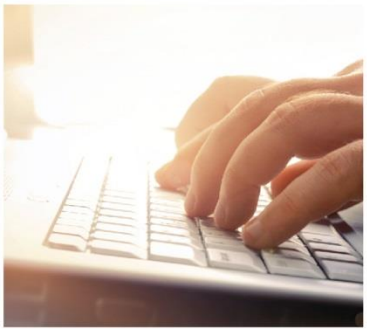
EXPERIENCE GATHERED FROM CONDUCTING DISSEMINATION AND COMMUNICATION ACTIVITIES IN THE **FP7 SCIENCE IN SOCIETY PROJECT INPROFOOD**







inprofood
Towards sustainable food research

This project has received funding from the European Union's Seventh Programme for research, technological development and demonstration under grant agreement No 289045. This communication reflects only the author's views and the European Union is not responsible for any use that might be made of the content of the information contained in it.

INDEX

01.

EXECUTIVE SUMMARY

1. EXECUTIVE SUMMARY

Science and technology is part of every European's life. It is present in the products that ease our daily lives, in the continuous expansion of our scientific and technological knowledge, or in the enhanced governance of our cities and countries. In addition, the attitude of Europeans towards research and innovation is increasingly positive. European and national-level consultations have shown that society wants to be more and more involved in science and research issues. Bringing together the relevant stakeholders, including scientists, policy-makers, civil society organisations and industrial actors into a common dialogue is expected to contribute to reducing the gap between knowledge producers, users and managers.

Conscious of this reality, the European Commission has been attempting to mobilize society to science since the second Framework Programme. Under the Seventh Framework Programme (FP7), the "Science in Society" (SiS) programme had as a main goal to increase public engagement and maintain a sustained two-way dialogue between science and society. The SiS programme introduced, in 2010, the Mobilisation and Mutual Learning (MML) Actions, which are projects that support sustainable collaborations between researchers, policy-makers, citizens, civil society and industry to address societal challenges, and that promote mutual learning in order to find solutions that develop and use knowledge in the public interest.

Funded under the challenge "A food dilemma: are technological innovations and health concerns reconcilable?", the SiS and MML project INPROFOOD has been implementing activities over the last three years aimed at fostering dialogue and mutual learning between industry, academia and civil society, already in the earliest stages of the research processes. The project has been developing practical guidelines for inclusive and sustainable research designs directed towards developing innovative approaches (technical and social) for dealing with the food and health challenge.

INPROFOOD has defined and implemented a dissemination and communication strategy as a means to raise awareness about the project and ensure a close involvement of all the actors that are expected to influence and be influenced by the project.

This document, developed by Sociedade Portuguesa de Inovação (SPI), the partner responsible for managing these activities within the INPROFOOD project, intends to convey the experience gathered from conducting dissemination and communication activities in this project. Firstly, it provides some information on the European context of SiS projects and MML actions, highlighting the relevance of communication and dissemination activities in the framework of these projects. This is followed by highlighting key aspects that should be taken into account while conducting dissemination and communication activities in SiS projects that may contribute to an effective knowledge exchange and stakeholder mobilisation. In particular, the importance of implementing a targeted strategy to monitor and evaluate the dissemination and communication activities and of updating it, so as to take on board project learning and new opportunities is emphasized. Various face-to-face and online communication activities are described as well as tools that support such activities such as a stakeholder database, branding and materials design as well as monitoring and evaluation activities.

02.

SCIENCE IN SOCIETY AND MOBILIZATION AND MUTUAL LEARNING CONTEXT AND RELEVANCE OF DISSEMINATION/ COMMUNICATION ACTIVITIES IN THESE PROJECTS

2. SCIENCE IN SOCIETY AND MOBILIZATION AND MUTUAL LEARNING CONTEXT AND RELEVANCE OF DISSEMINATION/ COMMUNICATION ACTIVITIES IN THESE PROJECTS

This section provides a brief description of the context of Science in Society (SiS) projects and Mobilization and Mutual Learning (MML) Action Plans, and defines dissemination and communication activities within the framework of European projects. Moreover, it explains the importance of these actions in engaging and mobilizing specific stakeholders[1], namely civil society, which is often underrepresented in the research and development process.

2.1 SiS and MML context

Although society has been increasingly interested in being involved in science issues, it is sometimes difficult for scientists to communicate their activities and results to the general public or even to other types of interested stakeholders.

The importance of fostering a good relationship between science, innovation and society is recognized by the European Commission (EC), expressed in its long established strategy to achieve this objective: it started with the Second Framework Programme for Research (FP2, 1987-1991) and was further developed in the following programmes [FP4 (1994-1998), FP5 (1998-2002), FP6 (2002-2006)]. Under the Seventh Framework Programme for Research and Technological Development [FP7 (2007-2013)] the actions of science and society were included in the Science in Society (SiS) programme[2].

The SiS programme aims to promote research's engagement with society and vice versa, whether by mobilising stakeholders for new partnerships, encouraging two-way dialogue between researchers and other stakeholders, promoting a European Research Area (ERA) of ethics, or by providing better access to research results. The SiS programme also supports new ways to interest young people in science and in research careers, and new ways to achieve greater gender equality in science. The programme has also been charged with the responsibility of supporting the following specific research activities: the connection between science, democracy and law; ethics in science and technology; the reciprocal influence of science and culture; the role and image of scientists; gender aspects; science education methods; and science communication.

The ERA's societal dimension can be enhanced by creating opportunities for members of the public and other groups in society (such as civil society organisations) to appropriate relevant knowledge, and for scientists to draw closer to the concerns of citizens. During the first years of the SiS programme under FP7, actions on public engagement and

[1] *A stakeholder is defined as any person, group or organisation, which as an interest in the topic of the project and/or could be potentially affected if the conditions change or stay the same. Examples include policy-makers, legislators, regulators, research institutions, the industry sector, civil society organizations or others.*

[2] *INPROFOOD (www.inprofood.eu) is one of the projects selected to receive funding from FP7 SiS programme.*

communication focused mainly on capacity building and mobilising key actors beyond the research community to engage not only in research findings but also in issues for future research.

