

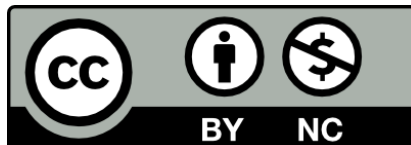
CoAct (Co-designing Citizen Social Science for Collective Action)
proposal submitted to the European Commission
under the call SWAFS-15-2019: Exploring and supporting citizen science.

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CoAct
Co-designing Citizen Social Science for Collective Action

Call: H2020-SwafS-2018-19/ **Topic:** SwafS-15-2018-2019

Research and Innovation Action

Participant No. *	Participant organisation name	Country
1. UB	Universitat de Barcelona	Spain
2. ZSI	Zentrum Für Soziale Innovation	Austria
3. UNIVIE	Universität Wien	Austria
4. FHP	Fachhochschule Potsdam	Germany
5. UNSAM	Universidad Nacional de General San Martín	Argentina
6. OKF	Open Knowledge International	UK*
7. GIG	Global Innovation Gathering	Germany
8. FSMC	Federació Salut Mental Catalunya	Spain
9. FARN	Fundación Ambiente y Recursos Naturales	Argentina

* This partner is an international organisation with a worldwide network with headquarters in the UK.



Figure 1: CoAct: Citizen Social Science general framework, R&I Actions (Mental Health Care, Youth Employment, Environmental Justice) and Gender Equality Research Pilots.

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1. Excellence

The European Commission report *Europe's Future: Open Innovation, Open Science, Open to the World* (2017-8) starts with the following quote:

“[First,] our actions must always reflect European values of openness and diversity, if we are serious about using European Research and Innovation for something greater than our own gain. [And second,] we have to embrace change – try new things and be willing to take risks – if we want European Research and Innovation to remain at the forefront of modernity and economic growth.” Carlos Moedas, European Commissioner for Research, Science and Innovation.

The report, a truly cornerstone of the current European Research and Innovation (R&I) policy, highlights some clear needs:

Accountable, transparent and multi-disciplinary R&I actions involving citizens: The *Open to the World* chapter of the report states that *“being open in science implies being fully accountable, transparent, inter- and multi-disciplinary. It also implies [...] involving engaged citizens to join scientific research (so-called Citizen Science)”*.

Inclusive openness when addressing societal challenges: Chapter 5 of the same report is focussed on policy and understands *“openness as tool addressing the grand societal challenges of our time. “Openness should be viewed here as inclusive tool” to avoid “individual or group exclusion” and “with respect to global networks and local communities’ way in which knowledge is being absorbed, developed, [and] refined”*.

Mobilise and co-design to participate in evidence-based policy and decision-making: *Investing in the European future we want* (2017) report provides 11 recommendations. Recommendation 8 proposes to *“Mobilise and involve citizens”* by stimulating *“co-design [...] through citizen involvement”* and *“Citizen Science should be encouraged [...] This [...] should enable citizens and citizen groups to participate in evidence-based policy and decision-making. This could give rise to new types of partnerships, [...] where ‘people’ are working together [...]. This could be systematically implemented on European, national and regional levels.”*

Participation covering an entire R&I process to face ‘wicked’ problems: *101 Ideas on the future of R&I in Europe* (2019) report says that *“citizens acquire new roles in the knowledge society”* (idea 27). *“Enabled by digitalisation and knowledge, citizens are [...] capable of shaping the innovation process and bypassing restrictive practices of established sectors and governments. This goes well beyond Citizen Science and covers the entire R&I process, with citizens becoming co-designers, co-creators [...]”*. In its summary, the report states that *“the solutions to the complex ‘wicked’ problems that we face today will be systemic. [...] Europe must act to enact breakthrough or systemic changes [...] and take a holistic approach that also considers the interactions between these and other policy areas.”*

CoAct creates an unique framework to respond to the aforementioned identified R&I policy guidelines:

CoAct proposes a radically new participatory R&I approach to face **four ‘wicked’ social issues in which citizen groups act as co-researchers**. CoAct will define and develop a general framework for **Citizen Social Science** as a **participatory research co-designed and directly driven by citizen groups sharing a social concern**. The effort will then not only provide new socially robust scientific knowledge but also propose scientifically reasoned measures **to promote social change**. In this frame, research question formulation, R&I design, data collection, data interpretation and evidence-informed policy as well as collective action will be based on a constant and open dialogue both within citizen groups and in the public sphere. CoAct R&I activities will be **systematically implemented** and carefully **evaluated with new tools** on local, regional, national and European levels **for enacting evidence-informed policies**.

1.1 Objectives

The general objective of CoAct is **to deploy and demonstrate (through a co-evaluation process) the scientific relevance and the social impact of Citizen Social Science¹** which is still to date an underexplored area of Citizen Science. While strengthening the foundations of **Citizen Social Science**, CoAct's ambitious Research and Innovation (R&I) Actions and bottom-up Research Pilots will respond to social 'wicked' concerns shared by citizen groups combining Citizen Science and Social Science (see Figure 1). A diversity of social impacts will be generated to respond to concerns related to **Mental Health Care, Youth Employment, Environmental Justice and Gender Equality**. In an innovative manner, R&I activities will contribute to the implementation of new or improved science-related policies or measures, while increasing their sense of ownership and facilitating evidence-informed reactions.

CoAct will enable a new understanding of Citizen Science valid to social research, creating an unprecedented field work to achieve the following specific **eight objectives**:

O1. To generate new ground-breaking and open scientific outcomes by means of Citizen Social Science .
O2. To engage vulnerable citizens and local civil society groups in R&I initiatives and to place them at the centre of the R&I cycle .
O3. To produce scientific evidence-informed reactions and thereby create new policies and to improve existing ones.
O4. To build a common and validated transdisciplinary Citizen Social Science methodological framework for a variety of end-users .
O5. To promote Open Science and scientific research integrity in methods and data.
O6. To create and validate a robust and inclusive R&I evaluation framework .
O7. To increase scientific literacy, skills, competences and public awareness regarding science.
O8. To disseminate CoAct results and build a global sustainable Citizen Social Science community of practice .

We describe hereafter how our objectives are Specific, Measurable, Achievable, Realistic and Time-bound (SMART).

Objective 1. To generate new ground-breaking and open scientific outcomes by means of Citizen Social Science. How? By generating new knowledge on complex social concerns such as Mental Health Care, Youth Employment, Environmental Justice and Gender Equality.

Ground-breaking scientific outcomes: **Citizen Social Science** will be, for the first time, **deployed at a broad geographical scale** (Spain, Austria, Germany, EU Eastern countries, pan-European, and Argentina) and **applied to a diversity of complex social issues** such as Mental Health Care, Youth Employment, Environmental Justice, and Gender Equality. Scientists and practitioners in Citizen Science (UB, ZSI), Participatory Social Science (UNIVIE, FHP, UNSAM) and NGOs/CSOs committed to Social Innovation (FARN, OKF, FSMC and GIG) will both guarantee the scientific excellence of the research and also the effective involvement and engagement of citizens. Novel scientific outcomes will arise from **(1) the blending of Citizen Science and Social Science, and (2) an effective engagement in R&I of citizen groups**, such as adults with an experience of mental health disorders and their families, youth aged between 15 and 18 years old not attending school, shanty town

¹ Citizen Social Science is a participatory research co-designed and directly driven by citizen groups sharing a social concern. It represents a new understanding of Citizen Science valid to social research. More explanation and background is provided in Section 1.3.a.1.

communities suffering environmental discrimination, and grass-root movements directly concerned with gender inequalities.

Open scientific outcomes: The R&I cycle will be completely open, inclusive and transparent. It will start with the constitution of the *Knowledge Coalitions* that will bring together citizen groups (as co-researchers), researchers from several disciplines, NGOs, local and national public bodies and SMEs. It will also include the public interpretation of the results (through Datathons and other innovative formats) and their transformation into new policy measures (through open debates, Hackathons and participatory platforms). A number of **open accessible reports, open data, open source codes, and open downloadable outcomes** will be constantly released and disseminated.

Objective 2. To engage vulnerable citizens and local civil society groups in R&I initiatives and to place them at the centre of the R&I cycle. How? By co-designing and putting into practice collective research to address vulnerable citizens' local social concerns, with a view on a global impact while fostering new technologies and new means of using social innovation.

Vulnerable citizen groups and citizens as co-researchers: In accordance with RRI framing, calling for “*engaging the societal actors via inclusive participatory approaches*”, **vulnerable citizen groups will be deeply engaged as co-researchers during the whole R&I cycle.** Instead of being considered as vulnerable - and often silenced - collectives, they will be considered as reliable in-the-field experts, *de facto* recognizing their contribution from the very beginning of the R&I cycle. For example, citizen adults with an experience of Mental Health disorders and their families are competent experts in Mental Health self-management (focus of the Barcelona-based partner).

Vulnerable citizens at the centre of the R&I cycle: As co-researchers, citizen groups will actively contribute during the whole R&I cycle, meaning that they will **co-design the R&I process** (including research questions and methodologies), and that they will participate in the **data gathering, results interpretation and their transformation into new or better evidenced-based policies and measures.** Innovation will be especially present in the form of new technologies (e.g. digital platform for supporting Mental Health self-management) provided by UB and in the form of social innovation strategies like collective mapping and crowdsourced data platforms provided by UNSAM. Citizens will participate to the R&I processes through **inclusive hands-on activities**, taking into account their degree of literacy in general and their scientific literacy in particular (as this will be the case of UNIVIE). To avoid further exclusion, digital and non-digital techniques will be mixed or combined.

From local to global: The commitment of the co-researchers at a local scale will produce a global impact through new policy making strategies and **specific solutions applicable to a variety of other countries and in line with the Sustainable Development Goals (SDGs numbers 3, 4, 5, 6, 8, 10, and 16).** Moreover, the global issue of **Gender Equality (SDG 5)** will be more specifically addressed by cascading grants for Research Pilots located in Berlin, in Eastern countries and on a global European level (with the support of the partnering global networks OKF and GIG in the last two cases).

Objective 3. To produce scientific evidence-informed reactions and thereby create new policies and to improve existing ones. How? By transforming local Citizen Social Science R&I results into action.

Scientific evidence-informed reactions: The inclusion of citizen groups as co-researchers inside a **singular Knowledge Coalition** (with public bodies, NGOs, CSOs and social innovators in general) specific to each local context (mostly cities) will enable **to match social and scientific impact from the very beginning.** The collective interpretation and discussion of data will allow the necessary knowledge transfer to produce scientific evidence-informed reactions among all stakeholders.

New or improved policies: All the R&I Actions are already framed in social and political contexts. There are though some serious breakdowns between the formulation of the existing policies and their main recipients. For example, the Austrian youths, recipients of the social measures to ensure their school attendance and future employment, often drop off by lack of ownership of these measures. In all cases, the scientific research will lead to the **creation of new or the improvement of existing policies and measures, being from the beginning the**

explicit final goal of the research. Consortium partners are already in close contact to local authorities for each of the actions. The achievement of this goal will be carefully evaluated.

Objective 4. To build a common and validated transdisciplinary Citizen Social Science methodological framework for a variety of end-users. How? By creating, implementing, evaluating and opening transdisciplinary Citizen Social Science.

Common and validated transdisciplinary Citizen Social Science methodological framework: All possible Citizen Social Science methodologies will be collectively refined, based on the strong and complementary expertise of the partners both in the fields of Citizen Science and Social Science. The development of a common methodological framework will be made possible by **Mutual Learning and Capacity Building activities within the consortium**. Thanks to a dynamic and collaborative evaluation process, this common methodological framework will **co-evolve** during all the project and the **optimum methodologies** will be selected. The final result will consist of a transdisciplinary common and validated Citizen Social Science framework, as a strong foundation for this underexplored field of methodologies.

Variety of end-users: The Citizen Social Science framework will be taking the form of an **Open Citizen Social Science Toolkit**, including a variety of tools such as a co-design Agile-based toolkit, an inclusive toolbox for low literacy co-researchers or an open source digital platform for gathering data related to environmental risk bottom-up indicators. The target of these ready and easy-to-use tools will be researchers in all disciplines as well as citizens acting as co-researchers, and Policy Makers, public bodies, CSOs, and SMEs.

Objective 5. To promote Open Science and scientific research integrity in methods and data. How? By opening Citizen Social Science initiatives to people from all backgrounds, by ensuring balanced and long-term participation of citizens, by recognizing their work and by identifying the limits of Citizen Science.

Open Science: It will be promoted not only by opening the results and knowledge transfer of the R&I cycle, but also by inclusively **opening the scientific research to a wide variety of stakeholders**. Two NGOs are part of the consortium (FSMC in Barcelona and FARN in Buenos Aires) in order to ground the R&I Actions into the relevant **communities' dynamics**. In other cities (Vienna and Berlin), numerous NGOs and other kinds of formal or informal grass-roots organizations will be engaged in the R&I process. The citizens engaged as **co-researchers** will represent a **diversity of social profiles** (with particular attention to age and gender balance) reflecting the diversity of social concerns considered, all related to social inclusion and/or employability. Both digital and non-digital methods will ensure a greater inclusiveness.

Scientific research integrity in methods and data: Horizontal research and associated principles such as **mutual trust, accountability, integrity and transparency** all closely linked to RRI, will be collectively discussed and implemented within the Capacity Building set of actions of the project. A **strong ethical commitment with citizens** will be taken (including for instance a collaboratively built informed consent and a revision of privacy protocols). The relation between professional scientists and co-researchers will also be collectively addressed. Finally, but not less important, a **gender perspective** will be carefully introduced in all aspects of the project and within a specific work package.

Limits of Citizen Science will be also investigated by fostering Gender Equality Research Pilots using the cascading grants modality. Therefore, the **potential of Citizen Science as a new way to contribute to unexplored thematics within Citizen Science** will be assessed. The co-evaluation of obstacles and limits of such approaches will help to foster the methodological toolset and also identify potentials for further developments.

Objective 6. To create and validate a robust and inclusive R&I evaluation framework. How? By creating, implementing and validating indicators to evaluate the societal, democratic, economic costs and benefits, scientific outcomes of Citizen Social Science research and the co-researchers involvement.

Robust and complete evaluation framework: The evaluation will be conducted by ZSI, having long standing expertise in the assessment of R&I. A set of quantitative and qualitative indicators will be developed using MoRRI indicators and SDGs, and based on the SMART objectives of the project. A variety of CoAct outcomes

will be evaluated: 1) the scientific outcomes 2) the societal changes produced 3) the democratic outcomes 4) the economic cost and benefits of R&I activities and finally 5) the co-researchers involvement and benefits.

Evaluation relevance and applicability: A direct communication line will be established with the SwafS CSA Eu-Citizen.Science project, where ZSI is responsible for the evaluation work package. The two evaluation frameworks will be aligned and the methods and results will be shared. The open evaluation tools will also be further disseminated through the Open Citizen Social Science toolkit.

Objective 7. To increase scientific literacy, skills, competences and public awareness regarding science.

How? By acting as a tool for formal and informal science education of young European people and adults and by showcasing how scientific research can promote social inclusion and employability.

Scientific literacy, skills and competences: While acting as co-researchers, citizen groups involved will go through a Capacity Building process, as a formal and **informal science education**. The scientific methodology will be organically introduced, being the conducting line of the collective R&I Actions and of the Research Pilots. When needed, the co-researchers will be further trained on **data literacy** by OKF using methodologies and materials especially adapted to mitigate data friction when adopted by citizens and policy makers. The hands-on research activities will also foster co-researchers practical skills and competences. All this knowledge acquisition process will be quantified. Early career researchers will also benefit from the methodological advances of the project in the form of a PhD Summer School, as a **formal education** activity.

Public awareness regarding science: The R&I Actions and the Gender Equality Research Pilots will lead to large-scale communication activities, based on innovative materials and processes devoted to highlight the positive results regarding empowerment, social inclusion and employability. Events to fight against mental health stigma (Barcelona and Europe-wide) and gender inequality (Berlin), a public exhibition on youth acting as co-researchers (Vienna) or even artistic pieces based on collective mapping (Buenos Aires) will rise the public awareness regarding science and the knowledge outputs of the project.

Objective 8. To disseminate CoAct results and build a global sustainable Citizen Social Science community of practice. How? By targeting and including researchers with diverse backgrounds, grass-roots movements, CSOs, public administrations and Policy Makers.

CoAct results dissemination: The results of the project will be disseminated through **innovative and multi-target tools** (such as microlearning videos, digital storytelling and infographics made of sketching), both in the projects events such as the final conference, including a policy forum (for policy makers), and in external scientific events (Citizen Science national and international conferences; methodological sections of the European and International Sociological Association). The Open Call launching for gender-related projects will also be an opportunity to present Citizen Science to a variety of European citizen initiatives which are generally not connected to this field. Thus CoAct aims to empower the connection of evidence based citizen research and policy making.

Global sustainable Citizen Social Science community of practice: Inside CoAct project, **Citizen Social Science community building** will be piloted. This Citizen Social Science community will be then enlarged and strengthened through the partners' active participation to National, European and International Citizen Science Associations, and other similar organisations. Communication lines and best practices exchanged will be established with other H2020 Citizen Science-based projects such as D-NOSES, MICS, CitieS-Health or InSPIRES. Formal education trainings for researchers such as a PhD Summer School will ensure the sustainability of the Citizen Social Science community. Finally, the introduction of Social Science and Humanities in all kind of Citizen Science projects, including Natural Sciences based ones, will be fostered.

1.2 Relation to the work programme

Table 1.1 shows the relation between the call SWAFS-15-2019, our proposal and its objectives:

SWAFS-15-2018-2019 topic requests...	...and CoAct proposes	Objectives
Specific challenge		

[Citizen Science] can potentially bring a wide variety of benefits to researchers, citizens, policy makers and society across the R&I cycle.	In each of the four CoAct R&I Actions, a combination of diverse actors such as researchers, local public bodies or CSOs will closely work across the R&I cycle with active citizen groups as co-researchers being personally affected by mental health issues, unemployment, environmental discrimination or gender inequality. They will form what we call Knowledge Coalitions . All the actors of the Knowledge Coalitions will both contribute to the research, and benefit from the knowledge created and the social change produced.	O2 O3 O7 O8
[It can] sometimes even make possible the production of new scientific knowledge.	In CoAct, Citizen Science and Participatory Social Science will be combined throughout a multidisciplinary consortium generating new groundbreaking scientific results, able to shed light on complex ‘wicked’ social issues.	O1
It can increase public awareness about science [...]	Public awareness about science will be promoted via communications actions, based on concrete outcomes regarding social inclusion and employability. Innovative materials and formats such as public exhibitions or artistic pieces will increase the impact of these actions.	O5 O7
It can increase [...] feeling of ownership of policies.	Active citizen groups will be involved in all steps of the R&I cycle, from the research design to data collection, interpretation and evidenced-based policy and decision making, being the main actors of the research and of the proposed policies and evidence-informed reactions.	O3 O5
Overcome difficulties [...] in terms of choosing the optimum methodologies [...]	Possible Citizen Social Science methodologies will be carefully reviewed, refined and evaluated, in order to focus on the optimum methodologies able to afford the greatest scientific, social and political impact.	O4 O6
Overcome difficulties [...] in terms of quality assurance and validation of the outcomes [...]	CoAct will rely on a robust and dynamic evaluation that will allow for the production of demonstrable and measurable impact regarding social concerns. Socially robust knowledge will be produced. The evaluation methodology, data and conclusions will be shared and contrasted with at least Eu-Citizen.Europe and MICS SwafS projects.	O6
Overcome difficulties [...] in terms of linking the various governance levels, from local to global [...]	In CoAct, local governance levels will be represented by local municipalities or public bodies directly participating or acting as a counterpart to the R&I Actions. The co-researchers engagement at a local scale will allow to elevate the outcomes through new or better policy making strategies with global impact, since the specific solutions collectively generated will be suitable for a variety of other countries and regions . Global issues such as Gender Equality will be tackled both at a local scale (Berlin and Eastern Europe) and at a global pan-European scale.	O2 O3 O8
Overcome difficulties [...] in terms of ensuring balanced participation of citizens (e.g. regardless of background, gender and age)	The citizen groups participating in CoAct are very diverse and balanced in terms of geographical coverage (Barcelona, Vienna, Buenos Aires, Berlin, Eastern Europe and pan-European scale) and in other dimensions like for example health status, literacy, economic welfare, participation culture and level of self-organization. CoAct will develop specific strategies to avoid age and gender barriers.	O2 O8 O5
Scope		
[...] support hands-on Citizen Science activities [...]	Citizen Science activities will relate with Mental Health Care, Youth Employment, Environmental Justice or Gender Equality, and will be mostly performed through face-to-face hands-on sessions, research co-design activities, public experimentation , and many activities such as Datathons, Hackathons and collective actions in public spaces.	O1 O2 O3 O7
Proposal may focus on one particular area of scientific enquiry or tackle several, though transdisciplinary approach should be favoured [...]	CoAct will focus on Citizen Social Science , transdisciplinary by definition and by practice. It will create new hybrid spaces through Knowledge Coalitions, blending methodologies and approaches coming mostly from Participatory Social Science and Citizen Science but also from other disciplines such as Arts and Design , and from inside and outside academic contexts. In addition, CoAct will develop a robust transdisciplinary Citizen Social Science methodological framework , that will be validated by a wide range of profiles in the consortium, and Open for a variety of end-users.	O1 O4
The intended activities should be clearly defined [...]	The intended CoAct activities are clearly defined in terms of societal challenges (Mental Health Care, Youth Employment, Environmental Justice or Gender Equality), in terms of citizen groups that will participate as	O1 O2 O3

	co-researchers , and in terms of scientific methodologies used to address them (e.g. Computational Social Science or Participatory Action Research).	
[...] and result in the development of new knowledge [...]	All the R&I Activities will produce new scientific knowledge . A more general approach will also be taken by combining Participatory Social Science, Computational Social Science, Data Science and Citizen Science, among many other fields.	O1 O2 O3
[...] result in the development of [...] new technologies [...]	New adaptive technologies will be developed in the frame of each R&I Action. For example, digital tools for mental health self-management will be collectively designed.	O4 O5
[...] result in the development of [...] new means of using existing [...] social innovations better .	Existing social innovations will be used in CoAct: (1)The Agile co-design methodologies adapted for research co-creation in the context of Citizen Science and Participatory Social Science. (2) digital Social Innovation , in the form of digital tools for participation, Citizen-generated Data platforms, crowd-mapping tools and platform, and collective decision making platform (Metadecidim, Barcelona Technopolitics).	O1 O2 O3 O7
Activities can explore how Citizen Science develops scientific skills and competences .	By being placed at the centre of the R&I cycle and actively co-designing, conducting research and interpreting data , the co-researchers will develop scientific skills and competences, following the learning by doing and learning via experiments methodologies.	O1 O2 O6
Activities can explore how Citizen Science [...] act as a tool for informal and formal science education of young people and adults	Furthermore, while acting as co-researchers, all the citizen groups involved will go through a Capacity Building process , including especially adapted data and science literacy training as an informal science education activity. At the mid-term of the project, a Citizen Social Science summer school will target PhD students as a formal education action to increase the long term sustainability of the CoAct activities.	O2 O7 O8
Activities can explore how Citizen Science [...] counter perceived anti-intellectual attitudes in society, raise the scientific literacy of European citizens	To tackle anti-intellectual tendencies, R&I Actions and Research Pilots will be grounded on scientifically sound and a scientifically validated process . Co-researchers will be included in the whole R&I cycle. Empirically based approaches and Citizen-generated Data following strict protocols will be driving all statements being collectively raised. OKF will run specific activities for increasing data literacy valid for all co-researchers engaged and the Knowledge Coalitions built . All these activities will be carefully analyzed and co-evaluated within the consortium.	O3 O5 O7
Activities can explore how Citizen Science [...] promote social inclusion and employability .	The R&I Action about Mental Health Care (Barcelona) will precisely deal with social inclusion and the stigma that are suffering persons with a mental health disorder experience and their families. The R&I Action about Youth Employment (Vienna) is also directly related to an improvement of the social inclusion of the youth and their employability . Research action in Buenos Aires about Environmental Justice promotes social inclusion of specific marginalized communities . Gender Equality Research Pilots will claim for a real representation of women in the professional, urban and digital world.	O2 O3 O8
Gender, geographical and socio-economic factors should be taken into account so as to ensure activities are open to people from all backgrounds .	The citizen groups engaged will reflect a wide geographical coverage (Barcelona, Vienna, Buenos Aires, Berlin, Eastern Europe and Europe-wide for the pan-European case), diverse socio-economic and educational backgrounds (including social groups with low social status and low level of formal education in Vienna and Buenos Aires), a wide age range (including adolescents in Vienna but also ageing mental health community in Barcelona) and gender balance (within the citizen groups as well as in the Knowledge Coalitions).	O2 O5 O7
Evaluate the impacts on society, democracy, [...] the science itself and the individual citizen scientists involved in the activities.	The CoAct evaluation framework, based on SMART objectives, MoRRI indicators and SDGs will evaluate the impacts of CoAct on the individual citizen scientists, on the production of new and relevant scientific knowledge and on the effective social change produced (mostly grounded on MoRRI PE2 and PE3). A new collection of indicators will be built through a co-evaluation process and the data will be available and shared. The approach will be aligned to Eu-Citizen.Science project (ZSI is performing the evaluation).	O6
Lines of communication should be established with other relevant Swafs projects in order to share evaluation data	Concerning evaluation, collaborations will be established with Eu-Citizen.Science and MICS. SUPER_MoRRI project outputs will serve to reinforce the evaluation framework. A win-win exchange will take place with the D-NOSES which is based on collective mapping, as our activities in	O8

and data arising from the Citizen Science in the spirit of open science.	Buenos Aires. Environmental-related projects such as ACTION or CitieS-Health , will be contacted. The findings on citizen groups engagement strategies in projects such as InSPIRES will be integrated in CoAct. Finally, a collaboration will be established with I-CONSENT as we also intend to revise the Informed Consent procedures in the frame of CoAct	
In line with the strategy for EU international cooperation in R&I, international cooperation is encouraged.	One research action is situated in Buenos Aires metropolitan area (Argentina) so that the project can benefit from the expertise of the local partners (UNSAM and FARN) in Social Science research linked with Environmental Justice issues. The project will also interlink all three R&I Actions to enhance EU international cooperation. Furthermore, GIG and OKF have both international networks and nodes that will both bring a world-wide vision to the project and a wider dissemination scope.	O8

Table 1.1. Relation between the objectives of the call and how they will be addressed in CoAct.

1.3 Concept and methodology

1.3.a Concept

1.3.a.1 Overall Concept: Citizen *Social* Science in Action

RRI and social Citizen Science CoAct grounds

Responsible R&I (RRI) approach “anticipates and assesses potential implications and societal expectations with regard to R&I, with the aim to foster the design of inclusive and sustainable R&I”². Due to its own nature, it is therefore not surprising to consider **Citizen Science as a very powerful candidate to organically fit into RRI approach and successfully pursue inclusive and sustainable goals** when running R&I activities.

As stated in the Cornell Ornithology Lab (United States of America) webpage, one of the precursors of Citizen Science practices in the 1980s, **Citizen Science (CS)** provides a R&I model where “**volunteers partner with scientists to answer and pose real-world questions**”. Citizen Science was indeed defined by the pioneering Societize European FP7 project Green Paper as a “general public engagement in scientific research activities where citizens actively contribute to science either with their intellectual effort or surrounding knowledge or with their tools and resources” (Societize, 2014). ZSI, that belongs to the CoAct consortium, was one of the partners of Societize European FP7 project.

Irwin (1995) put the accent on another important aspect of **Citizen Science**: “[It] **assists the needs and concerns of citizens and build knowledge with the participation of the non-expert**”. Such a stronger **social** notion of **Citizen Science is aligned to the “Citizen Science emergence as an important policy orientation in the SwafS work programme 2018-2020”** with the intention to **specifically cover public engagement RRI key element** but also to embrace the other **RRI key elements** as well: *open access, gender, ethics and science education*.

CoAct definition of Citizen *Social* Science

Just very few years ago, Purdam (2014) used the term **Citizen Social Science** to describe how “**volunteers collaborate in a formal social research project**”. The same author says: “**The role is different to simply volunteering to participate in a research study** such as giving an interview, joining a focus group or responding to a survey, as it is about citizens gathering data about the world that they observe around them. In many ways **this is a development of the wider field of ‘Citizen Science’**”. UB and ZSI lead researchers and CoAct consortium members are indeed part of the editorial team of the Special Collection “**Citizen Social Science: Active Citizenship Versus Data Commodification**” in the open journal Palgrave Communications (Nature Publishing Group, to appear in second semester 2019, visit the call webpage for further details³). Up to 20 high quality manuscript submissions already show the vitality and potential of Citizen Social Science as for today and the next coming years.

² <https://ec.europa.eu/programmes/horizon2020/en/h2020-section/responsible-research-innovation>

³ <https://www.nature.com/palcomms/for-authors/call-for-papers#citizen>

CoAct consortium therefore will develop one step further the understanding of Citizen Social Science as an emerging field in Social Science where “volunteers collaborate in a formal social research project” with a radically new participatory and transdisciplinary Research an Innovation approach (see Fig. 2).

Citizens as co-researchers with Knowledge Coalitions



Figure 2: Citizen Social Science in Action, with a vulnerable citizen group, an specific concern, and with the support of the Knowledge Coalition.

“Openness should be viewed here as inclusive tool” to avoid “individual or group exclusion” and “with respect to global networks and local communities’ way in which knowledge is being absorbed, developed, [and] refined” from European Commission report Europe’s Future: Open Innovation, Open Science, Open to the World.

Citizen Social Science is a participatory research co-designed and directly driven by citizen groups sharing a social concern. CoAct is **Citizen Social Science in action** since:

1. **Citizens act as co-researchers** in the whole R&I cycle and within specific **R&I Actions**. To: (1) place vulnerable citizens, civil society local groups and **their social concerns** at centre of the R&I cycle, (2) recognise citizens as in-the-field competent experts, (3) include citizens in R&I hands-on activities to bring in their perspective, skills, knowledge, and action plans. Citizen groups will contribute to **evidenced-based reactions** and **improved or new science-related policies and measures** in sustainable, grounded, long-lasting and more effective ways.
2. **Knowledge Coalitions** with a diversity of stakeholders are built to produce **socially robust knowledge**. An effective way to: (1) **promote social change**, (2) **implement science-related policies and measures**, (3) **boost evidence-informed reactions**, and (4) **increase feeling of ownership of policies**.

