

Table of contents

1	Introduction	2
1.1	Purpose and scope.....	2
1.2	Approval process.....	2
1.3	Applicability.....	2
2	Context and objectives of the project.....	3
2.1	Context.....	3
2.2	Objectives	3
3	Communication strategy	3
3.1	Objective.....	3
3.2	Target groups	4
3.3	Messages	4
3.3.1	Key messages	4
3.3.2	Targeted messages.....	5
4	Communication tools and materials.....	5
4.1	Visual identity.....	5
4.1.1	Logo.....	5
4.1.2	Project presentation template.....	6
4.1.3	Roll up	6
4.2	Project website	8
4.2.1	Website Key performance Indicators (KPIs)	8
4.3	Newsletters	9
4.4	Videos.....	10
4.5	Poster.....	10
4.6	Other materials	10
4.7	Obligations towards the European Commission	10
5	Scientific dissemination.....	10
5.1	MSP-REFRAM Workshops.....	10
5.2	Final Conference	11
5.3	Events.....	11
5.4	Scientific publications	11
5.5	Scientific dissemination Key performance Indicators (KPIs).....	12
6	Overview of communication activities & other dissemination actions.....	12
7	Conclusion	13

1 Introduction

1.1 Purpose and scope

Communication and dissemination activities have become a top priority in European collaborative research projects funded under the EU's Horizon 2020 programme.

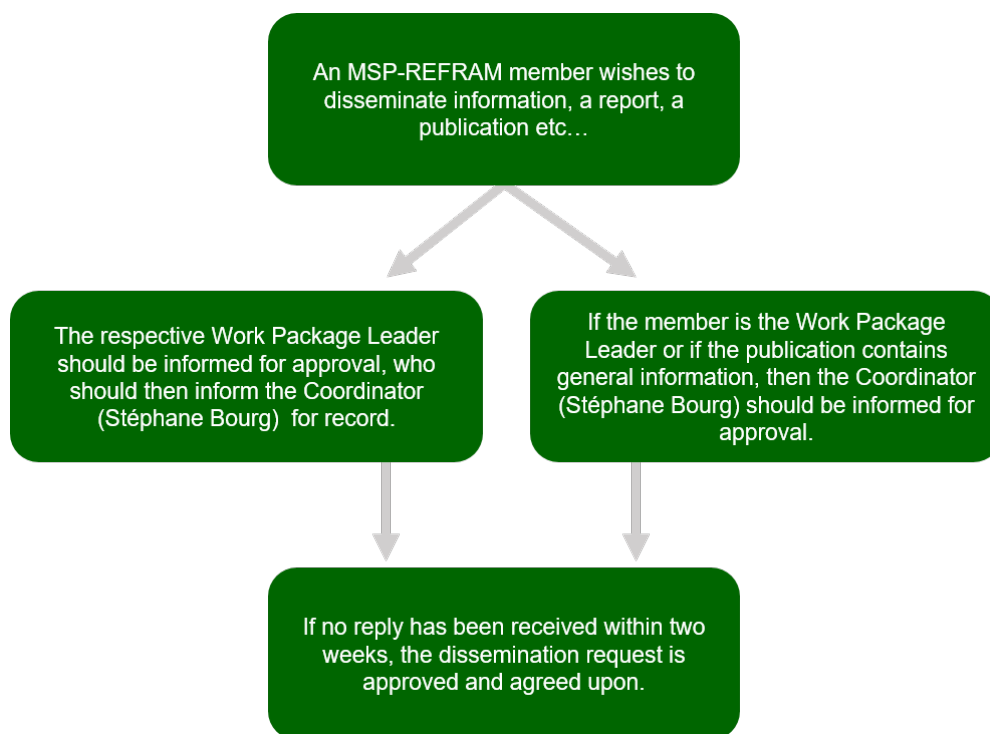
The main purpose of deliverable D7.3 is to describe the Communication Strategy of MSP-REFRAM and to give visibility to the entire process. This document includes a section on the context of the project and identifies the communication objectives, the target groups and the key messages. The document also defines the tools used to communicate with the audience and to disseminate the project's results.