The MML Action Plans[3] were launched in the framework of the SiS programme, in 2010. MMLs are designed to bring together actors from research and the wider community (e.g. civil society organisations, ministries, policymakers, science festivals and the media). They collaborate on action plans that will connect research activities for a chosen Societal Challenge[4].

These plans encompass a series of SiS actions, such as public engagement, investigating ethics and governance, two-way communication, women in science, and science education. The emphasis is on mobilising all relevant actors and on mutual learning in order to pool experiences and better focus their respective efforts on finding solutions that develop and use scientific and technological knowledge in the public interest.

A total of 185 projects under the SiS programme (FP7) have been contributing to a better understanding of the dynamics between science and society in different areas of knowledge. Amongst these, 15 MML action plans were funded in several thematic areas, as listed in the table below[5]:

	No. of projects funded	Thematic areas
SiS projects	185	Environment, Education/Teaching, Energy, Modernisation, Social Sciences, Gender, Technology, Mathematics, Science for Youth, Children and Elderly, Governance, Social media, Research, Health, Entrepreneurship, Journalism, Nanotechnology, Audio-visual, Ethics, Urbanism, Food, Nature, Marine research, Arts, Cultural heritage, Robotics, Security, Politics
MML action plans	15	Marine research, Neurology, Environmental sustainability, Food and Health, Economical Sustainability, Ethics, Urbanism, Science and Technology, Health

The importance of this issue is further translated by the EC in the development of the "Science with and for Society" programme under the new Framework Programme for Research and Innovation - Horizon 2020[6]. The objective is similar to SiS since it intends to build effective cooperation between science and society, to recruit new talent for science and to pair scientific excellence with social awareness and responsibility.

[3] *http://ec.europa.eu/research/science-society/index.cfm?fuseaction=public.topic&id=1226, last accessed 26.09.2014.*

[4] *INPROFOOD (www.inprofood.eu) is one of the selected MML projects under the challenge "A food dilemma: are technological innovations and health concerns reconcilable?".*

[5] *Community Research and Development Information Service, European Commission, last accessed 24.09.2014.*

[6] *http://ec.europa.eu/programmes/horizon2020/en/h2020-section/science-and-society, last accessed 26.09.2014*

INPROFOOD PROJECT

INPROFOOD (www.inprofood.eu), which received funding support from the EC's FP7 (Grant agreement no. 289045), is comprised of 18 partners from 13 countries. Over three years, INPROFOOD (Towards inclusive research programming for sustainable food innovations) explored new ways to establish dialogue and mutual learning between the scientific and civil society community, developing practical guidelines for inclusive, sustainable research designs. The outcomes and analysis of the project resulted in a roadmap to facilitate participatory method up-take, increase the participation of society in health and food research, and guiding principles for policy-makers on how to better incorporate science in society issues into research systems.

18
PARTNERS

13
COUNTRIES

2.2 Dissemination and communication activities

To support projects funded under the EU's FP7, the EC has published "Communicating EU Research & Innovation: A guide for project participants" (October 2012)[7]. It defined the purpose of communication activities as to:

> *"Generate an effective flow of information and publicity about the objectives and results of their work, the contributions made to European knowledge and scientific excellence, the value of collaboration on a Europe-wide scale, and the benefits to EU citizens in general."*

This document also explains the importance of communication in adding value to project activities such that society can understand how:

- "European collaboration has achieved more than would have otherwise been possible;
- the outcomes are relevant to our everyday lives;
- better use can be made of the results (e.g. by making sure they are taken up by decision-makers to influence policy-making and by industry and the scientific community to ensure follow-up."

[7] *http://ec.europa.eu/research/science-society/science-communication/index_en.htm, last accessed on 18.10.2014*

The interim evaluation study of SiS activities under FP7[8], from 2012, shows that project participants and coordinators across FP6 and FP7 have indicated that the consideration of communication and dissemination issues had some level of benefit to the implementation of their project, highlighting the relevance of these activities within the scope of SiS projects. This is further supported in the recommendations put forward in this study:

> *"Any future SiS/RRI programme should ensure that supported projects have more clearly defined dissemination and exploitation plans, with closer involvement of the actors that are expected to be influenced by the work (e.g. policymakers and practitioners)."*

Further, in its recent policy paper[9], Barroso's Science and Technology Advisory Council highlighted the need to involve experts in the dissemination and dialogue process as a means to broaden public engagement with science and technology to contribute to a more informed, sustainable and inclusive knowledge society. In the context of SiS activities, previous FP programmes have made clear that public engagement will only contribute to building trust if it has a clear impact on the research and innovation agenda and outcomes, and if it is conducted in a truly inclusive way, involving a wide range of stakeholders and citizens. Taking on board, and making effective use of, knowledge in different forms is a core issue for citizen engagement activities. Abelson et al.[10], also emphasize the need for two-way communication in such situations.

[8] *Interim evaluation & assessment of future options for Science in Society Actions, technopolis group and Frauhnofer ISI, December 2012.*

[9] *"Science for an informed, sustainable and inclusive knowledge society", Barroso's Science and Technology Advisory Council, 2013.*

[10] *Deliberations about deliberative methods: issues in the design and evaluation of public participation processes, Julia Abelson, Pierre-Gerlier Forest, John Eyles, Patricia Smith, Elisabeth Martin, Francois-Pierre Gauvin, Social Science & Medicine, Volume 57, Issue 2, July 2003, Pages 239–251 DOI: 10.1016/S0277-9536(02)00343-X.*

03.

ESSENTIAL ELEMENTS IN DISSEMINATION AND COMMUNICATION ACTIVITIES FOR AN EFFECTIVE KNOWLEDGE EXCHANGE AND STAKEHOLDER MOBILIZATION

3. ESSENTIAL ELEMENTS IN DISSEMINATION AND COMMUNICATION ACTIVITIES FOR AN EFFECTIVE KNOWLEDGE EXCHANGE AND STAKEHOLDER MOBILIZATION

This section highlights three key principles behind communication activities in INPROFOOD, which may prove useful for application in other projects:

- Communication should be strategic and targeted;
- Activities should build on best practice, aim to make efficient use of resources and support tools available;
- Effective information translation and maximising two-way communication as a means to achieve it.

