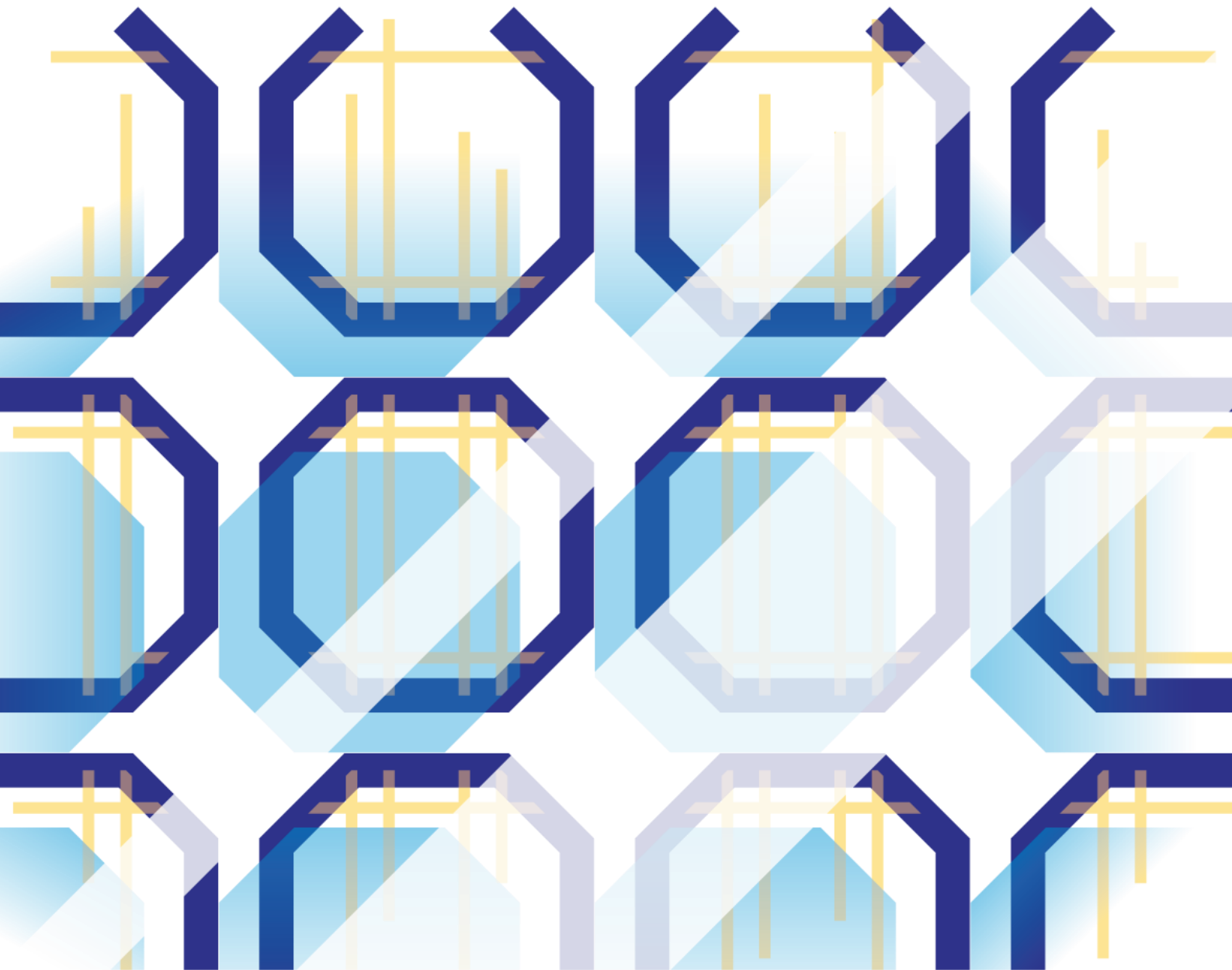


MOBILISATION AND MUTUAL LEARNING (MML) ACTION PLAN

Proof of Milestone 4.1
(MS15)





Please consider the environment before printing this document.

THIS DOCUMENT IS THE MEANS OF VERIFICATION OF THE ACHIEVEMENT OF MILESTONE 4.1 *INSTRUCTIONS ON HOW TO DEVELOP THE MML MEETINGS*. IT WILL BE SHARED INTERNALLY AMONG THE CONSORTIUM MEMBERS. THE DOCUMENT IS NOT A DELIVERABLE.

Executive Summary

The following document describes Mobilization and Mutual Learning (MML) actions, whose objective is to learn through dialogue. It intends to be a guide for GRECO partners to implement their own MML and broaden their research activities to include other sectors of the society. The plan establishes a set of steps to organize an MML action: either a World café, a Focus Group or a Reverse Science Café.

The document has been discussed during general assembly meeting, in November 2018, especially with WP4 partners. All agreed on the information and procedures detailed here. However, this is not a stationary document but rather a dynamic guide further improved through discussion and experience.

