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Executive Summary

Throughout the year of 2020, the PRO-Ethics project has enabled the research funding organisations (RFOs) in its consortium to reflect on their so-named Pilot I cases and showcase some of their prior experiences in working with participatory approaches in RFO activities. For this process, four hosting RFOs (FFG, VDI/VDE-IT, RCN and Innoviris) have partnered with four supporting RFOs (CDTI, TAČR, RCL, UEFISCDI) who contributed to a reflection and analysis process with their external and new perspectives. In this first phase of the project the RFOs reflected on their already existing participation processes with different means and from different perspectives, resulting in a diversity of insights.

Broadly speaking, the 11 Pilot cases in PRO-Ethics can be situated within three different fields of action: 1) citizen participation¹ in innovation projects; 2) citizen engagement within agencies' processes; and 3) citizen engagement in evaluation processes. The four cases of Pilot I represent all three of these action fields, with some fitting more neatly into a category than others. This also results in some readily apparent distinctions and overlaps mirrored in the evaluation results. First, Pilot case 1 (FFG) and 2 (VDI/VDE-IT) both fit within the action field of citizen participation in innovation projects, having evaluated programmes that support projects focused on end-users. In their evaluations, case 1 provides accounts of the experiences of researchers and innovators working with participation, while case 2 draws from an internal evaluation, awaiting an external one once the programme is concluded. Thus, case 2 can also be situated within the action field of 'citizen engagement in evaluation processes', as does case 4 (Innoviris). Case 3 (RCN) instead covers the action field of engagement within agencies' processes. Still, cases 3 and 4 can be said to provide examples of RFOs that have been more actively involved in participatory call and evaluation processes with stakeholders and citizens.

The present report provides insights into the ongoing reflections of the Pilots and provides lessons learnt from the first four cases of phase I. It summarises a variety of experiences which differ from each other and enables a deeper understanding of the difficulty and diversity of participatory processes. Furthermore, it gives insight into the different ways the RFO partners deal with ethical issues and risks. The experiences and lessons learnt from Pilot I summarised in this report will serve as basis for the development of the phase II Pilots, where RFOs design and implement new cases within the aforementioned action fields of participation.

The core findings described in this document can be summarised as such:

Participation is a time-consuming, complex process

When planning Pilot II, it must be taken into account that participatory processes are very time-consuming. This starts with the selection of the participants to be included, the recruitment process, the information participants receive, the support that needs to be provided in such projects and processes, as well as the specific requirements of evaluations. If such formats are to be included in the standard programme of an RFO in the long term, guiding principles for participatory processes should be considered against the background of the specificities, mandate and environmental conditions of each RFO.

¹ According to the call text, we use 'citizen participation' or 'citizen engagement' as an umbrella term that covers different groups of participants such as end-users, stakeholders, interest groups, or citizens.



There is no standard format that fits all

The pilot cases and processes employed differ greatly from one another. This is due to a variety of reasons, including different topics, different internal regulatory frameworks within RFOs, and different anchoring of the RFOs in their respective innovation ecosystems (e.g. their social anchoring, their degree of autonomy, their dependence on different stakeholders, and so on). While Innoviris and RCN design their processes and programmes largely independently, FFG and VDI/VDE-IT are more dependent on the specifications of their commissioning Federal Ministries.

The selection and recruitment of participants turns out to be a critical point

Case 1 (FFG) and case 2 (VDI/VDE-IT) are not very actively involved in the selection of participants; rather, the project leaders select suitable persons (end-users) autonomously. This bottom-up approach is possible because in both cases the participation takes place within the framework of funded projects. In case 3 (RCN) and case 4 (Innoviris), on the other hand, the RFOs are actively involved in the selection process. RCN reports that the selection of suitable participants is one of the biggest challenges, while Innoviris has created a dedicated infrastructure for this task with the 'co-create support centre'. How this centre works, what the exact tasks are and how such a structure facilitates the selection of participants will be an interesting aspect in the development of the new cases in Pilot II as well as an important topic of the trainings in T2.2 (Training for ethical engagement processes, M19).

Dealing with ethical issues and risks requires closer scrutiny

In all Pilot cases, the RFOs have developed guidelines for dealing with ethical issues. Such guidelines are especially helpful when working with potentially vulnerable groups such as e.g. patients. Innoviris developed a broad variety of ethical rules which are contingent on the particular type of participation. Systematising the handling of ethical issues in the context of participatory processes will be another central theme of the trainings in T2.2.

Expectations of all participants, as well as their specific roles, need to be carefully reflected upon

Researchers, innovators, lay people, stakeholders and citizens all bring different knowledges and experiences to the table. All should be aware of what their respective roles are, what is expected of them, and what their specific say is. This is also the prerequisite for valuing and respecting each other. The balance between researchers and innovators on the one hand, and citizens and lay people on the other, is also an important aspect of maintaining integrity. This is especially true in inter- and transdisciplinary settings.

Aspects of gender and equality must be taken into account when developing participatory formats

While gender is an area with which the participating RFOs are aware to an exceedingly large extent, gender issues have not been prioritized systemically within most of the cases of Pilot I. Furthermore, the role gender issues play in the different Pilot I also reflects the handling of such issues within their respective organisations. While for RCN, FFG and Innoviris gender is a consistently important aspect of their work, this aspect plays a less weighty role for VDI/VDE-IT. In developing the Pilot II cases, the RFO partners will need to look at this aspect more closely and systematically.



1 Introduction

In the first 12 months of the PRO-Ethics project, the eight Research Funding Organisations (RFOs) in the project consortium have chosen four innovative participatory real-life experiments in three different engagement action fields to undertake a detailed ethical analysis. The present deliverable D2.1 provides details on the results of these Pilot I cases.

First, in chapter 2, a short overview on the four RFOs providing the real-life examples is given, including the content of each case. In chapter 3, the general procedure of the Pilot phase I is detailed, including the partnering structure between the RFOs, the reflection process supported by questionnaires and templates, as well as the first cross-pilot learning workshop. Chapters 4, 5 and 6 are dedicated to the description of RFO inputs from the cross-pilot learning workshop, the Pilot I reporting, and the Pilot I assessment, respectively. Finally, chapter 7 describes the conclusions drawn so far in the Pilot phase I, which will in turn feed into the trainings for and the co-creation process of Pilot II and the ethics framework developed in WP5.

In the Annex of this document, the long-form data-sheets on the four hosting RFO partners and their pilot cases can be found (Annex 1), the Reporting and Assessment Templates (Annex 2).



2 Overview of PRO-Ethics Pilot I

As detailed above, four of the eight research funding organisations participating in the PRO-Ethics project provided Pilot cases with participatory elements from their already existing programmes and initiatives in research, development and innovation (RDI). These served as real-life experiments in the Pilot phase I, and were each scrutinised with the help of another RFO partner. In the following chapter, each of the four Pilot I cases will be presented, first with a short introduction of the four implementing RFOs, followed by the contents and aims of their chosen pilots. At the end of the chapter, the procedures surrounding the mutual reflection, analysis, and learning of Task 2.1 will be laid out.

Before going into further detail, it is important to know that all 11 Pilot cases chosen or developed for the PRO-Ethics project were situated during the proposal phase within one of three fields of action: 1) citizen participation in innovation projects; 2) citizen engagement within agencies' processes; and 3) citizen engagement in evaluation processes. Of the present cases of Pilot I, case 1 (FFG) provides accounts of experiences of researchers working with participation, while case 2 (VDI/VDE-IT) draws from an internal evaluation, awaiting an external one once the programme is concluded. Similarly, case 4 (Innoviris) engages citizens in evaluation processes. Case 3 (RCN) is particular among this selection, as it is made up of several subcases with different foci. However, each fits within the action field of engagement within agencies' processes.

For each case, more detailed characteristics from the RFO's self-reporting can be found in Annex 1 of this deliverable.

2.1 Pilot Case 1: Citizen Participation in 'benefit'/AAL Projects

2.1.1 General Characteristics of Austrian Research Promotion Agency

The Austrian Research Promotion Agency (FFG) (<https://www.ffg.at/en>) is the national funding agency for industrial research, development and innovation in Austria. FFG was founded in September 2004 and is owned by the Republic of Austria. It operates with a total budget of more than €600 million a year. As a 'one-stop shop' offering a diversified and targeted programme portfolio, FFG provides access to research funding for Austrian companies and research facilities. In addition, FFG implements part of the Austrian Broadband Strategy and supports Austrian Fiscal Authorities by assessing claims for RDI tax credits.

FFG offers a broad funding portfolio, from the support of bottom-up single firm experimental development to cooperative projects in thematic priorities, from funding innovative start-ups to bridging the gap between blue sky science and application, fostering science-industry cooperation in many different ways, from innovation vouchers to lighthouse projects and competence centres. FFG offers information and advisory services for its clients with respect to European funding, too.

New modes of interaction are core for several new funding schemes which have been developed and implemented by FFG, e.g. Living Labs, Idea Labs, Impact Innovation. These schemes aim at a broader concept of innovation, at inclusion of different perspectives and inclusion of different actors, including, but not limited to citizens.

The main duties of FFG regarding programme implementation, as for example the programme 'benefit', are the following:



- ▶ Supporting in programme design
- ▶ Providing all necessary call documents, launching calls for proposals, organising of launch events and other events (e.g. matchmaking), workshops etc., supporting the target group with advice and providing additional information and documents
- ▶ Organising the selection process, communicating the results, funding contracts
- ▶ Project monitoring, occasionally organising mid-term or interim reviews

2.1.2 Description of the Pilot

Field of action: Citizen participation in innovation projects.

Pilot case 1 focuses on two different funding schemes with citizen participation, called 'benefit' and 'AAL' (Active and Assisted Living Programme) respectively. While both programmes fund research projects aimed at ICT-based solutions to increase the quality of life of older adults, AAL is a transnational effort on a European scale. The innovation concept is based on involving different types of end-users (older adults and their relatives, providers of services of general interest, NGOs, interest groups, ...) from the conception phase of the project right up to its completion. This ensures that solutions address real requests and needs and are consequently considered useful, helpful, attractive and accepted by consumers. Several so called 'test regions' have been funded so far, that allow transdisciplinary Research, Development, and Innovation (RDI) to be performed including enterprises, end-user organisations, technical and scientific partners, and involving essential amounts of end-users. Ethical factors play a significant role in the market-oriented development of ICT-based solutions for older adults, both as regards the planned products, systems and services but also in terms of involving people in the course of the project. These ethical factors cover issues of human dignity, protection of privacy and data protection as well as honesty as regards risks which the projects might involve. To cope with these challenges, a so-called ethics checklist ('Ethik-Checkliste') has been developed to support projects in dealing with ethical issues.

The Pilot in PRO-Ethics aims at reflecting on the following issues:

- ▶ The added value and the design of end-user involvement,
- ▶ The coverage of relevant gender issues,
- ▶ The extent to which ethical sound procedures and approaches are applied throughout the whole development phase and beyond,
- ▶ The tackling of transdisciplinarity (finding a common language and establish common ground).

2.2 Pilot Case 2: Integrating ELSI into Technology Projects

2.2.1 General Characteristics of VDI/VDE Innovation + Technology GmbH

VDI/VDE Innovation + Technik GmbH (VDI/VDE-IT) (<https://vdivde-it.de/en>) is an organisation set-up by two of the largest European professional associations for engineers (VDI is the Association of German Engineers, and VDE the Association for Electrical, Electronic and Information Technologies). The company's primary objective is to promote RDI, particularly in the area of information technologies, by developing instruments and initiatives for accelerating technological development and industrialisation. VDI/VDE-IT is closely involved in the design and responsible for the



implementation and management of RDI programmes launched by national and regional governments. Currently VDI/VDE-IT acts as the official programme management agency for national research programmes in human-machine-interaction, service robotics, autonomous systems, electronics, IT security, electric mobility and health care. VDI/VDE-IT is the leading agency for the programme on innovation studies for the federal ministry of education and research (BMBF) and provides foresight and strategic advice on societal implications of ICT and future technologies for governments, companies and associations. Furthermore, VDI/VDE-IT has a long lasting track of working with IT industry stakeholders in Europe. At the European level, VDI/VDE-IT is the office of the European Technology Platform on Smart Systems Integration (EPoSS). Furthermore, VDI/VDE-IT is member of the Alliance for the Internet of Things Innovation (AIOTI). VDI/VDE-IT has also lead a number of industry-driven Coordination and Support Actions (CSAs) in this field (Internet of Things Architecture – IoT-A, Smart Electric Vehicle Value Chains – Smart EV-VC).

2.2.2 Description of the Pilot

Field of action: Citizen participation in innovation projects & Citizen engagement in evaluation processes.

Integrating a societal perspective into funded technology driven research projects has been a challenge for quite a while for the VDI/VDE-IT and their clients. There have been examples, as for instance the prominent failure of the German ‘naked scanner’ for airport security, which proofed that anticipating ethics and social norms are crucial for new technologies to be accepted and applied. Hence, funding agencies face the challenge of supporting innovation projects to take citizens’ perspectives into account. Pilot case 2 focuses on a funding programme by the German Ministry of education and research (BMBF) in the field of new and emerging technologies, called ‘Bringing technology to the people’ (Technik zum Menschen bringen). Since 2012 there is an increasing demand for projects to take ethical, legal and social implications (ELSI) into account. This is encouraged by including interdisciplinary research and civil society actors as well as ethic boards into funding calls. The Pilot investigates if this encouragement actually succeeded and what interdisciplinary modes of conduct proofed to consider citizen engagement in an innovative and beneficiary way. The Pilot case aims at identifying modes of interdisciplinary conduct and developing funding instruments that support projects to consider these.

2.3 Pilot Case 3: Systematic Pre-Call Consulting

2.3.1 General Characteristics of Research Council of Norway

The Research Council of Norway (RCN) (<https://www.forskningsradet.no/en/>) is the national funding agency for research activities and serves as the chief advisory body for the government and government ministries on research policy issues. RCN distributes roughly 9 billion Norwegian kroner (about €860 million) to research and innovation activities each year. RCN funds both basic and applied research and innovation. RCN has been charged with strengthening the knowledge base and encouraging research that can help to solve grand challenges. It works to enhance the quality of Norwegian research and to promote innovation and sustainability. Hence, RCN takes active steps to increase Norwegian participation in international research and innovation activities, and expand cooperation between research groups, trade and industry and the public sector. RCN also provides a platform for dialogue between researchers, research users and research funders.