3.1 Strategic and targeted communication

According to "Communicating EU Research & Innovation: A guide for project participants" (October 2012)[11], communication should be strategic and targeted.

Strategic communication

As emphasised in the proposal templates of the current Framework Programme of the EU (Horizon 2020)[12], the development of a Dissemination and Communication Plan is of paramount importance for ensuring that the most appropriate tools/channels are used to reach all project stakeholders.

To ensure that communication is strategic, as recommended in this document, in INPROFOOD, a Communication plan was developed. Following suggested best practice, this defined:

- Intermediate and long-term **goals and objectives** of the communication actions, as well as the expected impact;
- Its **target audience** (regional, national, European and/or worldwide) by identifying who has an interest in the topic, who can contribute to the work, who would be interested in learning about the project's findings or who could be affected directly by the outcomes of the project, who are not directly involved, but could have influence elsewhere;
- The **resources required**, including suitably qualified human resources and necessary budgetary means for implementing the communication and dissemination activities;
- **Key messages** that the audience should remember for each target audience taking into account particular language/stylistic differences between different audiences;

[11] *http://ec.europa.eu/research/science-society/science-communication/index_en.htm, last accessed on 18.10.2014*

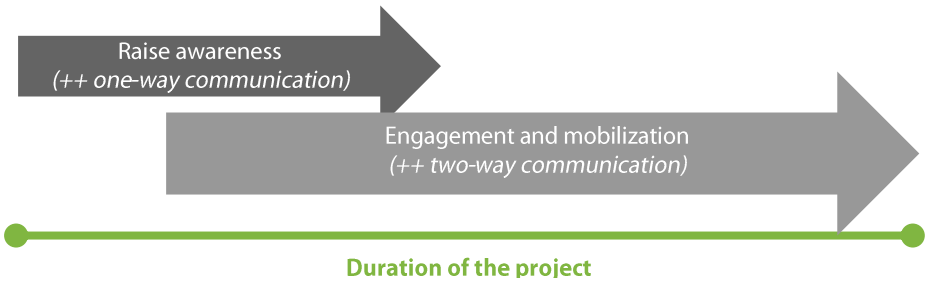
[12] *http://ec.europa.eu/research/participants/data/ref/h2020/call_ptef/pt/h2020-call-pt-ria-ia-csa_en.pdf*

- **Channels/ tools of communication** appropriately established for reaching the audience, including means for interpersonal communication, as well mass media communication;
- **An action plan** including schedule including those responsible for carrying it out - Identify the key moments in the project which will result in valuable messages for the stakeholders; Define a clear strategy (action plan) for implementing the Dissemination and Communication Plan;
- Effective **monitoring and evaluation** activities.

In order to develop this plan, as emphasized in EC documents on communication and dissemination activities[13]:

- Objectives were clearly defined;
- Targets, audience and message were clarified before deciding on the media;
- Creative people were used to achieve desired outcomes (a multimedia design team were used). This also guarantees that a standardized visual identity is used and that consistent messages are transmitted during the project communication activities.

While planning of the dissemination and communication activities in SiS projects one should also consider the different phases of communication within the project, including one-way communication as a means to inform stakeholders about the project and its results, as well as two-way communication actions to engage and mobilize stakeholders. It is expected that the former will occur at an earlier stage of the project, while the latter will come about as the project activities are implemented.



Thus, in INPROFOOD, it was important that the plan was viewed as a "living" document, updated to account for new opportunities for communication and with the ability to take on board learning from previous activities. In this respect, the monitoring and evaluation activities played an important role.

[13] *http://ec.europa.eu/research/social-sciences/pdf/communicating-research_en.pdf*

In MML actions, in particular, but also in the interaction of any Research & Development (R&D) project with those who need to take on board its results, it is important to gain the buy-in of all partners to ensure their active involvement in communication activities. Experience in INPROFOOD showed that this is best achieved by:

- Giving a high profile to communication activities throughout the project from its onset (this could be done by organizing a specific event (whether physical or online) or devoting a particular session of an existing event (such as a project meeting) to the discussion of such activities;
- Involving all partners in the development of the Communication strategy;
- Regularly communicating to the partnership about the different activities partners have implemented to allow mutual learning and sharing of experience about effective methods and to impress upon partners the benefits of active communication to their activities (e.g. highlighting the success of active partners in this respect).

Targeted communication

As highlighted in the interim evaluation study of Science in Society activities under FP7[14], an effective dissemination and communication of science and technology is crucial to ensure broad public engagement. On the other hand, the contribution of public engagement on Europe's science, innovation and technology system is greatly dependent on whether it is conducted in a truly inclusive way, involving a wide range of stakeholders and citizens.

In order to sustain dialogue between stakeholders and to mobilize all actors into tackling the societal challenge at hand, it is essential to foster a broader and deeper communication with all target groups. In this context, and as new technologies are changing the way knowledge is produced, it is important to consider that these trends also affect the way citizens engage with science and innovation and the way science should and could be communicated and disseminated. In addition to the traditional analogue tools (brochures, posters, etc.), digital channels and media such as video infographics or social networks, are gaining increasing importance as a way to reach a different groups of stakeholders.

The EC is keen on building on the growing interest of society in understanding science and taking a role in science and technology to further involve it in the governance of research. In a practical way, it is thus of paramount importance to ensure that the appropriate tools are used to communicate and disseminate the challenge of the project, its results and activities ('informing' - one-way communication actions), but also that the most effective channels are utilized to mobilize stakeholders into the reducing the gap between knowledge producers and citizens ('engaging' - two-way communication actions).

[14] *Interim evaluation & assessment of future options for Science in Society Actions, technopolis group and Frauhnofer ISI, December 2012.*

In its communications, the EC suggests some tips on how to engage with the different publics[15]:

- ✓ Focus on communicating results rather than processes;
- ✓ Define selective and targeted activities to maximize impact;
- ✓ Be transparent;
- ✓ Particular emphasis must be put on "going local" – local contacts, local press, local resources;
- ✓ Focus on people and stories to present the facts;
- ✓ Ensure that the EU and project's corporate image are present in all the material;
- ✓ Focus in clear and jargon-free language, adapted to the targeted audience;
- ✓ Adapt the materials to the local language, whenever necessary.