Glossary- Abbreviations

D	Deliverable
MML	Mobilization and Mutual Learning
P1.UPM	Partner nº1. Politécnica University of Madrid
P2.UPF	Partner nº2. University Pompeu Fabra
P3.UEVORA	Partner nº3. Universidade Evora
P7.CLSENES	Partner nº7. Central Laboratory of Solar Energy and New Energy Sources
P9.HZB	Partner nº9. Helmholtz-Zentrum Berlin
P10.RLI	Partner nº10. Reiner Lemoine Institute
P11.USP	Partner nº11. Universidade Sao Paulo
PV	Photovoltaics
SAB	Social Advisory Board
SC	Steering Committee
WP	Work-Package

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1. Introduction

1.1. What are MMLs?

A Mobilization and Mutual Learning (MML) is an action -activity or exercise- that **gathers together people to learn through dialogue**. It is based on the concept of mutuality. Therefore, the main discourse is decentralised. In MML activities, participants talk about possible futures, hopes and fears, uncertainties and alternative scenarios rather than about fixed knowledge and ideas.

The aim of these activities is to bring together various groups of stakeholders - researchers, professionals, students, media, broader publics, etc. In contrast with traditional forms of deliberation like lectures or question-and-answer sessions for large audiences, for MMLs **innovative methods must be employed** in order to stimulate in-depth dialogues (Zwart et al., 2017).

According to the European Commission (2012), the goal of an MML Action Plan is to create mechanisms for:

- **Addressing Societal Challenges where science and technology are involved**
- **Bringing together a wide range of actors**
- **Pooling partners' knowledge and experience**
- **Developing mutual understanding and joint solutions**

Therefore, as Zwart *et al.* (2017) from the NERRI project states, the aim of an MML “*is not to popularise or legitimise new forms of knowledge and technology, but rather to emphasise the complexities of the social world and to improve the societal embedding of these technologies by actively involving future users in the development process at a relatively early stage and in a co-constructive, upstream way*”.

1.2. Why doing MMLs?

The research, innovation and technology systems nowadays are predominantly hierarchical structures in which only a “selected” set of institutions collaborate, mainly from academia and big corporations. Therefore, the system lacks the basis of the society pyramid. For instance, research and innovation processes do not include community innovation centres that can gather the best ideas and suggestions of students, high teachers or local entrepreneurs and citizens (Serra, 2018).

To **challenge this traditional system** in science and technology, citizen engagement through **co-production** is necessary. In that sense, one very crucial factor is power sharing: researchers and practitioners should no longer make all the key decisions or take on all the responsibilities. To share the power implies that new relationships are built and maintained across the different sectors in society, creating trust (Hickey, Richards, & Sheehy, 2018).

“Co-production takes people out of their comfort zones, but the pay-off comes in the form of enhanced trust and communication. Importantly, the research has a much better chance of making a difference to the people involved” (Hickey et al., 2018)

MMLs are a way to stimulate co-production so the people “affected by” or interested on research gets involved in it. Their inclusion shapes how projects are conceived, supported, done, assessed, disseminated and rated. It also gives a broader perspective and allows to consider issues that scientists could miss. For example, the BMJ journal involved patients in the review process of papers. As a result, some asked authors to modify statements not backed by strong evidence, to avoid arousing unjustified hope. Others pointed out inadvertent use of pejorative language, such as ‘the patient failed treatment’ (Hickey et al., 2018). After the experience, BMJ editors reported that “patient and public reviewers provide valuable perspectives that complement those provided by academic reviewers”.

Some researches stress out how opening to the community can even lead to fighting biases: “we go in with our own biases when we’re not open to learning from community members” (Willyard, Scudellari, & Nordling, 2018). Importantly, the **focus** of MMLs is not mainly on the expertise of the researchers but on the “**knowledge gaps, the uncertainties, the controversies, the unknowns, the blind spots, the epistemic vulnerabilities and the open future**” (Zwart et al., 2017). GRECO has planned MML actions to have a better understanding of the social barriers to a major integration (or penetration, as known in the field) of photovoltaic energy.



Despite its benefits, one should admit that collaborative research is not always easy. It is an active process of finding a balance between scientific best practice and the community’s needs and desires. Think of a medical treatment for example. The ideal way to test a treatment is often through a randomized trial. But is it ok to use a true control group? It wouldn’t be ethical to deny some of the participants the resources that the study provides. Members of the project FRESH faced this issue and decided instead, to adopt a ‘wait-list control’ design. In the first part, two groups received the treatment and two served as the controls. In a second phase, the control group joined the experimental arm (Willyard et al., 2018).