In general, RCN considers it a prerequisite that all funded projects maintain high ethical standards. Responsible Research and Innovation (RRI) as interpreted in Horizon 2020 is, to a certain extent, being practised and taken into account in various programmes. In the last couple of years, many of RCN's programmes have experimented with new interaction modes by involving societal actors and citizens during the whole research and innovation process, including some examples of citizen science projects.

In 2018, RCN launched its Strategy for Innovation in the Public Sector, to foster a competent public sector, a research community that understands the public sector and, together with citizens and businesses, to develop knowledge that can foster innovative solutions. Central topics are digital transformation, innovation of services, social innovation and public-private partnerships. Consequently, a research programme exclusively for applicants from the municipal sector (in cooperation with research partners) has been established, and a similar programme directed towards the national directorates and state institutions is on its way. In both programmes, research topics are defined bottom-up.

RCN works to increase the recruitment of women to higher academic positions and within MST subject areas, to enhance the gender balance in Norwegian research and to ensure that gender perspectives are adequately integrated into research activities. Hence, the Programme on Gender Balance in Senior Positions and Research Management (BALANSE), a policy-oriented programme with a ten-year programme period was introduced in 2012. RCN also has its own policy for gender balance and gender perspectives in research and innovation.

When it comes to open access of research results, RCN is in the forefront of Plan S, which aims to make 'Gold open access' a reality in Europe by 2020. In addition, RCN is currently working on a policy for open science. The policy will focus on three key topics, namely open research processes, open innovation and citizen science.

As Norway's national funding agency for research and research-based innovation, RCN is a major stakeholder and beneficiary when it comes to the exploitation of the results of this project. Hence, RCN has a special interest and a strategic position when it comes to ensuring maximum impact, dissemination and exploitation and will therefore take a leading role in the dissemination and communication work in WP6. RCN will also run different project pilots.

2.3.2 Description of the Pilot

Field of action: Citizen engagement within agencies' processes.

The purpose of Pilot case 3 is to develop a model for how to consult stakeholders and citizens in the phase before calls are developed and published. Based on three former and one ongoing processes, the pilot aims to develop a checklist to ensure ethical considerations in participation processes.

- ▶ One experiment was carried out within health research where the purpose was to finance research projects defined by the users themselves, not just by the researchers. The inspiration and background were concepts like 'Priority Setting Partnerships' and 'Commissioned Research'. The experiment was restricted to issues in relation to CFS (Chronic Fatigue Syndrome). Along with a thorough communication plan, the first task was an open invitation, guided in particular to people 'living with the disease', to suggest research topics in this field. The next step was establishing a user panel with members from different patient/user organisations, representatives from patients and their relatives, health authorities, researchers



and RCN's Financing Programmes. The panels discussed call text and phase 1 simple application. Representatives for the financing boards made the final decisions on the projects invited to phase 2, and the final grant.

- ▶ Another equivalent method was explored within a call regarding gender equality in academia. RCN has a policy-oriented programme (BALANSE) targeted to promote gender balance in Norwegian research. Prior to the 2018-call relevant institutions, end-users, organisations and researchers were invited to partake in the process of defining call topics.
- ▶ A third input to case 3 is carried out in Lithuania on need driven research, where RCL (Research Council of Lithuania) initiated a new field of activities. The first call was launched in June 2015. Need driven research is the research dedicated to strategically significant and urgent issues under the topics of research and development programmes, proposed by the Office of the President, the Parliament, the Office of the Government of the Republic of Lithuania.

An established dialogue with KS (the national municipality organisation) contributes to further input to the checklist. This involvement will contribute to the formulation of research topics for the experiments, and furthermore to an ongoing discussion on research integrity in Lithuania and Norway.

2.4 Pilot Case 4: Citizen Jury - Citizens in Project/Proposal Evaluation

2.4.1 General Characteristics of Innoviris

As the regional institute for research and innovation, the mission of Innoviris (<https://innoviris.brussels/>) is to connect, stimulate and financially support citizens, companies, research institutes and non-profit organisations in achieving progress. Since its creation in 2003, Innoviris has developed a wide range of funding schemes in order to fund innovative projects implemented by companies, research organisations and the non-profit sector (typically non-profit associations and public administration in some cases).

The available schemes target technological, non-technological as well as social innovation. Several mechanisms specifically aim at fostering effective collaboration between sectors and besides the 'classical' collaboration between academia and industry, citizens' participation has increased over the years through 'civil society organisations' (associations). Innoviris is continually experimenting new ways of involving citizens into research & innovation dynamics, including through their involvements in the selection process of the proposals.

2.4.2 Description of the Pilot

Field of action: Citizen engagement in evaluation processes.

Since 2015, the Brussels capital region (BCR) is financing a programme (named 'co-create programme') aimed at increasing the resiliency of the region through participatory-by-design research projects. The framework of the co-create programme implies a close collaboration between a variety of actors (research organisations, non-profit organisations and ultimately citizens, companies) at all stages of the preparation and implementation of the projects. The setting-up of the co-create programme has raised a lot of questions and challenges related to the regulatory framework, new concepts (and related vocabulary) and their respective understandings, among others. Nevertheless, the decision was made to launch the programme and to work on an essentially empirical (and



somehow experimental) base, leaving room for progressive improvement based on mutual learning between all stakeholders (including Innoviris). To tackle the various difficulties related to the nature and scope of the programme, an intermediary structure, the 'Co-create support centre', was put in place as a transversal project with the aim to accompany the co-creation dynamics, facilitate collective learning and to disseminate the knowledge produced. In 2018, the support centre suggested to extend citizen participation, from their involvement as beneficiaries to an active participation in the selection process of the proposals (ex ante evaluation of the projects). This idea brought to the 'citizen jury', as part of the main selection jury. The group, composed of 8 to 10 citizens, follows a preparation path in order to feel ready to select the projects.



3 Pilot I Procedures

To enable an in-depth analysis of Pilot I cases, while laying the ground-work for the development of the Pilot II cases, a collaborative structure was set up between the RFO partners. This was supported by establishing a process to reflect, exchange and learn from each other, culminating in this present report about the lessons learnt from the Pilot I cases. The following section outlines the respective steps and processes implemented to this end.

3.1 Partnering Structure

As mentioned above, the PRO-Ethics team chose a team-based approach to both facilitate the analyses of our real-life experiments and to enable mutual learning between our RFO partners. In each team, one partner provides first-hand experience gained through implementing the respective case, while the other partner takes on the role of observer, critics, reviewer, and consultant. This approach brings together internal and external points of views, and thus supports out-of-the-box thinking and helps to critically analyse existing processes. Each team is in constant exchange to discuss open questions and issues. Additionally, each of the RFO couples organised a workshop to facilitate exchange with their partnering organisation and collect ideas from these external perspectives. The following RFOs collaborate in this first analysis stage:

- ▶ Case 1: Provided by FFG, supported by CDTI
- ▶ Case 2: Provided by VDI/VDE-IT, supported by TAČR
- ▶ Case 3: Provided by RCN, supported by RCL
- ▶ Case 4: Provided by Innoviris, supported by UEFISCDI

3.2 Pilot I Reflections

In a very first step, the four RFOs responsible for cases 1 to 4 followed a reflection process provided and lead by ZSI. To this end, they summarised the content of each case and recorded its characteristics according to specifications provided by ZSI: 1) categories of participants²; 2) field(s) of action; 3) programme start and end; 4) number of projects funded; 5) amount of public funding; 6) programme evaluation; and 7) ethical risks. Additionally, the RFOs were provided with self-reflection questions on participant selection, specific challenges, gender issues, tackling ethical problems and risks, expectations from participative approaches, measures for assessment, and possible tensions. The reflection templates served as a basis for a first Cross-Pilot learning workshop, for the Pilot I case reporting, and to facilitate the development of the Pilot II cases later in the project runtime. The results of the reflection questionnaire are integrated in the summary of the reporting (see 5)

² Participants are defined as persons who take part in engagement processes. These persons might be: citizens (without a specific interest in the case), (end-) users (with a specific interest in the results), and stakeholders, including non-traditional stakeholders like NGOs (with specific knowledge and/or specific interest). Furthermore, participants can both be individuals or representatives of institutions or groups, and may include vulnerable groups like such as patients, children, and older adults.



3.3 First Cross-Pilot Learning Workshop

Over the course of the PRO-Ethics project, a series of three Cross-Pilot learning workshops are planned. These workshops facilitate an iterative learning process with mutual exchange of experiences between the participating RFOs and technical partners. While the overarching goal of the workshops is to inform and test the core output of the project – the PRO-Ethics Ethics Framework and Guidelines – from a practical perspective to ensure its applicability, they also support the RFOs throughout their cases in Pilot I and II.

The first of these events was held on 8 and 9 June 2020 and focused on sharing and mutually developing key takeaways from the four cases in Pilot I, to build on the experiences and reflections up until this point, and ultimately to assist RFOs in their preparations of the upcoming Pilot II. To this end, the workshop was designed with the help of descriptions and an initial survey of Pilot I cases, from which experiences, practices, and early reflections of the associated partners were extracted.

The workshop was originally scheduled to take place in Oslo across two whole days, but the outbreak of Covid-19 made travelling impossible. Instead of taking place face to face, the workshop instead was conducted online with supportive digital tools to facilitate communication. Because of the constraints associated with an online format, the planning team consisting of task lead DBT and contributor ZSI decided to limit the length of the workshop and conduct two shorter, but more intense morning sessions, to keep attendees engaged throughout. Day one was mainly planned and implemented by DBT and still focused strongly on the cross-learning as described above. Day two was the responsibility of ZSI, and focused on the reporting structure to be applied in Pilot I cases and refined for Pilot II.

The format employed both plenary sessions and work in smaller breakout rooms, with Zoom being used as the communication tool and pre-arranged Miro boards as an interactive whiteboard. This format was chosen to ensure maximum engagement and high quality input from all participants, despite the limits imposed by online communication.

3.3.1 Pilot I Reporting

As already mentioned above, the PRO-Ethics project is built around a highly iterative process, with theoretical groundwork, practical implementation, analysis and synthesis taking place in alternating steps, and sometimes simultaneously, to work towards a common goal of more ethically sound participation processes. While we believe this process allows for much more relevant knowledge production, it demands tight feedback loops, bringing together our RFO partners with our technical ones to allow for multidirectional exchange. To this end, the second day of the cross-learning workshop focused on refining a common reporting structure to be implemented at the end of Pilot I, and feeding into the present deliverable.

Starting from a reflection template created by ZSI, the RFO partners were asked to share their expert knowledge in implementing participatory approaches in their RFO activities, their expectations regarding such processes, the challenges they faced, and the needs they had regarding a common reporting structure. This collaborative creation process should not just result in a commonly agreed on reporting structure, but ensure all perspectives were integrated and ascertain that the template, its structure, and its single components were clearly outlined and understood by all RFO partners.



The workshop was structured according to the outline of the Reporting template, with the main aim to interactively work on each section of the template and to discuss the details to make sure to integrate all relevant and important aspects. The inputs from the workshop fed directly into the draft for D3.1 Reporting and Assessment Templates, which was in turn opened to feedback from all RFO partners, before finalisation in June 2020. The final version of the templates can be found in Annex 2, which was used by the RFO partners in fall of 2020 to review their respective pilots. These reports formed an important basis for the present deliverable, the analysis of which will be detailed in 5.

3.3.2 Workshop Feedback

As an essential part of quality assurance, a short feedback survey was created by ZSI and sent out to all participants of the workshop. The filled-in surveys were collected by Nesta and forwarded to ZSI and DBT to ensure anonymity. The survey included questions on the objectives and activities of each day as well as the meeting organisation. It employed a Likert scale for most items, but offered open fields to add comments for each thematic block.

Despite continuing efforts, the response rate was very low, with only six surveys returned, and one email with unstructured feedback sent by a partner. However, some further feedback was provided in informal calls and conversations during the periodic consortium calls organised by ZSI. Generally speaking, the feedback skewed positive, with the variation and interactivity of the format as well as the tools employed being explicitly named in the responses. The greatest weak point, repeated by many participants, was the time constraints and limits of the online format, which was not conducive to unstructured and more creative conversations. Some colleagues pointed out that the connection to the Pilot II was missing for them, and that they were not able to reflect on their work and find solutions to existing problems as much as they liked to.

Although the feedback was positive overall, the workshop organisers ZSI and DBT took the points of criticism very seriously and have deepened their familiarity and skills with a diverse range of online tools. In April 2021, a co-creation workshop is planned, where ZSI supports the RFO partners in designing their cases for the Pilot II. Unless there is a dramatic change in situation, this workshop, too, will be held online. To make the best of this, ZSI is already working on a workshop concept that does justice to the complexity of the task. While having an online workshop take place over two full days might be too much for the continued engagement of all participants, it might be feasible to stretch the workshop over more days with shorter sessions. It might also be an option to bring in an external facilitator, as the consortium has done for the second general assembly meeting in early December, to great acclaim. Finally, it is essential for all participating RFOs to do some preparatory work, to make the limited format of an online workshop as impactful as possible.

Regarding the feedback process as a whole, ZSI and DBT have learnt to integrate it into the workshop format itself. While this might still be done in the form of a survey, ZSI also has experience with employing a semi-structured Miro board for feedback, which allows for more depth and a more interactive approach to joint reflection. In any case, both a higher response rate and further depth of input would be desirable for future workshop feedback.



4 Cross-Pilot Learning Workshop

The following section is dedicated to the synthesis of inputs collected during the first Cross-Pilot learning workshop. The main analytical work of this section has been done by the team of DBT, and will be laid out in much greater detail in 2023, when D3.3 Report on Cross-Pilot Workshop Activities will be published. Therefore, the following section focuses on results more than the details of the workshop itself.