Also, while reaching out to stakeholders, whether by informing them about the project results, or by attempting to mobilize them to the project activities, it is of paramount importance to select the appropriate means to effectively engage in knowledge exchange and stakeholder mobilization activities. Ensuring transparency regarding information translation and participant mobilization for consultation processes is also of utmost importance. The strengths and challenges associated with each tool, presented in Table 1, are inspired by the results of the activities of INPROFOOD project.

Table 1. Strengths and challenges associated with each typology of tool and means.

Tools and means[16]	Strengths	Challenges
Printed materials (project brochure, newsletters, flyers, leaflets, posters, etc. with a common brand and visual identity)	• Visually attractive • Useful for certain type of stakeholders and events	• Costly • May not reach some specific stakeholders
Digital communication (website, Twitter, Facebook, online newsletters, online news/press releases, blogs)	• Easy to use • Generally free • Attractive for younger populations as well as Civil society organisations • May lead to a higher participation in consultation processes	• May be difficult to convey the right message
Presentation/ attendance at relevant scientific/ technical events (articles, information relays, scientific publications, oral/poster presentations in scientific and/or business-based events, Brokerage events)	• Appealing to academic and industry sector • Provide structures for discussion • Wide audience (depending on events) mutual learning actions	• Very specific to a certain type of stakeholders • Message may be too technical and not clearly perceptible by other audiences • May be too specific to certain type of stakeholders (depending on the event)

[15] *ftp://ftp.cordis.europa.eu/pub/fp7/docs/communication-dissemination.ppt, last accessed on 26.09.2014*

[16] *This is not meant as an exhaustive list of tools and means that can be employed in SiS projects, nor all the strengths and challenges associated.*

Tools and means[16]	Strengths	Challenges
Direct communication with individuals (face-to-face conversation, email communication, telephone calls)	• Direct engagement with stakeholders • Possibility of establishing mutual learning actions	• Only a small fraction of the stakeholder group is targeted
Methods and tools for public engagement in science[17,18] (e.g. Awareness Scenario Workshops, Open Space Conference, PlayDecide Games, Café Seminar, the voting conference, etc.)	• Mobilize and engage different stakeholders in cooperation activities • Ensure transparent participation of stakeholders • Provide structures for discussion	• Ensure transparency in the invitation of participants • Background information provided for all participants

3.2 Building on best practice, making efficient use of resources and support tools available

Building on best practice

In addition to best practice guidelines which contain some examples of best practice communication, it is also often useful to see how other projects have tackled similar activities. Some examples are shown below of projects including different types of communication activities.

GAP Connecting Science Stakeholders and Policy

GAP2's (http://gap2.eu/) aim is to demonstrate the role and value of stakeholder driven science within the context of fisheries' governance. This MML project brings scientists, fishermen and policy makers together. It implements a number of communication tools, not only to inform stakeholders about the project results and activities, but also to engage them in knowledge and experience sharing in the topic (through, for instance, focus groups, interviews, a methodological toolbox to help researchers design a truly collaborative research project and a twitter account with more than a thousand followers).

[17] A number of policies and methods for public engagement in research and innovation have been developed along the years. The FP7 funded project Engage 2020 (www.engage2020.eu) is currently collecting the information available on these. A detailed analysis of these methodologies is out of the scope of the current document.

[18] INPROFOOD project has developed an Action Plan to promote participatory approach to research programming for sustainable and healthy food innovations.

NERRI (www.nerri.eu/) is a MML project that aims to contribute to the introduction of Responsible Research and Innovation (RRI) in neuro-enhancement (NE) in the European Area and to shape a normative framework underpinning the governance of neuro-enhancement technologies. The project involve different stakeholders and promote a broad societal dialogue in the topic by implementing activities such as interviews and workshops, and by feeding the project website and social networks with relevant news about the project and the area.

The project VOICES (Views, Opinions and Ideas of Citizens in Europe on Science) (www.voicesforinnovation.eu/) gathered opinions and ideas about urban waste from over 1000 citizens across 27 EU countries. The project has devised a methodology using 100 three-hour focus groups in order to engage citizens and gather their opinions and ideas about research and innovation. The consultations were run by science centres and museums. A number of informative videos were developed, showcasing the different public events organized.

Moreover, the EC has developed a quick dissemination guide[19] with specific suggestions to improve the dissemination strategy of European funded projects.

Making efficient use of resources and use of support tools available

To make an efficient use of resources, communication activities mean taking decisions that balance the most effective means to transmit information or receive feedback from stakeholders with the most efficient use of resources available. Often this involves considering whether paying for communications will allow access to an audience that is not available for free by other means or compare costs for a particular service. Since time and human resources are also limited, online communication has become increasingly popular as a means to reach a large audience with minimal resources.

It is worth noting that the EC or other EU funded projects will frequently implement communication activities which could involve little or no expense. For example, in addition to hosting physical events, the EC has a

USEFUL WEBSITES

http://ec.europa.eu/research/bioeconomy/

http://ec.europa.eu/health/index_en.htm

http://ec.europa.eu/environment/index_en.htm

http://ec.europa.eu/research/industrial_technologies/index_en.cfm

[19] *http://cordis.europa.eu/fp7/ict/components/documents/communication-and-dissemination-guidelines-a4.pdf, last accessed on 26.09.2014*

number of regular online publications provided by CORDIS as well as webpages associated different themes designed to disseminate the activities of its projects. These can provide a good source of information on relevant activities for participation and a very cost-effective means to reach a large audience. Often specific projects are funded with the aim to support other EU funded projects in communication of their results. In the context of the bioeconomy, CommNet: Communicating the Bioeconomy (http://commnet.eu/) provides support to facilitate the communication of EU Bioeconomy research to the general public and to key target groups including: media, young people, industry and policy makers. It does this by providing activities ranging from media training to audio-visual production, from the creation of educational material for schools to supporting communication of research to the business world.

