SciShops

ENHANCING THE RESPONSIBLE AND SUSTAINABLE EXPANSION OF THE SCIENCE SHOPS ECOSYSTEM IN EUROPE

D3.1

European Synergy Status Report

This project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under Grant Agreement No 741657.

Project

Acronym:	**SciShops.eu**
Title:	Enhancing the Responsible and Sustainable Expansion of the Science Shops Ecosystem in Europe
Coordinator:	SYNYO GmbH
Reference:	741657
Type:	Research and Innovation Action
Program:	HORIZON 2020
Theme:	Participatory research and innovation via Science Shops
Start:	01. September 2017
Duration:	30 months
Website:	project.SciShops.eu
Consortium:	**SYNYO GmbH (SYNYO)**, Austria **Handelsblatt Research Institute GmbH,** Germany **University of Hohenheim,** Germany **KPMG Limited,** Cyprus **The National Unions of Students in Europe,** Belgium **Institute of Social Innovations,** Lithuania **University of Oxford,** United Kingdom **Katholieke Universiteit,** Belgium **Universidad Carlos III De Madrid,** Spain **Universitatea Politehnica din Bucuresti,** Romania **Universitá Degli Studi Di Brescia,** Italy **Universiteit Leiden,** Netherlands **International Center for Numerical Methods in Engineering,** Spain **Institute Jozef Stefan,** Slovenia **Wuppertal Institute for Climate, Environment and Energy,** Germany **Vetenskap & Allmänhet,** Sweden **Bay Zoltán Nonprofit Ltd. For Applied Research,** Hungary **SciCo Cyprus,** Cyprus

Deliverable

Number:	**D3.1**
Title:	**European synergy status report**
Lead beneficiary:	Universitatea Politehnica Bucuresti (UPB)
Work package:	WP3: ENGAGE: Stakeholders Analysis, Involvement, Knowledge Exchange Roadmap
Dissemination level:	Public (PU)
Nature:	Report (RE)
Due date:	31.01.2018
Submission date:	31.01.2018
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Acknowledgement: This project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under Grant Agreement No 700583.

Executive summary

The report identifies winning H2020 and FP7 participatory and community-based research projects and establishes strong synergies and links with the SciShops.eu activities to enhance the pan-European knowledge exchange. The report presents potential connections and partnerships that could be developed between the SciShops.eu consortium and previous similar or related initiatives, trying to add value to the results generated already by previous or ongoing projects in the field of a participatory and community-based research and public engagement in research through Science Shops. The synergies will help in spreading the project's results to a broader audience but also to learn from other projects' findings.

The scan for projects specifically addressing Science Shops/CBR/CBPR found 11 H2020 projects, 6 FP7 projects, 10 FP5 and FP6 projects, 5 other initiatives and 16 networks. From a total of 32 European projects and other initiatives more than 70 valuable resources for establishing synergies have been identified. Based on the "**Synergy Matrix I**" and "**Synergy Matrix II**", the partners will be able to select and use, and furthermore to establish synergies with selected European projects/initiatives for producing other resources with a high added value.

The Strategic Plan sets the vision, goals and main objectives of the **SciShops.eu Synergy Process** for the project length (2018 – 2020) in accordance with project objectives. This document identifies short term objectives, to be achieved during the two-year period. At this early stage, the *Strategic Plan of the SciShops.eu Synergy Process* is a general one; it should be finalised after selecting the projects with which dynamic synergies will be established. All static synergies that were identified can be used, in certain conditions, without any strategy.

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Acronyms

CBPR	= Community Based Participatory Research
CBR	= Community Based Research
CORDIS	= Community Research and Development Information Service
CSO	= Civil Society Organization
EU	= European Union
FRS	= Final Report Summary
HEI	= Higher Education Institutions
LK	= Living Knowledge
LKN	= Living Knowledge Network
NGO	= Non-governmental Organisation
NPO	= Non-Profit Organisations
PE	= Public engagement (in research)
PR	= Participatory research
RRI	= Responsible Research and Innovation
RTD	= Research Technological Development
SiS	= Science in Society
SSE	= Science Shop Ecosystem
SwafS	= Science with and for Society
WP	= Work Package

1 Introduction

The international ecosystem of Science Shops and similar organisations involved in community-based research (CBR) and community-based participatory research (CBPR) is vast and extremely diverse. Besides its existing links, collaborations and partnerships, the ecosystem expansion depends on its sustainability and systematic involvement in the responsible research and innovation (RRI). The ecosystem components are in specific relations with the environment and between themselves, in multiple connections between different levels embedded on various architecture models. Like the natural organisms interrelate and connect with their environment, the Science Shops organisations are strongly linked with their surroundings. The Science Shop Ecosystem (SSE) could be considered as a complex of research entities (universities, research units, community organisations and other stakeholders) collaborating in the process of community engagement in research and knowledge transfer to public. They are in a relation of producing, transferring, receiving and "consuming" knowledge, in what it can be called the "knowledge chain", as knowledge producers and knowledge consumers. The entities/components of Science Shops ecosystem are diverse and interact, similar with living organisms, in different ways. The interactions may have positive, neutral or negative impacts on the components involved. Only the positive synergies components are interacting through constructive relations.

The entities of an SSE coexist without a high degree of interrelation. They can survive independently, but the success achieved depends of the existence of the connections they have inside the ecosystem. The ability of a SS to "survive" depends on the relationships it has with the community, with the stakeholders, and other SS organisations and is strongly rely on the ability to identify appropriate partners, manage the relationships with them and solve their research requests.

The most often, relations are of symbiotic type: the SSE components interact in a mutually beneficial way (mutualism) or one component will benefit while the other component is not harmed (commensalism).

Neutralism describes the relation between two entities (Science Shop) that interact but do not affect each other and can frequently exist, e.g., between Science Shops that are not part of a network or have different fields of interest.

Competition, as an interaction between SSE components, in which the strength of one could be lowered by the presence of another, is met, for example, during funding programs. It could affect the structure of the SSE community.

The SSE components have different life span and are characterised by productivity, sometimes as a measure of their success. This strongly depends on the attracted funds.

One of the most important characteristic of SSE is communication of the research results and the knowledge transfer in the **knowledge chain**. On one hand, this relates to communication between stakeholders and Science Shops, on the other hand, the communication of the research results is a very important step. The results have to be communicated in a scientific manner in scientific publications, but at the same time they have to be made available to the public in an open way.

There is no doubt that inside Science Shops networks, communication is vital in changing ideas, results, and case studies in addition to participation to joint events.

Due to the diversity and scope of questions received from CSO, the Science Shops could have difficulties in satisfying demand. Therefore, they would gain from cooperation, with the aid of the European Commission, in pooling their resources, their work, and their experience. The European Commission has funded a number of projects for taking stock of the results of Science Shops. Because of their combination of local and European elements, the Commission placed the Science Shops on its agenda since 2001 in the framework of its Science and Society Action Plan (European Commission, 2001), encouraging them to collaborate with each other.

The **Ex-post evaluation of Science in Society in FP7** (EC-DGRI, 2016) set up *Strategic recommendations as* an outcome of the assessment of FP7 SiS programme. It analyses the impact and achievements, as well as the added value demonstrated by the programme. Answering to "**a strong need to package up the results** of SiS projects in a way that makes them meaningful to potential 'users' such as policy makers, practitioners and industry", one of the recommendation (EC-DGRI, 2016a) was to maximize of the added value and impact of FP7. The Unit RTD B7 response to recommendations made the same recommendation for H2020 and emphasized the need for additional focus in SwafS Work Programme on science communication and **learning and reflection upon past and current projects**.

This report will describe potential connections that could be developed between the SciShops.eu consortium with ongoing and past projects or related initiatives. The synergies will help in spreading the project's results to a broader audience but also to learn from other projects' findings.

In its research, development and innovation process, SciShops.eu will make use of the data provided by H2020/FP7 projects and international initiatives. This study focuses on establishing synergy processes with the appropriate projects to enhance pan-European and international knowledge.

The report assesses winning H2020 and FP7 participatory and community-based research projects establishing synergies and links with the SciShops.eu activities for enhancing the pan-European knowledge exchange. The synergic process will focus on:

- using results produced by past projects;
- maximising the use of lessons learned in the past as well as update and add value to the lessons;
- establishing contacts and interact on a regular basis with the partners of past and ongoing projects;
- sharing SciShops.eu results to a broader audience through the partners of the past and ongoing projects;
- finding out if what kind of collaboration could empower SciShops.eu project results;
- identifying the target potential beneficiaries/stakeholders, experts and advisory board members among the groups involved in past projects or are partners in ongoing projects and initiatives.

1.1 Deliverable 3.1 in the context of SciShops.eu

This report will describe potential connections and partnerships that could be developed between the SciShops.eu consortium and current or previous similar projects or related initiatives. The synergies will help in spreading the project's results to a broader audience but also to learn from other projects' findings. It is the first deliverable of Work Package 3: "ENGAGE: Stakeholder analysis, involvement, knowledge exchange roadmap" that will be the vast collection of relevant stakeholders for the Science Shops ecosystem as well as experts in participatory community-based research. The report responds to Task 3.1 that identifies winning H2020 and FP7 participatory and community-based research projects and aims to establish strong synergies and links with the SciShops.eu activities to enhance the pan-European knowledge exchange.

1.2 The concept of Synergy

The strategy of maximisation the added value and impact of current or past projects consists of identifying and leveraging the resources and creating new sources of value that form the base for building synergy.

For the purpose of the project two types of synergies will be defined:

- **Static synergy** – the synergy effect results from the relationship between the new project SciShops.eu and existing resources generated by past projects (FP5, FP6, FP7 and some H2020).

  A synergy is never absolutely static. The synergies could be considered static since it is not possible to interact directly with the project activities, or at best with the partners or project coordinator. Instead, their results will be used, i.e., for the purpose of exploiting and testing, e.g. for new models of Science Shops. Thus, the information offered by past project outcomes will contribute to a sustainable use of resources under a synergic process.

- **Dynamic synergies** - the synergy effect results from the relationship between similar ongoing projects that are developing resources under a collaborative dimension. In this case the synergic processes have to be planned. Ongoing projects can create synergies based on adequate and synchronized roadmaps created for two or more projects.