During the workshop, inputs from participating RFOs were collected on a Miro board, and subsequently clustered by DBT. The diverse challenges and discussion threads provided during the workshop could thus be synthesised into five broad topics:

- ▶ Selection of stakeholders
- ▶ Participative methods
- ▶ Conflicts of interest
- ▶ Lack of knowledge/awareness
- ▶ Scientific integrity

The broad topic of stakeholder selection was discussed from many different perspectives. What could be criteria to choose participants, how broad or diverse a target group should be, and whether the approach towards participation should be framed rather bottom-up or top-down, all have implications for the engagement process, and should be considered in order to make an informed choice that meets the needs of an RDI endeavour, as well as the target group. In any case, these choices must be consciously reflected on, and communicated clearly.

By design, the RFOs of PRO-Ethics have widely different experiences with participatory methods, and operate under different levels of institutionalisation of such approaches in their respective national ecosystems. The questions of when, where, and to what end to include non-traditional stakeholders were subsequently discussed at length. Participation, it was pointed out, might be a time consuming process, demanding both comprehensive foresight and flexible planning. Here, it was stressed that a pragmatic approach to participation, conditional on the specific program, topic, and project, may maximise the impact of such an endeavour. Transparency and critical reflection were put forth as important features of participatory processes, while employing an iterative approach was positioned as highly beneficial to their quality.

Conflicts of interest were discussed both in the context of structural rigidity within RFOs that inhibit participatory processes, and with regards to stakeholders themselves. Regardless of where they were located, RFOs proposed that such conflicts should be met with reflexivity and transparency as well as careful coaching. Also, while external stakeholders in particular might bring forward interests or biases that might not resonate with a given programme, it was pointed out that such biases should not just be disregarded, but rather should be reflected on and considered in future endeavours.

Regarding lack of knowledge/awareness, the issue comprises how potential participants might become aware of the option to take part in RDI projects and activities, but also how experiences on participative approaches might be shared within research funding organisations. Taking a bottom-up approach was positioned as a way to counteract the first issue, with an openness to transformation on the part of RFOs remedying the other. A lack of scientific understanding and confidence, potentially resulting in skewed power relations within and beyond a target group, was also brought up as a matter



of concern. This might be counteracted with providing support and coaching from the very beginning of a participatory process.

Finally, the issue of scientific integrity when employing participatory processes was brought up as a point of contention, as the wants and needs of non-traditional stakeholders might be in contradiction with principles of science. Possible issues mentioned were a lack of scientific relevance of possible topics of interest to a target group, but also an unclear or outsized scope of a research interest. On the other hand, it was stressed that all participants in an RDI endeavour, be they scientific or not, bring their wants and needs to the table, and upholding the integrity of a project relies on critical reflection from all actors involved. This might mean compromise and adaption from all sides.

In addition to that, it was pointed out that academic scientists might have a stake in not joining participatory processes, as it might impact their scientific standing indirectly. Creating knowledge with and for a broader public might for instance be perceived as a 'dumbing down' of complex scientific issues that in turn threatens the integrity of the scientific process. On the other hand, it was pointed out, monitoring and evaluation processes might need to be adapted to novel participation modes, especially with regards to rethinking impact assessments. It was also suggested to make ethicists mandatory participants in project evaluations.

In the very last session of day one of the Cross-Pilot learning workshop, key recommendations were sought from the four RFO partners leading the cases of Pilot I, drawing on their experiences with participatory processes. The RFOs were asked to answer one of the following questions in preparation to the workshop: What would you do differently if you are to do this project again? And if you are to make just one recommendation for other RFOs, what would it be?

These questions were discussed in the plenary, with the team at DBT summarising the four RFO case lead's recommendations as follows:

- ▶ Question why you are interested in certain types of knowledge in the first place. Answering this can help you design more focused discussions and will ensure that your participants are aware of their role and the value of their input.
- ▶ Do your best to consider the framework and methods you wish to apply, and ensure they are fully compatible with the context and stakeholders you wish to engage. You should especially consider the balance between and roles of researchers and stakeholders, as you risk jeopardizing research integrity if they are not attuned. The greater your dependence on interdisciplinarity or conflicting views, the greater your attention to such a balance should be.
- ▶ Allow for flexibility in your planning and do not plan too far into the future. You may find that (unexpected) nuances and concerns of participants only unveil themselves once you are well into a project, and you should do your best to adjust to and consider these findings openly. Participatory processes should therefore allocate plenty of time and resources for their final stages, in order to secure uptake and incorporation of results to secure a meaningful impact.
- ▶ Create a dialogue with your research projects. Getting an idea of the experiences within certain fields can help you evaluate how governance should be approached, letting you know where you should concentrate your efforts towards furthering engagement.



5 Pilot I Reporting

During Pilot I of the PRO-Ethics project, ZSI supported the participating RFOs in an iterative reflection process. To this end, several questionnaires were sent out, starting in early February 2020 and culminating in the development of templates for Reporting and Assessment. The final version of these templates was used by the four lead RFO partners to report on their Pilot cases 1 through 4. While the reporting aimed to be comprehensive, and the assessment left room to further deepen the reflective representation of each case, the templates are a more superficial instrument than an interview format would be, for instance. Therefore, the conclusions drawn from the RFO inputs are necessarily limited, although some connections might be extrapolated from the data. It should be noted that some RFOs (notably Innoviris) differentiated their answers according to whether they referred to their specific case or to their general practice, while most answers were deliberately focused on Pilot I only and as such do not necessarily reflect the general perspectives of the whole organisation, especially with regards to participation. In some cases, the specifics of their case explain an answer that differs from the other RFOs. It must also be mentioned that the individual entries in the tables were co-created during the cross-learning workshop and therefore some RFOs have developed an understandable closeness to the proposals they put forward and find it somewhat difficult to deal with other points of view that might be at odds with their own experiences and specific cases. In the following, the results from their responses are summarised, structured along the lines of the template sections. Wherever there are thematic overlaps, responses from the Reporting have been complemented with inputs from other questionnaires sent out. Finally, at the end of this chapter, the four remaining open questionnaire items will be discussed in the section on “Reflection questions”.

5.1 Expected benefits of participation

In the very first section of the Reporting and Assessment templates, the RFO partners were asked to rate the expected benefits of participatory activities with regard to their pilots for external stakeholders, RDI agents³, RFOs and society. A Likert scale ranging from 1 to 10 was employed, with 1 being ‘minor importance’ and 10 being ‘highest importance’. Below, the rating given by each RFO can be seen, followed by an explanation of the table.

Participants:

Expected benefit	FFG	VDI/VDE-IT	RCN	Innoviris
Gaining an interest in RDI as a whole	1	6	8	6
Access to RDI, a deeper and broader understanding of how RDI operates	1	6	7	7
Enhancing scientific literacy, improving skills and gaining knowledge	1	5	6	5
Gaining a greater say in and commitment to RDI matters	1	10	9	9

³ RDI agents include researchers in Higher Education Institutions (HEIs) and research performing organisations as well as researchers, developers and innovators in enterprises, NGOs and public bodies. As in the case of ‘participants’, ‘RDI agents’ might be individuals (e.g. individual researchers) or institutions/institutional delegates (e.g. universities or firms).



Contributing to better solutions, being a first adaptor	10	10	1	1
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The assessments regarding expected benefits for external stakeholders given by the RFO partners do not show a uniform picture. The differences in rating are partly due to the diversity of the cases, but also due to different priorities, practices, beliefs and values. This becomes particularly clear in the evaluation of the benefit ‘Contribution to better solutions, being a first adaptor’: FFG, whose case deals with the participation of end users in projects, gave the (only) highest rating of 10 here, with the reason that ‘participation in Pilot I aims at developing better solutions, tailored to real needs, finding first adopters and access to the market’. Meanwhile, RCN gave a rating of only 1, stressing that the ‘Pilot is on pre-call consultation about research topic’. Innoviris, while only awarding one point for their specific case, noted that this benefit should be valued at 9 in the organisation as a whole.

VDI/VDE-IT rated this benefit equally high as FFG, together with the benefit of ‘gaining a greater say in and commitment to RDI matters’. However, they pointed out that research aims are usually defined prior to the participation. They expect further benefits for participants in all areas suggested in the template, including ‘access to and deeper understanding of RDI’ and ‘enhancing scientific literacy’. Looking at pilots 2 and 4 of VDI/VDE-IT and Innoviris, the ratings are noticeably similar, which is particularly interesting as both cases operate in the same field of action, namely citizen engagement in evaluation activities. The only notable exception is the aforementioned ‘contribution to better solutions’.

RDI agents:

Expected benefit	FFG	VDI/VDE-IT	RCN	Innoviris
Achieving expected and unexpected discoveries and results, development of new RDI questions	8	6	8	1
Developing better solutions that meet the needs and wishes of the users	10	10	7	8
Being able to gather large amounts of data with the support of citizens	1	8	3	1
Better understanding of the market	9	9	6	3
Allowing more deeply investigation of research questions, on a much larger scale	1	9	5	2
Enhancing credibility of science and gaining trust	3	6	8	8
Taking the societal impact of research into account	1	7	9	9
Building up networks and ecosystems of participation	3	2	8	7
Making research more accessible to a wider audience and increasing its reach	1	7	8	6

In this table, we also see a huge difference in ratings given by the RFOs. While RCN and VDI/VDE-IT rate most aspects of rather high importance, for FFG most of the expected benefits for RDI agents are of minor importance.



FFG explains the relatively high rating of the entry ‘Achieving expected and unexpected discoveries and results, development of new RDI questions’ with a value of 8 as follows: ‘unexpected results arise from the better knowledge of real needs’. Concerning the highest score of 10 given for ‘Developing better solutions that meet the needs and wishes of the users’, FFG emphasises that ‘participation in Pilot I aims at developing better solutions, tailored to real needs, finding first adopter and access to the market’, and explains the score of 9 with ‘better understanding of the market arises from the integration of care institutions and their clients as well as further organisations (insurances, municipalities)’. Additionally, FFG notes with regard to the low rating of 3 for ‘Enhancing credibility of science and gaining trust’ that ‘trust based collaboration is a necessary pre-requisite to include end-users, particularly vulnerable groups. This might also have a slight effect on the way research is perceived by the public’ and highlights that ‘building up networks and ecosystems of participation [is a] prerequisite for success in the market and creation of benefit for end-users’.

VDI/VDE-IT adds, regarding ‘building up networks and ecosystems of participation’ (rating 2) that ‘mostly, participation is very specific and focused on one project’. It remains somewhat unclear whether this refers to VDI/VDE-IT’s specific case or whether they do not consider participation as a suitable means to build networks. According to RCN, benefits for RDI agents strongly depend on the call topic or call type. Especially in the case of innovation projects, RDI agents benefit from a better understanding of the market.

RFOs

Expected benefit	FFG	VDI/VDE-IT	RCN	Innoviris
Starting a dialogue with society or societal groups and engage in taking up relevant topics for society, including multi-perspectivity	1	4	8	8
Raising topics that researchers wouldn’t come up with on their own	1	3	10	7
Increasing the understanding of internal RFO practices	1	1	6	6
Adapting the funding portfolio to real societal needs	7	5	8	7
Enhancing societal impact	8	10	9	9
Gaining access to different types of expertise	1	5	8	8

While RCN and Innoviris rated all expected benefits for RFOs rather high for their pilots, for FFG only two aspects are of high importance (‘adapting the funding portfolio to real societal needs’ and ‘enhancing societal impact’). For VDI/VDE-IT, most aspects are of low to average importance, with the exception of ‘enhancing societal impact’, which is rated of highest importance, and ‘increasing the understanding of internal RFO practices, which is of lowest importance.

Regarding the adapting of funding portfolio to real societal needs, FFG noted that this is ‘relevant in definition of call topics, when different types of end-users are consulted to inform the process’. Moreover, regarding the enhancing of societal impact, FFG highlights that ‘a useful product and process shall have a broader societal impact, e.g. if elderly people can live longer and independently’.



Society

Expected benefit	FFG	VDI/VDE-IT	RCN	Innoviris
Enhancing societal trust in RDI	1	6	10	6
Enabling more society-relevant research questions and topics	1	7	10	8
Increasing the permeability and transparency of the interface between research, innovation and public	1	5	8	8

FFG rated all stated expected benefits for society of minor important, where VDI/VDE-IT kept their rating in (high) average. Innoviris and especially RCN see high importance of the mentioned benefits. RCN underlined their highest rating of 10 with the explanation that ‘society is involved in deciding what to research on’.

5.2 Expectations from the participative approach

As part of the Reporting and Assessment process, the four participating RFOs were asked to rate their expectations of their chosen participatory approaches according to four different levels: project, programme, RFO and society. The present section shows their responses and given explanations in greater detail. The specific expectations were again rated with a Likert scale, ranging from 1 (minor importance) to 10 (highest importance). The summary below details how the four cases differ a lot in their expectations from their participative approach.

Project level:

Expectation	FFG	VDI/VDE-IT	RCN	Innoviris
Innovative outputs are closer to the needs of users	10	10	8	5
New combination of knowledge increases the novelty of solutions and project outputs	5	6	9	3
Participation increases the societal impact	8	10	9	7

Expectations on project level play an important role for FFG, VDI/VDE-IT and RCN, while Innoviris positioned all expectation as medium important in the context of their case. However, Innoviris again pointed out that this rating was specific to their pilot, and does not reflect the organisation as a whole, where Innoviris would have given a rating of 10 to all stated expectations.

FFG underlined that all stated expectations are their main intention of the pilot. This can be explained by the fact that FFG’s case deals with participation at project level. RCN explained that ‘innovation outputs are closer to the needs of users, since society is involved in deciding what to research on (but not necessarily the research outputs)’.



Programme level:

Expectation	FFG	VDI/VDE-IT	RCN	Innoviris
Participation helps to improve programme design	4	1	8	7
Programmes with participative elements are better accepted by users, stakeholders and the society in general	3	10	8	8
Involving participants in the definition of calls or funding schemes helps to select relevant topics and increases the understanding of the challenges	7	1	9	4

On a programme level, the expectation of ‘participation helps to improve programme design’ was rated highest by RCN, whose case is explicitly about pre-call consultation, followed by Innoviris. FFG give a low medium rating, while VDI/VDE-IT assigns no importance to this benefit. The second expectation of ‘Programmes with participative elements are better accepted by users, stakeholders and the society in general’ was rated high across the board, with the exception of FFG. Finally, ‘involving participants in the definition of calls or funding schemes helps to select relevant topics and increases the understanding of the challenges’ was rated highest by RCN and FFG, low medium by Innoviris, and again of no importance by VDI/VDE-IT. FFG added to their rating that ‘expert consultations (including different groups of end-users) help to improve the programme design’ and that ‘programme activities result in a higher number of different kinds of stakeholders and end-users that are aware of the existence of the programme and wish to be included’.

