on the research results of the SALEMA project can begin. This document serves as the basis for new standards and is published worldwide. In summary, this process requires four easy steps to create it:



2- Standardisation within a Technical Committee.

It may be interesting or needed that the results of SALEMA to go through the standardisation process are standardized within a standardisation committee. The possible scenarios are:

➤ Development of a new standard within a standardisation committee.

When there is a result of SALEMA to be promoted to a standard in a field covered by a standardisation committee and such committee decides to include this development in its work programme. The resulting standard would have the support of the standardisation committee, but the work shall be adapted to the internal timeline of such standardisation committee and could go beyond the timeframe of the project.

➤ **Contribute to an on-going standard.**

As a consequence of the monitoring of the standardisation landscape it may be found that the results of SALEMA are covered by an on-going standard but that these results do not fit in the current draft of the standard. Gaps in standards may be found in both, standards that are being developed from a new initiative and standards already published that are going under a review process towards a new version.

➤ **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 standardisation committee. In this case, a fully justified modification request can be made to the standardisation committee.

➤ **Outline of a future standard.**

Only when there is not a clear view on a full roadmap for the contribution to standardisation (like lack of agreement within the Consortium or lack of the expected results).



5. IMPLEMENTATION

The actions and approach to be performed for the implementation of the each of the steps of the strategy described in clauses 3 & 4 are detailed next.

5.1. First contact with the standardisation technical committees

Table 4 includes the standardisation committees identified in D8.4 and those proposed to contact with the objectives described in 4.2 as SALEMA will innovate in topics related to their scope; the rest of them are just considered useful in terms of compatibility of the developments of SALEMA.

Table 4. Identification of standardisation committees to be contacted

Standardisation Technical Committee	To be contacted
CEN/TC 132- Aluminium and aluminium alloys	YES
CEN/TC 132/WG 5- Extruded and drawn products	YES
CEN/TC 132/WG 7- Sheets, strips and plates	YES
CEN/TC 132/WG 14- General support	YES
CEN/TC 132/WG 23- Revision of EN 1676 and EN 1706	YES
CEN/TC 250/SC 9- Eurocode 9: Design of aluminium structures	YES
CEN/TC 250/SC 9/WG 1- Update and Simplification of all parts of EN 1999	YES
CEN/TC 250/SC 9/WG 2- New types of Connections	YES
CEN/TC 250/SC 9/WG 3- Long span structures	YES
ISO/TC 79- Light metals and their alloys	YES
ISO/TC 79/SC 2- Organic and anodic oxidation coatings on aluminium	YES
ISO/TC 79/SC 4- Unalloyed (refined) aluminium ingots	YES
ISO/TC 79/SC 5- Magnesium and alloys of cast or wrought magnesium	YES
ISO/TC 79/SC 6- Wrought aluminium and aluminium alloys	YES
ISO/TC 79/SC 7- Aluminium and cast aluminium alloys	YES
ISO/TC 79/SC 9- Symbolization	YES
ISO/TC 79/SC 11- Titanium	YES
ISO/TC 79/SC 12- Aluminium ores	YES
CEN/SS S26- Environmental Management	YES
ISO/TC 207- Environmental management	YES
ISO/TC 323- Circular economy	YES
CEN/WS 113- Framework linking dismantled parts with new design components for the automotive industry in a circular economy model	YES

First contacts with technical standardisation bodies were carried out in the period M10-M15. The contacts were addressed to the Secretary/Convenor of each selected standardisation committee and subcommittee.

The text for the communication includes:



- Brief introduction of the project.
- Explanation of the aim of the standardisation activities in the project. Presentation of UNE as part of the standardisation community and as the project partner leading these activities
- The link of the work developed in SALEMA with the relevant standardisation committee highlighting specific project objectives and relevant standards.
- Link to the SALEMA webpage.

The general text shared can be consulted in Annex D as well as the response of the TCs . This document was circulated and agreed by the consortium. The support of the coordinator and SALEMA partners is needed to summarise the relevant progress and validate the information to disseminate avoiding any confidential content.

5.2. Monitoring and interaction with the standardisation technical committees

The implementation of actions aimed at creating follow-up interactions with technical standardisation committees begins with monitoring the work of the standardisation committees identified in D8.4. This monitoring also includes the analysis of the European standardisation workshops. Monitoring of relevant standardisation activity will be continuous for the duration of the SALEMA Project.

The timing of these updates depends on the reactions to the first contacts and the date of achievement of the SALEMA results. The main planned dates that will be considered for providing updated reports/information to the standardisation committees are:

- M10-M15 (first contact with the standardisation committees)
- M18 (to be aligned with the needs of the standardisation process described in chapter 4.4)
- M21-M24 (to be included the proposal of standardisation document as a result of SALEMA)
- M36 (end of the project)

The standardisation committees included in Table 4 will be updated with the relevant progress in SALEMA. 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 A meeting of the standardisation committee if feasible).

Further engagement with the standardisation committees (i.e., the participation of members of the SALEMA in these Technical Committees and the consideration of a project liaison person) will be determined according to the outcomes of the described communications and the approach of the standardisation process illustrated below.

5.3. Implementation of standardisation process

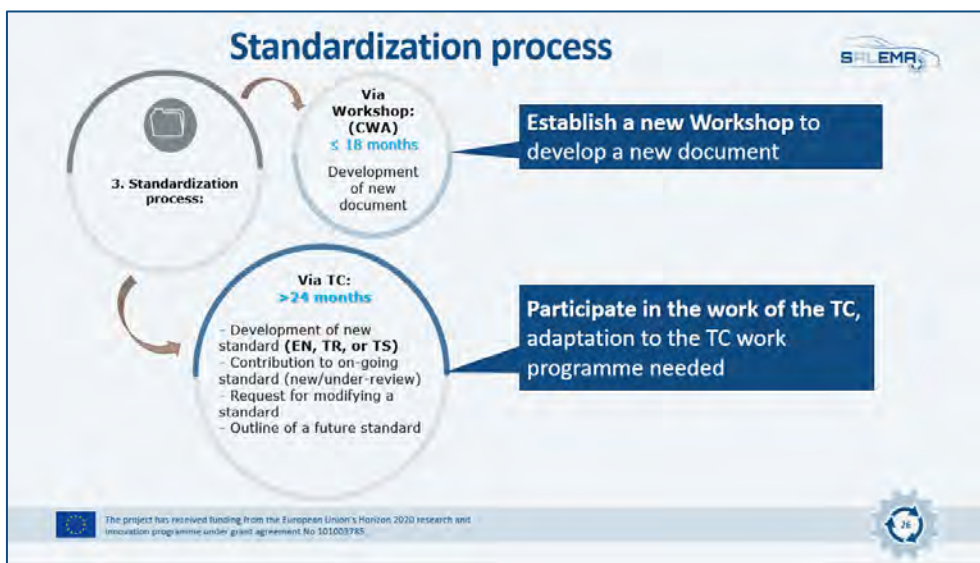
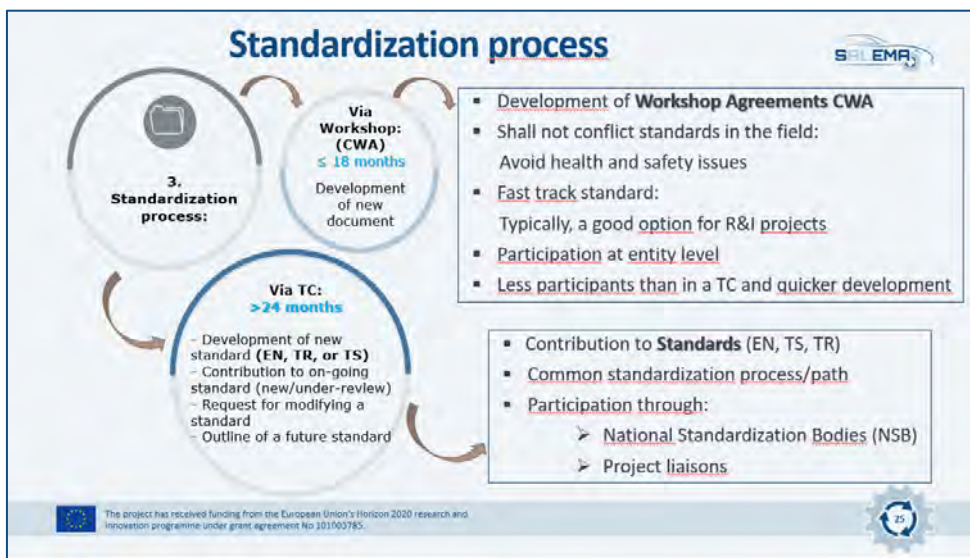
Based on the identification of standardisable results, in the standardisation landscape at the moment (the result of the interaction with the standardisation committees and the monitoring of their standardisation works) and the progress of the project, the most suitable roadmap among the options described in 4.4 will be selected and conducted.



In the SALEMA project, a standardisation session was planned dedicated to working on the identification of standardisable results and the choice of the roadmap. This session took place during a physical project meeting. That is, a Standardisation session "Working Group 1: Standardisation" was included in the Agenda of the "M12- Meeting PB- (16&17 May 2022)" to discuss the possibilities of standardisation in this project. In summary, we saw two possibilities:

- 1.- Develop new standards based on SALEMA results , through CEN Workshop [i.e., CEN Workshop Agreement- CWA]
- 2.- Improve existing standards to cover SALEMA results, through CEN Technical Committees [i.e., EN, TS, TR Standards]

In any of the established ways, the consortium must take a decision and follow the Roadmap established for standardisation. This event was a good opportunity to present and evaluate the different possible options and to clarify any doubts regarding the standardisation process. The conclusions are compiled in Annex E.



Taking into account the instructions of the European Commission:



““Each beneficiary must up to four years after the project completion, take measures aiming to ensure “exploitation” of its results, either directly or indirectly, through transfer or licensing by:

- Using them in further research activities (outside the action)
- Developing, creating, or marketing a product or process
- Creating and providing a service, or
- **Using them in standardisation activities ““**

It is concluded that using the route of standardisation is one of the ways to get transferred market some of the results reached in the of projects innovation. Therefore, the standardisation process is considered very valuable for the market uptake of the results of SALEMA and for the project's impact beyond the financing period. The decisions taken, the actions performed, and the results obtained will be properly registered in clause 5.4.

5.4. Summary of the implementation

Taking into account all the previously presented information, the summary of the tentative dates and the responsible for the actions are included in the following table:

Table 5. Summary of the actions in the strategy towards a contribution to standardisation

Action	Responsible	Month
First contacts with the standardisation committees in Table 4	UNE (Content provided by the coordinator)	M10-M15
Updates on the standardisation landscape	UNE	Continuous, whenever it is demanded
Standardisation session: Working Group 1: Standardisation (for consortium)	UNE	M12
Familiarisation to the consortium about standardisation activities. Elaborate the “Technical Support Document for D8.5”	UNE	M24
Interaction with the relevant standardisation committees. [e.g., Attend Plenary Meetings of CEN/TC 132, see Annex G]	UNE and Coordinator	M26 When relevant
Standardisation process	UNE and Coordinator/Partners	M24-M36

In each of the project work packages, those deliverables already published within the consortium have been identified, based on technical criteria (structure similar to European standards, technical content,

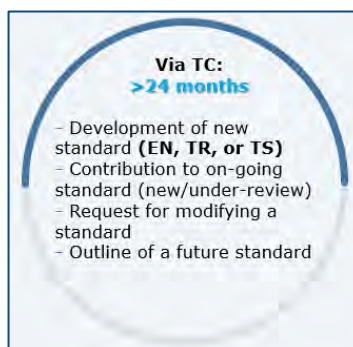


scope of the document, possible interest for the entire sector), (or that will be published within the required period) for which it will be necessary to decide whether they are submitted to the European or international standardisation system as potential Work Items.

Regarding the deliverables of SALEMA, and depending on the works of the TC, three scenarios can be foreseen, based on the expected reaction from CEN standardisation bodies regarding a potential standardisation proposal coming from the SALEMA project. The deliverables that have been identified by UNE and by the members of the consortium as possible normative documents will be submitted to a later study in order to decide the possible creation of a Workshop for its publication as CEN WORKSHOP AGREEMENT (CWA).: (for further information, see Annex F "Roadmap for the standardisation process").

The actions for the two possible vias in the standardisation process are detailed below:

1.- Via TC (Technical Committee):



The consortium proposed to UNE to transfer to CEN/TC 132 the proposal to revise the following standards:

- EN 1676: 2020, Aluminium and aluminium alloys - Alloyed ingots for remelting – Specifications
- EN 1706:2020+A1:2021, Aluminium and aluminium alloys - Castings - Chemical composition and mechanical properties

with the aim of including in these European standards the new partially recycled HPDC alloys developed in the SALEMA Project. It is about promoting the use of recycled aluminium with a view to sustainability and the circular economy (low energy consumption and low Carbon footprint emission), and above all to reduce the use of CRM.

UNE informed that both documents had been developed by CEN/TC 132/WG 10 “Aluminium and aluminium alloys. Casting”, and the situation was the following:

- EN 1676: 2020: The WG10 will start the review of this document in October 2025
- EN 1706:2020+A1:2021: The WG10 will start the review of this document in April 2025.

In this case, SALEMA's achieved results could contribute to improving the ongoing EN 1676 and EN 1706, which are scheduled for revision at the end of 2025. SALEMA experts should register with the National Standardisation Body (NSB) of their country, participate as experts in TC 132 and achieve the inclusion of new aluminium alloys in these standards. To this end, the participation of one or more SALEMA partners in this TC would allow for deeper monitoring of the activity of TC and the possibility of easily transferring the results obtained from SALEMA innovation to TC.

2.- Via WS (Workshop):



The followings actions have been done:

1. Identification of the key SALEMA results and standardisation path

Considering the specificity of the above topics, the 'standardisation workshop' may be the more suitable path in the standardisation process (see 4.4). After several dedicated sessions, one topic was selected with the aim of developing one CEN-CENELEC Workshop Agreement in a Standardisation Workshop.

The topic selected is focused on the development a testing method to evaluate the fluidity of aluminium alloys for thin wall castings robustly and reliably to provide useful information for subsequent use in the foundry: **Fluidity Evaluation Via Multi Strip Testing Moulds for Aluminium And Its Alloys.**

Considering D8.4 ("Report on the standardisation landscape and applicable standards") and a dedicated analysis that also included a particular consultation to CEN/TC 132, it was concluded that there was no standardisation activity at the European level regarding the fluidity evaluation via multi-strip testing moulds for aluminium and its alloys.

2. Setting a CEN-CENELEC Workshop

The next actions were performed after the selection of the standardisation topics:

- a) Drafting of the Workshop (WS) Project Plan.
The draft Project Plan is submitted for approval during the Workshop Kick-off Meeting (KOM)
- b) Delivery of the WS Project Plan to CEN-CENELEC Management Centre (CCMC) with the request to initiate the WS.
CCMC announced the CEN-CENELEC Workshop on the CCMC website on December 19, 2023 [[CEN Workshop SALEMA Announcement- CEN-CENELEC \(cencenelec.eu\)](#)], see also Annex H CEN-CENELEC Workshop official announcement and dedicated dissemination actions). The WS announcement, including the draft WS Project Plan and the KOM agenda, was announced for one month ending on February 7, 2024. The objective of this announcement is that any interested party could participate in the WS or submit comments to the Project Plan.
- c) Dedicated dissemination of the WS
The WS objectives and the KOM agenda were additionally communicated to the next entities (see also Annex H):
 - CEN/TC 132 "Aluminium and aluminium alloys"

- Members of the External Industrial Exploitation Board of the SALEMA project
- Spanish standardisation committee CTN 38 Light metals and their alloys and CTN 26 Road vehicles

d) Additional dissemination of the WS KOM

In addition, the next dissemination was made (see also Annex H):

- CEN-CENELEC Website: [CEN Workshop SALEMA Announcement- CEN-CENELEC \(cencenelec.eu\)](https://www.cenelec.eu/)],
- SALEMA Website: [Towards standardisation: register for SALEMA CEN workshop kick-off - Salema Project](#)
- UNE Medios:
 - Revista UNE: <https://revista.une.org/67/futuro-estandar-europeo-para-aluminio-y-sus-aleaciones.html>
- UNE Social Media:
 - LinkedIn: <https://www.linkedin.com/feed/update/urn:li:activity:7168969321078108160>
 - X: <https://twitter.com/NormasUNE/status/1763204732267405360>

3. Development of the CEN-CENELEC Workshop Agreements

As advanced above, the objective of the standardisation work in this project is to develop one CEN-CENELEC Workshop Agreement in the next field:

- **Fluidity evaluation via multi strip testing moulds for aluminium and its alloys (CWA)**

This candidate to CWA proposes to develop a testing method to evaluate the fluidity of aluminium alloys for thin wall castings robustly and reliably to provide useful information for subsequent use in the foundry sector.