The scope includes all actions taken in and outside the project in terms of knowledge dissemination and public communication on the project and its results.

Communication actions will be continuously monitored and updated accordingly in this document.

1.2 Approval process

An approval process, illustrated below, has been defined for the dissemination of information on the project.



1.3 Applicability

The plan is applicable to all project partners, subject to the defined communication process, for the duration of the MSP-REFRAM project.

2 Context and objectives of the project

2.1 Context

A secure access to refractory metals (tungsten, tantalum, rhenium, molybdenum and niobium) is highly strategic. They provide a number of unique characteristics – such as resistance to high heat, corrosion and wear – making them critical in a multitude of applications. Today, with the exception of rhenium, these metals are mainly imported from China (Tungsten, Tantalum and Molybdenum), Brazil (Niobium and Tantalum) and Chile (Molybdenum and Rhenium) but also from USA, Canada, etc.

The European primary production of these metals represents only a small share of the global production – only Rhenium is produced in significant amounts in the EU (Poland produces 15% of the world production, 2013) and Tungsten, which is produced in Austria, Spain and Portugal (total EU production represents about 2.7% of the world production). And although Tantalum is mainly mined in Africa, China remains the first Tantalum processing country. According to USGS, the impact of trade restrictions applied by China is therefore highly visible to the consumer. In addition, the EU argued in 2009 that Chinese export restrictions on raw materials will cost EU companies at least €20 billion on a yearly basis.

Refractory metal resources exist in Europe: while they are limited in primary resources (ores), these metals are likely to be found in secondary resources (industrial waste and urban mines). Refractory metals are already being recycled from super alloys to some extent (more than 50% for Niobium and Rhenium; between 25% and 50% for Molybdenum, between 10% and 25% for Tungsten but less than 1% for Tantalum).

In this context, it would be possible to improve the supply value chain in the coming years if industry, in line with European regulations and standards, develops a better use of secondary or tertiary resources that can be found in these wastes, optimises the use of external resources such as energy and water and at the same time reduces the amount and the toxicity of the waste.

MSP-REFRAM will contribute to improving the refractory metals supply chain by identifying:

- Secondary and primary resources of refractory metals available for Europe
- New technologies that could be developed for refractory metals production, with a focus on the secondary resources
- Substitution strategies, trends and pathways related to these metals
- New markets and business models
- Regulations and standards to be changed or established for facilitating new markets to emerge

2.2 Objectives

Two high-level objectives were defined for the MSP-REFRAM project:

- Create a Refractory Metals Multi Stakeholder Platform, which supports the refractory metal sector in Europe.
- Ensure the sustainability of the platform at the end of the project by integrating its outcomes into the PROMETIA network.

3 Communication strategy

3.1 Objective

The key objective of public communication activities is to promote widely MSP-REFRAM, its activities, its outcomes and the expected impacts of the project's results. The project will continue to be promoted and communicated upon after it has ended through the PROMETIA Association.

3.2 Target groups

Communication should be adapted to each target audience group and their expectations and needs should be analysed and taken into account.

The following audiences are targeted in the present communication strategy:

- Industry
- SMEs
- Governments
- Scientists / research community
- General public

3.3 Messages

A set of key messages for MSP-REFRAM have been developed. In addition, tailored messages were designed for the identified target groups in order to promote MSP-REFRAM in an effective way.

3.3.1 Key messages

KEY MESSAGES

MSP-REFRAM will advance the availability of and access to knowledge on refractory metals all along the value chain and increase awareness for the different stakeholders allowing them to make better-informed decisions.

MSP-REFRAM will contribute to the growth of the refractory metals market. By acting as an innovation catalyser MSP-REFRAM will enhance the breakthrough potential of technologies applicable to refractory metals.

MSP-REFRAM will increase the awareness and use of the most advanced, economically effective, eco-friendly and innovative technologies in the whole value chain of raw materials.