RFO level:

Expectation	FFG	VDI/VDE-IT	RCN	Innoviris
The voice of citizens helps in the course of restructuring the RFO to more and better engagement with society	1	1	9	4
Including citizen expertise enhances the societal impact of RFOs’ activities	1	1	8	7
Having peers to peers evaluation (added by Innoviris)	/	/	/	8
Increase the coherence between the strategic goals of the programme and the way it is designed (including the selection process) (added by Innoviris)	/	/	/	8

On the RFO level, it is important to point out that the first two expected benefits were represented in the template, while the last two were added by Innoviris. These RFO level expectations were rated of minor importance by FFG and VDI/VDE-IT, where RCN sees them as very important. Innoviris rated the first one low medium and the second high medium, but added two expectations which they see as highly important for their pilot. However, they explain that ‘also here, the first point would be of highest importance in general, but in the case of Pilot I, it has a rather low importance’. One difference between Innoviris and the other three RFOs may be that Innoviris, as a comparatively small organisation, sees the development of new programmes as well as the involvement of societal actors as being accompanied by an institutional reorientation of the entire organisation. This is certainly different for very large RFOs with a large number of programmes and initiatives.



Society level:

Expectation	FFG	VDI/VDE-IT	RCN	Innoviris
Participation helps to identifying the topics relevant to the society and the problems which should be addressed	1	1	9	8
Bridge the gap between the RDI community and society	1	1	9	10

The expectations on a societal level are of very high importance for RCN and Innoviris, while FFG and VDI/VDE-IT rated them with minor importance. In relation to the first point, RCN adds: ‘Yes, but we need to improve our methodology due to potential challenges (addressed in PRO-Ethics). This comment applies to all answers here.’

5.3 Recruitment process

This section summarizes the recruitment processes for Pilot I cases, shows which kind of participation the RFOs implemented, which scope was/is given, which target groups they identify, how participants are selected and by whom, and gives an overview on the specific recruitment processes. The RFOs were also asked to answer the questions both for their specific case in Pilot I and for their participative processes across the organisation in general.

Do the participative processes follow any predefined concept or study design?

For case 1 (FFG), case 2 (VDI/VDE-IT) and case 4 (Innoviris), the participative processes follow predefined concepts or study designs. Case 3 (RCN) does not. Therefore, the following questions regarding the specific elements of the concept of RCN remained unanswered. However, after the table below detailing the RFOs responses, a more detailed discussion is laid out, which includes additional information provided by the four RFO partners in their long-form self-assessment.

The RFOs were asked whether their concept included the following elements:

Kind of participation	
FFG	Projects normally follow some kind of co-creation approach. This includes a broad variety of methodologies. Normally also longer term involvement in evaluation/studies are included. ⁴
VDI/VDE-IT	yes (no further explanation)
Innoviris	In their Pilot I case, Innoviris applies jury participation. In their organisation, they enable participation through focus groups, surveys, co-creation, end-user involvement (experiments) and more.

⁴ For more details on the methods see <http://www.aal-europe.eu/ageing-well-universe/i-am-a-user-2/end-users/>



Scope of the participation	
FFG	Involvement of different types of end-users aims at helping to develop together solutions (products and services) that are attractive, wanted, helpful, useful and that therefore will be adopted and bought.
VDI/VDE-IT	yes (no further explanation)
Innoviris	For their pilot, the scope of participation is the evaluation process. For the organisation as a whole, the scope includes evaluation, strategic planning, involvement as end-users, citizen scientists, definition of call topics, etc.
Definition of the target group(s)	
FFG ⁵	<ul style="list-style-type: none"> ▶ Primary end-user is the person who actually is using an AAL product or service, a single individual, 'the well-being person'. This group directly benefits from AAL by increased quality of life; ▶ Secondary end-users are persons or organisations directly being in contact with a primary end-user, such as formal and informal care persons, family members, friends, neighbours, care organisations and their representatives. This group benefits from AAL directly when using AAL products and services (at a primary end user's home or remote) and indirectly when the care needs of primary end-users are reduced; ▶ Tertiary end-users are such institutions and private or public organisations that are not directly in contact with AAL products and services, but who somehow contribute in organising, paying or enabling them. This group includes the public sector service organisers, social security systems, insurance companies. Common to these is that their benefit from AAL comes from increased efficiency and effectiveness which result in saving expenses or by not having to increase expenses in the mid and long term.
VDI/VDE-IT	yes (no further explanation)
Innoviris	For the Pilot I case target groups are citizens, laymen, locally embedded. For the organisation the target group are citizens in the broadest sense.
Size of the participatory group	
FFG	Depending on the project the number of involved end-users ranges between a few persons and up to several hundreds.
VDI/VDE-IT	yes (no further explanation)
Innoviris	For the Pilot I case, the size of the participatory group is 10. For their organisation, one to hundreds.

⁵ FFG answered these questions primarily for AAL, but as the processes and for AAL and benefit are very similar, the answers mostly apply to benefit as well (see 2.1.2).



Ethical rules	
FFG	<p>Depends on the specific project. In some cases, the participating institution's ethical rules have to be respected and respective ethics committees will be approached. E.g. medical universities or care organisation normally have their own ethics committees.</p> <p>At the programme level, programme 'benefit' provides an ethics checklist⁶. The AAL Programme has published ethical guidelines in the call documents, and in addition an ethics document that can be found under http://www.aal-europe.eu/wp-content/uploads/2020/08/AAL-guidelines-for-ethics-final-V2.pdf</p>
VDI/VDE-IT	yes (no further explanation)
Innoviris	<p>For the Pilot I case, the conflict of interest is predefined. For the organisation, has performed a broad reflexion on how to apply ethical principles to its institutional processes (<i>funding modalities, evaluation, forms, legal clauses, etc.</i>) which will be integrated into an ethical framework at the RFO level. The latter will exceed legally binding conditions, intends to reinforce the ethical debate in RDI, and is inspired by the ethical appraisal procedure applied in H2020.</p>

FFG provided an overview of their innovation concept employed in the AAL programme. The basic idea is that via integration of care organisations and other end-user groups, and extensive involvement of primary end users in RDI projects, developed solutions will respond to actual needs and wishes, and will be wanted and adopted. The projects develop user-oriented business models and innovative value chains that address challenges of an aging society. The programme helps establish market niches for domestic (service) suppliers and promote international commercialisation of solutions. The consortia take care of the recruitment of end-users. However, it is difficult to avoid biases, as in some projects the number of end-users are too low which limits selection processes. The innovation concept influences the recruitment process in terms of whom to involve according to the specifics of a project. The programmes provide guiding documents and offer help via a check of the informed consent procedure at the Austrian level. Design and implementation of the recruitment and participation process are within the responsibility of the project consortium. FFG also points towards ethical factors that must be considered when involving target groups in research processes, such as issues of human dignity, protection of privacy, and data protection as well as honesty as regards risks which the projects might involve, not least because the solutions are still in the development stage. Furthermore, FFG stresses that it is essential to assess the social implications of the results of a proposed RDI project. Ethics in the context of 'benefit' and AAL projects is fundamentally about what a project can and shall do for the benefit of those defined as the end-users of that particular project. Ethical issues may also be raised regarding the relationships and social networks of the involved (or future) end-users.

VDI/VDE-IT explained that the BMBF⁷-funding in this field of research is mission-oriented. This means that societal needs are to be addressed through funded research. These missions are defined within the strategy and are related to specific target groups by means of funding calls (i.e. vulnerable groups,

⁶ The checklist is only available in German
https://www.ffg.at/sites/default/files/allgemeine_downloads/thematische%20programme/programmdokumente/ethik-checkliste_endred_autoren.pdf

⁷ German Federal Ministry of Education and Research



people living in rural areas, elderly workers, etc.). In addition, the programme's calls ask projects to include future users within their research ('no user involvement, no funding'). However, it is important to point out that the research methods by which the projects involve users are not determined by the funding calls. The avoidance of an unbalanced mix of methods as well as incomplete data is left to the good scientific practice of the projects.

As part of their Pilot I case, RCN published an invitation on its website asking the general public for input on research topics related to CFS/ME syndrome (see 2.3.2). The invitation was targeted specifically towards 'those who are living in the disorder'. A total of 737 submissions were received from patients, family members, treatment providers and organisations during the three weeks the invitation was online. A substantial amount of input also came in via email and by post. A news brief, 'Most are seeking research on the causes', was published based on RCN's review and summary of the input received. Recruiting members for the user panel was described as a time-consuming process. In addition to the members from two involved patient organisations, RCN needed to find treatment providers and researchers who were not prominent in the scientific debate on CFS/ME and did not plan to apply for funding in this area. It was particularly challenging to recruit treatment providers both because it was difficult for them to find time for full-day meetings and because the topic is controversial. Therefore, CFS/ME project group avoided recruiting professionals who shared the same view as the patient organisations involved in the dispute.

Innoviris states that citizens are chosen the same way as the conventional jury members: based on the networks of the support centre, the expertise Innoviris is looking for, and the availability. Innoviris looks for a great diversity of profiles (regarding for instance age, gender, social and ethnic origin, etc.) but does not follow a quota-based selection. One of Innoviris' basic assumption is the inherent risk of bias, irrespective of the type of jury. For instance, professors from universities could be more in competition and institutionally biased than people that are not at all active in the academic sector. In Innoviris' citizen juries, citizens always work in pairs. They are full members of the jury which is composed of at least two other experts plus two scientific advisors from Innoviris itself. Innoviris stresses that 'the mere fact of being conscious about our choice and the presence of risk is key. Biases are inherent. Our objective is to mitigate risks as much as possible by finding a good balance between the diversity of evaluation and the feasibility and quality of the jury.'

Who is selecting the participants?

For Pilot case 1 (FFG) the project lead is selecting the participants in line with the programme's call aims. The RFO is indirectly selecting participant via the definition of the call texts. In Pilot case 2 (VDI/VDE-IT), the project lead selects the participants, while the research funding organisation has no influence on the matter. For Pilot case 3 (RCN), the RFO selects as project leaders do not play a role in pre-call consultations. For Pilot case 4 (Innoviris), a co-creation support centre, structurally funded by Innoviris, takes care of the selection, in close collaboration with Innoviris.

How does the recruitment process work?

At FFG, the project lead is responsible for selecting participants but is not totally free in doing so. The programme and the call define possible target groups, while the proposal has to specify the end-users involvement and the study design – including the recruitment process – which will be assessed in the course of the evaluation process prior to taking a funding decision. The programmes 'benefit' and AAL have both published documents on different relevant issues regarding end-users' involvement. The project lead receives support by partners (mainly care organisations). In addition, projects receive



feedback by external experts, e.g. from ethics bodies at universities, on the regional level, or other legal experts (particularly regarding informed consent and data protection). FFG may influence the selection by specifying certain characteristics of the target group, depending on the specific call, making it more or less open. However, the direct selection is still done by the project.

In case 2 of VDI/VDE-IT, the project leads choose to include whoever fits their research aim. However, all projects have a concept for doing so. Most of the time, the project leads do not get support. Still, VDI/VDE-IT supports the research community in exchanging their ideas on participation. Regarding predefined concepts, VDI/VDE-IT explains that in their case project leads develop their own methods and, thus, do not have to follow any predefined concepts. Thus, the only way that the RFO is involved in the selection process is in terms of the topic of a call (e.g. people in the need of care).

RCN takes on the responsibilities of participant selection in their Pilot case 3 itself. The organisation seeks participants by an open call without any specification regarding categories such as age, gender, or socio-economic background, e.g. via the RFO’s website or via social media. When it comes to pre-call consultations, there are no established common routines, so different pathways have been tried in different settings. RCN also specifies certain characteristics and addresses multiplier organisations (e.g. Citizen Science organisations, patient representatives), on top of selected individuals. For instance in the case of the BALANSE call on gender equality in Norwegian research, relevant research environments and equality units at research institutions were addressed.

Innoviris follows a different approach. In their case, neither the project lead nor Innoviris is responsible for participant selection, but a co-creation support centre, which is structurally funded by Innoviris and works in close collaboration with the RFO. This selection procedure involves an elaborate coaching process with different stages. Two month before the first group session, initial contact is made individually with various Brussels residents, to explain the reason for this experiment in simple language, and interest them in the endeavour. Then, a group of eight people is created, a size chosen to both have the relationships not become too personal and limit the levels of involvement. Although no quotas are employed, the aim is to mix the group according to age, gender, ethnicity and country of origin, class, and so on. It is also important that the participants be true ‘third parties’ with no connection to the existing projects.

5.4 Ratings of Recruitment

The following section focuses on the question of recruitment, and summarises ratings for a list of recruitment challenges provided to RFO partners by ZSI. Each table shows one challenge, the rating per RFO, and a summary of their explanations below. Ratings are given as before in a Likert scale, with 1 being ‘minor importance’ and 10 being ‘highest importance’. RCN did not provide ratings for this section and is thus not represented.

Challenge	Explanation of the challenge	Ratings			
		FFG	VDI/VDE-IT	RCN	Innoviris
Recruiting a sufficient number of participants	RFOs as well as project leads might have difficulties in recruiting a sufficient number of participants	5	6	-	4



For the RFO partners, the question of ‘recruiting a sufficient number of participants’ is of medium importance. FFG points out that it depends on the project itself how easily participants might be recruited, while VDI/VDE-IT stresses that the research aim and target group play a role, explaining that ‘it is very difficult to recruit people with dementia’. Innoviris selects participants one by one, without making a broad call for interest, which ‘can cause difficulty in recruiting the required number of people if the time devoted to this phase is too short’. In addition, FFG pointed out that the current pandemic makes it more difficult to recruit participants.