1.3. Previous experiences

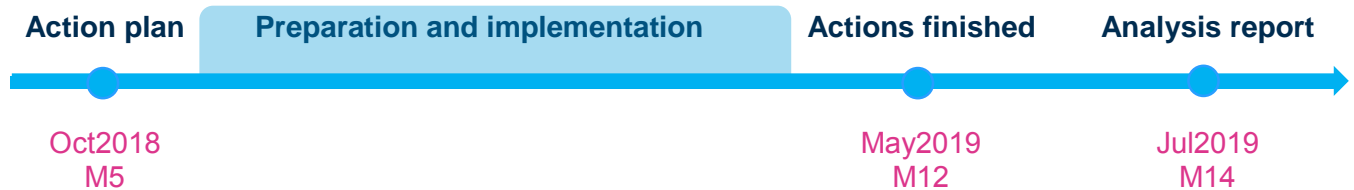
GRECO has been inspired by the outputs of the following Mobilizations and Mutual Learning Action Plans and projects from the European Commission:

- **VOICES Project.** This was a consultation project that used a novelty methodology to obtain the feedback from the society on waste management. One of the conclusions of the project was that “they [a different range of Stakeholders] wanted manufacturers to be regulated more heavily, taking responsibility for the lifespan and recycling of their products, and ending planned obsolescence”. This is the base for WP2.
- **BEWATER Project.** It provided a vision from the different stakeholders on the use of the water. Outcomes reflect the need of more efficient irrigation systems and the use of low-quality water. This is the base of WP3.
- **R&Dialogue.** A Mutual Mobilization that came up with Vision Papers on Low Carbon Energies in Europe after a consultation with a wide range of stakeholders. Main assumptions are adopted by GRECO in WP 4.

1.4. MMLs in GRECO

As part of GRECO six MML actions will be planned and organized in Spain, Portugal, Bulgaria, Germany, Brazil and UK. All actions should be **finished by May 2019 (M12)** (Figure 1). A results assessment from each MML will be provided by each organiser to Reiner Lemoine Institute (RLI), who will prepare the deliverable 4.1 “Report on the organization, planning and MML results” in July 2019 (M14).

Figure 1 – MML actions calendar



The aim of these actions is to have a better understanding of the social barriers to a major integration of the photovoltaic energy. The actions are designed to generate dialogue and debate among different stakeholders and to generate outreach by addressing their concerns. The D4.2 ‘Strategy paper on the alignment of the technologies according to the MML outcome’ written by UPM in March 2020 (M22) **will focus on explaining how the technologies developed solve or address the concerns manifested by people in the MMLs** and will describe forthcoming actions to ensure a better alignment with MML inputs. As the citizens’ concerns will be integrated into the research of three innovation products, not only technical but also economic, security, environmental and any other perspectives manifested by the stakeholders will be addressed. The D4.2 will be send later to the MML participants.

During the initial phase of the project several **stakeholders have already manifested their support** to the MML initiative. These could be of interest for the MML organizers: the Energieavantgarde Anhalt (Germany), IPES (Portugal), Ecooo (Spain), and Greenpeace (Spain), and the “Energy visioning” group that meets regularly with stakeholders from across the Forest of Dean and the Newent area of Gloucestershire.

The following representatives are the contact people from the partner institutions of GRECO responsible for the planning, organization and follow up of one MML activity. Each partner will oversee the communication of results and insights from each activity to P10.RLI.

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The methodology and instructions for organizing MML activities will be explained in detail in the following pages. This information is based on methods that have been used and tested in other projects like NERRI in the field of neuroscience and in SPARKS for health research. GRECO partners **UPM, UEVORA, CLENSSES, HZB, USP and Mr. Brocklehurst** in charge of organizing the actions will **decide from three MML activities described in this document, which one best suits their resources and interests and addresses their objectives**.



There are some ethical considerations required when performing an MML action. Remember that MMLs are done based on mutual respect for diversity (considering experiences, areas of expertise and views). As the MML organizer you must give and strengthen an attitude of mutual trust and credibility, and act as a reliable source of information. The people attending to the MML should not be seen as mere providers or recipients of information, but partners with something at stake in a mutual learning action. According to the actions, participants may be invited to reply to preliminary or final reports. To use explicit citations (in reports, publications, on websites), you must ask for an informed consent. No payments should be given to the participants for attending the events.

2. Work plan

This section is meant to help you be clear about what to do, how and when. It is crucial to prepare this event with enough time and care. This work plan consists of five steps: definition of objectives, definition of audience, activity selection, of place, date and time selection and assessment of outcomes.

2.1. Define objectives

The first point is to identify the objectives of your MML action. Take into account that the actions focus on the gaps of knowledge, the uncertainties, expectancies and controversies.

During the general assembly in Berlin (November 2018), WP4 partners have discussed how to set the objective of their MMLs. It was agreed that all MMLs should focus on understanding the barriers to a major integration of PV, but that each group will approach this issue according to their research lines and the social context. Three main objectives have been proposed:

- **Identify how photovoltaic energy could have a greater presence in the daily life of citizens in our country.**
- **Identify the requirements of a next generation of PV products from a social point of view.**
- **Identify how the different stakeholders can actively take part from the energy transition.**

An online document called "[MML guidance](#)" has been developed by UPM and shared among WP4 participants to elaborate a series of questions that can be used to focus the discussion during the MMLs.

Use this information and your knowledge on the context (societal, economic, political issues, etc.) to select the questions that will guide your MML. Also, it is possible that you would have to slightly modify the objective according to this. Once you are clear about what you intend with the action and how your intention will be transmitted to the participants, you are ready to move on.

2.2. Define your audience

Ideally, the MML activities will involve actors from different sectors of society (Zwart et al., 2017). However, each partner will decide who to invite according to the local context, ensuring the best advantage and atmosphere for the activity.