The key steps in the development of the CEN-CENELEC Workshop Agreement (CWA) are summarized below:

➤ **WS Kick-off meeting**

The CEN-CENELEC Workshop on “Evaluation of flowability using multiple strip test moulds in HPDC processes for aluminium and its alloys” formally started its activity on 29th February 2024 with an online KOM.

At the KOM, the WS Project Plan was debated and approved unanimously. The first preliminary draft of CWA was elaborated by the project leader Dr Manel da Silva (EURECAT) and with the collaboration of Prof. Mr Franco Bonollo (University of Padua). The document was shared with the participants on March 4, in joint with the draft of the minutes of KOM. Dr Manel da Silva (EURECAT) was appointed as WS Chair, Prof. Mr Franco Bonollo (University of Padua) as WS Vice-Chair and UNE confirmed as WS Secretary.

See Annex H CEN-CENELEC Workshop SALEMA (KOM agenda)



➤ **Commenting first period**

No technical or editorial comments were received during the first comment period, which had a March 18, 2024, deadline. As there were no additional comments, the document was considered approved by the CEN/WS participants, and consequently, this document was considered an unanimously approved final text.

Notwithstanding the above, an editorial review was carried out to correct typographical errors, the English level of the document was improved, and the terminology was unified into British English. Finally, the result was collected in the document (N9) uploaded to the CEN platform (CEN/WS SALEMA).

➤ **WS second meeting and subsequent ones**

To prepare the text of the CWA and its subsequent publication as a CEN/WS document, during the KOM Workshop, two comment periods and their corresponding CEN/WS meetings were planned during the KOM CEN/WS.

The second CEN/WS meeting was scheduled for March 25, 2024, also online. Since no technical or editorial comments were received during the first comment period, it was not necessary to hold this meeting (because no comments needed to be resolved). Therefore, this second meeting was cancelled and communicated to all CEN/WS participants through the CEN platform.

As a result, the provisional meeting scheduled for April 18 is also cancelled as not necessary.

➤ **Public Commenting Phase**

A public commenting phase was not mandatory for the developed CWA, because safety aspects were not included (according to CEN-CENELEC Guide 29, an “open commenting phase” is only mandatory if the CWA deals with safety aspects). Notwithstanding the above, it is recommended that all Workshops be posted on the CEN website with a minimum duration of 30 days, because it increases transparency, and gathers the feedback of any interested party.

The CWA developed at CEN/WS SALEMA does not include security aspects and no comments were received in the consultation period. In this regard, the Chair of CEN/WS and the project team were consulted through the CEN Documents platform about the "open commenting phase" for the final text of the CWA (N9). The result of this consultation was that the “open commenting phase” on the CEN website was unnecessary for this CWA.

➤ **CWA Publication**

The documents were sent to the CEN-CENELEC Management Center (CCMC) requesting the upload of the NWIP (WSSLM001) to the CEN Submission Interface platform for this CWA (<https://submissioninterface.cencenelec.eu>). The document will be published as:

CWA 18112: 2024 Aluminium and aluminium. Fluidity evaluation via multi-strip testing moulds



It was finalized and sent to CEN-CENELEC for publication. CEN-CENELEC confirmed that the publication date will be 2024-05-08 (see Annex I).

➤ **Free of charge availability of published CWA**

To allow for open access to this CWA, UNE covered the cost of providing the published CWA under public access.

Once published, the CWA will be downloaded free of charge through the CEN-CENELEC webpage: [CWA download area - CEN-CENELEC \(cenelec.eu\)](https://www.cenelec.eu/cwa-download-area) (see also Annex I)



6. CONCLUSION

The contribution to standardisation from SALEMA outputs yielded relevant results that support the market acceptance of the approach and outcomes of the project. The main result obtained is the development of one CEN-CENELEC Workshop Agreements (CWA) related to Fluidity Evaluation Via Multi-Strip Testing Moulds for Aluminium and Its Alloys. At the same time, the dissemination of the project objectives and outcomes through the standardisation channel has returned a satisfactory replication in the key standardisation environment.

Interaction with the standardisation

The interaction with the standardisation system (4.2 and 4.3) resulted in good dissemination of SALEMA objectives and results towards the standardisation community. Relevant information about SALEMA was delivered to the selected standardisation committees in the scope of aluminium and aluminium alloys.

This first communication aimed to introduce the project, show the link with the relevant standardisation committees, and pulse their interest and their view about a later contribution to standardisation from the project (see Annexes A, C and D). As a result of these communications, relevant feedback was received from CEN/TC 132 'Aluminium and aluminium alloys' that are the key targets of the interaction with the standardisation system. The scope of this TC is closely linked to the core of SALEMA being focused on the standardisation of unwrought, wrought and cast products made from aluminium and aluminium alloys: - designations; - terms and definitions; - material specifications; - technical conditions of delivery; - dimensions and tolerances; - methods of testing specific to aluminium.

The communication channel with CEN/TC 132 allowed it to disseminate relevant and updated information about SALEMA to interested parties in this field. The Secretary of the TC became involved in the SALEMA project and facilitated communication between experts through the CEN platform (see Annex D). Furthermore, for the presentation of the SALEMA project to the experts, he included that point in the official agenda of the Plenary meeting of TC 132 scheduled for June 14, 2023 (see Annex G). The results of this interaction with TC 132 are considered satisfactory and valuable support for disseminating the SALEMA project.

Regarding TCs in the rest of the fields, low or no interest was shown by the respective standardisation committees. The innovation activity in the project is not focused on these fields so this low feedback does not deeply impact the result of the interaction with the standardisation system. On the other hand, the summary information of SALEMA was circulated among some of these committees/subcommittees, expanding the dissemination of the project to different types of stakeholders.

Effective contribution to standardisation

The main reason for integrating standardisation activities in SALEMA was to contribute to the generation of new standards (4.4). The results of the project facilitated the market's acceptance and use of the developed solutions. The inclusion of the outcomes of the project in new or future standards, external to the consortium, that can be easily used by the European or international industry and research increases the impact of the project and will positively contribute to the transfer of the knowledge generated within the project to the industry and society.



The innovation at SALEMA focuses on fluidity evaluation via multi-strip testing moulds for aluminium and its alloys, so it was an objective to focus the contribution to standardisation on these topics to facilitate the widespread acceptance and adoption of this technology. This objective was successfully achieved with the development of a CEN Workshop Agreement (CWA):

CWA 18112:2024 Aluminium and aluminium. Fluidity evaluation via multi-strip testing moulds

To facilitate its use by any organization and allow open access to this CEN Workshop Agreement, it must be requested from CEN the download free and a partner must cover the cost to carry it out. UNE supported this initiative and was the sponsor so that this document can be downloaded free of charge through the CEN-CENELEC website. [[CWA download area - CEN-CENELEC \(cencenelec.eu\)](https://www.cenelec.eu/cwa-download-area)].



Annex A - Patent policy

A.1 Standardisation and intellectual property rights (IPR) for CEN-CENELEC

CEN and CENELEC have had intellectual property rights (IPR) policy for many years under the provision of the CEN-CENELEC Guide 8 "Standardisation and intellectual property rights (IPR)". The purpose of these common guidelines is to provide in simple words practical guidance to the participants in their technical bodies in case patent or other intellectual property rights matters arise.

For the sake of clarity, this document refers to "patents", as most - but not all - IPR issues that CEN and CENELEC technical bodies must deal with concern patent rights. However, the same implementation principles shall apply to other statutory intellectual property rights based on inventions that may arise, such as utility models or registered semiconductor topographies (see Clause 2, Terms and definitions).

Considering that technical experts are not normally familiar with the complex issue of patent law, the Common Patent Policy for ISO/IEC/ITU endorsed by CEN and CENELEC (hereafter referred to as the "Patent Policy") was drafted in its operative part as a checklist covering the three different cases which may arise if a deliverable requires licences for patents to be practiced or implemented, fully or partly.

These Guidelines for Implementation of the Common Policy on Patents for CEN and CENELEC (hereafter referred to as the "Guidelines") are intended to complement, clarify and facilitate the implementation of the Patent Policy, a copy of which can be found in Guide 8, Annex 1 and also on the websites of both organisations.

The CEN and CENELEC Patent Policy request stakeholders participating in technical Committees, and patent holders, to proceed to early disclosures and identification of patents that may be considered, at the best of their knowledge, to be essential for the future use of the deliverables under development. In doing so, greater efficiency in standards development is possible and potential patent rights problems can be avoided.

CEN and CENELEC are not involved in evaluating patent relevance or essentiality about deliverables, nor to interfere with licensing negotiations, or engage in settling disputes on patents. This is left to the parties concerned. For further information see [CEN-CENELEC Guide 8](#).



A.2 Common Patent Policy for ISO/IEC/ITU

In the light of the need to balance the competing interests of standard-essential patent (SEP) holders and standards implementers and aiming to develop standards that reflect the best available technical solutions, SDOs have established rules (usually referred to as IPR policies or patent policies) governing the inclusion of patents in standards. These IPR policies generally require that patent holders disclose their SEPs during a standard's development and that they make commitments to licensing such SEPs to all standards implementers under reasonable and non-discriminatory conditions.

In a typical standardisation process, it is the participants that drive a standard's development by proposing the inclusion of what they deem to be the most appropriate methodologies, technologies or technical solutions. The development of such methodologies, technologies or technical solutions is often a complex, costly endeavour demanding investments in R&D that can span several years. Yet, for a variety of reasons, many companies volunteer their patented innovations for inclusion in standards.

Standards can incorporate literally thousands of patents, and the associated difficulties have been compounded by the fact that the development of standards sometimes anticipates the progression of technology rather than following it.

A standard-essential patent (SEP) is one that is indispensable to the implementation of a standard. A patent is considered standard-essential if the text of a standard is drafted in such a way that it becomes impossible to implement the specifications of the standard without using the technology protected by the patent. While there may be (and usually are) many patent-protected innovations able to add value to standards-based products, these are not necessarily essential as per the above definition.

Most standards bodies have developed IPR policies that allow for companies' patent-protected innovations to be reflected in standards, provided that such intellectual property is made available to all standards implementers under royalty-free or reasonable and non-discriminatory terms and conditions.

The inclusion of patented technology in standards is very common today. One explanation for this is that the inclusion of patented technology adds to standards' ability to improve performance, cost-effectiveness, connectivity or interoperability. Another is that patents have come to cover a larger portion of our society's overall knowledge base. A further, complementary explanation for the increase in SEPs is that they serve the strategic interests of market players, which see a considerable benefit to having their patented technologies selected as part of a standard.

Companies owning SEPs benefit from new revenue-generating opportunities in that every implementer of a standard is by definition infringing the associated SEPs unless they acquire licenses to these SEPs from their owners. SEP owners possess strong bargaining positions in cross-licensing deals that grant them access to other patents. Companies also benefit from contributing patented technology to a standard because the widespread adoption of that standard might signify a change in market direction that suits a SEP owner's strengths and



expertise or existing products, platforms and clients, thereby giving them a competitive advantage by their having less need than their competitors to remodel their product offerings.

Although the patent and standardisation systems both aim to support and incentivize innovation and technological progress, the intersection of these two mechanisms may give rise to various tensions and conflicts. The standardisation system is based on the assumption of commonalities, creating an even playing field for competition by granting stakeholders equal access to innovative solutions.

Conversely, the patent system is based on the award of temporary monopolies borne of IPR holders' ability to exclude others from implementing protected technologies. The contrasting principles of the inclusivity of standards and exclusivity of IPR do not meet without complexity. For further information see [ISO/IEC/ITU Common Patent Policy](#).



ANNEX B: GENDER IN STANDARDISATION

B.1 Foreword

Gender equality contributes to faster economic growth, productivity, and innovation. Equal access to education, employment, entrepreneurship, trade opportunities, and leadership positions enlarges the pool of labour and talent available to the economy and contributes to productivity and innovation.

Gender equality can help enterprises succeed. Enterprises with supplier-diversity programmes outperform other ones. Finally, gender equality is a precondition to reduce poverty. Expanding women's opportunities contributes to increasing household income, asset accumulation, and spending on child welfare.

There are numerous initiatives at global, regional and domestic levels focused on women's economic empowerment. However, the lack of clear and universally agreed definitions to describe enterprises owned or led by women has created challenges across the women entrepreneurial ecosystem. Particularly, these challenges revolve around collection of gender-disaggregated data, research, policymaking, international comparability, and access to capacity building, finance and markets.

Creating a definition for enterprises owned or led by women and guidance on its use will allow for clear and targeted efforts in advancing women's economic empowerment and will contribute to the overall achievement of the United Nations Sustainable Development Goals (SDGs) for 2030, including several genders-specific targets under SDG 5 on "gender equality".

B.2 Gender in the ISO Framework

ISO (the International Organization for Standardisation) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work.

To date, many ISO standards have been identified as contributing, or have the potential to contribute, to GOAL 5 "GENDER EQUALITY" ([ISO - Gender Equality](#)). Below we will highlight, among others, the following:



- **ISO 26000:2010, Guidance on social responsibility**
- **IWA 34:2021, Women's entrepreneurship. Key definitions and general criteria**
- **ISO 30415:2021, Human resource management. Diversity and inclusion**
- **ISO 45001:2018/Amd 1:2024, Occupational health and safety management systems. Requirements with guidance for use. Amendment 1: Climate action changes.**
- **Under the direct responsibility of ISO/PC 337: ISO/FDIS 53800, Guidelines for the promotion and implementation of gender equality and women's empowerment.**

ISO 26000:2010, Guidance on social responsibility

Gender equality is a key component of social responsibility, and the empowerment of women and their equality in society is underlined in [ISO 26000 Guidance on social responsibility](#). This standard has been adopted in Europe as EN ISO 26000 *Guidance on social responsibility*. This standard aims to eliminate bias and promote parity through recommending that organizations have a balanced mix of men and women in governing structures and management, ensure both sexes are treated equally when it comes to recruitment, career opportunities and pay, and make sure the needs of men and women are given equal consideration in company decisions and activities.

In addition, ISO aims to encourage equal representation in standardisation, to strengthen the participation of women in the development of ISO International Standards and to make them more relevant to women around the world. For this reason, ISO has recently joined the [International Gender Champions](#) a leadership network working to advance gender parity in executive management.

ABSTRACT: This document provides guidance to all types of organizations, regardless of their size or location, on concepts, terms and definitions related to social responsibility; the background, trends and characteristics of social responsibility; principles and practices relating to social responsibility; the core subjects and issues of social responsibility; integrating, implementing and promoting socially responsible behaviour throughout the organization and, through its policies and practices, within its sphere of influence; identifying and engaging with stakeholders; and communicating commitments, performance and other information related to social responsibility.

This standard is intended to assist organizations in contributing to sustainable development. It is intended to encourage them to go beyond legal compliance, recognizing that compliance with the law is a fundamental duty of any organization and an essential part of their social responsibility. It is intended to promote common understanding in the field of social responsibility, and to complement other instruments and initiatives for social responsibility, not replace them. In applying this standard, it is advisable that an organization take into consideration societal, environmental, legal, cultural, political and organizational diversity, as well as differences in economic conditions while being consistent with international norms of behaviour.

ISO 26000 is intended to provide organizations with guidance concerning social responsibility and can be used as part of public policy activities. However, for the purposes of the Marrakech Agreement Establishing the World Trade Organization (WTO). It is not intended to be interpreted as an “international standard”, “guideline” or “recommendation”, nor is it intended to provide a basis for any presumption or



finding that a measure is consistent with WTO obligations. Further, it is not intended to provide a basis for legal actions, complaints, defences or other claims in any international, domestic or another proceeding, nor is it intended to be cited as evidence of the evolution of customary international law.

ISO 26000 is not a management system standard. It is not intended or appropriate for certification purposes or regulatory or contractual use. This standard is not intended to prevent the development of national standards that are more specific, more demanding, or of a different type.

IWA 34:2021, Women's entrepreneurship. Key definitions and general criteria

ABSTRACT: This document establishes a set of common definitions related to women's entrepreneurship, such as those for women-owned business and women-led business. This document also defines women-led cooperatives and women-led informal enterprises. These definitions can be used, for example, in women's economic empowerment programmes (such as procurement and trade programmes) and for the collection of internationally comparable data on women's entrepreneurship (including the impact on local and national economies). This document also provides criteria for evaluating important factors related to these definitions, such as ownership, management, and control, as well as how to handle dilution by investment.

This document does not provide recommendations on how to initiate programmes based on the definitions and criteria, for example on public procurement. In addition, this document does not address issues such as how to promote conformity assessment.

NOTE If an enterprise cannot be categorized according to the definitions given in this document, it does not necessarily mean that the enterprise is male-owned or male-led.