Citizen Science in general has the aim to be coherent with the **inclusiveness values of RRI**: “Responsible R&I means that societal actors work together during the whole R&I process in order to better align both the process and its outcomes, with the values, needs, and expectations of European society. RRI is an ambitious **challenge for the creation of a R&I policy driven by the needs of society and engaging all societal actors via inclusive participatory approaches**.” (European Commission, 2014). **Citizen involvement** or **public engagement**, if one prefers to use the terminology of RRI approach, is becoming prominent in the context of **mission-oriented R&I**. CoAct will conduct **three Citizen Social Science R&I Actions** and **three Gender Equality Research Pilots** which will be **mission-oriented to specific societal challenges** aligned to Sustainable and Development Goals (SDGs) and neatly driven by RRI key elements (Mazzucato, 2017).

CoAct and 3Os strategy: being transdisciplinary, fully accountable and transparent

“being open in science implies being fully accountable, transparent, inter- and multi-disciplinary. It also implies [...] involving engaged citizens to join scientific research (so-called Citizen Science)” from European Commission report Europe’s Future: Open Innovation, Open Science, Open to the World.

The emerging field of **Citizen Social Science builds on several traditions and interpretations** that, in some way or another, are all **related to the 3Os** (*Open Innovation, Open Science, Open to the World*) **strategy** of the Horizon 2020 R&I programme. All traditions and interpretations that CoAct will embrace rely on a **social Citizen Science that aims at opening up science being accountable and at least inter- or multi-disciplinary**. Just to name a few of these efforts in which CoAct will contribute, Citizen Social Science R&I activities are related to Citizen-generated Data in environmental research within the Environmental Justice (Jordan et al., 2019), to Computational Social Science when undergoing in-the-field public experimentation to study of human behaviour (Sagarra et al., 2016), or even to a Participatory Action Research very much linked to civic actions or what is sometimes called Community Science or Civic Science (Heiss et al., 2017). These are just three very different R&I activities that evidence **the inter-, multi- and mostly transdisciplinary approach to better and more completely define and put into practice Citizen Social Science**.

CoAct will respond to inter-, multi- and even transdisciplinary call from SwafS work programme with joint effort from: (1) UB working on Computational Social Science and Complex Systems Science, ZSI working on Open Science and co-evaluation tools and metrics; (2) UNSAM, FHP and UNIVIE working on Participatory Social Science; (3) CSOs organisations (FARN and FSMC) strongly aligned to specific “real *social* world”⁴ questions; and (4) global networks related to Open Data (OKF) and Open Science (GIG) out the academic worlds. Such a strong **consortium has the appropriate capacity able to digest, combine and share a diversity of cultures and perspectives when dealing with Citizen Social Science**.

CoAct will enable a reconfiguration of Citizen Science valid to social research.

This effort unavoidably **implies being inter-, multi- or even transdisciplinary by definition:**

CoAct will blend methodologies and approaches mostly from Social Science and Citizen Science but also from a wide variety of fields such as Participatory Action Research, Citizen-generated Data, Computational Social Science, Complex Systems Science, Data Science, Crowd Science, Community Science, Game Theory, Design Thinking, Civic Technology, Technopolitics, Collective Mapping, Graphic Recording, Research Creation, and Design and Arts in general. A wide diversity of perspectives will be therefore provided, coming both from inside and outside academic contexts, and from both formal (institutions) and informal organisations.

This effort **implies being transdisciplinary by practice:**

CoAct will create hybrid spaces for citizen groups, where citizens act as co-researchers, and for Knowledge Coalitions, that enable the participation of a wide variety of stakeholders, to respond to specific shared social concerns. The effort assumes that when dealing with a shared concern there is no need to start from specific disciplines: all expertise and experiences can positively contribute to a common social goal.

Pushing the boundaries of Open Science with CoAct

SwafS 2018-2020 work programme says in its introduction that “**Citizen Science was recently recognised as an open science priority by the [EU] Council**”. **CoAct will build on Open Science principles**, with special guidance of two worldwide relevant actors that also belong to this consortium: Open Knowledge Foundation (OKF) and Global Innovation Gathering (GIG). On the one side, OKF mission⁵ is “to see enlightened societies around the world, where everyone has access to key information and the ability to use it to understand and shape their lives; where powerful institutions are comprehensible and accountable; and where vital research information that can help us tackle challenges such as poverty and climate change is available to all”. On the other side, GIG is “committed to the values of constant curiosity, open collaboration, and sustainable impact with special attention to diversity, inclusion, and open technologies driven and shaped by grassroots perspectives on development and social innovation. [...] Its network is built on openness, trust, and respect. [...] [They] believe in active citizenship, in doing instead of waiting and in development through grassroot initiatives”⁶

CoAct will apply an open Social Science to existing forms of knowledge production **by experimenting with new tools, metrics, evaluation mechanisms and institutional arrangements**. **CoAct** will not only adopt principles of open data, open method, open evaluation and open education, but it will also **enrich the Open**

⁴ Paraphrasing initial claim on what is Citizen Science from Cornell Lab.

⁵ From <https://okfn.org/about/> (retrieved 23th of March 2019).

⁶ From <https://www.globalinnovationgathering.org/core-values> (retrieved 23th of March 2019).

Science discourse with innovative practices coming from Social Sciences and Citizen Science and combine them with a wide variety of approaches and methodologies coming from both formal and informal contexts. Open Science (ethical) values and principles for CoAct will include mutual trust, accountability, integrity and transparency to all participants (including Knowledge Coalition members but even most importantly citizen groups as they are co-researchers).

To reinforce a strong sense of transparency with participants of R&I Actions and to Citizen Science community in general, CoAct will develop a next generation evaluation methodology (led by ZSI who has a long experience in evaluation processes). Measuring the impact of CoAct means gathering evidence for social change. A steady stream of information will therefore be required to understand what is happening and what are the effects of each activity, so that stakeholders are provided with ongoing opportunities to learn from feedback.

This way of understanding evaluation will contribute to Citizen Science “in terms of choosing the optimum methodologies; in terms of quality assurance and validation of the outcomes; in terms of linking the various governance levels [...]; in terms of ensuring balanced participation of citizens [...]; in terms of integrity of methods and data; in terms of recognising the work of citizens participating in Citizen Science initiatives” (from SwafS-15-2018-2019). Furthermore, CoAct will link, through the evaluation process, to **“questions that remain unanswered about the potentials of Citizen Science for society” and explore the “limits of Citizen Science”** (from SwafS-15-2018-2019) which are vastly unexplored when considering social issues.

CoAct: Citizen-generated Data for global impact

R&I Actions will be responding to specific concerns raised by clearly identified vulnerable citizen groups which are generally marginalised or silenced in the decision making and policies. CoAct will place citizen group at the center of the R&I Actions. **Citizens will therefore act as co-researchers, being in-the-field competent experts.** Furthermore, CoAct does not want to dismiss **Citizen-generated Data initiatives worldwide.** Rather, CoAct recognizes Citizen-generated Data as “data that people or their organisations produce to directly monitor, demand or drive change on issues that affect them. It is actively given by citizens, providing direct representations of their perspectives and an alternative to datasets collected by governments or international institutions”. The recent report *Advancing sustainability together? Citizen Generated Data and the Sustainable Development Goals* (Lämmerhirt et al., 2018) by our OKF key partner in the consortium consider that Citizen-generated Data cover areas from cartography to government policies, public services or environmental research. The report shows via illustrative examples how this approach may further progress around the Sustainable Development Goals and therefore include any group of citizens and local communities. UNSAM has also experience along these lines, they will adopt this approach in their R&I Action. The report **identifies several concrete benefits for implementing and monitoring the SDGs, underlining the importance for public institutions to further support these initiatives thus requiring the existence of Knowledge Coalitions that unite the effort of different expertises and several groups or organizations.**

By considering a *social* Citizen Science and by following the SwafS-15-2019 aiming to “raise the scientific literacy of European citizens”, **CoAct will take the responsibility to diminish and mitigate (open) data friction within Knowledge Coalition and within citizen groups.** This effort will be based on the Frictionless Data project from OKF⁷. Data literacy set of activities, strategies, materials, codes and resources will be designed based on this experience and with real care **to maximize impact and reinforce evidence-informed reactions, policies and measures.** Such an effort will also facilitate **replicability** of the R&I Actions, and Citizen Science data **reusability** in and out of academic contexts.

Pushing the boundaries of Citizens engagement with CoAct: citizens as co-designers and co-creators

“[C]itizens acquire new roles in the knowledge society” (idea 27). “Enabled by digitalisation and knowledge, citizens are [...] capable of shaping the innovation process and bypassing restrictive practices of established sectors and governments. This goes well beyond Citizen Science and covers the entire R&I process, with citizens becoming co-designers, co-creators [...]” from European Commission report *101 Ideas on the future of R&I in Europe* (2019).

⁷ <https://frictionlessdata.io>

Considering citizens as co-researchers refers to a participatory method of research that recognizes participants as joint contributors to the findings of a research project (Kemmis et al., 2014; Bergold et al., 2012). CoAct will reinforce this role of in-the-field competent experts to give voice to several *vulnerable* citizen groups. Their first-hand experience of mental health problems, of being young school leavers, of living in a highly polluted area, or of gender inequality, provides them with practical authority to contribute in the R&I cycle.

CoAct will demonstrate the crucial role of citizens as co-designers or even co-creators in Citizen Social Science. Jointly with Knowledge Coalitions constituted by a variety of stakeholders (civil society, academics, SMEs and public bodies), CoAct will be **building socially robust transdisciplinary knowledge** and will be providing **innovative solutions to promote social change by surpassing restrictive practices to promote social change with methods such as the Research Forum (FHP).** By means of co-design and other engagement strategies, **citizen groups, acting as co-researchers, will provide evidenced-based reactions and improved or new science-related policies and measures in sustainable, grounded, long-lasting and more effective ways.**

CoAct will deal with several participatory digital tools and resources such as an Open Citizen Social Science Toolkit, a chatbot or a Citizen-generated Data digital map to make that possible. Additionally, Agile based co-design tools (Senabre et al., 2018) will be revised and deployed for enabling and improving citizen participation in all stages of the R&I cycle.

CoAct taking a holistic approach to ‘wicked’ social problems

*“[T]he solutions to the **complex ‘wicked’ problems** that we face today will be **systemic**. [...] Europe must act to enact breakthrough or systemic changes [...] and take a holistic approach that also considers the **interactions between these and other policy areas**.”* from European Commission report *101 Ideas on the future of R&I in Europe* (2019).

CoAct will work at the crossroads of societal issues and the need for social change, at the interface of science, policy and society, and it will tackle a broad range of societal challenges. **Social issues are generally complex and ‘wicked’.** A rich perspective is then needed to address them effectively. In this context, **Citizen Science and Citizen Social Science can be both understood as a holistic approach able to embrace different expertise and enhance the innovative capacities of European citizens in order to address a wide range of social concerns.**

CoAct will dedicate a strong effort to **mission-oriented R&I Actions** to effectively respond to the CoAct general objective, that is: **to deploy and demonstrate the scientific relevance and the social impact of Citizen Social Science.** In this sense, CoAct R&I Actions will be carefully **evaluated with new tools and systematically implemented on local, regional, national and European levels for enacting evidence-informed policies.** Albeit responding to clearly identified and very relevant local shared concern, local contextualised set of R&I Actions will also have the capacity to be afterwards easily elevated to European and global levels: social concerns being chosen are widely shared worldwide. **Evaluation dynamics will therefore be considered as a necessary element to demonstrate the validity of CoAct approach when facing complex ‘wicked’ problems at all levels.**

1.3.a.2 From local to global through SDGs mission-oriented Citizen Social Science

While strengthening the foundations of Citizen Social Science, the CoAct **ambitious R&I Activities will also respond to ‘wicked’ social concerns shared by specific citizen groups: Mental Health Care, Youth Employment, Environmental Justice and Gender Equality.**

All CoAct R&I activities in Mental Health Care, Youth Employment, Environmental Justice and Gender Equality will address **four Sustainable Development Goals (SDGs): SDGs 3, 5, 8 and 10.** In addition **SDG16, 4 and 6 are specifically addressed** by one of the R&I Activities (see Figure 3 for further details). CoAct R&I activities will also be aligned to the **two Horizon 2020 cross-cutting issues:** “Climate change, sustainable development, and biodiversity” paying attention to the notion of “**sustainable development**” as a transversal approach, and with the concept of “**Cooperation with third countries**” since one of the research actions is performed in Argentina with partners FARN and UNSAM.

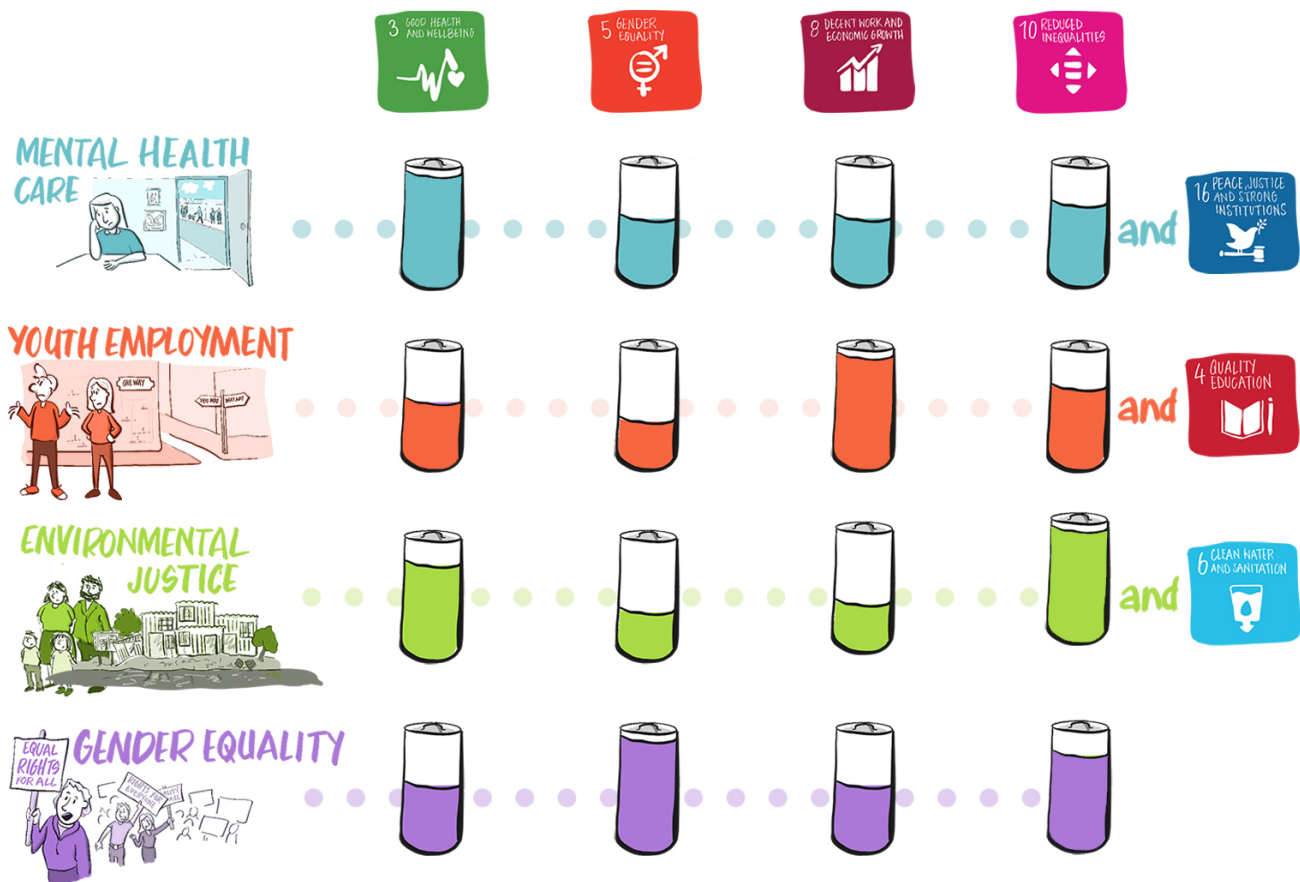


Figure 3. Degree of intensity of SDGs in the CoAct R&I Actions (Mental Health Care, Youth Employment, Environmental Justice) and the Gender Equality Research Pilots.

SwafS-15-2018-2019 call expects to “focus on the meanings, mechanisms and challenges facing Citizen Science **from local to European and global levels**, learning from ongoing experiences and innovative grassroots initiatives.” For this reason, we first have selected three **local experiences** (Barcelona, Vienna, Buenos Aires), with a well-defined citizen group that share a social concern which can be successfully addressed via a Citizen Social Science approach. This effort will be afterwards elevated to “European and global levels” since the social concerns being chosen are widely shared worldwide. OKF and GIG will help reaching this global impact through their **wide global network**: (1) **GIG has 100 network members** of which 47 are officially registered members of the NGO from across the world, most of them based in Africa, Latin America and South East Asia and (2) **OKF has groups in more than 40 countries**.

We list and discuss the three R&I Actions of CoAct hereafter.

R&I Action #1: Mental Health Care - Barcelona

+30 *co-researchers*: Adults having experience of Mental Health disorders and their families

+1M in Catalonia (in 2015, more than one million people visited primary care services for mental disorders, CatSalut).

+220M (25% of the WHO European Region inhabitants affected by mental disorders every year (WHO, 2015; The European Mental Health Action Plan 2013–2020))



Citizen Group and Shared Concern

The citizens' community involved will be constituted by **adults with an experience of mental disorders and their families**⁸, living in Barcelona city and its metropolitan area. The adults involved will represent a broad range of socioeconomic, educational backgrounds and age group profiles. A variety of participatory activities organized by the 68 associations, members of the Catalonia Mental Health Federation, have identified a **common social concern of the individuals with an experience of mental health disorders: the lack of wide and scientific evidence-based acceptance of tools, models and protocols that put their life experience and self-perception at the center**.

Other members of the Knowledge Coalition

UB: Being experts in Citizen Science and Computational Social Science (Behavioural Science and Game Theory), UB will accompany the citizen groups during all the R&I Action and propose a co-design methodology and Social Science methodologies to formulate the research questions and to investigate issues related to the Recovery Model⁹.

FSMC: This regional CSO is composed of more than 68 federated entities, including family associations, institutions and first-persons associations. Experts in mental health advocacy and policy making. They will closely interact with the concerned citizens' community and support the whole process, while providing knowledge and assessment on mental health.

Barcelona City Council: It implements City-based Mental Health policies through the Mental Health Table. They have shown interest in the project and will be asked to participate in policy making.

El Prat and Sant Boi de Llobregat City Councils: They are two small/mid sized cities close to Barcelona, especially active in mental health community actions. They will be asked to participate as Policy Makers.

Others: Group of **activists** based on **Design Justice** principles and with technological background that can enhance data collective interpretation. **Research groups** specialized in **co-design methodologies and digital and data Commons**. **Research group** specialized in **Complex Systems and Statistics**. **IT company** specialized in digital collective tools and with strong social compromise.

Why Citizen Social Science is relevant?

Until the 1990's, recovery processes in Mental Health were often parameterized using symptoms profiles over time. Psychiatric models tended to view recovery from mental illness similar to that seen in physical diseases (Frank et al., 1991). During the last two decades, the Recovery Model started to view mental illness from a perspective radically different. This model does not focus on full symptom resolution but **emphasises resilience and control over problems and life**. Hence, for many people with an experience of mental disorders the concept of recovery is about staying in control of their life rather than the elusive state of return to premorbid level of functioning. **In the Recovery Model, the lived experiences of individuals with mental health issues are put at the forefront**, as well as mechanisms contributing to individual wellbeing, such as supportive social networks and the use of self-management tools (Davidson, 2005). Yet, the dominant paradigm in mental health research and practice still affords biomedical knowledge a privileged status, preventing addressing mental health from a wider perspective. **Citizen Social Science and CoAct is also perfectly aligned to the World Health Organisation**

⁸ The context and the ways how Mental Health Care is provided is different for adults versus adolescents and children. CoAct has for this reason decided to focus on individuals of at least 18 years old.

⁹ Recover Model emphasises resilience and control over problems and life of the persons with an experience of mental disorders.

(WHO) European Action Plan for mental health 2013-2020¹⁰ (WHO, 2013). One of its main objectives is “to provide comprehensive, integrated and responsive Mental Health Care and social assistance services (Objective 2)”. One of the lines of work refers to the need for community mental health care services provision to include a **Recovery Model approach, so that people with their own experience reach their own aspirations and goals.** In this sense, WHO Action Plan points to **the necessary participation of persons with mental health problems and their families in the reorganization, provision, evaluation and monitoring of services, so that care and treatment better respond to their needs.** One of the actions that is considered indispensable is **to offer integrated and adaptable support that allows for a holistic approach of prevention, promotion, rehabilitation, attention and support that facilitates the recovery of people with mental disorders with general health and social services, focused on the user of the service.** It also specifies the need to define strategies to promote the participation of users, relatives and caregivers in the planning of the services and therapeutic decisions. Additionally, the **European Framework for Action on Mental Health and Wellbeing¹¹** highlights at the “**empowerment and involvement of patients, families**”. Mental Health R&I Actions fits into the objectives 1, 3 and 4 of this Action framework. The European Federation of associations of families of people with Mental Illness have also recommended the project with a LOI, the collaboration will allow CoAct to have a global impact in Mental Health Care.

R&I Action #2: Youth Employment - Vienna

+25 *co-researchers*: young early school leavers.

3,500 young people (estimate) under 18 neither in employment nor in education or training in Vienna (Austrian Federal Ministry of Labour, Social Affairs, Health and Consumer Protection, 2016),

+6,3 M young people (aged 15-24 years) neither in employment nor in education or training (NEETs) in the EU (European Commission, 2016),



Citizen Group and Shared Concern

The citizens are youth between **15 and 18 years old, who do not attend school** or other types of education, who take part in social policy measures by the Public Employment Service Austria (AMS) and who live in Vienna. In international sociological terms many of them are early school leavers, some of them (who have not dropped out of school, but have never started a school after compulsory education) are NEET youth. NEET means young people not in education, employment or training. According to a law introduced in Austria in 2016 they are now obliged to do some kind of school or training until they are 18. Early school leavers and NEET youth are usually **perceived as a vulnerable social group as young people without sufficient education have more difficulties in finding stable jobs with a livable income** (e.g. Steiner, 2009). The most important social concern is that especially those **young early school leavers who are in very precarious socio-economic positions often do not take part in social policy measures or drop out of these measures.** Accordingly, adaptations and changes, maybe new measures should be created to attract these young people. In the proposed R&I Action, **early school leavers themselves together with social scientists and a supervising social worker will ask their colleagues about interests and needs and will work on designing and/or adapting suitable measures.**

Other members of Knowledge Coalition

University of Vienna (UNIVIE): They are responsible to develop the methodological frame which will be based on Participatory Action Research.

¹⁰ <http://www.euro.who.int/en/health-topics/noncommunicable-diseases/mental-health/publications/2015/european-mental-health-action-plan-20132020-the>

¹¹ https://ec.europa.eu/research/participants/data/ref/h2020/other/guides_for_applicants/h2020-SC1-BHC-22-2019-framework-for-action_en.pdf

Viennese Fonds for Employees (WAFF): They will coordinate courses and initiatives connected to “Ausbildung bis 18” in Vienna. The WAFF is involved as a local partner and will implement the research project in the structure of measures and courses. The WAFF will ensure that selected young people are able to participate in the project in agreement with the Public Employment Service Austria (AMS) and other administrative bodies.

Federal Ministry of Labour, Social Affairs, Health and Consumer Protection: It coordinates and is responsible for administration of the new law. The ministry is involved as a local partner and will give insights on the structures and goals of measures which are currently available and provide the basic framework conditions for Participatory Action Research with young people. The ministry is one of the main addressees of the outputs of this Action.

Produktionsschule SpaceLab: Viennese organisation that offers courses for young people who are currently not employed. The organisation provides workshops with various themes in which young people learn social skills and different crafts. Their activities are directed at young people with more severe social and learning difficulties. The cooperation with Spacelab will encompass the creative component. Additionally the organisation will perform an advisory function in regard of the cooperation with young people who attend measures.

Others: Public Employment Service Austria (AMS) provides financial support for the young people in question and implements some of the measurements according to the law “Ausbildung bis 18”. **Adult Education Centers in Vienna** implement some of the measurements according to the law “Ausbildung bis 18”.

Why Citizen Social Science is relevant?

As said before, a new law (“Ausbildung bis 18”), introduced in Austria in 2016, makes education and training obligatory for young people until the age of 18. Young people, who do not attend school or another type of education are identified and can use “youth coaching” to apply for other schools or trainings. Youth coaches are mostly social workers trained to help young people with education, training and finding work. This is planned to be a low-threshold social measurement as youth coaches for example regularly come to schools or youth centers. Nevertheless, teachers report that especially those **young people in most need of help and assistance often do not participate** (Atzmüller, 2013). With the new law, young people who do not use youth coaching or do not find any place of training or education are now identified and have to attend courses to prepare for work life. These courses and measures are administered by different institutions in different federal states (e.g. WAFF for Vienna). The main objective of this R&I Action is to involve **young people affected by these measures, in the conceptualisation and improvement of new (maybe different) measures**. By linking common policy indicators to individual life-courses the Action is critically approaching the development of welfare measures and assessing their impact. The research will be conducted according to the principles of Citizen Science methodologically reconfigured with Participatory Action Research inputs.

R&I Action #3: Environmental Justice - Buenos Aires

+200 co-researcher: inhabitants of a highly polluted and crowded shanty town of 1,500 families.

1.7 M people with health and living conditions highly risky (Matanza-Riachuelo basin).

2.1 billion people lack safe drinking water at home, more than twice as many other sanitation lack (World Health Organisation, WHO).



Citizen Group and Shared Concern

The Matanza-Riachuelo is a heavily contaminated 64 km long river that runs along the southern limit of the City of Buenos Aires. According to the most recent population census (2010), 6 million people live in the river basin - one million of whom live in shanty towns and emergency settlements. It is estimated that health and living

conditions are highly risky for at least 1.7 million people living in the basin. 35% of the basin population does not have access to sewers and 40% does not have access to potable water. The Action will work with **communities in highly polluted areas and hence, strategic areas to advance clean-up policies and improve the health and rights situation of people**. Villa Inflammable is one of the most severely affected areas with a lack of basic services, and toxic waste dumps which are at risk of flooding. A ruling by the Supreme Court has decided to relocate 1,200 families due to the sanitation situation and health risks. It has also prohibited access to construction materials so there are no more families settling in the neighbourhood. Policies affecting the neighbourhood are homogeneously developed without considering the particular situation of different families. **Environmental Justice is not guaranteed because people directly affected by environmental pollution do not participate neither in the definition of what the problem is, nor in what the social-environmental risks are, nor in the design of actions to mitigate risks**. Interestingly, some groups of residents in the basin are highly mobilised and some of the NGOs are also very active and they have organized together with the community several participatory activities to, for example, discuss alternative options for the resettlement process.

Other members of the Knowledge Coalition

The Centro de Investigaciones para la Transformación (inside UNSAM): A research organisation based in Buenos Aires whose objective is to contribute to debates about economic and social transformation in Argentina and Latin America. Its role in the project would be in blending Citizen Science methodologies to social science methodologies regarding socio-environmental risk assessment.

The Environment and Natural Resources Foundation (FARN): A non-governmental, non-partisan, non-for-profit organization, created in 1985 and located in Buenos Aires, Argentina. FARN's principle objective is to promote sustainable development through policy, law, and the institutional organization of society.

Iconoclastas (collective): The group generates visual devices that could communicate scenarios of injustice. They will facilitate/coordinate collective mapping workshops to be used to define new key categories of socio-environmental risk assessment to be included in the crowdsourcing platform.

Neighbour's assemblies (community organisation): In most communities along the basin neighbours have organized themselves around citizen organizations in which they discuss and decide different actions. They will be key collaborators, both in helping to disseminate the platform and in co-defining collective mapping workshops.

Fundación AVINA (regional NGOs): It is a Latin American NGO created in 1994. It focuses on producing the large-scale changes necessary for sustainable development by fostering collaborative processes among leaders from different sectors. They will participate in our workshops and discussion activities and they will observe the possibilities to replicate CoAct project.

Ministry of Science and Technology Buenos Aires Province (policy body): Their goal is to plan the provincial technological and innovation policy. They are interested in our policy advice regarding Sanitation Policy in the Riachuelo basin.

National University of Hurlingham (educational institution): Education specialist Guillermo Priotto: a well-known environmental education specialist that will contribute in framing discussions around the workshops.

Others: Public Defense Office of the City of Buenos Aires (policy body), ACUMAR (policy body), University of Lanús (educational institution), Public Prosecutor office (public body), ACIJ (civil society organisation), Observatorio de Derecho de la Ciudad (civil society organisation): citizen collective which is politically related and involved in different conflicts involving vulnerable communities and public policies.

Why Citizen Social Science is relevant?

In December 2009 an Integrated Environmental Sanitation Plan (PISA) was created by ACUMAR, later readjusted in 2016 as a result of a judicial request. The PISA is now organised on the basis of 14 action lines that emerged from the mandates established by the Court. One of the action lines from PISA concerns the creation of two System of Indicators: i) to measure the degree of progress in complying with goals established by the Court, which also serves to re-orient policy guidelines and plans in this area to make them better adjusted to the proposed goals¹² and ii) to create a map of environmental risk to identify population in risk situation; to diagnose and identify pollution-related diseases from other non-environmentally-triggered pathologies; to create open access data on prevalence and persistence of those pathologies; and to establish indicators of epidemiological surveillance. This map, though, does not include information regarding the perspectives of the affected population about the nature and meaning of such risks, which can be summarized by the terminology "socio-environmental risk perception". We aim to use **Citizen Science methodologies to gather information** about how different

¹² <http://www.acumar.gov.ar/content/documents/3/1583.pdf>

groups of citizens in the Matanza-Riachuelo basin think about and identify the **socio-environmental risks** that **a) matter to them, b) why they matter, c) what levels or magnitudes of those risks are considered acceptable/unacceptable to citizens, and d) what are appropriate, fair responses**. This way, we are going to generate a new data set on socio-environmental risk perception that can be contrasted with PISA's existing map of environmental risks. We thus plan to develop **data based on Citizen Science methodologies and to assess that information in the context of official Sanitation Policy**, which is based on the regulatory (ACUMAR) risks assessments. This will allow us to identify divergent patterns of desired (**following Environmental Justice premises**) and actual policy solutions and processes.