MSP-REFRAM will ultimately help to create jobs and contribute to the growth of Europe's economy by creating new value chains and opening new opportunities in the production of refractory materials from waste and end of life products, and in substitution materials.

3.3.2 Targeted messages

TARGET GROUPS	MESSAGES
Industry	Thanks to the knowledge generated by MSP-REFRAM, industry will be able to make better-informed decisions concerning the adoption of innovation in the refractory metals value chain.
SMEs	MSP-REFRAM will disseminate and share widely and openly the knowledge gathered in the project, giving SMEs full access to information that can be difficult to access for them.
Governments	MSP-REFRAM will help to create jobs and contribute to the growth of Europe's economy by creating new value chains and opening new opportunities in the production of refractory materials from waste and end of life products, and in substitution materials.
Scientists / research community	By identifying gaps in knowledge and potential breakthrough areas in refractory metals processing, MSP-REFRAM will help the R&D community to orient its research work.
General public	MSP-REFRAM will help Europe move towards advanced, economically effective and clean technologies for raw materials, helping to reduce Europe's dependency on foreign imports while protecting the environment.

4 Communication tools and materials

This section describes the various tools and materials that will support the present plan.

4.1 Visual identity

MSP-REFRAM has created its visual identity to be applied to all of its communication tools and products.

4.1.1 Logo



MSP-REFRAM logo

One of the first actions in the communication activities was to develop the project's identity. To build its *brand recognition*, a logo was designed in the first month of the project. It is and will be associated and included in all documentation (paper or electronic) and promotional material.

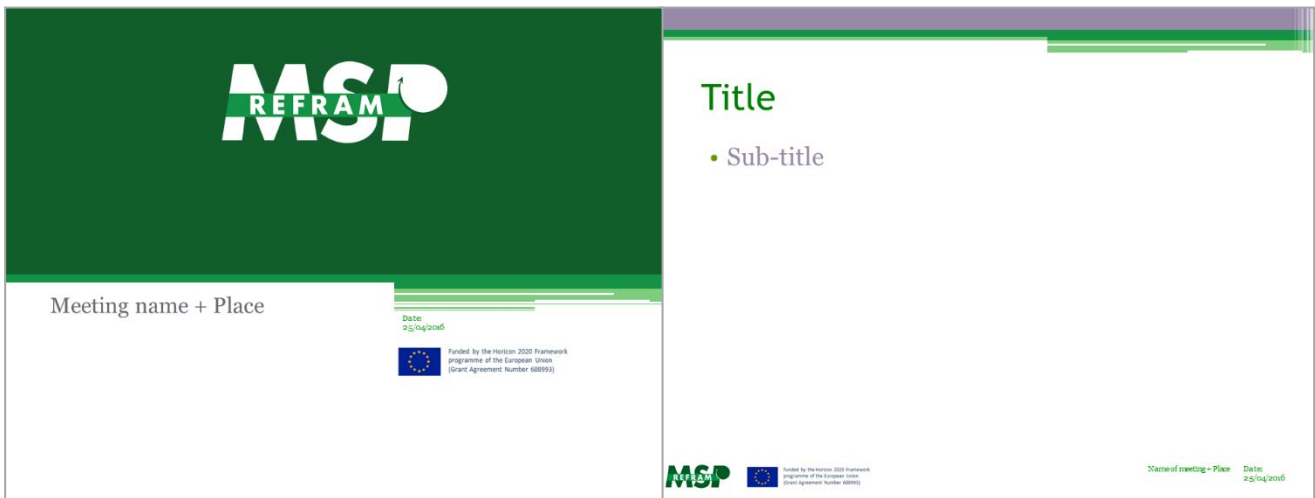
The logo guarantees the identity of the project. To achieve this, a number of logo versions were designed and examined, with the aim to represent as best as possible the project in the simplest and clearest way.

MSP-REFRAM gathers members of the PROMETIA Association who came together to build a consortium and submit a proposal to a Horizon 2020 call. Also, as the MSP-REFRAM website is integrated into the PROMETIA website it was decided from the start to keep the logo's design in line with the Association's.