Identify possible stakeholders in all strands of society (i.e. research, policy, industry and civil society) related to the topic(s) of your activity and contact them. Consider the best way for reaching them (by email, telephone, written letter, personal meeting) and the relevant elements that should be included in the "invitation" to rise their interest. This would probably require a change in the way or channels through which your

institution normally communicates as you may include populations that are not usually your target audience.

Some examples of local partners you may contact to reach representatives of various interest groups and “ordinary citizens” are:

- **Universities**
- **Researchers (from the field PV or related to RRI or citizen engagement)**
- **Research institutions**
- **Associations**
- **Foundations**
- **NGOs**
- **Municipalities (energy department)**
- **Energy Networks**
- **Ecologists**
- **Environmentalists**
- **Fossil fuel representatives**
- **Lay public (tourists, a neighbour community in highly-contaminated areas, etc.)**



You can increase the likelihood of thought-provoking ideas if you ensure great diversity in the audience. For instance, you can identify and invite a group of people that usually do not have the opportunity to exchange their opinions, experiences and point of view on your subject which is within their common scope of interest. Keep in mind that your final audience is mainly dependent on your local context and the topic(s) of your activity.

2.2.1. Prepare your « experts »

MML actions require a great extent of moderation and expertise. Therefore, finding proper experts is crucial for holding a smooth and effective activity. Select the persons in your team who will acquire this responsibility considering that they should be highly qualified, well-prepared, and -very important- ready to listen to the opinions of the audience. Ideally the persons you choose should be already in their work open to dialogue (with public and colleagues), interested in seeking advice and listening to different point of views.

MML actions will make the “experts” discuss with and confront non-specialists and acknowledge and respect the opinions coming from them. Ideally you would organise a prior session to explain the dynamic of the MML and mention this information. Finally, we highly recommend maintaining a gender balance in the group of experts during your MML activity.

2.3. Select an activity

There are many MML actions to stimulate dialogue and involvement of different strands of society. For this plan, we have outlined three different activities we find effective, interesting and easy to implement. As an MML organizer you may select one action

from the following list or explore a different one in case you feel courageous. The [Engage2020 Action Catalogue](#) is an available database with more than 50 methods to conduct inclusive research, with plenty of material to seek for or deepen on dialogue actions.

Before going into detail, consider that innovative deliberative tools often involve the use of multiple media. Besides words, arguments and ambiance, visualisation is an important dimension of this sort of activities. For example, in a World café carried out during the NERRI project, the organizers invited a professional cartoon artist who produced a visual impression on site during the day of the activity. The drawing provided an artistic reflection in the introductory talks and the workshop discussions, based on observations, associations and quotes and allow the participants to discuss the final product at the end of the meeting. Other relations with art are encouraged during MMLs. For example, cinema or series extracts can be used as an opening to help stimulate debate.

2.3.1. World Café



The World Café is a method conducted in a workshop format which follows the principle of a good conversation, where anybody can talk about things that matter to them. In the 1990s it was created by Juanita Brown and David Isaacs who wanted to design a method based on two principles: first, humans want to talk together about things that matter to them and second, if they do, they could create collective power (The Action Catalogue, 2015).

A World Café is a dialogical activity that can create results to generate new ideas, enable joint decision-making on key strategic issues, discover new ways for collaboration, reflect on the implications of a complex issue and identify a path for further exploration and implementation (“ActionCatalogue - World café,” 2015). It is, therefore, an ideal action to explore PV integration on society.

It usually involves rounds of conversations in small groups (4-6 people) seated around a table. Prompted by specific questions, the small groups discuss and take notes with the help of markers on large sheets of paper. After 20 minutes (approx.), participants move to a different table where, again, are invited to share insights and deliberative results with the “new team”. One person should remain in each table during the different rounds. This “table host” will act as a spokesman and briefly fill in the new team members on what happened in the previous round. The activity should be moderated by one person (“the general moderator”) and, ideally, each table should be accompanied by one facilitator. If not possible, the general moderator should rotate around the tables to follow the discussions.

At the beginning of the activity, the moderator should welcome and give an introduction in the process and the “Café Etiquette”. Then, each round starts with a question designed for the specific context and desired purpose of the session. The same questions can be used for more than one round, or they can be built upon each other to focus the conversation or guide its direction (Brouwer et al., 2017). Posing “good questions” is essential for the success of the activity. Because of this, dedicate enough

time to ensure you will be asking the right question. These should produce curiosity, stimulate reflexive dialogue, invite creative thinking, bring new possibilities and evoke more questions.



The World Café Guidelines.

Illustration by Avril Orloff for [The World Café Community Foundation](#).

After the small groups discussion, the participants are invited to share results or insights from their conversations with the rest of the café. These results are reflected visually in different ways, often using graphic recorders in the front of the room.

In sum, a World Café follows seven core design principles (“ActionCatalogue - World café,” 2015):

- (1) Set the Context
- (2) Create Hospitable Space
- (3) Explore Questions That Matter
- (4) Encourage Everyone’s Contribution
- (5) Cross-Pollinate and Connect Diverse Perspectives
- (6) Listen Together for Patterns, Insights, and Deeper Questions
- (7) Harvest and Share Collective Discoveries.