1.3.a.3 National and International R&I activities linked to CoAct

Concerning evaluation, collaborations will be established with **Eu-Citizen.Science**, where ZSI is also performing the evaluation or **MICS** (Developing metrics and instruments to evaluate Citizen Science impacts on the environment and society) which is especially devoted to evaluate Citizen Science impacts. Concerning collective mapping, a win-win exchange will take place with the **D-NOSES** (see LOI) project and some of their partners such as **Mapping For Change**, since this EU project is based on Citizen-generated Data mapping, as our R&I Action in Buenos Aires. As Environmental Justice is one of the approaches of the project, we will openly share our findings with some environmental-related projects such as **ACTION** or **CitieS-Health**, also asking for their assessment. **Public Lab** (see LOI) community science organization and its approach will also be truly valuable to share and discuss experiences from both sides. The findings on both citizen groups and policymakers engagement methodologies and strategies in projects such **InSPIRES** (Innovative models for Science Shops) (see LOI) will be integrated into CoAct.

Extreme Citizen Science group at University College of London (see LOI) will be in close contact with CoAct to discuss and better shape the concept of Citizen Social Science. Its director is one of the pioneers in including social dimension in Citizen Science R&I and will be in the Advisory Board of CoAct. International contacts will also be established in countries such as **Chile** (through the **Fundación Ciencia Ciudadana**, see LOI) or other world-wide networks such as the **European Citizen Science Association** (see LOI) in order to expand the concept and the community around Citizen Social Science. Other international contacts will be more strategic. Countries like Canada have a well-established national and regional (Québec) science programme on **Research Creation**. "Research-creation is an approach to research that combines creative and academic research practices and supports the development of knowledge and innovation through artistic expression, scholarly investigation, and experimentation. The creation process is situated within the research activity and produces critically informed work in a variety of media (art forms)."¹³ We will therefore keep permanent contact with **Milieux** (see LOI), an interdisciplinary research institute for new media arts, digital culture and information technology at **Concordia University**. They are one of the key players in this research frame that incorporates Arts and Humanities. Europe in general and CoAct consortium in particular lack of this expertise. The contact will allow us to maintain a rich multidisciplinary perspective with other ways of understanding participatory and transdisciplinary research.

1.3.b Methodology

1.3.b.1 Overall Methodology for Citizen Social Science

CoAct general objective is to deploy and demonstrate the scientific relevance and the social impact of Citizen Social Science, being currently an underexplored area of Citizen Science. **Citizen Social Science is here understood as a participatory research co-designed and directly driven by citizen groups that shares a social concern**. This will be done with three combined strategies mostly grounded on experimentation and testing, to approach R&I activities as much as possible to practice. These are:

- 1) **Strengthening the methodological foundation of Citizen Social Science to share a common ground**
- 2) **R&I Actions (hands-on activities) where citizens act as co-researchers**
- 3) **Co-evaluation process to better reflect on Citizen Social Science framework**

¹³ <http://www.sshrc-crsh.gc.ca/funding-financement/programs-programmes/definitions-eng.aspx#a22> (Social Sciences and Humanities Research Council, retrieved 28th of March 2019).

1.3.b.2 Capacity Building: a combination of a wide diversity of approaches and methodologies

An intense **Capacity Building set of activities for strengthening the foundation of Citizen Social Science** will be fundamental not only to develop successfully the R&I Actions but also **to share a vast variety of methodologies that can be used to develop Citizen Social Science inside and outside the consortium.**

Inside the consortium: Hands-on workshops will especially share the existing methodologies even from external experts, will together address to ethics and new forms of informed consent, will be learning about the co-evaluation process, will dynamically discuss for example: about research integrity, data ownership, the relation between co-researchers and professional scientists, gender perspective in Social Science. These workshops will be more intensive during the first period of CoAct and prior to the beginning of the R&I Actions.

Inside Knowledge Coalitions as a whole and specially with co-researchers (citizen groups): Capacity Building will be addressed through different activities: data literacy using open educational material and strategies to enhance data literacy among vulnerable groups, Datathons, Hackathons, Collective Mapping, Citizen-generated Data strategies and analysis, Oral and Visual Science methods, and learning by doing for co-designing a broad set of digital and non-digital tools.

For the Citizen Social Science community: CoAct will develop a common and validated transdisciplinary methodological framework for Citizen Social Science. A set of materials and guides will be compiled in the Open Citizen Social Science Toolkit. At mid-term of CoAct, a Citizen Social Science summer school will be organised. CoAct will also organise satellite activities in national and international Citizen Science conference and forums and a final conference.

For Policy Makers: They will take an active role within the Knowledge Coalitions in order to fasten evidence-based reactions and implement new science-related policies and measures. During the final conference there will be a Policy Forum to share and discuss the role of policy bodies. A **Brief for policy makers: Opportunities and Challenges of Citizen Social Science** will be edited and policy briefs dealing with Mental Health Care, Youth Employment, Environmental Justice and Gender will be produced.

Within the consortium, strong capacities and diverse methodologies coming from several backgrounds will coexist. They will enrich methods being developed by each of the R&I Actions and their local responsables (UB, FHP, FSMC, UNIVIE, UNSAM and FARN). For instance, an interesting methodology to be implemented is been already explored by FHP around the **Research Forums, where the citizen groups co-design, discuss and evaluate research around their particular concerns** (Thomas et al., 2019). OKF can bring a large variety of **Citizen-generated Data methods**, highlighting some prominent ways of producing Citizen-generated Data, and how each method relates to implementation, monitoring and achievement of the SDGs. This effort will allow to answer questions such as: What Citizen-generated Data methodologies work well for what purposes? What is the role of citizens in generating data, and what can data ‘generation’ look like? How are participation and use of Citizen Data organised? (Lämmerhirt et al., 2018). Other **Open Science literacy strategies and methodologies** will also transversally developed by OKF and GIG with special attention about **how to mitigate data friction** within citizen groups and Knowledge Coalitions. Another important aspect to be shared is the transversal work that all partners have been done on **gender perspective**. All partners will thus construct a common strategy to cover a wide spectra of elements that needs to be revised through a gender perspective.

A wide variety of fields: Participatory Action Research, Citizen-generated Data, Computational Social Science, Complex Systems Science, Data Science, Crowd Science, Community Science, Game Theory, Design Thinking, Civic Technology, Technopolitics, Collective Mapping, Graphic Recording, Research Creation, and Design and Arts in general.

A wide diversity of perspectives: Coming both from inside and outside academic contexts and from both formal (research institutions and public bodies) and informal organisations.

1.3.b.3 R&I Actions: A hands-on approach where citizens act as co-researchers

Ambitious R&I Actions will respond to social ‘wicked’ concerns shared by citizen groups and with the contribution of what we have defined as Knowledge Coalitions in its early beginning. Citizens act as co-researchers in a co-design and co-creation R&I cycle. **R&I Actions** will include in its last step the

implementation of new science-related policies, increasing feeling of ownership of policies and evidence-informed reactions. They will all follow the same scheme described in Figure 4:

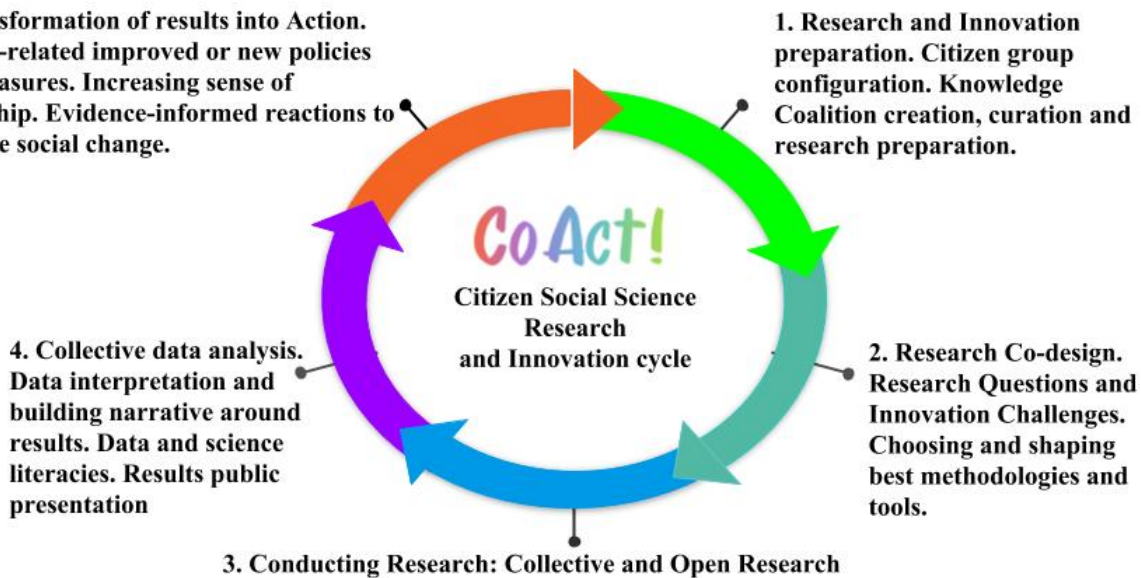


Figure 4: CoAct R&I life cycle for all R&I Actions and Research Pilots.

Hereafter, we will underline some of the methodologies explored by the three R&I Actions. The Gender Equality Research Pilots will be extensively described in the next Section 1.3.b.4. The set of methodologies and approaches described below will be the basis of a discussion within the consortium. These methods and approaches will be revised, enriched and completed in the Capacity Building set of activities before R&I Actions start.

R&I Action #1: Mental Health Care - Barcelona

CoAct will in this Action blend Computational Social Science with Citizen Science. Computational Social Science refers to the academic sub-disciplines concerned with computational approaches to the Social Science. IT and internet based devices and platforms are been used recently to gather massive social data. Computational Social Science focuses on investigating social and behavioral relationships and interactions through social simulation, modeling, network analysis, and media analysis. Scientists in this field are often coming from Complex Systems Science which understand social phenomena as an ecosystem where actors interact in a non-trivial manner and through a holistic and systemic perspective. Such an approach **will provide new insights for understanding the Recovery Model (see Section 1.3.a.2) in Mental Health by putting the accent on social interactions and in understanding the active role of individuals belonging to mental health ecosystem.** UB has already published a study related to community Mental Health Care provision by means of Citizen Social Science approach (Cigarini et al., 2018).

Such an effort will be done also considering **Social Dilemmas and Game Theory** which have an experimental-driven approach to measure human behavioural social traits such as Cooperation, Altruism or Reciprocity just to name a few. During last five years, UB have been developing a set of digital interfaces to make public experiments with a large collection of Social Dilemmas (Sagarra et al., 2014; Vicens et al., 2018). The classical approach to Social Dilemmas and Game Theory is to undergo in-the-lab restricted set up. This contrasts with UB adaptation of this approach to Citizen Science R&I participatory approach. Public experiments by UB links behavioural traits of participants to concrete urban contexts and to specific topics such as gender violence or air quality. Main novelty in **CoAct would be to apply these strategies in the co-design of new digital interfaces such as chatbot: for enabling social interaction and real-time interaction for a long period of time and to enrich the platform with other kinds of measurable social interactions than those offered by Social Dilemmas and Game Theory.** Data being gathered would be richer and it will better respond to the needs of self-management to mental health problems.

The final shape of this public experiments under the form of chatbot but also under other forms to avoid exclusion of the participants will be discussed, co-designed and even co-created within the citizen groups, acting as co-researchers. Specially adapted Agile-based tools will be developed to better assist the whole R&I Action.

The adaptation will take as a starting point the **design thinking dynamic been widely used by UB during last couple of years to achieve a co-created research design, in which interaction sequences between the different groups of participants were developed**: (a) the problem to be addressed, (b) research questions, (c) conceptual diagram and (d) planning the tasks for executing a public experiment (Senabre et al., 2018). A final toolkit for Citizen Science has been developed in the context of StemForYouth H2020 SwafS project.

R&I Action #2: Youth Employment - Vienna

CoAct will in this case blend Citizen Science with Participatory Action Research to better define Citizen Social Science. Participatory Action Research (PAR) consist of a set of approaches that are emphasising the involvement of the research subjects on equal footing into the research process as co-researchers (Whyte, 1990). Arnstein (1969) developed a ‘ladder of participation’ to define different degrees of citizen participation reaching from manipulation and information to consultation, partnership and decision by citizens, which most of today’s concepts of participation are based on. The methods developed in PAR are highly interventional and performative, seeking to collaboratively understand the social phenomena by changing them and reflecting the interventions. PAR researchers highlight forms of collective inquiry and experimentation grounded in experience.

Citizen Science approaches host many opportunities that can enhance Participatory Action Research approaches, such as the possibility to build digital online communities. **More transparency of collaboration and acknowledgement of co-researchers might also serve to the benefits of the participants in terms of data ownership and expertise/empowerment.** In our paradox times of diminishing public trust in social science (and in science in general) on the one hand, and growing demands of evidence based policy development on the other hand, a sensible combination of Citizen Science and PAR approaches will therefore certainly **bring benefits to an open Citizen Social Science**, that is capable of dealing not only with the complexities of social problems, but also commits to a democratic governance of science.

The chosen participatory approach that puts the young early school leavers at the center of the research process shall help to understand their point of view, their interests and needs for trainings and social policy measures. This helps to **adapt or redesign new and more suitable measures**. We plan to do almost all steps of the research process together with selected early school leavers. According to Arnstein (1969) and Hart’s (1992) “ladder of participation” our approach will be in-between steps 6 and 7: **“adult-initiated shared decisions with children” and “child-initiated and directed”**. While the idea to do this research, the organization setting and the broad theme of the research is set up by the adult sociologists, the **concrete research questions, the choice of method, the gathering of data, the analysis, the presentation and dissemination of results will be done by the young people with support by adult social scientists**. To be able to conduct a whole research process together with **young co-researchers**, we will have to adopt academic sociological terms, concepts and methods to this target group. There are guides and materials from different English-speaking contexts (e.g. Kellett, 2005) and one book from the German speaking area (Wöhrer et al., 2018) that can be used in our research. **We developed several methods such as school walk, drawing sketches, box for terms, research museum or content analysis by “stop and go” mission which are inspired by classic social research as well as classroom training methods (Wöhrer et al. 2018) in previous research projects with young people (9-13) as co-researchers.** In the suggested case, we will further work on adapting and inventing social science methods this time for young people who are slightly older (15-18), but mostly come from disadvantaged social and economic backgrounds and are not necessarily fluent in reading and writing. Therefore, we will also assume that **oral and visual participatory social scientific methods that do not work with written texts will be the most suitable methods.**

R&I Action #3: Environmental Justice - Buenos Aires

First, **collective mapping methodologies** will be used to identify key categories of social/environmental harm within a population, but in a richer fashion that includes perspectives on the social causes and meanings of those harms (e.g. the political and socio-economic conflicts through which they emerge). Collective mapping (Chambers, 2006; Iconoclastas, 2016) is also a highly visual and political way of engaging a community with a social phenomena, as well as a tool for clearly diffusing perspectives amongst a much wider subset of a population. They are produced in workshops with students, neighborhood organizations, social movements and anybody who feels drawn to the idea of collectively rethinking their local territory. At the end of the workshop they hold a plenary session or **pooling of the maps** created by all the groups. This last stage is crucial for sharing the **group narratives**, revealing differences and planning future goals for action and understanding. As a result,

an actual cartographic map is produced reflecting the day-to-day experiences of the participants in the mapping process. These maps could be downloaded and shared and thus they are also a tool for political communication promoting other forms of subsequent participation, such as crowdsourcing of data, and engaging in an ongoing political process.

Secondly, instead of expert-designed surveys, **indicators of understanding and perception of social-environmental risks will be produced using Citizen-generated Data.** The community supplies data using an open source platform about relevant dimensions informed by the collective mapping workshops. Information from workshops will be used to develop an updated version of the *Qué Pasa Riachuelo* platform and new mobile applications, both of which will be open source. **Citizen-generated Data will assess the importance and the relative degree of acceptance/tolerance of each of the environmental, policy, institutional and other risks identified** in the initial workshops. Data produced collectively could be downloaded at anytime and used for different purposes. The *Qué Pasa Riachuelo* platform will provide visualization tools that generates awareness of how risks in the community are understood, prioritized and perceived. Those tools will be defined collectively and may themselves be modified or updated as the platform use progresses. As such, it is important to stress that the methodological tools and the social community that will use them, and the underlying purposes of the exercise will all co-evolve over time. This is distinct from a more traditional approach in which methods and tools are fixed from the outset, and where a community of users/practitioners are required to conform to the meanings and utility that the underlying methods and tools define.

1.3.b.4 Gender perspective is an issue: a transversal and a specific crucial dimension of CoAct

Gender perspective is a highly required aspect to better understand and reflect on Citizen Science. Unfortunately, there are no studies, to our knowledge, on Citizen Science focussing on this dimension. Being CoAct a project that focuses on social issues, gender perspective is thus becoming even more relevant. **CoAct will organically include gender perspective in its methodological approach.** CoAct will therefore respond to *public engagement* and *gender RRI* key elements in two different ways: **(1) Transversally**, when CoAct will investigate and build the grounds and common understanding of Citizen Social Science and its methodologies. **(2) Specifically**, when considering each of the three already clearly defined R&I Actions but also by creating three Open Calls (through cascading grants) on concrete gender-related issues, in order to perform Gender Equality Research Pilots.

In terms of **data management and data handling in CoAct**, gender perspective will be considered in two different ways. We will refer to **inclusivity because we are considering all facets of gender questions**, including non-binary perspective. Of course, women-focused issues are also at the core of our thinking. The concept of gender mainstreaming should also apply to data-driven work. For instance, that means thinking about how, when building a questionnaire, to make sure that the design of the questions **do not ignore crucial issues because of gender bias**; about how, inversely, asking **too precise information about gender could create risks for people who are at risk of gender-based violence**; or about how **data visualisation, by highlighting a certain narrative at the detriment of others, can reinforce the mechanisms through which underrepresented groups get even more disempowered**. OKF will be a crucial partner in a consortium common reflection that will be molded around OKF flagship methodology, the data pipeline, which present clear steps through which data projects, big and small, can be approached: **define, find, get, verify, clean, analyse, present**. Gender perspective shall be revised for each of those steps, and our aim is to work with experts and our community **to remove the gender blind spots that are present in the daily work of data practitioners. Citizen-generated Data methodologies and protocols will also be carefully revised from a gender perspective.**

Gender perspective in Mental Health Care - R&I Action #1. Why? and How?

In the framework of the commemoration of the International Women's Day of March 8th of 2019, FSMC did want to highlight the **serious differences that women have in terms of work situation, care and gender violence which, in the field of mental health, are still more severe.** According to Spanish Statistics Institute (INE), women with disabilities have a lower salary than men with disabilities: 3,249 EUR less per year meaning, around 15% less than men. In this sense, 73.8% of women do not communicate at the workplace that they have a mental disorder to avoid discrimination, compared to 57.2% of men. Inequality in the organization of care has also a direct impact on women's time management and on women's health. Dual employment -labour and family-, lack of conciliation and greater dissatisfaction at work, coupled with wage inequality, are among the main reasons that

almost 20% of women have symptoms of depression, anxiety and work-related stress, compared with about 14% of men (source EWCCS-Spain 2015). The profile of the person who cares for a relative with mental health problems is a 64-year-old woman who devotes more than 21 years of her life to this task. 78% of the consultations regarding a relative or person in charge of mental disorders were made by women. There is four times more risk of gender violence if you have a mental health problem and more than 40% of women with mental disorders have been the victims of sexual violence. 26% of girls with mental health problems have suffered child abuse, a figure that is divided by nine for girls without disorder. All these big numbers will be taken into account during the whole **R&I Action. Especially when building the citizen group (adults with mental health problems and their families), when studying their social interactions based on the Recovery Process model, when interpreting data and provide specific science related policies. Non-binary approach will also be considered to surpass the duality among men and women which might be of special important when discussing about the specific caring tasks and when working with some persons with mental disorders as part of the citizen groups.**

Gender perspective in Youth Employment - R&I Action #2. Why? and How?

Gender perspective is of importance in Vienna's R&I Action since up to date there is only insufficient research about gendered aspects of early school leaving, school drop-out and participation in educational measures. Even though several authors recorded research gaps in this regard several years ago (e.g. Landauer, 2011; Tamesberger et al., 2014), **no systematic research about gender has been done about early school leaving in the German speaking countries so far.** Accordingly, this is an important issue we want to address and research with the co-researchers: Are **young women differently affected** of NEET status than young men? If yes, how far? Are there gender differences in their perceptions of educational measures? Do they have **different wishes or goals** for their futures? In how far **does gender structure their perspectives on work and occupation**? In how far does sex and gender restrict their **chances of finding (sufficiently paid) work**? All these questions will be carefully addressed in R&I Action methodologies being chosen.

Gender perspective in Environmental Justice - R&I Action #3. Why? and How?

Fieldwork being planned involves interacting with a variety of social actors, largely based around workshops. We expect **gender differences to be critical in how the research subjects understand socio-environmental risks.** This is because, in practice, **it is largely women who, for example, are responsible for looking after their children's health** (threatened by industrial contamination of the river and surrounding areas), **and taking their children to school**, (schools are being relocated some distance from people's homes as part of the sanitation plan). We therefore need to explicitly **ensure that women's opinions and understandings** are adequately captured in the R&I Action process (as well as many other ways of differentiating across the local population). In practice, we will ensure that invitations and subsequent confirmation of places ensure an equal gender balance. Furthermore, during the conduct of the workshops, we will require the people in charge of choreographing the events **to ensure that female and male participants have equal opportunities to voice their perspectives, and in particular that the opinions of residents are taken into account in the mapping process that we envisage in ways that reflect a balance off gender perspectives.** This requirement, and the associated practices for encouraging and ensuring equal contributions, along lines of gender, are routinely adopted amongst the kinds of people running the workshops.

Endeavouring new Citizen Social Science Spaces: Gender Equality Research Pilots



We are witnessing a new feminist wave. Just by looking at the huge participation on 8th of March of 2019 contest in Barcelona (300,000 people went out to streets), it is possible to evaluate the importance of this concern that covers a large diversity of facets in our daily life. Wikipedia entry on gender inequality says that it “acknowledges that men and women are not equal and that gender affects an individual's lived experience. [...] Some of these distinctions are empirically grounded while others appear to be socially constructed. Studies show the different lived experience of genders across many domains including education, life expectancy, personality, interests, family life, careers, and political affiliations. Gender inequality is experienced differently across cultures.”¹⁴ Citizen Social Science framework can represent a powerful bottom-up approach to this global issue.

As specified in the call SwafS-15-2018-2019, beneficiaries may provide support to third parties as described in part K of the General Annexes of the Work Programme¹⁵ by using the cascading grant mechanism. In CoAct, this cascading grant mechanism is especially beneficial, as it will allow to incubate new Citizen Social Science initiatives dealing with **Gender Equality**. The open calls will have a clear European dimension both in terms of the objective of the call (as explained below, gender is a main concern in European societies) and in terms of the application of results (CoAct will develop activities for the further visibility of the financed projects as best practices all over Europe, thus being a source of inspiration in the consortium and beyond).

Three open calls of max. 20,000 € each will be prepared. The following types of project will be financed through a transparent selection process of the proposals received. Eligible grantees will be CSOs and grantees will be mentored by CoAct consortium. The three calls for bottom-up Research Pilots calls will be launched at the beginning of M18. Applicants will have 3 months to apply. Date of open calls closing will be at the end M20. Date of open calls resolution will be M21 (1 month after closing). The granted projects will have a duration of maximum 10 months. Their specificities are:

Open Call 1 (Berlin-based). Open call issued by local partner (FHP) for **one** project for a maximum of 20,000.00 €. Eligible grantees will be CSOs based and active in Berlin and Brandenburg Area. Proposals will need to address to SDG 11 (Sustainable cities and Communities) and SDG 5 (Gender Equality).

Open Call 2 (Eastern Europe-based). Open call issued by OKF (organisation with several nodes in Eastern Countries) for max. **two** projects, for a maximum of 15,000.00 € for each project and a total maximum budget of the call of 20,000.00 €. Eligible grantees should be based in at least one of the following countries: Bulgaria, Croatia, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovakia, Slovenia. Eligible grantees: CSOs based in eligible countries. Proposals will need to address to SDG 8 (Decent Work and Economic Growth) and SDG 5 (Gender Equality).

Open Call 3 (Pan-European-based). Open call issued by OKF (organisation with several nodes in all Europe) for max. **one** project of a maximum duration of 10 months, for a maximum amount of 20,000.00 €. Eligible grantees: CSOs based in any EU-28 countries. CSOs with international networks will be the most suitable candidates. Proposals will need to respond to any of the SDGs jointly with SDG 5 (Gender Equality) and with the focus on Opportunities and Risks of Digitalisation.

Feminism and other grassroots gender movements (including non-binary perspectives) will be encouraged to participate. The texts of the open call, the launching events of the call, the related dissemination activities and even the outputs under the form of new science-related policies will be carefully revised with inclusive and ethical

¹⁴ https://en.wikipedia.org/wiki/Gender_inequality (retrieved 28 of March 2019).

¹⁵ http://ec.europa.eu/research/participants/data/ref/h2020/other/wp/2018-2020/annexes/h2020-wp1820-annex-k-fs3p_en.pdf

perspectives. Design Justice principles and other very contemporary trends when considering gender issues will be an added value to the proposals.

Rationale behind the open call scopes

The topics behind each of the calls have been selected in the following way:

Open Call 1 (Berlin-based). The call is based on SDG 11 and more particularly to affordable housing and urban planning which shared challenges in all European cities. An increasing individualization of lifestyles, social isolation, and deprivation have ruptured traditional, family-oriented accommodations (Schröder et al., 2017). With the mentoring of FHP local partner, the proposal should examine practices and develop new community approaches with participative research methods addressing the gender gap in affordable housing and urban planning (e.g., Scheller et al., 2018; Vestbro et al., 2012).

Open Call 2 (Eastern Europe-based). Women in the EU earn on average over 16% less per hour than men (source: European Commission). This figure becomes more extreme in Eastern Countries. The EIGE Gender Equality Index concerning segregation and quality of work¹⁶ shows that Bulgaria, Croatia, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovakia, Slovenia are below the EU-28 average. For this reason, Gender perspective related to SDG 8 (Decent Work and Economic Growth) will be the focus of this call.

Open Call 3 (Pan-European-based). A very recently published *Gender and Youth: Opportunities and Risks of Digitalisation* report¹⁷ shows that: digital spaces are gendered spaces which hinder the participation of young women; exposure to online harassment has far reaching effects on young women's online engagement, and gender norms are exacerbated online. All these statements will be the concerns that proposals must respond to. Digital, hacker and open-source (global) communities will be specially encouraged to participate.

1.3.b.5 When co-evaluation is also a R&I activity

Evaluation process in CoAct means to consider and measure MoRRI indicators (PE2, PE3, OA1, OA3, GE4, SLSE4) and mostly SDGs (3, 4, 5, 6, 8, 10 and 16) as a very valuable starting point. However, CoAct wants to go one step further by also elaborating its own basket of indicators, even they are still linked to MoRRI indicators and SDGs. **CoAct co-evaluation must be understood as part of the R&I set of activities as a dynamic process with feedback loop iterations within the consortium.** ZSI researchers have been elaborating during last years a general frame for a wider use in Citizen Science (Kieslinger et al., 2017) for a holistic evaluation that collects indicators on three dimensions:

- 1) The **scientific dimension** aims to understand in how far CoAct generates new knowledge for the scientific community and helps to address authentic and socially robust scientific questions.
- 2) The **co-researcher dimension** tries to bring evidence for the impact on individual citizens who participate in CoAct R&I Actions and Research Pilots.
- 3) The **socio-ecological and political dimension** collects insights with regard to changes in the communities and natural systems, as well as influences on political bodies that are addressed by CoAct.

For each of the three dimensions, dynamical indicators will provide the consortium with formative feedback for an adaptive project management, while indicators on the outcome level will support our understanding of the CoAct impact we could reach. The question of how to assess the impact of a Citizen Social Science intervention, e.g. into policy making, is crucial. Thus, expected and desired impacts will be anticipated and discussed in the phase of issue definition within the consortium. The guiding characteristics of the **next generation evaluation** that complements traditional evaluation approaches and are adapted to complex social systems and more specifically to CoAct understanding of Citizen Social Science. The evaluation approach will be based on a combination of qualitative and quantitative methods able to reflect **the co-design approach of the project**. The parameters will be suited to measure improvements on **individual wellbeing**, the **social quality of policy and governance**, next to more explored indicators of Citizen Science, such as the **scientific impact** or the **learning outcomes** for the co-researchers.

Under the lead of ZSI, the consortium will collect evidences from the R&I Actions and the Citizen-led Research pilots on the effectiveness and efficiency of CoAct methodologies and tools by involving all

¹⁶ <https://eige.europa.eu/gender-equality-index/2015/countries-comparison/work/2/bar>

¹⁷ <https://eige.europa.eu/publications/gender-equality-and-youth-opportunities-and-risks-digitalisation>

stakeholders and by covering diverse perspectives, including on an individual level, a community level, and the wider societal level. The individual level will look at the citizen scientist dimension, where a process-oriented assessment observes the alignment of target groups and the degree of involvement, while an outcome-oriented evaluation looks at levels of motivation and engagement of citizens in relation to the tools and interventions. The assessment exercise will also cover the potential of transferability of CoAct.