The success of synergic processes typically requires creating dedicated strategy for finding common interests or objectives, identifying opportunities, setting goals for value creation, and providing incentives with real upside for breakthrough performance.

The "four Cs" of synergy approach developed by Puranam and Vanneste (2016)[1] for corporate strategies, offers a reciprocally and cooperatively exhaustive categorisation of four types of operational synergies. Using this approach as a starting point, the four types of synergies could be easily adapted for the purpose of classification of synergic processes between projects:

[1] All links have been retrieved on 22.12.2017

SYNERGY TYPE	CHARACTERISTICS
Consolidation	involves creating values for highly similar resources by eliminating redundancies. The resources identified must be analysed, adapted and eventually adjusted to be taken into account in synergies. An example might be merging resources of the separate projects, adapt and complement them with new and update findings and research results. Consolidation synergies will be developed during the elaboration of SciShops.eu training materials for new Science Shops, for training modules as well as guides for establishment and running of Science Shops.
Combination	involves pooling highly similar resources to gain bargaining power. Unlike consolidation, no resources are eliminated in achieving synergy. One example could be consecutively combining two events for reducing the costs for participants as well as for the organisers. This type of synergy will be achieved by SciShops.eu during the organisation of joint events like trainings or conferences, with related/sister projects
Customisation	partnership based on joining two entities' distinctive value chains. For instance, one project consortium with a strong expertise in training Science Shops and another one with experience in drafting manuals and other publications collaborate to develop a manual for staff or stakeholders' training. The outcome of the customisation should be that the final product, the manual, will work better for different staff groups or stakeholders. Intangible assets such as best practice or knowledge from one organisation can be customised by another to generate value.
Connection	it basically consists in a tying effect when different projects link up to expand their connections, seeking new collaborations in their field of expertise and not only.

Table 1. "Four Cs" of synergy classification (adapted) - approach for projects' synergies

An original classification of the synergies was done and used by the **WIKIAlps project**[2], co-financed by the *European Regional Development Fund* through *the Interreg Alpine Space programme*. It defines synergies "*as an interaction of elements that, when combined, produce a greater effect than the sum of the individual elements or contributions*" and identifies, for the purpose of the project, eight classes of synergies among projects related with Alpine areas[3]. The types' best suited to SciShops.eu synergies were adapted and described in Table 2.

[2] http://www.wikialps-project.eu/Pages/default.aspx
[3] http://www.wikialps.eu/doku.php?id=wiki:synergies

SYNERGY TYPE	CHARACTERISTICS
Subject specific	*Two or more projects address the same topic, but from different perspective and thus results could be enriched if joined and interrelated*. For example, when two projects are undertaking the environmental impact respectively social or health impact of an activity performed in the same area.
Data	*Two or more projects have collected data, that could be merged and additionally some new indexes could be calculated based on the datasets from different projects.* The data collected by SciShops.eu through questionnaires and interviews designed to gather information, could be merged with similar resources for extending, for example, the targeted group and for covering broader stakeholder categories.
Institutional/network	*Two or more partnerships separately work on the same topics – when joined their results could be much greater.* This type of synergies will be established, for example, by organizing events, conferences along with other project consortia for a greater impact.
In tools	*One project can develop a tool that can be used also in other cases (e.g. platforms, training tool kits).* The platforms, manuals, guidelines developed by selected closed and/or ongoing projects will facilitate sharing the knowledge and information previously gathered. Base on them, SciShops.eu will design, develop and customise new resources for modules, pedagogy and training for Science Shops staff.
In approaches and methods	*Two or more projects use methodological approaches that could be combined into comprehensive methodology that could be implemented in other situations.* This type of synergies will be developed by SciShops.eu with other H2020 projects for organizing summer schools, knowledge cafes and co-creation events with Science Shops staff, trainers and experts in the field, but also with community and interested organizations representatives

Table 2: Types of synergies identified within WIKIAlps project

Many of these types of synergies are applicable to SciShops.eu and the projects briefly described in Section 2.

1.3 Methodological approach

This section provides information on the methodologies that were used to collect relevant data and information for investigating potential links, collaborations and/or synergies as well as the way of identifying the strong synergies with SciShops.eu. The main steps are:

- conducting a desk research by browsing the existing online data about projects and initiatives related with SciShops.eu project (CORDIS database, CBR and CBPR networks, RRI-tools website). The search process was carried out using several keywords ("science shop", "research centre", "community-based research"," community-based participatory research", "community engagement in research");
- refining the search results and, retaining initially only FP7 and H2020 projects. During the search many valuable reports of earlier project were identified, like those from FP5 and FP6). Consequently, these projects were also retained. A list of the projects and initiatives was created;
- scanning the available information about the identified projects and initiatives for potential synergies and links with SciShops.eu;
- elaborating the Synergy Matrix I of potential synergies with SciShops.eu (Projects x Potential Synergies);
- evaluating the projects in Synergy Matrix I against the synergies that could be created. The projects will be assessed for potential links, relationships and relevance with SciShops.eu, on one hand, and research performed in Science Shops/research centres, CBR/CBPA, public engagement in research;
- elaborating a matrix of strong synergies (Synergy Matrix II) is elaborated (Projects x Strong Synergies) based on the findings from previous step that will contain the projects for which the strong synergies with SciShop.eu will/could be set up.

2 SciShops.eu potential links with other European projects

2.1 Explore SciShop.eu objectives, activities and outcomes

SciShops.eu develops a strong strategy for growing and building capacity in the European Science Shops ecosystem through conducting an extensive assessment and analysis of existing Science Shops and other concepts of participatory and CBR across Europe and beyond. At least ten new Science Shops will be established within different types of research organizations (SMEs, Large enterprises, universities, NGOs and research institutes) based on the acquired knowledge, experience, best practices and guidelines.

SciShops.eu main objectives
O1 ASSESS European and international Science Shops characteristics and players, drivers and barriers of establishing a science shop.
O2 IDENTIFY and engage relevant community and research stakeholders through organization of participatory events.
O3 ELABORATE a strategy for CBR and knowledge transfer from Science Shops to society for the benefit of the community.
O4 BUILD an online platform with best practices in the field, guidelines and recommendations for networking between Science Shops activities and exchange and matchmaking.
O5 CONCEPTUALIZE and organize summer schools and knowledge cafes with students and trainers from the same field but from different geographical areas.
O6 ESTABLISH new Science Shops within different types of research organisations, based on the acquired knowledge, experience, best practices and guidelines.

Identification of the main elements within existing objectives, activities, outputs, deliverables, etc. of SciShops.eu project that can underpin the development of synergies were carried out through scanning for potential elements that can be translated to synergies through collaborations and partnership with other projects and initiatives.

EXPLORE

Baseline research and best practice assessment of participatory and CBR

For most of the research projects one of the starting steps is gathering information about existing knowledge from previous research initiatives, information about research or target groups as well as the research results. In this regard, SciShops.eu focuses on the identification and analysis of the existing studies, publications, best CBPR practices and strategies, aiming at establishing interconnections between the SciShops.eu project and previous similar or related initiatives. These linkages will support the identification of potential synergies with FP7, H2020 projects and other initiatives.

RRI tools

Different RRI tools were developed under European and international initiatives. The SciShops.eu project selected and will use the RRI tools that foster CBPR, with the view of creating a bridge between science and society. This bond can facilitate a better alignment of scientific results with the society's needs and concerns through Science Shops intervention, and enables the networking within the Science Shops ecosystem. Related mechanisms will be searched for in FP7, H2020 and other initiatives, to establish possible synergies with SciShops.eu.

Case studies of successful participatory community-based research

Complex issues such as CBPR can be better examined and understood by using case study research. The project capitalizes on a comprehensive collection of successful CBPR case studies and analyses their methods and outcomes. A selection of the ones that best qualify for the development of the Science Shops ecosystem will be made, with a view of establishing potential synergic elements with FP7, H2020 projects and other initiatives.

Surveys on Science Shops and/or CBPR

The project uses an online survey as a means for learning what motivates survey respondents (researchers, community organizations and policy makers) and what is important to them and gather meaningful requirements, opinions, needs, comments, and key use cases. This valuable feedback from Science Shops and/ or other CBR organisations represents a baseline for developing potential synergy processes with FP7, H2020 projects and other initiatives.

Classification of Science Shops - Science Shops taxonomy

SciShops.eu will provide a comprehensive taxonomy of the existing Science Shops (both university and non-university based) according to criteria such as theme, type of mother organization and capacity level. This classification will represent the benchmark for the Science Shop establishment guide, as well as for developing multidimensional synergic connections with FP7, H2020 projects and other initiatives.

Assessment of challenges and impacts of existing Science Shops

The project investigates the issues that needed to be addressed by Science Shops to continue to operate on the market and assesses the impacts they have had locally - on their communities and internationally - on the entire European society and beyond, in response to the public's research questions. This analysis will extend to more than 30 Science Shops and its outcomes will serve as a platform for developing possible synergies between SciShops.eu and FP7, H2020 projects and other international initiatives.

ENGAGE

Experts and advisory board/Stakeholders

The project will provide a broad list of stakeholders relevant for the Science Shops ecosystem, including Science Shops, universities and research institutes, which is to be used to select an extensive group of Experts and the members of the Advisory Board. The lists of the Experts and

Advisory Board will be further exploited as synergic elements, similar with those pertaining to FP7, H2020 and other international projects.

Engagement strategy on CBPR

To promote CBPR, an engagement strategy of the identified Experts and Advisory Board in the SciShops.eu project will be conceived. This engagement strategy will as well as potentially accentuate the synergic processes with FP7, H2020 projects and other international initiatives.

Events - knowledge transfer and training, co-creation events and knowledge cafés

A strength – based approach to engaging the identified stakeholders in SciShops.eu, relies on the conceptualization and organization of training and knowledge transfer events. Training of new Science Shops' staff will progress through summer school events, while knowledge transfer from the Science Shops to the communities will evolve through "Knowledge Cafés" and co-creation events. These activities, together with their outcomes will lay the foundation for developing the initial SciShops.eu Knowledge Exchange Roadmap and for seeking potential synergies with FP7, H2020 projects and other international initiatives.