ISO 30415:2021, Human resource management. Diversity and inclusion

Developing an inclusive workplace requires an ongoing commitment to diversity and inclusion (D&I) to address inequalities in organizational systems, policies, processes, and practices, as well as people's conscious and unconscious biases and behaviors.

In today's increasingly interconnected world, recognizing and leveraging D&I can be critical for organizations seeking to increase innovation, and enhance their resilience, sustainability and reputation. Each organization is different and decision makers need to determine the most appropriate approach for integrating D&I into their strategy and business processes, based on their organizational context. To achieve D&I objectives, organizations need to be brave and committed to actively tackling sensitive issues and addressing non-inclusive behaviors and cultural norms, and unfair and discriminatory organizational practices, whether these are developed by people or associated with technologies.

Fostering a diverse and inclusive organizational culture can enable individuals and teams to thrive and do their best in conditions that enable effective collaboration and participation. Building fairer, more inclusive, socially responsible organizations can help people, regardless of identity, background, or



circumstance, to access work and develop knowledge, skills and abilities critical to their personal development and well-being.

This document is relevant to the following United Nations Sustainable Development Goals: (5) Gender Equality; (8) Decent Work and Economic Growth; (9) Industry, Innovation, and Infrastructure; and (10) Reduced Inequality and is guided by the principles of human rights at work.

This document supports organizations to embed D&I in their workplaces by providing guidance and methods on a) prerequisites for demonstrating ongoing commitment to D&I; b) accountabilities and responsibilities for D&I; c) approaches to valuing diversity and fostering development of an inclusive workplace; and d) identifying D&I objectives, opportunities and risks, actions, measures, outcomes, and impacts. It is intended to help organizations achieve D&I objectives, evaluate the impact on people, communities, and society, and meet sustainable development goals. It can also support independent and external validation of organizational approaches to embedding D&I in the workplace.

ABSTRACT: This document provides guidance on D&I for organizations, including their governance body, leaders, workforce and recognized representatives, and other stakeholders. It is intended to be scalable to the needs of all types of organizations in different sectors, whether in public, private, government or non-governmental organizations (NGO), regardless of size, type, activity, industry or sector, growth phase, external influences, and country-specific requirements.

This document presents fundamental prerequisites for D&I, associated accountabilities and responsibilities, recommended actions, suggested measures and potential outcomes. It recognizes that each organization is different and that decision makers need to determine the most appropriate approach to embedding D&I in their organization, based on the organization's context and any disruptive challenges that emerge.

This document does not address the specific aspects of relations with labour unions or work councils, or country-specific compliance, legal requirements, or litigation.

ISO 45001:2018/Amd:2024, Occupational health and safety management systems. Requirements with guidance for use. Amendment 1: Climate action changes.

An organization is responsible for the occupational health and safety of workers and others who can be affected by its activities. This responsibility includes promoting and protecting their physical and mental health.

The adoption of an OH&S management system is intended to enable an organization to provide safe and healthy workplaces, prevent work-related injury and ill health, and continually improve its OH&S performance.

The purpose of an OH&S management system is to provide a framework for managing OH&S risks and opportunities. The aim and intended outcomes of the OH&S management system are to prevent work-related injury and ill health to workers and to provide safe and healthy workplaces; consequently, it is critically important for the organization to eliminate hazards and minimize OH&S risks by taking effective preventive and protective measures.



When these measures are applied by the organization through its OH&S management system, they improve its OH&S performance. An OH&S management system can be more effective and efficient when taking early action to address opportunities for improvement of OH&S performance. Implementing an OH&S management system conforming to this document enables an organization to manage its OH&S risks and improve its OH&S performance. An OH&S management system can assist an organization to fulfil its legal requirements and other requirements.

The implementation of an OH&S management system is a strategic and operational decision for an organization. The success of the OH&S management system depends on leadership, commitment and participation from all levels and functions of the organization.

ABSTRACT: This standard specifies requirements for an occupational health and safety (OH&S) management system, and gives guidance for its use, to enable organizations to provide safe and healthy workplaces by preventing work-related injury and ill health, as well as by proactively improving its OH&S performance.

This standard is applicable to any organization that wishes to establish, implement and maintain an OH&S management system to improve occupational health and safety, eliminate hazards and minimize OH&S risks (including system deficiencies), take advantage of OH&S opportunities, and address OH&S management system nonconformities associated with its activities. This standard helps an organization to achieve the intended outcomes of its OH&S management system. Consistent with the organization's OH&S policy, the intended outcomes of an OH&S management system include a) continual improvement of OH&S performance; b) fulfilment of legal requirements and other requirements; and c) achievement of OH&S objectives.

In summary, this standard is applicable to any organization regardless of its size, type, and activities. It is applicable to the OH&S risks under the organization's control, taking into account factors such as the context in which the organization operates and the needs and expectations of its workers and other interested parties. This standard can be used in whole or in part to systematically improve occupational health and safety management. However, claims of conformity to this document are not acceptable unless all its requirements are incorporated into an organization's OH&S management system and fulfilled without exclusion.

This standard does not state specific criteria for OH&S performance, nor is it prescriptive about the design of an OH&S management system. This standard does not address issues such as product safety, property damage or environmental impacts, beyond the risks to workers and other relevant interested parties.

ISO/FDIS 53800, Guidelines for the promotion and implementation of gender equality and women's empowerment. (Under the direct responsibility of ISO/PC 337)

ABSTRACT: Standardisation in the field of gender equality with the aim of developing a technical guidance on how to promote and implement gender equality in all types of organizations, public or private, regardless of their size, location, and field of activity.



The objective is to develop guidelines on: Concepts, terms, and definitions; identification of existing good practices; definition of actions, strategies, policies for the promotion and implementation of gender equality.

Standardisation work related to diversity in human resources management as covered by ISO/TC 260 “Human resources management” is excluded.

B.3 Gender in the UNECE Framework

UNECE (United Nations Economic Commission for Europe) supports countries in the implementation of the 2030 Agenda and the Sustainable Development Goals (SDGs) thanks to its role as a platform for governments to cooperate and engage with all stakeholders on norms, standards and conventions, its unique convening power across the region, its multisectoral approach to tackle the interconnected challenges of sustainable development in an integrated manner and its transboundary focus, which helps devise solutions to shared challenges.

The UNECE Working Party on Regulatory Cooperation and Standardisation Policies (UNECE WP.6) encourages increased regulatory coherence in specific sectors that have a critical impact on sustainable development and promotes greater resilience to natural and man-made hazards. WP.6 also works to:

- Promote the use of standards by policymakers and business as a tool for reducing technical barriers to trade, promote increased resilience to disasters, foster innovation and good governance
- Advocate the use of standards in the implementation of UN-wide goals, including the implementation of the Agenda 2030 and the Sendai framework for action.

One of the key areas of work most recent is “Gender initiative”. The UNECE “Gender Responsive Standards Initiative” aims at providing a practical way forward for standards bodies wishing to take a step towards making the standards they develop and the standards development process they follow gender responsive.

The initiative started work in response to a mandate by the Working Party on Regulatory Cooperation and Standardisation Policies (WP.6). It aims to:

- strengthen the use of standards and technical regulations as powerful tools to attain SDG 5 (Achieve Gender Equality and Empower all Women and Girls),
- integrate a gender lens in the development of both standards and technical regulations,
- elaborate gender indicators and criteria that could be used in standards development.

The initiative is ongoing and continue to bring together a diverse working group composed of representatives from standardisation bodies as well as experts on gender issues and women’s empowerment, representative of regulatory bodies and policymakers, as well as NGOs, UN Organizations



and members of the academic community from the entire world. Among others, the following institutions participate:

- International standards bodies (ASTM International, IEC, ISO, ISEAL) national and regional standards bodies (AFNOR, BSI, the Swedish Standards Institute, CEN-CENELEC, the Institute for Standardisation of Moldova),
- Governmental authorities, regional and intergovernmental organizations (WorkSafe New Zealand, the European Commission, the Eurasian Economic Commission),
- NGOs (BSR, International Gender Champions, L'Association Réseau Normalisation et Francophonie, EDGE Certified Foundation),
- UN organizations (the International Trade Centre (ITC), ITU, UNAIDS, UNICEF, UN/WOMEN, and the World Meteorological Organization) and
- Academic and research institutions.

The meetings allow participants to exchange information and best practice about successful approaches to gender-responsive standards development and implementation.

The activities of the Gender Responsive Standards Initiative culminated in the drafting of the [Declaration for Gender Responsive Standards and Standards Development](#). The Declaration invites all standards bodies, whatever their business model and operations modality to pledge to make the standards they develop and the standards development process they use gender responsive by: signing the Gender Responsive Standards and Standards Development Declaration, creating and proactively implementing a gender action plan for their organization and tracking progress, collecting and sharing data, success stories and good practices.

Guidelines on Developing Gender-Responsive Standards

This document was finalized in 2021 and is intended to be officially presented in November 2022. This copy of the guide addresses highly relevant issues such as:

- What is gender-responsive standards?
- Why is gender important for standardisation?
- Who needs to act to improve gender-responsiveness in standardisation?
- How can standards developers ensure standards are gender-responsive?
- Balanced representation, inclusive meetings, etc.

ABSTRACT: There is a growing recognition that standards are not gender responsive. Through the Declaration for Gender Responsive Standards and Standards Development, the United Nations Economic Commission for Europe (UNECE) has invited standards bodies to commit to take action to ensure the efficacy of standards for men, women, boys, and girls. Research has shown that the failure to account for women in standards development can have dire consequences. This document provides practical advice for standards developers on how they can improve the gender-responsiveness of their standards.



Specifically, the guidelines address how to improve the representation of women on technical committees and ensure that meetings are inclusive to foster the participation of women, and how to ensure that standards are gender-responsive, regardless of the number of women participating on the technical committee. While the guidelines can be used by any standards developers to improve gender-responsiveness, leaders of technical committees and standards bodies play an important role in promoting and empowering the application of a gender-lens in standards development.

The guidelines provide recommendations on how to consider gender in standards development. These guidelines are intended to be a living document that, in the spirit of standards development, will need to be updated as knowledge in the area evolves. While the guidelines are specific to gender, many of the principles could also be applied to other groups who may be marginalized in the standards development process.

B.4 Gender Equality and Mainstreaming in the ITU Framework

ITU (International Telecommunication Union) seeks to become a model organization for gender equality and to use the ICTs to empower both women and men. The role of ICTs is to advance gender equality and empower women in many ways. Mainstreaming a gender perspective in ITU and promoting gender equality and the empowerment of women through ICTs.

ITU's work on gender equality is guided in particular by Resolution 70: Mainstreaming a gender perspective in ITU and promotion of gender equality and the empowerment of women through information and communication technologies. ITU is working in a number of areas to include women and girls in the digital transformation of economies and societies.

ITU regularly collects and disseminates ICT indicators related to individuals accessing and using ICTs. These indicators can be disaggregated by gender, age, education, labour force status, and occupation. ITU monitors and tracks three gender-related indicators that are included in the SDG Indicators Monitoring Framework: (1) "proportion of individuals who own a mobile telephone, by sex", (2) "proportion of individuals using the Internet, by sex", and (3) "proportion of individuals with ICT skills, by sex".



Annex C - List of National Standards Bodies (NSB)

C.1 CEN members

Acronym	Country	Organization	Website
ASI	Austria	Austrian Standards International - Standardisation and Innovation	www.austrian-standards.at
NBN	Belgium	Bureau de Normalisation/Bureau voor Normalisatie	www.nbn.be
BDS	Bulgaria	Bulgarian Institute for Standardisation	www.bds-bg.org
HZN	Croatia	Croatian Standards Institute	www.hzn.hr
CYS	Cyprus	Cyprus Organization for Standardisation	www.cys.org.cy
UNMZ	Czech Republic	Czech Office for Standards, Metrology and Testing	www.unmz.cz
DS	Denmark	Dansk Standard	www.ds.dk
EVS	Estonia	Estonian Centre for Standardisation	www.evs.ee
SFS	Finland	Suomen Standardisoimisliitto r.y.	www.sfs.fi
AFNOR	France	Association Française de Normalisation	www.afnor.org
DIN	Germany	Deutsches Institut für Normung	www.din.de
NQIS/ELOT	Greece	National Quality Infrastructure System	www.elot.gr
MSZT	Hungary	Hungarian Standards Institution	www.mszt.hu
IST	Iceland	Icelandic Standards	www.stadlar.is
NSAI	Ireland	National Standards Authority of Ireland	www.nsa.ie
UNI	Italy	Ente Nazionale Italiano di Unificazione	www.uni.com
LVS	Latvia	Latvian Standard Ltd.	www.lvs.lv
LST	Lithuania	Lithuanian Standards Board	www.lsd.lt
ILNAS	Luxembourg	Organisme Luxembourgeois de Normalisation	www.portail-qualite.lu
MCCAA	Malta	The Malta Competition and Consumer Affairs Authority	https://mccaa.org.mt
NEN	Netherlands	Nederlands Normalisatie-instituut	www.nen.nl
SN	Norway	Standards Norway	www.standard.no/
PKN	Poland	Polish Committee for Standardisation	www.pkn.pl



Acronym	Country	Organization	Website
IPQ	Portugal	Instituto Português da Qualidade	www.ipq.pt
ISRSM	Republic of North Macedonia	Standardisation Institute of the Republic of North Macedonia	www.isrm.gov.mk
ASRO	Romania	Romanian Standards Association	www.asro.ro
ISS	Serbia	Institute for Standardisation of Serbia	www.iss.rs
UNMS SR	Slovakia	Slovak Office of Standards Metrology and Testing	www.unms.sk
SIST	Slovenia	Slovenian Institute for Standardisation	www.sist.si
UNE	Spain	Asociación Española de Normalización	www.une.org
SIS	Sweden	Swedish Institute for Standards - SIS	www.sis.se
SNV	Switzerland	Schweizerische Normen-Vereinigung	www.snv.ch
TSE	Turkey	Turkish Standards Institution	www.tse.org.tr
BSI	United Kingdom	British Standards Institution	www.bsigroup.com

C.2 CENELEC members

Acronym	Country	Description	Website
AFNOR-FrSS-UTE	France	AFNOR-French Standardisation System-UTE	www.afnor.org
ASRO	Romania	Romanian Standards Association	www.asro.ro
BDS	Bulgaria	Bulgarian Institute for Standardisation	www.bds-bg.org
BSI	United Kingdom	British Standards Institution	www.bsigroup.com
CEB-BEC	Belgium	Comité Electrotechnique Belge/Belgisch Elektrotechnisch Comité	www.ceb-bec.be
CEI	Italy	Comitato Elettrotecnico Italiano	www.ceinorme.it
CYS	Cyprus	Cyprus Organization for Standardisation	www.cys.org.cy
DKE	Germany	German Commission for Electrical, Electronic and Information Technologies of DIN and VDE	www.dke.de
DS	Denmark	Dansk Standard	www.ds.dk
Electrosuisse	Switzerland	Association for Electrical Engineering, Power and Information Technologies	www.electrosuisse.ch



Acronym	Country	Description	Website
EVS	Estonia	Estonian Centre for Standardisation	www.evs.ee
HZN	Croatia	Croatian Standards Institute	www.hzn.hr
ILNAS	Luxembourg	Organisme Luxembourgeois de Normalisation	www.portail-qualite.lu
IPQ	Portugal	Instituto Português da Qualidade	www.ipq.pt
ISRSM	Republic of North Macedonia	Standardisation Institute of the Republic of North Macedonia	www.isrm.gov.mk
ISS	Serbia	Institute for Standardisation of Serbia	www.iss.rs
IST	Iceland	Icelandic Standards	www.stadlar.is
LST	Lithuania	Lithuanian Standards Board	www.lsd.lt
LVS	Latvia	Latvian Standard Ltd.	www.lvs.lv
MCCAA	Malta	The Malta Competition and Consumer Affairs Authority	https://mccaa.org.mt
MSZT	Hungary	Hungarian Standards Institution	www.mszt.hu
NEC	Netherlands	Nederlands Electrotechnisch Comité	www.nen.nl
NEK	Norway	Norsk Elektroteknisk Komite	www.nek.no
NQIS/ELOT	Greece	National Quality Infrastructure System	www.elot.gr
NSAI	Ireland	National Standards Authority of Ireland	www.nsai.ie
OVE	Austria	Austrian Electrotechnical Association	www.ove.at
PKN	Poland	Polish Committee for Standardisation	www.pkn.pl
SEK	Sweden	Svensk Elstandard	www.elstandard.se
SESKO	Finland	Finnish Electrotechnical Standards Association	www.sesko.fi
SIST	Slovenia	Slovenian Institute for Standardisation	www.sist.si
TSE	Turkey	Turkish Standards Institution	www.tse.org.tr
UNE	Spain	Asociación Española de Normalización	www.une.org
UNMS SR	Slovakia	Slovak Office of Standards Metrology and Testing	www.unms.sk
UNMZ	Czech Republic	Czech Office for Standards, Metrology and Testing	www.unmz.cz



Annex D: Communication with the standardisation technical committees

D.1 First communication text

About this matter, UNE has collaborated with the partners and finally, UNE sent this first communication to the selected Technical Committees according to the list of most relevant standardisation TCs included in Table 1. The content of this first communication included a summary SALEMA project, external link to the SALEMA website, and offered information exchange. An example of this communication is as follow:

Subject: Horizon 2020: SALEMA project. Standardisation Activities. CEN/TC 132 "Aluminium and aluminium alloys"

Sent: 11/02/2022 12:34

Dear Mr V. Cottin,

First, allow me I introduce myself; my name is Isabel LINARES and work for UNE (Spanish Standardisation Body) as Business Manager of Industry and Equipment. I'm addressing you on behalf of the SALEMA project (H2020 frame), in which UNE is a partner in charge of tasks related to standardisation, including proposals for future European standards. The main objective of the Standardisation activities is to facilitate the acceptance and utilization by the market of the developed solutions.