Challenge	Explanation of the challenge	Ratings			
		FFG	VDI/VDE-IT	RCN	Innoviris
Easy access to participation	Participation practices may lead to unfair concentration of power in the hands of a privileged, educated elite and would undermine interests of disadvantaged groups	2	4	-	6

The question of ‘easy access to participation’ was rated from minor to medium importance. FFG rated the challenge very low, but added that interviews conducted in Pilot case 1 revealed that selection of participants was a tricky question, owing to the concrete profile employed: people open to new things, with cognitive capacity, etc. In addition, FFG stresses that ‘projects usually aim at a participant group that mirrors the target group of their product or services. However, often there are no too strictly specified criteria to select primary end users concerning diversity, gender balance etc., since the priority is to find enough participants and avoid drop outs during the process.’ Still, FFG points out that ‘it is good to try at the programme level to address in the call text issues of fair access and see via the evaluation process that this is taken sufficiently into consideration.’ VDI/VDE-IT points out that they see ambivalent power relations rather between projects (which define research goals) and participants. Innoviris names as points of constant attention to always seek for participants and individuals not previously engaged, instead of opting for those found in ‘usual networks’, using understandable language, and offering different possibilities for participation.

Challenge	Explanation of the challenge	Ratings			
		FFG	VDI/VDE-IT	RCN	Innoviris
Representation of all societal groups relevant in the specific case	The societal groups affected by a specific innovation or technology in the respective cases should be carefully defined and fully represented. This includes the consideration of non-traditional stakeholders (such as citizens, public and semi-public caretakers, NGOs, social entrepreneurs, etc.).	10	8	-	1

The question of ‘representation of all societal groups relevant in the specific case’ was met with wildly diverging responses. Innoviris rated the challenge as least important, explaining that ‘this is the very heart of the "citizen jury" project’. FFG and VDI/VDE-IT, on the other hand, work with a rather narrow target group of end-users, which might make other categories of diversity less important criteria. At FFG, projects ‘aim at a group distribution mirroring the target group’, while VDI/VDE-IT points out that



‘this challenge is underestimated by many projects, which often have a rather narrow idea of potential end users’.

Challenge	Explanation of the challenge	Ratings			
		FFG	VDI/VDE-IT	RCN	Innoviris
Implementation of quality control mechanism	The recruitment process should include quality control mechanisms to avoid biases, technological divides, lobbying, and exclusion or underrepresentation of women and specific societal groups (e.g. people with disabilities, elderly or very young people, and so on).	10	6	-	5

The question of ‘implementation of quality control mechanism’ has core relevance for FFG, with the caveat that it depends on the size and aims of a project. At FFG, projects often seek approval by external ethics committees. VDI/VDE-IT and Innoviris both give an intermediate rating, while the latter points out that it works with small groups which makes it possible to identify and address possible biases collectively. Innoviris also applies various evaluations on the organisation, group and individual level during the research process.

Challenge	Explanation of the challenge	Ratings			
		FFG	VDI/VDE-IT	RCN	Innoviris
Investigation of regulatory and institutional frameworks	Regulatory and institutional frameworks may allow or may hinder an active involvement of citizens and other relevant stakeholders.	10	8	-	5

The question of ‘investigation of regulatory and institutional frameworks’ was rated highest by FFG, which highlights the importance of data protection and the need for informed consent. Also, at FFG projects sometimes include external legal expertise. At VDI/VDE-IT, with another very high rating, most projects are familiar with institutional frameworks. Innoviris rates this issue intermediate, and turns this possible barrier into an advantage by creating strong links between participants and organisers.

Challenge	Explanation of the challenge	Ratings			
		FFG	VDI/VDE-IT	RCN	Innoviris
No exploitation of participants	All participants should be treated equally and fairly and should receive an adequate compensation for their time and effort.	8	8	-	2

The challenge of ‘no exploitation of participants’ was again rated fairly high by both FFG and VDI/VDE-IT, with Innoviris giving a very low rating. For FFG, full transparency is important and informed consent procedures are always employed. While monetary compensations are rare, participants might receive small gifts or can keep technical devices. Also, FFG points out that the attention participants receive is important. VDI/VDE-IT stresses that in specific fields such as care ‘participation often leads to expectations that projects cannot fulfil’. At Innoviris it is important that all participants, experts and



citizens, receive the same remuneration, get the same information, and have the same weight in assessments. Thus, this challenge is met head on.

Challenge	Explanation of the challenge	Ratings			
		FFG	VDI/VDE-IT	RCN	Innoviris
Tackling conflicts of interest	The responsible RFO should ensure that persons with a conflict of interest are excluded from the participatory process.	2	4	-	2

The aspect of ‘tackling conflicts of interest’ is of minor importance to all RFO partners. FFG points out that it is taken into account in the project design already, while Innoviris states that it is ‘explicitly addressed in the first contact with each participant’.

5.5 Gender

As part of the reporting, the issue of gender was also addressed with several binary yes/no-questions, followed by open fields for explanations. The following section provides a summary of the role gender issues play in the RFOs’ different Pilot I cases. The issues vary greatly between the four RFOs, reflecting also their relevance within the different organisations themselves. While for RCN, FFG and Innoviris gender is a consistently important aspect of their work, this aspect plays a less weighty role for VDI/VDE-IT. The answers and concepts of the individual RFOs are given below.

At FFG, gender issues are covered via FFG-wide standard evaluation criteria, which are adopted at the level of the projects’ content and staff. Stakeholders are selected in a gender sensitive way and mechanisms of inequality are tackled. Gender equality is not only addressed in evaluation processes but also considered in the choice of reviewers and the composition of panels.

At VDI/VDE-IT, gender issues are not explicitly covered even if there might be projects that address gender.

RCN emphasizes that in Norway in general there is ‘a long tradition for focussing on gender equality’. Therefore, ‘all project proposals are required to address gender issues where relevant, this includes projects with participatory approaches’. In addition, RCN states that ‘we strive for gender equality/balance in our assessment panels.’ Concerning the specific Pilot I case, RCN states that stakeholders and citizens are selected in a gender sensitive way and mechanisms of inequality are tackled as far as they lie within the responsibility of the organisation. In addition to this, the overall focus of BALANSE (one of the calls addressed in RCNs Pilot I, see 2.3.2) is specifically on gender equality in academia. With regards to the question of male-dominated work, RCN states that they are a female-dominated workplace.

At Innoviris gender was paid attention by ‘(1) increasing the diversity of jury members, and (2) [...] applying a gender sensitive approach.’ In the programme submission form, it is asked to reflect upon any discrimination issues, enhancing sensitivity during the project evaluation and rollout phase. Innoviris’ notion of diversity takes not only gender identity into account, but also social and cultural background. Mechanisms of inequality are mostly tackled by a broad scope of actions related to science communication. Furthermore, Innoviris ensures an equal presence of women and men in its own organisation, both overall and at the various hierarchical levels.



5.6 Reflection questions

As part of the first phase of Pilot I reporting, ZSI sent out an open questionnaire to the RFOs of PRO-Ethics in early 2020, which served as a systematised guide to the joint reflection between partnered RFOs. The employed questions focused on how ethical risks were tackled by RFOs; the role of interdisciplinarity and transdisciplinarity in the Pilot I cases; how added value, impact, and success were measured; and whether RFOs saw any conflicts between ethics and participation arise. In the following, the responses given by the RFO partners to these questions are laid out one by one.

How were ethical risks tackled?

FFG employs several means to raise awareness with respect to ethical issues within their community. This includes the wording used in call texts, the requirements given for proposals (such as mandatory informed consent drafts), and an ethics checklist included directly in the national call text. When promoting a call, ethical issues are also specifically addressed. Finally, in the evaluation process FFG takes care that at least one evaluator has expertise with respect to ethical issues.

Projects funded by VDI/VDE-IT employ a variety of different methods to address ethical, legal and social issues. On the one hand, VDI/VDE-IT describes methods of user integration such as observations, qualitative interviews, quantitative questionnaires, laboratory tests where users test technology, focus group discussions, as well as co-creation and design methods (e.g. Design Thinking). On the other hand, intra-network activities are employed, including discussions with partners on ethical, legal and/or social issues; ELSI workshops (e.g. on the MEESTAR model⁸); collaborations by technical and non-technical partners within single work packages; activities specifically designed to broaden the perspective (such as sitting in on classes with other partners); and discussions with a linked ELSI advisory board. Finally, VDI/VDE-IT employ discourse and literature analyses, legal methods (such as legal dogmatics, case constructions), and submit applications to ethics committees to tackle ethical risks. VDI/VDE-IT states that the internal activities of the network are particularly important to integrate results on ethical, legal and social issues into the interdisciplinary research work.

RCN points out that the approach chosen in its Pilot case 3 is user-identified research, which has both strengths and weaknesses. One of these weaknesses is the lacking discussion on ethical aspects and a design for ethical user involvement in identifying research topics. Thus, RCN's Pilot does not employ institutionalised methodologies to address ethical issues to the same degree as both FFG and VDI/VDE-IT.

Innoviris cannot point to any particular ethical problems or risks encountered upfront, although the RFO stresses that this does not necessarily mean no risks or problems exist. However, as described extensively above, Innoviris leans heavily on the deliberative process of its citizen juries, which are constructed in a way to meet many ethical challenges head-on.

Were interdisciplinary / transdisciplinary research questions taken into account? If so, in what way?

At FFG, projects funded by benefit and AAL are per definition interdisciplinary/transdisciplinary, in the sense that experts from different fields cooperate on a RDI endeavour. Usually, a project consortium consists of an SME, a research partner, and an end-user organisation. Depending on the specific

⁸ Model for Ethical Evaluation of Socio-Technical Arrangements, see e.g. <https://www.degruter.com/view/book/9783110677485/10.1515/9783110677485-007.xml>



solution to be developed, different kinds of questions arise and have to be tackled. FFG points out that the cooperation between research partners and non-research partners or practitioners is generally challenging in terms of finding a common language and defining a common goal that is supported by all the involved partners.

At VDI/VDE-IT, all research funded by the programme is essentially inter- and transdisciplinary as well. This means for one thing, that the interdisciplinarity of research questions must be elaborated in every proposal. For another, the cooperation of different disciplines is required and also evaluated by reviewers. Transdisciplinarity is called for primarily through the involvement of practical partners. In most projects, not just research institutions and SMEs are involved, but also institutions representing the users (such as nursing associations).

As RCN takes three different RFO activities into account for its Pilot case 3, there is some difference with regards to how interdisciplinarity is tackled. Concerning the pre-call consultation on CFS/ME, inter- and transdisciplinary issues were taken into account only indirectly. However, as user panels for the consultation were made up of civil society organisations, representatives from patients and their relatives, health authorities, and researchers, transdisciplinarity is structured at least in part similarly to FFG and VDI/VDE-IT. Meanwhile, the BALANSE call with its focus on gender equality is seen by RCN as inherently transdisciplinary. With regards to the municipality sector, RCN points out that a relevant and ongoing challenge is indeed the lack of inter- and transdisciplinarity. In any case, the question seems not to be met in a particularly proactive manner.

At Innoviris, the co-creation programme⁹ is transdisciplinary by nature. This in itself is one of the reasons for involving citizen experts, as one of their tasks within citizen juries is to evaluate projects from a laypersons perspective. Innoviris also employs a catalogue of evaluation criteria.

What measures are in place to assess added value, impact and success?

FFG has a highly standardised and institutionalised assessment procedure. For FFG programmes funded by national funds, an evaluation plan is defined in the programme document, which is the legal basis for funding programmes. AAL projects are subject to annual reviews according to the AAL rules. Therefore, FFG's RDI programmes have been evaluated several times.

VDI/VDE-IT's approach to governance is less to assess what the best way for implementing ELSI. Rather, VDI/VDE-IT tries to find measures to implement which help the community develop new and interesting methods, as well as increase the reputation of interdisciplinary research. This has led the RFO to set up a series of specialist conferences and to promote accompanying measures, such as a dedicated research network. Still, a large-scale evaluation on ELSI was carried out among funded projects – not as part of the Pilot I case, although case 2 builds on this. This internal evaluation had the aim of developing supporting measures. The evaluation showed that ELSI has led to very good innovation impulses in the projects and also to a broad range of methodological approaches¹⁰.

As RCN's Pilot experiences are still rather early, so is the development of new measures to assess their added value, impact, and success. However, RCN has developed a policy for open research that

⁹ More information on the co-creation programme can be found here (French only):

https://innoviris.brussels/sites/default/files/documents/presentation_du_programme_co-creation.pdf

¹⁰ The results can be found in a discussion paper (German only): <https://www.interaktive-technologien.de/dateien/service/veranstaltungen/diskussionspapier-integrierte-forschung-2018-05-25.pdf>



will be converted into concrete actions. In any case, PRO-Ethics actively supports these efforts through the templates for Reporting and Assessment, among other activities.

For Innoviris, measures were in place to assess the role and the impact of the co-creation support centre: The 'Co-creation support centre' reports to Innoviris and has a follow-up committee every six months. Besides these reporting milestones, there is a continuous contact and co-evolution also with regard to the participation of citizens in the jury.

Do you see any tensions (legitimacy conflicts or trade-offs) between ethics and participation?

FFG sees participatory approaches as enriching for all sides, as long as good communication at eye level and mutual respect are observed. Thus, FFG describes no general tensions between ethics and participation, but emphasises that the involvement of end-users in RDI projects requires high sensitivity at the side of the project consortia as well as the programme management. It is important to understand ethical approaches as a continuous process with the aims of contributing to the wellbeing of persons involved. This includes the fulfilment of legal requirements, as well as the employment of informed consent as standard procedure.

VDI/VDE-IT sees tensions between ethics and participation especially when research requires dealing with vulnerable groups. For example, the RFO has funded many projects with a focus on dementia, where participation has a great potential for conflict. VDI/VDE-IT describes how participation in such technology projects often generates unfulfillable hopes and expectations, nurtured by a high degree of actual suffering. Participation in such contexts takes place at very high cost to the participants (and their relatives), whereby the real added value for the people never corresponds to the hopes associated with it. In addition, VDI/VDE-IT points out how a similar situation arises with regards to strategy development, where it is much easier to develop topics together with non-traditional stakeholders, than to manoeuvre through the always limited spaces of policy development.