GENERATE

Science Shops scenarios

To carefully predict the barriers a science shop might encounter along its entire life cycle, key use cases covering all types of Science Shops will be gathered from the previously assessed Science Shops ecosystem, and various scenarios will be built, based on existing Science Shops but also on imaginary ones to cover all possible layouts. The existence or the development of different Science Shops scenarios are to be explored within FP7, H2020 projects and other international initiatives to establish potential synergies with SciShops.eu.

Methods, RRI tools for an effective knowledge exchange/transfer

RRI tools and participatory research methods will be identified and used for an effective knowledge exchange/transfer in the CBPR process between Science Shops and civil society. Similar tools and methods used in FP7, H2020 projects and other initiatives will be identified and described in the next chapters for facilitating synergy processes.

Modules for training Science Shops' staff

Within the SciShops.eu project, the training modules that will be designed for the new Science Shops' staff, will be tailored in accordance with the mother organization's profile, and delivered during summer schools. The development of the training materials (e.g., lesson plans, presentations, different scenarios) will be led by experienced science shop staff, supported by and with input from the RRI experts.

Science Shops establishment guides

To strengthen the creation and the operation of the new Science Shops based on the type of mother-organization, the SciShops.eu project will prepare Science Shops establishment guides. Besides the guides for university-based Science Shops, which are being set-up within previous initiatives, all the other establishment guides destined for research institute, SMEs, LEs or NGOs/NPOs based Science Shops will be the subject of this project. These guides will stress the threats and the opportunities any organization might face at this stage and in the long term.

Strategy for participatory research in communities and capacity building of existing Science Shops

One of the main barriers a science shop must overcome is the lack of research questions formulated by the community. Therefore, to support a better involvement of the community and an improved capacity building of the existing Science Shops, SciShops.eu will set-up a comprehensive strategy for CBPR and for knowledge transfer from Science Shops to the civil society. This strategy will include guides for CSOs on how to formulate research questions, for staff and for resource allocation within the science shop, as well as inputs provided by the first knowledge transfer events within WP3.

EMPOWER

Online platform with best practices, guidelines and recommendations for networking

A web-based platform will be designed and implemented to advance the Scishops project results and to secure a sustainable provision of knowledge and support to all stakeholders. The platform will include best practices in the field, guidelines and recommendations for networking between Science Shops activities, knowledge exchange and matchmaking tools. Similar or related platforms designed in FP7, H2020 projects and other initiatives will be investigated for establishing synergy processes.

ESTABLISH

New Science Shops through twinning and mutual learning

In the SciShops.eu framework, the establishment of new sustainable Science Shops within different types of organizations (universities, SMEs, NGO/NPOs and LEs) will be supported through partnerships and twinning with experienced Science Shops. These activities will have to include the adjustments of the new Science Shops concepts, based on the reported community needs and requirements. Therefore, the project provides for a final session of mutual learning exchange events to further train the new Science Shops' staff.

Knowledge transfer events

Two iterative rounds of knowledge transfer events from the newly established Science Shops to the community will be organized. These events will include “Knowledge Cafés” and co-creation events, and will make use of the SciShops.eu platform. The second round of knowledge transfer will be conducted after the final training of the staff, considering the necessary and required changes to be made, resulting from the feed-back provided by community.

DISSEMINATE

Dissemination: website, factsheets, newsletters, solution leaflets, scientific publications, conferences

Scishops will provide its stakeholders with relevant information concerning the aims of the project, its progress and outcomes through the web platform channels and by using factsheets, newsletters and solution leaflets.

Networking

Through the web platform, SciShops.eu will develop an online collaborative network for CBPR via Science Shops and will reach European policy makers, private sector, research and education sector, as well as the civil society. The SciShops.eu research findings and results, as well as innovative concepts, will be communicated through scientific papers and presentations within specific conferences and symposia.

European SciShops.eu Symposium

The utmost event planned for networking and matchmaking with stakeholders will consist in the European SciShops.eu Symposium. The objectives of the symposium are to present and promote the SciShops.eu outcomes to trigger the interest of a wide range of stakeholders and to lay the foundation for the long-term sustainability of the project.

All the identified topics for potential synergies with other projects are included in Table 3.

	Topics for establishing synergies with other projects	Topic	SciShops.eu WP
1	Research and best practice **assessment** of participatory and CBR	**Assessment**	WP2
2	**RRI tools**	**RRI tools**	WP2
3	**Case studies** of successful participatory community-based research	**Case studies**	WP2
4	**Surveys** on Science Shops and/or CBPR	**Surveys**	WP2
5	**Classification** of the existing Science Shops - Science Shops taxonomy	**Collection and Classification**	WP2
6	Assessment of **challenges and impacts** of existing Science Shops	**Challenges and impacts**	WP2
7	Experts and advisory board/**Stakeholders**	**Stakeholders**	WP3
8	**Engagement** strategy on CBPR	**Engagement**	WP3
9	**Events** - knowledge transfer and training, co-creation and knowledge cafés	**Events**	WP3
10	**Methods**, RRI tools for an effective knowledge exchange	**Methods**	WP4
11	Modules for **training** Science Shops' staff	**Training**	WP4

	Topics for establishing synergies with other projects	Topic	SciShops.eu WP
12	New Science Shops (NSS) establishment, running, evaluation and other **guidelines**	**Guidelines for NSS**	WP4
13	Participatory research **strategy** in communities for Science Shops/ Strategy for capacity building of existing Science Shops	**PR Strategies**	WP4
14	Training new Science Shops through **twinning**	**Twinning**	WP6
15	Online **platform** with best practices, guidelines and recommendations for networking	**Platform**	WP5
16	**Dissemination**: website, factsheets, newsletters, solution leaflets, scientific publications, conferences	**Dissemination**	WP7
17	**Networking**	**Networking**	WP7
18	European SciShops.eu **Symposium** and participation in conferences	**Conferences**	WP7

Table 3: Potential links with other projects

2.2 Search for projects and initiatives and scan for potential synergies

RRI is an approach that anticipates and assesses potential implications and societal expectations with regard to research and innovation, aiming to foster the design of inclusive and sustainable research and innovation. RRI has five dimensions: **public engagement, open access, gender, ethics, science education**; each of these dimensions are promoted under H2020. Our search for projects that could develop strong synergies was focused on the first pillar of RRI, **public engagement in research**, and more specifically on **CBR and CBPR via Science Shops and similar entities**.

The amount of available online information is different for the two main categories of projects:

- the FP7 projects are closed and their Final Report Summary (FRS) is available in CORDIS database. Most of them made available the results of their work online (deliverables like: reports, conference proceedings, tools, platforms, presentations, websites, etc.). The search will be targeted on RRI and PE related projects financed by EU under the calls FP7 “Science in Society” with emphasis on CBR, CBPR, **Science Shops and similar entities**, etc.
- most of H2020 projects started in 2017 and the available information come mostly from CORDIS. The search will be targeted on RRI and PE related projects financed by EU under the calls of H2020 “Science with and for Society” programme (WP 2014-2015 and WP 2016-2017) with emphasis on CBR, CBPR, **Science Shops and similar entities**, etc.

  The search focused on the projects funded by “Science with and for Society” programme. In the research, development and innovation process, SciShops.eu will make use of the data available at the time of the report for the selected projects funded under the Programmes:

H2020-EU.5.a. - Make scientific and technological careers attractive to young students, and **foster sustainable interaction between schools, research institutions, industry and civil society organisations (CSOs)**

H2020-EU.5.c. - Integrate society in science and innovation issues, policies and activities in order to **integrate citizens' interests and values** and to increase the quality, relevance, social acceptability and sustainability of research and innovation outcomes in various fields of activity from social innovation to areas such as biotechnology and nanotechnology

H2020-EU.5.e. - **Develop the accessibility and the use of the results of publicly-funded research**

H2020-EU.5.f. - Develop the governance for the **advancement of responsible research and innovation by all stakeholders**, which is sensitive to society needs and demands and promote an ethics framework for research and innovation

The actions and activities for which potential synergies and links could be established with the SciShops.eu project are assessed. For identifying the types of synergies, the objectives, activities and actions of each project have been explored performing the nest steps:

- scan CORDIS database for projects in relation with Science Shops, CBR, CBPA;
- identify other national, European and international initiatives from the RRI tools platform, Living Knowledge Network website and other sources;
- set a list of relevant projects;
- identify projects' websites;
- identify the **objectives** of the projects;
- look into the projects key **activities and actions**;
- look for any similar/common targeted beneficiaries;
- look into **deliverables** (reports, toolboxes, platforms, etc.) – if available or Final Report Summary on CORDIS;
- find the networks developed by the projects and other initiatives under PE and RRI projects; group the synergies in accordance with Table 3.

The potential synergic elements, links and collaborations identified through the analysis of the objectives, actions and deliverables of an important number of closed FP7 projects as well as H2020 ongoing projects and other initiatives are briefly presented in the next subchapters.

The **main outcomes of the selected projects, having relevance to the SciShops.eu goals,** are described further. These outcomes can be project deliverables, materials presented at the events organized within the projects, scientific papers resulting from projects and conference proceedings as well, and they will be considered as a starting point for achieving synergies.

2.3 H2020 projects

Most of the H2020 ongoing projects have just started and their activities are far from being completed (see Figure 1). Only few of them had made available some deliverables and are still under the process of developing their activities and/or elaborating their deliverables, planning the events and dissemination. The information was collected using mainly CORDIS database. Based on the conclusions of this report, SciShops.eu will be able to develop links and collaborations for those strong synergies that will be identified.