The details on participants, outcomes and resources are presented in the [World Café Fact Sheet](#) (Annex 1, table 1).

More info: The World Café is a trademark of the World Café Community Foundation. The World Café Hosting and Consulting Services have developed [A Quick Reference Guide for Hosting World Café](#) and a [list of materials](#). Also, the Centre for Development Innovation of Wageningen University describes the World café step-by-step in its report [Sixty tools to facilitate multi-stakeholder partnerships](#).



2.3.2. Focus group

The focus group is a qualitative method profusely used in qualitative research to explore opinions and attitudes, to determine the preferences of people or to evaluate strategies and concepts. It is structured and directed yet allows for the free expressions of opinions by the participants and can gather a lot of in-depth information in relatively short time (The Action Catalogue, 2015).

Focus groups are a similar method to needs assessment surveys, designed to help learning more about community and groups' preferences and opinions. They “have proved to be a highly insightful research technique for engaging a group of people with a question, product or idea. Bringing together a group to discuss a particular topic provides a more natural setting than one-to-one interviews, as it allows participants to share their stories and through discussion, enable new strands of thought to emerge. Focus groups can reveal a wealth of detailed information and deep insight (...) This qualitative research method can generate rich data in a less resource intensive manner than interviewing.” (National Co-ordinating Centre for Public Engagement, 2017).

This method is useful to assess a specific topic by asking participants qualitative and open-ended questions. Participants are selected according to certain characteristics in common that relate to the topic of interest and are grouped into 8-10 people. The information given by participants in the focus group (including group dynamics, interaction and non-verbal communication) should be observed with attention and is open to interpretation. The focus groups can reveal what the participants really think and feel. Therefore, the method is useful to generate or evaluate hypotheses and ideas.

A focus group session consists of an introduction, some discussion exercises and an evaluation part. It generally lasts around 2 hours (Broerse, van der Ham, Tieleman, & Mazzonetto, 2014). At the end, the information gathered in the discussion should be summarized in writing.

Each focus group should be led by a moderator. They play a very important role maintaining the group's focus, stimulating and facilitating discussion, establishing a friendly atmosphere and providing clear explanations of the objectives and exercises. The moderator is therefore a person that (Mazzonetto, Broerse, & Van der Ham, 2013):

- **Listens carefully to what a participant has to say, paying attention to what is said and avoiding judgment or critique.**
- **Summarizes what has been said to check whether all participants are clear on it. They should agree on what a statement means and how it should be written down with the participants.**
- **Clarifies using questions to gain an in-depth understanding of a participant's view.**

We advise to use probing questions that ask for ‘what’ and ‘how’ instead of the explicit ‘why’. For instance:

“Tell me more about...”
“What makes you think that...?”
“What is it that you find important in this...”
“Please explain to me how...”
“If you compare this to...?”
“If you think about..., what is your idea on...?”
“Can you think of an example?”
“What do you mean by...?”

To ensure good moderation a nice idea is to follow a focus group script. This should be planned and provided to the moderator in advance and contains the introduction, questions and exercises to guide the work and ensure equal individual input as well as group discussion.

The details on participants, outcomes and resources are presented in the **Focus Group Fact Sheet** (Annex 1, table 2)

More info: In the VOICES project, the European network of science centres and museums organized a series of focus groups all over Europe using a script. This can be found in the [Spanish report](#) (Box 2.1, p.7). The National Co-ordinating Centre for Public Engagement also published a [tool-guide on how to organise a focus group](#).

2.3.3. Reversed science café



The Reversed Science café is an event focused on the discussion of ethical or societal issues related to local cases of research, technology or innovation. Unless a regular Science café, the experts initiate the dialogue by posing questions to the audience. Then, they listen to their answers (ECSITE, 2016).

For the Reversed Science Café, the audience will be divided into small groups for discussion (maximum eight people in each) and located around a table. The number of small groups should not be less than five nor more than ten. One expert and one group moderator will sit with each small group. Then, the expert will pose questions and the participants will start a discussion around it to formulate an answer, advice or recommendation on it. The moderator plays a role here guiding the discussion and encouraging the participation of all table members.



The more people invited, the more resources you will need

The Sparks project has worked with this method by changing the common citizen engaging activity of a science café: “A science café usually has experts giving a talk and answering questions from the public. We reversed this format by having experts

ask questions to the public to get inputs on issues relevant to their work” (ECSITE, 2016).

The Reversed Science Café contributes to making research more inclusive by encouraging various stakeholders to contribute to the discussion. The format empowers a diverse audience to share opinions and knowledge and the experts will address their research issues and might find solutions to unresolved questions by considering the perspective of other citizens.

As the discussions are initiated by questions posed by the experts, the resulting discussion should at least indirectly answer them. In practice, these may also be advices or petitions for research and innovation processes in general.

The Reversed Science Café has an informal style that helps establishing relations between all participants, including experts and the host organisation.

The details on participants, outcomes and resources needed are presented in the [Reversed Science Café Fact Sheet](#) (Annex 1, table 3).

More info: In the SPARKS project, the European network of science centres and museums developed the method of Reversed Science Café and reported its mechanism in the [The Sparks Handbook: A guideline of innovative formats for participatory activities & more](#) (p.43).

