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NANO—S—MART®

Communication & Dissemination Plan

Deliverable 9.1

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Project Technical References

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[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)

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EXECUTIVE SUMMARY

The present document (D9.1) outlines the dissemination, exploitation and communication activities planned for the whole duration of the Nano-S-Mart project. Effective communication and dissemination of the project's activities and results are of major importance to maximize impact in the academic and industrial communities and society at large. These actions ensure that the concept and results of a project reach potential end users and other relevant stakeholders.

The document describes the communication channels, tools, and targeted results. It defines responsible partners and collaborators and provides guidelines about events, publications, press releases, and social media. It will also outline the dissemination management policy and methodology and the dissemination tools. Furthermore, it describes the preliminary exploitation strategy. The plan will be updated at intervals linked to the reporting schedule.

DISCLAIMER

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the Health and Digital Executive Agency (HADEA). Neither the European Union nor the granting authority can be held responsible for them.

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ABBREVIATIONS AND ACRONYMS

Abbreviations / Acronyms	Description
CSP	Clean Steel Partnership
ESTEP	European Steel Technology Platform

1 INTRODUCTION

This document is the first deliverable of Work Package 9 “Project Dissemination” and intends to outline the communication and dissemination activities to be carried out along the project lifecycle to achieve its objectives. This WP will focus on maximizing the impact of the project, raising awareness and delivering results in an accessible manner for the international scientific community as well as potential end-users. Results will be mapped from the beginning and updated throughout the project with dissemination and exploitation routes defined for each.

In the early stages of the project, efforts will focus on raising awareness about the project's existence and showcasing the expertise of the partners involved. As the project progresses and validated results become available, the emphasis will shift toward sharing these outcomes and insights with a broader academic, research, and industrial audience to drive impact, support education, and encourage further development.

The timing of dissemination activities will align with these two phases, following a strategic and well-managed Communication, Dissemination, and Exploitation (C, D & E) plan. All project partners will contribute to the dissemination and communication of results, as detailed in the sections that follow.

Article 17 of the Grant Agreement mentions the obligation of disseminating the results of the project, the beneficiaries must promote the action and its results by providing targeted information to multiple audiences (including the media and the public), in accordance with Annex 1 and in a strategic, coherent and effective manner. Task 9.1 was included in the work program to articulate the Communication and Dissemination plan in fulfilment of this obligation. This report details the planning for this dissemination work (i.e. who will perform each activity, to which audience, when, where and how). The dissemination and communication plan will be updated twice during the project, in month 24 and month 46.

1.1 Article 17 of the Grant Agreement

Especially relevant are the instructions regarding the acknowledgement of EU funding.

17.1 Communication — Dissemination — Promoting the action

Unless otherwise agreed with the granting authority, the beneficiaries must promote the action and its results by providing targeted information to multiple audiences (including the media and the public), in accordance with Annex 1 and in a strategic, coherent and effective manner. Before engaging in a communication or dissemination activity expected to have a major media impact, the beneficiaries must inform the granting authority.

17.2 Visibility — European flag and funding statement

Unless otherwise agreed with the granting authority, communication activities of the beneficiaries related to the action (including media relations, conferences, seminars, information material, such as brochures, leaflets, posters, presentations, etc., in electronic form, via traditional or social media, etc.), dissemination activities and any infrastructure, equipment, vehicles, supplies or major result funded by the grant must acknowledge EU support and display the European flag (emblem) and funding statement (translated into local languages, where appropriate):







Funded by the
European Union



Co-funded by the
European Union

The emblem must remain distinct and separate and cannot be modified by adding other visual marks, brands or text. Apart from the emblem, no other visual identity or logo may be used to highlight the EU support. When displayed in association with other logos (e.g. of beneficiaries or sponsors), the emblem must be displayed at least as prominently and visibly as the other logos. For the purposes of their obligations under this Article, the beneficiaries may use the emblem without first obtaining approval from the granting authority. This does not, however, give them the right to exclusive use. Moreover, they may not appropriate the emblem or any similar trademark or logo, either by registration or by any other means.

17.3 Quality of information — Disclaimer

Any communication or dissemination activity related to the action must use factually accurate information. Moreover, it must indicate the following disclaimer (translated into local languages where appropriate): "*Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or [name of the granting authority]. Neither the European Union nor the granting authority can be held responsible for them.*"

17.4 Specific communication, dissemination and visibility rules

Specific communication, dissemination and visibility rules (if any) are set out in Annex 5.