Project	Coordinator Country	Programme	Topic
Big Picnic - Big Questions - engaging the public with Responsible Research and Innovation on Food Security	United Kingdom	H2020-EU.5.c.	ISSI-1-2015 - Pan-European public outreach: exhibitions and science cafés engaging citizens in science
CIMULACT - Citizen and multi-actor consultation on Horizon 2020	Denmark	H2020-EU.5.c.	ISSI-2-2014 - Citizens and multi-actor engagement for scenario building
EnRRICH - Enhancing Responsible Research and Innovation through Curricula in Higher Education	Belgium	H2020-EU.5.a.	SEAC-2-2014 - Responsible Research and Innovation in Higher Education Curricula
FoTRRIS - Fostering a Transition towards Responsible Research and Innovation Systems	Belgium	H2020-EU.5.f.	GARRI-1-2014 - Fostering RRI uptake in current research and innovations systems
HEIRRI - Higher Education Institutions and Responsible Research and Innovation	Spain	H2020-EU.5.a.	SEAC-2-2014 - Responsible Research and Innovation in Higher Education Curricula
InSPIRES- Ingenious Science Shops to promote Participatory Innovation, Research and Equity in Science.	Spain	H2020-EU.5.c. H2020-EU.5.f.	SwafS-01-2016 - Participatory research and innovation via Science Shops
JERRI - Joining Efforts for Responsible Research and Innovation	Germany	H2020-EU.5.c.	ISSI-5-2015 - Supporting structural change in research organisations to promote Responsible Research and Innovation
NewHoRRizon - Excellence in science and innovation for Europe by adopting the concept of Responsible Research and Innovation	Austria	H2020-EU.5.f.	SwafS-09-2016 - Moving from constraints to openings, from red lines to new frames in Horizon 2020
NUCLEUS - New Understanding of Communication, Learning and Engagement in Universities and Scientific Institutions	Germany	H2020-EU.5.c.	ISSI-5-2014 - Supporting structural change in research organisations to promote Responsible Research and Innovation

Project	Coordinator Country	Programme	Topic
SiS.net2 - Network of Science with and for Society National Contact Points	Iceland	H2020-EU.5.f.	GARRI-7-2014 - Science with and for Society National Contact Points (NCPs) in H2020
SPARKS - Sparkling with ideas for RRI	Belgium	H2020-EU.5.c.	ISSI-1-2014 - Pan-European public outreach: exhibitions and science cafés engaging citizens in science

Table 4: H2020 selected projects

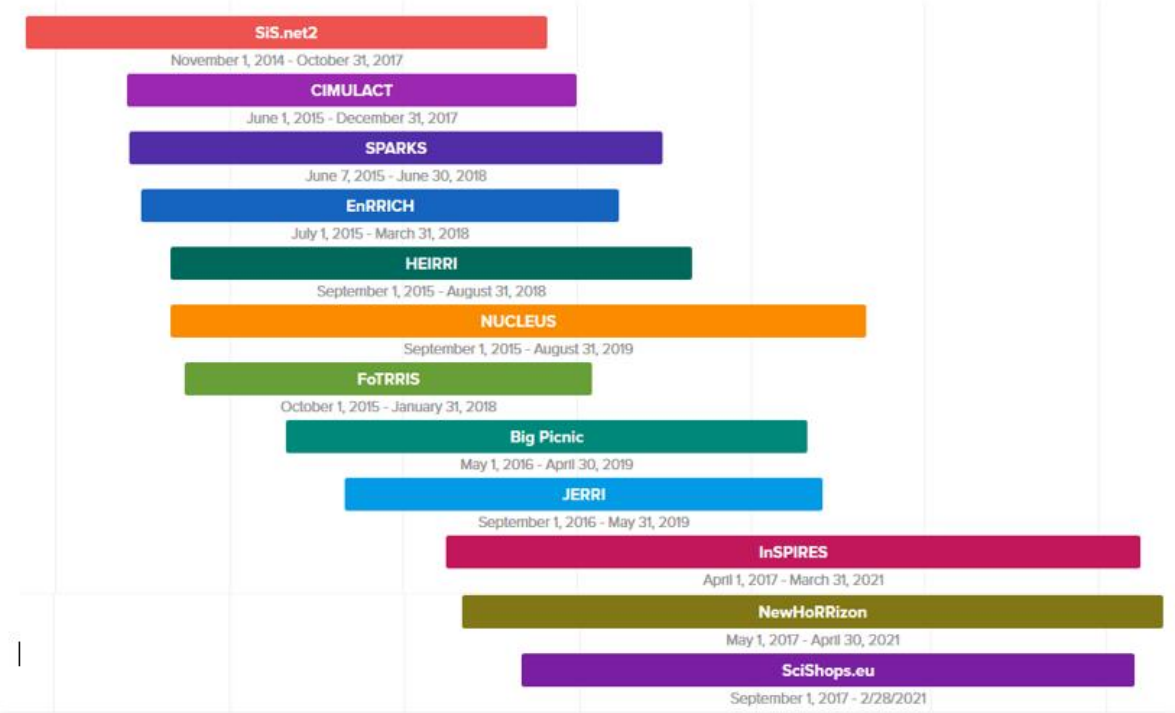

Figure 1. Time scale of selected H2020 projects

BigPicnic

BigPicnic: Big Questions - engaging the public with Responsible Research and Innovation on Food Security" project[4] is an example of CBPR project that engaged community in debates on the future of the food and sharing ideas through a large range of events like travelling exhibitions, activities, science cafés and participatory events, co-created with local people, to generate dialogue and build greater understanding of food security issues.

BigPicnic Partners are international leaders in the fields of food security, public engagement and participatory techniques Most of the partners were botanic gardens.

[4] https://www.bigpicnic.net/about/co-creation/

The botanical gardens represent continuous displays of local useful plants, collections of living plants providing an essential resource for scientific research, conservation and public engagement. They represent an excellent example of a permanent exhibition where the community could be involved in running activities, events or debates on a much closer relationship with the environment that provides daily food. BigPicnic project ensured the tools and the skills to introduce the co-creation method in Partners' organisation, considering co-creation as the best method for involvement of the communities on the topic of food security. It gives excellent examples of **co-creation events**.

BigPicnic defined **co-creation** as "an innovative and participatory process which aims to create shared ownership of a project between institutions and community partners. Co-creation enables professionals to co-operate with and learn from others, to build a connection between groups that would not normally meet, to raise awareness and sensitivity towards important issues and to build relationships between groups and individuals that will last well beyond the scope of a project".

Responsible Research and Innovation (RRI) involves society into research and innovation introducing it in the big "family" of citizens, researchers, policy-makers and businesses. They are involved in the whole process of aligning the outcomes of scientific and technological progresses with the principles and needs of society. In this frame, the outcomes of events and exhibitions developed by BigPicnic intends to provide recommendations for ethically acceptable, sustainable and societal research and innovation, helping to shape the future of our food.

BigPicnic objectives are focused on **increasing public engagement through exhibitions and science cafés, co-creation events** among diverse audiences. Some of its objectives are:

- bridge the gap between the public, policy makers and researchers;
- develop botanic gardens as dialogue centres between public, researchers and policy makers;
- improve the understanding and recognition of RRI through the provision of best practice case studies for an RRI toolkit;
- use the findings of other EU funded projects (INQUIRE, PLACES and VOICES);
- co-develop tools for measuring the engagement of partners and co-creation teams with RRI and the benefits of the co-creation participatory approach adopted in the project.[5]

Stakeholder Engagement Strategy

The goal of the **BigPicnic engagement strategy** (BigPicnic, 2016a) is to help stakeholders for their future through creating openings for collaboration and participation, and to create:

- ownership with existing and new stakeholders so that they can take things forward;
- opportunities for participation and collaboration and sharing competences and knowledge,

To achieve this goal the specific objectives of the BigPicnic's stakeholder engagement include:

[5] https://www.bigpicnic.net/about/

- To create ownership of the food security movement with existing and new stakeholders
- To share competences and knowledge between all stakeholders
- To increase competitiveness and growth in the Food Security sector
- To influence policy and the direction of new research in the field of Food Security
- To respond to relevant and important issues in the context of Food security for both individual Partners and the EU
- To ensure accessible and user - friendly materials and resources for stakeholders
- To maintain stakeholder trust and interest in the project
- To reach the agreed audiences / stakeholders with project outcomes and outputs
- To facilitate sustained action for and engagement with the food security movement post project

Co-creation toolkit and Partner strategies for co-creation

A full description of the methodology used in the project is presented in **Blueprint of toolkit for co-creation** report (BigPicnic, 2016b). It includes a workbook for tailoring co-creation practice for different groups. **Draft partner strategies for co-creation** (BigPicnic, 2016c) contents the individual draft co-creation strategies of all botanic garden partners.

Partner recruitment guidelines and consent. Data use. Ethical guidelines for non-EU-countries

The project developed guidelines[6] related to participants' identification and recruitment to join co-creation teams. The guidelines include practices for the ethical collection and handling of personal data and obtaining informed consent from participants.

BigPicnic used the results and practices of several EU funded projects, including INQUIRE, PLACES, and VOICES. From the success of these projects **BigPicnic** has used, tried and tested techniques such as **Inquiry Based Science Education (IBSE)**, as well as **making use of established networks between the public, scientists and policy-makers**, and following best practice in compiling and analysing citizens' views to advise on future policies and research.

CIMULACT

The main objective of CIMULACT project is to **engage citizens and stakeholders in the co-creation of European research agendas** based on real, validated and shared visions, needs and demands.[7]

CIMULACT aims to contribute to this development by establishing and improving a genuine dialogue between citizens, stakeholders, scientists, and policymakers where visions and scenarios for desirable and sustainable futures can be developed, debated and transformed into recommendations and suggestions for research and innovation policies and topics. The project will offer a strong input to the identification of the future European research agenda by revealing societal needs of more than 1000 citizens all over Europe. Also, it will develop and experiment methods for citizen and multi-actor participation, as well as build capacities in already existing methods.

[6] https://www.bigpicnic.net/resources/partner-recruitment-data-use/
[7] http://www.cimulact.eu/objectives/

Social needs-based research programme scenarios – set of research topics based on European citizens' needs - including 10 to 15 simulated calls for H2020

This report (CIMULACT, 2017) documents the draft **citizen-based research topics** and related CIMULACT policy recommendations that has been produced for the programme Horizon2020. They were finalized at the Pan European Conference, based on the feedback from more than 2000 citizens and experts across 30 countries, when Commission Project Officers, experts and CIMULACT partners finalize the research topics selecting and worked on 23 of them.