RCN also describes several (potential) points of tensions between participation and ethics. This includes the overrepresentation of certain groups; an imbalance in the ratio between patients/family members and other panel members; insufficient knowledge on CSF/ME (see 2.3.2); ethical dilemma of not thoroughly considering scientific merit on an application when assessing its potential benefits; adequacy and clearness in roles of panel members; user panel involvement in the final project selection phase (round two); and communication and dissemination after concluding meetings. Also, as Norway is a small country, RCN points to the limited pool of potential participants, and their possible divergent needs and requirements that might interfere with the with the goals of the consultation.

Innoviris describes a 'legitimacy' tension on the side of citizen experts with respect to the requirement to evaluate all criteria. Citizens might think they need to evaluate the criteria from another perspective than their own (e.g., 'I need to evaluate that criteria as a scientist because it is a scientific criterion'). In such cases Innoviris and the Support Centre need to be very clear on how they define the person's role as a citizen. Another tension relates to risk exposure. The jury performs a consensual evaluation, with the evaluation report never mentioning individual critics among jury members. Nevertheless, citizen experts from the jury visit projects before their evaluation, where they can ask questions and express doubts separately from the jury. This might lead to an overly large focus on individuals by the members of a project, who might make one individual jury member responsible for their project not being funded. Another important potential tension is the fact that citizen experts are forced out of their



comfort zone. Innoviris tackles these issues by continuously reflecting on this unusual context and on how best to support the citizen experts in their tasks.



6 Pilot I Self-Assessment

As discussed in greater detail above, the Pilot I reporting was complemented by a more detailed assessment, with the aim of enabling the participating RFOs to reflect more deeply on their expected benefits of participation, their expectations towards their employed participatory processes, their recruitment procedures, as well as gender dimensions covered by their activities. The RFO partners' answers mirror their different approaches, while some of the key take-aways and noteworthy aspects of these self-assessments add to the summary above. In the context of this self-assessment, the pilot cases of phase I have been evaluated primarily based on the RFOs' own reflections and more immediate feedback from participants. As such, these assessments, and the nuances within, reflect the different roles the RFOs envision for themselves. Taken all together, the cases of Pilot I should thus provide a good outset and a common set of experiences for the cases of Pilot II to consider.

6.1 Benefits of Participation and Expectations of a Participatory Approach

As a first step of their self-assessment, the RFO partners were asked to highlight the expected benefits of employing participatory approaches in their RFO activities. Here, the strongest overlap between the different Pilot I cases can be seen, as all RFO partners but FFG stress that they expect participation to offer participants a greater say in RDI matters. Elaborating on this, Innoviris of Pilot 4 pinpoints that members of their citizen jury had gained a much greater insight into their city and its development by evaluating regional projects to-be. An important factor allowing for this success was the comprehensive guidance and trust-building, secured by Innoviris' participatory support centre. This process included pre-sessions and field visits, which also helped qualify the knowledge of participants and the overall process. However, Innoviris cautions that this process is precarious in its lack of clarity about the knowledge frame the citizen expert is asked to refer to, and might put participants in an uncomfortable position by asking them to 'wear a "mask of expertise".' RCN and VDI/VDE-IT, too, consider this one of the most important benefits of participation, the achievement of which was reflected both in more structured evaluations (VDI/VDE-IT) and in the direct feedback of participants (RCN).

As RFOs were asked to pinpoint their expectations towards applying a participatory approach, the input was slightly more skewed than when asked about the benefits they saw in participation. As some initiatives were still not fully assessed, this made it difficult for some of the RFO partners to tell whether these expectations had been met. Here, the direct contact between RFOs and participants, seen in Pilot case 3 (RCN) & case 4 (Innoviris), may allow for more immediate assessments of this question. In this sense, RCN and Innoviris assessed their approach on a continuous basis and as a result have already discovered and to a degree addressed potential pitfalls. However, difficulties can arise when such a fluid approach is combined with a lack of experience in participatory approaches, as was particularly stressed by RCN. While the team at RCN did see their efforts to increase participation supported from central parts of their organisation, which has been key in the whole process, a lack of internal experience and know-how obscures how the organisation can go about increasing participation systemically.

Innoviris highlights a few additional aspects of both its expected benefits of participation and its expectations of such processes. For one, its expected benefit of gaining access to different types of expertise was met, in turn enlightening their project evaluations. This was made possible particularly by jury members being invited into pre-project sites, which helped ground their expert knowledge. However, the benefits to including such knowledge also brought new concerns to the table, for



instance regarding the way in which such acquired expertise was built on and used within the confinements of a given project. Quite importantly, it also brought into question what common knowledge experts should be asked to consider in their role as experts, and how as well as to what extent they should adhere to the criteria already in place.

6.2 Recruitment Processes

The four RFO partners providing cases in the Pilot Phase I employed very different approaches to recruitment, leading to diverse experiences with the process. As seen in the reporting sections above, Pilot case 1 (FFG) & case 2 (VDI/VDE-IT) employ similar approaches in their funding programmes that leave recruitment largely to the project consortia. While a plan for participation is a prerequisite for proposals, FFG also provides recruitment support and demands a draft informed consent sheet in project proposals. While this approach offers a certain flexibility to projects, researchers, and innovators themselves, this made it harder for the PRO-Ethics consortium to gain insights and nuances into how participation and recruitment is done in practice. In turn, this also obscures how the ethics of such decisions are handled in practice. This divergence is exacerbated by the fact that the degrees and forms of participation may differ a lot between individual projects, and often take place in context-dependent collaborations, such as those that emerge between researchers and patient organisations. Such collaborations help to build and conserve trust, while the mere act of getting in touch with participants also becomes much easier. At the same time, however, it gets harder to ensure that key ethical issues are considered in their entirety. For instance, if vulnerable participants have an existing relationship to, or depend on the care of consortium members, tensions may arise. Still, such tensions are met head-on by FFG and are taken into account in participation design. To further avoid or mitigate the above issues, researchers interviewed in relation to FFG's Pilot case 1 stressed that good communication is key, while ethics and participation should also be planned throughout the entire runtime – and afterlife – of any given project. This is essential as the ethical issues embedded in any project develop over time, with some suddenly crystallising, while others may stay dormant throughout. While poor communication can result in such developments not being addressed, it can also hinder the inputs of participants from being valued and included to the full extent of their utility. FFG has several active measures in place to support the community in recruitment related issues. For instance, the programmes have commissioned several studies in order to provide tailor-made support to projects and help them to improve the methodological approaches. FFG also organises different kinds of events such as launch and forum events, with the goal of bringing together relevant stakeholders, to network, exchange experiences, and create a common knowledge base. This might entail inviting speakers with expertise in the different relevant fields, including end-users, researchers, business partners, and so on, but also discussions on practical questions such as the handling of ethical issues. Some of these forum events also resulted in the publication of proceedings.

As VDI/VDE-IT leaves the recruitment to the individual projects, the RFO sees their role primarily in supporting the scientific community in developing participatory methods.

For Pilot case 3 (RCN) & case 4 (Innoviris), different approaches were taken to recruitment. RCN sought to engage a broader range of stakeholders, including patient groups in one instance, by themselves. While RCN is satisfied with its recruitment approach, and it provided grounds for much learning, it also meant a lot of work – in both sending out, collecting and managing inputs with little prior experience of the sort. At the same time, some issues and challenges arose during the pre-call consultations, regarding for instance the bias and ethical risk concerning the targeted group of participants. These efforts have also made it clear that the organisation needs more systematic



practices that can help shape calls and ultimately make them more viable for approaches that embrace participation. To this end, an internal ethics checklist for pre-calls is being developed by RCN, providing a list of questions leading into potential ethical issues which should always be considered before calls go out. While the team at RCN plans for the list to provide a better common understanding of participatory approaches within the organisation as a whole, it may also serve as a reference point when evaluating progress and institutional change in future funding activities.

Contrasting this, Innoviris employed their dedicated participatory support centre in their Pilot I case, which served to efficiently systematise the process of engagement, given their experience on the subject. This partial 'outsourcing' required a good amount of mutual trust to be established between the centre, which was given a number of criteria for selecting citizens (for instance the importance to avoid conflicts of interest). This made it much easier to conduct the desired citizen evaluations. Still, Innoviris had to adopt and consider their role in the process, given the presence of the support centre. For instance, the RFO made it clear that there was some confusion amongst citizens as a long round of preparatory work was concluded with a final evaluation that seemed a bit rushed in comparison. The centre would otherwise do much work in managing a healthy line of communication and work to interest potential participants, who were also compensated for their participation, as this helped in the recruitment of citizens. In essence, while outsourcing aspects of a participatory process can be efficient if a competent partner can be found, it still requires fine-tuning from an RFO approaching a participatory process in such a way.

6.3 Gender Issues

While gender is an area with which the participating RFOs are aware to an exceedingly large extent, gender issues have not been prioritized systemically within most of the cases of Pilot I. Although they do account for and consider different aspects of gender issues, the way and degree in which they do so is often not clear from the provided reporting, and as such, it is difficult to highlight any learnings so far. Still, FFG, RCN, and Innoviris have laid out how gender aspects are and will be worked with more actively and thoroughly within their organisation. Innoviris describes its process of tackling gender as anchored in the regional gendermainstreaming action plan. Based on increasing demands, Innoviris has also prioritised the development of a more systematic policy toolkit for tackling gender disparities. As a first step, this includes an effort to communicate more clearly some of the issues at hand, while the RFO also aims to amass an inventory of 'gender disturbing' aspects in the RFOs' own programmes. This will lead into an examination of the viability and need for targeted gender measures, for instance in juries. Here, the balancing of gender is complicated by the fact that some research areas (for instance ICT) may see a significant imbalance in the genders of practitioners and experts, making the possibility of (unwanted) discrimination very real.

In the Pilot I case 1 of FFG, where participation is done within projects, gender balances of participants are generally tackled in a way that matches the target groups. But in particular within projects involving older adults or potentially vulnerable groups such as patients, gender balance might be prioritised lower than other aspects, such as finding enough participants and avoiding drop outs during the process.

VDI/VDE-IT does not employ a specific approach to tackle gender issues in their programmes, while RCN takes a broad but rather non-specific approach to tackling gender issues. However, RCN stresses that it constantly works on improving its efforts on the gender dimension. On a more general note, RCN points out that from 2022, the EU will demand Gender Equality Plans (GEPs) before granting



funds, which means that organisations applying for Horizon Europe funding will need to have a gender equality plan to be eligible. RCN stresses that this policy might have consequences for gender aspects in other areas of the research funding cycle.



7 Conclusion

As the report has shown, the four Pilot I cases differ widely in their approaches, thematic foci, target groups, scope, and so on. Therefore, the experiences the RFO partners have gathered naturally differ as well, including the engagement, recruitment and implementation processes they employ as well as the assessment of the activities and challenges they faced. The summary report of Pilot I gives insight into the general challenges regarding engagement and participation processes the RFOs are facing, provides an overview on the experiences RFOs made so far, and shows the differences in expectations and process details due to the different goals of the participatory approaches.

Based on the first reflections which already address aspects of the activities and challenges in implementation processes, a list of overarching challenges was compiled in the first cross-learning workshop. It could be shown that the RFO partners generally speaking have very high expectations of the benefits of participation processes. At the same time, such processes often prove very complex, demanding both a high level of reflection and flexibility from the all involved parties. Participatory processes also seem to come with certain pitfalls, such as overexerting participants, or raising hardly satisfiable expectations on all sides.

Another issue the RFO partners voiced is the framework surrounding participatory activities, and whether participation seeks wider reach or deeper engagement. Another question needing to be answered is when a participatory process should be initiated, and whether it should be carried out during the entire project duration or only anchored around events at certain key moments within a project. Similarly, the issue of how to select topics for participation and when and how to best involve participants in such a process was brought up by the RFO partners. Another problem to be tackled is the question of how participants should be classified, as a person might be a stakeholder and a 'regular' citizen at the same time. Further challenges RFOs face are due to time-consuming participation formats (recruiting, receiving input, ordering, processing input and building up a call-text), or due to inputs which are in conflict with an RFO's internal structure, or go beyond the scope of responsibilities or specific objectives of a given call.

The selection processes of citizens/stakeholders/participants played another important role in the experiences of our RFO partners. They provided details about their recruitment processes, important aspects that deserve particular attention to avoid biases, and improvements they would want. The recruitment processes also differed a lot, with only two of the four RFO partners being responsible for the recruitment processes themselves. The other two mainly influence the recruitment process on a broad basis through criteria and guidelines included in their call texts. None of the RFOs uses 'quotas' for avoiding biases, but still take care to reach out to a diverse group of people. The reporting also showed that there is a huge difference between the numbers of people engaged in participation processes, which makes it even more difficult to have a common strategy for avoiding biases.

Accordingly, the question of monitoring and evaluation and how to measure successes of participatory processes is still a question which cannot be answered definitively. While the RFO partners have their evaluation strategies and apply different measures, they state that these are not specifically modified for participatory processes. However, the RFOs agree that it is worthwhile to adapt and add novel aspects to these processes in the future. Standard processes could be adapted for specific needs, more participants and stakeholders could be included in the evaluation processes, as well as experts such as ethicists or committees. Interdisciplinary exchange and collaboration could not only contribute to a broader range of methodological approaches, but also help develop new supporting measures.



Annex 1: Characteristics of RFOs and Pilots

FFG / Pilot Case 1

Characteristics of FFG			
Reporting period: 2019 <i>Please answer with 'Y' for yes and 'N' for no and explain</i>		Y/N	Explanation
Annual budget and staff:	Funding budget (see definitions)	616.000 TEUR (excluding investment in Broadband infrastructure)	
	RFO's employees	308 FTE	
Experiences with citizen science:	Citizen participation in innovation projects	Y	See Pilot I description. Citizen participation in the programmes AAL and 'benefit', occasionally also in other programmes
	Citizen participation within RFOs' processes (see definitions)	N	
	Citizen participation in evaluation processes (see definitions)	N	
	<i>Other (please specify)</i>		
Existing Rules and Guidelines at RFO level:	Research integrity	Y	We are member of the Austrian Agency for Research Integrity, ÖAWI.
	Conflict of interest	Y	Regulations for conflict of interest for external and internal reviewers and project officers
	Ethics	N	None apart from those mentioned here
	Gender / Diversity	Y	Gender criteria for proposal evaluation, internal gender trainings, HR gender statistics
	Open Access / Open Science	Y/N	Call documents include information regarding open access
	Data Management	Y	Call documents include information regarding DMP (use of DMP is not mandatory)
Existing committees and agencies:	Ethics committees	N	No ethics committee within the agency. If needed, consortia address competent ethics committees to receive the necessary vote.