17.5 Consequences of non-compliance

If a beneficiary breach any of its obligations under this Article, the grant may be reduced (see Article 28).

Such breaches may also lead to other measures described in Chapter 5.

2 COMMUNICATION AND DISSEMINATION STRATEGY

2.1 Objectives

The Nano-S-Mart consortium constitutes a balance of industrial partners and research groups. In this respect, this dissemination plan will demonstrate how this variety of partners will contribute to the widespread dissemination of the NANO-S-MART outcomes.

The NANO-S-MART project will raise awareness of modern steelmaking processes using scrap and hereby realizing enormous reductions in CO2 emissions. The dissemination measures planned imply effective knowledge-sharing of research results and good practices to the scientific community. It will also promote the use of the project results by relevant actors outside the project consortium: this strategy aims at strengthening the innovation capability of the consortium partners and the steel industry beyond the project. The dissemination activities are planned to reach the relevant target groups as listed in the section.

Communication measures will support the dissemination and exploitation of work throughout the lifespan of the project. The aim is to inform and interact with the steel industry, the scientific community, scrap producers, users of martensitic steels, policy makers and citizens. Relevant cooperation with other projects and initiatives that will bring value and resources to the project will also be a key opportunity for advertising NANO-S-MART activities. The work will be linked to the PR and communication teams of the four partners within the work, strengthening the spreading of results from the project to different target groups. The following section identifies the main targeted groups of this project.

2.2 Target groups

The following target groups encompassing the wider value chain are identified and NANO-S-MART will disseminate results and bring value to them:

- **The metallurgical scientific community:** Decarbonisation of steelmaking and innovative use of steel is continuously raising fundamental questions for metallurgical scientists, in particular related to micro- and nano-scale characteristics. This project uses the most modern techniques for nano-scale metallurgical research (cfr, APT, nano-indentation, micro/nano-fracture mechanics, ab initio simulations) on a systematic material set-up. Multiple fundamental questions which are not understood today will hence be tackled and answered, and this knowledge will be shared with the scientific community, as such raising scientific understanding.

- **The steel industry:** The decarbonization of steel production is a huge challenge for steel research in the coming 2 decades. After decades of focus on the development of new and ever-better steel products, a new challenge will dominate steel research in the coming years: redesigning the existing steel products to make them compatible with the clean processes that will be implemented in the coming years. Those that do this best will have a clear competitive advantage over the others.

- **End-users of martensitic steel products:** Martensitic steels play a crucial role in various sectors, e.g. construction, automotive, energy, and defense. Within all these sectors, providing “greener” products is an important competitive advantage. The brand image of the companies using “low CO2” steels can

improve and at the same time would be prepared to comply with future EU regulations in terms of sustainability and environmental impact of industrial products. Hence, there is also a strong push from the end users towards suppliers to provide them with materials with a lower CO2 footprint.

- **Scrap suppliers:** Scrap will become a more important raw material and the economic value of scrap will certainly rise. Scraps are currently classified in different qualities according to the chemical composition of their metallic share, and the levels of (so-called) impurities among others. The expected increase in scrap use for steel production, will induce:

  A need for advanced assessment of scrap quality, especially for their use in production of the most demanding grades such as martensitic steels, with imposing limits on allowable levels of residual elements.

  A need for reclassification of the different scrap qualities based on allowable levels of residuals.

- **Policy makers and citizens:** Towards the broader public and policy makers, it is of great importance to underline the efforts of the European steel industry to decarbonize its production via enormous modernization of its facilities and adoption of circular economy principles. Projects such as NANO-S-MART will serve to explain in an accessible way the challenges that are tackled. This will be done via dedicated communications.

2.3 Collaboration with other projects and initiatives

The NANO-S-MART project will seek within Clean Steel Partnership synergies with projects and initiatives at national and international levels to exchange information, jointly consider policy and standardization issues, discuss technical developments, and manage joint C&D activities for a multiplier effect. Activities would also include presentation of the technical results, exchange of information and carbon reduction potential based on the LCA analysis with the Clean Steel Partnership. Periodic contacts with CSP and ESTEP will be pursued together with a proactive presence in CSP events and seminar. Two members in the consortium, UGent and OCAS-AM, are active ESTEP members.