1 *At one with nature*
2 *Access to equal and holistic health services and resources for all citizens*
3 *Evidence-based personalized healthcare (initially Qualitative person-centred health)*
4 *Educational ecosystem as a driver of social innovation and local development*
5 *Consume smarter, increase well-being (initially Consume less, enjoy more)*
6 *Smart energy governance*
7 *Balanced work-life model*
8 *Good quality food for all*
9 *Empowered citizens*
10 *Debating alternative economic models (initially Alternative economic model)*
11 *Design thinking & doing and life skills for all*
12 *I'm empowered to lead my changes*
13 *Technology as a means of well-being*
14 *Empowering diversity in communities*
15 *Urban-rural symbiosis*
16 *Learning for society*
17 *Evolving food culture in growing cities*
18 *Meaningful research for community*
19 *Evidence-based community building*
20 *Sustainable transport solutions that enable us to live where we choose (initially Distributed living)*
21 *Fostering equal opportunities in the digital era (initially Digital inclusion)*
22 *Making dense and growing urban areas more sustainable and liveable (initially The bigger (the cities) the better)*
23 *Dissemination and continuous exploitation of research and innovation in the healthcare system (This research topic was created at the pan European conference, based on other research topics. No online rating and prioritization information available)*

Posters of the European Citizens' Needs

CIMULACT project has developed from the 29 social needs extracted during the Clustering Workshop in Paris, a set of 26 intuitive and interesting posters that were used as starting point for the Scenario Co-Creation Workshop in Milano, were citizens and researchers jointly developed research agendas answering to these needs.[8]

[8] http://www.cimulact.eu/wp-content/uploads/2016/04/Cimulact_ALL_POSTER_SOCIAL_NEEDS_reduced.pdf

EnRRICH

EnRRICH project aimed to increase the capacity of students and staff in higher education to develop knowledge, skills and attitudes in RRI, to embed RRI in universities curricula in relation to the research needs of society particularly by CSOs[9]. The project identified, developed, piloted, and disseminated good practice and resources to embed the RRI pillars in academic curricula across Europe.

One of the main objectives of the project is to support new Science Shops creating more opportunities for staff and students embedding RRI in HEIs. The RRI will be embedded in higher education curricula[10] through Science Shops and other similar community knowledge exchange groups. A 15-credit **module for teaching community based participatory research** has been developed and shared. This module will be the support of the trainings and of the **three new Science Shops** establishment process.

EnRRICH project aimed to **build partnerships and engage stakeholders** (CSOs, HEIs, other research bodies, the media, relevant networks, and policy makers) with EnRRICH activities and results, obtaining feedback and encouraging exchange and dissemination of RRI curricula for use by HEIs and other societal actors.

RRI in Curricula - Good Practices and Case Studies

The project explored ways of **embedding of RRI in university** curricula and identified a set of 26 modules and courses. Examples of **good practices and case studies**, were collected by EnRRICH partners. Each of so called "promising practice" gives a short description of the course, learning outcomes and answers to questions like how students' learning is assessed, how students learn with CSOs through the course, how students learn about dimensions of RRI through the course.

The University College Cork- CARL developed a training module on Community Based Participatory Research for PhD students. The enrolled students come from different disciplines and learn about the good practice, CBPR principles, about the importance of working with community groups of organisations. One of the main lesson they learn from this course is the role of the University in society and civic engagement and HEIs.

The EnRRICH tool for educators: (Re-)Designing curricula in higher education from a "Responsible Research and Innovation" perspective

The tool gives information about RRI in higher education (EnRRICH, 2016), about principles of designing curricula, about specific competencies to be acquired by students. The tool can be used to "**refresh existing modules from a RRI perspective"**. The tool provides guidance to educators that are invited to experiment with the tool and identify the best course of action, within their own context.

[9] http://www.livingknowledge.org/projects/enrrich/
[10] http://www.livingknowledge.org/projects/enrrich/work-packages/

PG6025 Community Based Participatory Research - Course Pack and Information

The course pack[11] is a set of CBPR module and materials that was developed to engage students at doctoral level. Elements of this modules could be used at other levels of education as well. They will support academic and research staff to **embed CBPR, as an approach to RRI, within the curriculum**. The module materials include various resources made available by CARL and Campus Engage: **presentations, video, concise case studies, exercises and scenarios, forms, reading list**, etc.

The project organized the 7th Living Knowledge Conference: "Inspire – Integrating community-based partnership into learning and teaching for responsible research and innovation"– in Dublin, 22-24 June 2016.

FoTRRIS

The project **Fostering a Transition towards Responsible Research and Innovation Systems** underlines that RRI is a collaborative activity. In this regard the project develops transition experiments in five EU member states to support the transformation of current research and innovation strategies into co-RRI-strategies.

Platform for co-creation of RRI Project ideas[12]

The platform supports co-RRI facilitating on-line dialogues between stakeholders at different stages of involvement in RRI representing a well-structured process of "various phases and supported by appropriate tools and methods, which guide the participation of innovation actors through the process of co-designing RRI project concepts." The Platform includes 30 titles of potential proposals/projects registered as work in progress.

HEIRRI

Based on an extensive literature review (policy documents, academic papers, results from EU projects on RRI), expert interviews, consultation of the Advisory Boards and the broader communities, HEIRRI developed "Training Programmes" for teaching RRI in higher education institution. EnRRICH is its sister project.

Training Programmes

The HEIRRI deliverable gives a synopsis of 10 training programmes for teaching RRI in HEIs, and not only. It includes:

- an overview of HEIRRI's approach to designing training programmes for teaching and learning RRI in higher education and an outline of the different steps pertaining to the development process, consisting of four closely interrelated steps in detail;
- the key findings from the HEIRRI development process and the insights from consulted higher education stakeholders as well as the main conclusions for the final design of the training programmes;

[11] http://www.ucc.ie/en/scishop/resources/module/
[12] http://ingenias.fdi.ucm.es/fotrris/home.php

- an overview of the ten training programmes:
    1. Teaching RRI in Higher Education – a Guide to the HEIRRI Training Programmes
    2. Studying Responsibility: A Module-Based Integration of RRI into Bachelor's Programmes
    3. Doing and Experiencing Dialogical Reflection on Research and Innovation
    4. Enhance your Thesis
    5. Responsible PhD: RRI and PhD Research Projects
    6. Supporting RRI: Developing RRI Guidelines for PhD Candidates
    7. Teaching RRI in Higher Education
    8. Facilitating Reflection on Responsible Research and Innovation
    9. Considering Responsible Research and Innovation by Design
    10. Concepts and Practice of Responsible Research and Innovation

InSPIRES

The main goal of **Ingenious Science Shops to promote Participatory Innovation, Research and Equity in Science** project is to "*build effective cooperation between science and society by supporting the growth of Science Shops and enabling the expansion of responsible participatory research and innovation* in *Europe and abroad, in order to tackle key societal challenges that affect the world population*". It has very similar objectives with SciShops.eu project. One of the main objective of the project is to **establish new Science Shop structures** and **strengthen existing Science Shops** within and beyond Europe's borders through a training and mutual learning programme around the models and tools developed.

InSPIRES will carry out a **background and baseline research** for understanding, identifying and assessing existing Science Shops ecosystem that will allow building and capitalizing on further public engagement activities.

The project **will develop and pilot new Science Shop models** based on new methodologies (models of SS 2.0) that will make the Science Shops more collaborative, accomplishing in a better way the requirements of RRI process, including impact evaluation requirements. The models will be more culturally, health and environment sectors adapted, with a focus on innovative and participatory techniques for systematically engaging civil society and other key RRI stakeholders in research and innovation.[13]

InSPIRES will give support to new Science Shops by **mentoring and twinning, promoting international cooperation**.

Training activities will be carried out for existing Science Shops and the relevant stakeholders (coordinators and mediators, local communities' representatives, academic staff/researchers, students and local authorities) using tailored manuals.

The **impact evaluation of the Science Shops effectiveness in society** will be reviewed and improved and a new and more effective way of evaluation will be provided, including appropriate guidelines for diverse geographical areas and research fields.

[13] http://www.livingknowledge.org/projects/inspires/objectives/

Communication, dissemination and exploitation activities will raise awareness of these research practices within the civil society, as well as other RRI stakeholders.

SciShops.eu and InSPIRES are two projects funded under *SwafS-01-2016 - Participatory research and innovation via Science Shops* topic, following the same specific challenge and scope, with almost similar objectives, presented in Table 5.

SciShops.eu	InSPIRES
Objective 1: **ASSESS** European and international science shops characteristics and players, drivers and barriers of establishing a science shop **Objective 2**: **IDENTIFY** and engage relevant community and research stakeholders through organization of participatory events.	**Objective 1**: To co-create, and jointly pilot, refine and implement a set of innovative Science Shop 2.0 models aligned with RRI, OSc and impact evaluation requirements and that are more culturally, health and environment sectors adapted, with a focus on innovative and participatory techniques for systematically engaging civil society and other key RRI stakeholders in research and innovation.
Objective 3: **ELABORATE** a strategy for CBR and knowledge transfer from science shops to society for the benefit of the community.	**Objective 3:** To contribute to the European debate on the interaction between science and society for research and innovation, through **comparative impact assessment** of the InSPIRES initiatives and **comprehensive reviews of existing good practices**.
Objective 4: **BUILD** an online platform with best practices in the field, guidelines and recommendations for networking between science shops activities and exchange and matchmaking	**Objective 4:** To widely disseminate these models and to promote international strategic alliances through the implementation of Transdisciplinary and Transnational SS projects, the **establishment of Spanish and Italian networks of SS** and through policy impact.
Objective 6: **ESTABLISH** new science shops within different types of research organisations, based on the acquired knowledge, experience, best practices and guidelines **Objective 5**: **CONCEPTUALIZE** and organize summer schools and knowledge cafes with students and trainers from the same field but from different geographical areas.	**Objective 2:** To **establish new Science Shop structures** and strengthen existing Science Shops within and beyond Europe's borders through a **training and mutual learning programme** around the models and tools developed.

Table 5. Comparison between SciShops.eu and InSPIRES objectives

JERRI

Joining Efforts for Responsible Research and Innovation project aims to develop and test good RRI practices in pilot cases covering all 5 pillars of RRI. Two reports are describing specific goals for two of the research organisations (consortium partners). They include long-term vision of societal engagement for each of the two partners, on the strategic respectively on the project level.