The SALEMA project (***Substitution of Critical Raw Materials on Aluminium Alloys for Electric Vehicles***) addresses in a coordinated and cooperative manner the key challenges in the different levels of the value chain: improving scrap classification and sorting systems to turn scrap into a valuable raw material; demonstrating the feasibility to **substitute Critical Raw Materials** (CRMs) in alloying systems; developing recycled aluminium alloys with improved mechanical performance; optimizing High Pressure Die Casting, sheet metal Stamping and Extrusion processes in a timely and cost-efficient manner to ensure the adoption of the developed alloys.

The primary objective of the SALEMA project is to demonstrate a non-CRM dependent aluminium industrial ecosystem. This is to be accomplished by substituting primary CRMs with alternative and commonly available elements, and with resources embedded in **domestic scrap**. The result of the SALEMA will be **new tailored-made Aluminium alloys with a higher amount of recycled material and consuming greatly reduced CRM levels**, conceived from the ground up to be transformed using a minimum adaptation of existing installations and to cover the ever-increasing requirements of the high added value European vehicle industry. To achieve this result and demonstrate that their performance can match what is currently obtained with primary alloys and primary scrap metal, SALEMA involves the whole value-chain of the aluminium transforming industry. For further information, see <https://salemaproject.eu/>

One of the aims of this contact is to raise awareness on the project to this TC and gather feedback on any suggestions, questions or comments related to it at this point. When they become available, it is intended that the content and results of this project be considered by the TC as possibly useful inputs for contributing to future or ongoing standardisation works or for identifying standardisation needs within the TC work program. If you need further information at this point or would like to talk to others involved in the project, please contact me.

I would also appreciate it if you could inform the active Working Groups of the CEN/TC 132 about this initiative:



- **CEN/TC 132/WG 5** Extruded and drawn products: Mr K. Aune
- **CEN/TC 132/WG 7** Sheets, strips and plates: Mr V. Cottin
- **CEN/TC 132/WG 14** General support: Mr M. Schulze
- **CEN/TC 132/WG 23** Revision of EN 1676 and EN 1706: Mr F. Rieger

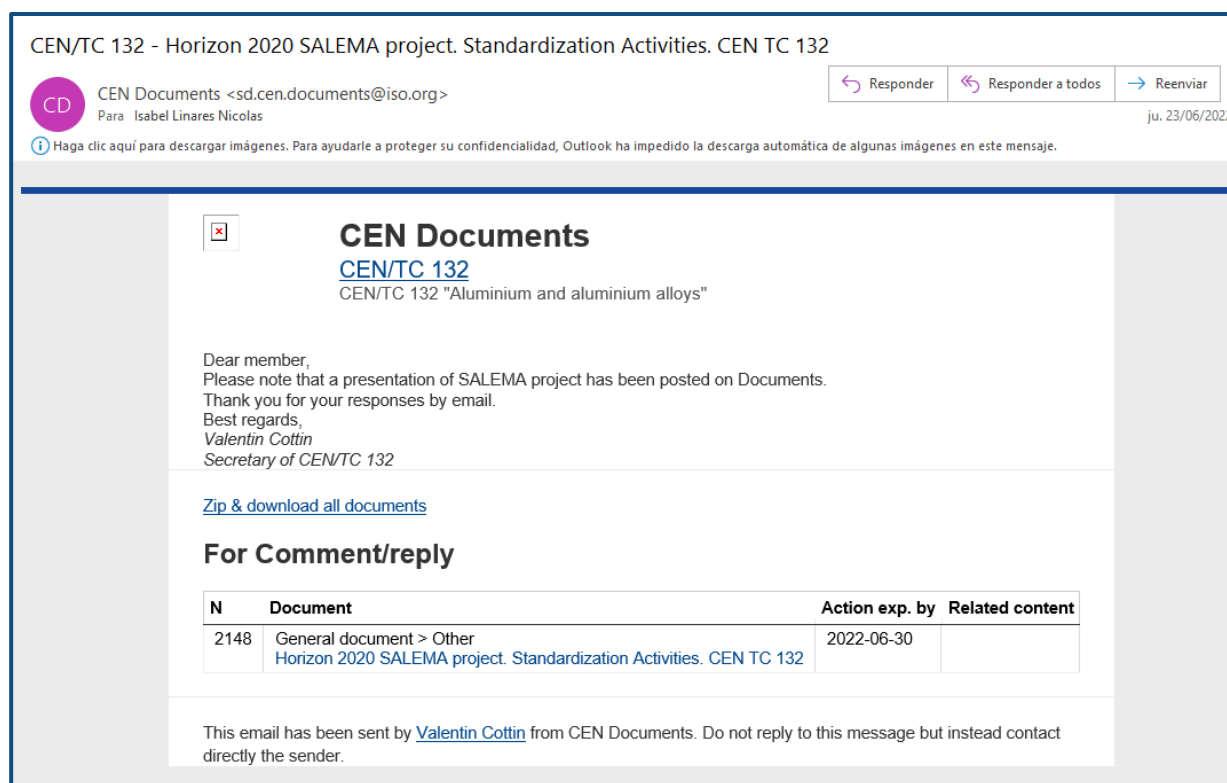
We would appreciate it if you could provide this **feedback before March 31st**. If you need to extend this date, please let us know.

Thank you very much in advance.

D.2 Subsequent communications

The first contact has a double aim, on the one hand, informing the relevant standardisation committees, where different categories of stakeholders at the European/international level are participating, and raising awareness about the SALEMA project, facilitating subsequent contacts. On the other hand, it is intended that towards the second half of the project, it will contribute to the standardisation of selected project results. Depending on several factors such as the nature of these results and the current standardisation landscape, this contribution to standardisation may be oriented to generating new pre-standards (Workshop Agreements) or participating at TC level.

For example, one of the responses of CEN/TC 132 (2022-05-23) was the dissemination of the SALEMA Project to European experts in aluminium and its alloys through the CEN platform:



CEN/TC 132 - Horizon 2020 SALEMA project. Standardization Activities. CEN TC 132

CD CEN Documents <sd.cen.documents@iso.org>
Para Isabel Linares Nicolas

ju. 23/06/2022

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CEN Documents
CEN/TC 132
CEN/TC 132 "Aluminium and aluminium alloys"

Dear member,
Please note that a presentation of SALEMA project has been posted on Documents.
Thank you for your responses by email.
Best regards,
Valentin Cottin
Secretary of CEN/TC 132

[Zip & download all documents](#)

For Comment/reply

N	Document	Action exp. by	Related content
2148	General document > Other Horizon 2020 SALEMA project. Standardization Activities. CEN TC 132	2022-06-30	

This email has been sent by [Valentin Cottin](#) from CEN Documents. Do not reply to this message but instead contact directly the sender.



After that, the subsequent interaction with the standardisation technical committees has been continuous (in particular, with TC 132 for your relevance in this project) and updated according to the latest information about standardisation in their respective scope. and the information through the CEN Documents platform:

2022-07-06

CEN/TC 132/WG 23 - Horizon 2020 **SALEMA** project. Standardization Activities. CEN TC 132 -(INFO)-

CEN Documents <sd.cen.documents@iso.org>
Para Isabel Linares Nicolas

vi. 08/07/2022

Responder Responder a todos Reenviar

Categoría Roja

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CEN Documents
CEN/TC 132/WG 23
CEN/TC 132/WG 23 "Revision of EN 1676 and EN 1706"

Dear member,
Please note that the following new documents have been posted on Documents.
Best regards,
Myrna Kleist

[Zip & download all documents](#)

For Info

N	Document	Action exp. by	Related content
118	General document > Other CEN/TC 132 N 2148 - Horizon 2020 SALEMA project. Standardization Activities. CEN/TC 132		

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2022-10-11

CEN/TC 132/WG 14 - documents available

CEN Documents <sd.cen.documents@iso.org>
Para Isabel Linares Nicolas

ma. 11/10/2022

Responder Responder a todos Reenviar

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CEN Documents
CEN/TC 132/WG 14 "General support"

Dear member,
Please note that the following new documents have been posted on Documents.
Best regards,
Marcel Schulze
Secretary of CEN/TC 132/WG 14

[Zip & download all documents](#)

For Info

N	Document	Action exp. by	Related content
73	General > Other CEN-TC132_N2148_Horizon 2020 SALEMA project. Standardization Activities. CEN TC 132		
72	General > Other prEN 12392_2023_20221004 with tracked changes		
71	General > Other prEN 12392_2023_20221004 - executed copy		
70	General > Other CEN-TC132 N 2162 Request for revising EN 12392		

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2023-06-19

CEN/TC 132 - Meeting documents of the plenary meeting (2023-06-14)

CD CEN Documents <sd.cen.documents@iso.org>
Para Isabel Linares Nicolas

Lu. 19/06/2023

Responder Responder a todos Reenviar

Categoría Roja

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CEN Documents
CEN/TC 132 "Aluminium and aluminium alloys"

Dear members,

Please note that the following new documents have been posted on Documents.
Best regards,
Valentin Cottin
Secretary of CEN/TC 132

[Zip & download all documents](#)

For Info

N	Document	Related content
2235	Meeting > Other Decisions of the CEN/TC 132 plenary meeting 2023	Meeting: Winterthur (Switzerland) 14 Jun 2023
2234	General > Other guidance_normative_references_hens	Meeting: Winterthur (Switzerland) 14 Jun 2023
2233	General > Other Applicability and suitability of Normative references in hENs	Meeting: Winterthur (Switzerland) 14 Jun 2023
2232	General > Other 20230802_Common checklist for hENs_Final - Clean	Meeting: Winterthur (Switzerland) 14 Jun 2023
2231	General > Other CEN_TC132-2023-draft	Meeting: Winterthur (Switzerland) 14 Jun 2023
2230	Meeting > Presentation Candidate CWA - SALEMA project- 2023-08-14	Meeting: Winterthur (Switzerland) 14 Jun 2023
2229	Meeting > Presentation Presentation SALEMA and QWA CEN-TC 132	Meeting: Winterthur (Switzerland) 14 Jun 2023

2023-11-15

CEN/TC 132 - Candidate CWAs- Scope and content proposed- SALEMA

CD CEN Documents <sd.cen.documents@iso.org>
Para Isabel Linares Nicolas

mi. 15/11/2023

Responder Responder a todos Reenviar

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CEN Documents
CEN/TC 132 "Aluminium and aluminium alloys"

Dear members,

Since the presentation of the SALEMA project at our last plenary meeting, the project has evolved.

Please find attached the most advanced CWA#1 proposal that the consortium has submitted as a result of a future standardization. This proposed CWA (CEN Workshop Agreement) includes the title, scope and content. The consortium is finalizing the details of each chapter and plans to submit it to the Workshop (WS) process (according to CEN CENELEC GUIDE 29).

We would appreciate receiving the feedback, if any, before November 28.

If you need further information, please contact Isabel Linares Nicolas <ilinares@une.org>

Best regards,
Valentin Cottin
Secretary of CEN/TC 132

[Zip & download all documents](#)

For Comment/reply


N	Document	Action exp. by	Related content
2260	General > Other Candidate CWAs- Scope and content proposed- SALEMA	2023-11-28	



Also, the ISO/TC 79 and its WGs were interested in this project, and responded the following:

2022-04-06

RE: Horizon 2020: SALEMA project. Standardization Activities. ISO/TC 79/SC 7 "Aluminium and cast aluminium alloys"

 H el ene CROS <h.cros@unm.fr>
Para Isabel Linares Nicolas

Responder Responder a todos Reenviar

mi. 06/04/2022

Dear Ms. Linares,

Yes you can keep me informed. Anyway I suppose that CEN/TC 132 was also informed of this project, since European Standardization on aluminium will be mainly dealt with by CEN/TC 132.


Best regards,

Ms. Helene CROS
UNM
Standardisation Office for Mechanical Engineering, Rubber and Steel on behalf of AFNOR

Accordingly, we continued informing at these TC and WGs until the launching of the Workshop SALEMA and candidate CWA:

2023-12-06


ISO/TC 79/SC 7 - documents available

 ISO Documents <sd.iso.documents@iso.org>
Para Isabel Linares Nicolas

Responder Responder a todos Reenviar

mi. 06/12/2023

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 **ISO Documents**
ISO/TC 79/SC 7 "Aluminium and cast aluminium alloys"

Dear member,

Please note that the following new document has been posted on Documents.
Best regards,

Julie Kamokoue
Committee manager of ISO/TC 79/SC 7

[Zip & download all documents](#)

For Comment/reply

N	Document	Action exp. by	Related content
216	General > Other Candidate CWAs- Scope and content proposed. SALEMA	2023-12-08	

This email has been sent by [Julie Kamokoue](#) from ISO Documents. Do not reply to this message but instead contact directly the sender.



Annex E: Working Group “Standardisation session (M12)”

E.1 Agenda of 2nd General Assembly of SALEMA

The session of the standardisation: Working Group 1 was included in the agenda of the 2nd General Assembly of the SALEMA project.

2nd General Assembly		
AGENDA		
DATE: 16TH AND 17TH MAY 2022		
MEETING LOCATION: EURECAT, BARCELONA: ROOM SALA INOVA – ground floor, behind reception		
May 17th Day 2		
09:00	Arrival and group photo	<u>All, outside</u>
09:15-10:45	Work Package Presentations cont.	WP lead
09:15	WP8 30 Min	Antonio Louro EUT
09:45	WP9 30 Min	Marcell Boviz ESCI
10:15	WP10 30 Min	Hannah Arpke EUT
10:45	Coffee Break	
11:00 Parallel sessions 1 hr	Working Group 1: Standardisation Mandatory participants: PROFIL, EUT, GESTAMP, CRF, UNIPD <u>Other participants can attend if they wish to</u>	Antonio Louro and Isabel Linares EURECAT and UNE



E.2 Conclusion of the session (M12)