3.3 Effective information translation and maximising two-way communication to achieve it

The basic principle behind communication activities within INPROFOOD is "information translation" i.e. to seek to promote effective use of knowledge derived from the interactive and integrative processes developed[20]. In developing guidelines for future communication after its first year of operation, INPROFOOD concluded that, from the perspective of mutual learning within such activities, the following aspects appear to be particularly important for maximizing success:

- ✓ Identifying the media used by the stakeholders the project wants to address that might promote their feedback and allow two-way communication;
- ✓ Maximising opportunities for two-way communication with relevant stakeholders;
- ✓ Making sure that the communication is structured so that it works towards an objective that is clear to those involved;
- ✓ Motivating participation by ensuring the benefit of participation is clear to those that need to be involved.

[20] *Citizen engagement processes as information systems: the role of knowledge and the concept of translation quality, Tom Horlick-Jones, Gene Rowe and John Walls, Public Understanding of Science 16, 3 (2007) 259-278" DOI : 10.1177/0963662506074792*

04.

EXPERIENCE FROM IMPLEMENTING COMMUNICATION ACTIVITIES IN INPROFOOD

4. EXPERIENCE FROM IMPLEMENTING COMMUNICATION ACTIVITIES IN INPROFOOD

Research and development projects (including SIS projects) often need to communicate with or facilitate cooperation between a diverse set of actors with different types of knowledge. Thus, a broad reaching approach using different types of communication activities becomes necessary. Since INPROFOOD used a number of different approaches involving various face to face and online communication activities, this section is intended to share experience gained in the context of implementing different communication activities in INPROFOOD, highlighting particular features and important aspects to consider for specific activities. It cannot be considered as an exhaustive guide to existing communication activities, but rather it is presented as a collection of examples on which other projects, might wish to draw, for use in similar situations.

4.1 Face-to-face communication

Face-to-face communication may cover a multitude of different types of interactions between individuals in the same physical location. Commonly used formats might include:

- One-to-one interactions (e.g. during an interview or more informally during a period of "networking" at an event such as a coffee break between presentations);
- Interactions with an entire group (e.g. at formal events such as workshops or conferences).

Formal events may take many different formats, each emphasizing different aspects of communication. As an MML action needing to facilitate cooperation between a diverse collection of actors with different types of knowledge, INPROFOOD used a wide range of different types of activity including: structured interviews and project events (European Awareness Scenario Workshops, PlayDecide Games, Open Space Conference, as well as a workshop and conference with a more traditional format), as well as attending externally organized events.

There was a general consensus among INPROFOOD partners that face-to-face communication or one-to-one communication via telephone was the most effective for transmitting information on the project and receiving feedback from stakeholders. However, it was also the most labour intensive.

Project interviews

INPROFOOD conducted structured interviews about processes, structures, actors and decision making mechanisms in research funding in Austria, Germany, Greece, Italy, Netherlands, Portugal, Scotland, Slovakia, Spain, UK and at EU level, with actors involved in a particular topic under the theme "Development of foods with improved nutrition". Partners in different EU Member States followed an interview guide with analysis mainly conducted by one partner. Some partners

conducted the interviews by telephone rather than face to face, but since the communication was one-to-one, they provided an excellent means to gain the opinions of stakeholders. As the purpose of the interviews was more aimed at providing information for the project to analyse (rather than presenting a best practice case study), it was less easy for the participants to see the immediate benefit of the activity, compared to other face-to-face methods used, such as those that involve interaction with a number of individuals and thus provide more opportunities for networking. This presented more of a challenge in recruiting those willing to participate.

Project events

EUROPEAN AWARENESS SCENARIO WORKSHOPS

35 European Awareness Scenario Workshops (EASWs) on sustainable research programming were conducted in three series in 13 different countries (Austria, Belgium, Denmark, France, Germany, Greece, Italy, the Netherlands, Portugal, Slovakia, Spain, Turkey, and the United Kingdom). They brought together different stakeholders (from public organisations, civil society, and the business sector) to establish a mutual learning environment and to generate shared visions of socially acceptable, trustworthy, and transparent conditions for developing sustainable innovations in the area of food and health. This participatory activity was organised around the principles of a transparent recruitment strategy, harmonised implementation procedures taking account of power imbalances, as well as authenticity in reporting, allowing for a retrospective comparison of the outcomes.

By employing a lottery and open call process for inviting stakeholders instead of using the regular channels, this participatory activity succeeds, to a great extent, in engaging stakeholder groups that are usually not sufficiently integrated into participatory discussions on food and health programmes. This process can hold up on scrutiny and is traceable by interested and sceptic parties. For large countries, it might prove to be difficult and labour-intensive to produce a single database. The invitation process has been perceived as quite labour-intensive by some partners. Personal invitations and follow-up calls have shown to be very valuable and almost mandatory to attract participants. Open Calls for Participation have been perceived as much less labour-intensive but may not attract enough stakeholders without a large (and costly) advertising campaign. Non-arbitrary selection might lead to the non-attendance of certain stakeholder organisations which may be expected to attend.

The provision of a toolkit enables all implementing organisations to follow a unified process. The use of professional facilitators ensures the implementation of this designed process and makes sure that everyone has a voice and that no single person or stakeholder can dominate the deliberations. A briefing exercise for these facilitators is mandatory, though. Careful documentation should be ensured in each working group to optimize information translation (e.g. by dedicated note takers). The stringent following of the foreseen procedures is necessary to make workshops comparable.

The procedure, its background, and its objectives and use, need to be explained carefully to the participants. The procedure is time-intensive.

Scenario Workshops are a sophisticated, well thought-out, and democratic method to facilitate participatory processes – especially for the inclusion of target groups that are neglected in usual processes. The implementation at European and multi-state level needs careful and intensive planning, briefing, and monitoring. Financial support, especially for civil society organisations that do not have the means for covering travel expenses needs to be considered to ensure their participation.