Description of specified RRI goals at TNO

The report (JEIRRI, 2017a) details the RRI goals developed by TNO for each of the RRI dimensions. Three ambitious goals[14] have been set up **under Societal Engagement** for and with society, at strategic levels and project levels:

- To include 'unusual' stakeholders, e.g., NGOs or civil society organizations;
- To develop a practical 'Societal Impact' tool, for managing projects or programmes, to facilitate dialogues. The tool will be used in different stages: 1) to articulate the project's intended impact (before) in terms of SDG's; 2) to steer the project towards positive impact on society; and 3) to evaluate its actual impact.
- To share examples of 'best practices' of 'user involvement' and project where 'citizens scientist 'are used in projects, so that our stakeholders, and the general public, know about it.

Description of specified RRI goals at Fraunhofer

The RRI goals for all five key dimensions at Fraunhofer-Gesellschaft are specified in this report. In the process of establishing the goals related to the developed **Societal Engagement**, an ambitious vision was agreed on and 11 ideas for pilot activities in the field of "Societal Engagement at Fraunhofer" were proposed by stakeholders. The long-term goals and actions "Societal Engagement at Fraunhofer" were conceived based on the two major clusters of activities denominated by the stakeholders involved in the process: "*the cluster 'resources/management' referring to the governance principles/fields of action 'capabilities', 'capacities' and 'subsidiarity' and the cluster communication' referring to the fields 'deliberation', 'transparency' and 'institutional entrepreneurs*'".

NewHoRRIzon

The objectives of the project **Excellence in science and innovation for Europe by adopting the concept of Responsible Research and Innovation** are to:

- "foster the integration of RRI into European, national and local Research and Innovation practice and funding
- organise 18 Social Labs and co-create pilot actions and activities and develop narratives and storylines based on the experience from these pilots
- develop and disseminate a concept of Societal Readiness of Technology (= Societal Readiness Levels)

[14] https://www.jerri-project.eu/jerri-wAssets/docs/deliverables/wp-3/JERRI_Deliverable_D3_2_Description-of-specified-RRI-goals-at-TNO.pdf

- raise awareness on RRI and mainstream RRI best practices and NewHoRRIzon results
- provide results on how to better integrate RRI into the next European Framework Programme
- create a RRI Network including the national funding agencies and develop a RRI community starting with a RRI Ambassadors programme".[15]

Every section of H2020 will be represented by a Social Lab. The different stakeholders will gather in a Social Lab to define the social challenges at stake and develop social experiments to overcome them. The labs will unite stakeholders from academia, business, non-university research institutes, research funding organisations, policy-makers, CSOs) and the general and specific public. The Social Lab 15 is allocated to the topic "Science in and for Society".

NUCLEUS

The main goal of the project **New Understanding of Communication, Learning and Engagement in Universities and Scientific Institutions**[16] is to "*embed Responsible Research and Innovation in the governance and culture of academic institutions in Europe, China, South Africa and Georgia*". The project aims to stimulate research and innovation to continuously reflect and respond to societal needs by creating "Nuclei" of institutional change in universities or research institutions.

Three conferences have been organised under NUCLEUS project:

- NUCLEUS Conference 2015: **Facing the Challenge, Setting the Scene**, Kleve, Germany
- NUCLEUS Conference 2016: **Universities as "Learning Systems",** Lyon, France
- NUCLEUS Conference 2017: **Facing the Challenge: Obstacles and opportunities of RRI in scientific institutions***,* Hannover, 5-6 October

SiS.net2

Network of Science with and for Society National Contact Points project shaped a collection of SwafS interested parties, intending to strengthen knowledge in regards to the diverse community of stakeholders for SwafS National Contact Points (NCPs), interested newcomers and/or experienced stakeholders. The created directory improves the competences of SwafS NCPs in offering advice to their clients and offers the interested parties to identify potential partners for SwafS calls and not only.

Sis.net is a platform of the international network of NCPs for Science with and for Society in Horizon 2020, the EU's Programme for Research and Innovation. The network unites more than 70 representatives from countries participating in Horizon 2020, in Europe and beyond. It offers support to Science with and for Society stakeholders, authorities, research institutions and enterprises on the opportunities offered by Horizon 2020 to enhance integration of scientific achievements into society and engage the public in science. It keeps the audience informed about SwafS funding, brokerage events, gives insights on the latest policy developments, and introduce success projects about SwafS projects. It offers a useful dynamic database on SwafS community that gives information about more than 2300 stakeholders.

[15] https://newhorrizon.eu/
[16] http://www.nucleus-project.eu/

SiS.net - SWAFS Stakeholder Database

The Stakeholder Database[17] offer an online tool for the stakeholders for finding partners and engaging in different areas of SwafS like Ethics and Research Integrity, Gender Equality, Open Access/Open Science, Public Engagement, RRI, Science Communication, Science Education and Careers, Science Governance, Mobilisation and Mutual Learning Actions. The database allow registration and searching for SwafS stakeholders across Europe.

SPARKS

SPARKS promotes RRI across 29 European countries by means of interactive touring exhibitions and participatory activities on RRI (science cafés, pop-up Science Shops, incubation activities and scenario workshops). It represents an excellent example of building synergies with other European projects like **RRI Tools** to **PERARES**, from **PLACES** to **VOICES** or **Twist**— and powerful European/ international networks —the European Network of Science Centres and Museums (**ECSITE**), the international network of Science Shops (**Living Knowledge**) and the European Regions Research and Innovation Network (**ERRIN**).[18]

THE SPARKS' HANDBOOK - A guideline of innovative formats for participatory activities & more[19]

The handbook is a deliverable of SPARKS' project. Even if the handbook addresses mainly the SPARKS partners, it is a valuable resource of tools for running participatory activities. It includes a deep insight on how to run **innovative participatory activities** starting with establishment of **local partnerships** and continuing with **organising events** in new formats such as:

- Reverse Science Café;
- Science Espresso;
- Pop-up Science Shop;
- Scenario Workshop;
- Incubation Workshop;

The handbook includes examples of **Template for Local Organisers** and **Visitor's survey**.

2.4 FP7 projects

The FP7 projects have made their outcomes accessible on their own websites or on various networks or platforms like Living Knowledge or RRI Tools.

Project	Coordinator Country	Topic
ENGAGE2020 - Engaging Society in Horizon	Denmark	SiS-2013.1.1.1-6 - Tools and instruments for a better societal engagement in "Horizon 2020"

[17] http://www.sisnetwork.eu/swafs/stakeholder-database/
[18] http://cordis.europa.eu/project/rcn/198208_en.html
[19] http://www.ecsite.eu/sites/default/files/sparks_handbook.pdf

Project	Coordinator Country	Topic
PE2020 – Public Engagement Innovations for Horizon 2020	Finland	SiS.2013.1.1.1-6 - Tools and instruments for a better societal engagement in "Horizon 2020"
PERARES - Public Engagement with Research and Research Engagement with Society	The Netherlands	SiS-2009-1.2.1.1 - Structuring Public Engagement in Research (PER) SiS-2009-1.3.2.1 - Governance and Ethics of the responsible development of Nanoscience and Nanotechnologies
RRI TOOLS, a project to foster Responsible Research and Innovation for society, with society	Spain	SiS-2013.1.1.1-1 - Production and use of a Training and Dissemination Toolkit on Responsible research and innovation
SCICOM - European Network of Science Centres in communicating energy-related topics	Austria	SiS-2007-3.0.3.1 - Actions to encourage co-operation and networking between science museums, science centres and/or the organisers of national and regional events, e.g. by creating synergies to conceive and exchange ambitious and interactive exhibitions on European research topics
VOICES - Views, Opinions and Ideas of Citizens in Europe on Science	Belgium	SiS-2013-1.2.1-1 - Citizen participation in science and technology policy

Table 6: FP7 selected projects

ENGAGE2020

ENGAGE2020 (**Engaging Society in Horizon 2020**) project maps how, where and why members of the public, stakeholders, consumers and other groups are engaged in the research process, from early policy development to the delivery of research activity. ENGAGE2020 aimed to increase the use of engagement methods and policies by mapping what is practiced and spreading awareness of the opportunities amongst researchers, policy makers and other interested parties. The project mapped existing policies, structures, methods, approaches, tools and instruments, and highlighted promising new or adapted approaches for the future.

Action Catalogue

The Action catalogue[20] is an online decision support tool that is intended to enable researchers, policy-makers and others wanting to conduct inclusive research, to find the method best suited for their specific project needs. The catalogue consists of 57 methods with the common denominator that their focus is research driven by involvement and inclusion. The tool allows the user to search the 57 different methods on 32 different criteria, with the possibility of weighing the importance of each criterion. The user will be presented with the results, either on a prioritized list of the methods that fits his search or in a visually intuitive overview with relevance of each method corresponding to its size.

[20] http://actioncatalogue.eu/

Current praxis of policies and activities that support societal engagement in research and innovation in Europe and beyond

The results and analysis presented in this report (ENGAGE2020, 2014a) are the outcomes of the overview of **current policies and activities** that support societal engagement in research and innovation activities in Europe and beyond. The findings are a result of a comprehensive review that was conducted by scanning existing policies and activities, with a clear focus on societal engagement in research and innovation. The process included scanning policies, funding mechanisms, other instruments and activities aimed at supporting research and innovation in Europe and beyond. Descriptors such as the type of activity or policy, reasons for setting up the policy or activity, disciplinary areas of use, societal challenges addressed, level of the research and innovation process, choice of participants' inclusion, and evaluations were also considered.

Public Engagement Methods and Tools

This report (ENGAGE2020, 2014b) describes 57 methods and tools for public engagement, emphasizing the difference between a method and a tool:

"A method is a well-defined process that is fit to perform a certain set of roles. Often the method has a procedural form, making use of several tools in sequence.

A tool is a technique (e.g. an interview), which potentially can be used within methods, and which is less role-specific."