CoAct will investigate, fully deploy, and test a complete evaluation methodology valid for Citizen Social Science projects (and for any other Citizen Science co-designed project with a social dimension).

1.4 Ambition

1.4.a Advance beyond the State of the Art of Citizen Social Science

A recent meta-analysis of Citizen Science by Kullenberg and Kasperowski (2016) certifies the dominance of biology, ecology and conservation research when analyzing publication datasets from Web of Science. The authors states that **“Citizen Science projects in the social sciences and the humanities are, however, absent from the [scientometrics] results and not yet developed to a degree that matches those in biodiversity and conservation”**. From Kullenberg and Kasperowski (2016) to now, there has been a growing debate on what should be understood as “Citizen Science projects in the social sciences and the humanities”. Nowadays, it is still hard to see *social* Citizen Science projects, either **being social because professional scientists belong to Social Science field** or either **being social because the project itself deals with social issues or concerns**.

Just very few years ago, Purdam (2014) defined Citizen Social Science as **“volunteers collaborate in a formal social research project”** and the author considers that “[t]he role is different to simply volunteering to participate in a research study” from Natural Sciences. A very recent paper, when talking about climate action and policies, reclaims the need to move forward the notion of **“Citizen Social Science to a new level across governments as an advanced collaborative approach of accelerating climate action and policies that moves beyond conventional Citizen Science and participatory approaches.”** (Kythreotis et al., 2019). Other contributions however **puts the accent on the need of a civic or community science** (Jordan et al., 2019). All these tentatives to embrace a *social* Citizen Science under the term of Citizen Social Science are however partial and there is a lack of a common space to discuss and integrate this broad concept. In many different ways, the inclusion of a social dimension requires reflecting on a “wider field of Citizen Science” (Purdam, 2014). During last few years, some partners of the consortium (UB, ZSI, FHP) have indeed already been **reflecting on social Citizen Science and on the construction of new meanings of Citizen Social Science embracing the visions presented above**. UB, ZSI or FHP have already worked along these lines by organising special sessions in the greatest conference from Science and Technology Studies community in Lancaster (2018), by presenting their work on this topic in major American and European Citizen Science Conferences in Raleigh (CSA Conference, 2019), Geneva (ECSA Conference, 2018) and Santiago de Chile (2018), or even by editing a special collection the open journal Palgrave Communications (Citizen Social Science: Active Citizenship Versus Data Commodification, to appear in 2019).

CoAct consortium as a whole therefore **will move one step further the understanding of Citizen Social Science** with a radically new participatory and transdisciplinary Research an Innovation approach that considers:

Citizen Social Science as a participatory research co-designed and directly driven by citizen groups that shares a social concern.

CoAct main ambitions are:

To respond to the lack of Citizen Social Science projects, through specific R&I Actions. **CoAct will bring social dimension in Citizen Science to a radically new and more ambitious level** with a collection of R&I Actions that **includes co-design and co-creation, new tools for a co-evaluation, and actions, measures and policies to promote social change and science related policies**. The Actions will be carefully evaluated to provide new experimentally-tested insights to better shape the notion of Citizen Social Science.

To respond to the lack of a common background on Citizen Social Science, through an intense Capacity Building. CoAct aims to build the foundations of Citizen Social Science by providing **a common framework and a common arena to better elaborate the notion of Citizen Social Science**. CoAct wants to contribute to the debate by catalyzing the discussion and enlarging the Citizen Social Science community. This effort is

unprecedented in the Citizen Science and the Open Science worlds and it will result into **new materials (for policy makers, citizens, NGOs and academics) and new transdisciplinary methodologies** to widen the impact of Citizen Science.

The **starting premise of Citizen Social Science is that social research is conducted by citizens in-the-field competent experts, acting as co-researchers**. The premise is beyond most of the current Citizen Science R&I EU funded projects (see Table 1.2 below).

Previous project	Description	CoAct added value and potential cooperation
CITIZEN SCIENCE related projects		
Eu-Citizen.Science http://eu-citizen.science	The ambition of EU-Citizen.Science CSA SwafS project is to build, fill, and promote a sustainable platform and mutual learning space providing different tools, best practice examples and relevant scientific outcomes that are collected, curated, and made accessible to different stakeholders in order to mainstream Citizen Science in Europe.	CoAct and Eu-Citizen.Science evaluation frameworks will be aligned, as ZSI is in charge of evaluation in both projects. CoAct will include its methodologies and materials in the Eu-Citizen.Science platform, thus broadening the scope of this project with Social Science and Humanities oriented contents and tools.
MICS https://cordis.europa.eu/project/rcn/220371/factsheet/en	MICS SwafS project will use novel impact-assessment metrics and instruments that measure costs and benefits of Citizen Science in relation to the Nature Based Solutions, with particular attention in the domains of society; democracy; the economy; Nature Based Solution science, and citizen scientists.	CoAct will establish a win-win collaboration with MICS, in order to share and compare Citizen Science evaluation framework and data. The two evaluation frameworks will benefit from this Open Science process that will enrich both projects' applicability.
D-NOSES http://dnoses.eu	D-NOSES SwafS project will empower citizens to become a driving force for change through RRI, Citizen Science and co-creation tools to map and measure the problem, and co-design solutions with key quadruple helix stakeholders. We have a LOI from this project.	CoAct and D-NOSES both use collective mapping strategies. CoAct is further implementing creative practices to increase citizens' engagement and sense of ownership to results of the R&I activities. Both projects will exchange practical experience.
ACTION https://cordis.europa.eu/project/rcn/220241/factsheet/en CitieS-Health https://cordis.europa.eu/project/rcn/219217/factsheet/en	ACTION has partnered with 5 European Citizen Science initiatives tackling major forms of pollution, which pose substantial threats to human health and to the environment. CitieS-Health aims at developing an effective Citizen Science model at the maximum collaboration level by developing Citizen Science projects in five European cities, assessing urban air and noise pollution, wood burning, urban design and mobility at local levels.	CoAct will also address environmental issues but from another starting point. CoAct will co-design with vulnerable communities in Buenos Aires bottom-up risk indicators that will be taken into account in future policies. CoAct will work on the transferability of this approach to European pollution and Environmental Justice issues.
STEMForYouth http://www.stem4youth.eu	This SwafS project was devoted to find new ways to attract young people to Science and Technology. UB contributed by introducing Citizen Science at schools in a radical manner and in an urban context.	In STEMForYouth, a toolkit for Citizen Science projects co-design was built by UB and tested with young students. This experience and this material will be the basis for the Agile-based toolkit that will be elaborated in the frame of CoAct and adapted to the co-researchers.
InSPIRES http://inspiresproject.com	InSPIRES brings together Civil Society, practitioners and other stakeholders from across and beyond Europe to co-design,, implement and roll out innovative models for Science Shops. We have a LOI from this project.	UB has already initiated a collaboration with InSPIRES that will further continue to improve a evaluation methodology being that also works as a self-reflection tool for Science Shops and Citizen Science projects.
RRI related projects		
HubIT http://www.hubit-project.eu NewHorizon https://newhorizon.eu	Those SWAFS projects are dedicated to understand the barriers and drivers to the successful implementation of RRI both in European and global contexts. They provide very useful sets of instructions and tools and good resources for the advocacy of RRI practices.	Resources from those projects will help CoAct to promote reflection on blind-spots and culture-driven aspects of open and participatory Citizen Social Science. ZSI is a partner of NewHoRRizon, leading on social labs, where we can explore different stakeholder engagement processes.

SUPER_MoRRI https://cordis.europa.eu/project/rcn/219479/factsheet/en	The SUPER_MoRRI project builds upon and continues the work of MoRRI, ensuring sustained data collection, curation, further assessment and refinement of the MoRRI indicators. SUPER_MoRRI will develop a more complete scientific understanding of the complex and diverse relationships between RRI policies and practices and their societal, democratic and economic benefits.	CoAct will establish a communication line with this project, in order to include the latest updates of the MoRRI indicators. CoAct will also share its evaluation results, in line of the common goal to understand the societal, democratic and economic benefits of RRI oriented practices, such as Citizen Social Science.
CITIZEN ENGAGEMENT related projects		
I-CONSENT https://i-consentproject.eu	i-Consent, aims to improve the information that patients receive from clinical studies. Guidelines to improve Informed Consent process will be created, including vulnerable groups, under a gender perspective and relying on ICT tools.	During CoAct internal Capacity Building phase, we plan to revise and improved all the partners' informed consent procedures. We will closely monitor i-Consent outputs, to be incorporated into our revised informed consents.
Made4You https://www.careables.org	Made4You facilitates co-design of open healthcare for people with physical limitations. Made4You aims to build an ecosystem under the name Careables.Org, linking existing local communities of citizens with disabilities and their families, healthcare professionals and makers.	ZSI and GIG are part of Made4You: we will learn about community building and governance, as well as about the realization of the co-designed plans. CoAct will take a step further and validate methods and data by building a co-evaluation framework.

Table 1.2: CoAct added value and potential cooperation with other EU projects.

The **starting premise of Citizen Social Science is that social research is conducted by citizens in-the-field competent experts, acting as co-researchers**. This premise goes beyond current agenda of several Social Science subfields. Without the intention to be exhaustive we can mention specific ambitions to transform Social Science by means of Citizen Science approaches:

In Computational Social Science and Data Science fields, human behavior is been studied by data crawling from social media platforms such as Twitter or Facebook or by means of virtual labs that ask volunteers to complete specific task in online digital platforms such as Mechanical Turk. The effort fails to respond to specific concerns of a given citizen group. UB novel approach on co-designing and co-creating will better align scientific results to social interests. Adopting Citizen Science in these field, as CoAct will do, it will enlarge the impact of science. The approach is also novel in combining community health care and Citizen Science: there is only one precedent in Netherlands that deals with public health and Citizen Science although with no Data Science component (Den Broeder et al., 2016).

In qualitative social research, the debate on Citizen Social Science is still in its infancy, with already some scepticism regarding Citizen Science. There is an urgent need of deep reflection about the role of participation, including observation and subjectivity tasks, when designing research, conducting research, interpreting data and establishing the possible ways to transform the knowledge into actions. Participatory social research must then be integrated and reinterpreted into this process but there only few and partial temptatives on how this might be possible such as the Research Forums by FHP (Thomas et al., 2019).

The usual approach to build environment risks indicators will be transcended by the inclusion of citizen groups as co-researchers (UNSAM, FARN). Co-researchers will have a different perspective to environmental risks. Citizen's perspective is just vaguely considered when building environmental indicators. Knowledge Coalition will in turn fasten and more effectively incorporate co-researchers perspectives into new policies and measures.

Written texts are not the most suitable materials in Citizen Science. Some of the citizen groups that participate prefer **oral and visual participatory social scientific methods** (UNIVIE). Similarly, several specific methodologies will be provided by CoAct to also mitigate Data Friction (OKF, GIG) when adopted by citizen groups. For instance, **playful resources for a data visualizations such as a cards game** will be extensively used and adapted to Citizen Social Science (OKF). All efforts will result into new materials and new ways to increase data and science literacy.

RRI approach anticipates and assesses “societal expectations with the aim to foster the design of inclusive and sustainable R&I”. By looking at the **RRI key elements**, we can therefore also synthesize the CoAct ambitions in the following manner in Table 1.3:

RRI key elements	CoAct ambitions:
Public Engagement	Citizens will act as co-researchers and will be co-designing three R&I Actions. Thanks to public engagement and participatory dynamics CoAct expect to build new socially robust knowledge both valid to academia (with ground-breaking transdisciplinary results) and to specific citizen groups (shortening the distance between science and policies, measures and collective actions).
Open Access	Accessibility will ambitiously be transformed by calling citizens to take an active role in knowledge building. CoAct will rely on Open Science principles and openness when responding to local and global social concerns. Openness will be viewed as fully accountable, transparent, inter-, multi- and transdisciplinary kind of practices. Openness will also be conceived in an inclusive manner and will be grounded on SDGs mission-oriented Actions. GitHub and Zenodo will be intensively used in CoAct.
Gender	CoAct will launch three Open Calls for Gender Equality Research Pilots which will represent a totally novel collection of Citizen Science projects. To our knowledge, this class of projects are absent in Citizen Science world. Gender perspective will also be considered a cross-cutting issue to enable a fair and inclusive citizen participation.
Ethics	CoAct aims to explore the notion of participation by placing citizens and civil society local groups at centre of the R&I cycle. CoAct will establish strong ethical basis when <i>fairly</i> working together with citizen groups. New specific rules and protocols such an adapted consent form will be delivered valid for any Citizen Science on social topics. There are only few and esparsed precedents (for instance, Extreme Citizen Science Group in University College of London - see LOI - whose leader Prof Muki Haklay is part of the Advisory Board).
Science Education	CoAct aims to increase science and data literacy of large groups of concerned citizens. The project will contribute in a unique manner to Europe serious concerns on fake news. Citizen Social Science will be here understood “as a tool for informal science education of young people and adults, to counter perceived anti-intellectual attitudes in society, raise the scientific literacy of European citizens” (from SwafS 15-2018-2019 call).

Table 1.3: CoAct ambitions in relation RRI key elements.

1.4.b Building the foundations of Citizen Social Science requires a reconfiguration of Citizen Science

As Citizen Science is been developed primarily in the Natural Sciences, **Citizen Science must be reconfigured when it is integrated into both quantitative and qualitative social research** (Eitzel et al., 2017; Hecker et al., 2018). The methodological reconfiguration of Citizen Science in both quantitative and qualitative social research aims to contribute both to the Citizen Science debate and to the general debate on participatory research approaches that has intensified in recent years (Rowell et al. 2017; Kemmis et al., 2014; Bergold et al., 2012). This effort needs to include a wide diversity of disciplines and subdisciplines thus becoming a transdisciplinary effort that will be afterwards transferred to Citizen Science world-wide community in a powerful manner. CoAct will provide ground-breaking insights about the understanding of the notion of participation.

The central dimensions of Citizen Science, inclusion, contribution, and reciprocity, must be supplemented with further concepts such as responsibility, transparency, and mutual trust. In this way, it is possible to achieve closeness to the lifeworld and practical relevance, a focus on problem solutions, and concrete answers – in other words, an orientation toward citizens’ lived reality. This opens up the prospect that the research process will produce *socially robust knowledge* (Maasen et al., 2006) and that citizen scientists will be taken seriously and included as equals in the substantive development of the research process.

For this reason, CoAct aims to build a strong Capacity Building set of activities that will **invigorate Citizen Social Science worldwide community** by means of 1) **Open Tools** all aggregated in an **Open Citizen Social Science toolkit including** as for example a co-design Agile-based toolkit, an inclusive toolbox for low literacy co-researchers, a Citizen-generated Data mapping platform, a Chatbot and co-evaluation tools; Citizen Social Science Open Training Materials for social scientists PhD programmes 2) **Open Reports** such as *Brief for policy makers: Opportunities and Challenges of Citizen Social Science*, *Policy recommendations, guidelines and action plans*, *Gender Equality White Paper*, *White paper on co-evaluation of Citizen Social Science R&I*; 3) **Specific**

activities such as specific workshops for Policy Makers (Policy Forum), PhD Summer school for PhD students and the CoAct final conference that will target a wide audience.

1.4.c Looking for excellence in Citizen Science R&I by promoting social change

Collaborative research between science and the social world aims: to integrate lifeworld knowledge into science at all stages of the research process (Franzen et al., 2015); and to enable citizen scientists to achieve findings of their own that are relevant for their everyday life contexts. CoAct assumes that research excellence is possible by means of better alignment between Social Science research and citizen groups shared concerns. This collaborative research can better meet the needs of both sides – that is, the co-researchers' need for practice-relevant forms of knowledge corresponding with local contexts, and the professional researchers' need for generalized insights and findings (Bergold et al., 2017; Maasen et al., 2006).

Firstly, CoAct aims to develop measures to extend Citizen Science practices and principles to solve societal problems and induce change: The project examines and systematically compares three different use cases of methods: Computational Social Science and Mental Health Care (Barcelona), Participatory Action Research and Youth Employment (Vienna), and Mapping and Citizen-generated Data and Environmental Justice. All focus on public involvement and participation in academic research and asks how Social Science improves understanding of and intervention in these processes. Inviting also members to the consortium who do not belong to the *usual suspects* of the Citizen Science discourse, and whose work has not been labelled *Citizen Science* or *Citizen Social Science* before, CoAct develops its **scientific framework based on long standing experiences of closely collaborating with citizens and communities on different societal challenges**.

Secondly, **CoAct strives to enrich the Citizen Science spectrum and the general discourse on Open Science with learnings from the qualitative participatory Social Science (FHP) and especially on the dimensions of open social data (OKF), open methods, open educational resources (UNIVIE, GIG) and open evaluation (ZSI)**. Furthermore, CoAct aims to foster a systematic approach to Citizen Social Science, and hence to a still rather marginal sector of Citizen Science.

It is the goal of **CoAct to therefore become a reference point for policy decision making** backed on Citizen Social Science by developing standards for an Open and Participatory Social Science. And it is also the goal of CoAct to demonstrate that **through these participatory ways is also possible to build ground-breaking science of excellence in top rated journals**.

1.4.d. Innovation in processes, tools and impact

CoAct aims to experiment on the R&I cycles by including citizens as co-researchers and Knowledge Coalitions as relevant actors in a social research. This novel approach under the Citizen Science framework will need a systematic and careful analysis of the dynamics in each R&I Actions that will be done with a co-evaluation process (ZSI). Successful experiences can be taken as examples and guidelines to apply best dynamics to other local contexts, to other citizen groups and to other topics with a strong social component.

CoAct strives to make its results and tools easily transferable for re-use to tackle a broad range of societal challenges, by attending to the following principles:

Inclusion: Involving all segments of society in Citizen Science, especially people from vulnerable citizen groups and public bodies who can directly benefit from the outcomes of Citizen Social Science.

Access to knowledge: Producing research, resources and tools which are accessible beyond the *usual suspects* and which can be picked up *off the shelf* and put into practice by professional scientists, citizen scientists, community groups etc. Linked to this, to always communicate in as accessible language, avoiding jargon whenever possible while maintaining rigour and accuracy.

Sustainable social impact: To create a fuller understanding of the state societal challenges and its potential solutions by establishing skills and capacity within issue areas, building on mutual learning and continuous participation and training.

Some of these tools will contribute in a novel manner on the ways how Social Innovation is currently shaped and on the design of digital tools able to provide better and socially robust Citizen-generated Data (OKF). Tools created are expected to be easily transferred to other social issues, to other contexts or to other locations.

CoAct wants introduce new ways of producing impact during the whole R&I cycle **with the presence in Knowledge Coalitions of a wide variety of public bodies and without waiting until the results are shaped and delivered to society or to academic journals**. This ambition requires to consider innovative ways to enhance public debate and dialogues, and to approach citizen concerns to those bodies responsible of delivering policies in at least local, regional and national levels. Some of these innovatives ways are: the inclusion of artists, the production of public exhibitions with unusual format of presenting scientific knowledge, the organisation of Datathons with a large number of different stakeholders to together interpret pure data and therefore avoid byases (OKF, GIG, UB, UNSAM, FARN), the organisation of Hackathons with a large number of different stakeholders to together shape best policy measures (UB, UNSAM), and the use technopolitics digital platform for collective decision making on new policies: the platform has never been previously been used to take decisions based on Citizen Science project outcomes (UB).

1.4.e. Gathering evidence in Citizen Social Science: Collaborative Evaluation and Impact Evaluation

Measuring the impact of CoAct means gathering evidence for **change in complex social systems**, which evolve over time and are unpredictable. A steady stream of information will therefore be required to understand **what is happening and what are the effects**, so that stakeholders are provided with ongoing opportunities to **learn from feedback**. The guiding characteristics of the **next generation evaluation** that complements traditional evaluation approaches and are adapted to complex social systems are going to take as a reference Table 1.4 ambition.

Not Just...	But Also...
Focussing on Individual Programs and Projects	Focusing on Whole Systems
Fixed Evaluation Plan with Interim and Year-end Reports	Shorter Cycles, Real-Time Feedback Using Alternative Formats
Traditional Data Collection Methods	Newer Innovative, Often Digital, Data Collection
One Foundation, One Grantee, One Evaluation	Shared Responsibility for Data Collection and Learning Across Multiple Organisations
Traditional Data Reporting Techniques	Use of Sophisticated Data Visualisation and Infographics
Evaluator Collecting Data	Everyone Collecting and Using Data as Part of Ongoing Practice

Table 1.4: Ambition of the CoAct co-evaluation. Source: Gopalakrishnan et al. (2013).

ZSI researchers have been further elaborating during the last years a general frame for a wider use in Citizen Science (Kieslinger et al., 2017). **The matrix is already being tested in a small scale** for the self-evaluation pilot developed in InSPIRES EU project (Innovative models for Science Shops, 2019, ongoing) by UB CoAct project coordinator (as subcontract) and in a local project where communities around public libraries co-create small Citizen Social Science projects (BiblioLab - Science in Action, 2018-2019, ongoing). All these two small tests are done in collaboration with ZSI. CoAct will extend, improve and enhance the applicability of ZSI evaluation framework. **CoAct wants in all these ways to go one step further by also elaborating its own basket of indicators, even they are still linked to MoRRI indicators and SDGs.**

2. Impact

2.1 Expected impacts

CoAct will achieve the expected impacts through Key Performance Indicators (KPIs) classified within the co-evaluation framework (Kieslinger et al., 2017) explained in Sections 1.3.b.5 and 1.4.e, and by considering the MoRRI indicators and SDGs. The CoAct complementary set of indicators for impact on scientific, individual and

socio-economic levels is thus sketched in Table 2.1 and will be adapted according to the goals co-created in the R&I actions:

CoAct specific Key Performance Indicators (KPI)				
Scientific (Knowledge) dimension	KPI 1: +5 Open Access scientific papers with co-researchers as co-authors	KPI 2: +4 conceptual scientific Open Access papers, based on CoAct methodological framework	KPI 3: +15 CoAct presentations at international scientific conferences, openly available via Zenodo	KPI 4: +3 inclusive and Open tools created for Citizen Social Science practices, openly accessible on GitHub and CoAct website
Related MoRRI indicators:	PE3, OA1, OA3	OA1, SLSE4	OA1, SLSE4	OA1, OA3
Citizen Scientist (co-researchers) dimension	KPI 5: +250 co-researchers engaged in CoAct R&I Actions	KPI 6: +70 co-researchers trained on (Open) data literacy	KPI 7: +70% of co-researchers interested in further participating to R&I processes	KPI 8: +70 % of co-researchers felt that they really contributed to the research and innovation process
Related MoRRI indicators:	PE2, PE3, SLSE4	OA1, OA3	PE3, SLSE4	PE2, PE3, SLSE4
Socio-ecological & political dimension	KPI 9: +20 public and/or scientific conference presentations of results by co-researchers, openly accessible via Zenodo and CoAct website	KPI 10: +15 public bodies and institutions effectively engaged in R&I Actions	KPI 11: +2 new digital platforms for collaborative Citizen Social Science created and openly accessible via GitHub	KPI 12: +3 actions plans or better or new policies measures proposed
Related MoRRI indicators:	PE2, PE3, OA1, OA3	SLSE4	OA1	SLSE4

Table 2.1. CoAct Specific Key Performance Indicators (KPI) classified by the different dimensions of the CoAct evaluation framework and in relation to MoRRI indicators.

In the following Table 2.2, we examine the different expected impacts:

SWAFS-15-2019 expected impact 1 (EI1): <i>Development of new knowledge [...] by citizen scientists.</i>
Aligned to CoAct Objectives: O1, O2, O3, O5, O6, O7 (see Section 1.1 for further details)
R&I Actions and Gender Equality Research Pilots will engage more than 250 citizen scientists (co-researchers) and more than 70% of them will feel that they really contributed to the scientific process. The mobilization expects to create an academic and non-academic research impact on social issues. The best way to demonstrate the effectiveness and the quality of the knowledge being developed is also to have citizen scientists (co-researchers) as co-authors of the scientific results and to publish at least 5 papers together in high-quality scientific journals. Vulnerable citizen groups will also develop for themselves a knowledge that allow them to better respond to their own social concerns. Enabling them to publicly express their concerns is a strong way to give them a voice in the public arena and to promote social inclusion. CoAct expects to provide them the deserved visibility in at least 20 public presentations of the outcomes of the R&I Actions with relevant press coverage and/or presentations in scientific conferences.
KPIs for EI1: KPI 1; KPI 5; KPI 8; KPI 9
MoRRIs for EI1
PE3: Citizen preferences for active participation in S&T decision making: “The indicator taps into the desired degree of citizen inclusion in making decisions about S&T. It reveals preferences for participation. It is based on a specific item from the special Eurobarometer on RRI, which reads: ‘What is the level of involvement citizens should have when it comes to decisions made about science and technology?’ with the following response categories: 1) citizens do not need to be involved or informed, 2) citizens should only be informed, 3) citizens should be consulted and their opinions should

<p>be considered, 4) citizens should participate and have an active role, 5) citizens' opinions should be binding, 6) don't know. While response categories 1 and 2 assign a passive role to citizens, response categories 3, 4 and 5 assign an active role to citizens. The indicator reports the share of citizens at the national level expressing a preference for active participation." From MoRRI progress report 3.2.</p> <p>CoAct expects to: increase by 20% the PE3 MoRRI indicator of CoAct's co-researchers, with respect to the same answers before starting the Action; increase by 20% the PE3 MoRRI indicator of CoAct's co-researchers, with respect to Eurobarometer 2013.</p>
<p>OA1, OA3, GE2, GE3, GE4, SLSE4 will also be used to evaluate the Expected Impact in relation to CoAct citizen scientists. In relation to publications co-authored by co-researchers, Open Access RRI key element will be a very important aspect: OA1 Open Access Literature (OAL) and OA3 Social media outreach/take up of Open Access Literature and open research data. In relation to the roles adopted within citizen groups and within Knowledge Coalition, Gender policy key indicators can indeed be reinterpreted and perfectly adapted: GE2 Share of female researchers by sector, GE3 Share of RFOs promoting gender content in research, and GE4 Dissimilarity index. In relation to Science Literacy and Science Education RRI policy key, most relevant indicator is SLSE4 Citizen Science activities in RPOs. In CoAct, the analysis will be done over all the stakeholders' perception and then the discrepancies will be analyzed.</p>
<p>Relation to SDGs (see also Figure 3 in Section 1.3.a.2)</p> <p>We provide most relevant alignment between CoAct and SDGs. Since citizen scientists will in all cases belong to vulnerable groups, with some risk of social exclusion, CoAct will be transversally linked to SDG10 (Reduced Inequalities). In relation to SDG3 (Good Health and Wellbeing), CoAct expects to contribute with new knowledge being developed by persons with experience of mental disorder and by their families on their own daily social interactions. The new knowledge will reinforce the Recovery Model, which emphasises individual resilience and control over problems and life of persons with mental health problems. SDG16 will also be addressed as the Mental Health Care Action will strengthen the role of associations of persons with experiences of mental disorders and their families. In relation to SDG5 (Gender Equality), it will be a transversal approach since vulnerability of the CoAct co-researchers are also related to gender inequalities (see Section 1.3.b.4). Three open calls are expecting proposals from CSOs and shall be addressing effectively this goal while combining it with SDG11, SDG8 or the Opportunities and Risks of Digitalisation. In relation to SDG8 (Decent work and Economic Growth), citizen scientists in Vienna will be youth who do not attend school and have difficulties to find a decent job. Their Action in Vienna will scientifically investigate new measures that better respond to their educational needs (for this reason it also applies SDG 4). Finally, mostly related to SDG10 and SDG6 Clean water and Sanitation, citizen scientists living in a shanty town will build their own socio-environmental risk indicators to better know about the magnitude of the risk and then assess the official Sanitation Policy.</p>
<p>SWAFS-15-2019 expected impact 2 (EI2): Development of new [...] innovations by citizen scientists.</p>
<p>Aligned to CoAct objectives: O2, O3, O6, O7 (see Section 1.1 for further details)</p>
<p>Citizen Social Science in Action within CoAct expects to complete the R&I cycle with a set of action plans, policies and measures grounded on the development of new knowledge by vulnerable citizen scientists (co-researchers). CoAct reinforce the development of new innovations driven by vulnerable citizens in the following ways: In relation to Mental Health Care, digital (a chatbot) and non-digital tools for mental health self-management will be created and an Action Plan will be elaborated to, among other aspects, offer new roles to families in Mental Health Care provision. In relation to Youth Employment, guidelines for new measures and policies to better adapt education and coaching to young school leavers will be delivered. In terms of Environmental Justice, new policy briefs based on citizen's environmental risk perceptions will be delivered thanks to new Citizen-generated Data on socio-environmental risks as they are perceived by local communities in a shanty town. Based on these Actions, at least 3 innovative inclusive and open tools and 2 digital platforms will be created for Citizen Social Science practices, at least 3 new plans to improve policies will be provided. To demonstrate the importance of these measures we expect to directly engage at least 6 public bodies that will adopt these measures. Long lasting effects are also important ways of measuring the expected impact: CoAct expects to train more than 70 citizen scientists in open data for social issues and it expects that 70% of the more than 250 co-researchers engaged wants to continue participating in Citizen Social Science activities. And finally, the complete CoAct Project expects to disseminate the methodological framework for this innovation process by publishing at least 4 scientific papers explaining all these experiences.</p>
<p>KPI for EI2: KPI2, KPI 4; KPI 6; KPI 7; KPI 8; KPI 10; KPI 11; KPI 12</p>
<p>MoRRIs for EI2</p>
<p>PE2: Policy-oriented engagement with science. "The indicator taps into actual engagement practice among citizens. The term vertical engagement is used to denote policy-oriented engagement. The indicator builds on individual-level data emerging from the 2010 Eurobarometer on 'Europeans, science and technology', specifically on the following three items: 1) Do you attend public meetings or debates about science and technology', 2) Do you sign petitions or join street demonstrations on matters of nuclear power, biotechnology or the environment, 3) Do you participate in the activities of a non-governmental organisation dealing with science and technology related issues. Same response categories (yes regularly, yes occasionally, no hardly ever, no never, Don't know) apply to the three items. For each individual an index score (in the range from 0-6) is calculated based on assigning 2 points to 'yes regularly', 1 point to 'yes occasionally' and 0 points to other answers. The indicator is calculated as the mean national score." From MoRRI progress report 3.2.</p>

CoAct expects to: increase by 20% the PE2 MoRRI indicator of CoAct's co-researchers, with respect to the same answers before starting the Action; increase by 20% the PE2 MoRRI indicator of CoAct's co-researchers, with respect to Eurobarometer 2010.
SDG Indicators for EI2 (see also Figure 3 in Section 1.a.2)
Same SDGs as in EI1. As CoAct Considers a Citizen Social Science in action, all R&I activities are SDGs mission oriented. Knowledge acquisition by co-researchers overlaps with their capacity to innovate in terms of policies, collective actions and social innovators initiatives.
SWAFS-15-2019 expected impact 3 (EI3): <i>Availability of evaluation data concerning the societal, democratic and economic costs and benefits of citizen science.</i>
Aligned to CoAct objectives: O4, O5, O6, O7, O8 (see Section 1.1 for further details)
Evaluation data concerning societal, democratic and economic costs and benefits of Citizen Science will be gathered with the complementary basket of indicators built in CoAct as part of the R&I activity in social issues. The non-sensitive data obtained will be openly available via Zenodo . The transparent and open co-evaluation process described in Sections 1.3.b.5 and 1.4.e will be also fully available through an open deliverable in work package 7 . A direct communication line will be established with the SwafS MICS project and even more intensively with SwafS CSA Eu-Citizen.Science project, where ZSI is responsible for the evaluation work package as well. The evaluation framework will be aligned and methods and results will be shared. The open evaluation tools will also be further disseminated through the Open Citizen Social Science toolkit . Find in next Table 2.3 a set of examples of indicators.