3 COMMUNICATION ACTIVITIES AND TOOLS

Original, engaging, and audience-specific content will be developed to enhance the visibility of NANO-S-MART objectives, achievements, benefits, and broader societal and industrial impact. The content will be crafted to resonate with both expert audiences and the general public. As such, it will be adapted to the needs of each target group ensuring that project outcomes are conveyed effectively, using the appropriate tone and level of accessibility.

To maximize outreach, a variety of content formats and communication channels will be employed. This layered communication approach will reinforce dissemination and exploitation activities, raising awareness of NANO-S-MART developments. Similarly, content development and distribution will remain dynamic and responsive throughout the project, allowing for timely and impactful delivery. This flexibility ensures that each piece of content is strategically released for optimal visibility and engagement.

3.1 Nano-S-Mart branding and visual identity

The project identity was set at the beginning of the project and has been designed by a professional designer. The project identity will help dissemination activities and ensure a consistent communication of the project concept, objectives and results.

3.1.1 Project logo

Multiple versions of the logo were created to be used in all communications products and official documents in front of different backgrounds; white or dark, in a long or short version (see Figure 1). This will allow to stand out in a range of digital and print media. All files are available on the Nano-S-Mart Teams Site.

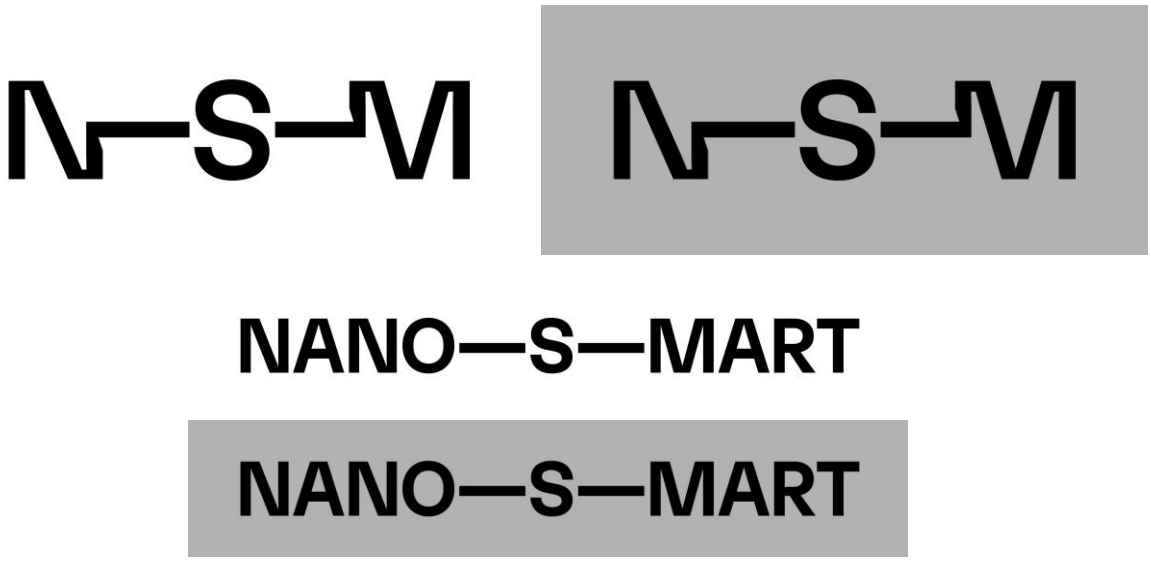


Figure 1 Logo of Nano-S-Mart project.

3.1.2 Templates

Following graphical guidelines, templates for the project's official documentation (deliverables, presentations, meeting minutes) were developed in coherence with the project's visual identity. All templates are available on the Nano-S-Mart Teams Site and should be used for all internal and external project communication.

All partners will use the Nano-S-Mart templates to apply a consistent look for all project documents. The following templates will be designed and shared with all project partners:

- Deliverable (Microsoft Word) - see Figure 2.
- Meeting Minutes (Microsoft Word)
- Presentation Template (Microsoft PowerPoint)

The NANO-S-MART templates follow the guidelines provided by the EC and will contain the layout of the title page, the layout of headers and footers and styles that are to be used in the documents.