PLAYDECIDE GAMES

Science centres in 11 countries evenly spread throughout Europe engaged with young people in a uniformly designed PlayDecide game developed by Ecsite and EUFIC as part of the INPROFOOD project (in the second round of the event, also with support from WHO and University of Surrey). Discussion games, like PlayDecide, are simple and effective ways to learn to discuss about societal and scientific issues. But discussing is not the only purpose of these games: it is also to propose solutions, define strategies and policies for action, and inform the decision and policy makers of the ideas and plans developed during the game.

The games are designed to facilitate the take-up of participatory methods, exchange experiences and knowledge. The game is composed of set of cards covering fact, issue and personal stories on a chosen topic. The results of the games are uploaded on the dedicated website which allows for comparisons of views between different countries. The tool introduces policymaking as a process where different choices and options are available.

Through dialogue and listening to different points of view, participants realise the complexity of policymaking. PlayDecide is a proven method to stimulate debates and policy positions of a given group on controversial scientific topics[21].

OPEN SPACE CONFERENCE

This event gathered around 70 stakeholders from 18 different countries and thus brought in a wide spectrum of expertise and cultural backgrounds. One of the main targets of this conference was to facilitate networking and developing new topics for future research across countries and stakeholder groups (including civil-society-

[21] *http://www.playdecide.eu/sites/default/-les/instructions/Fund_Manual_4.2.pdf*

organisations) in the field of food and health related techno-science, to share insights and experiences, and to initiate new partnerships and new topics to research in food and health.

To meet these challenging objectives and to offer an optimal opportunity to freely speak in a pleasant and creative atmosphere INPROFOOD-partner DIALOGIK designed a conference format and structure which is roughly based on the "Open Space Technology".

Right from the beginning the participants developed their own agenda according to their areas of interest and expertise. Due to the Open Space Method, the agenda setting was completely in the hands of the participants. While the facilitator provided the conference structure, e.g. in terms of organising time-slots for the workshops and discussion groups during the day, the issues discussed within these groups depended on the preferences of its members. So the participants put their own topic on the agenda and were thus able to discuss it with others in the workshop sessions or to simply join other groups of their interest. There was plenty of space to address all the pressing issues mentioned at the beginning.

The format of this event allowed the stakeholders to freely express and exchange opinions, share expertise and best-practice experiences, and discuss it with people from other disciplines, backgrounds, and countries.

In relation to the limited time of just one day, participants elaborated fruitful results, and exchanged their experience in a comfortable setting. The preliminary report can be sent to the participants within a few days, and also provide a means of asking for feedback and further elaboration.

Group size can be a limiting factor; groups can be too large (more than 12 people) and not all participants are evenly heard, or groups are too small and not all points of view are represented.

In an intense discussion, information can get lost. People tend to focus on the discussion and listening to each other, but not on the reporting. A proper audio recording in each of the workshops may facilitate the reporting, but may limit the perceived freedom to speak as well. Another option is a professional note taker (or even stenographers) who just assure that all results are reported.

The experiences in Brussels showed that the Open Space Technology as a conference method can be successful for diverse groups with heterogeneous interests and from various disciplines (probably from conflicting parties as well) as given in the INPROFOOD project and the topics of food, health and research. It brought about new topics in main research areas despite the very short time frame of a full day event.

WHO EUROPEAN REGION WORKSHOP ACTION PLAN DEVELOPMENT EVALUATION

At this event, an outline for a Mobilization and Mutual Learning Action Plan was developed through a two-day workshop bringing together the different identified stakeholders to present prior project activities. It resulted in a roadmap of how to integrate science and society in building up research or answering policy responses. The event was by invitation and the selection of the participants followed criteria that aimed at maximising geographical and diverse stakeholder participation. Since the purpose was for the participants to provide input to the action plan, their contribution was paramount and thus the structure of the event, using working groups was designed to maximise this contribution.

FINAL CONFERENCE

This event followed an open invitation/registration procedure using the vast INPROFOOD database which included also the interested parties that subscribed to the database by enlisting via the online possibility on the INPROFOOD homepage. The invitation process was aligned to the INPROFOOD target groups, and it was attempted to account for an equal distribution of invitations among the stakeholder groups.

The primary aim of this conference was to present and to feed-back the results to policy makers, industry, research, civil society organisations, and an interested public. In addition, a strategically selected panel of experts from public health, industry and research, and public participation, was chosen to stimulate the discussion amongst the present participants and stakeholders, and to give their input to elicit additional points that have not been covered or that need closer attention in further MML actions. Furthermore, the audience was asked to state any comments or questions they might have in general and in connection with INPROFOOD. A 'ballot box' was installed where participants could submit their questions. These were also put to discussion with the expert panel. All the points raised were taken up to be included in the Action Plan that will be available at the end of the project.

Thus, this concept allowed for both one-way interactions with stakeholders (dissemination of results and information) and two-way interactions in form of the feed-back from the panel and the audience.

ATTENDING EXTERNAL EVENTS

INPROFOOD found that attending events organized by other entities, whether annual events of relevant networks or associations or one-off events to be a valuable way to extend communication activities. Often partners would attend such events as part of their regular networking and professional activities. Careful selection of the event needs to be made to ensure that the topic addressed is the most relevant and that the event provides the opportunity to meet the project's target audience. Even if a presentation or poster is not delivered, informal networking can present a useful

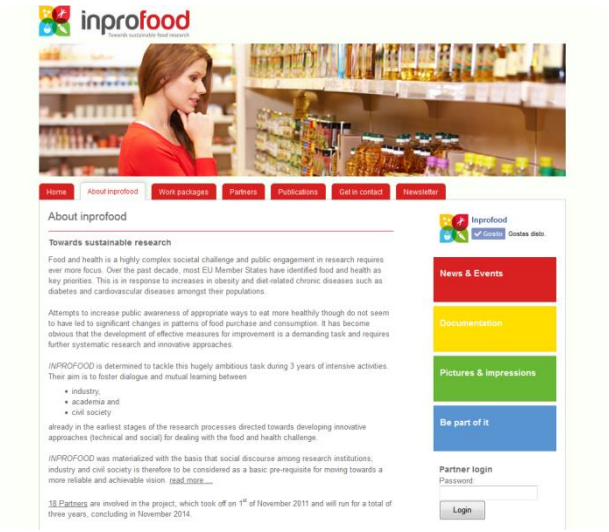
opportunity to discuss the project and provide stakeholders with information about the project (e.g. via a project brochure or flyer).