Table 2.2. Relation between the expected impacts of the call and how CoAct will address and measure them.

In addition to the MoRRIs indicator and SDGs indicators described in the previous table, the consortium will also design a complementary basket of indicators to measure the impact of CoAct R&I Actions. A set of examples are provided in the following Table 2.3:

	Categories	Examples of indicators
Scientific dimension	Process and Feasibility	
	Scientific objectives	Nr. of clear and authentic scientific goals per R&I Action and pilot
	Data and Systems	Data ownership defined and communicated to all stakeholders
	Evaluation and adaptation	Nr. of feedback loops influencing an adaptive management
	Cooperation and synergies	Nr. of cooperations with related scientific initiatives
	Outcome and impact	
	Scientific knowledge and publications	Nr. of scientific publications that involve citizens as co-authors
	New fields of research	Nr. of new research questions generated
	New knowledge resources	New collaborations amongst science and societal actors established
Citizen scientist dimension	Process and Feasibility	
	Target group alignment	Diversified options and degree of citizens' involvement offered in the R&I Actions
	Degree of intensity	Nr. of project phases that involve citizens in the R&I Actions, citizens feedback about their involvement
	Facilitation and communication	Adapted support and training measures to participants in the R&I Actions
	Cooperation and synergies	Nr. of involved public bodies, CSOs in our cases and their roles
	Outcome and impact	
	Knowledge and attitudes	Individual knowledge gains of involved citizens

		Increased awareness of involved citizens for the social issues addressed in the R&I Actions
	Behavior and ownership	Citizens' increased ownership to solve social problems addressed in the R&I Actions
	Motivation	Citizens' motivation to continue project involvement
Socio-ecological & political dimension	Process and Feasibility	
	Target group alignment	Innovative means of science communication and popular media used for broader dissemination (e.g. art, social media with digital storytelling)
	Active involvement	Nr. of hands-on experiences offered to broader public (e.g. exhibitions)
	Policy alignment	Nr. of identified regulations and political bodies that can and would like to be influenced and benefit from CoAct outcomes
	Cooperation and synergies	Nr. of cooperations with science communication professionals
	Outcome and impact	
	Societal impact	Increased capability of the citizen groups to address their social problems Better living circumstances of the co-researchers
	Ecological impact	Higher awareness for the built environment and discussion of concrete solutions with all decision makers involved
	Political impact	Nr. of political decisions, informed, driven or influenced by CoAct activities, description of those interventions
	Wider innovation potential	Nr. of cooperation with social entrepreneurs to exploit the CoAct results Transferability of comparative framework to other domains

Table 2.3. Preliminary set of indicators of CoAct R&I Actions and Open Calls based on a multi-dimensional approach. See also Sections 1.3.b.5 and 1.4.e for more details. Gender perspective will be present in all these indicators.

2.1.a Other Impacts

CoAct will enable a **multi-level impact connecting vulnerable citizen groups, citizen initiatives, scientists and public bodies**. This will be done by putting citizens at the center of the R&I Cycle. A way to measure this impact is to count the number of relationships among the different actors and evaluate them. However, there are many other ways that combines quantitative and qualitative indicators: CoAct will deliver a White Paper on co-evaluation of Citizen Social Science R&I on these sophisticated indicators. CoAct will **enhance innovation capacity** through the set of methodologies being developed in the Open Citizen Social Science Toolkit: an Inclusive Tool Box, an Agile-based co-creation Toolkit and two Open Source platforms. The resources could be shared to transform an existing project in a more social oriented Citizen Science initiative or even to create new Citizen Social Science initiatives (number of projects adopting the set of tools). But it will also **enable the possibility that Citizen Science approach could be adopted by NGOs, public bodies and social innovators** (number of projects adopting the set of tools). Moreover, the consortium will analyze the possibility of **creating a social enterprise with some of the methods and the set of experiences being developed**. In terms of **Environmental issues**, CoAct will provide and share new methodologies to build up **bottom-up environmental health risk indicators with citizen groups that have in-the-field experience on these sites**. This will allow to build more **effective and long-lasting measures grounded on scientific facts that include citizen local groups perceptions** (number of new measures being adopted). In a wider scope, CoAct will **contribute to strengthening democratic values and enhancing the participatory capacities of European citizens based on scientific reasoning** (number of actions proposed). CoAct will **raise awareness on vulnerable citizen groups concerns thus promoting social inclusion and break down social stigmas** in a way that can be evaluated through the basket of co-evaluation indicators, with the crucial contribution of ZSI. In terms of **sustainability**, CoAct will

have a multi-level impact. First, inside the consortium, the project will build an **in-house Citizen Social Science community of practice**, with a solid common practical ground as well as a validated transdisciplinary **Citizen Social Science methodological framework**. This community of practice will be enlarged through satellites workshops in international conferences and through **formal education actions like the Summer school for PhD students**, thus creating at the end of the project **a solid community able to autonomously maintain itself**. Besides, the PhD summer school will provide a set of **open materials that can be used for formal education of PhD students**, both performing a PhD in Social Science and in Natural Sciences. Similarly, the **Open Citizen Social Science toolkit** will serve for a variety of end-users and over a long period of time, given its novelty, both conceptual and practical.

2.1.b Barriers and framework conditions

CoAct has designed a very complete and fact- and experience-based strategy to place citizen groups at the center of the R&I cycle. **Direct contacts and long-term collaborations**, indeed having CSOs as partners (FSMC, FARN), **are already established with the citizens' target groups so that no direct obstacles are foreseeable regarding citizens' engagement**. In the same way, **policy makers and public bodies are already part of the Knowledge Coalitions, and thus are in a privileged situation to understand and participate to the R&I Actions**. **CoAct do not expect to have obstacles to comply Regulations**. **Financing follow-up** obstacles for continuing related activities when project ends could mostly rely on CSOs' engaged (inside and outside the consortium). The obstacle is considered to be **minor, at least to those CSOs inside CoAct as they are consolidated organisations**. The **public acceptance** of the CoAct open science process **may however be somewhat challenging** due to the fact that many European citizens still do not feel they can really take part in the R&I Cycle and/or believe that science is as an effective way to promote social change. A comprehensive strategy to raise scientific awareness of the general public and to communicate the CoAct process and results in a simple way and using attractive materials has been set up jointly with the fact that **results themselves will be communicated and explained by the citizen groups engaged as co-researchers**.

2.2 Measures to maximise impact

To bring evidence for the project's impact to light, and to understand what it shows, we will use a mix of quantitative and qualitative evaluation methods (participant feedback, user data from the platforms, questionnaires, interviews, polls, etc.). These will be implemented from the very beginning of any activity, starting with citizen engagement activities and awareness measures.

2.2.a Dissemination and exploitation of the results

2.2.a.1 Dissemination

CoAct overall mission is to **deploy and demonstrate the scientific relevance and the social impact of Citizen Social Science**, based on the three R&I Actions addressing Mental Health Care, Youth Employment, Environmental Justice and the Gender Equality Research Pilots. **From local...** In the frame of the R&Is Actions, there will be a **permanent call for participation in the R&I process through dissemination activities**, once the first results will be gathered (even if they are partial). The research co-design will be done by relatively small groups (usually around 30 citizens) and will result in the co-design of the R&I Actions. All subsequent steps will be made accessible by a large variety of stakeholders through open events. **...To global** On an **international scale**, dissemination is also a key point, as Citizen Social Science is currently an under-explored discipline whose takeoff needs to be sustained by a comprehensive dissemination strategy. Accordingly, R&I Actions will be efficiently disseminated at a wider scale in order to have an **optimum impact across Europe** and to be replicable in other local contexts, thus ensuring the CoAct sustainability. The dissemination strategy is developed and coordinated by GIG with contribution from all consortium partners. More detailed dissemination activities¹⁸ will be defined in the initial phase of the project within deliverable D8.1. In the following we present the initial draft plan to be defined in more detail during the first months of CoAct.

¹⁸ All communications activities will follow the best practices provided in http://cordis.europa.eu/fp7/ict/participating/communication-best-practices_en.html

Dissemination target groups

The dissemination targeted groups are defined as follows, from local to global:

1. **Vulnerable citizens** in relation to Mental Health Care (Barcelona), Youth Employment (Vienna), Environmental Justice (Buenos Aires) and Gender Equality (Berlin, Eastern European countries, pan-European scale)
2. **Civil Society** and in particular associations, NGOs, grass-root movements, activists, neighbours, and other local communities that are connected to the concerns previously listed.
3. **Local administrations (public bodies)** like city councils, public regional institutions, public organisations (for example Women's Office), that are building and implementing social policies.
4. **National institutions (public bodies)** such as Ministries (Health, Employment, Environment, Social Affairs, etc.) that are responsible of social policies on a national level.
5. **EU and worldwide Researchers** coming from a variety of disciplines (Citizen Science, Social Sciences, Social Innovation, Computational Science, Science and Technology Studies, Technopolitics, etc.).
6. **International networks/associations** related with the different concerns as for example, the European Federation of Associations of Families of people with mental illness (see LOI).
7. **EU policy makers**, that can further disseminate and promote the implementation of new or better bottom-up policies, as well as boost Citizen Social Science uptake.

Dissemination activities

The dissemination activities described in Table 2.4 are planned, though they will be carefully revised and adapted (1) at the beginning of the project in order to deliver a Plan for Dissemination at Month 3, and (2) every 6 months, during the CoAct meetings.

DISSEMINATION ACTIVITIES									
Results	Tools	Targeted groups							Channels
		1	2	3	4	5	6	7	
Open Citizen Social Science Toolkit	Scientific publications, Open deliverables, Brochure, Innovative materials								Conferences, satellites workshops, Final conference, Open Calls launching, Summer school, website, social network, newsletters
Opportunities of Citizen Social Science for Policymakers	Deliverable for a targeted audience, scientific publications, presentations								Conferences, Final conference, Open Calls launching, Hackathons, website, open repositories, newsletters
R&I Actions Scientific Results and associated Open Data	Scientific publications, Open Deliverables, Brochure, Presentations								Conferences, satellites workshops, Final conference, Open Calls launching, summer school, Datathons, Hackathons
Mental health policy recommendations	Deliverable for a targeted audience, scientific publications, presentations, Innovative materials								Conferences, Final conference, World Mental Health day, Hackathons
Policy guidelines for youth employment	Deliverable for a targeted audience, scientific publications, presentations								Conferences, Final conference, Hackathons

Open Citizen-generated Data and visualization (Environmental Risks)	Brochure, presentations, Innovative materials, Open deliverables								Conferences, satellites workshops, Final conference, Datathons
Policy impact and model replicability in Europe (Environmental Justice)	Deliverable for a targeted audience, scientific publications, presentations								Final conference
Conceptual results on limits and optimum methodologies of Citizen Science	Deliverable for a targeted audience, scientific publications, presentations, Innovative materials								Conferences, satellites workshops, Final conference, summer school

Table 2.4: Summary of the Dissemination activities. Targeted groups are: 1) Citizens affected; 2) Civil society; 3) Local public bodies; 4) National public bodies; 5) Researchers 6) International networks/associations 7) EU Policy Makers.

Dissemination tools

CoAct will count on a diversity of dissemination tools that will allow to address a wide audience.

Scientific publications: CoAct consortium aim is to generate at least 9 scientific papers or book chapters. The scientific publications will be very different regarding their contents as they will range from methodological papers to specific topic articles (e.g. Behavioural Sciences) or even applied research papers on Policy.

Open Deliverables: The vast majority of the Deliverables of CoAct will be completely open and available at the CoAct' website, giving their link to the Zenodo repository.

Deliverables for a targeted audience: In all work packages, it has been taken care that the Deliverables do not only report on the work progress, but they will also constitute valuable documents to be disseminated to a targeted audience. The edition and layout of these "special" deliverables will be especially taken care off. These deliverables are:

- **Brief for policy makers: Opportunities and Challenges of Citizen Social Science - WP2.**
- **Brief on policy recommendations and action plans to enhance recovery processes and Mental Health Care self-management. - WP3.**
- **Policy guidelines and models for new social measures on Youth Employment - WP4.**
- **Policy brief on Environmental Justice: social perception of risks and model replicability in European contexts - WP5.**
- **Gender Equality White Paper and bottom-up Research Pilots reports- WP6**
- **White paper on co-evaluation of Citizen Social Science R&I - WP7**
- **Citizen Social Science Open Training Materials for social scientists PhD programmes - WP8**

CoAct presentations: Self-sufficient (but adaptable) digital presentation of CoAct in a variety of formats (Powerpoint and Prezi at least) to explain the project in conferences or other events. Special innovative formats such as microlearning videos, digital storytelling and infographics made of sketching will be embedded.

Brochure: During the last semester of CoAct, a brochure will be prepared in order to plainly explain the scientific evidenced-reactions and to report the new or better policies created or recommended within the cycle of CoAct, contributing to the sustainability of CoAct as it will also disseminate the results and their future applicability.

Innovative dissemination tools: Some material to Social Innovation contexts will also be prepared:

- **Microlearning Videos** will detail some special aspects related to data literacy, R&I cycle and policy impact.
- **Digital storytelling, infographics and sketching materials** will illustratively show the R&I Actions' results.

Offline channels for dissemination

Journals: CoAct scientific papers will be published in a wide variety of Journals such as (but not limited to): Citizen Science: Theory and Practice, PloS ONE, Research Policy, Nature Human Behavior, PNAS, Scientific Reports, Science Advances, Frontiers in Sociology, Qualitative Research etc. All the scientific papers will be available in Open Access.

Conferences: Given the transdisciplinarity of CoAct, different types of conferences (at least 10) will be attended in order to increase CoAct visibility for researchers, social innovators of many disciplines, and policymakers. Main conferences will be **Citizen Science Conference** (EEUU, 2021, 1,000 attendants), **European Citizen Science Association Conference** (EU, 2020, 2022, 600 attendants), **European Forum for Studies of Policies for R&I** EU-SPRI (EU, yearly, 200 attendants), **International conference on social science and humanities** (International, yearly, 500 attendants), **International Sociological Association** (International, biennially, 6,000 attendants), **European Sociological Association** (EU, biennially, 5,000 attendants), **Conference on Computational Social Science** (EU, yearly, 1,000 attendants), **Euroscience Open Forum-ESOF** (EU, 2020-Trieste-, 2022-TBC-, 4,000 attendants), **re:publica** (Berlin, each year, 9,000 attendants), **Sónar+D** (Barcelona, each year, 6,000 attendants).

Satellite Workshops: Satellites workshops are a good way to engage and mobilize interested researchers in Citizen Social Science, by mixing scientific talks and hands-on workshops using tools of the Open Citizen Science Toolkit. At least one satellite workshop in an international conference will be organized.

Final conference: By the end of the project, a CoAct final conference will disseminate the results to all relevant stakeholders such as representatives of policy bodies dealing with Mental Health Care, Youth Employment, Environmental Justice and Gender Equality, and CSOs. Co-researchers will act as co-presenters.

World Mental Health Day: Practical demonstrations of digital tools for mental health research will be done in the frame of this yearly international event on October 10th.

Open Calls launching: In the frame of WP6, three Open Calls will be launched in order to foster Citizen Social Science projects on Gender Equality. The Open Calls launching will be done in the form of Capacity Building events, devoted to disseminate the CoAct results and Citizen Social Science framework to a wide audience.

PhD Citizen Social Science Summer School: a one week summer school will be organized for PhD students, having a geographical and academic background heterogeneity.

Datathons: Day-long Datathons will be challenging citizens in general, and citizen groups and Knowledge Coalitions members in particular, to explore data from R&I Actions. We will reformulate the classic Datathon approach to make it become more inclusive – in the case of Barcelona to Mental Health Community that does not necessarily have digital skills.

Hackathons: Day-long Hackathons will reformulate the classic approach to make it become more inclusive – in the case of Barcelona to the Mental Health Community under the principles of Design Justice. The main goal is to suggest reasoned proposals ready to be implemented at some level. Policy Makers will take the compromise of exploring and putting into practice at some level the proposals being collectively reformulated. This effort will be complemented with Barcelona MetaDecidim collective decision platform.

Online channels for dissemination

Website: the CoAct website will be ready at Month 3 and will be a reference for all dissemination targets. Apart from explaining the context and rationale of the project, it will give very concrete information about the R&I activities, methodologies and results. Although the language will be English, some contents will be especially written for co-researchers and Knowledge Coalitions members and thus will be translated in local languages corresponding to the different research actions (Catalan, Spanish, German). The website will contain a devoted section for the Open Citizen Social Science Toolkit and will embed examples of innovative dissemination tools (microlearning videos, digital storytelling and infographics). It will also include a blog with comment section, a mailing list subscription form and social media plugins.

Open Science repositories: Open repositories such as Zenodo and GitHub will be used to disseminate all documents, data or open source digital platform and mobile application, in line with the CoAct Open Access and Open Data policy (see 2.2.a section). We will create a CoAct collection or label in GitHub and build repositories with key information, documents and images archive, announcements for events, collaborative drafting and writing of research articles etc. GitHub allows for active contribution by the core team as well as the wider interested community. GitHub also integrates with other research-relevant services such as Zenodo.

Social networks: A Facebook page, and Instagram and Twitter accounts will be created to engage with the wider community of scientists, the general public and other stakeholders. All project partners will advertise the project social media accounts to their respective audiences to reach highest possible follower numbers.

Facebook: We will create a fanpage on Facebook with a linked discussion group to trigger engagement.

Twitter: An account will be set up to reach out new audiences, to announce and report live from events.

Instagram: We will set up an Instagram account to test ROI (Return of Investment) of time for the target audiences. If ROI is low, Instagram will be used occasionally to refer to CoAct website for further information.

Mailing list and newsletters: CoAct results and main events (call launching, summer school, final conference) will be disseminated through targeted emails and the newsletters of the main Citizen Science associations such as ECSA or CSA, as well as newsletters of partner organisations such as FSMC (+9.000 newsletters subscribers).

Monitoring Dissemination

Dissemination will be carefully measured to ensure that its impact is maximized. Analytic tools will be used to keep track of the number of visitors of the webpage and the number of downloads of the Open Social Citizen Science toolkit. Records of number of participants in CoAct events will be carefully documented and their impact on the participants will be evaluated in the frame of the evaluation work package (WP7). All partners will keep track of their dissemination actions by means of ad-hoc tables and the impact of dissemination will be updated every 6 months, during project meetings. Table 2.5 presents the main monitoring indicators.

	M1-M12	M13-M24	M25-M36
Social media strategy Digital distribution targeting consolidated platforms	Twitter: 500 followers Facebook: 500 followers Instagram: 100 followers	Twitter: 1.5K followers Facebook: 1.5K followers Instagram: 300 followers	Twitter: 3-5K followers Instagram: 3-5K followers
CoAct Project Website	Web-stats: 200 visits/month Av. Session: > 2 minutes	Web-stats: 300 visits/month Av. Session: > 2 minutes	Web-stats: 500 visits/month Av. Session: > 2 minutes
CoAct Open Citizen Science Toolkit online	-	Web-stats: 150 downloads	Web-stats: 950 downloads
Scientific Publications	1 research article	3 research articles	5 research articles
National & International specialized events / year	3 presentations in Intl. congresses: 1,000 recipients.	5 presentations in Intl. congresses: 1,500 recipients. 1 Datathon 1 Hackathon 3 Open Calls launching Citizen Social Science Summer School: 30 attendees.	10 presentations in Int. congresses: 1,500 recipients. 2 satellite workshop 1 Datathon 1 Hackathons Final conference: 100-150 attendees
Online Innovative material (microlearning videos, digital storytelling and infographics)	3 pieces	5 pieces	5 pieces

Table 2.5. Dissemination monitoring

2.2.a.2 Open Science Policy

Open Access

CoAct is fully aligned with the concept of Open Science, as described in the Concept and Methodology section, and it fully supports the Vienna Principles (www.viennaprinciples.org). In that regard, not only scientific papers but also public deliverables with a targeted audience will be available in Open Access. Open access to all scientific publications will be guaranteed by self-archiving (“green” open access), i.e. the articles published within the project will be made available online in the project website, in the publication open repositories of each Consortium partner, and in ZENODO, considering both the embargo period which may be requested by the publisher and the six months deadline requested by the Commission. Depending on the partners and on the possibility to charge relative expenses, “gold” open access, i.e. immediate open access by the publisher to articles as published, will be also implemented. Academic partners have allocated a specific item budget on “gold” open access publications. **In line with the same Open Science approach, the text of this proposal will be made**

publicly available through a Creative Commons License, should CoAct be granted, in order to widely share the concepts and ideas elaborated for this project.

Research Data Management

According to the **Pilot on Open Research Data** in Horizon 2020 scheme, the first draft of the Data Management Plan (DMP) will be presented in Month 6 (D1.2). This plan will be led by OKF, as experts in Open Data, in collaboration with UB that was in charge of the DMP of a past SwafS project STEMForYouth.

What types of data will the project generate/collect? (1) The research data collected during the four R&I Actions regarding Mental Health, Youth Unemployment, Environmental Justice and Gender Inequality. These data will include several typologies such as qualitative and quantitative data (eventually including big data for the mental health associated platform). **(2) The project evaluation and assessment data.**

What standards will be used? The format of the data will be mainly electronic but some others formats (handwritten, drawings) can be also found given the transdisciplinarity of CoAct. All electronic files will follow the FAIR principles. A special effort will be done in order to systematize qualitative data collection and sharing, specially those partners that mostly deals with qualitative data (UNIVIE, FHP).

How will this data be exploited and/or shared/made accessible for verification and re-use? If data cannot be made available, explain why. All non-sensitive research data will be available as OPEN DATA through Zenodo repository or equivalents (to be decided in the first draft of DMP), after being properly anonymized if necessary so that subjects cannot be identified, directly or indirectly. In all cases, the research design will include privacy by design measures that will imply collecting the minimum necessary information regarding the participants, and it will follow the EU General Data Protection Regulation (see Section 5). The participation of subjects will only happen following established Ethics considerations, and participants will go through an Informed Consent procedure, that will be revised at the beginning of the project. All the R&I Actions will get an approval from the corresponding Ethics Committees. All published data will have a Creative Commons License such as CC BY-SA 4.0. In some cases, the research data may be uploaded in Zenodo with an embargo period (which will not exceed 6 months after the end of the project), to allow the researchers to publish in a scientific journal the corresponding paper. Additionally, the raw data as well as all sensitive data will be securely stored in the institutions' servers with a backup routine and with all the corresponding safety measures.

How will this data be curated and preserved? In Zenodo repository, items will be retained for the lifetime of the repository. This is currently the lifetime of the host laboratory CERN, which currently has an experimental programme defined for the next 20 years at least. In all cases, a DOI and a perma-link will be provided. For any data in internal servers, CoAct will define a proper curation and preservation data plan. It will be ensured that the data will be safely-kept during a period (e.g. 5 years) and then destroyed to avoid any misuse.

How will the costs for data curation and preservation be covered? There will be no cost associated for the deposit in Zenodo as all the processes described are free of charge. Considering internal servers of the institutions maintenance, it will be covered with overheads of the project for 5 years, if not already guaranteed as a basic research service.

2.2.a.3 Project exploitation and sustainability strategy

Based on the mission of CoAct, the project is intended to be as Open as possible, which means that CoAct will remain Open and inclusive not only to stakeholders and citizens, but also for exploitation opportunities. Therefore the partners will develop a multi-channel strategy regarding application and sustainability, led by UB in collaboration with its Knowledge Transfer Unit. The collaboration with ZSI, UNIVIE, FHP, UNSAM, OKF, GIG, FSMC and FARN, and diverse third parties, ensures that project outcomes will be integrated into daily work routines and strategies of change-makers. The exploitation and sustainability matters of the project will be extensively described in the Plan for Exploitation, Dissemination and Communication (T8.1), delivered at M3. Via the project's associate partner network, which is listed in Section 4 of this proposal, the consortium will be able to extend its impact in terms of exploitation considerably, and even look for additional funding of side activities that might arise during the course of the project. The consortium will make sure that it supports the best possible distribution of the developed methods and tools, as well as of the learning materials. UB, as responsible of exploitation, will continuously monitor new arising opportunities, and feed this information into the consortium communication. The following Table 2.6 lists the exploitation opportunities that have been identified for the different partners and that could be embraced after the project ends. These potential valorisation of the projects

processes and outcomes could attract organisations and citizens without prior contact to the consortium, since all project materials and learnings will be made openly available encouraging re-use.

Opportunity	Explanation	Potential partners involved
Policy services for data-driven decision making	With the CoAct Open Citizen Social Science toolkit, interested parties are able to engage in specific consultation services, designing Citizen Social Science projects for societal challenges based on a systematic framework and a network of relevant communities	UB, ZSI, FHP, UNIVIE, UNSAM, OKF
CoAct becomes a basic reference point for Citizen Social Science	New projects conducted within the Citizen Social Science CoAct methodological framework will be able to build on the rich body of knowledge produced within and around the project. Members of the consortium and their partners will benefit from their participation and can establish new programs, initiatives or services based on the standards developed in CoAct.	UB, ZSI, FHP, UNIVIE, UNSAM, OKF, FARN
Citizen Social Science Community of practice expansion	The Citizen Social Science community of practice will have the potential to expand, thanks to solid methodological foundations, Open tools (Open Citizen Social Science Toolkit), prototyped events (Citizen Social Science summer school and satellites workshops) and an extensive network of academic and non-academic supporters.	ALL
Development of apps and services based on CoAct requirement lists and experiences	Mobile apps, crowdsourcing platforms, digital storytelling, hacks of existing social media, all these approaches can be designed based or further exploited in cooperation with ICT business partners.	UB, UNSAM, OKF, FARN
Development of inclusive materials to engage vulnerable collectives	CoAct's inclusive materials could be further adapted to other research methodologies or others collective, based on the expertise of the partners in this field.	UB, UNIVIE, OKF, FSMC, FARN
Development of standards for a more <i>social</i> Citizen Science	CoAct's standards and sets of principles (e.g. legal/ethical aspects) developed for Citizen Social Science can be further applied to the wider context of Citizen Science, to introduce a more social perspective in all projects.	UB, ZSI, FHP, UNIVIE, UNSAM

Table 2.6. CoAct exploitation opportunities and potential partners involved.

Strategy for IP rights management

IP rights (including open licenses) will be managed as shall be agreed by the project Participants in the Consortium Agreement (CA). The CA will also examine the IP rights legislation of a non-EU country (Argentina) and the possible additional agreements to be taken. During the proposal preparation, it was preliminary agreed with partners that the CA will follow the DESCA model, and the adapted versions for Horizon2020 and IP rights issues will be managed in compliance with the Horizon 2020 applicable rules¹⁹. In the Consortium Agreement, the task of overseeing the exploitation and dissemination plans shall be agreed by all Consortium Participants as well as the task of Knowledge Portfolio Management (e.g. collecting IPR information on project knowledge, agreeing with their owner on the access terms for the knowledge and the use, keeping track of licensing within the project, moderating potential IPR conflicts). The main principle of IPR issues are as follows:

- Background IP as shall be defined by the partners for the purposes of the project as specified herein below (hereinafter: "Background IP"): access to the partners on royalty-free basis unless otherwise agreed by the partners for carrying out the partners' work share in the project;
- Parties shall define the Background IP necessary for the purposes of the project and may agree to exclude specific backgrounds;

¹⁹ <https://iprhelppdesk.eu/Fact-Sheet-IP-Management-H2020-Grant-Preparation-Stage>

- Any Background IP shall remain the sole property of its owner, whether it was acquired and/or generated prior to the date of the project or independently of the project;
- Knowledge generated under the project ("Foreground IP") will be owned by those who generated such Foreground IP. Access to Foreground IP to the partners will be royalty-free for execution of the project; preferential or at market conditions for use out of the scope of the project as shall be agreed by the relevant partners;
- Dissemination may conflict with IP rights. In this case, IP protection must prevail. Hence, in order to prevent dissemination jeopardizes IP rights, partners will have to inform the consortium of their intention to publish their foreground.
- The project results (materials, digital platform, etc.) will be made accessible under Creative Commons 4.0 (or higher).

2.2.b. Communication activities

This section is dealing with communication actions targeted at multiple audiences beyond CoAct project community and it is summarized in Table 2.7, in which some part of the civil society was already included (citizen groups and Knowledge Coalitions: NGOs, grass-roots movements, activists, neighbours' communities, etc that are engaged or affected by the concerns previously listed). GIG, with previous experience in communications lead in H2020 projects, will act as Communication Manager. The Communication Master Plan, will be integrated in D8.1 and drafted hereafter.