	Integrity bodies	N	
Ethical reviews at RFO level:	All proposals	Y/N	Not as a standard procedure in FFG. In programme 'benefit' the evaluation panel includes at least one ethics expert. A draft informed consent has to be submitted with the proposal and is being evaluated. Ethical aspects are to be taken into consideration under the criterion 'quality of the proposal'. In the AAL programme, evaluation is being performed at the European level. At the national level an ethical check is being performed by an external expert when the draft informed consent is being checked and feedback is being given, prior to releasing the first payment to the beneficiary.
	(bio)medical proposals	N	But proposals need to cover ethical aspects and fulfil all national requirements regarding ethical bodies and approvals
	Proposals involving animals, children, or vulnerable groups	Y/N	-- Vulnerable groups: see procedure above for programmes 'benefit' and AAL
	Proposals involving personal data collection and/or processing/use	N	Projects need to comply to the legal requirements, proposal needs to demonstrate how this is done
	Proposals involving human participants	N	See above
	Proposals with volunteers for social or human sciences research	N	See above
	Proposals dealing with safety, security, or defense matters	N	See above

Characteristics of Pilot Case 1: Citizen Participation in Projects Supported by the Funding Programme 'benefit'/AAL

		For the Pilot I		For your organisation ¹¹	
<i>Please answer Y for 'yes' or N for 'no'</i>		Y/N	<i>Please specify</i>	Y/N	<i>Please specify</i>
Categories of Participants ¹² (see definitions):	(End) Users	Y	<i>See Pilot I description</i>	Y	<i>In most company driven development projects, some kind of end user integration is</i>

¹¹ Please answer 'Y' in case participative approaches are *general practice* at RFO's level



					<i>state of the art</i>
	Adult citizens	Y	As end users/experts, see above	y	As end users/experts, see above
	Vulnerable groups (patients, children, elderly people other)	Y	As end users/experts, mainly in the programmes and funded projects covered in the Pilotcase	n	
	stakeholders (e.g. firms, interest groups, NGOs, persons or institutions)	Y	e.g. care organisations and related staff in the Pilotcase. Older adults and their networks	y	Stakeholders as multipliers, as source of information for strategy development, as 'Bedarfsträger' in certain funding programmes, NGOs as beneficiary in few programmes
	Other		Please specify		Please specify
Field(s) of Action: ¹³	Citizen participation in innovation projects	Y	See Pilot I description	Y	In most company driven development projects, some kind of end user integration is state of the art
	Citizen participation within RFOs' processes (see definitions)	N	Specify if possible	N	Specify if possible
	Citizen engagement in evaluation processes (see definitions)	N	Specify if possible	N	Specify if possible
Start and End:	2008 to date				
Number of Projects Funded:	In total (from start of the programme until end of 2019: national programme benefit: 120 projects; Austrian partners in the AAL Programme: 233 in 103 projects)				
Amount of Funding in 2019 and 2020:	public funding Programme benefit: ca. € 26 Mio; public funding (national funding + EU top-up) for Austrian participants in the AAL Programme: € 41,5 Mio				
Programme Evaluation:	https://repository.fteval.at/365/ https://repository.fteval.at/364/1/EVAL_BMVIT-IKT-Bericht_180824_final.pdf				

¹² Please note that the categories of participants are not disjunctive, adult citizens might be users as well. In case that more than one category can be applied, multiple answers are possible.

¹³ At least one of the three fields of actions should be filled out.



VDI/VDE-IT / Pilot Case 2

Characteristics of VDI/VDE-IT			
Reporting period: 2019 <i>Please answer with 'Y' for yes and 'N' for no and explain</i>		Y/N	Explanation
Annual budget and staff:	Funding budget (see definitions)	<i>Depends on contract; in case of Pilot I: 80 Mio annual budget</i>	
	RFO's employees	>500	
Experiences with citizen science:	Citizen participation in innovation projects	Y	
	Citizen participation within RFOs' processes (see definitions)	N	
	Citizen participation in evaluation processes (see definitions)	N	
	<i>Other (please specify)</i>		
Existing Rules and Guidelines at RFO level:	Research integrity	N	
	Conflict of interest	Y	
	Ethics	N	
	Gender / Diversity	N	
	Open Access / Open Science	N	
	Data Management	N	
	Existing committees and agencies:	Ethics committees	N
	Integrity bodies	N	
Ethical reviews at RFO level:	All proposals	N	
	(bio)medical	N	<i>Ethical reviews take place on the project level; our answers</i>



	proposals		<i>describe the RFO level</i>
	Proposals involving animals, children, or vulnerable groups	N	
	Proposals involving personal data collection and/or processing/use	N	
	Proposals involving human participants	N	
	Proposals with volunteers for social or human sciences research	N	
	Proposals dealing with safety, security, or defense matters	N	

Characteristics of Pilot Case 2: Integrating ELSI into Technology Projects

		For the Pilot I		For your organisation ¹⁴	
<i>Please answer Y for 'yes' or N for 'no'</i>		Y/N	<i>Please specify</i>	Y/N	<i>Please specify</i>
Categories of Participants ¹⁵ (see definitions):	(End) Users	Y	<i>Potential users of assistive technologies (our main fundings area)</i>	N	
	Adult citizens	N		N	
	Vulnerable groups (patients, children, elderly people other)	Y	<i>People in the need of care, elderly people</i>	N	
	stakeholders (e.g. firms, interest groups, NGOs, persons or institutions)	Y	<i>Participation also on RFO level</i>	Y	
	Other	N		N	

¹⁴ Please answer 'Y' in case participative approaches are *general practice* at RFO's level

¹⁵ Please note that the categories of participants are not disjunctive, adult citizens might be users as well. In case that more than one category can be applied, multiple answers are possible.



Field(s) of Action: ¹⁶	Citizen participation in innovation projects	Y		Y	
	Citizen participation within RFOs' processes (see definitions)	N		N	
	Citizen engagement in evaluation processes (see definitions)	N		N	
Start and End:	2016-2020				
Number of Projects Funded:	~ 300 (the exact number is hard to tell, because programs overlap sometimes)				
Amount of Funding in 2019 and 2020:	80 Mio Euro per year of public funding				
Programme Evaluation:	An ex post evaluation is planned for 2021				

RCN / Pilot Case 3

Characteristics of RCN			
Reporting period: 2019 Please answer with 'Y' for yes and 'N' for no and explain		Y/N	Explanation
Annual budget and staff:	Funding budget (see definitions)	10.3 million EURO?	
	RFO's employees	443	
Experiences with citizen science:	Citizen participation in innovation projects	Y	Pilots on citizen science, much more on stakeholder participation
	Citizen participation within RFOs' processes (see definitions)	Y	Pilots on citizen science, much more on stakeholder participation
	Citizen participation in evaluation processes (see definitions)	N	
	Other (please specify)		

¹⁶ At least one of the three fields of actions should be filled out.



Existing Rules and Guidelines at RFO level:	Research integrity	Y	Mandatory part of project evaluation
	Conflict of interest	Y	Mandatory procedures for project evaluations
	Ethics	Y	No dedicated policy, but mandatory part of project evaluation
	Gender / Diversity	Y	Policy on gender equality and gender perspectives in RDI
	Open Access / Open Science	y	Policy on open science
	Data Management	Y	Part of policy on open science. Mandatory part of project evaluation. All projects must have a data management plan.
Existing committees and agencies:	Ethics committees	N	No committee, but one department with responsibility for ethics issues. Close dialogue with National ethics committees for research ethics and integrity (Norwegian National Research Ethics Committees)
	Integrity bodies	N	See above
Ethical reviews at RFO level:	All proposals	Y	No dedicated ethics experts, but mandatory part of the overall project evaluation
	(bio)medical proposals	y	See above
	Proposals involving animals, children, or vulnerable groups	y	See above
	Proposals involving personal data collection and/or processing/use	y	See above
	Proposals involving human participants	y	See above
	Proposals with volunteers for social or human sciences research	y	See above
	Proposals dealing with safety, security, or defense matters	y	See above

Characteristics of Pilot 3: Systematic Pre-Call Consultation

		For the Pilot I		For your organisation ¹⁷	
<i>Please answer Y for 'yes' or N for 'no'</i>		Y/N	<i>Please specify</i>	Y/N	<i>Please specify</i>
Categories of Participants ¹⁸ (see definitions):	(End) Users	Y	See attachment describing the four different cases that	(Y)	RCN have different main types of calls, with different demands for stakeholder and

¹⁷ Please answer 'Y' in case participative approaches are *general practice* at RFO's level

¹⁸ Please note that the categories of participants are not disjunctive, adult citizens might be users as well. In case that more than one category can be applied, multiple answers are possible.



			<i>comprise Pilot I</i>		<i>user involvement.</i>
	Adult citizens	Y	<i>See attachment describing the four different cases that comprise Pilot I</i>	(Y)	<i>See above</i>
	Vulnerable groups (patients, children, elderly people other)	Y	<i>See attachment describing the four different cases that comprise Pilot I</i>	(Y)	<i>See above.</i>
	stakeholders (e.g. firms, interest groups, NGOs, persons or institutions)	Y	<i>See attachment describing the four different cases that comprise Pilot I</i>	(Y)	<i>See above</i>
	Other		<i>Please specify</i>		<i>Please specify</i>
Field(s) of Action: ¹⁹	Citizen participation in innovation projects	Y	<i>See attachment describing the four different cases that comprise Pilot I</i>	(Y)	<i>See above. Innovation projects are user-controlled/user-led</i>
	Citizen participation within RFOs' processes (see definitions)	Y	<i>See attachment describing the four different cases that comprise Pilot I</i>	(Y)	<i>Ongoing work on developing more open research and participation processes</i>
	Citizen engagement in evaluation processes (see definitions)	N	<i>Specify if possible</i>	N	<i>Specify if possible</i>
Start and End:	<i>Not relevant, see attachment on Pilot I</i>				
Number of Projects Funded:	<i>Balanse: 6 projects (36 million NOK) ME: 4 (30 million NOK) RCL: ?</i>				
Amount of Funding in 2019 and 2020:	<i>Not relevant</i>				
Programme Evaluation:	<i>Please add a link if available or mention a planned year for which an evaluation is planned (if applicable)</i>				

¹⁹ At least one of the three fields of actions should be filled out.



Innoviris / Pilot Case 4

Characteristics of Innoviris			
Reporting period: 2019 <i>Please answer with 'Y' for yes and 'N' for no and explain</i>		Y/N	Explanation
Annual budget and staff:	Funding budget (see definitions)	50.000.000 EUR	
	RFO's employees	57 FTE (occupied), 69 FTE (in the personnel plan)	
Experiences with citizen science:	Citizen participation in innovation projects	Y	<i>A broad range of projects has been funded, applying crowd-sourcing, citizen science and wisdom of crowds methods.</i>
	Citizen participation within RFO processes (see definitions)	Y	<i>Until now, citizens have never been directly involved in the identification of call topics. However, citizens are currently being involved in drawing up the new smart specialisation strategy, which defines strategic areas of innovation and serves as an input for the Regional Innovation Plan from 2021 onwards.</i>
	Citizen participation in evaluation processes (see definitions)	Y	<i>Cf. Pilot I case – citizen jury in the co-creation programme.</i>
	<i>Other (please specify)</i>		
Existing Rules and Guidelines at RFO level:	Research integrity		<i>No specific recommendations yet (work in progress). The researchers themselves are expected to take responsibility for respecting the codes of deontology.</i>
	Conflict of interest	Y	<i>Part of the rules. Innoviris expects that the promoter and the researcher-entrepreneur shall take all necessary means to prevent any situation which may compromise the impartial and objective execution of the project, including situations that result in conflicts of interest. A conflict of interest can arise from financial interests, political or national affinities, family ties or emotional connections, or any other interpersonal or common interests. Any conflict of interest or any situation that can lead to a conflict of interest during the execution of the project must be immediately reported to Innoviris in writing. Each admissible project is evaluated by a jury organised and chaired by Innoviris. When submitting the application, the promoter may indicate whether there are potential conflicts of interest with certain specialists from the sector in question in Belgium or abroad.</i>
	Ethics		<i>No specific recommendations yet (work in progress). The researchers themselves are expected to take responsibility for respecting the codes of deontology.</i>
	Gender / Diversity	Y	<i>Each project to be approved will be subjected to an 'equal test' (including gender) to reveal potential sensitivities. There is currently no systematic policy to ensure gender and diversity-based evaluation. The diversity policy at HR level ensured a diverse and gender-balanced workforce (including in the hierarchies), making Innoviris one of the leaders amongst regional government bodies.</i>



	Open Access / Open Science	Y	Innoviris does not impose general open access measures. Academic researchers are bound by the institutional policies. Only in a socially oriented research & innovation programmes are a number of open science measures in place. In the Prospective Research researchers are obliged to publish in a local diamond open access journal (Brussels Studies), and to deliver a policy brief at the end of the project. The latter is also the case for the projects in the societal resilience oriented programme Co-Creation, open to all types of innovation actors.
	Data Management	N	No particular policy has been put in place yet.
Existing committees and agencies:	Ethics committees	N	There is no systematic policy. Case by case, it is considered whether an additional evaluation by an ethics committee (in case of academic research) is required. Furthermore, legal obligations are complied with, for example in the context of clinical trials legislation (required ethical evaluation at federal level).
	Integrity bodies	N	Idem (cf. supra).
Ethical reviews at RFO level:	All proposals	N	No systematic checks have been put in place yet (under development). Ethical sensitivities are usually addressed during the evaluation by an expert jury
	(bio)medical proposals	N	No systematic checks have been put in place yet (under development). Ethical sensitivities are usually addressed during the evaluation by an expert jury.
	Proposals involving animals, children, or vulnerable groups	N	No systematic checks have been put in place yet (under development). Ethical sensitivities are usually addressed during the evaluation by an expert jury.
	Proposals involving personal data collection and/or processing/use	N	No systematic checks have been put in place yet (under development). Ethical sensitivities are usually addressed during the evaluation by an expert jury.
	Proposals involving human participants	N	No systematic checks have been put in place yet (under development). Ethical sensitivities are usually addressed during the evaluation by an expert jury.
	Proposals with volunteers for social or human sciences research	N	No systematic checks have been put in place yet (under development). Ethical sensitivities are usually addressed during the evaluation by an expert jury
	Proposals dealing with safety, security, or defense matters	N	No systematic checks have been put in place yet (under development). Ethical sensitivities are usually addressed during the evaluation by an expert jury