4.2 Online communication

Technology has considerably advanced in recent years and stakeholders increasingly access a diverse range of online content. Beyond static text on a website, they can listen to podcasts, watch videos and share their interests and opinions on social networking sites. Further, instead of travelling to an event they can participate remotely. Thus, it is important that such technologies are employed to communicate effectively with stakeholders using media that they would access during their day-to-day activities.

Project website

The project website is often one of the main project communication tools. Experience shows that:



- Websites updated on a regular basis are more likely to generated return visits and attract a greater number of visitors overall.
- Including audio-visual content (e.g. videos of some project workshops) along with other downloadable reports and documents (e.g. podcasts), pictures and information on coming project activities like project events makes the website more attractive;
- Changing the homepage may provide a useful means to advertise project events;
- Including a facility for feedback and linking to social networking tools like Facebook, LinkedIn and Twitter is important for generating two-way communication.

Newsletters

Newsletters are frequently used to update individuals interested in the project with a summary of project activities and can also include information on other activities relevant to the topic addressed by the project. Experience shows that:

- Newsletters sent via email to a database of contacts held by the partnership can provide a means for engaging a wide range of stakeholders throughout the duration of the project;

- Employing a consistent and attractive template consistent with the graphical image of the project helps recipients recognise the origin of the content and transmits a professional approach. It also speeds up the process of developing such newsletters.
- Beyond being formatted for online distribution via email, newsletters can also be designed in a way they can be easily printed and distributed in the events organized by partners.

Press releases and articles

Apart from sending stakeholders news via email, information about the project may be provided to online media via press releases or articles accessed by the target audience. Experience shows that:

- Information provided in externally published online content helps increase activity on the project website;
- Since many sites with a large readership charge for space, careful consideration is needed to assess the cost-effectiveness in each case;
- While contacts may be included for further information or to encourage feedback, this form of communication is mostly one-way.

Social media

A huge range of social networking sites currently exist aimed at different audiences with a diverse range of functionalities. For INPROFOOD Facebook (www.facebook.com/inprofood) and Twitter (https://twitter.com/inprofood) accounts were set up and maintained due to their widespread use across all the target groups addressed by the project. Experience shows that:

- Careful management is required to ensure that partners communicate relevant activities on a regular basis that can be used to provide the new content required to maintain stakeholder's interest;
- Beyond a project networking page, contents can be adapted to the partner's current social networking activities (e.g. an institution page can further disseminate share the content concerning the project it is participating in).

Webinars

Webinars are an online form of interaction that INPROFOOD has found useful for:

- Sharing experience and two-way communication with stakeholders;
- Expanding the dissemination of its results to a public unable to attend a physical event.

Aspects to consider:

- While various platforms exist that are simple to use, a number of participants may still be unfamiliar with using such technology and so it is useful for the organiser of an event to provide some support to help those with any technical difficulties in participation;
- Achieving a good level of interaction between participants can be more difficult than with a face-to-face event due to the need also to technically manage who has the ability to transmit their thoughts to the rest of the participants.

05.

SUPPORT TOOLS FOR EFFECTIVE COMMUNICATION

5. SUPPORT TOOLS FOR EFFECTIVE COMMUNICATION

5.1 Developing a stakeholder database of contacts

The development of a **database of stakeholders**, whether as a platform for communication between stakeholders or as an internal tool of the consortium for addressing communication materials to all that may be interested in the project[22], is an action of great relevance in SiS projects.

Experience in INPROFOOD showed that:

- The database could be significantly strengthened when a strong national network of contacts could be accessed (e.g. through a partner in the particular country);
- Categorisation of stakeholders was particularly useful for targeted communication activities, but classification of certain organizations can present a challenge, particularly when there is overlap between categories.

22 The INPROFOOD project has developed a database of stakeholders (with over 5400 entries) from publically available sources and from manifestations of interest from stakeholders. It was used not only for inviting participants for the project engagement actions, but also for informing them about the project results and activities. More information on how the database was developed can be found here: http://www.inprofood.eu/documentation/.

5.2 Branding and materials design

Design of communication materials incorporating, for example a project logo, using documents based on a standard template, employing specific colours and formatting can help transmit a consistent visual image for the project.

General communication materials such as a brochure and poster can be adapted throughout the project to incorporate information on project results and targeted to different stakeholders. Translation of these documents in to various languages can also support national communication activities.

5.3 Monitoring and evaluating for improving communication actions

In the context of SiS projects and mutual learning, the aim of communication and dissemination is two-folded: raising awareness to the challenge and project (one-way), as well as promoting two-way communication, encouraging effective use of knowledge derived from the interactive and integrative processes developed. As stakeholder engagement is the cornerstone of SiS projects, it is of utmost importance to continuously monitor and evaluate the effectiveness of communication and dissemination activities, so as to update and/or redefine the dissemination activities and to ensure the quality of the activities carried out.

Gaining feedback from stakeholders is of paramount importance to gauge the effectiveness of the communication actions.

It is thus beneficial to include in the Dissemination and Communication Plan of SiS projects a monitoring and evaluation strategy with a set of quantitative and qualitative indicators that should aim to provide information about the quantity and quality (in terms of knowledge use) of one-way and two-way communication actions conducted.

The definition of indicators should take into account the often diverse target audience, in terms of size and type of stakeholders, across the countries involved in SiS projects. As such, it is frequently recommended that many quantitative indicators should be considered in relation to an estimation of the size and the proportion of each of the relevant types of stakeholders. Qualitative indicators are not as straightforward to assess, since they are dependent on the judgement or perception of a certain activity to a certain stakeholder. However, their importance for assessing the effectiveness of communication actions is incontestable.

Table 2. Quantitative and qualitative indicators.