Key messages to communicate (to be collaboratively refined with the partners but that in a preliminary version include):

1. The CoAct R&I activities Mental Health Care, Youth Employment, Environmental Justice and Gender Equality.
2. CoAct will place vulnerable citizens at the center of the R&I cycle by means of Citizen Social Science.
3. Citizens act as co-researchers, being in-the-field competent experts.
4. CoAct demonstrates that co-designing research and conducting research collectively is a way to foster social change and sustainable development.
5. CoAct engages a wide variety of actors in the R&I cycle, following Citizen Science and RRI principles.
6. Citizen Social Science processes can have an impact in evidence-informed reactions, and in better or new policies or measures implementation.
7. CoAct advocates for horizontal, transparent co-creative research processes.

COMMUNICATION ACTIVITIES								
Key messages	Tools	Targeted groups						Channels
		1	2	3	4	5	6	
1	Media, flyer, video, Hackathons and Datathons							Website, social network, Public presentations, press conference
2,3	Exhibition, collapsible cartographies, video, flyer, media							Newspapers, newsletters, social networks, public presentations, website
4,5	Video, Flyer, Media, Hackathons and Datathons							Social networks, website, public presentations
6,7	Media, Video, Flyer, Exhibition, collapsible cartographies							Public presentations, social networks, newspapers, website, newsletters, press conference

Table 2.7: Communication activities. Targeted groups: (1) Media (2) The European Commission (3) Policymakers (4) Citizens (5) Data and social activists (6) Grass-root movements and NGOs.

Communication tools

Media (Press releases, press kit): the media strategy will be defined at the European level by GIG and deployed at local level involving Knowledge Coalitions also in the planning, as media impact is an important element of tackling CoAct social concerns. The consortium will prepare a project narrative and press releases for CORDIS and selected national and local media to raise interest and get support from other engagement and dissemination strategies. The main activities include:

- Creation of a database of local media (this is related to the locations where the project is implemented) and topic related specialized national media where to send alerts and other relevant information by means of specific methods (e-mail, tweets, text messages, etc.);
- Organising journalist visits to citizen groups and interview them;
- Press releases for targeted newspapers, radio and TV programmes on the occasion of events or important developments of CoAct;
- Press conferences for major events as the Final Conference or announcing important results of CoAct.

Flyer: A project flyer will be designed and made available at Month 4. This flyer will prioritize innovative tools such as sketching to communicate in an effective and attractive way the CoAct objectives and the concept of Citizen Science and Citizen Social Science. The flyer will be produced in English, German, Spanish and Catalan.

Infographic postcards: At least 3 postcards based on sketching contents will be prepared for a wider audience.

Brochure: Although it is mainly dedicated to disseminate the results (see Dissemination Section 2.2.a.1), it will also constitute an appealing material for communication.

Video: An introductory video based on digital storytelling will introduce the aims of CoAct and the main rationales for the project. It will advocate for more horizontal research and for placing citizens at the centre.

Exhibition: In Vienna, an original public exhibition will be done to explain the whole R&I cycle, and especially to recognize and acknowledge the role of the youth as co-researchers.

Hackathons and Datathons: These events will be part of the R&I cycle but also a way to communicate CoAct aims to a wider audience.

Collapsible Cartographies: This artistic piece produced with collective maps of the workshops will be made available through Creative Commons licenses. It will provide information on responsibilities and risks, and it will provide solutions for Environmental Justice.

Online channels for communication

Website: the website functionalities has been already described in dissemination section. It will include innovative contents such as microlearning videos and digital storytelling and infographics made of sketching, making the contents especially attractive for a non-specialized audience.

Newsletters and mailing list: The newsletters of the partners closer to civil society, like FSMC and FARN, will serve as a channel to communicate to a wider audience. Other grass-root movements and NGOs dealing with the social concerns explored in CoAct will be contacted in order to reach a potential interested audience.

Social Networks: as described under Dissemination, Twitter, Facebook and Instagram account will be created. In particular Instagram is highly popular amongst the youngest part of the population, which will allow for more effective communication measures.

Offline channels

Press conferences: to communicate the most relevant steps and results of CoAct, press conferences will be organized by the consortium members' press offices.

Newspapers (local and national): the narratives generated by CoAct research are especially attractive for journalists as they are easily understandable by a wider audience and because they are dealing with issues that have a high impact in everyone's daily life (mental health, unemployment, gender issues, etc.). A dedicated press list will be created for journalists to subscribe for press releases and event announcements. The CoAct press releases will be disseminated via all partner institutions and their respective press contact lists.

Public presentations of the results: Public presentations will be done at a local scale, in public spaces such as civic centers, museums or science related events (science festival, local weeks of science). The co-researchers will be the main players of these presentations.

Monitoring communication

	M1-M12	M13-M24	M25-M36
CoAct printed material distribution	Flyer: 600 recipients Infographic postcards: 1,500 recipients	Updated Flyer: 1,200 recipients. Infographic postcards: 2,800 recipients	brochure: 3,000 recipients Infographic postcards: 3,500 recipients
National & International public events / year	At least 4 public presentations	At least 6 public presentations	At least 10 public presentations

Table 2.8: Communication monitoring.

All printed materials will be archived digitally on the website and on the GitHub account, they will also be disseminated in digital formats via the CoAct online channels for elevated reach (see Table 2.8).

3. Implementation

3.1 Work plan — Work packages, deliverables

3.1.a Overall structure of the work plan

The work plan of CoAct consists of eight work packages. **WP1** is the **management and coordination** work package (Lead: UB), which also includes Administrative and Financial coordination as well as risk management and Quality Assurance. **WP2 (Citizen Social Science Foundations)**, **WP7 (Evaluation and Assessment)** and **WP8 (Communication, Dissemination and Exploitation)** are building a solid frame to ensure that the main goal of the project, namely to deploy and demonstrate the scientific relevance and the social impact of Citizen Social Science, is reached. Based on the internal Capacity Building actions performed in **WP2** as well as on strong methodological concepts and tools developed in this work package, **four ‘wicked’ social issues** in which citizen groups are co-researchers will be tackled in **WP3, WP4, WP5 and WP6**. In these work packages, the research is co-designed and directly driven and conducted by a number of citizen groups that share a social concern, related to Mental Health Care (Barcelona), Youth Employment (Vienna), Environmental Justice (Buenos Aires) and Gender Equality (Berlin, Eastern Countries and Europe). These R&I Actions will be dynamically evaluated and assessed through the different tasks enclosed in **WP7**. Their R&I results will be disseminated and exploited in **WP8**, where CoAct communication activities will also be deployed. The Pert Chart in Figure 5 visualizes the most relevant interactions among the work packages.

WP1, Project Management and Coordination (Lead: UB). This work package will deal with project’s management from a technical point of view. Administrative and financial aspects will be assumed by UB, as the coordinator of CoAct. Both Coordination and project quality Assurance and Risk Mitigation tasks will ensure that the project’s activities are properly implemented. For this purpose, a Project Management and quality assurance manual, delivered at month 3, will set the basis of procedures and good governance practices inside the consortium, that will be followed during the whole duration of CoAct. Additionally, WP1 will deal with Data Management, that will be conducted by OKF, with a dilated experience in Open Data and Open Science.

WP2, Citizen Social Science Foundations (Lead: FHP). In this work package, a common and validated transdisciplinary Citizen Social Science methodological framework will be built for a variety of end-users. WP2 will first extensively and comprehensively review the state of the art of the existing Citizen Social Science projects and detect possible new associated methodologies, that will be able to strengthen the R&I Actions of WP3-5 and the prospective work done in WP6 about new Citizen Social Science spaces. While the building of this framework will be an ongoing endeavor during the whole project duration, another task will implement internal Capacity Building Activities. These Capacity Building Activities will create a shared common practical ground between all partners and implement open mutual learning and knowledge to reinforce the internal cohesion and collaboration inside the project. Some highly relevant issues of the project, such as research integrity, ethics and new forms of informed consent or data and knowledge ownership, will be collectively discussed and agreed upon clear guidelines to be commonly adopted. In order to open the research results and methodologies to a wider scientific (and non-scientific) audiences, the work done in WP2, enriched with the evidence-based outcomes and tools of WP3-6, will take the form of an online Open Citizen Social Science Toolkit. Through this toolkit, a variety of end-users will be able to put into practice and evaluate a series of Citizen Social Science methodologies. Finally, the applicability of Citizen Social Science to policy making and

collective actions, being one of the key points of CoAct, will be critically reviewed and a series of recommendations for policy makers will be elaborated.

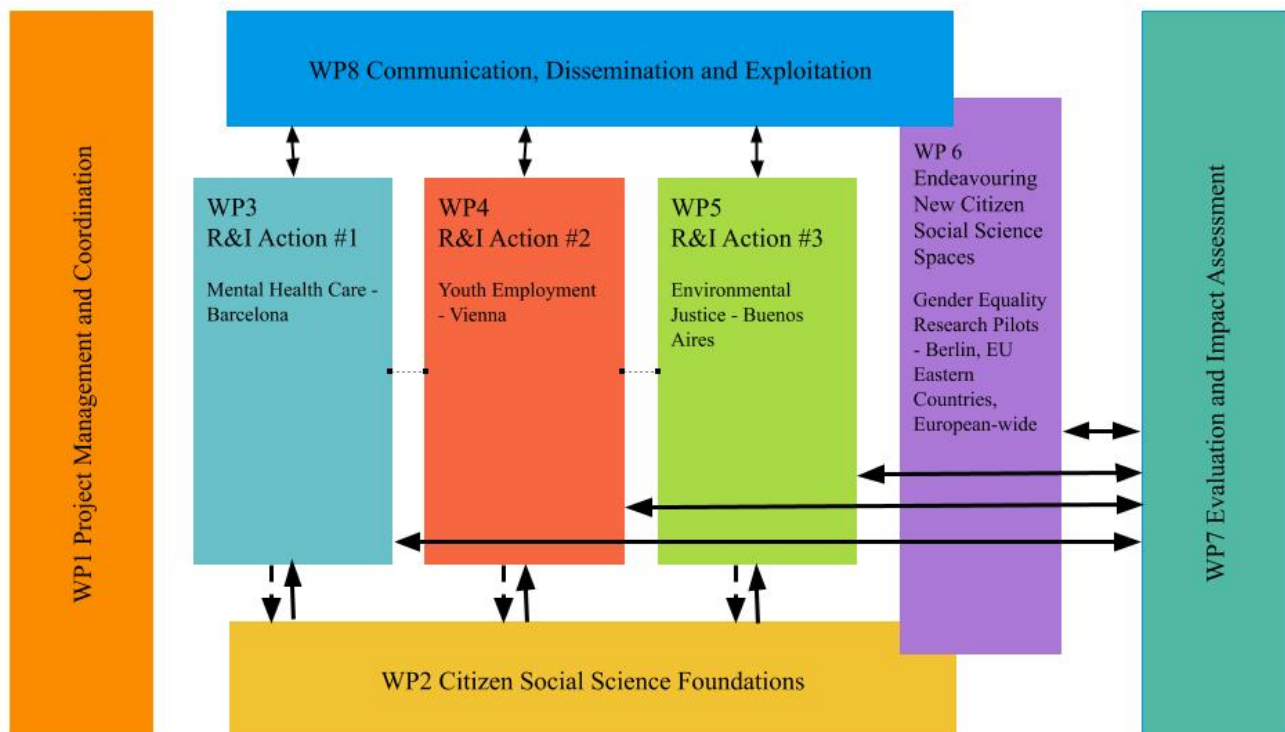


Figure 5: Pert Chart showing most relevant relations and interactions among the different work packages.

WP3-5 R&I Actions are devoted to the collective research. The outcomes of WP2 will serve as a basis to optimize and build the Actions on strong methodological foundations. The structure of the work packages include the same steps: *Knowledge Coalition creation and research preparation, research co-design, conducting research, collective data analysis and results interpretation* and, finally, *transformation of results into action* (see also Figure 4, Section 1.3). For each specific work package, the actors, the concern, the methodologies and the open tools will be different. These processes will be continuously evaluated and their impact assessed through WP7. Their associated results will be disseminated, communicated and exploited in WP8.

WP3, R&I Action #1: Mental Health Care, Barcelona (Lead: UB). At least 30 citizens, involved as co-researchers (adults with an experience of mental disorders and their families), will work together with UB, FSMC and other members of the Knowledge Coalition such as professional caregivers, social workers and policy makers. The collective research will be co-designed using an Agile-based Toolkit and putting the lived experiences of individuals with mental health issues at the forefront, in accordance with the mental health Recovery Model. Based on Computational Social Science and Data Science techniques and methods, and by combining an innovative digital tool, such as a chatbot, public space experimentation, data related to social interactions and perceptions of well being will be generated and collectively analysed and interpreted through Datathons. Based on Hackathons, following Design Justice principles, new action plans and recommendations will be collectively elaborated with local public bodies dealing with Mental Health Care provision.

WP4, R&I Action #2: Youth Employment, Vienna (Lead: UNIVIE). 25 young people aged 15-18 years old, which do not attend school or another type of education (and thus are social measures beneficiaries) will be the co-researchers. Together with UNIVIE, the providers of measures and social workers, an NGO (SpaceLab) and two different Austrian ministries, will constitute the Knowledge Coalition of this R&I Action. Using an Inclusive Toolbox, especially prepared for this collective research, the co-researchers will co-design the research and gather the data. The research process will include several meetings with social policy institutions for exchange of information. With the help of data literacy Capacity Building, the data will be interpreted based on co-researchers own lived experience. Finally, policy guidelines and models for new measurements and indicators will be presented by the co-researchers to social policy institutions, and they will be co-evaluated with the aim of improving the existing social measures.

WP5, R&I Action #3: Environmental Justice, Buenos Aires (Lead: UNSAM). Participants of neighbourhood assemblies of Villa Inflamable (a shanty town in a highly polluted area of Matanza-Riachuelo basin) will be involved as co-researchers. Those co-researchers will be members of the Knowledge Coalition, in which UNSAM and FARN also participate, together with activist groups, social organizations and NGOs mobilized to promote Environmental Justice, and together with public bodies with authority in the subject matter. The R&I Action will be co-designed through collective mapping workshops that will define territorial divisions of the basin, organize priorities in Environmental Justice, add other bottom-up perspectives to social environmental risks, and identify key steps in sanitation policies to promote Environmental Justice. Based on those first insights, an open source digital platform will be built to integrate the Citizen-generated data, and to provide the open data sets and visualization tools that will serve also for dissemination purposes. Interpretation of the results will be accomplished using open Hackathons, that will led to a more social understanding of the risks and the necessary steps needed to promote Environmental Justice.

WP6, Endeavouring new Citizen Social Science Spaces – Gender Equality (Lead: OKF). A new innovative approach is performed: Open Calls (through Cascading Grants) will be launched in order to grant a maximum of 4 bottom-up Gender Equality Research Pilots. The granted Pilots will have to propose original research responding to: 1) SDG 11 (Sustainable cities and Communities) jointly with SDG 5 (Gender Equality) in Berlin; 2) SDG 8 (Decent Work and Economic Growth) jointly with SDG 5 (Gender Equality) in Eastern Europe; and 3) SDG 5 (Gender Equality) with the focus on Opportunities and Risks of Digitalisation-Europe. This WP will both investigate the limits of Citizen Science by proposing new mechanisms to foster underrepresented thematic areas, and by testing the potential of Citizen Social Science to have an impact on Gender Equality.

WP7, Evaluation and Impact Assessment (Lead: ZSI). WP will perform an evaluation and impact assessment of CoAct's methodological framework and the participatory Citizen Social Science activities. Another task of this WP is impact monitoring. Under this WP an assessment of the potential impact of our approach towards open and participatory citizen social science on an individual level, community level, and wider societal level, will be carried out. Depending on the R&I Actions as well as the Open Calls, specific impact potential on a scientific, ecological and economic level will also be assessed.

WP8, Communication, Dissemination and Exploitation (Lead: GIG). This work package deals with the dissemination and exploitation of CoAct results, the building of a global sustainable Citizen Social Science community and the communication of the CoAct project. For all these tasks, innovative formats such as microlearning videos, digital storytelling, sketching, Datathons and Hackathons (dissemination) or public exhibition and art pieces (communication) will be used, as well more classical (but useful) diffusion materials. Appropriate networks and communication channels of the partners represented in the consortium and beyond will be used to ensure the effective dissemination and communication of CoAct.

3.1.b Timing of the different work packages and their components

The eight work packages and associated tasks, deliverables and milestones are planned according to the Gantt chart shown in Figure 6.

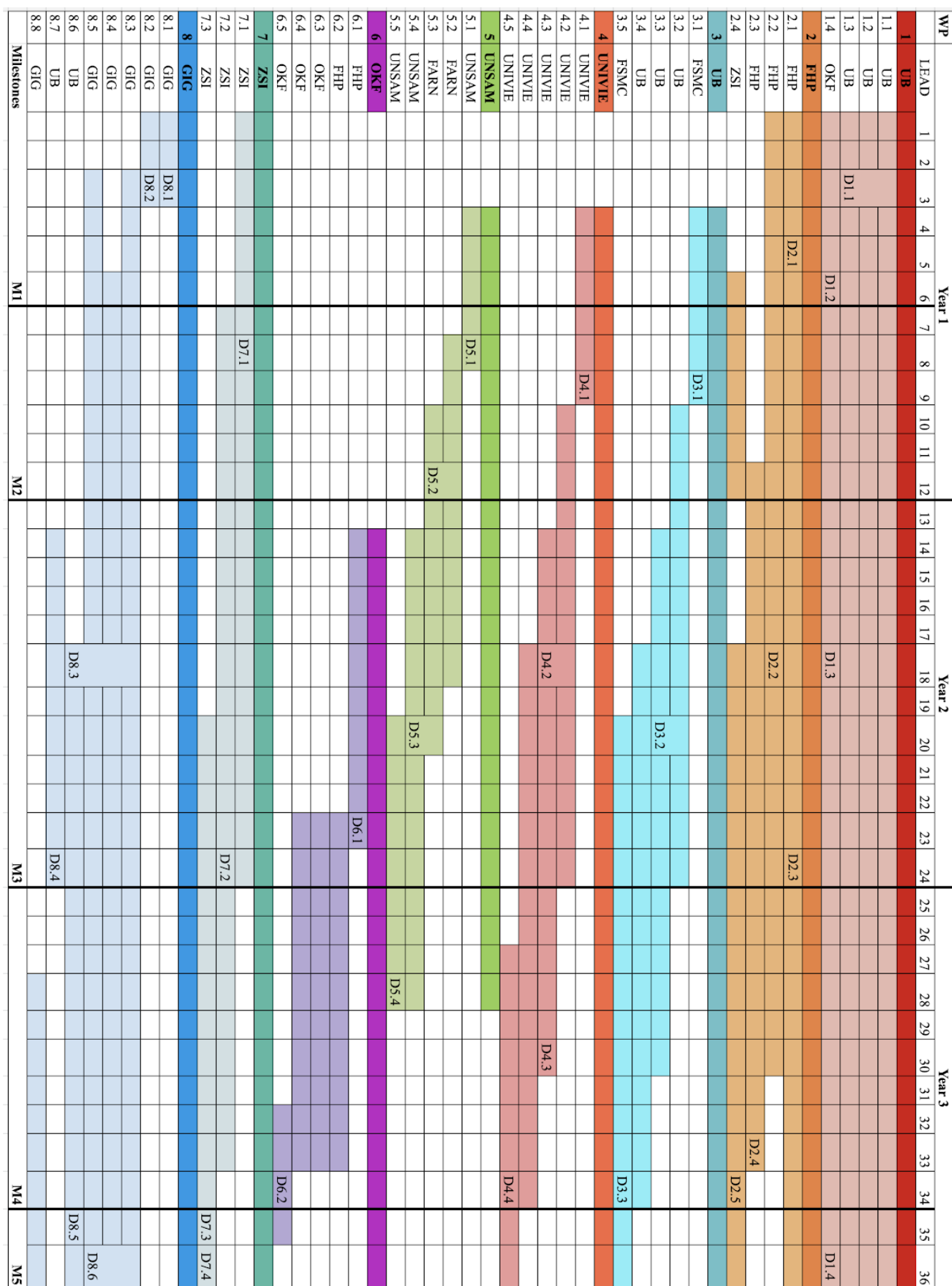


Figure 6. Gantt Chart of the different work packages, tasks, deliverables and milestones.

3.1.c Detailed work description

The list of work packages are presented in the following Table 3.1.a:

Work package No	Work package Title	Lead Participant No	Lead Participant Short Name	Person-Months	Start Month	End month
1	Project Management & Coordination	1	UB	31	1	36
2	Citizen Social Science Foundations	4	FHP	35	1	36
3	R&I Action #1: Mental Health Care, Barcelona	1	UB	29	4	36
4	R&I Action #2: Youth Employment, Vienna	3	UNIVIE	28	4	36
5	R&I Action #3: Environmental Justice, Buenos Aires	5	UNSAM	24	4	28
6	Endeavouring new Citizen Social Science spaces: Gender Equality	6	OKF	25	14	35
7	Evaluation and Impact Assessment	2	ZSI	26	1	36
8	Communication, Dissemination and Exploitation	7	GIG	28	1	36
				226		

Table 3.1.a. List of work packages.

The eight work packages are detailed here after, in the form of Tables.

Table 3.1.b.1 Work package 1: Project Management and Coordination.

Work package number	1		Lead beneficiary				1-UB		
Work package title	Project Management and Coordination								
Participant number	1	2	3	4	5	6	7	8	9
Short name of participant	UB	ZSI	UNIVIE	FHP	UNSAM	OKF	GIG	FSMC	FARN
Person months per particip.	22	1	1	1	1	2	1	1	1
Total person months	31								
Start month	1			End Month			36		

Objectives

The main objective of this work package is to ensure the accomplishment of the project objectives on time, under budget and at the highest quality, and the maximization of the impact of the results. The objective will be achieved by setting up an efficient management infrastructure, by providing technical and administrative assistance to the consortium partners, by ensuring the execution of the project in conformity with the Commission contract, and by managing the risks and performing contingency planning. This work package also includes research data management.

Description of work and role of partners

T1.1 Coordination (M1-M36) (Lead: UB; Contribute: All)

Under the responsibility of the project coordinator, this task covers all activities related to ensuring that the grant agreement is implemented as planned, providing overall contractual coordination. In particular, this task will include quality control organization, monitoring and maintaining the work plan, monitoring the project progress, identification and troubleshooting of technical and organizational problems and coordination of technical meetings. Collaborative digital platforms and cloud services will be licensed for all Consortium members.

T1.2 Administrative and Financial management (M1-M36) (Lead: UB, Contribute: All)

The management of financial and administrative issues entails establishing and maintaining financial records, follow-up of EC payments, providing financial help-desk services and establishing procedures, projects management methods and online/offline tools. This task will also include the kick-off meeting and subsequent project meeting and

General Assembly meetings, for project review, decision making and conflict resolution. It also deals with the coordination of the internal and periodic reporting and of the timely delivery of the deliverables.

T1.3 Project Quality Assurance and Risk Mitigation (M1-M36) (Lead: UB, Contribute: ZSI, UNIVIE, FHP, UNSAM, OKF, GIG)

Possible risks as well as the methods to overcome them (risk management) or to prevent them will be continuously assessed throughout the execution of the project. To this end, the consortium will develop and deploy a system to identify, manage and overcome risks that may occur within the activities of all the WPs as part of D1.1 and as a live document that will be updated throughout the project's duration. Appropriate collective actions will be undertaken when a risk is identified.

T1.4 Data Management (M1-M36) (Lead: OKF, Contribute: UB, ZSI, UNIVIE, FHP, UNSAM).

The main objective of this task is to make Research Data FAIR, meaning Findable, Accessible, Interoperable and Reusable. In the frame of the Pilot on Open Research Data, a draft of CoAct will be prepared at M6 and revised at M18 and 36.

Deliverables

D1.1 Project Management and quality assurance manual (M3)

Handbook describing the project management and quality assurance procedures, containing also Risk Register and Quality Plan.

D1.2 Data Management Plan (M6)

A first draft of the Data Management Plan will be submitted at M6 and further completed and revised at M18 and 36.

D1.3 Revised Data Management Plan (M18)

Revised version of the Data Management Plan at M18.

D1.4 Final Data Management Plan (M36)

Final version of the Data Management Plan.

Table 3.1.b.2 Work package 2: Citizen Social Science Foundations.

Work package number	2		Lead beneficiary				4-FHP		
Work package title	Citizen Social Science Foundations								
Participant number	1	2	3	4	5	6	7	8	9
Short name of participant	UB	ZSI	UNIVIE	FHP	UNSAM	OKF	GIG	FSMC	FARN
Person months per particip.	4	4	4	14	3	2	2	1	1
Total person months	35								
Start month	1			End Month			36		

Objectives

O4. To build a common and validated transdisciplinary Citizen Social Science methodological framework for a variety of end-users.

O1. To generate new groundbreaking and open scientific outcomes by means of Citizen Social Science.

O2. To engage vulnerable citizens and local civil society groups in R&I initiatives and to place them at the centre of the R&I cycle.

O8. To disseminate CoAct results and build a global sustainable Citizen Social Science community of practice.

Description of work and role of partners

T2.1 Foundations for a Citizen Social Science (M1-M36) [Lead: FHP, Contribute: UB, ZSI, UNIVIE, UNSAM, FARN].

FHP will lead an extensive and **comprehensive review of existing Citizen Social Science projects and methodologies** with the participation of those partners with academic expertise in this field. This state of the art will be completed by a prospective work, aiming at identifying **candidate methodologies or approaches, both coming from Citizen Science and Social Sciences but also from a wide variety of fields and disciplines**, where citizens' participation and research co-design could be intensified. These results will serve as foundations for conducting the R&I Actions of WP3, 4, 5, and 6 and will evolve with the project, in order to include the possible new methodologies used during the course of the R&I Actions.

T2.2 Capacity Building within consortium (M1-M30) [Lead: FHP, Contribute: OKF, ZSI, UB, UNSAM, UNIVIE, GIG].

This task will create **common practical grounds** and implement **open mutual learning and knowledge exchange within the consortium**, in order to pilot the creation of an **in-house citizen social science community of practice**, to be enlarged in WP8. Based on T2.1 findings, partners' expertise and invited external experts, **Capacity Building workshops** will be organized, mainly as satellites of project meetings. The Capacity Building activities within the first 18 months will be of special importance, as their results will be **the collective co-designed framework of the methodologies to be used in the R&I Actions**, based on the expertise of the leaders of the three R&I Actions (UB, UNIVIE, UNSAM) and the leader of the evaluation (ZSI). Topics to be discussed will be: *qualities and limitations of methods and data; research participation of citizens; research integrity; ethics and new forms of informed consent; gender perspective in Social Science; relation between professional scientist and co-researcher and data and knowledge ownership; and the co-evaluation process along the project*. OKF will especially contribute regarding participatory and inclusive methods because of their **open educational material**, their experience in designing data-driven projects and their strategies to enhance **data literacy** among scientists and the general public.

T2.3 Creation of an Open Citizen Social Science Toolkit (M12-M33) [Lead: FHP, Contribute: ZSI, UB, UNIVIE, UNSAM, OKF, GIG].

Based on new knowledge created in T2.1 and T2.3, as well as practical learnings extracted from the R&I Actions (WP3-5), a **web-based toolkit** will be prepared, in order to transfer and open up the knowledge and best practices of the project. The toolkit will present, through concrete and easy to follow steps and recommendations, **how to put the Citizen Social Science, its methodology and methods into practice and how to evaluate their impact**. The toolkit will target both researchers and groups of citizens, as a dissemination tool to be used in WP8. The toolkit will be **made accessible to citizens, politicians, administrations, companies and scientists**, by setting up a website on which methodical modules, tutorials and examples are presented on a low access threshold by using innovative contents and presentations such as videos, photographs or **drawings, microlearning videos** (short online tutorials), or **sketching** (tools to visually develop ideas).

T2.4 Applicability of Citizen Social Science to policy making and collective action (M6-M12, M18-M36) [Lead: ZSI, Contribute: UB, UNIVIE, FHP, FARN, FSMC]

In this task, the applicability of Citizen Social Science to policy making will be critically reviewed based on insights from WP3-6 and the co-evaluation exercise. Findings, including best practices as well as failures and limitations, will be elaborated and completed with **integrated recommendations for policy makers and stakeholder groups** that are looking for innovative evidence-based practices regarding applicability.

Deliverables

D2.1 Report on State of the Art of Citizen Social Science (M5)

This report will exhaustively describe the possible Citizen Social Science methodologies and approaches, based on a literature review and on the partners' expertise.

D2.2 Report on Capacity Building within the consortium (M18)

In this report, the Capacity Building activities will be described as well as their concrete results such as the refined methodologies to be used in the R&I Actions, the co-design strategies to be developed or the research integrity principles to be adopted.

D2.3 Report on Informed consent procedure requirements and challenges (M24)

This report will focus on necessary innovations in informed consent procedures. It will be directed to social researchers and institutions that promote Citizen Social Science including expertise from legal and data security experts. It will describe how to open up the informed consent procedure in order to guarantee fair participation, while at the same time fostering community-building and open evaluation.

D2.4 Open Citizen Social Science Toolkit (M33)

Web-based Toolkit, detailing how to put Citizen Social Science into practice, to choose appropriate research and evaluation designs, to implement participatory research elements, to apply criteria for selection and application of the best fitting methods, and how to assess the impact of specific Citizen Social Science methodologies.

D2.5 Brief for policy makers: Opportunities and Challenges of Citizen Social Science (M34)

This briefing document including a guideline will give a nuanced view on how Citizen Social Science can be a useful and powerful tool for the interplay between bottom-up public engagement and policy making.

Table 3.1.b.3 Work package 3: R&I Action #1: Mental Health Care, Barcelona.