The MSP-REFRAM logo reuses the same typography as PROMETIA's logo and the letter "P" with the arrow that symbolises the idea of recycling. The color green was chosen to illustrate the production of refractory materials from waste and end of life products and substitute materials and to evoke the concepts of sustainability and efficiency.

4.1.2 Project presentation template

A presentation template was designed and distributed in the first months of the project in order to continue building the "MSP-REFRAM brand".



MSP-REFRAM presentation template

4.1.3 Roll up

A rollup was designed in order to reflect the mission and expected outcomes of the project. The rollup includes the main messages, keywords and the consortium members. It will be used in events organised by MSP-REFRAM or it will be displayed during poster sessions at events, thus raising awareness on the project's aims and topics.

It was displayed at MSP-REFRAM's first workshop on 30-31 May 2016 in Barcelona.





Multi-Stakeholder Platform for a Secure Supply of Refractory Metals

CONTEXT

A secure access to refractory metals is highly strategic for Europe. Their resistance to extremely high temperatures, corrosion and wear in addition to several other unique characteristics make them extremely beneficial for various manufacturing applications.

Today with the exception of rhenium produced in Poland (15% of the world's production), and tungsten produced in Austria, Spain and Portugal (2.7% of the world's production), these metals are mainly imported from China, Brazil, Chile, the USA and Canada.

Although primary refractory metal resources are limited in Europe, they can be found in secondary resources (industrial waste and urban mines) and are already being recycled from super alloys to some extent. The supply value chain in the coming years could be improved if industry develops a better use of these secondary resources, optimises the use of external resources such as energy and water and at the same time reduces the amount and the toxicity of the waste.

In this context, members of the PROMETIA association, whose expertise cover the whole refractory metals value chain, gathered to address this challenge by setting up the MSP-REFRAM project.



OBJECTIVES

MSP-REFRAM aims to establish a durable multi-stakeholder network that will carry out a comprehensive study of the entire value chain of key refractory metals including mining, processing, recycling and final applications (and potential substitution opportunities), and taking account of crosscutting aspects: policy/society, technology and market.

MSP-REFRAM WILL CONTRIBUTE TO IMPROVING THE REFRACTORY METALS SUPPLY CHAIN BY IDENTIFYING:

Primary and secondary resources of refractory metals available in Europe

New technologies that could be developed for the production of refractory metals with a focus on secondary resources

Substitution strategies, trends and pathways related to these metals

New markets and business models

Regulations and standards to be changed or established to facilitate the emergence of new markets



All of the knowledge and results generated in the project will be shared widely with stakeholders to lift barriers and boost the creation of new markets in Europe.

CONSORTIUM

The MSP-REFRAM consortium includes industry, SMEs, research and technology centres, academia, a public authority and the PROMETIA association.



EXPERTS COMMITTEE

Three External Expert Committees on Society/Policy, Technology and Market will bring together experts from different organisations.

They will participate actively in the three works hops and the final conference organised by MSP-REFRAM and will help to identify the necessary knowledge, and discuss and validate the results of the project.

MSP-REFRAM has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 654935.