2.4. Set a place, date and time

Once you have chosen the activity to perform, select a date and time that suites with your calendar and that takes into account the availability of your participants and the preparation time needed.

Finally, choose a proper location. The location, more importantly the ambiance, has proven an important element for mutual learning exercises (Zwart, 2015). Therefore, the selected place should preferably be a ‘thought-provoking’ environment such as design or art labs, cafés and museums. These places have optimal settings to serve as imaginative laboratories and to encourage societal ‘experiments’. If you do not have or cannot arrange the availability of such a place, try to ambient your available space in order to simulate a distended and open environment (consider the lighting -warm light instead of white one-, the decoration (art pieces or photographs), and even some background music). Also, take into account the length of the event: a focus groups lasting for 3 hours will need a more comfortable space than an hour World café.

2.5. Assess the activity’s outcome

After each MML activity, both participants and organisers will be asked to complete an assessment procedure. This will be done through surveys and reporting and shared with the WP4 members to feed their actions. Specially, the assessment is necessary

for P10.RLI to elaborate the “Report on the organization, planning and MML results” (deliverable 4.1).

The elaboration of questionnaires for the participants will be done in collaboration with MML leaders, following the structure proposed by the Sparks project to assess MML activities (see annex 2) (Pletosu, Daubeuf, & Goffredo, 2018) and adjusted to the field of PV.



An informed consent is needed to collect information from the participants in the MML.

Moreover, after each activity, the MML organisers should complete a reporting format (annex 3) describing the details on their MML activity and writing down the main findings. The template proposed in this document has been adapted from the [Template for local organisers of the Sparks project](#) (p.61).

To implement the participants survey and complete the organisers report, we propose using an online open tool called “[Open data kit](#)”. This software is in line with GRECO values, as it is made by a network of that appreciates open communities and open source. Moreover, it provides an online data storage and management that is useful when dealing with international teams, as in the case of GRECO and it has been successfully used in other European projects:

The electronic surveys were managed via Open Data Kit (ODK), an open source set of tools which helps designing and fielding mobile data collection solutions. The questionnaires were built on the ODK platform and uploaded on a Sparks dedicated server from which local organisers could download them on the tablets via a Data collection app. The visitors were next interviewed by being presented the questionnaire on the tablets. The filled-in questionnaires were then sent back to the Sparks server via the app installed on the tablet. The responses were exported into readable files with .CSV format, before being centralised for the overall analysis (Pletosu et al., 2018).

Due to its international character, in the data gathering process GRECO faces one problem: the multilingualism. The [questionnaires proposed here may be translated from English into the local language](#) by the local organisers for each venue. As some words or expressions used in the original English version will be translated differently in different languages, this may cause a slight change in meaning. Thus, the important role of the organisers’ reporting become evident, as they serve as cultural translators to the common GRECO language. Moreover, the translations could provide useful insights on how different cultures and societies respond and understand the topics treated in the MMLs.



Skype meetings will be organized with the MML leader to solve questions regarding the interviewing, reporting and software use. Also, the final way of handling assessment data will be agreed on with MML leaders and P9.RLI who is in charge of collecting and analysing this data.

3. Conclusion

Mobilization and Mutual Learning (MML) actions are participatory activities that stimulate knowledge through dialogue. As part of GRECO project, six MMLs will be organized and implemented between November 2018 and May 2019. This document offers a guide to plan one of such actions, selecting between a World Café, a Focus Group and a Reversed Science Café.

The planning of an MML requires time and care. We recommend you start clearly defining your goals, according to what has been discussed with the consortium. After that, you may define the audience, select an activity, set the place, date and time. You will then perform your MML. Finally, you should assess the activity by inviting participants to complete a survey and by filling in a report.

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Annex 1. MML activities Fact Sheets

Table 1 – Fact sheet World café

GENERAL DESCRIPTION	The World Café is a method for engaging groups founded on the assumption that people have the capacity to work together and create collective knowledge. It bases on discussions in small groups, directed by questions posed by the host or moderator. The groups have 10-20 minutes' discussion rounds and write down their ideas. After this time, the participants move to different tables and the discussion starts again. There should be one "spokesman" per table, a person that does not move during one round and is responsible for feeding in ideas from previous discussions. At the end of the exercise the participants should share their ideas with the whole group (i.e. the entire 'café').
PARTICIPANTS – TARGET GROUPS	For this activity no participant filter applies. This means the host can invite all kinds of stakeholders (CSO's, policy-makers, researchers, citizens, consumers, industry, etc.). The group should be inclusive of people from various backgrounds, different genders and points of view. The age group of audience should be 12+ with preference for adults.
EXPECTED OUTCOME	The activity results will be reflected visually in a variety of ways, using white boards, graphics, posters or graphic recorders in front of the room. People's ideas and expressions will be therefore captured in words, images and colour. You should be able to list 3 to 4 ideas related to your main topic and addressed by the questions in each round.
FORMAT IN NUMBERS	Preparation: 3 months before the activity Duration: between 1,5 and 2 hours. Participants: between 25-50 participants, one general moderator and one facilitator per table.
VENUE	A room with an informal atmosphere which can hold 5-10 groups of 5 people, sited around tables, where they can write easily and move from table to table.
CATERING	Enough to make the participants feel like in a café. Hot and cold drinks and snacks are the minimum.
RESOURCES	Staff: <ul style="list-style-type: none"> - Main coordinator of the event (with optional 1 to 3 logistics and venue assistance) - Main moderator - Group facilitator (1 per table, optional) - 1 photographer (optional -the assistant may serve this function) Equipment: <ul style="list-style-type: none"> - Microphones and loudspeakers for the main moderator. - Stationery (flipchart paper, markers, post-its) for each group.