Work package number	3		Lead beneficiary				1-UB		
Work package title	R&I Action #1: Mental Health Care, Barcelona.								
Participant number	1	2	3	4	5	6	7	8	9
Short name of participant	UB	ZSI	UNIVIE	FHP	UNSAM	OKF	GIG	FSMC	FARN
Person months per particip.	13	2	2	1	2	1	1	7	0
Total person months	29								

Start month	4	End Month	36
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Objectives

- O1. To generate new ground-breaking and open scientific outcomes by means of Citizen Social Science.**
- O2. To engage vulnerable citizens and local civil society groups in R&I initiatives and to place them at the centre of the R&I cycle.**
- O3. To produce scientific evidence-informed reactions and thereby create new policies and to improve existing ones.**
- O7. To increase scientific literacy, skills, competences and public awareness regarding science.**

Description of work and role of partners

T3.1. Knowledge Coalition creation, curation and research preparation (M4-M9) [Lead: FSMC, Contribute: UB, OKF]

The vision, methods and practical grounds of WP2 will be implemented in the building of Knowledge Coalitions for a collective R&I on mental health care provision. The group of citizens involved will be constituted **by adults with an experience of mental disorders and their families**, that will act all as co-researchers (at least 30 individuals). FSMC will build this group by means of their 68 members associations in order to **work along the so-called Recovery Model, where the lived experiences of individuals with mental health issues are put at the forefront of the collective research**. The role of families will be introduced within this new paradigm. UB and FSMC have worked together since 2014 in order to address issues concerning mental health collectives through Citizen Science. The Knowledge Coalition will also include IT engineers, data scientists, professional caregivers, psychologists and social workers to constitute a diverse, resilient and innovative Knowledge Coalition. **Policy makers** will be mostly representatives from Barcelona and surroundings (such as El Prat and Sant Boi de Llobregat municipalities), that have both a long-term experience in implementing mental health policies. Workshop and focus groups will be organized jointly with a set of meetings including all members of the Knowledge Coalition.

T3.2. Research co-design using an Agile-based toolkit (M10-M24) [Lead: UB, Contribute: FSMC, UNIVIE, UNSAM, OKF, FHP]

A co-design process inspired by **Agile methodologies** will be started with the co-researchers adapting the Citizen Science toolkit developed by UB in the previous STEMForYouth European SwafS project. The revised toolkit will propose the following steps for a collective research co-designed jointly by the co-researchers and computational social scientists: *social concern, research question, research design, intervention plan, research intervention (digital monitoring and public space experiment), data interpretation and collective action for social change*. In this case we will combine **Computational Social Science** techniques and methods with **Behavioural Science** to study behavioural traits in social interactions. Outputs of the WP2 and other consortium members such as UNIVIE, FHP, UNSAM and OKF will provide other methods to enrich the research and favour transdisciplinarity.

T3.3. Conducting Research (M14-M30) [Lead: UB, Contribute: FSMC]

Collective research will be developed through **digital tools and devices** considering the different co-designed scientific protocols (T3.2). A digital tool such as a **chatbot** (data gathering for long periods of time) will be combined with a set of **public interventions/experiments** both in massive events and in working sessions of the Mental Health Care communities (data gathering in specific days and contexts). **Both digital and non-digital strategies** will be used to **avoid social exclusion** of some participants. The co-researchers will be asked to contribute to the research by sharing behavioral data for the following personal returns regarding aspects linked with the **Recovery Model** and based on the conclusions of the T3.1, such as social interactions or perception of wellbeing. The main aims are: to fertilize mutual support networks, to increase self-reflection, and to improve self-management. Evaluation outputs coming from WP7 will be constantly taken into account to improve the R&I practices.

T3.4. Collective data analysis and results interpretation (M18-M34) [Lead: UB, Contribute: FSMC, UNIVIE, UNSAM, OKF]

UB and OKF will organise at least two **Datathons** to interpret data being obtained with citizens with experience of mental disorders and relatives. OKF Capacity Building on **data literacy** will have an important role at this point to invigorate the scientific evidence-informed reactions to envision new policies. **Caregivers, data scientists, and policy makers** at several levels will also participate to the Datathons. The Datathons will be carefully organised to enhance the voice of citizens with experience of mental disorders and of their relatives. UB will do it by means of design justice principles. The Datathons will be complemented with interviews and surveys to active participants (mostly citizens with experience of mental disorders, and relatives).

T3.5. Transformation of results into action (M20-M36) [Lead: FSMC, Contribute: UB, ZSI, UNIVIE, UNSAM, OKF, GIG]

Specific events with the Knowledge Coalition as a whole will serve to **prepare specific materials to transform knowledge into actions**. The previous task will be able to deliver specific knowledge and information that will allow to open up a second phase under the form of two **Hackathons** following Design Justice principles. The Hackathon

replicating a parliamentary model will be the first step to deliver a list of recommendations and new action plans to Health Care provision and a first prototype of materials to accompany the recovery process digital tool (for citizens with experience of mental disorders and relatives). In a second step, with the collaboration of **Metadecidim (a collective decision making digital platform)**, the outputs of the Hackathon will be **revised, prioritized and publicly discussed**. In a third step, FSMC will organize specific meetings and events to **forward proposals and recommendations to public administrations and agencies**. The dissemination of these final results will be done in **large public events (WP8)** which will also contribute to the fight against mental health stigma.

Deliverables

D3.1 Report on Knowledge Coalition building / Mental Health Care (M9)

This report will describe and analyze the composition and the process to build Knowledge Coalition.

D3.2 Digital and non-digital tools for conducting research (M20)

Software codes from chatbot and for alternative digital interfaces to gather data as well the revised version of the Agile-based toolkit will be delivered and left in an open source platform (GitHub).

D3.3 Brief on policy recommendations and action plans to enhance recovery processes and Mental Health Care self-management (M34)

The report will include action plans to improve healthcare outcomes related to recovery of the individuals with a mental health disorder experience and to informal caregivers support (such as relatives) as well as policy making recommendations to improve the Recovery Model from the inside. The contents could be exported and adapted worldwide, for other regions and countries.

Table 3.1.b.4 Work package 4: R&I Action #2: Youth Employment, Vienna.

Work package number	4		Lead beneficiary				3-UNIVIE		
Work package title	R&I Action #2: Youth Employment, Vienna								
Participant number	1	2	3	4	5	6	7	8	9
Short name of participant	UB	ZSI	UNIVIE	FHP	UNSAM	OKF	GIG	FSMC	FARN
Person months per particip.	3	3	15	2	2	2	1	0	0
Total person months	28								
Start month	4			End Month			36		

Objectives

O2. To engage vulnerable citizens and local civil society groups in R&I initiatives and to place them at the centre of the R&I cycle.

O3. To produce scientific evidence-informed reactions and thereby create new policies and to improve existing ones.

O7. To increase scientific literacy, skills, competences and public awareness regarding science.

O1. To generate new ground-breaking and open scientific outcomes by means of Citizen Social Science.

Description of work and role of partners

T4.1. Knowledge Coalition creation and research preparation (M4-M9) [Lead: UNIVIE, Contribute: UB, ZSI, FHP]

The Knowledge Coalition will be created, the two main constituent being **25 young people between 15 and 18 years old who do not attend school or another type of education**, and who are thus social measures beneficiaries, and **the social scientists team**. The young people will take the role of competent knowing subjects and active researchers. The Knowledge Coalition will be completed with **providers of measures and social workers** belonging to the Vienna Employment Promotion Fund (WAFF) and with Produktionsschule SpaceLab, which is an NGO offering courses to young unemployed people and that will also contribute with their expertise in creative processes and in the cooperation with young people. Responsible social policy institutions like the **Federal Ministry of Labour, Social Affairs and Consumer Protection** which is responsible for the administration of the new Austrian law and the **Austrian Employment Service Vienna** will be integrated.

T4.2. Research Co-design using an inclusive toolbox (M10-M24) [Lead: UNIVIE, Contribute: UB, UNSAM, OKF]

The co-researchers (youth of 15-18 y.o.) will co-design the whole research process such as *formulating research questions, co-create and co-design research, choosing adequate methods to be used*. Social scientist will rely on the co-researchers' ideas and expertise, assist with their knowledge about social research while following the youth's set of relevance. The methodological frame of research co-design collectively built in WP2 will be introduced here

together with the internal Capacity Building practical results, such as *reviewed informed consent procedures, guidelines on co-researcher and data and knowledge ownership and research and data integrity recommendation*. The research co-design will also include the preparation of an **Inclusive Toolbox** for Citizen Social Science that will consist of tools that will allow to put into practice **new oral and/or visual science methods** that can be used in participatory research with young people or adults with **little formal education** or with **illiterate persons**. The co-researchers will be both co-designers and end-users of this toolbox, their needs being thus organically integrated.

T4.3. Conducting Research (M14-M30) [Lead: UNIVIE, Contribute: ZSI, FHP]

The co-researchers, assisted by the social scientists, will work out research questions, they will decide about the research design and they will gather the data. The research process will include **several meetings with social policy institutions** for exchanging information and discussing preliminary findings. We will include the findings of the evaluations, done in WP 7, in all stages of the research process.

T4.4 Data analysis and results interpretation (M18-M34) [Lead: UNIVIE, Contribute: UB, ZSI, FHP, UNSAM]

Co-researchers and social scientists will perform the data analysis together. OKF will contribute to this process bringing their expertise in **data literacy** building and in using inclusive materials such as card games. Social scientists will thus also learn about the **relevance systems of the co-researchers**. As **experts in the field, co-researchers** based on their own experience will contribute to alternative interpretations which would be unknown to the social scientists. Social scientists in turn will contribute with knowledge about social scientific methods, protocols and techniques and assist in documenting the analysis.

T4.5. Transformation of results into action (M27-M36) [Lead: UNIVIE, Contribute: UB, ZSI, UNSAM, GIG]

Based on T4.4, **policy guidelines and models for new measurements and indicators** will be proposed by the co-researchers and the social scientists team. These guidelines and new measures will be presented by the co-researchers to social policy institutions, and they will be co-evaluated with the aim of improving the existing social measures. **The impact of this process is potentially high because persons most affected by the measures (co-researchers) are involved in all parts of the research process and are directly involved in finding and implementing the results.** These results will also be disseminated in WP8, in the form of a presentation done by co-researchers and an **exhibition** to present the overall process working with posters and videos.

Deliverables

D4.1 Report on Knowledge Coalition building / Youth Employment (M9)

This report will describe and analyze the composition and the process to build Knowledge Coalition.

D4.2 Inclusive Toolbox for Citizen Social Science (Beta Version) (M18)

This beta version of the toolbox will include tools to put into practice new oral and/or visual science methods that can be used in participatory research with young people or adults with little formal education or illiterate persons.

D4.3 Inclusive Toolbox for Citizen Social Science (Final version) (M30)

Revised version of the toolbox that will include tools to put into practice new oral and/or visual science methods that can be used in participatory research with young people or adults with little formal education or illiterate persons.

D4.4 Policy guidelines and models for new social measures on Youth Employment (M34)

This report will comprehensively list the new social measures and policy guidelines proposed as a result of the research, and it will extrapolate them to other European cities and contexts.

Table 3.1.b.5 Work package 5: R&I Action #3: Environmental Justice, Buenos Aires.

Work package number	5		Lead beneficiary				5-UNSAM		
Work package title	Research action #3: Environmental Justice, Buenos Aires.								
Participant number	1	2	3	4	5	6	7	8	9
Short name of participant	UB	ZSI	UNIVIE	FHP	UNSAM	OKF	GIG	FSMC	FARN
Person months per particip.	3	2	1	1	8	2	1	0	6
Total person months	24								
Start month	4			End Month			28		

Objectives

O2. To engage vulnerable citizens and local civil society groups in R&I initiatives and to place them at the centre of the R&I cycle.

O3. To produce scientific evidence-informed reactions and thereby create new policies or to improve existing ones.

O1. To generate new ground-breaking and open scientific outcomes by means of Citizen Social Science.

O7. To increase scientific literacy, skills, competences and public awareness regarding science.

Description of work and role of partners

T5.1. Knowledge Coalition creation and research preparation (M4-M8) [Lead: UNSAM, Contribute: UB, FHP, OKF, FARN]

Based on the findings and recommendations of WP2, UNSAM will build the Knowledge Coalition around **communities living in highly polluted areas of Matanza-Riachuelo basin**. One crucial member of the knowledge coalition is **FARN** which has been working on several issues related to **Environmental Justice** in the same communities. Neighbourhood assemblies present in communities will be involved as **co-researchers**. The Knowledge Coalition will be completed by **activist groups, social organisations and NGOs** mobilised to promote Environmental Justice (e.g. Iconoclastas, AVINA, and others) and **public policy bodies** with authority in the subject matter (National and Provincial Secretary on Science and Technology). OKF's open materials on data literacy and Capacity Building methodologies will be used to increase the capacity of the members of the Knowledge Coalition on data collection and interpretation.

T5.2. Research Co-design through collective mapping (M8-M18) [Lead: FARN, Contribute: UB, UNIVIE, FHP, UNSAM]

Mapping workshops will be conducted in order to co-design the research, in two stages. In the first stage, a recognition workshop will be conducted, coordinated by Iconoclastas, a political-art group, with experience in collective mapping techniques. Neighbourhood assemblies (as co-researchers), social scientists, environmental scientists, NGOs and social organisations will participate in this workshop. The aim of this workshop is to **define territorial divisions of the basin, identify dimensions and categories to organise priorities in Environmental Justice** for the basin and to produce a **mapping kit including resources and playful graphics** to be used in subsequent collective mapping workshops. A second series of collective mapping workshops will be organised openly with the community (co-researchers) using the mapping kit. There will be two of these in **Villa Inflamable** (shanty town in Avellaneda, Buenos Aires Province) where 1,500 families live without concrete information on their health situation. Specific territories, to ensure a good representation of neighbours, as well as the dissemination strategy, will be defined in the previous series of workshops. The result of the second series of workshops will be maps produced by neighbours and social scientists about perspectives on the causes and meaning of social and environmental risks in the basin, and the identification of key steps in sanitation policies to promote Environmental Justice. The maps will be **available for downloading and sharing**, and will be a source of inspiration for political-art groups to produce **artistic pieces** (called collapsible cartographies) also shared through Creative Common licenses, to be used as tools for political communication. This will contribute to the dissemination of the crowdsourcing platform and engagement in an ongoing political process.

T5.3. Conducting open research using Citizen-generated Data (M10-M20) [Lead: FARN, Contribute: UNSAM, UB]

This task will start by updating FARN's **crowdsourcing digital platform 'Qué Pasa Riachuelo' (QPR)** using the results from the collective mapping workshops. This software piece will be open source and will be able to crowdsource the data needed for conducting the research. UB will contribute by sharing their experience on Citizen-generated Data through digital platforms such as the Citizen Social Lab. FARN and other members of the collegiate body will use their own established networks to disseminate the QPR platforms. During some of the neighbourhood assemblies that are regularly held along the basin, our research team will attend and demonstrate the use of the platform, and encourage neighbours to input and share data using the QPR platforms. The dataset will be **open and flexible and can be downloaded at anytime**. New indicators and categories can be proposed and incorporated into the digital platform in a **co-evolving logic**. The QPR platform will provide **visualization tools** that generate awareness of how risks in the community are understood, prioritized and perceived, and thus will be also introduced through dissemination activities of WP8. Both the platform and the visualization tools, constantly defined collectively, will co-evolve overtime. The results of the evaluation performed in WP7 will also be integrated in order to promote a greater impact. OKF will contribute to this task thanks to their wide experience in data literacy, open data and community engagement.

T5.4. Data analysis and results interpretation (M14-M28) [Lead: UNSAM, Contribute: FARN]

An open **Hackathon**, inviting **participants from previous workshops, activists, policy makers, data scientists and social scientists**, will be organised to produce indicators and visualisations to reflect the social understandings of risks and steps towards Environmental Justice. These resources will be included in the QPR digital platform and will be used as inputs for social science analysis about divergences and commonalities between social understanding of risks and top-down policy framings and priorities using the case of sanitation policy in the Riachuelo basin.

T5.5. Transformation of results into action and applicability in Europe (M20-M28) [Lead: UNSAM, Contribute: UB, ZSI, UNIVIE, FHP, GIG, FARN]

Collapsible cartographies plus Citizen-generated Data will be jointly used to mobilize stakeholders to take action. Anyone looking at the cartographies will be able to readily understand where critical situations exist in the basin, who is involved, and on that basis generate reflections about what might be done to generate improvements. The maps will inform users about political responsibilities, connections, causes and consequences. The Citizen-generated Data will provide the **empirical underpinning needed for policy assessment** and at the same time it will disseminate and create

awareness of how socio-environmental risks are understood by the relevant communities, as described in WP8. Our approach is innovative because it combines methods that are apt for highly contested and controversial issues, and that help create **impetus for political action**, on the one hand, with **Citizen-generated Data** that helps create **a basis for policy action**, on the other. **We expect the new understandings of social-environmental risk to be accounted for in the design of sanitation policy actions.** Together with UB, ZSI, UNIVIE and FHP, a collective brainstorming and reflection will take place in order to envision the practical applicability and transferability of these highly innovative methodologies and results, in order to foster new bottom-up Citizen Science practices. **Other relevant European environmental issues such as urban pollution and European river sanitation**, and in particular (given our approach) issues that are highly controversial, and/or where the inclusion of vulnerable but politically marginalised, groups of citizens into policy design is a priority, will be central to this collective reflection.

Deliverables

D5.1 Report on Knowledge Coalition building / Environmental Justice (M8)

This report will describe and analyze the composition and the process to build the Knowledge Coalition.

D5.2. Collapsible cartographies (M12)

An artistic piece produced by Iconoclasistas, informed by collective maps produced during the workshops, will be made available through creative commons licenses. It will provide information on responsibilities and risks and suggest possible solutions towards Environmental Justice.

D5.3 Open Source digital platform (M20)

Open Source digital platform, made available through external repositories (GitHub and Zenodo).

D5.4 Policy brief on Environmental Justice: social perception of risks and model replicability in European contexts (M28)

A policy brief will combine social perception of risks and desired steps towards Environmental Justice (produced and disseminated directly through UNSAM and FARN networks and media departments to relevant policy bodies in Argentina) and an analysis of the model replicability in European contexts, including how the tools and models produced could be used for European environmental issues.

Table 3.1.b.6 Work package 6: Endeavouring new Citizen Social Science spaces: Gender Equality.

Work package number	6		Lead beneficiary				6-OKF		
Work package title	Endeavouring new Citizen Social Science spaces: Gender Equality								
Participant number	1	2	3	4	5	6	7	8	9
Short name of participant	UB	ZSI	UNIVIE	FHP	UNSAM	OKF	GIG	FSMC	FARN
Person months per particip.	3	2	3	5	1	8	2	1	0
Total person months	25								
Start month	14			End Month			35		

Objectives

O2. To engage vulnerable citizens and local civil society groups in R&I initiatives and to place them at the centre of the R&I cycle.

O5. To promote Open Science and scientific research integrity in methods and data.

O1. To generate new ground-breaking and open scientific outcomes by means of Citizen Social Science.

O3. To produce scientific evidence-informed reactions and thereby create new policies or to improve existing ones.

Description of work and role of partners

T6.1 Design, launching and resolution of open calls for Citizen Social Science projects (M14-M23) [Lead: FHP, Contribute: UB, ZSI, UNIVIE, OKF, GIG, UNSAM, FSMC, FARN].

Extensive description of the call design, launching and resolution as well as the rationale for the calls' subject are described in Section 1.3.b.4 as well as in Section 4.3. Three open calls of max. 20,000 € each will be prepared and launched in M18. Applicants will have 3 months to apply, until M20. A transparent selection process of the proposals received will be performed the Open Calls resolution date will be M21. The granted projects will have a duration of maximum 10 months. **Open Call 1 (Berlin-based):** Open call issued by local partner (FHP) for one project for a maximum of 20,000 €. Eligible grantees will be CSOs based and active in Berlin and Brandenburg Area close neighbourhood. **Proposals will need to respond to SDG 11 (Sustainable cities and Communities) jointly with SDG 5 (Gender Equality).** **Open Call 2 (Eastern Europe-based):** Open call issued by OKF (organisation with several nodes in Eastern Countries) for max. two projects, for a maximum of 15,000 € for each project and a total maximum budget of the call of 20,000 €. Eligible grantees CSOs based in at least one of the following countries: Bulgaria, Croatia, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovakia, Slovenia. **Proposals will need to respond to SDG 8 (Decent Work and Economic Growth) jointly with SDG 5 (Gender Equality).** **Open Call 3 (Pan-European-based).** Open call issued by OKF (organisation with several nodes in all Europe) for max. one project of a maximum duration of 10 months, for a maximum amount of 20,000 €. Eligible grantees: CSOs based in any EU-28 countries. CSOs with international networks will be the most suitable candidates. **Proposals will need to respond to any of the SDGs jointly with SDG 5 (Gender Equality) and with the focus on Opportunities and Risks of Digitalisation.** The call will be launched publicly in several European locations (such as Berlin, Budapest, Bucharest, Tallinn and Barcelona), through face-to-face Capacity Building events, that will also disseminate general concepts about Citizen Social Science as a new transdisciplinary approach. The international networks of the consortium partners, especially endorsed by OKF and GIG and media actions (press releases and press conferences) will also contribute in publicizing the open calls. OKF will make use of its School of Data nodes in Germany and Latvia, as well as its Fellowship network in Hungary and Romania to disseminate information about the calls through information sharing and public forums.

T6.2 Research example on Gender Equality, Berlin (M23-M33) [Lead: FHP, Contribute: UB, UNIVIE, GIG].

The call grantee's research project will address respond to SDG 11 (Sustainable cities and Communities) jointly with SDG 5 (Gender Equality) and more particularly to affordable housing and urban planning which shared challenges in all European cities. With the mentoring of FHP local partner, the granted research project will examine practices and develop new community approaches with participative research methods on this topic.

T6.3 Research example on Gender Equality, Eastern Europe (M23-M33) [Lead: OKF, Contribute: UB, FHP, UNIVIE].

The granted research projects (max. 2 projects) will be located in one of the following countries: Bulgaria, Croatia, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovakia, Slovenia. The projects will address SDG 8 (Decent Work and Economic Growth) jointly with SDG 5 (Gender Equality). With the mentoring of OKF, the granted projects will develop bottom-up research actions to gather evidences on these issues and to transformed them into evidence-informed reactions and possible new or improved policies.

T6.4 Transnational Research example on Gender Equality (M23-M33) [Lead: OKF, Contribute: UB, UNSAM, GIG].

The granted research project will respond to any of the SDGs jointly with SDG 5 (Gender Equality) and with the focus on Opportunities and Risks of Digitalisation. Being mentored by OKF, possible issues that the project will address are related to digital spaces, online harassment or how the gender norms are exacerbated online. Digital, hacker and open-source (global) communities will be specially encouraged to participate.

T6.5 Conclusions drawing of Gender Equality Research Pilots (M32-M35) [Lead: OKF, Contribute: UB, ZSI, FHP, UNSAM, GIG,FSMC].

The Research Pilots results will be critically revised through the evaluation results and the Research Pilots reports. The conclusions drawn will be translated into a White Paper examining future perspectives regarding the intersection of Citizen Social Science and Gender Equality.

Deliverables

D6.1 Open Calls resolution report (M23)

This report will describe how the three open calls have been prepared, give a relation of the proposals that were presented and report on the grantees open selection process.

D6.2 Gender Equality white paper and bottom-up research pilots reports (M34) In this deliverable, the scientific and political outcomes of the Research Pilots in the field of gender equality will be described. The different bottom-up Pilots perspectives will be carefully reviewed, thus identifying best practices and strategies. Based on this critical review, this White paper will broaden the scope of Citizen Social Science to Gender Equality. It will critically review this potential new field and envisage future applicabilities of Citizen Social Science in projects with a strong gender perspective.

Table 3.1.b.7 Work package 7: Evaluation and Impact Assessment.

Work package number	7		Lead beneficiary				2-ZSI		
Work package title	Evaluation and Impact Assessment								
Participant number	1	2	3	4	5	6	7	8	9
Short name of participant	UB	ZSI	UNIVIE	FHP	UNSAM	OKF	GIG	FSMC	FARN
Person months per particip.	3	15	2	2	2	0	0	1	1
Total person months	26								
Start month	1			End Month			36		

Objectives**O6. To create and validate a robust and inclusive evaluation framework.**

O5. To promote Open Science and scientific research integrity in methods and data.

O1. To generate new ground-breaking and open scientific outcomes by means of Citizen Social Science.

Description of work and role of partners**T7.1 Creation of the evaluation framework, establishing collaborations with other Swafs projects (M1-M24)**

(Lead: ZSI, collaborate: UB, UNIVIE, FHP, UNSAM)

The evaluation approach will be based on a combination of qualitative and quantitative methods able to reflect the co-design approach of the project and will contribute to MoRRI indicators and SDGs. Based on ZSI expertise in this field and in collaboration with other H2020 Citizen Science projects like Eu-Citizen.Science or MICS (Developing metrics and instruments to evaluate Citizen Science impacts on the environment and society), we will correspondingly lead a co-evaluation process. The guiding characteristics of our evaluation and impact assessment activities are adapted to complex social systems: in our “next generation evaluation” we will have short feedback cycles, work with digital data and sophisticated visualisations, involve all partners in the collection and usage of data, and try to look at the whole system. In this task we define quantitative and qualitative data collection instruments at various time points of the project (combining data usage, questionnaires, focus groups, interviews and workshops); prepare the evaluation process and materials; coordinate the implementation of data extraction services, and develop an analysis framework to investigate and jointly interpret the collected data and describe the setting of the cases as well as across the cases. These efforts will combine project indicators and MoRRI (in collaboration with SUPER-MORRI project) and SDG indicators in order to evaluate three dimensions: the scientific dimension, the citizen scientist dimension and the socio-ecological, economic & political dimension. Some of the evaluation tools will be integrated in the Open Citizen Social Science Toolkit prepared in WP2.

T7.2 Iterative data elicitation and evaluation (M7-M33) (Lead: ZSI, collaborate: UB, UNIVIE, UNSAM)

The evaluation framework, developed under T7.1, will contain tools and indicators that will be applied in R&I Actions and bottom-up research pilots (WP3-WP6) to allow for comparability between the different applied methods and generated impacts. Specific methods will be applied and revised selectively on a case-by-case basis to consider case-specificities during the evaluation. Special attention will be paid to engagement and empowerment strategies, motivational aspects, the recognition of citizen knowledge, co-ownership, openness, etc., as these are all important challenges in Citizen Social Science. Data will also be collected beyond the cases, from the associate partner network, the scientific partners in the project, and external stakeholders such as social policy makers. Internal review cycles will be conducted continuously within the project to foster mutual learning between the different R&I Actions, to revise the ongoing R&I Actions, to compare among the different activities, and to maximize the impact of the R&I Actions and activities. Within this aim, one selected R&I Action study will be internally introduced and collaboratively investigated as an extension to every consortium meeting. Results of this task will feed also into the last update of the Citizen Social Science toolkit (M33, WP2), and into the trainings, guidelines and other material to be developed in WP8. We will also share our findings with the ECSA working group on empowerment, where there is also strong interest in exchange of practices for Citizen Social Science.

T7.3 Impact assessment and transferability (M20-M36) (Lead: ZSI, collaborate: UB, UNIVIE, FHP, UNSAM, FSMC, FARN)

This task will synthesise and extrapolate the collected data with the aim to derive a set of recommendations on the use and transfer of the CoAct evaluation framework. We will take into account different levels of engagement and understand the impact of the Citizen Social Science and co-design approach on the different stakeholders involved. Project impact monitoring will also be done within this task. Critical impacts on the social concerns linked with the R&I Actions WP3-WP5 (Mental Health Care, Youth Employment, Environmental Justice), and bottom-up Research Pilots (Gender Equality) will be assessed. Such an effort will become the basis to several materials and events of WP8. To assess the transferability of the methodological framework to other contexts, **open reflective workshops** (co-evaluation) will be conceptualised and organised under this task. These workshops will involve representatives from the associated partner network, who will reflect upon the generated impact and collaboratively work on approaches to transfer the generated knowledge of the methodological framework into new contexts. If possible, the

workshops will be integrated into the offerings on the European Citizen Science portals. Within those workshops matters of openness in data access, collection and method development will be discussed based on the experiences of the R&I Actions and Research Pilots.

Deliverables

D7.1 Impact Assessment Plan (M8).

This plan will describe the evaluation and impact assessment framework as well as the foreseen methods to assess the various project aspects. It will also include a first analysis of experiences from first formative evaluation results.

D7.2 Interim Impact Assessment Report (M24)

This interim report will discuss the evaluation activities performed until year 2 and the corresponding results. It will include an in-depth reflection on the project performance and the issues encountered with the open Citizen Social Science framework and inform other WPs on possible implications for the final project year.

D7.3 White paper on co-evaluation of Citizen Social Science R&I (M35)

This deliverable will describe the co-evaluation approach used in CoAct and will critically assess the challenges and opportunities of co-evaluation for Citizen Social Science R&I. The paper will also enhance knowledge transferability of CoAct to Citizen Science initiatives in general.

D7.4 Final Impact Assessment Report (M36)

This report will summarise the evaluation results of the project and the validation of the overall impact at social, economic, political and technological levels. It will also reflect on possible implications for future implementation of the CoAct approach and its transferability.

Table 3.1.b.8 Work package 8: Communication, Dissemination and Exploitation.

Work package number	8		Lead beneficiary				7-GIG		
Work package title	Communication, Dissemination and Exploitation								
Participant number	1	2	3	4	5	6	7	8	9
Short name of participant	UB	ZSI	UNIVIE	FHP	UNSAM	OKF	GIG	FSMC	FARN
Person months per particip.	4	2	2	2	2	2	12	1	1
Total person months	28								
Start month	1			End Month			36		

Objectives

O8. To disseminate CoAct results and build a global sustainable Citizen Social Science community of practice.

O7. To increase scientific literacy, skills, competences and public awareness regarding science.

O2. To engage vulnerable citizens and local civil society groups in R&I initiatives and to place them at the centre of the R&I cycle.

Description of work and role of partners

T8.1 Exploitation, Dissemination and Communication Plan (M1-M3) (Lead: GIG, Contribute: UB, OKF).