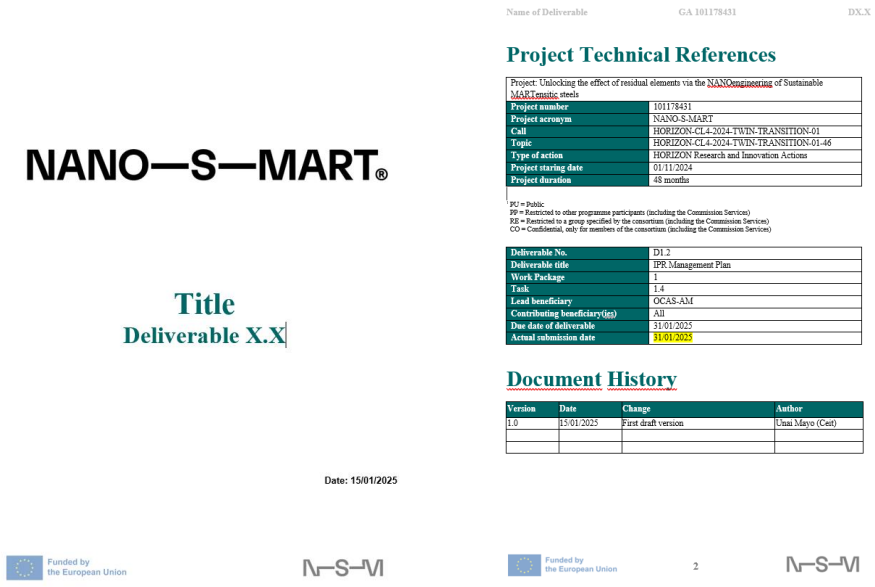


Figure 2 Example of deliverable template.

3.2 Communication tools

As mentioned earlier, to reach the widest possible audience, different content types and communication channels will be employed:

3.2.1 Website

The Nano-S-Mart webpage is hosted at *https://www.nano-s-mart.eu/*. It was launched at the end of M3 (January 2025), and will be the main communication tool for the project and the primary information source for the Nano-S-Mart target groups. Hence, the website address will be included in all project's communication material.

The website URL was strategically chosen to ensure that parties interested in the topic of the project easily find their way to the website. The purpose of the website will be to proactively promote the project and its results by providing targeted information to different audiences. It will be used to promote the research results, inform interested public, as well as communicate among the members of the consortium. The website will be the external representation of the project with the widest target group.

The website will be updated frequently with the project activities: meetings, announcement of events, conferences workshops, as well as with progress and achievements. The home page of the site is shown in Figure 3.