1



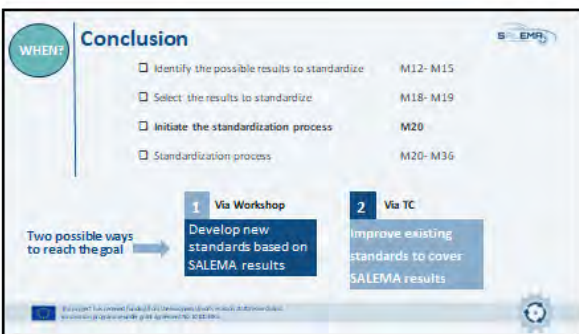
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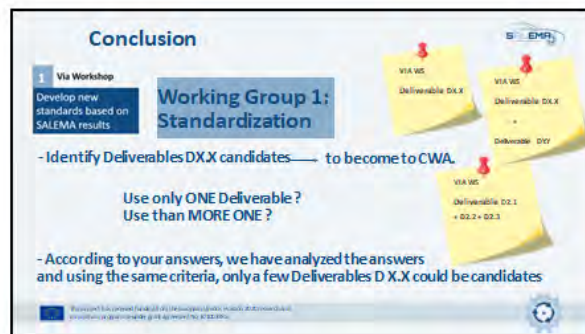
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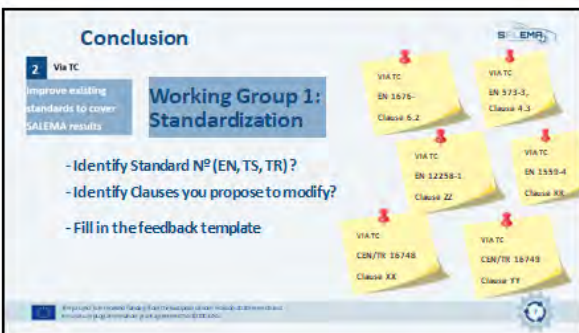
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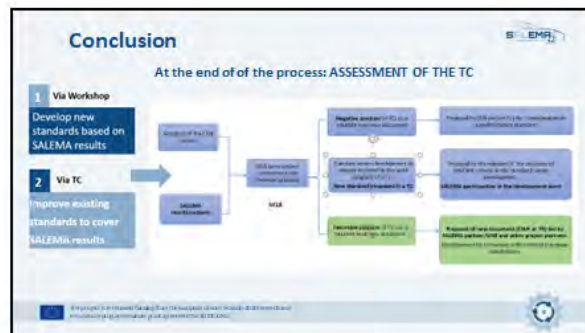
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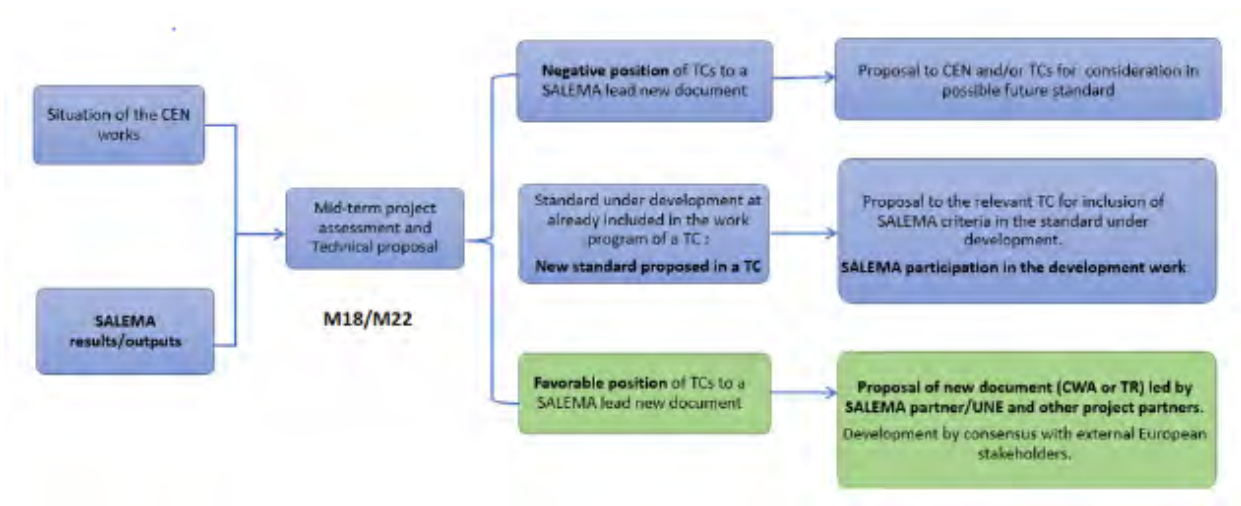


Annex F: Roadmap for standardisation process

F.1 What about the roadmap for the standardisation process?

The starting point is the current standards and the results of the SALEMA Project. Regarding the first deliverables of SALEMA, and depending on the works of the TC, three different scenarios can be foreseen, based on the expected reaction from CEN standardisation bodies regarding a potential standardisation proposal coming from the SALEMA project:

- **Negative position** of TCs to develop a new document under his work program
- There is already a standard under development in a TC
- **Favourable position** of TCs to develop a new document under his work program



These three scenarios could be linked to the following cases:

- Impossible to develop future standards, (i.e., there is no Technical Committee)
- Proposal to the relevant TC for inclusion of SALEMA criteria in the standard under development and SALEMA participation in the development of the work
- Establish a WORKSHOP to propose a new document (CWA or TR) led by a SALEMA partner and UNE as Secretariat, and other project partners. The success and the rate of progress of this document will depend on the facility to achieve consensus with interested European stakeholders, external to the project, and also involved in its development.

F.2 What is next on the roadmap for the standardisation process?

Development of a more specific roadmap for standardisation considering further outputs of SALEMA to obtain a more advanced and reliable way for standardisation.

Note that there are several types of documents developed by the European standardisation system that are in general denominated standards, but that have different characteristics and advantages.

CWA and TR are the best-fitted documents to **introduce the outputs of research projects into the standardisation system** when this activity is developed as part of the project, due to time considerations and considering them as a first step to be promoted to future standards if their application in the market is successful. The internal regulations of CEN shall be observed for the creation and approval, which usually will take a few months of the decision process.

Another way to disseminate the results of the Project in the framework of standardisation is to elaborate recommendations on existing standards and draft standards that cover the same application as SALEMA research.

At the end of this assessment, we should be getting the following:

- **Negative position of TC to develop a new document under his work program:** It is a **favorable scenario** to SALEMA leads a new document:
- **Establish a WORKSHOP** to propose a new document (CWA) led by SALEMA. WS Chair/Technical leader and UNE as Secretariat, and other project partners will be part of this **Workshop** and the future document will be developed by consensus with external European stakeholders
- **A technical leader and several partners ready to develop CWA.**



Annex G: CEN/TC 132 June 2023, Plenary Meeting Agenda and Minutes

G.1 Plenary Meeting Agenda (includes the Presentation of SALEMA)

CEN/TC 132 N 2210

CEN/TC 132 "Aluminium and aluminium alloys"
Secretariat: AFNOR
Secretary: Cottin Valentin M.

(REVISED) Plenary_meeting_agenda_2023-06-14

Document type	Related content	Document date	Expected action
Meeting / Agenda	Meeting: Winterthur (Switzerland) 14 Jun 2023	2023-06-08	INFO

Replaces: N 2207 Agenda of the 54th plenary meeting - Hybrid Format - Winterthur, Switzerland (2023-06-14)

« Aluminium and aluminium alloys » CEN/TC 132

Date: 2023-06-08 Doc. Number: **N 2210**

Assigant: Aurelie KIEFER
Direct line: +33 (0)1 41 02 84 20
aurelie.kiefer@afnor.fr

Your contact: Valentin COTTIN
Direct line: +33 (0)1 41 02 84 20
valentin.cottin@afnor.fr

(REVISED) Draft agenda of the next CEN/TC 132 Plenary meeting (14th of June 2023 – SNV, Winterthur - Switzerland)

This document provides the Draft agenda of the next CEN/TC 132 plenary meeting, which will be held on 14th of June 2023 (SNV offices, Winterthur - Switzerland) and by Web-conference. It will begin at 9:30 am and will finish at 13:00 pm.

COMMENTARIES/ DECISIONS: <https://afnor.zoom.us/j/97588383183?pwd=QkQyQmIpeTdtZXloTzJlOkl3SWMlKzZl>

FOLLOW UP: For information

SOURCE: CEN/TC 132 secretariat

Meeting ID: 975 8838 3183
Passcode: 961563

Draft agenda of the 54th plenary meeting of CEN/TC 132 on 2023-06-13 at SNV (Winterthur - Switzerland)

Agenda items

- 1 Welcoming and opening of the meeting
- 2 Roll call of delegates
- 3 Adoption of the agenda
- 4 Approval of the report of previous meeting
- 5 **Presentation of the project SALEMA**
- 6 Report of the Secretary and/or the Chairman
- 7 Re-appointment of the CEN/TC 132 Chairman
- 8 Following of 2023 systematic review
- 9 Report of the Convenors of the Technical Committee Working Groups:
 - 9.1 WG 5 "Extruded and drawn products"
 - 9.2 WG 7 "Sheet, strips and plates"
 - 9.3 Reactivation of WG 9 "Aluminium and aluminium alloys cast and wrought products in contact with food"
 - 9.4 WG 10 "Castings"
 - 9.5 WG 14 "General support"
 - 9.6 WG 23 "Revision of EN 1676 and EN 1706"
 - 9.7 Conclusions of these reports and actions to be taken
- 10 CEN/TC 132 liaisons
- 11 Information on ISO/TC 79 and its SCs
- 12 Preparation of the next meeting (date, venue, homework)
- 13 Any other business
- 14 Approval of decisions
- 15 Closure of the meeting

Valentin COTTIN is inviting you to send a national delegation of three delegates ⁽¹⁾ to the next plenary meeting of CEN/TC 132 which will take place:

From: **Thursday 14th of June 2023, 9:30 am to 13:00 pm**

at: **SNV, Sulzerallee, Postfach 70, 8404 Winterthur, Switzerland**

And by **Web-conference** : <https://afnor.zoom.us/j/97588383183?pwd=QkQyQmIpeTdtZXloTzJlOkl3SWMlKzZl>

Meeting ID: 975 8838 3183
Passcode: 961563

International numbers available [here](#).



G.2 Plenary Meeting Minutes (includes the Presentation of SALEMA)

CEN/TC 132 "Aluminium and aluminium alloys"
Secretariat: AFNOR
Secretary: Cédric Valentin M.

Minutes of the plenary meeting 2023 (2023-06-14)

Document type	Related content	Document date	Expected action
Meeting / Minutes	Meeting: Winterthur (Switzerland) 14 Jun 2023	2023-09-26	

« Aluminium and aluminium alloys »
CEN/TC 132

Date: 2023-07-14 Doc. Number: **N 2244**

Assistant: Mrs. Audele CODES
Direct line: +33 (0)1 41 62 82 64
audale.codes@afnor.org

Your contact: Mr. Valentin COTTIN
Direct line: +33 (0)1 41 62 84 20
valentin.cottin@afnor.org

Minutes

of the 54th CEN/TC 132 Plenary Meeting

held on 14th of July 2023 in Winterthur (Switzerland)

Chairman: Mr Christophe Jaquero (France)
Secretary: Mr Valentin Cottin (AFNOR)

Association Française de Normalisation 11, rue Francis de Pressensac F - 92177 La Plaine Saint Denis cedex www.afnor.org; SIRET 775 724 818 00020

1 Welcoming and opening of the meeting

Mr. Jaquero opens the 54th plenary meeting of CEN/TC 132.

2 Roll call of delegates (Belgium, Italy, Norway, Sweden, Spain, France)

The list of participants is available as document N 2223.
Mr Christophe Jaquero indicated that Mr Leonard Heuser would be unable to attend the meeting and apologised for its absence.

3 Adoption of the agenda

Mr Michel Stucky, Chairman of ISO 79/SC 7, asked that an item be added to the agenda concerning the heat treatment of aluminium alloys, which are not part of any document in the European system of standards. Only two ASTM standards exist (ASTM B17 and ASTM B18). Mr Michel Stucky indicated that it might be appropriate for CEN/TC 132 to look into the matter.

Mr Kursley Alairy also proposed that an update should be given to the participants of the meeting on the CEN rules concerning harmonised standards.

Two items were therefore added to the agenda.

4 Approval of the minutes of previous meeting

Decision 1/2023 taken by CEN/TC 132 on 2023-06-14

Subject: CEN/TC 132 – Approval of the minutes of 53rd meeting on 2022-06-15

The minutes of 53rd meeting on 2022-06-15 held in Stockholm (Sweden) and by web conference were approved.

The decision was taken by unanimity.

5 Adoption of the decision drafting committee

Decision 2/2023 taken by CEN/TC 132 on 2023-06-14

Subject: CEN/TC 132 – Adoption of the decision drafting committee

The decision committee consists of:

- Mr Christophe JAQUERO
- Mr Marcel SCHULZE
- Mr Michel STUCKY
- Mr Valentin COTTIN for the Secretariat.

The decision was taken by unanimity.

6 Presentation of the project SALEMA

Mr Valentin Cottin gave the floor to Mr Manuel da Silva (EURECAT) to present the SALEMA project. This presentation is available as document N 2229.

7 Report of the secretariat

Mr Valentin Cottin presented the report of the secretariat with the following information:

- the structure (chairman, committee manager, scope, active working groups, liaisons);
- the decisions taken during the last meeting in 2022;
- the active projects of all the working groups and the systematic review 2023.

The CEN/TC 132 members discussed several topics currently developed in the technical committee directly.

prEN 683-2 Aluminium and aluminium alloys - Firststock - Part 2: Mechanical properties
prEN 14361 Aluminium and aluminium alloys - Chemical analysis - Sampling from metal melts
prEN 605-2 Aluminium and aluminium alloys - Wrought forging stock - Part 2: Mechanical properties
prEN 602 Aluminium and aluminium alloys - Wrought products - Chemical composition of semi-finished products used for the fabrication of articles for use in contact with foodstuff
prEN 601 Aluminium and aluminium alloys - Castings - Chemical composition of castings for use in contact with foodstuff
EN 573-3:2019+A1:2022/prA2 Aluminium and aluminium alloys - Chemical composition and form of wrought products - Part 3: Chemical composition and form of products
prEN 754-2 Aluminium and aluminium alloys - Cold drawn rod/bar and tube - Part 2: Mechanical properties
prEN 755-2 Aluminium and aluminium alloys - Extruded rod/bar, tube and profiles - Part 2: Mechanical properties
prEN 12392 Aluminium and aluminium alloys - Wrought products and cast products - Special requirements for products intended for the production of pressure equipment

All information is detailed in the document N 2224.

8 Presentation of drafting rules regarding Standardisation Request by M. Kursley Alairy

Mr Kursley Alairy, Technical Programme Manager at CEN/CENLEC, presented a number of documents relating to several new developments in CEN rules, notably concerning harmonized standards and the role of HAS consultants.

These documents are available on CEN Documents as documents N 2231, 2232, 2233, 2234.

9 Re-appointment of the CEN/TC 132 Chairman

Decision 3/2023 taken by CEN/TC 132 on 2023-06-14

Subject: CEN/TC 132 – Re-appointment of CEN/TC 132 Chairman

Following chairman terms which ended at the beginning of 2024, TC 132 agrees to re-appoint current TC 132 chairman, Mr Christophe JAQUERO for further 3 years (mainstage ending on



G.3 Plenary Meeting Minutes. Presentation of the SALEMA project and Candidate to CWA

CEN/TC 132 N 2229

CEN/TC 132 "Aluminium and aluminium alloys"
 Secretariat: AFNOR
 Secretary: Cottin Valentin M.

Presentation SALEMA and QWA CEN-TC 132

Document type	Related content	Document date	Expected action
Meeting / Presentation	Meeting: Winterthur (Switzerland) 14 Jun 2023	2023-06-19	INFO

SUBSTITUTION OF CRITICAL RAW MATERIALS ON ALUMINIUM ALLOYS FOR ELECTRIC VEHICLES

Manel da Silva- EURECAT/Isabel Linares-UNE

June 2023 – Presentation of SALEMA to CEN/TC 132

PROJECT GOAL

European Green Deal poses multiple challenges for the automotive industry:

- Need for new, high-performance but lightweight materials
- Decrease the dependencies on imported raw materials while creating a sustainable economy for the future

SALEMA Main objectives:

- To develop a non-CRM dependent aluminium ecosystem, by exploring 2 different approaches:
 - By **substituting primary CRMs with alternative** and commonly available elements
 - By obtaining the **CRMs elements from domestic scrap**, significantly increasing the amount of recycled material

The project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101003785.