Quantitative indicators	Qualitative indicators
Measured by quantifying visitors of websites, number of participants, etc.	Measured through feedback obtained directly from stakeholders and/or from partners
• number of enquiries about a result/document/event • number of brochures, DVDs, materials distributed • number of visitors to the project website or other online resources • number of members of social network accounts • number of visitors attending a conference, seminar, workshop • amount of press coverage (number of articles and items on radio or TV) • size of audience reached through dissemination activities • number of meetings (e.g. bilateral meetings during large events) focusing on collaboration • number and type of collaboration activities carried out • level of satisfaction of participants in the planned project events	• to indicate the most effective communication action from the point of view of gaining feedback useful for the project's objectives (also including the reasons for this choice) • to give a general feeling of feedback from stakeholders • to offer specific ideas about what has been successful, how to do things differently next time or new ideas for future projects

A reporting mechanism may also be included in the monitoring and evaluation strategy of the project, which would establish defined moments in the project to implement the evaluation mechanisms (preferably every 6 months), establish clear responsibilities in terms of what should be provided to whom (within the partnership) and when, and define tools that could be used to monitor and evaluate the activities. The reporting mechanism should be directed towards gaining feedback from stakeholders, particularly as a result of the activities implemented, but also to gain understanding on the actions carried out by each partner.

Feedback from stakeholders	Usually obtained through satisfaction/evaluation questionnaires distributed to participants at conferences, seminars, workshops or other events, as well as direct feedback obtained in face-to-face or telephone contact with relevant stakeholders of the project. The project website could also include a tool where stakeholders could provide comments regarding the implementation of the project/ its activities.

Feedback from partners	Can be attained through the provision of regular (e.g. on a six-monthly basis or continuous) reporting by partners to the dissemination/communication partners. The reports should contain a comprehensive analysis of the communication actions conducted (those foreseen in the project plan and ad-hoc activities), including evidence of the actions (e.g. presentations, participants lists, etc.). By performing regular monitoring of the activities it is possible to assess if the action plan is being carried out properly and is on time. It will also be possible to analyse which activities had the largest impact on the stakeholders (both in quantitative and qualitative terms). In their reports, partners should address not only the quantitative indicators, but also the qualitative ones, providing feedback on stakeholders' responses and comments during their interactions. The conclusions from these reports should be translated into an updated action plan for dissemination and communication. An online platform (such as web-based spreadsheet programmes and word processors) may be used for continuous reporting of the communication and dissemination activities performed.

It is worth noting that during the implementation of SiS projects, there are a number of factors that may hamper an appropriate implementation of communication and dissemination activities by the partnership, as well as the monitoring and evaluation mechanism. On the basis of the experience from the INPROFOOD project, the following aspects can be highlighted:

- Although communication and dissemination actions are closely linked with the activities of SiS projects, partners often tend to concentrate their efforts on conducting the planned activities of the project and on elaborating the associated deliverables in a timely manner, giving a secondary focus to dissemination and communication actions;
- The ability to conduct an effective management of the communication and dissemination actions of the project and to efficiently monitoring and evaluate such activities is highly dependent on the size of the partnership as well as on the commitment of each partner to these activities;
- The communication specialist of the project (often the leader of the Dissemination/Communication work package), jointly with the coordinator, should be able to keep track of all communication/dissemination elements and to closely monitor its implementation. Liaising with all partners is of utmost importance in this regard, allowing on one hand the re-planning of activities, and on the other hand the provision of necessary support in developing dissemination materials;
- It is of paramount importance that the quantitative and qualitative indicators defined are tailored to the project activities, duration and target stakeholder groups, so that the monitoring and evaluation strategy is realistic and appropriate.

06.

GENERAL CONCLUSIONS

6. GENERAL CONCLUSIONS

MML Action Plans have been launched to bring together actors from research and the wider community (e.g. civil society organisations, ministries, policymakers, science festivals and the media). They collaborate on action plans that will connect research activities for a chosen Societal Challenge. INPROFOOD has explored new ways to establish dialogue and mutual learning between the scientific and civil society community, developing practical guidelines for inclusive, sustainable research designs. The outcomes and analysis of the project resulted in a roadmap to facilitate participatory method up-take, increase the participation of society in health and food research, and guiding principles for policy-makers on how to better incorporate science in society issues into research systems.

As highlighted in the opinion paper from Robert-Jan Smits[23], "science and innovation need to be well-aligned with societal values if they are to play an effective role in helping address societal challenges. Such alignment can only be achieved if there is a robust exchange of ideas and aspirations between science, innovation and society". Efficient communication and dissemination actions are one of the most important activities to achieve such interaction and communication between different actors of society.

In this document, INPROFOOD's experience of conducting dissemination and communication activities has been shared. As also recommended by the EC, it was important that a clear strategy guided these activities and that communications could be targeted at specific types of stakeholders. It was also essential that the implementation of this strategy was carefully monitored and evaluated to allow for its updating to take on board learning from previous activities along with new opportunities for communication. For this it was important to gain "buy-in" from all partners by giving a high profile to communication activities throughout the project from its onset and involving all partners in the development of the Communication strategy as well as regularly communicating results of activities implemented.

A broad range of communication activities were implemented to gather different types of information or receive feedback from different types of stakeholders. The particular features of each have been discussed and important considerations highlighted for face-to-face and online activities as well as for support tools such as a stakeholder database, materials branding and design, and monitoring and evaluation strategy. A real focus on maximising opportunities for two-way communication was at the heart of activities with the challenge for each activity to clearly demonstrate the benefits of participation to those that need to be involved. While face-to-face communication or one-to-one communication via telephone was judged to the most effective for transmitting information on the project and receiving feedback from stakeholders, it was also the most labour intensive. Thus, it was important to supplement this with online activities, particularly those that are directed to individuals or that are attractive for the interactive nature (e.g. new social media).

[23] *Robert-Jan Smits, Aligning science, innovation and society: An integral part of European Research and Innovation policy, October 2013, Berlaymont Paper, European Commission.*

Acknowledgements

Sociedade Portuguesa de Inovação (leader of the Communication and Dissemination strategy Work Package) and University of Hohenheim (coordinator of the project) acknowledge the support provided by the project partners regarding dissemination and communication actions of the project. The conclusions herein presented highly benefited from the discussions with partners and feedback from INPROFOOD stakeholders.