This task will consist of the elaboration of a detailed Exploitation, dissemination and communication plan. GIG will be in charge of the dissemination and communication plan and the exploitation plan will be led by UB that will be supported by the Knowledge Transfer Unit of UB. This task will include listing the significant events organized by CoAct and update them at the end of each reporting period.

T8.2 Creation of the visual identity, website and social media accounts (M1-M3) (Lead: GIG, Contribute: UB).

In M3, GIG will have prepared the logo, the website of the project and established the social media accounts. The website will include statistics records. During the project, GIG will update properly the website with the material generated by the Consortium, design a social media strategy and act as a community manager of CoAct social media accounts (Twitter, Instagram and Facebook).

T8.3 Creation of contents for dissemination and communications (M3-M36) (Lead: GIG, Contribute: ALL)

The contents and tools envisioned in the PEDRC, such as project brochures and flyers, videos and articles will be prepared. Especially innovative contents and dissemination methods such as **microlearning videos, digital storytelling or infographics made with sketching** will be used. All these materials will be distributed by the proper channels described in the communication and dissemination section.

T8.4 Dissemination activities (M6-M36) (Lead: GIG, Contribute: ALL)

The activities listed in the Dissemination plan will be implemented. In particular, the following innovative format/tools will be developed: 1) Hackathons/Datathons 2) Satellites workshops in European and international conferences 3) Practical demonstrations of digital tools created in WP3 and WP5 (digital platforms and chatbot) 4) Specific capacity-building events to present and launch the Open Calls for Research Pilots (WP6)

T8.5 Communication activities (M3-M36) (Lead: GIG, Contribute: UB, UNIVIE, UNISAM, FHP, OKF, FSMC)

The communication activities will be implemented, according to the communication plan. Innovative formats, such as a Public Exhibition in Vienna (in relation to WP4) or the organization of public events to fight against the stigma suffered by the persons with an experience of mental health disorders (in relation to WP3) will be prioritized. In line with the established media strategy, GIG will ensure the quality of the materials to be prepared for press releases and press conferences and supervise media relations, in collaboration with the press office of UB.

T8.6 Exploitation activities (M18-M36) (Lead: UB, Contribute: ALL)

This task will be led by UB, that will help different partners to implement the actions defined in the Exploitation Plan. In particular, the exploitation of training courses and of genuine research strategies for policy impact will be explored.

T8.7 Citizen Social Science Summer School for PhD students (M14-M24) (Lead: UB, Contribute: UNIVIE, UNISAM, FHP, ZSI)

A one week Summer School for PhD students will be organized during M21. The participation of students coming from a wide range of disciplines (not only Social Sciences), a wide range of countries and a wide range of socio-economic and cultural backgrounds will be encouraged. This first of this kind formal education action will also disseminate the Citizen Social Science strong methodological transdisciplinary framework established in WP2. The Summer School will reinforce the Citizen Social Science community building, with a special focus on sustainability as early-career researchers will be involved. The material used during this summer school will be compiled in an Open deliverable, with the aim to be used in PhD programmes from diverse disciplines.

T8.8 Final conference preparation and realisation (M28-M36) (Lead: GIG, Contribute: ALL)

During M36, the final CoAct conference will take place, with the aim of disseminating the results of the project to all the relevant stakeholders at an European Level. Relevant representatives of policy bodies dealing with mental health, youth unemployment, gender equality and environmental actions will be invited to participate to a Policy Forum. The civil society, in the form of bottom-up associations, activists or NGOs will be another important target. The co-researchers will act as co-presenters of the conclusions, as competent experts in their fields. Moreover, concrete outcomes of the project such as the *Open Citizen Science Toolkit* (including the Inclusive Toolbox and the Agile-based toolkit), the *Brief for policy makers: Opportunities and Challenges of Citizen Social Science - Brief on policy recommendations and action plans to enhance recovery processes and Mental Health Care - Policy guidelines and models for new social measures on Youth Employment - Policy brief on Environmental Justice: social perception of risks and model replicability in European contexts - White paper on Citizen Social Science and Gender Equality - White paper on co-evaluation of Citizen Social Science R&I - Citizen Social Science Open Training Materials for social scientists PhD programmes* will be presented to a wide audience.

Deliverables

D8.1 Plan for Exploitation, Dissemination and Communication, including CoAct events (M3)

Plan for Exploitation, Dissemination and Communication, including significant events organized by CoAct.

D8.2 Visual Identity manual for offline and online materials (M3)

D8.3 Interim Report on communication, dissemination and exploitation (M18)

The report will describe and evaluate the actions done and provide recommendations for the second half of the project.

D8.4 Citizen Social Science Open Training Materials for social scientists PhD programmes (M24)

Compilation of the materials used in the PhD summer schools, to be used in PhD programmes from diverse disciplines.

D8.5 Exploitation plan (M35)

This deliverable will detail the CoAct exploitation plan, with the aim of fostering the sustainability of the project.

D8.6 Final Report on communication and dissemination activities (M36)

This report summarizes and evaluates all the R&I Actions performed. In particular, conclusions on the impact of the PhD students summer school and of the final conference will be formulated.

Finally, a list of all the deliverables produced during the 36 months of the project is presented in Table 3.1c.

Deliverable	Deliverable name	WP	Type	LEAD participant	Dissemination level	Delivery date (month)
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D1.1	Project Management and quality assurance manual	1	R	UB	CO	M3
D1.2	Data Management Plan	1	ORDP	OKF	PU	M6
D1.3	Revised Data Management Plan	1	ORDP	OKF	PU	M18
D1.4	Final Data Management Plan	1	ORDP	OKF	PU	M36
D2.1	Report on State of the Art of Citizen Social Science	2	R	FHP	PU	M5
D2.2	Report on Capacity Building within the consortium	2	R	FHP	CO	M18
D2.3	Report on Informed consent procedure requirements and challenges	2	R	UNIVIE	PU	M24
D2.4	Open Citizen Science Toolkit	2	DEC	FHP	PU	M33
D2.5	Brief for Policy Makers: Opportunities and Challenges of Citizen Social Science	2	R	ZSI	PU	M34
D3.1	Report on Knowledge Coalition Building / Mental Health Care	3	R	FSMC	PU	M9
D3.2	Digital and non-digital tools for conducting research	3	DEC, R	UB	PU	M20
D3.3	Brief on policy recommendations, and action plans to enhance recovery processes and Mental Health Care self-management	3	R	FSMC	PU	M34
D4.1	Report on Knowledge Coalition Building / Youth Employment	4	R	UNIVIE	PU	M9
D4.2	Inclusive Toolbox for Citizen Social Science (Beta Version)	4	R	UNIVIE	PU	M18
D4.3	Inclusive Toolbox for Citizen Social Science (Final Version)	4	R	UNIVIE	PU	M30
D4.4	Policy guidelines and models for new social measures on Youth Employment	4	R	UNIVIE	PU	M34
D5.1	Report on Knowledge Coalition Building / Environmental Justice	5	R	UNSAM	PU	M8
D5.2	Collapsibles cartographies	5	OTHE R	FARN	PU	M12
D5.3	Open Source digital platform	5	DEC	FARN	PU	M20
D5.4	Policy brief on Environmental Justice: social perception of risks and model replicability in European contexts	5	R	UNSAM	PU	M28
D6.1	Open Calls resolution report	6	R	FHP	PU	M23
D6.2	Gender Equality White Paper and bottom-up research pilots final report	6	R	OKF	PU	M34
D7.1	Impact Assessment Plan	7	R	ZSI	PU	M8
D7.2	Interim Impact Assessment Report	7	R	ZSI	PU	M24
D7.3	White paper on co-evaluation of Citizen Social Science R&I	7	R	ZSI	PU	M35
D7.4	Final Impact Assessment Report	7	R	ZSI	PU	M36
D8.1	Plan for Exploitation, Dissemination and Communication, including CoAct events	8	R	GIG	PU	M3
D8.2	Visual Identity manual for offline and online materials	8	R	GIG	CO	M3
D8.3	Interim Report on communication, dissemination and exploitation activities	8	R	GIG	PU	M18
D8.4	Citizen Social Science Open Training Materials for social scientists PhD programmes	8	R	UB	PU	M24
D8.5	Exploitation Plan	8	R	UB	CO	M35
D8.6	Final Report on communication and dissemination activities	8	R	GIG	PU	M36

Table 3.1c: List of major deliverables. Type of deliverables: R(report), DEC(websites, patents filing, press & media actions, videos, etc.), OTHER (software, technical diagram, etc.) and ORDP (Open Research Data Pilot).

Dissemination level: PU (public, fully open, e.g. web), CO (confidential, restricted under conditions set out in Model Grant Agreement).

3.2 *Management structure, milestones and procedures*

The management structures and procedures will be formalised in greater detail in the Consortium Agreement, based on the DESCAs model, adapted to the context of a RIA.

3.2.a Organisational structure

The CoAct project is organised in eight work packages (WP). The WPs are divided into tasks according to the goals and structure of each WP. To implement each task, several consortium partners have been allocated to undertake the activities scheduled therein and to achieve the task's operative goals. All tasks have one task lead. The formal management bodies of the project are the following:

General Assembly (GA). The GA is composed of all the project partners (9) and is chaired by the Coordinator. It acts as the ultimate decision-making body of the consortium. Each consortium partner has one vote. The quorum is 55% presence in decision-making. Decisions are made on majority principle, but processes will be organised in a way so as to facilitate unanimity for all major decision to be made. In case of tie-voting, the vote of the Coordinator counts twice. The GA will meet every 6 months throughout the project duration. The European Commission Research Executive Agency project officer will be invited to join GA meetings. The GA's main functions are to supervise the general orientation of the project vis-à-vis the identified deliverables and milestones; to develop the work plan and to propose amendments in agreement with the EC; to decide (wherever necessary) on the evolution of the consortium, to monitor the budget and resource allocation; etc.

Advisory Board. An external Advisory Board is attached to the project. Its responsibility is to oversee the project's activities and outputs and to provide timely and relevant feedback on processes and outputs. The Advisory Board reviews key outputs of the project and helps the Coordination and quality assurance team. The Advisory Board meets at the occasion of the general assembly meetings (attendance of 1-2 Advisory Board members per event). Members can give their inputs directly to the general assembly, meet with the Coordination, the WP Leaders, the quality assurance Task Leader so called Steering Board meetings, and/or submit their views in written form. The Advisory Board is activated by the kick-off meeting or the Coordinator. The following experts have confirmed their interest in being part of the Advisory Board: **Muki Haklay** (m, ExCiteS, University College of London, UK); **Shannon Dosemagen** (f, Public Lab - CSO, US); **Mayo Fuster** (f, Dimmons, Open University of Catalonia, ES); **Lee Anne Walters** (f, citizen scientist, Goldman Environmental Prize - CSO, US); **Sabine Hark** (f, Zentrum für Interdisziplinäre Frauen- und Geschlechterforschung, TU Berlin, DE); **Juan Freire** (m, Tecnológico de Monterrey and TeamLABS - SME, MX); **Chris Salter** (m, Milieux, University of Concordia, CA). In order to allow the Advisory Board to provide quality inputs, budget for their travel has been set aside.

Coordination. The project will be coordinated and managed by UB. UB has coordinated 44 European projects in FP7 and H2020. The *Coordinating Team* of the CoAct project will be led by *Prof. Josep Perelló*, who has an extensive expertise and theoretical background in Citizen Science (being founder of Barcelona Citizen Science Office and ECSA and currently national representative and Management Committee member of Citizen Science COST Actions CA15212) and in Citizen Science related projects lead as STEMForYouth (SwafS) and Games for Mental Health. The coordinating team will be completed by a Project Manager and the UB International Projects Office (OPIR) will lead the administrative and financial coordination. The Coordination team is responsible for the formal communication with the EC services on behalf of the consortium and in addition it establishes liaison with other initiatives and projects. It is in charge of the overall legal, contractual, ethical, financial and administrative management of the project according to the project's work plan and EC regulations. The Coordination provides documents and information connected with the project (including financial statements and related certification) to partners and the EC. The Coordination monitors the overall progress of the project, and prepares the GA meetings (agenda, content, chairing the meeting and drafting the minutes) and monitors the implementation of decisions taken.

Gender considerations. In CoAct, 5 of 9 Principle Investigators are women, so that gender balanced is fully respected. Considering all the consortium's professionals involved, 18 out of 29 are women, so that there is a very relevant presence of women. Recruitment in CoAct will consider gender balance consideration and even prioritize gender balance increase for those partners where women are underrepresented.

Table 3.2a shows the Milestones and how their achievements will be checked.

Milestone number	Milestone name	Related work package(s)	Due date (in month)	Means of verification
M1	CoAct baseline, visibility & documentation	all	M6	Successful project Kick-Off, Project Management and Quality Assurance Manual (D1.1), draft of Data Management Plan (D1.2), Report on State of the Art of CSS (D2.1), Plan for Exploitation, Dissemination and Communication, including CoAct events (D8.1), Visual Identity manual for offline and online materials (D8.2)
M2	CoAct R&I Actions and Assessment Framework implemented	WP1, WP2, WP3, WP4, WP5, WP7	M12	Capacity Building Actions implemented, Reports on the Knowledge Coalitions Building (D3.1, D4.1, D5.1), First results of Research Actions (collapsible cartographies D5.2), Impact Assessment Plan (D7.1)
M3	CoAct R&I Actions co-designed and functioning	WP1, WP2, WP3, WP4, WP5, WP6, WP7	M24	ECR1, Report on Capacity Building within the Consortium (D2.2), Tools for conducting research (D3.2, D4.2, D5.3), Open Calls resolution report (D6.1), Interim Impact Assessment Report (D7.2), Citizen Social Science Open Training Materials (D8.4)
M4	CoAct R&I activities successfully ended	WP3, WP4, WP5, WP6	M34	General policy brief (D2.5) and detailed policy briefs regarding each R&I activities (D3.3, D4.4, D5.4 and D6.2).
M5	CoAct results disseminated to all stakeholders	all	M36	Final project conference over and documented, all deliverables made available

Table 3.2a: List of milestones.

3.2.b Management procedures

Meetings. Face-to-face plenary project meetings of the GA will be organized every 6 months (including M1 for the kick-off, and beginning of M36 for the final meeting). They will take place together with internal Capacity Building actions in order to keep travel expenses and environmental impact as low as possible. To ensure proactive communication with the EC, a budget is also foreseen for meetings between the EC and the Coordination in Brussels. In exceptional cases, additional meetings can be envisaged.

Internal communication and virtual tools. Since project partners are located in a variety of countries, the communication, coordination and cooperation of the project team members will be supported by a number of virtual tools: A cloud service for knowledge sharing, an online collaborative platform, Email lists (internal and for stakeholders), and Etherpad (a collaborative online and open source writing tool that provides tools for live drafting and meeting documentation).

Knowledge and data management. The public outputs and knowledge produced throughout the duration of the project will be organised, stored and disseminated using the website and repositories as the core platform. We will use other existing communication channels (i.e. twitter and instagram) when promoting the project. WP and Task Leaders will be responsible for communicating knowledge produced by the WP or specific Tasks. The data management is described in detail in Section 2.2.2 Open Science Policy and in Section 5.1 Ethics.

Quality assurance. The Project Management and Quality Assurance (QA) Manual, delivered at M3, will give clear instructions to ensure appropriate quality control, that will be monitored during the whole project (T1.3). It will cover procedures for the write-up of deliverables, e.g. language and quotation standards. For all deliverables, they will define an appropriate level of review, which can range from a quality check by a member of the QA task team (provided by the coordinator - UB) to a review procedure, including peer review by external experts (budget for daily fees has been reserved) or Advisory Board members and/or an open community review. QA procedures will also include reviews by the Coordination at key milestones in the project.

Risk management procedures. Although the project does not include elements which simultaneously have both high risk and high probability, risk management is still considered important for the successful completion of a complex project such as the CoAct. Risk management identifies, quantifies and manages risks that could endanger the project or parts of it. Risk management is part of the management task in WP1. The Coordination will continuously monitor and re-assess project risks. Risk management will focus mostly on the process of risk mitigation. This involves the identification of remedial actions for the risks requiring active management, the

segregation of those risks that only require monitoring, and the recording of secondary risks that might arise from implementing the risk mitigation plans. The expected potential risks and respective contingency plans are shown in Table 3.2b.

Description of risk	Level of likelihood	WPs involved	Proposed risk mitigation measures
Knowledge coalitions fail to co-create / work together	low	WP3-5	Since stakeholders were also involved in the writing of this proposal from the beginning, and especially in designing the R&I Actions, we think there is a strong will to work together for social good. However, arising problems will be closely monitored and hopefully solved via mediation procedures by local case action partners.
Keeping a balance between research and solutions for involved stakeholders	medium	WP1, WP2, WP3-6, WP7	Here feedback from the participants in the knowledge coalitions and the Advisory Board will be crucial. The project interim report will focus on this issue.
Low local visibility of the project for target stakeholders	low	WP3-6 WP8	Consortium members and knowledge coalitions are very well connected to their communities and already have visibility locally. Our communication and dissemination measures will foster this visibility.
Methodological framework fails to integrate all relevant methods	medium	WP2, WP3-5	There are many potential approaches out there, and we cannot integrate all of them. However, via the internal Capacity Building throughout the project we will identify the most suited methods for our concerns.
Co-creation sessions drive project into different direction, more efforts needed than originally planned	medium	WP3-5, WP7	The consortium will keep the necessary flexibility to adapt to shifts in issue definition and respective necessities of method and evaluation. The work plan as it is designed now is flexible enough to include such shifts.
Data quality of Citizen-generated Data too low	low	WP3-5, WP6, WP7	Since this is a core question in the issue of socially robust data, it will be addressed together with all stakeholders from the beginning. The notion of “data quality” will be examined critically in general throughout the project.
Project documentation is too complex	low	All WPs	Since one main focus of the project is on social impact, we will make sure from the beginning to produce easy to understand and broadly comprehensible documents, as well as visualizations for the monitoring of the project progress.
Partner fails to deliver and stops cooperation	low	All WPs	The consortium consists of highly motivated and reliable partners, all members have extensive networks to replace unavailable workforce.
Work not delivered on time by project partners	low	All WPs	In case of late delivery the timing needs to be adapted. UB and other lead partners will closely monitor all project activities and send out early warnings.

Table 3.2b: Critical risks for implementation.

3.3 Consortium as a whole

Regarding the geo-political distribution of the Consortium, CoAct brings together **7 European partners** representing 4 countries (2 partners from Spain, 2 from Austria, 2 from Germany, and 1 from United Kingdom) and **2 South American partners** (both from Argentina). Although their headquarters are based in UK and Germany, two partners (OKF and GIG, respectively) are acting in CoAct as European-level organisations with a worldwide network. Considering the budget, Spain represents a 25%, Austria a 32%, Germany a 24%, UK under

the form of a worldwide network a 10%, Argentina a 9%, and finally a 3% will be spent in the form of cascading grants with global European and Eastern countries impact (although these cascading grants are formally included in the budget of FHP and OKF). From the 9 partners, **4 are Research Universities, 1 is a Private-Non-Profit Research Organisation, 1 is an NGO of end-users, 1 is an NGO for social justice rights, and the last 2 are global networks of Open Science and Open Data activism.**

CoAct is coordinated by **UB, which is a big and transversal Public University that has coordinated 44 European projects in FP7 and H2020 and thus manifests its leadership on R&I.** The CoAct consortium has been assembled through a careful partner search to cover complementary and diverse R&I capacities of a *social* Citizen Science. Research group leader from UB is a pioneer of the Spanish Citizen Science. **UB has a proven quality on including participatory dynamics in top-rated Computational Social Science and Complex Systems Science research since 2012** and, through **SwafS STEMForYouth**, it has co-created with young students public experiments and developed a Citizen Science toolkit. **ZSI are well-known experts on configuring evaluation for social impact**, have participated in the **pioneering EU Citizen Science project (FP7 Societize)**, and have a long trajectory with other EU projects related to Citizen Science like **CAPTOR, MAKE-IT** and, most importantly, the recent **CSA EU-Citizen.Science**. **UNIVIE** will contribute with their strong expertise in **Participatory Action Research** and in **working with youth**, a segment of population that is generally not included in decisions and policies. **UNIVIE** will also contribute in a rather unique manner with oral and visual formats to enhance participation and inclusivity. **FHP** will provide their more recent reflections on the **limits of Citizen Social Science from a qualitative Social Science perspective**. Their extensive expertise of **Participatory Social Science** implements their **Research Forum methodology**. Conversely, **UNSAM**, an organisation from a non-EU country, will contribute through the perspective of science related policies, Sustainable and Development Goals in developing countries (e.g. their **UK Economic and Social Research Council ESRC grant**). **UNSAM is able to provide a unique contribution: it combines Development, Open and Collaborative Science, and Citizen-generated Data methods.** This is indeed an important discussion topic in today's Citizen Science global policies. All these academic methodological approaches are harnessed in CoAct with informal organisations' long experience in Open Data and on Open Science. **OKF** has long-standing capacities on realising open data's value to society by helping civil society groups access and use data to take action on social problems. The OKF's School of Data network includes 13 organisations and a total of 101 active individuals, and have trained over 6,500 people since 2013. **OKF expertise will offer ways to citizens to take a strong data ownership, locally and globally.** **GIG** global network, which will also be in charge of Communication and Dissemination, complements OKF's approach **by focussing on community of innovation hubs, makerspaces, hackerspaces, changemakers, and other grass-root innovation community spaces.** **GIG** has also experience in EU projects on maker cultures and social innovation, such as **Made4You/Careables**. Both OKF and GIG will together provide fresh methodologies and strategies to open up research processes and better align them to Open Science and Data Science principles. Last but not least, CoAct also includes in the consortium CSOs that represent vulnerable groups of citizens. **FSMC, founded in 1996, is a federation that aggregates families and users of mental health services all over Catalonia and that has been collaborating with UB since 2014.** Having already experience with European projects - **Maratone** (Marie Skłodowska-Curie Actions ITN), their mission is to improve quality of life, freedom from discrimination, and equal opportunities for people with mental health problems and their families/caregivers and ensure the protection and full exercise of their rights in all spheres of life. The second CSO, **FARN**, is from Argentina is **a key actor to develop a R&I Action on Environmental Justice, jointly with UNSAM.** Without FARN, it would be impossible to undergo the very special Citizen Social Science R&I in an international country (Argentina). Since 2012 and through an European project, FARN has been working with inhabitants of the Matanza-Riachuelo basin exposed to severe environmental health risk. The Matanza-Riachuelo **basin is a very special location where CoAct can provide a local long-lasting impact and can extract valid experiences to be replicated in the European context.**

3.4 Resources to be committed

The resources to be committed correspond to a total number of PMs of 226, distributed as shown in Table 3.4a and representing a total of 2.047.226,25 € for the total CoAct budget:

	WP1	WP2	WP3	WP4	WP5	WP6	WP7	WP8	PMs per participant
UB 1	22	4	13	3	3	3	3	4	55.00
ZSI 2	1	4	2	3	2	2	15	2	31.00

UNIVIE 3	1	4	2	15	1	3	2	2	30.00
FHP 4	1	14	1	2	1	5	2	2	28.00
UNSAM 5	1	3	2	2	8	1	2	2	21.00
OKF 6	2	2	1	2	2	8	0	2	19.00
GIG 7	1	2	1	1	1	2	0	12	20.00
FSMC 8	1	1	7	0	0	1	1	1	12.00
FARN 9	1	1	0	0	6	0	1	1	10.00
Total person months	31	35	29	28	24	25	26	28	226.00

Table 3.4a: Summary of staff effort. Person Months for work package leaders are in **bold**.

The following participants' other costs (travel, equipment, goods and services) exceed 15% of the personnel costs:

1/ UB	Cost (€)	Justification
Travel	€ 25,000.00	5 (project meeting + Capacity Building workshops) related trip within Europe for 2 persons; 2 project related trips for cascading grants launching (2 persons); 1 (project meeting + Capacity Building workshop) in Argentina (2 persons); 4 scientific conferences to present the project (1 person); Travel costs for Advisory board members (3*3 journeys to yearly consortium meetings/events).
Equipment	€ 3,750.00	2 desktop computers, 2 laptops for research co-design and conducting research in the field, digital devices for digital platform testing (Chatbot or similar). This cost is the depreciation cost of € 5,000.00.
Others goods and services	€ 68,000.00	€ 3,000.00 (Co-design workshops associated costs: venue, catering, materials); € 5,000.00 (Renting tablets and material for public experiments); € 13,000.00 Experiment set ups in public spaces (disney, material production); € 22,000.00 (coding, design and data visualization of mental health digital platform); € 4,000.00 (Open Access publications fees (3 articles); € 7,000.00 (Summer School and Final Event organization and materials); € 4,000.00 (Datathons and Hackathons organization and material); € 4,000.00 (collaborative digital platform license for Consortium); € 3,000.00 (cloud services for Consortium); € 3,000.00 Audit.
Total	€ 96,750.00	
3/UNIVIE		
Travel	€ 15,000.00	6 (project meeting + Capacity Building workshops) related trip within Europe for 2 persons; 1 (project meeting + Capacity Building workshop) in Argentina (1 person); 3 scientific conferences to present the project (1 person); 3 outreach events (1 person).
Equipment	€ 1,400.00	2 laptops and an audio and video recording device.
Other goods and services	€ 62,000.00	€ 12,500.00 (co-creation workshops with youth: materials, venue, local transport and tickets for exhibitions, catering); € 4,500.00 (translation and proofreading (papers, website, policy briefing, informed consent); € 30,000.00 (social work consultancy and supervision: support in every workshop and at all preparation and reflection meetings), € 15,000.00 (Technical Assessment and guiding from local partners: <i>Spacelab</i> , <i>WAFB</i> , and <i>AMS Austria</i>), in order to set up a workshop format that can count for the participants as a measure and is specifically designed for our research on the youth's view on measurements of 'Ausbildung bis 18' in general).
Total	€ 78,400.00	
4/FHP		
Travel	€ 15,000.00	6 (project meeting + Capacity Building workshops) related trip within Europe for 2 persons; 1 (project meeting + Capacity Building workshop) in Argentina (1 person); 3 scientific conferences to present the project (1 person); 3 outreach events (1 person).
Equipment	€ 2,500.00	2 laptops, audio recording devices, video recording device, software.
Other goods and services	€ 27,000.00	€ 2,000.00 (Capacity Building Workshops inside the Consortium); € 2,000.00 (one open calls launching event in Berlin); € 4,000.00 (Materials, design, prints, rents for supporting Research Pilots); € 5,000.00 (Transcription); € 4,000.00 (Open Access publications fees for 2 articles); € 10,000.00 (Open Citizen Science Toolkit web design and associated videos, photographs or drawings, microlearning video -short online tutorials- and sketching).
Total	€ 44,500.00	
5/UNSAM		
Travel	€ 15,000.00	4 (project meeting + Capacity Building workshops) related trips to Europe for 2 persons.
Equipment	€ 800.00	One laptop for fieldwork.

Other goods and services	€ 5,550.00	Recognition workshop (1 two-day long participatory workshops): catering (€ 200), local travel and per diems (€ 200.00), facilitators fees (€ 300.00), and printing and stationary (€ 200.00); Training in collective mapping: Collapsible cartographies (artistic piece) (€ 1,200.00) / Hackathon for data analysis (€ 700.00): 1 two-day long Hackathon: catering (€ 200.00), local travel and per diems (€ 300.00) and facilitators fees (€ 200); Printing and stationary (€ 2,000.00).
Total	€ 21,350.00	
6/OKF		
Travel	€ 15,000.00	6 (project meeting + Capacity Building workshops) related trip within Europe for 2 persons; 2 data literacy training related travels within Europe (1 person); 2 open calls launching events within Europe (2 persons).
Equipment	0	/
Other goods and services	€ 15,000.00	€ 10,000.00 (print materials, web tutorials, venues); € 5,000.00 (translations).
Total	€ 30,000.00	
7/GIG		
travel	€ 15,000.00	6 (project meeting + Capacity Building workshops) related trip within Europe for 2 persons; 6 outreach events within Europe (1 person).
Equipment	0	/
Other goods and services	€ 31,000.00	€ 3,000.00 Open Deliverables Editing; € 2,500.00 Brochure Design 2; € 2,000.00 Dissemination material for Hackathon and Datathons; € 2,000.00 Dissemination material for Open Calls launching (Capacity Building events); € 6,000.00 Microlearning videos for website; € 5,000.00 Digital storytelling and infographics for website; € 2,500.00 Flyer and postcards design; 6,000.00 € Vienna Exhibition Design and production; € 2,000.00 Material printing.
Total	€ 46,000.00	
8/FSMC		
Travel	€ 8,000.00	4 (project meeting + Capacity Building workshops) related trip within Europe for 2 persons.
Equipment	0	/
Other goods and services	€ 5,000.00	€ 2,000.00 (Materials for local participants coordination); € 3,000.00 (Dissemination material for local stakeholders).
Total	€ 13,000.00	
9/FARN		
Travel	€ 8,000.00	2 (project meeting + Capacity Building workshops) related trips to Europe for 2 persons.
Equipment	€ 800.00	One laptop for fieldwork.
Other goods and services	€ 7,400.00	Collecting mapping 2 two-days long participatory workshops: renting spaces (€ 800), catering (€ 500.00), local travel & per diems (€ 400.00), facilitators fees (€ 800.00), and printing & stationery (€ 800.00); 6-8 training activities/fairs to promote the platform: catering (€ 800.00), local travel & per diems (€ 1,000.00), training fees (€ 1,500.00), and printing and stationary (€ 800.00).
Total	€ 16,200.00	

Table 3.4b: ‘Other direct cost’ items (travel, equipment, other goods and services, large research infrastructure).

Subcontracting is foreseen for:

- a company developing the visual identity of the project and building and hosting the website (to be hosted beyond the project’s end for a minimum of 5 years) for an amount of 15,000.00 €. The subcontracting will be done by GIG.
- a company for the crowdsourcing platform development of R&I action on Environmental Justice for 18,000.00 €. This platform will include innovative crowdsourcing data functionalities, visualization tools for environmental risks and downloadable maps. It will be available as an Open Source code. The subcontracting will be done by FARN.