Characteristics of Pilot 4: Innoviris Citizen Jury, Citizens in Project/Proposal Evaluation

		For the Pilot I		For your organisation ²⁰	
<i>Please answer Y for 'yes' or N for 'no'</i>		<i>Y/N</i>	<i>Please specify</i>	<i>Y/N</i>	<i>Please specify</i>
Categories of Participants ²¹	(End) Users	N	Members of the jury are not especially end users.	Y	Besides Co-creation, other programmes such as 'Experimental

²⁰ Please answer 'Y' in case participative approaches are *general practice* at RFO's level



(see definitions):			But they often have a particular interest in the results of the evaluated projects – often living in the same neighbourhood/area		Platforms´ specifically target end-user involvement and testing. Furthermore citizens are as well involved in consultations for strategic development, such as the smart specialization strategy.
	Adult citizens	Y	Sometimes citizen jury members have no particular interest in the results of the projects.	Y	Citizens often are recruited by non-profit associations funded by Innoviris to participate for reasons of scientific interest etc.
	Vulnerable groups (patients, children, elderly people other)	N	Please specify	Y	Research & Innovation related to medical devices, clinical studies, etc.
	stakeholders (e.g. firms, interest groups, NGOs, persons or institutions)	N	Please specify	Y	Regularly involved in the light of consultations for setting thematic call priorities.
	Other		Please specify		Please specify
Field(s) of Action: ²²	Citizen participation in innovation projects	N	Specify if possible	Y	Cf. supra > Co-creation, Experimental platforms, Prospective Research, Prove your social innovation programme, etc.
	Citizen participation within RFOs´ processes (see definitions)	N	Specify if possible	Y	Until now, citizens have never been directly involved in the identification of call topics. However, citizens are currently being involved in drawing up the new smart specialisation strategy, which defines strategic areas of innovation and serves as an input for the Regional Innovation Plan from 2021 onwards.
	Citizen engagement in evaluation processes (see definitions)	Y		Y	The co-creation citizen jury case.
Start and End:	<i>The Co-creation call is launched yearly. The implication of citizen experts started in 2018 for the first time, and was repeated during the evaluation of project proposals in the spring of 2020.</i>				
Number of Projects Funded:	29 since the creation of the Co-creation programme In 2015 (6 in 2015, 10 in 2016, 6 in 2017, 3 in 2019, 3 in 2020)				
Amount of Funding in 2019 and 2020:	4 098 443 €				
Programme Evaluation:	<i>It is a continuous evaluation. No planned event for an evaluation of the programme.</i>				

²¹ Please note that the categories of participants are not disjunctive, adult citizens might be users as well. In case that more than one category can be applied, multiple answers are possible.

²² At least one of the three fields of actions should be filled out.



Annex 2: Reporting and Assessment Template

Reporting Template

The reporting templates refer to Pilot I and will be adapted at a later stage to meet the needs of Pilot II. The reporting should be descriptive in nature. Therefore, *please avoid normative elements as far as possible.*

Case Description

Please provide a brief description of the case you report on (no more than half a page).

Characteristics of the Pilot I Cases and the RFO in Charge

		For the Pilot I		For your organisation ²³	
<i>Please answer Y for 'yes' or N for 'no'</i>		Y/N	<i>Please specify</i>	Y/N	<i>Please specify</i>
Categories of Participants ²⁴ (see definitions):	(End) Users		<i>Please specify</i>		<i>Please specify</i>
	Adult citizens		<i>Please specify</i>		<i>Please specify</i>
	Vulnerable groups (patients, children, elderly people other)		<i>Please specify</i>		<i>Please specify</i>
	stakeholders (e.g. firms, interest groups, NGOs, persons or institutions)		<i>Please specify</i>		<i>Please specify</i>
	Other		<i>Please specify</i>		<i>Please specify</i>
Field(s) of Action: ²⁵	Citizen participation in innovation projects		<i>Specify if possible</i>		<i>Specify if possible</i>
	Citizen participation within RFOs' processes (see definitions)		<i>Specify if possible</i>		<i>Specify if possible</i>
	Citizen engagement in evaluation processes (see definitions)		<i>Specify if possible</i>		<i>Specify if possible</i>
Start and End:	<i>Month of starting the participative approach and (proposed) month of the final participative exercise</i>				
Number of Projects Funded:	<i>In total (from start of the programme until end of 2020) / in 2019 and 2020 (if applicable)</i>				
Amount of Funding in 2019 and 2020:	<i>Total funding in € / Share of public funding in % (if applicable)</i>				
Programme Evaluation:	<i>Please add a link if available or mention a planned year for which an evaluation is planned (if applicable)</i>				

²³ Please answer 'Y' in case participative approaches are *general practice* at RFO's level

²⁴ Please note that the categories of participants are not disjunctive, adult citizens might be users as well. In case that more than one category can be applied, multiple answers are possible.

²⁵ At least one of the three fields of actions should be filled out.



Expected Benefits of Participation

	<i>Please answer with numbers 1 to 10 (1 is for minor importance, 10 is for highest importance) and explain why*</i>	Rating	Explanation
<i>*Benefits and scale of importance are judged by the RFO on behalf of the other groups. Please specify if the importance is to be seen as a general level, or if it regards the Pilot I case.</i>			
Benefitting party	Expected benefits		
Participants (see definition)	Gaining an interest in RDI as a whole		
	Access to RDI, a deeper and broader understanding of how RDI operates		
	Enhancing scientific literacy, improving skills and gaining knowledge		
	Gaining a greater say in and commitment to RDI matters		
	Contributing to better solutions, being a first adaptor		
	<i>Other (please specify)</i>		
RDI agents (see definition)	Achieving expected and unexpected discoveries and results, development of new RDI questions		
	Developing better solutions that meet the needs and wishes of the users		
	Being able to gather large amounts of data with the support of citizens		
	Better understanding of the market		
	Allowing more deeply investigation of research questions, on a much larger scale		
	Enhancing credibility of science and gaining trust		
	Taking the societal impact of research into account		
	Building up networks and ecosystems of participation		
	Making research more accessible to a wider audience and increasing its reach		
<i>Other (please specify)</i>			
RFOs	Starting a dialogue with society or societal groups and engage in taking up relevant topics for society, including multi-perspectivity		
	Raising topics that researchers wouldn't come up with on their own		
	Increasing the understanding of internal RFO practices		



	Adapting the funding portfolio to real societal needs		
	Enhancing societal impact		
	Gaining access to different types of expertise		
	<i>Other (please specify)</i>		
Society	Enhancing societal trust in RDI		
	Enabling more society-relevant research questions and topics		
	Increasing the permeability and transparency of the interface between research, innovation and public		
	<i>Other (please specify)</i>		
<i>Other parties (please specify)</i>			

Expectations from the participative approach

<i>Please answer with numbers 1 to 10 (1 is for minor importance, 10 is for highest importance) and explain why*</i>		Rating	Explanation
<i>* Please specify if the importance is to be seen as a general level, or if it regards the Pilot I case.</i>			
Project level	Innovative outputs are closer to the needs of users		
	New combination of knowledge increases the novelty of solutions and project outputs		
	Participation increases the societal impact		
	<i>Other expectations (please specify)</i>		
Programme level	Participation helps to improve programme design		
	Programmes with participative elements are better accepted by users, stakeholders and the society in general		
	Involving participants in the definition of calls or funding schemes helps to select relevant topics and increases the understanding of the challenges		
	<i>Other expectations (please specify)</i>		
RFO level	The voice of citizens helps in the course of restructuring the RFO to more and better engagement with society		
	Including citizen expertise enhances the societal impact of RFO activities		
	<i>Other expectations (please specify)</i>		
Society level	Participation helps to identifying the topics relevant to the society and the problems which should be addressed		
	Bridge the gap between the RDI community and society		
	<i>Other expectations (please specify)</i>		



Recruitment process

		For the Pilot I case	For your organisation
Do the participative processes follow any predefined concept or study design?		<i>Please answer with 'Y' or 'N'</i>	<i>Please answer with 'Y' or 'N'</i>
If yes, what are the elements of the concept?		<i>Please specify</i>	<i>Please specify</i>
Kind of participation (e.g. one time focus group, longer term involvement in a study, co-creation)		<i>Please specify</i>	<i>Please specify</i>
Scope of the participation		<i>Please specify</i>	<i>Please specify</i>
Definition of the target group(s)		<i>Please specify</i>	<i>Please specify</i>
Size of the participatory group		<i>Please specify</i>	<i>Please specify</i>
Ethical rules		<i>Please specify</i>	<i>Please specify</i>
Who is selecting the participants?			
The project lead (see definition)		<i>Answer with 'Y' or 'N'</i>	<i>Answer with 'Y' or 'N'</i>
The RFO		<i>Answer with 'Y' or 'N'</i>	<i>Answer with 'Y' or 'N'</i>
<i>Other (please specify)</i>		<i>Please specify</i>	<i>Please specify</i>
How does the recruitment process work?			
The project lead selects	The project leads can choose whom they want and how they want (without any concept – see above - or support)	<i>Please specify</i>	<i>Please specify</i>
	The project leads get support	<i>Support by whom?</i>	<i>Support by whom?</i>
	The project leads must follow a predefined concept	<i>Which concept? Please add a link in case the concept is public</i>	<i>Which concept? Please add a link in case the concept is public</i>
The RFO selects	The RFO searches participants by an open call without any specification (e.g. via the RFO's website or via social media)	<i>Please specify</i>	<i>Please specify</i>
	The RFO specifies certain characteristics (e.g. needed knowledge and/or qualification)	<i>Please specify</i>	<i>Please specify</i>
	The RFO addresses multiplier organisations (e.g. Citizen Science organisations, patient representatives)	<i>Please specify</i>	<i>Please specify</i>
	The RFO addresses selected individuals (e.g. using RFO's networks)	<i>Please specify</i>	<i>Please specify</i>
Both select	<i>Please specify the process</i>		
<i>Others select (please specify)</i>	<i>Please specify the process</i>		



Specific challenges concerning the Recruitment process

Please answer with numbers 1 to 10 (1 is for minor importance, 10 is for highest importance) and explain why. Please specify if the importance is to be seen as a general level, or if it regards the Pilot I cases

Challenge	Explanation of the challenge	Rating (1 - 10)	Explanation of the Rating
Recruiting a sufficient number of participants	RFOs as well as project leads might have difficulties in recruiting a sufficient number of participants		
Easy access to participation	Participation practices may lead to unfair concentration of power in the hands of a privileged, educated elite and would undermine interests of disadvantaged groups		
Representation of all societal groups relevant in the specific case	The societal groups affected by a specific innovation or technology in the respective cases should be carefully defined and fully represented. This includes the consideration of non-traditional stakeholders (such as citizens, public and semi-public caretakers, NGOs, social entrepreneurs, etc.).		
Implementation of quality control mechanism	The recruitment process should include quality control mechanisms to avoid biases, technological divides, lobbying, and exclusion or underrepresentation of women and specific societal groups (e.g. people with disabilities, elderly or very young people, and so on).		
Investigation of regulatory and institutional frameworks	Regulatory and institutional frameworks may allow or may hinder an active involvement of citizens and other relevant stakeholders.		
No exploitation of participants	All participants should be treated equally and fairly and should receive an adequate compensation for their time and effort.		
Tackling conflicts of interest	The responsible RFO should ensure that persons with a conflict of interest are excluded from the participatory process.		
Other challenges (please specify)	Please specify		

Gender issues

Please answer with 'Y' or 'N' and explain		For the Pilot I case		For your organisation	
		Y/N	Explanation	Y/N	Explanation
Gender issues are covered					
Citizens and stakeholders are selected in a gender sensitive way					
Mechanisms of Inequality in RDI are tackled	negative and pervasive stereotypes and discriminatory social and legal norms				



	careers and human resources policies in research and STEM sectors				
	male-dominated work and organisational cultures				
	gender unequal conditions of exploitation of innovations (capital, start-ups)				
Gender equality in proposal evaluation processes as well as in Panel sessions is addressed					
<i>Other gender issues covered (please specify)</i>					

Assessment Template

The assessment of the pilots will take place in two parts. Part 1 is a self-assessment where the participating RFOs assess their processes and think about possible improvements. Part 2 will be an analysis done by DBT in the course of T2.1 for the Pilot I cases and T3.5 for the Pilot II cases. The structure for both the self-assessment and the external assessment follows the reporting structure.

Expected Benefits of Participation

Please highlight the three most important expected benefits (see section 0) and answer the following questions:

- ▶ Are/Were you successful in achieving the benefits?
- ▶ How do you measure your success?
- ▶ What were/are the most important supporting and the most important hindering factors?

Expectations from the participative approach

Please highlight the three most important expectations (see section 0) and answer the following questions:

- ▶ Are/Were your expectations met?
- ▶ How do you measure your success?
- ▶ What were/are the most important supporting and the most important hindering factors?

The Recruitment processes

Please describe very briefly your recruiting processes by using the terms introduced in section 0 and answer the following questions:

- ▶ Does your predefined concept help you to carry out the participative processes?
- ▶ Are you satisfied with your recruitment approach?
- ▶ What can be improved?
- ▶ Do you see any bias or ethical risk concerning the group of participants/stakeholders? If so, which ones?



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- ▶ Do the participants possess sufficient know-how, knowledge, skills and experience to fulfil their tasks?
 - ▶ Do you take the following issues into consideration?
 - ▶ Easy access to participation
 - ▶ Representation of all societal groups relevant in the specific case
 - ▶ Implementation of quality control mechanism
 - ▶ Investigation of regulatory and institutional frameworks
 - ▶ No exploitation of participants
 - ▶ Tackling conflicts of interest

Gender issues

Please describe very briefly your approach to tackle gender issues by using the terms introduced above and answer the following questions:

- ▶ Are you satisfied with your approach?
- ▶ What can be improved?