4.2 Project website

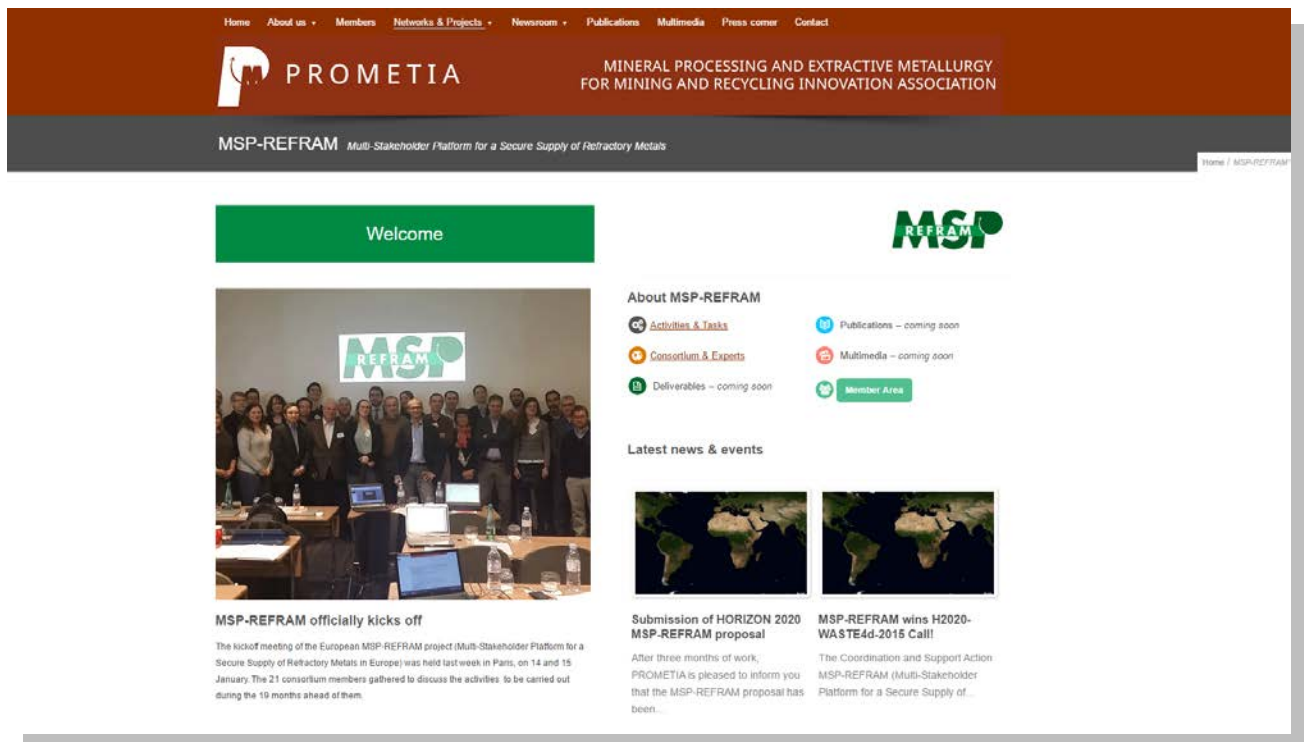
The public MSP-REFRAM website was officially launched in March 2016 at the following address:

<http://prometia.eu/msp-refram/>

It will be updated regularly and will promote the international visibility of the project by playing a key role as the main information point and delivery channel for results and the progress achieved. It will also disseminate the key messages to the target audiences, inform on events, publications or activities of interest to the MSP-REFRAM community and foster participation among the consortium members.

In order to make available useful and relevant information for visitors, it was decided that the website should address the needs and the questions that would most likely interest external stakeholders or visitors, such as:

- What the project is about
- What the project is delivering, and why, including its vision
- Who the partners of the project are
- What the past and present related projects in the field are
- Where to find more information on the topic or related topics



MSP-REFRAM website

4.2.1 Website Key performance Indicators (KPIs)

The MSP-REFRAM website aims at delivering information and communicating on the results of the project, the activities and the achievements to the public.

We have selected five KPIs in order to be able to adapt the content and website structure in order to best respond to the users' needs. The website benefits from the Google analytics solution implemented for the PROMETIA site, which will be used to monitor the KPIs.

1. Number of page views: Page views is the total number of pages viewed. Repeated views of a single page are counted.
2. % of new sessions: An estimated percentage of first time visits.
3. Entrance: Entrances is the number of times visitors entered the site through a specified page or set of pages.
4. Average time on page: The average amount of time users spent viewing a specified page or screen, or set of pages or screens.

Initial targets have not been set for the KPIs above. Users' interactions with the website will first be studied in order to see how the defined communication activities affect traffic and measures will be taken to improve trends.