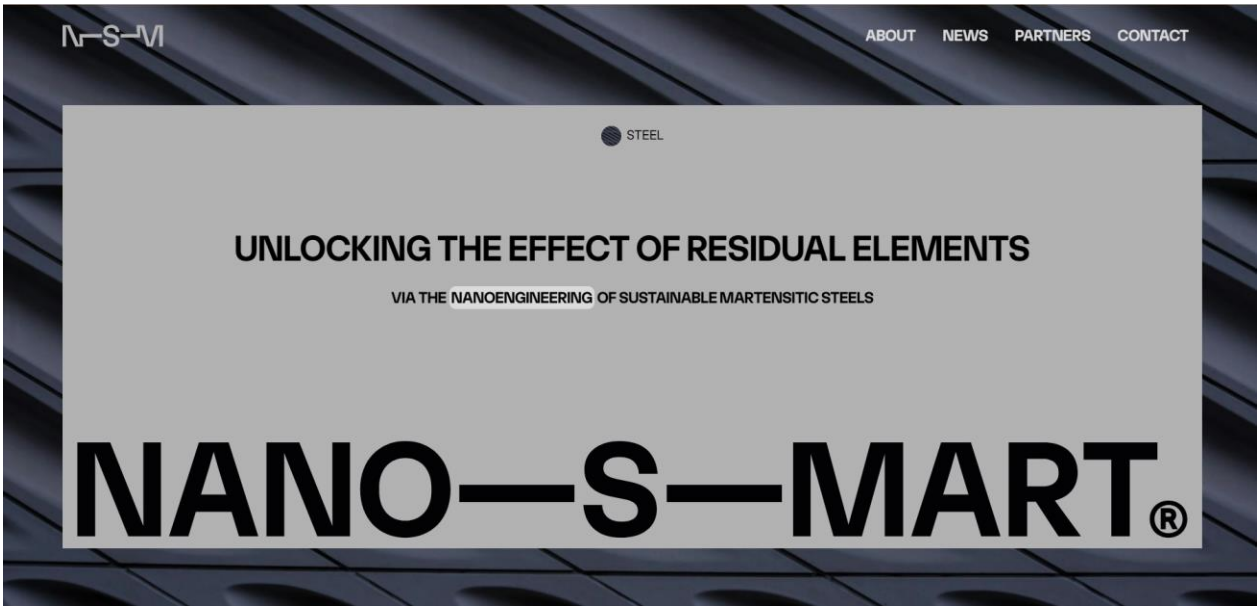


Figure 3 Nano-S-Mart Website homepage.

The project coordinator (CEIT) will maintain the web site during the entire project lifetime, and the rest of the partners will play a leading role in promoting public exposure and awareness of the project by providing content and the link to the Nano-S-Mart public website in their institutional websites or social media.

To measure the website traffic, gather more information on how visitors find and use the website and determine how to ensure periodic visits, will be performed through Google Analytics.

The most relevant metrics to be monitored are:

- Total number of visits
- Average sessions and visit duration
- Language and location of visitors
- Number of frequent- and one-time visitors

3.2.2 Social Media

Social media will play an important role in the project`s activities. The main objective is to create a Nano-S-Mart community to increase the visibility and impact of the project achievements and results.

Due to the industrial and scientific nature of the project, the key social media channels selected for Nano-S-Mart is LinkedIn, which is used by a wide range of professionals and companies.

The number and type of posts on LinkedIn will vary throughout the project lifetime. At the beginning of the project we will post information about meetings and events. Once the consortium gets the first results such as publications, articles etc , LinkedIn will be used for promoting these and highlighting the benefits of the proposed technologies. Ceit is responsible for publishing on Linkedin, but all the beneficiaries are asked to provide to Ceit with any relevant news, ideas, material, etc. Furthermore, beneficiaries are encouraged to use their own social media profiles and networks to increase the visibility of the project.

Summarizing Linkedin will be used to promote project action; to send messages among the technical audience, policy makers and stakeholders; and to foster networking.

LinkedIn account for Nano-S-Mart project: https://www.linkedin.com/company/nano-s-mart-project

3.2.3 Press Releases

The Nano-S-Mart project will also advertise its main achievements and/or events through the publication of the official press. The press releases will outline what Nano-S-Mart is, which are the objectives, which are the benefits of the innovation, what is the expected impact, who form the partnership, and what is the finding or event justifying the press release. It is expected that also some consortium members will have the chance of publishing at least one press releases during the project lifetime. Press releases will be written in English, but translated into different languages to maximize their impact. They will be sent to general media at national level.

The first press release, related to the project's kick-off meeting, was published at the beginning of the project in both English and Spanish on Ceit's website.

Ceit leads the transition towards sustainable steels with the NANO-S-MART project

Additionally, several press releases about the same kick-off meeting were published in various Spanish industrial magazines.

https://www.interempresas.net/MetalMecanica/Articulos/587489-Ceit-lidera-la-transicion-hacia-aceros-sostenibles-con-el-proyecto-europeo-NANO-S-MART.html

https://fedit.com/2025/02/el-centro-tecnologico-ceit-lidera-la-transicion-hacia-aceros-sostenibles-con-el-proyecto-nano-s-mart/

https://www.metalesymaquinas.com/texto-diario/mostrar/5166347/ceit-lidera-transicion-hacia-aceros-sostenibles-proyecto-nano-s-mart

3.2.4 Project Video

A short (3-5 minutes) project video will be published at the end of the project (M48), explaining the topic, highlighting the objectives and showing the most relevant results of the project to the lay audience. The video will be made available on YouTube / LinkedIn / social media channels of partners and distributed among science journalists. The video will be made in English, with subtitles in certain EU languages.

3.2.5 Internal communication

Communication inside the consortium is facilitated by the project coordinator. Planed general meetings, when not in person, are organized via Microsoft Teams. For document sharing within the consortium, a Microsoft Teams Site was created by the project coordinator.

3.3 Overview of planned communication activities

Table 1 summarizes the planned communication actions.

Table 1 Planned communication actions of NANO-S-MART, with timing, target groups, and KPIs.