Policy options for engagement in science and innovation within the frame of Horizon2020

The report (ENGAGE2020, 2014c) presents possible **policy options to support public engagement** in fields of policy formation, program development, definition of a research and innovation project, and research and innovation activities. Six dimensions of policy interventions gathering possible **policy measures** are described: rules and regulation; infrastructure/institutions/networks; funding and incentives; training; promotion; and research activities.

What the Future Holds for Societal Engagement - Future Engagement Report

The report (ENGAGE2020, 2015) promotes recent methodological developments for societal engagement such as deliberative engagement, digital engagement, participative research, user led innovation and an engagement system.

PE2020

Public Engagement Innovations for Horizon 2020 project identified, analysed and refined innovative public engagement tools and instruments for dynamic governance in the field of Science in Society. It elaborated tools for making European research more effective.

PE2020 was conceived with the aim to **identify**, **analyse and refine innovative public engagement (PE) tools and instruments** for dynamic governance in the field of Science in Society (SiS). PE2020 analyses the PE tools and instruments through a systemic and contextual perspective, and

contributes to the potential and transferability of new governance innovations. PE2020 is allowing to create new knowledge of the status quo and trends in the field of PE in science, refines innovative PE tools and instruments and propose new ones.

An up-to-date inventory of current and prospective European PE innovations was developed included in the "Inventory of PE mechanisms and initiatives (PE2020, 2014).

One of the main outputs of PE2020 project is a web-based toolkit that helps policy makers to adopt, adjust and implement PE processes for their different needs.

Toolkit on Public Engagement with Science

The aims of the PE2020 toolkit[21] is to **identify evaluate and transfer innovative PE practices** among European countries. The web tool presents an easy, rapid and guided access to the practical and theoretical knowledge as well as resources and tools developed on public engagement with science. This includes four sections: A. Strategic Framework, B. PE Methods and Tools, C. Institutional Anchorage, D. Societal Anchorage.

The section A intends to frame the public engagement in a science continuous changing context. The section B introduces types of public engagement and connections with the organisational processes, designing PE initiatives, implementing PE initiatives and monitoring and evaluation for PE initiatives. The role of research organisations in PE is emphasised (in Section C) and it is considered that they may play a key role in making public engagement a common social practice and in favouring the development of a real scientific citizenship.

PERARES

PERARES ("Public Engagement with Research and Research Engagement with Society") project used several debates (or dialogues) on Science to actively articulate research request of civil society. These are forwarded to research institutes and results are used in the next phase of the debate. Thus, these debates move 'upstream' into agenda settings. For this, partners linked existing debate formats – such as science café's, science festivals, online-forums – with the Science Shop network - already linking civil society and research institutes.

The project has organized the **5th Living Knowledge Conference** - *Re-imagining Research Relationships – Co-creating Knowledge in a Democratic Society* - in Bonn, 10-12May 2012 and **6th Living Knowledge Conference** - *An Innovative Civil Society: Impact through Co-creation and Partcipation*- in Copenhagen, 9-11 April 2014

Some of the resources[22], relevant for community-based research, were elaborated by PERARES project; they could be used by new Science Shops as well as by existing ones in different stages of their activity.

[21] https://toolkit.pe2020.eu/
[22] http://www.livingknowledge.org/projects/perares/outcomes-reports/

PERARES Transnational Online Debate website

The website[23] is a platform that allows CSOs, researchers and members of the public to discuss research needs on different topics with the aim of creating new research projects. The platform allows to formulate online questions for Science Shops and similar structures on behalf of CSOs. The Questions can arise from the debates or be directly uploaded on the platform. A summary of on-line debates carried on during PERARES project is presented by Buckley (2014).

Supporting new Science Shops Report

The report (Mulder, 2014) is written based on the experience and challenges of the new Science Shops supported by PERARES project. It introduces the main steps for starting a new Science Shop:

Prepare a feasibility study and a business plan based on a SWOT analysis taking into consideration the potential demand for research, potential resource of students and researchers, organisational issues (office, staff, responsibilities and funding), creation of an advisory board, a structure for taking and responding to research questions, and initiate and finalise a pilot project.

Handbook of Models of Community Engagement Strategies in Higher Education Institutions: Policy and Curriculum Development

A practical handbook aimed at practitioners of Science Shops linked to higher education institutions. The authors recommend it for elaboration of policies and strategies supporting the sustainability of such Science Shops by linking to HEI policy priorities and ensuring that policymakers such as funders, political representatives and senior university managers understand and appreciate how Science Shops can help them deliver on their own relevant priorities.

The handbook has a four-step structure for developing strategies to support community engagement in HEIs: surveying the territory, building alliances, making a case and being prepared for challenges. At each step, concrete actions and guidelines are suggested. The handbook also lists complementary resources that can help users create and seize opportunities and prepare arguments.

This report therefore offers tools for use by Science Shops to help them become embedded in policy, models for embedding Science Shop projects in the curriculum, and lessons learned from a process of sharing curriculum development tools across Science Shops in different contexts. The handbook develops a set of practical actions which can help Science Shop practitioners develop their own strategic context to enable community engaged project work. It offers four steps in developing strategy to support community engagement in HEIs: surveying the territory; building alliances; making your case; and being prepared for challenges (Martin and McKenna, 2013a).

[23] http://www.livingknowledge.org/discussion/debate/

Sustainability for Science Shops - Practical Guide to Developing Policy and Strategy

The document is a concise version of the above-mentioned handbook that presents in the synthetic manner the methods used to develop policy and strategy to support Science Shops in HEIs. (Martin and McKenna, 2013b)

Participatory Research Programmes - Views of stakeholders

The report **Programmes de recherche participative – Points de vue d'acteurs (Millot, 2014)** highlights the benefits researchers and CSOs, and even research funders, may have from **joining in participatory research projects**. It also outlines, however, the limitations and constraints of such research, based on **feedback from stakeholders**. It then makes recommendations to improve **research eco-system** through an improved focus on addressing societal needs through research. This study assesses participatory research programs carried out in three French regions from 2005 until 2014 and the projects performed within the framework of these programs aiming to encourage engagement of research organizations and civil society organizations in such processes. The benefits that come from such projects are highlighted; however, the limits and constraints of this type of research, based on the feedback of the stakeholders, are mentioned.

The report is available only in French, but an extended Executive Summary is provided.

Evaluating Projects of Public Engagement with Research and Research Engagement with Society

The report (van der Windt et al., 2014) presents a system of internal evaluation and self-evaluation for project partners through the way of indicators and instruments for evaluation based on relationships between Science Shops whether or not associated with HEIs and their participating community partners. The report provides PERARES evaluation toolkits (**Evaluation Survey Matrix** and **PERARES Evaluation Surveys**) that can be used as well for other similar community-based and participatory research projects.

Experience and attitudes of research funding organisations towards public engagement with research with and for society and its organisations

The main aim of this work was a better understanding of the experiences and attitudes of research funders across Europe towards public engagement with research with and for civil society and its organisations (Steinhaus, 2013).

Feasibility report - The Grenoble Science Shop

An example of feasibility study for a Science Shop is presented by ADReCA Science Shop (Grenoble). The study introduced specific problems encountered by CSOs in France: the basic structural and administrative problems and possible solutions, relations of Science Shop with universities within the frame of potential projects (ADReCA, 2011).

Guide to organizing scenario workshop to develop partnerships between researchers and CSOs

PERARES aimed to test whether the **scenario workshop** tool could be used with local authority representatives, to assess how well the method worked to create collaborations between actors with different occupations, priorities and background. The scenario workshop methodology was developed during the INTERACTS project, one of the forerunners of the establishment of the international Science Shops network (Living Knowledge). The report concluded that public funders of research should create funding lines or specific calls for projects, to facilitate funding of participatory research projects. Opening public policies to include innovative funding schemes can allow elected representatives to meet an increasing social demand for research in response to social needs (Millot and Buckley, 2013).

Structuring Participatory Action Research in HE through research with CSOs

The report presents the state of the art in terms of community and regional and national public engagement policy within HEIs, focusing on core areas of teaching and research in HEIs (Martin, E, McKenna, E., Treasure, K., 2011).

Structuring PER in Social Sciences Research and forgotten citizens of Europe

The report provides the research results of pilot reports on local human rights issues from three teams to show what they achieved in their participatory research with and/or for roma/travelers. Three pilot studies are presented in this report:

- Spain: Perform and Evaluate Project Pilot Human Rights and the Roma Communities;
- Hungary: Participatory Action Research for Local Human Rights - The Case of Roma Minority in Szeged, South-Hungary;
- Ireland: Development of the Research Design and Process (Málovics et al., 2012).

RRI Tools

The "**RRI TOOLS, a project to foster Responsible Research and Innovation for society, with society"** project, which developed a set of digital resources to advocate, train, disseminate and implement RRI under Horizon 2020, drawing extensively from past FP7 and Horizon 2020 projects.

RRI Tools Platform[24]

At European and international level there are a multitude of tools addressed to all RRI dimensions. It addresses policy makers, research and education communities, business and industry, and CSOs.

SCICOM

European Network of Science Centers in communicating energy-related topics (SCICOM) was a project supported by EU Seventh Framework Programme, which aimed to reunite Science Centers and Museums in communicating science and performing research in the field of renewable energy. Its specific objectives were related to increasing science communication, networking and the

[24] https://www.rri-tools.eu/

engagement of CSOs, policy-makers and other decision makers in communication and educational matters. The network could represent an excellent starting point in identifying European experts from across the field.

VOICES

The Project **Views, Opinions and Ideas of Citizens in Europe on Science** is an excellent example of participatory consultation processes led by Ecsite network that involved the public across the EU on a topic of permanent interest: waste management.

Voices for responsible research and innovation: Engaging citizens to shape EU research policies on urban waste

This report gets through the whole process of engaging citizens from 33 locations in 27 EU countries in a large consultation process for integrating the public opinion in a dimension of the Horizon 2020 Work Programmes. VOICES brought together science centres and museums with academic experts in consultation methodologies and established key hubs of expertise across the EU. Its results had a significant impact on influencing the direction of the EU's research and innovation policy (Broerse et al., 2014).