4.3 Newsletters

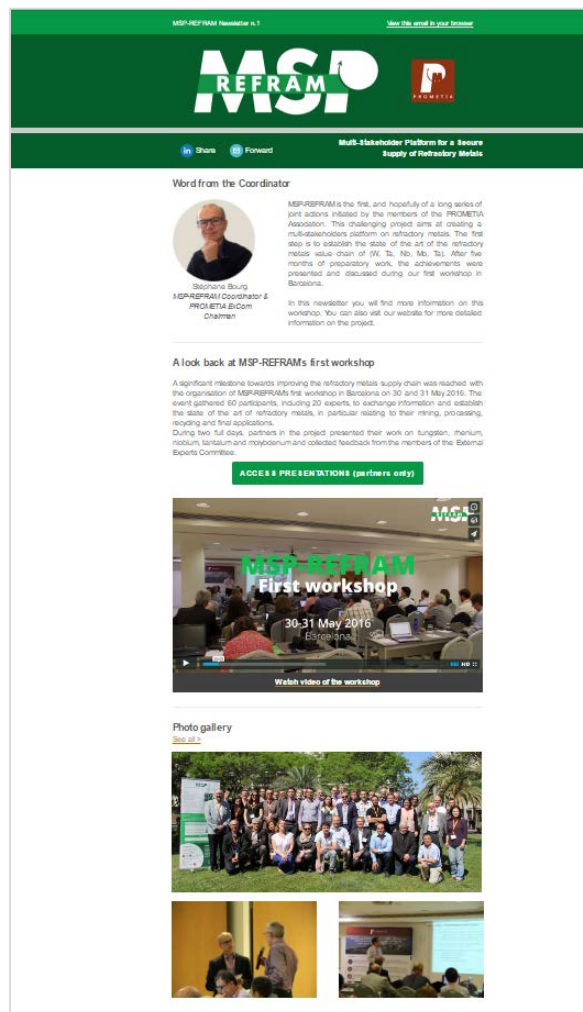
A total of four electronic newsletters will be distributed: one after each workshop organised by the project at Month 7, 11, 13 and one following the final conference at Month 15.

The MSP-REFRAM contact list includes European bodies (EIP-RM, KIC, ETP-SMR, ERAMIN, etc.), the public sector (agencies, ministries), associations and industry.

These newsletters will cover the main outputs and highlights of the workshops.

The first e-newsletter was released following the first workshop.

Access here: <http://eepurl.com/b5vZLf>



4.4 Videos

Four short testimonials (interview style) of key persons in the project will be published at the end of each workshop, along with each newsletter. They will highlight the importance of MSP-REFRAM for the sector and how stakeholders can benefit from the expected outcomes and results.

In addition one video animation (motion design) presenting the project, its objectives and benefits will also be published online and used to communicate in a more interactive and simple manner with the public.

The first video was released after the first workshop which was held on 30-31 May 2016.

Watch video here: <http://prometia.eu/a-look-back-at-msp-reframs-first-workshop>

4.5 Poster

A poster will be designed in order to reflect the mission and expected outcomes of the project. The poster will show the project's logo including catch phrases and keywords, the consortium members, and the main messages for the target group.

It will be used in events organised by MSP-REFRAM or it will be displayed during poster sessions at events, thus raising awareness on the project's aims and topics.

4.6 Other materials

Additional material can be produced to communicate on the project such as press releases, if considered necessary.

4.7 Obligations towards the European Commission

All dissemination and communication materials produced in the project should contain the following sentence and the EU emblem:



This project is funded by the European Union

Scientific papers will include the following sentence:

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 654935.

5 Scientific dissemination

5.1 MSP-REFRAM Workshops

Three workshops, which will enable a strong two-way dialogue with stakeholders, will be organised at months 6, 10 and 12.

- The first workshop was held in Barcelona from 30-31 May 2016. Information on primary and secondary resources was presented. In addition the current production and use of refractory metals in

Europe were discussed and the entire value chain was analysed. This workshop involved all key stakeholders of the refractory metals value chain.