PROJECT STRUCTURE

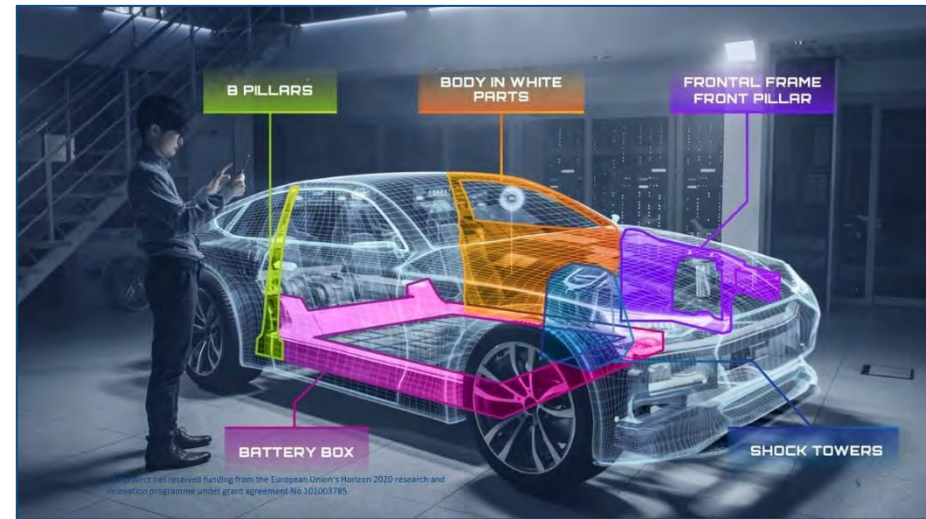
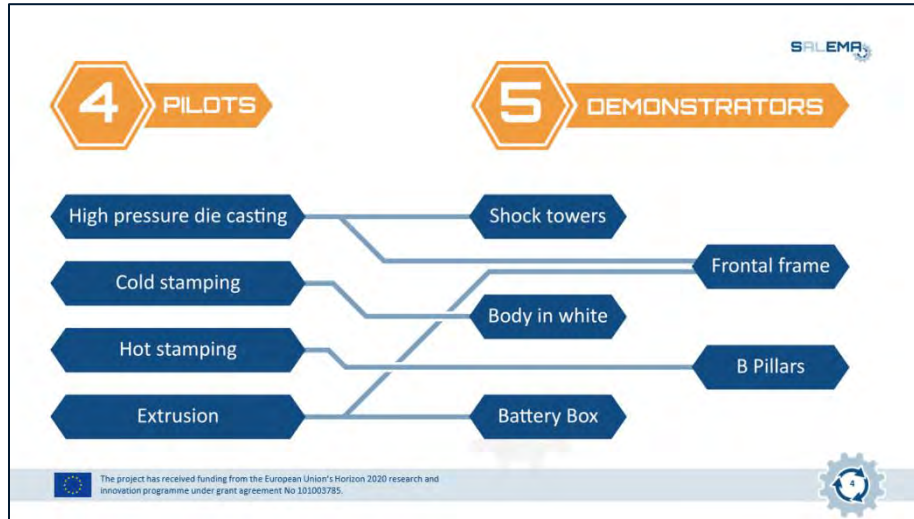
The diagram illustrates the project structure with four main stages:

- EXPLOITATION OF KNOWLEDGE THROUGH TECHNOLOGY TRANSFER** (Left side): Includes Innovative Pilot Actions (Structural parts made by Al die casting, Aluminium stamping for body in white, Aluminium extrusion for battery box) and Material Development (RAFFMETAL, Profilglass, ASAS).
- RESEARCH ON IMPURITIES AND MECHANICAL PROPERTIES** (Middle): Led by eurecat.
- COMMERCIAL EXPLOITATION OF NEW PRODUCTS OR SERVICES** (Right side): Includes Manufacturing Process Development & Demonstration (Hot stamping, Cold stamping) and Standardisation & Policy Guidelines (UNE).
- RECYCLING & PROVISION OF RAW MATERIALS** (Bottom): Led by LIÈGE University.

Legend: = Individual commercialization of their own products

The project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101003785.





FLUIDITY TESTS CARRIED OUT ON HPDC ALLOYS

Material	1 mm	3 mm	5 mm	7 mm	9 mm	11 mm	Average
AlSi10MnMg0.2	0	135	35	135	60	85	75.00
AlSi10MnMg0.2 + 20% scrap	0	100	55	110	95	70	71.67
AlSi10MnMg0.2 + 40% scrap	0	90	40	80	65	60	55.83
AlSi10MnMg0.2 + 60% scrap	0	130	30	105	75	20	60.00
AlSi10MnMg0.2 + 80% scrap	0	40	5	70	20	0	22.50
100 % AlSi10MnMg scrap	0	70	5	75	20	10	30.00
AlSi10MnMg0.3	0	75	55	55	0	100	57.50
AlSi10MnMg0.3 + 20% scrap	0	35	5	55	0	25	20.00
AlSi10MnMg0.3 + 40% scrap	0	30	20	60	0	10	20.00
AlSi10MnMg0.3 + 60% scrap	0	30	30	40	0	0	13.33
AlSi10MnMg0.3 + 80% scrap	0	75	5	70	30	35	31.67
AlSi10MnMg0.45	0	65	20	80	50	40	45.89
AlSi10MnMg0.45 + 20% scrap	0	40	15	65	15	20	25.83
AlSi10MnMg0.45 + 40% scrap	0	40	5	45	10	0	16.67

The project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101003785.

INTENTION TO PRESENT A CWA

Candidate CWA #1 from EURECAT

Title:
SALEMA, Aluminium and aluminium Alloys, Evaluation of Fluidity in Aluminium Casting Alloys

Scope:
This CEN Workshop Agreement (CWA) is aimed at proposing a mould geometry and experimental procedure to carry out a robust and repetitive fluidity test for aluminium alloys.

Being the filling behaviour of die and mould cavities, in foundry processes, controlled by the viscosity of the liquid metal/alloy employed, the technological relevance of viscosity is very high. However, experimental data on viscosity of liquid metals and alloys are lacking, due to the difficulty in carrying out high temperature viscosity tests. The evaluation of fluidity, intended as a technological property of metals and alloys representing the inverse of viscosity, can supply fundamental information to be used in foundry process.

Content:

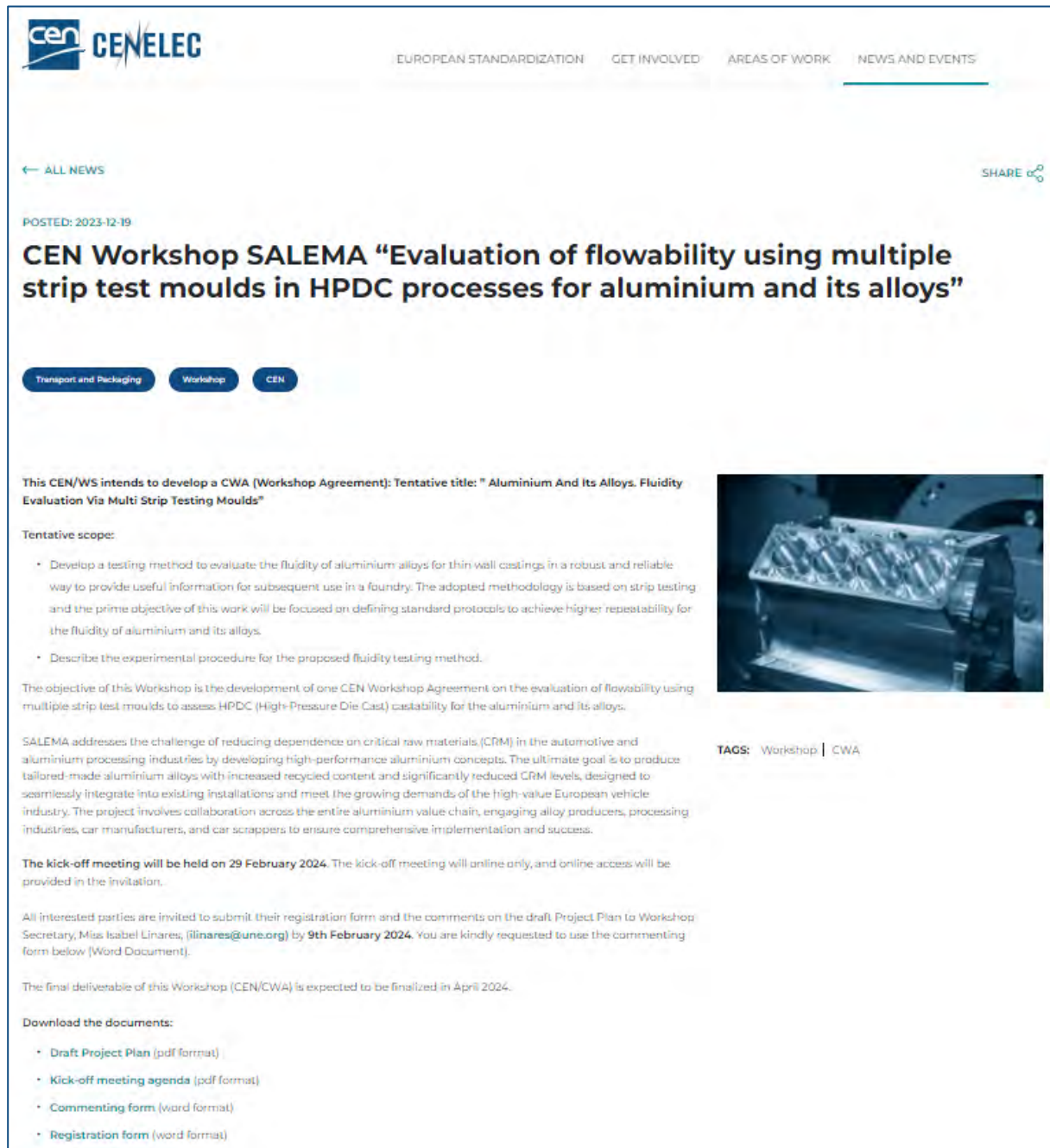
- European foreword
- Introduction
- 1 Scope
- 2 Normative references
- 3 Terms and definition
- 4 Mould geometry for fluidity test
- 5 Test procedure
- Bibliography

The project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101003785.



Annex H: CEN-CENELEC WORKSHOP SALEMA: Official announcement on the CEN website. KOM Agenda of CEN/WS. Presentation of the KOM


H.1 CEN-CENELEC WORKSHOP official announcement on the CEN website: 2023-12-19



The screenshot shows a webpage from CEN-CENELEC. The header includes the CEN-CENELEC logo and navigation links: EUROPEAN STANDARDIZATION, GET INVOLVED, AREAS OF WORK, and NEWS AND EVENTS. Below the header, there is a '← ALL NEWS' link and a 'SHARE' icon. The main heading of the article is 'CEN Workshop SALEMA "Evaluation of flowability using multiple strip test moulds in HPDC processes for aluminium and its alloys"', dated 'POSTED: 2023-12-19'. There are three category tags: 'Transport and Packaging', 'Workshop', and 'CEN'. The text of the announcement states: 'This CEN/WS intends to develop a CWA (Workshop Agreement): Tentative title: "Aluminium And Its Alloys. Fluidity Evaluation Via Multi Strip Testing Moulds"'. It defines the 'Tentative scope' as developing a testing method for fluidity of aluminium alloys and describing the experimental procedure. The objective is to develop a CWA on the evaluation of flowability using multiple strip test moulds to assess HPDC (High-Pressure Die Cast) castability. The SALEMA project aims to reduce dependence on critical raw materials (CRM) in the automotive and aluminium processing industries. A kick-off meeting is scheduled for 29 February 2024. All interested parties are invited to submit their registration form and comments on the draft Project Plan to the Workshop Secretary, Miss Isabel Linares, by 9th February 2024. The final deliverable is expected to be finalized in April 2024. A list of documents to download is provided: Draft Project Plan (pdf format), Kick-off meeting agenda (pdf format), Commenting form (word format), and Registration form (word format). An image of a multi-strip test mould is shown on the right side of the page. The tags are 'Workshop | CWA'.



H.2 CEN-CENELEC WORKSHOP. KOM Agenda of CEN/WS SALEMA



EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

2024-01-25

**Draft Agenda for the kick-off meeting of
CEN/WS "SALEMA. Evaluation of flowability using
multiple strip test moulds in HPDC processes for
aluminium and its alloys"**

Thursday, 29th February 2024, from 10:30 h. to 1300 h

Venue
The meeting will be held virtually: Teams (KOM Meeting-WS- SALEMA).
Contact Isabel Linares (ilinares@une.org) for more information.

Agenda	Timing
1. Opening of the meeting	10:30 h
2. Roll call of participants	
3. Adoption of the agenda	
4. Introduction on CEN and on the Workshop concept	
5. General presentation of the Workshop	
6. Possibly other presentations	
7. Election and appointment of Workshop Chair (and Vice-Chair if one) Confirmation of the Secretariat	
8. Project Plan	
a. Discussion and review of comments received	
b. Adoption of the Project Plan (by consensus)	
9. Organization of the technical work	
10. Any other business	
11. Next meeting, future actions and their assignment	
12. Closure of the meeting	13:00 h

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H.3 CEN-CENELEC WORKSHOP. Presentation of the KOM

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ORGANISATION	HEAD OF ORGANISATION	COUNTRY	PARTICIPANT
CEN-CENELEC	European Standardization Organizations	BELGIUM	Mr Alain Aumont
ENUNAVANCE	Industry and commerce	ITALY	Dr. Miro Cusato
EURECAT	Research, innovation and technology centre	SPAIN	Dr de Silva, Manel Ms Isabel Linares
EUROPEAN ALUMINIUM ASSOCIATION	Industry and commerce	GERMANY	Mr Hubert Grotz
EUROPEAN ALUMINIUM ASSOCIATION	Industry and commerce	SPAIN	Mr Elías Ariza
EUROPEAN ALUMINIUM ASSOCIATION	Industry and commerce	ITALY	Professor M. Basso, Tiziano
EUROPEAN ALUMINIUM ASSOCIATION	Industry and commerce	ITALY	Mr Angelo, Oreste
EUROPEAN ALUMINIUM ASSOCIATION	Industry and commerce	ITALY	Mr Zambek, Ruggiero
EUROPEAN ALUMINIUM ASSOCIATION	Industry and commerce	ITALY	Mr Andrea Borgognoni
EUROPEAN ALUMINIUM ASSOCIATION	Industry and commerce	SPAIN	Ms Isabel Linares

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Workshop Participants

- ▶ **Participation in Kick-off Meeting ≠ Participation in the Workshop**
- ✓ **Conditions of participation in Workshop:**
 - ▶ Signature of Registration Form
 - ▶ Agreement to assign exploitation rights of individual contributions to Workshop deliverables to CEN
 - ▶ Registration to Workshop can be done at any time until the end of the drafting phase
- ✓ **Role of Workshop Participants:**
 - ▶ Providing comments and input on draft documents
 - ▶ Approval of the CEN Workshop Agreement (organisations approving CWA will be listed in the foreword)

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Open Consultation Phase

- ✓ **Mandatory if the CWA deals with safety aspects**
- ✓ Highly recommended for all Workshops → increase transparency
- ✓ Draft CWA text posted at CEN website ->
- ✓ Duration: minimum 30 days (60 days for CWA dealing with safety aspects)

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CWA and Lifetime

- ▶ By default, once the CWA is published, the maintenance of the CWA is the responsibility of the **WS secretariat**; however, a **Technical committee** with an interest in the document may decide to undertake the responsibility of the CWA.
- ▶ The CWA is **valid for 3 years**, after which the participants are asked to make a choice to:
 - Confirm for 3 years
 - Revise
 - Withdraw
- ▶ The maximum validity of a CWA is **6 years**. After that, it is either withdrawn or transformed into another deliverable.
- ▶ At any point during the CWA lifecycle, a TC may decide to transform it into another deliverable, following the normal standard development process
- ▶ If at any point a standard in conflict with the CWA is published, the CWA is to be withdrawn

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Intellectual Property Rights

- ▶ The copyright of a CWA is owned by CEN. All participants in CEN Workshops assign the copyright in their individual contributions to CEN for the benefit of its Members by signing copyright assignment statements (registration form).
- ▶ The original copyright holder of a contribution to the European Standardisation process (e.g. a researcher) is not precluded from continuing to exploit his own contribution for its own purposes, provided that such use does not adversely affect the exploitation of the common work, which is the standard itself.
- ▶ Sponsored access: CWAs in the R&D and ICT domains can be made available for view and download without charge on the CEN/CENELEC website. The participants must agree to cover the loss of revenue for CEN through a specific extra charge calculated as 8% of the total cost to develop the CWA

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Code of Conduct for delegates, experts and observers participating in the technical work of CEN/CENELEC

Workshop participants should be aware of the CEN/CENELEC Code of conduct, as available online:
https://bss.cen.eu/media/aitikv2/code_conduct_experts.pdf

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Dissemination strategy

Main steps for dissemination	Internal channels and target	External channels and target
Consultation(s) phases	TC Coordination groups	Relevant stakeholders and groups Social media Channel
Publication		
Lifecycle		

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How to interact with existing standardization bodies

- ✓ In case the CWA is being developed while there is a Technical Body in the same domain, the final draft CWA shall be sent to the Technical Body for comments at the same time as to the CEN/CENELEC Workshop participants. In such cases, a commenting period of 30 days is recommended. (mandatory, see Guide 29)
- ✓ Exchange information with relevant TC during the drafting phase and the open commenting phase
- ✓ Take initiatives to make presentations of scopes, progress and project plan for the relevant TC's.
- ✓ Notify the CCMC project manager about any major problems encountered in the development of the draft CEN/CENELEC Workshop Agreement in order to find solutions (mandatory, see Guide 29)
- ✓ Notify CCMC project manager about any possible conflict with a European Standard that could arise from adoption of the draft CEN/CENELEC Workshop Agreement (mandatory, see Guide 29)

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Security specific slide (annex: security self assessment)

- ▶ Have the following security risk been taken into account.
 - Is the planned CWA expected to have a major impact on the security policy/strategy of the core stakeholders.
 - Does the scope of the CWA cover products or services with a clear dual-use purpose (i.e. which can be used for military purposes)?
 - In light of the scope of the CWA, is it likely that it may deal with sensitive information? If so, what is the information sensitivity level?
 - Is there a need for a (non-) disclosure agreement?
 - Is there any conflict of interest for stakeholders involved in the Workshop, regarding especially the use they may make of any information they receive during the development of the CWA?
 - What steps should be taken to manage information dissemination and storage (e.g. memory stick, emailing, storage) during the development of the CWA?