Table 2 – Fact sheet Focus group

GENERAL DESCRIPTION	The focus group is a similar method to needs surveys that can extract a great amount of detailed information on a specific topic in a considerably less amount of time. It consists on discussion sessions of 8 to 10 people guided by a moderator, which plays a crucial role in keeping the track of the conversation and ensuring a proper environment for the free participation of people. The session is organized in an introduction, a set of questions and discussion exercises and the final interpretation of results.
PARTICIPANTS – TARGET GROUPS	Selected according to certain common characteristics that relate to the topic of interest. It is important to make a careful selection to ensure an environment in which people feel free to talk openly. However, the group should be inclusive of people from various backgrounds and organizations, of different genders and points of view as far as possible. Some authors classify the focus groups in an age range, for instance from 18 to 35, from 36 to 50 and 50+.
EXPECTED OUTCOME	During the session audio and/or video recordings should be taken, as well as notes. The participants shall generate visual data like individual drawings or collective mind maps. Those should be collected and photographed at the end of each focus group.
FORMAT IN NUMBERS	Preparation: 1,5 months before the activity (the main duty will be to define and invite the participants) Duration: between 1 - 3 hours. Participants: between 8-10 participants, one moderator and one note-taker.
VENUE	A noise-free environment with enough space to relax, walk around and engage in conversation.
CATERING	Hot and cold drinks will do.
RESOURCES	Staff: <ul style="list-style-type: none"> - Main coordinator of the event - Moderator - Note-taker - 1 photographer (optional) Equipment: <ul style="list-style-type: none"> - Stationery (paper sheets, pens). - Audio or audio-visual recorder.

Table 3 – Fact sheet Reversed Science café

GENERAL DESCRIPTION	The Reversed Science Café is a discussion event focused on various ethical and societal topics related to local examples of research, technologies and innovations. Opposite to the regular science café, the experts initiate the dialogue by posing questions and listening to answers from the audience. Together they work in small groups to formulate their advice on making research and innovation more responsible (Pletosu et al., 2018) or to give answer to the questions posed by the researchers.
PARTICIPANTS – TARGET GROUPS	Interested citizens and representatives of various strands of society - depending on the choice of topic. The group should be inclusive of people from various backgrounds, of different genders and points of view. The age group of audience should be 12+ with preference for adults.
EXPECTED OUTCOME	From 5 to 10 short written recommendations referring to the topic under discussion. This activity also stimulates the participants' understanding of the complexity and ethical or social context of an innovation process and creates new connections between experts and audience, building trust and openness to dialogue.
FORMAT IN NUMBERS	Preparation: 3 months before the activity. Duration: between 3 and 4 hours. Participants: Between 30 and 80 participants and 5 to 10 experts (at least 1 for every 8 members of the audience).
VENUE	A room with an informal atmosphere which can hold 5-10 groups of 5 people, sited around tables, where they can write easily and move from table to table.
CATERING	Enough to make the participants feel like in a café. Hot and cold drinks and snacks are the minimum.
RESOURCES	Staff: <ul style="list-style-type: none"> - Main coordinator of the event (with optional 1 to 3 logistics and venue assistance) - Main moderator - Group moderators (1 for every 8 audience members, per table) - 1 photographer (optional -the assistant may serve this function) Equipment: <ul style="list-style-type: none"> - Microphones and loudspeakers for the main moderator. - Screen projector - Stationery (flipchart paper, markers, post-its) for each group.

Annex 2: Template questionnaire for MML participants

Model questionnaire elaborated by the Sparks project to assess the participation in the MML activities. If needed, this should be modified by the MML organisers. When possible, use the questionnaire in English so the information can be centralized. If not, the organizer team should translate the questions to the local language.

PARTICIPANT QUESTIONNAIRE FOR ACTIVITIES

PART I – ASSESSMENT OF SPARKS ACTIVITIES

1. I have just attended one of following activities (*only one answer possible*):

- ☐ World café
☐ Focus group
☐ Reverse science café
☐ Other :

2. My impressions about the attended event...

[illegible]

I feel inspired
to continue
the discussion
after the
event

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How much do you agree with the following statements?