- A second workshop will be organised on potential innovative pathways in order to optimise the balance between resource availability and usage. The aim is to discuss potential substitutions, and assess innovative product/service design and innovative business models that may bring changes in the current value chain.
- Finally, a third workshop will be organised on the feasibility of the proposed innovations (policy/society and market aspects), and compared with the current situation. The adequacy of current standards and regulations, as well as the potential need for new ones, will be analysed.

Three EECs (Policy, Technology and Market) gathering experts from different organisations representing the sector (public entities, governments, industrials, research centres and universities) will actively participate in these three workshops and the final conference.

5.2 Final Conference

A final international conference will be organised at the end of the project in order to communicate on the results of the project to a wide audience. Among the participants we expect European decision makers, end users and experts. In addition to the project's members and external experts committees, 50 external institutional and industrial participants will be targeted.

5.3 Events

In order to contribute to the dissemination and the exploitation of the project, the research community gathered within MSP-REFRAM will participate to events. However, due to the short implementation time of the project, dissemination in numerous conferences will be difficult. Key events will be targeted including EIP-RM meetings and relevant workshops and conferences.

This participation can take several forms:

- Paper and presentation in a conference
- Participation in a workshop or other event
- Poster presentation

All participation of MSP-REFRAM partners in relevant events will be recorded by the Coordinator for monitoring and reporting purposes.

Some events of interest for the MSP-REFRAM consortium are listed in the table below. Additional events will be targeted and further added to the communication plan. The consortium will aim to attend a maximum number of events in the short time duration of the project.

Events	Date
Industrial Workshop and Standardisation in Burgos, Spain	5-6 October 2016
Conference: Role of Regions in the European Circular Economy plan and Critical Raw Materials strategy in Burgos, Spain	10 October 2016

5.4 Scientific publications

Partners will be encouraged to submit articles to peer-reviewed journals/scientific journals with high impact factors. The submitted final versions of the articles and communications will be uploaded in the collaborative workspace folder of the relevant WP and published on the MSP-REFRAM website if made public. Communication via EU research dissemination media, such as the CORDIS newsletter, will also

be promoted.

The following journals for publication and their impact factor have been identified:

Journal	5y impact factor	Art Influence	Position
Resources, Conservation and Recycling	2,889	0,86	Q2
Mineral Resources Reviews	http://www.springer.com/series/11683	-	-
Mine Water and the Environment	1,206	0.251	Q3
Journal of Geochemical Exploration	2,828	0,605	Q2
Minerals	1	0,341	Q3

5.5 Scientific dissemination Key performance Indicators (KPIs)

We have selected four KPIs in order to be able to collect feedback on the relevance and performance of the different scientific dissemination activities.

1. # of people attending the workshops and final conference
2. # of participation in events: these include poster presentations and oral presentations
3. # of scientific papers published in journals

6 Overview of communication activities & other dissemination actions

A number of other dissemination activities in Work Package 7 will be organised during the project, in particular related to knowledge management and sharing. Communication efforts, mostly through the website and mass-mailing, will contribute to promoting these activities.

These activities and their targeted audiences are summarised in the table below. The table also includes all other planned communication actions.

Communication Channel	Objective, target and indicator	Targeted Audience
MSP-REFRAM public website	Wide scale dissemination.	General public Industry Governments Scientists/researchers
Communication tools and material	A poster and a leaflet presenting the project will be edited and printed to easily and systematically communicate on the project at conferences and workshops. 3 newsletters will be sent following each workshop organised by the project.	Industry Scientists/researchers
Traditional media	Goals: Press releases will be distributed to relevant European and national press when appropriate.	Scientists/researchers Governments
Video project presentation and testimonials	4 testimonials (interview style) of key persons in the project will be published online	General public Industry Governments Scientists/researchers
Project Events	3 workshops and a final conference will be organised during the project, starting with the first on 30-31 May 2016 in Barcelona.	Industry Governments General Public

7 Conclusion

This communication plan is a flexible and living document. It also allows the project team to adapt to future developments, especially the lessons learned from the first months of the project and its initial activities.