Source: [CEN/CENELEC Guide 29 « CEN/CENELEC Workshop Agreements – A rapid way to standardization » - Annex A.3](#)

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Thank you for your attention!

Mr. Koralay Alalay
CCMC Project Manager
k.alalay@cecimil.com
www.cecimil.com
www.ccmc.it

CEN/WS/SALEMA - Cluster 20 - CEN/SALEMA Workshop Announcement

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UNE

Draft Agenda

1	Opening of the meeting (09:30h)	5 min
2	R&A call of participants	10 min
3	Adaptation of the agenda	5 min
4	Introduction on CCM and on the Workshop context	25 min
5	General presentation of the Workshop	15 min
	5.1. Evaluation of feasibility using multiple strip test moulds	
	5.2. HPDC processes for aluminium and its alloys	
6	Proximity other presentations	15 min
	6.1. Aluminium And Its Alloy Castability Solution Via EBM Strip Casting	
7	Electronical Approvements of Workshop Chair (and Vice-Chair)	10 min
	7.1. Confirmation of the Chairperson	
8	Project Plan	10 min
	8.1. Discussion and review of content and	
	8.2. Adaptation of the Project Plan by consensus	
9	Organization of the technical work	20 min
	9.1. Proposal of the OVA	
10	Any other business	5 min
11	Next meeting, evaluations and their assignment	10 min
12	Closure of the meeting	

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UNE CEN/WS SALEMA on Evaluation of flowability using multiple strip test moulds in HPDC processes for aluminium and its alloys

5. GENERAL PRESENTATION OF THE WORKSHOP

PO57820-2023-02-01
CEN/WS SALEMA - Announcement

CEN Workshop SALEMA "Evaluation of flowability using multiple strip test moulds in HPDC processes for aluminium and its alloys"

[CEN Workshop SALEMA "Evaluation of flowability using multiple strip test moulds in HPDC processes for aluminium and its alloys" - CEN/WS/SALEMA Announcement](#)

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UNE CEN/WS SALEMA on Evaluation of flowability using multiple strip test moulds in HPDC processes for aluminium and its alloys

Quantified goals, working closely with the company

58% ↑
42% ↓
705 ↑/year
23% ↓/year

WS Chair: Dr Manel da Silva

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UNE CEN/WS SALEMA on Evaluation of flowability using multiple strip test moulds in HPDC processes for aluminium and its alloys

Proximity

- Support and strategic financing
- Technical support
- Technical support
- Technical support

The previous activities and experiences and research efforts in bringing the existing knowledge closer to companies.

We are committed to being close to the Companies and their challenges.

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UNE CEN/WS SALEMA on Evaluation of flowability using multiple strip test moulds in HPDC processes for aluminium and its alloys

WS Chair

Dr. Manel da Silva
Head of Light Alloys Research Line at Eurecat
Development of new aluminium alloys, specially for HPDC

eurecat

PhD in Materials Science by University of Navarra in 2006. Researcher at ASCAMM (current EURECAT) since 2008 and, currently, manager of the Light Alloys Research Line of the Unit of Metallic and Ceramic Materials at EURECAT. He has more than 20 years of experience working on research projects related to High Pressure Die Casting and processing of aluminium alloys at CBT CURAL (University of Quebec), ASCAMM and EURECAT. He has participated in 10 European projects, being the technical director of 4 of them, in addition to numerous national projects. Author and co-author of 15 articles in indexed scientific journals and over 20 communications in national and international conferences.

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UNE CEN/WS SALEMA on Evaluation of flowability using multiple strip test moulds in HPDC processes for aluminium and its alloys

WS Vice-Chair

Prof. Franco Bonollo
President of the School of Engineering at Padova University
Optimization of Aluminium alloys composition & performance

Graduated in Chemical Engineering by Padova University in 1988. After an experience as Industrial Researcher at ENI Group, in 1991 started his career at Padova University (Italy), where he became full professor of Metallurgy in 2010. He is leading the Metallurgy Research Group at DTG (Dept. of Management and Engineering). Since 2018 he is President of the School of Engineering of Padova University; since 2022 he is President of INEST, Ecosystem of Innovation of North-Eastern Italy. He founded SIMONET, Regional innovative network on foundry, collecting about 60 Companies. His Research activity is mainly focused on Aluminium alloys and Foundry and led to about 200 scientific publications. He has participated in several European projects, being the scientific manager in 2 of them and the coordinator of StaCast project, which led to the development of two CEN Standards on Aluminium alloys castings.

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UNE CEN/WS SALEMA on Evaluation of flowability using multiple strip test moulds in HPDC processes for aluminium and its alloys

PROJECT GOAL

European Green Deal poses multiple challenges for the automotive industry:

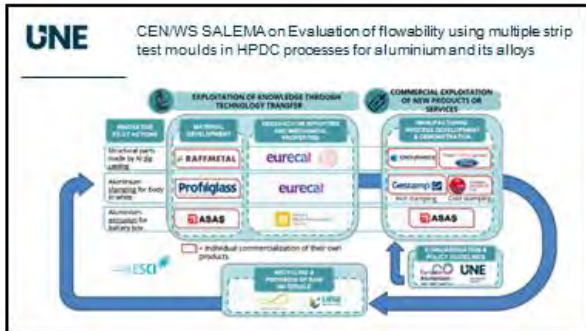
- Need for new, high-performance but lightweight materials
- Decrease the dependencies on imported raw materials while creating a sustainable economy for the future

SALEMA Main objectives:

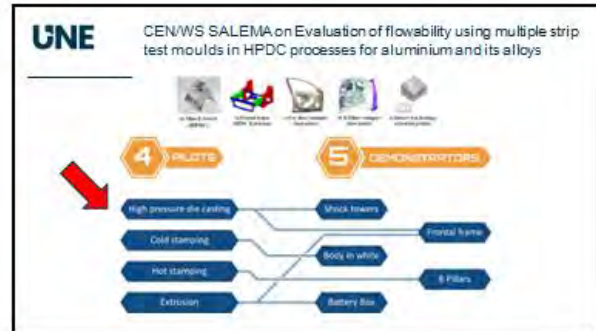
- To develop a non-CRM dependant aluminium ecosystem, by exploring 2 different approaches:
 - By substituting primary CRMs with alternative and commonly available elements
 - By obtaining the CRMs elements from domestic scrap, significantly increasing the amount of recycled material

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UNE CEN/WS SALEMA on Evaluation of flowability using multiple strip test moulds in HPDC processes for aluminium and its alloys

Relevant points:

- Development of a robust method to assess flowability and processability of casting alloys
- Importance to determine the impact of impurities in alloy castability
- Ability to predict alloy processability in High Pressure Die Casting

WORKSHOP Main objectives:

The overall goal of the Workshop is developing a pre-standard (CEN Workshop Agreement-CWA) on the evaluation of flowability using multiple strip test moulds for HPDC (High-Pressure Die Cast) processes for the aluminium and its alloys.

And:

- Prove robustness of the test methodology by assessing dispersion of results under constant testing conditions
- Demonstrate test ability to discriminate between differences in alloy flowability

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UNE

Draft Agenda

1. Opening of the meeting (10:30h)	5 min
2. Roll call of participants	10 min
3. Adoption of the agenda	5 min
4. Introduction on CWA test on the Workshop concept	25 min
5. General presentation of the Workshop	15 min
5.1. Evaluation of flowability using multiple strip test moulds in HPDC processes for aluminium and its alloys	15 min
6. Priority (Other general tasks)	15 min
6.1. Aluminium and Al-Alloys: Plastic Extrusion for Multi-Strip Testing (MST)	15 min
7. Election and appointment of Workshop Chair (and Vice-Chair) - Chairmanship of the Secretariat	10 min
8. Project Plan	20 min
8.1. Discussion and relay of commercialised	
8.2. Adoption of the Project Plan (by consensus)	
9. Distribution of the technical work	20 min
9.1. Proposal of the CWA	
10. Any other business	5 min
11. Next meeting, discussions and their assignment	10 min
12. Closure of the meeting	

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UNE CEN/WS SALEMA on Evaluation of flowability using multiple strip test moulds in HPDC processes for aluminium and its alloys

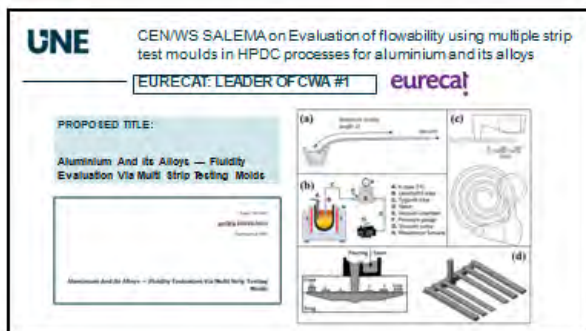
EURECAT: LEADER OF CWA #1 eureka!

WORKSHOP REPORT

INTRODUCTION

SCOPE

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UNE CEN/WS SALEMA on Evaluation of flowability using multiple strip test moulds in HPDC processes for aluminium and its alloys

EURECAT: LEADER OF CWA #1 eureka!

PROPOSED SCOPE:

The aim of this document is to develop a testing method to evaluate fluidity of aluminium alloys for thin wall castings in robust and reliable way to provide useful information for subsequent use in foundry. The adopted methodology is based on strips testing and the prime objective of this work will be focused on defining standard protocols to achieve higher reproducibility for fluidity of aluminium and its alloys. The present document describes experimental procedure for the proposed fluidity testing method.

The Fluidity for AlSi10Mg0.2 alloy via strip testing technique through permanent mold casting is included in **Annex A**.

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UNE CEN/WS SALEMA on Evaluation of flowability using multiple strip test moulds in HPDC processes for aluminium and its alloys

EURECAT: LEADER OF CWA #1 **eurecat**

PROPOSED CONTENTS:

European Forward Introduction

- 1 Scope
- 2 Normative references
- 3 Terms and Definitions
- 4 Technical Background
- 5 Test Material, Equipment and Fixture
- 7 Analysis of results

Annex A
Bibliography

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UNE CEN/WS SALEMA on Evaluation of flowability using multiple strip test moulds in HPDC processes for aluminium and its alloys

BACKGROUND

The current situation is:

- Different worldwide equipment and devices in the literature to determine the flowability of an aluminium alloy.
- Lack of a norm or standard procedure to measure alloy flowability.
- In general, test repeatability is not taken into account and some authors question test accuracy.

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FLUIDITY VARIABLES

Factors affecting overall fluidity of metals or alloys can be attributed into two main categories: **Melt based factors** and **Mold based factors**

Melt based factors:

- Material composition
- Viscosity
- Melt superheat
- Surface tension
- Metallurgical pressure
- Specific weight
- Melt cleanliness
- Solidification mechanism

Mold based factors:

- Mold material
- Mold temperature
- Mold permeability
- Mold coating
- Mold surface characteristics

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MOLD GEOMETRY

Based on literature, a mold with strips of different thickness was defined:

- 6 strips of thicknesses 1, 2, 5, 7, 9 and 11 mm were selected
- Each strip had a width of 20 mm and a total length of 228 mm
- The thinnest strips were located closer to the mold ingate and the thickest the furthest
- The distribution of strip thickness on both sides of the mold was done intending to keep it well balanced in terms of metal flow and temperature
- FEM simulations were conducted to assess mold geometry performance under different testing conditions

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MOLD GEOMETRY

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EXPERIMENTAL SET-UP

The set-up required to conduct the experiments consist of:

- An open furnace that could allow the extraction of molten metal with a hand ladle
- A molten metal skimmer, to remove the dross from the melt surface
- A hand ladle, it is recommended to be reinforced fiber, glass or ceramic
- A type-k thermocouple to measure the mold temperature
- A temperature probe to measure the melt temperature
- A thermoregulator unit to allow a constant stream of heated oil flowing inside the mold circuit

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OPERATING PROTOCOLS

- All experiments were conducted in an open environment with temperature of ~20° C.
- The mold was placed on perfectly horizontal surface and closed by aligning side holes.
- The ingots of given aluminium alloy were cleaned thoroughly with acetone to remove all dust and gray particles present on it before inserting into the furnace for melting to avoid any possible foreign inclusions.
- The dross was removed from the molten melt surface every time shortly before pouring into the mold.
- The ladle was preheated by placing over the furnace for ~5 min and hold inside the molten metal for ~15 s.
- The ladle filled with molten metal up to the same level in order to keep metalostatic pressure constant for all set of experiments.
- The filling of molten metal was standardized by targeting the same pouring zone in the pouring basin.
- Molten material was poured into the mould with constant pouring velocity and with the same pouring angle for all set of experiments.
- The temperature monitoring of molten metal and mold was performed consistently before conducting each experiment by mean of K-type thermocouples.
- After pouring the mold was opened after ~30 s to remove the casting.

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TEST RESULTS

- Tests at 3 different pouring temperatures were conducted: 680°C, 710°C and 740°C
- A minimum of 3 tests were performed in order to determine test variability and assess its repeatability

S	Fe	Co	Mn	Mg	Cr	Si	Zn	Pb	Ti	Zr	Ni
11.5	0.12	0.02	0.05	0.03	0.01	0.15	0.01	0.003	0.001	0.001	0.001

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UNE CEN/WS SALEMA on Evaluation of flowability using multiple strip test moulds in HPDC processes for aluminium and its alloys

8.1 Discussion and review of comments received

Project Plan 8.1

Resource Requirements of this WS

- **Free of charge** cost covered by UNE (but each participant shall cover their own costs for travel, accommodation, and subsistence in case of on-site meetings)
- **Free download** of published CWA, covered by UNE
- **Administrative costs** covered by SALEMA project through H2020 funding

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UNE CEN/WS SALEMA on Evaluation of flowability using multiple strip test moulds in HPDC processes for aluminium and its alloys

8.1 Discussion and review of comments received

Project Plan 8.1

Workshop Programme:

- EURECAT- Technology Centre of Catalonia
- UNE- Spanish Association for Standardization

DATE/TIME	TOPIC	LOCATION	PRESENTER
10/04/2024	Workshop Kick-off Meeting	EURECAT	Dr. Josep Ferrer
11/04/2024	Workshop Day 1	EURECAT	Dr. Josep Ferrer
12/04/2024	Workshop Day 2	EURECAT	Dr. Josep Ferrer
13/04/2024	Workshop Day 3	EURECAT	Dr. Josep Ferrer
14/04/2024	Workshop Day 4	EURECAT	Dr. Josep Ferrer
15/04/2024	Workshop Day 5	EURECAT	Dr. Josep Ferrer
16/04/2024	Workshop Day 6	EURECAT	Dr. Josep Ferrer
17/04/2024	Workshop Day 7	EURECAT	Dr. Josep Ferrer
18/04/2024	Workshop Day 8	EURECAT	Dr. Josep Ferrer
19/04/2024	Workshop Day 9	EURECAT	Dr. Josep Ferrer
20/04/2024	Workshop Day 10	EURECAT	Dr. Josep Ferrer
21/04/2024	Workshop Day 11	EURECAT	Dr. Josep Ferrer
22/04/2024	Workshop Day 12	EURECAT	Dr. Josep Ferrer
23/04/2024	Workshop Day 13	EURECAT	Dr. Josep Ferrer
24/04/2024	Workshop Day 14	EURECAT	Dr. Josep Ferrer
25/04/2024	Workshop Day 15	EURECAT	Dr. Josep Ferrer
26/04/2024	Workshop Day 16	EURECAT	Dr. Josep Ferrer
27/04/2024	Workshop Day 17	EURECAT	Dr. Josep Ferrer
28/04/2024	Workshop Day 18	EURECAT	Dr. Josep Ferrer
29/04/2024	Workshop Day 19	EURECAT	Dr. Josep Ferrer
30/04/2024	Workshop Day 20	EURECAT	Dr. Josep Ferrer

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UNE CEN/WS SALEMA on Evaluation of flowability using multiple strip test moulds in HPDC processes for aluminium and its alloys

8.1 Discussion and review of comments received

Project Plan 8.1

Kick-off meeting of this Workshop

The overall goals are:

- to **approve the Project Plan**
- to **develop a pre-standard (CEN Workshop Agreement- CWA)** on the evaluation of flowability using multiple strip test moulds in HPDC (High Pressure Die Cast) processes for the aluminium and its alloys.

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UNE CEN/WS SALEMA on Evaluation of flowability using multiple strip test moulds in HPDC processes for aluminium and its alloys

8.2 Adoption of the Project Plan (by consensus)

Project Plan 8.2

Draft of 2023-12-20
(CEN-CENELEC announcement)

Final Project Plan should be agreed today

Is there any comment about the content of Project Plan?