1	2	3	4	5	6	99
Strongly agree	Moderately agree	Slightly agree	Slightly disagree	Moderately disagree	Strongly disagree	No opinion

The chosen topic was relevant to me

The topic was presented in a thought provoking way

There was enough information to understand the topic

The physical location was adequate to hear participants' contributions

I had the opportunity to hear about different point of views

The moderator facilitated dialogue amongst participants

There was sufficient time to engage in the discussion

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PART II – READINESS TO ENGAGE

4. After having taken part to the activity, who do you think should play a role in Research & Innovation in the field of PV? (*multiple answers possible*)

- ☐ Individual citizens
- ☐ Business & Industry
- ☐ Government
- ☐ Scientists
- ☐ Educational community
- ☐ Civil society organisations
- ☐ Other, namely: _____

5. Would you like to take part to similar activities in the future?

- ☐ Yes, more frequently than now
- ☐ Yes, as frequently as now
- ☐ Yes, but less frequently than now
- ☐ Do not know
- ☐ No, never

If you have answered 'yes', go to question 6. If you have answered 'Do not know' or 'No, never', go to question 8.

6. I would like to attend similar activities in the future if.... - Please rate the following items in terms of importance

[illegible]

[illegible]

Other :

PART III – SOME INFORMATION ABOUT YOU

In which year were you born? _____

Please, indicate your gender:

- ☐ Male
☐ Female
☐ Prefer not to say
☐ Other: _____

What is the highest level of education that you have completed?

- ☐ Primary Education
☐ Secondary Education
☐ Higher education (Bachelor or Master)
☐ Doctoral or higher level

Do you work in any science-related field?

- ☐ Yes
- ☐ No
- ☐ Currently, I am not working

How much do you agree with the following statement?

[illegible]

In which field are you currently active? (for professional, volunteering or other reason) – *multiple answers possible*:

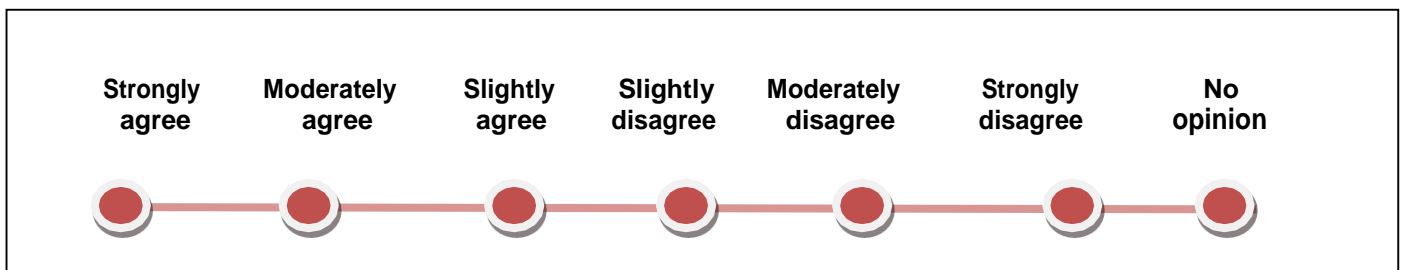
1. ☐ **Civil society organisation**
2. ☐ **Education**
3. ☐ **Research**
4. ☐ **Industry/business**
5. ☐ **Government or public administration**
6. ☐ **Other:** _____

THANKS YOU FOR YOUR COOPERATION!

Your responses will be treated in complete confidentiality and with anonymity.

SHOW CARD

A show card is a visual list of answer options (e.g. Likert scale) that the interviewer will provide the respondent with to facilitate and accelerate the interview process.



Annex 3: Reporting template for MML organisers

NAME OF THE LOCAL ORGANISER:

COUNTRY:

SECTION I: INFORMATION ABOUT THE ACTIVITY

Name of the local organiser	
Country	
Type of activity performed	
Number of participants	
Number of “experts”	
Date	
Time	
Topic	
Main subject/theme or guiding questions for the chosen activity	

SECTION II – INDICATORS OF PUBLIC ENGAGEMENT

		Strongly agree	Moderately agree	Slightly agree	Slightly disagree	Moderately disagree	Strongly disagree	I have no opinion
1	The discussion required encouragement from the chair/moderator							
2	The discussion easily moved forward (i.e. new issues are raised)							
3	The audience expressed its willingness to be involved in this kind of activities in the future							
4	The participants continued the discussion after the event							
5	Are you overall satisfied with this activity format?							
6	Are you willing to use it again in the future?							

7	In your view, did any of these factors encourage multi-actor dialogue?	The chosen topic						
		The way the topic was presented						
		The physical location						
		The presence of different actors and points of view						
		The way the moderator animated the session						
		Sufficient time to engage in the discussion						
		The way contributions were treated						
		The format of the activity						
		8	Out of the previous, please present in more detail two “success factors” (or “do’s”) that stimulated multi-actor dialogue and two “unsuccessful factors” (or “don’ts”) and explain why/how: Max 800 characters					
9	What are the main outcomes resulting from this activity?	1. New research inputs generated from the public. Please describe shortly: 2. Clear understanding of fears or constrains from the public. Please describe shortly: 3. A new strategy/action plan. Please describe shortly:						

		<p>4. New or innovative collaborations taking shape. Please describe shortly:</p> <p>5. Other (related to the three MML objectives defined for GRECO) Please describe shortly:</p>
10	Overall, did the whole procedure (proposed theme, methodological guidelines, training, etc.) meet your expectations?	<p>Yes: No:</p> <p>Why?</p>

DISCLAIMER

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