Action	Time	Targeted groups	Description	KPIs
Project website	M1	All	Creating an *open-access* website describing the aims, WPs, and impacts of the project	Reaching out more than 500 visits per year
News release on the project kick-off	M2	All	Using social media to introduce the project and partners with photos of the project kick-off meeting and link to the project website	Reaching out more than 100 visits in total
Social media	M1-M48	All	Post regularly on technical & scientific progress/achievements by sharing e.g., public deliverables, publications, and other project-relevant content on LinkedIn.	More than 500 followers. More than one post per month.
Project video	M31-M48	Public at large and scientific community	A 3-5 minute *open-access* project video will be published that explains the topic and the project results to a lay audience.	One short video edition

4 DISSEMINATION ACTIVITIES

NANO-S-MART's dissemination strategy and activities are designed to ensure that the project's outcomes—such as concepts, scientific results, methodologies, and developed tools—are effectively shared with the appropriate target audiences.

4.1 Scientific publications

NANO-S-MART will significantly strengthen EU's scientific base in (martensitic) steel characterization and understanding at macro, micro and nano-scale. Multiplicative effects of the conducted research may be expected via the generation and publication of new future-proof knowledge, with potential spill over potential towards other steel types. Via the strong involvement of multiple research and academic partners, the project will also positively impact EU human capital in related topics for the current and future generations.

The following potential scientific journals have been identified for the publication:

- Acta Materialia
- Scripta Materialia
- Sustainable Materials and Technologies
- Journal of Materials Research and Technology
- Metallurgical and Materials Transactions A
- Materials Science and Engineering A
- Steel Research International
- Metals
- Materials Science Forum
- Materials & Design

4.2 Scientific conferences and fairs

Project findings will be presented (via oral or poster sessions) at national and international conferences and fairs such as:

- THERMEC
- MSE
- MS&T
- TMS

- MRS
- ECI
- Euromat
- ICOMAT

4.3 Online Course

A self-contained online course module (open and free) for skill development will be prepared that can be integrated by teachers in their materials. The course is intended for those who want to learn about this topic at a more technical level (end of bachelor or beginning of master level). The course module will be offered online, for free and forever, in a format suitable for self-paced study as well as for adoption/illustration in bachelor courses. It is a complementary way to reach people we would not reach at conferences.

4.4 Workshops

A workshop will be organized at the end of the project to show the most relevant achievements of the project. Ceit will organize this workshop in the frame of a big conference (such as MSE-Germany, Thermec, etc.) with the active collaboration of all the partners in order to get a higher audience and dissemination impact. Information on the workshop will be sent to the Commission and the Clean Steel Partnership. The target attendance will be: Project partners, Steelmakers, Technological Platforms and Associations, and the Scientific Community.

4.5 Overview of planned communication activities

Table 2 summarizes the planned dissemination actions.

Table 2 Planned dissemination actions of NANO-S-MART, with timing, target groups, and KPIs.

Action	Time	Targeted groups	Description	KPIs
Participation Conferences	M6-M48	Scientific community; steel industry	Project findings will be presented (via oral or poster sessions) at national and international conferences such as the International Conference on Processing & Manufacturing of Advanced Materials (THERMEC), MSE in Germany, MS&T and TMS Conferences and similar symposia.	8 or more, with some possibly after the project (first year after the project)
Organizing a thematic workshop, seminar - liaison with related	M46-M48	Scientific community; Steel industry; Scrap suppliers;	One thematic workshop or mini-symposium will be organized on the theme of "impact of scrap recycling on (martensitic) steels". This workshop will be held at a major conference in order to maximize people attendance and dissemination	Attracting more than 40 participants to the event.

projects and initiatives		Policy makers		
Participating and organizing science events	M6-M48	Public at large and policy makers	The project partners will participate in European or local science events targeting the broader public, e.g., school students.	Two European or local science events
Online course	M31-M48	Public at large and scientific community	A self-contained online course (*open-access* and free) will be prepared oriented to teachers for their materials, physics or engineering courses.	Online course module
Open access Publications	M6-M48	Scientific community; Steel industry	Project findings will be published in *open-access* format in peer-reviewed scientific journals (e.g. Acta Materialia, Scripta Materialia, Metallurgical Transaction A, Sustainable Materials and Technologies).	An average of 3 journal articles per partner (a total of 12 or more).