NO? YES?

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UNE CEN/WS SALEMA on Evaluation of flowability using multiple strip test moulds in HPDC processes for aluminium and its alloys

8.2 Adoption of the Project Plan (by consensus)

Project Plan 8.2

Draft of 2023-12-20
(CEN-CENELEC announcement)

Is there any comment about the content of Project Plan?

NO

NO comments have been received

Project Plan = APPROVED

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UNE CEN/WS SALEMA on Evaluation of flowability using multiple strip test moulds in HPDC processes for aluminium and its alloys

Draft Agenda

- 1 Opening of the meeting (0:30min) 5 min
- 2 Roll call of participants 10 min
- 3 Adoption of the agenda 5 min
- 4 Introduction on CEN and on the Workshop concept 20 min
- 5 General presentation of the Workshop 10 min
 - 5.1 Evaluation of the daily using multiple strip test moulds in HPDC processes for aluminium and its alloys
- 6 Flexibility of the presentation 10 min
 - 6.1 Adaptation to the High Pressure Die Casting (HPDC) process
- 7 Electronic approval of Workshop Chair (and Vice-Chair) of Confirmation of the Success 10 min
- 8 Project Plan 20 min
 - 8.1 Discussion and review of comments received
 - 8.2 Adoption of the Project Plan (by consensus)
- 9 Organization of the technical work 20 min
 - 9.1 Proposal of the CWA
- 10 Any other to address 5 min
- 11 Next meeting, Administration and their organization 10 min
- 12 Closure of the meeting

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UNE CEN/WS SALEMA on Evaluation of flowability using multiple strip test moulds in HPDC processes for aluminium and its alloys

9. Organization of the technical work

CWA development schedule

Task	Start	End	Duration
8.1 Kick-off meeting (online)	2024-04-29	2024-04-29	1
8.2 Adoption of the agenda	2024-04-29	2024-04-29	1
8.3 Introduction on CEN and on the Workshop concept	2024-04-29	2024-04-29	1
8.4 General presentation of the Workshop	2024-04-29	2024-04-29	1
8.5 Evaluation of the daily using multiple strip test moulds in HPDC processes for aluminium and its alloys	2024-04-29	2024-04-29	1
8.6 Flexibility of the presentation	2024-04-29	2024-04-29	1
8.7 Electronic approval of Workshop Chair (and Vice-Chair) of Confirmation of the Success	2024-04-29	2024-04-29	1
8.8 Project Plan	2024-04-29	2024-04-29	1
8.9 Organization of the technical work	2024-04-29	2024-04-29	1
8.10 Any other to address	2024-04-29	2024-04-29	1
8.11 Next meeting, Administration and their organization	2024-04-29	2024-04-29	1
8.12 Closure of the meeting	2024-04-29	2024-04-29	1

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UNE CEN/WS SALEMA on Evaluation of flowability using multiple strip test moulds in HPDC processes for aluminium and its alloys

9. Organization of the technical work

Workshop programme

CWA #1: Aluminium and its Alloys. Fluidity evaluation via multiple strip casting moulds

Task	Start	End	Duration
8.1 Kick-off meeting	2024-04-29	2024-04-29	1
8.2 Adoption of the agenda	2024-04-29	2024-04-29	1
8.3 Introduction on CEN and on the Workshop concept	2024-04-29	2024-04-29	1
8.4 General presentation of the Workshop	2024-04-29	2024-04-29	1
8.5 Evaluation of the daily using multiple strip test moulds in HPDC processes for aluminium and its alloys	2024-04-29	2024-04-29	1
8.6 Flexibility of the presentation	2024-04-29	2024-04-29	1
8.7 Electronic approval of Workshop Chair (and Vice-Chair) of Confirmation of the Success	2024-04-29	2024-04-29	1
8.8 Project Plan	2024-04-29	2024-04-29	1
8.9 Organization of the technical work	2024-04-29	2024-04-29	1
8.10 Any other to address	2024-04-29	2024-04-29	1
8.11 Next meeting, Administration and their organization	2024-04-29	2024-04-29	1
8.12 Closure of the meeting	2024-04-29	2024-04-29	1

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UNE CEN/WS SALEMA on Evaluation of flowability using multiple strip test moulds in HPDC processes for aluminium and its alloys

9. Organization of the technical work

DRAFTING PHASE:

- KOK Meeting, February 29**
 - **Deadline 2024-03-04:**
Deadline to dispatch the **1st Preliminary Draft of CWA** and circulation by UNE.
 - **Comments period #1 (Deadline 2024-03-18):**
Closing of the commenting period the **1st Preliminary Draft of CWA** **TEMPLATE for comments in Period #1**
 - **Deadline 2024-03-20:**
If comments have been received:
- Circulation of comments received from period #1 and the proposed resolution. Discuss at the first CEN/WS meeting, online on March 25, if applicable.

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UNE CEN/WS SALEMA on Evaluation of flowability using multiple strip test moulds in HPDC processes for aluminium and its alloys

9. Organization of the technical work

DRAFTING PHASE (continued):

- First CEN/WS Meeting, March 25**
 - **Deadline 2024-03-26:**
- After the first CEN/WS meeting, online on March 25, move the agreements to the CWA.
- Deadline to dispatch the **2nd Draft of CWA**.
 - **Comments period #2 (Deadline 2024-04-09):**
Closing of the commenting period the **2nd Draft of CWA** **TEMPLATE for comments in Period #2**
 - **Deadline 2024-04-11:**
If comments have been received:
- Circulation of comments received from period #2 and the proposed resolution. Discuss at the second CEN/WS meeting, online on March 25, if applicable.

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UNE CEN/WS SALEMA on Evaluation of flowability using multiple strip test moulds in HPDC processes for aluminium and its alloys

9. Organization of the technical work

DRAFTING PHASE (continued):

- Second CEN/WS Meeting, April 18, if applicable.**

At the end of the Drafting phase:

Final approval of CWA (by consensus in the WS): **Target Deadline 2024-04-22**

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UNE CEN/WS SALEMA on Evaluation of flowability using multiple strip test moulds in HPDC processes for aluminium and its alloys

9. Organization of the technical work

Last-FINALIZATION PHASE:

If the Final approval of CWA, Deadline 2024-04-22

- Deadline 2024-04-22:**
Submission to CEN
- Publication - Maybe June or July of 2024

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UNE

Draft Agenda

1	Opening of the meeting (10:30h)	5 min
2	Roll call of participants	10 min
3	Adoption of the agenda	5 min
4	Introduction on CEN and on the Workshop concept	25 min
5	General presentation of the Workshop	15 min
6	Feasibility of other presentations	15 min
7	Electoral and appointment of Workshop Chair (and Vice-Chair), Confirmation of the Secretariat	10 min
8	Project Plan	20 min
9	Organization of the technical work	20 min
10	Any other business	5 min
11	Next meeting, Instructions and their assignment	10 min
12	Closure of the meeting	

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UNE

Questions?

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UNE

Draft Agenda

1	Opening of the meeting (10:30h)	5 min
2	Roll call of participants	10 min
3	Adoption of the agenda	5 min
4	Introduction on CEN and on the Workshop concept	25 min
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10	Any other business	5 min
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12	Closure of the meeting	

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UNE CEN/WS SALEMA on Evaluation of flowability using multiple strip test moulds in HPDC processes for aluminium and its alloys

All work will be done by correspondence.

Next meetings

In principle and to be confirmed, depending on the comments received:

- First meeting, March 25**
- Second meeting, April 18, if applicable.**

Nevertheless, depending on the nature and relevance of the comments

- well-received **after the draft circulation** among CEN/WS participants
- or
- well-received **through the CEN website** for any other organisation,

new (online) meetings could be scheduled and announced if necessary.

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H.4 Other related disseminations

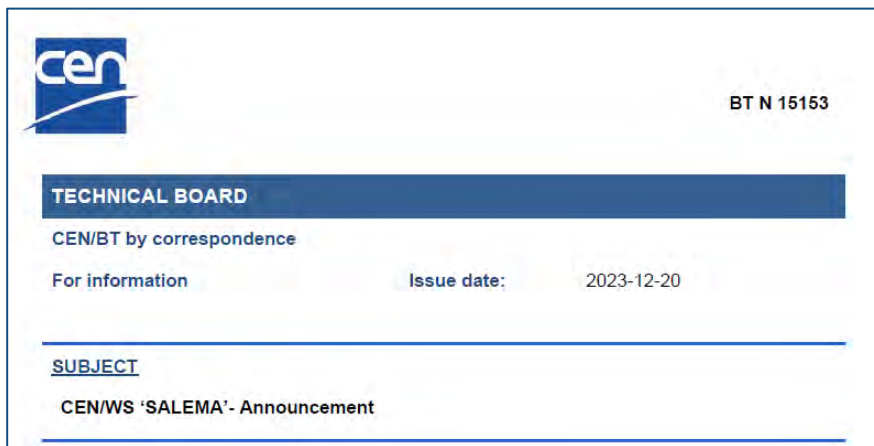
Dissemination through “Revista UNE”:

[Actualidad. Futuro estándar europeo para aluminio y sus aleaciones \(une.org\)](https://www.une.org/actualidad/futuro-estandar-europeo-para-aluminio-y-sus-aleaciones)



The screenshot shows the UNE website interface. At the top left is the UNE logo with the text "LA REVISTA DE LA NORMALIZACIÓN ESPAÑOLA". To the right are navigation links: "Inicio", "Web UNE", "Revistas anteriores", and "Contacto". Below these is a search bar with the placeholder "Escriba un término" and a "Buscar" button. A dark blue header bar contains "Nº 67 | MARZO | 2024" and a menu icon. The main content area features a "Noticias UNE" section with a sub-label "ACTUALIDAD". A featured article is titled "Futuro estándar europeo para aluminio y sus aleaciones". It includes a thumbnail image of the SALEMA project with the tagline "Driving sustainable aluminium" and the URL "salemaproject.eu". The article text states: "El 29 de febrero tuvo lugar la reunión de lanzamiento del Workshop de CEN y CENELEC SALEMA sobre evaluación de la fluidez utilizando moldes de prueba de múltiples tiras en procesos HPDC para aluminio y sus aleaciones. La secretaria de este Workshop es Isabel Linares, Responsable de Negocio Industria y Equipamiento de UNE. El plan del proyecto fue aprobado e iniciado por los socios UNE y EURECAT. Ya se ha finalizado el texto final del estándar europeo CWA: "Aluminio y sus aleaciones: evaluación de la fluidez mediante moldes de prueba de múltiples tiras". Los próximos pasos consistirán en iniciar la fase de finalización del documento normativo y su publicación."

Dissemination through Technical Board – CEN/BT by correspondence: CEN/WS “SALEMA” Announcement



The screenshot shows a CEN Technical Board announcement. At the top left is the CEN logo. To the right is the reference "BT N 15153". Below this is a dark blue bar with the text "TECHNICAL BOARD". Underneath, it says "CEN/BT by correspondence". There are two buttons: "For information" and "Issue date: 2023-12-20". A horizontal line separates this from the "SUBJECT" section, which contains the text "CEN/WS 'SALEMA': Announcement".



The screenshot shows a workshop announcement. On the left is a photograph of a metal mold. To the right, there is a "WORKSHOP" label and the date "2023-12-19". The main text reads: "CEN Workshop SALEMA 'Evaluation of flowability using multiple strip test moulds in HPDC processes for aluminium and its alloys'". Below this, it says: "This CEN/WS intends to develop a CWA (Workshop Agreement); Tentative title: 'Aluminium And Its Alloys. Fluidity Evaluation Via Multi Strip Testing Moulds'". At the bottom right is a "→ READ MORE" link.



Invitation to Kick-off Meeting of the SALEMA CEN WORKSHOP: Towards standardization



TOWARDS STANDARDISATION
CEN Workshop Agreement kick-off meeting
29 February 2024: 10:30–13:00 CET

'Aluminium And Its Alloys. Fluidity Evaluation Via Multi Strip Testing Moulds'

REGISTER!
All interested parties invited

DEADLINE:
9 February 2024

News

Towards standardisation: register for SALEMA CEN workshop kick-off

26 January 2024

On 29 February 2024, the EU-funded SALEMA project in conjunction with the European Committee for Standardization (CEN) will hold the online kick-off meeting for a ... [Read more](#)

Aluminium, CEN Workshop Agreement, CEN-CENELEC, Event, Fluidity, SALEMA, Standardisation

Invitation for CEN/TC 132 experts to the first SALEMA Workshop.

RV: News- Invite you to the first WORKSHOP organized within SALEMA's project (Horizon 2020: SALEMA project. CEN/TC 132 ...

Isabel Linares Nicolas
Para: valentin.cottin@afnor.org

Responder Responder a todos Reenviar

ju. 29/09/2023 14:30


Dear Mr V. Cottin,

I am contacting you because we would like to invite you to the first workshop organized by EAE within SALEMA's project: *Driving sustainable aluminium: recycling and critical raw materials for aluminium alloys in mobility* which will take place online on November 8th and 9th.

I would also be grateful if you could inform the experts participating in CEN/TC 132 & ISO/TC 7, and its active Working Groups about this relevant event, using the electronic platform (CEN Documents & ISO documents). Thank you

The workshop aims to address the challenges and opportunities of CRM reduction for aluminium alloys in e-vehicles. European Aluminium is pleased to have Bernd Schäfer, CEO & Managing Director of EIT Raw Materials, as the keynote speaker who will address the CRM policy strategy supporting e-mobility in Europe. These aspects will be addressed from policy (Session 1), market (Session 2), and technological (Sessions 3 & 4) perspectives. Additionally, synergies with other EU projects will be analysed in Session 4.

You can register and view the agenda [here](#).



Thank you in advance

Best regards




Annex I – CWA 18112 published. SALEMA project

I.1 prCWA SALEMA- Fluidity evaluation via multi-strip testing moulds for aluminium and its alloys

- CWA proposal made by the SALEMA consortium and led by EURECAT:

Task 8.2 Standardisation activities



CWA Candidate: A EURECAT proposal

Candidate CWA #1 from EURECAT

Title:
SALEMA. Aluminium and aluminium Alloys. Evaluation of Fluidity in Aluminium Casting Alloys

Scope:
This CEN Workshop Agreement (CWA) is aimed at proposing a mould geometry and experimental procedure to carry out a robust and repetitive fluidity test for aluminium alloys.

Being the filling behaviour of die and mould cavities, in foundry processes, controlled by the viscosity of the liquid metal/alloy employed, the technological relevance of viscosity is very high. However, experimental data on viscosity of liquid metals and alloys are lacking, due to the difficulty in carrying out high temperature viscosity tests. The evaluation of fluidity, intended as a technological property of metals and alloys representing the inverse of viscosity, can supply fundamental information to be used in foundry process.

M24

Content:

- European foreword
- Introduction
- 1 Scope
- 2 Normative references
- 3 Terms and definition
- 4 Mould geometry for fluidity test
- 5 Test procedure
- Bibliography

- CEN-CENELEC confirmed that the publication date of the CWA 18112 will be 2024-05-08:

De: Simon Sébastien <SSimon@cencenelec.eu>
Enviado el: viernes, 19 de abril de 2024 11:03
Para: Isabel Linares Nicolas <ilinares@une.org>; Mail dataservice <dataservice@cencenelec.eu>
CC: Alairy Kursley <KAlairy@cencenelec.eu>; Taran Bugarin Nicoleta <ntaran@cencenelec.eu>; Mail Accounting <Accounting@cencenelec.eu>
Asunto: RE: CEN/WS SALEMA- Publication CWA

Dear Isabel,

Thank you for informing us about your submission!

Given the current workload of our editors, it will, unfortunately, not be possible to commit to a publication date of 2024-04-26.

The latest publication date we can commit to would be 2024-05-08.

Kind regards,

Sébastien SIMON
Project Manager – Process Transformation / Coordination & Procedures – Standardization



I.2 Publication of CWA 18112:2024

CEN **CWA 18112**
WORKSHOP **May 2024**
AGREEMENT

ICS 77.120.10

English version

Aluminium And Its Alloys - Fluidity Evaluation Via Multi Strip Testing Moulds


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References

For the elaboration of this report, the following sources have been consulted:

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- ISO Website (www.iso.org)
- ISO Project Portal (isotc.iso.org) (restricted to authorized users)
- ETSI Website (www.etsi.org)
- IEC Website (www.iec.ch)
- EUR-Lex (eur-lex.europa.eu)
- European Commission Mandate database (<https://single-market-economy.ec.europa.eu>)
- European Commission Energy website (<https://energy.ec.europa.eu>)
- Common Patent Policy for ITU-T/ITU-R/ISO/IEC ([Common Patent Policy for ITU-T/ITU-R/ISO/IEC](#))