2.5 FP5 and FP6 projects

Project	Coordinator Country	Call	Topic
CIPAST - Citizen Participation in Science and Technology	France	FP6-2003-SCIENCE-AND-SOCIETY-7	SOCIETY-WP-2004-1.1.1 - Participatory policy making
EFSUPS - Exploring the ground - Fostering scientific understanding in primary schools	Germany	FP6-2005-SCIENCE-AND-SOCIETY-16	SOCIETY-WP2005-4.3.4.3 (a - School science teaching practice)
INMOSION - Science shop for innovative mobility solutions for mobility challenged Europeans	Greece	FP6-2005-SCIENCE-AND-SOCIETY-20	SOCIETY-WP-2005-4.3.1.5 - Science Shops
NEWCOM - New Communities and Mental Health? A Needs Analysis	Ireland	FP6-2005-SCIENCE-AND-SOCIETY-20	SOCIETY-WP-2005-4.3.1.5 - Science Shops
TRAMS - Training and Mentoring of Science Shops	Netherlands	FP6-2003-SCIENCE-AND-SOCIETY-7	SOCIETY WP 2004 -4.3.4.1 - Governance, scientific advice, outreach and communication -
VECTOR - Visualisation of the exposure of cyclists to traffic on roads	Netherlands	FP6-2005-SCIENCE-AND-SOCIETY-20	SOCIETY-WP-2005-4.3.1.5 - Science Shops

Project	Coordinator Country	Call	Topic
WINDFARMPERCEPTION - Visual and acoustical impact of wind farms on residents	Netherlands	FP6-2005-SCIENCE-AND-SOCIETY-19	SOCIETY-WP-2005-4.3.1.5 - Science Shops

Table 7: FP6 selected projects

Project	Coordinator Country	Call	Topic
INTERACTS - Improving interaction between NGO's, Science Shops and universities: experiences and expectations	Denmark	FP5-HUMAN POTENTIAL	1.4.1.-5.1. - Strategic Analysis of Specific Political Issues
ISSNET - Improving science shop networking	Netherlands	FP5-HUMAN POTENTIAL	1.4.1.-3.3. - Raising Public Awareness
SCIPAS - Study and conference on improving public access to science through Science Shops.	Netherlands	FP5-HUMAN POTENTIAL	1.4.1.-5.1. - Strategic Analysis of Specific Political Issues

Table 8: FP5 selected projects

CIPAST

Citizen Participation in Science and Technology[25] (FP6 project) aimed at bringing together different organisations that have significant experience in participatory actions in scientific and technological issues. The organisations were experienced actors in that field such as parliamentary offices, research institutes, academic teams, Science Shops or science museums. The two key CIPAST objectives have been:

- to structure and expand networks of current and potential actors in participation through the dissemination of best practices and circulation of information, and
- to foster transfer of expertise through the implementation of training sessions and the production of a "training package" based on case-study methodology.

The training package contains a case study that can be used for training situation ("ECC' – European Citizens Consultation") as well as "CIPAST Procida Workshop posters"[26]presentations of different projects and experiences involving public participation.

EFSUPS

Exploring the Ground - Fostering Scientific Understanding in Primary Schools[27] developed and tested teaching resources on soil science subjects for pre-school and primary school education and

[25] http://www.cipast.org/cipast.php?section=3
[26] http://www.cipast.org/download/CD%20CIPAST%20in%20Practice/cipast/en/whatelse_4_2.htm
[27] http://cordis.europa.eu/result/rcn/48742_en.html

organised seminars and workshops for kindergarten and primary school teachers on the effective use of the EFSUPS materials. It offers a good example of how Science Shops can collaborate for generating teaching resources for schools.

INMOSION

Under FP6 program, topic SOCIETY-WP-2005-4.3.1.5 - Science Shops, four projects have been funded and **"Science shop for innovative mobility solutions for mobility challenged Europeans"**[28] was one of them. The overall aim of this project was to develop expertise and know-how for **assisting communities with the deployment of an innovative transportation system** to meet the mobility needs of elder and mobility challenged Europeans. A **university-based Science Shop** initiated the action by creating a group of students and researchers that supported communities through the whole process starting with "from conception, feasibility analysis, needs analysis, requirements analysis, system design, yield management, deployment, evaluation and maintenance"

ISSNET

Improving Science Shop Networking project[29] established a new vibrant and sustainable International Science Shop Network. The project focused on activities that optimise the exchange of content and ideas in the science, society and governance debate, and improved public access to, and awareness of science. ISSNET strengthened Science Shops world-wide, an unique infrastructure that increases public access to science, the public awareness and understanding of the beneficial impacts of science, as well as the limitations and implications of science and technology on their daily lives.

To be continued - Recommendations for structuring and funding the Living Knowledge network[30]

> The report (de Bok, 2005) introduces the relation between SCIPAS and ISSNET projects and the Living Knowledge Network. It gives recommendations for improving the effectiveness of the cooperation within the Living Knowledge network, without providing concluding solutions. The network itself must find the solutions to move forward for the Living Knowledge network *to be continued*.

INTERACTS

Improving Interaction between NGOs, Universities and Science Shops project[31] is an innovative cross-national study. Its main objective is "*to strengthen the interaction between research institutions and society*". Organisations and institutions from seven different countries collaborated to identify necessary changes in structures and practises in the RTD system. The aim was to improve future interaction between NGOs, researchers, and intermediaries like Science Shops. By collating results from different countries, a broader picture of experiences can emerge, which focusses on impacts on future Science Shops, future expectations and policy relevance, the needs and opportunities for cooperation and their change over time.

[28] http://cordis.europa.eu/result/rcn/47394_en.html
[29] http://www.livingknowledge.org/projects/overview/eu-funded-projects/issnet/
[30]http://www.livingknowledge.org/fileadmin/Dateien-Living-Knowledge/Library/Project_reports/ISSNET_WP1_report_2005.pdf
[31] http://wilawien.ac.at/interacts/scienceshops.html

NEWCOM

New Communities and Mental Health? A Needs Analysis project[32] was **an example of good practice** for CBR in a Science Shop. It performed a study that seeks to understand the mental health needs amongst migrants in Ireland and to assess the capacities they need in order to respond to mental health inequalities amongst the target populations. It represented a pioneering study for the Community Engagement Office at Dublin City University done by a Science Shop based on community knowledge exchange. Results allowed to identify health inequality risks in migrant communities of Ireland and to influence policy makers.

SCIPAS

Study and Conference on Improving Public Access to Science through Science Shops project led to eight reports and a scientific conference. The international Science Shop network's benefits to science and society interactions are increased visibility and accessibility, improved documentation and evaluation, dissemination of results, collaboration and quality control.

Science Shops: Operational options

SCIPAS report nr. 1 (Gnaiger and Martin, 2001) makes an early and briefly introduction on what Science Shops are from an operational point of view. The operational options cover Science Shops models, processes, benefits, successes and failures. The impact of Science Shops on universities and social/economical/cultural or political development are approached as well as the changes that could occur over time and affect the Science Shops.

Success and failure in starting Science Shops

SCIPAS report nr. 2 (Mulder et al. 2001) introduces European and international initiatives including Science Shops stories from 16 countries from Europe, North America, Asia, Australia and Africa. It includes also:

- Checklists for starting a Science Shop at the University
- Tips for supporting starters
- Tips for long-term survival

Training programmes for Science Shops

SCIPAS report nr. 3 (de Bok, 2001) is an overview of existing training programmes (2001) for Science Shops. It is an inventory of training needs and the resources for tailored training programmes for Science Shop coordinators, staff members, researchers and community groups and different target groups.

The development of an international science shop magazine

SCIPAS report nr. 4 (Steinhaus, 2001) gives an overview of the objectives, needs for realisation and structure of an international science shop magazine as an effective means in Science Shops network information dissemination.

[32] http://cordis.europa.eu/result/rcn/49718_en.html

Development of a public Internet database of Science Shops

SCIPAS report nr. 5 (Chopyak. 2001) has initiated the largest Science Shop Network at European and international level. The report surveys the need for an Internet-based communication network, of a publicly-accessible database of Science Shops and science shop activities. It set up the architecture of the future data base, functioning today, after 16 years from its establishment, as **the Living Knowledge Network.**

The impact of Science Shops on university curricula and research

SCIPAS report nr. 6 (Hende and Jørgensen, 2001) is based on the collected information from persons experienced in doing research in Science Shops (members of the SCIPAS consortium and other Science Shops) and other university-based community research organisations. The consortium investigated how Science Shops contribute to the development of research education in universities. The main two directions of the study are the **impact on curricula** and the **impact on research**.

One of the important conclusions of the Report is that "*the science shop projects can inspire to new ways of project based and problem oriented studying and to new course topics. Researchers might get inspiration to new research topics and might involve citizen in their research*."

Living Knowledge: the network

SCIPAS report nr. 7 "**Accomplishments and Further Opportunities for Developing an International Network of Science Shops**" reflects SCIPAS consortium thoughts on why, how, by whom, and in which context an international network of Science Shops will be developed (Lüsen and Sclove, 2001).

TRAMS

Training and mentoring of Science Shops project encouraged the development of new Science Shops by providing training and mentoring support. TRAMS developed training materials and training courses on the Science Shop concepts and an individual mentoring programme for practical advice and support. The practical outcomes of the project were the mentoring programme, the training materials (Science Shop Toolbox), and print publication.

Emerging of Science Shop CREA Barcelona 2006

CREA Research Centre, Barcelona, produce an overview of how the science shop is emerging in 2006 describing how a new Science Shop was established at CREA (Research Centre on Theories and Practices that Overcome Inequalities) at University of Barcelona.[33]

[33]http://www.livingknowledge.org/fileadmin/Dateien-Living-Knowledge/Dokumente_Dateien/Toolbox/LK_C_CREA_Overview.pdf

Frequently Asked Questions at Living Knowledge website

The LK FAQ[34] is a list of questions and given answers based on the experience of TRAMS team got during working with and for Science Shops at European at international level. The main topics that are approached are:

1. About Science Shops (history, locations, definitions)
2. Working with clients or civil society partners
3. Working with students and researchers
4. Organisational forms (inside/outside university)
5. Staffing a Science Shop
6. Financing a Science Shop
7. Science Shops and policy makers
8. Questions relating to the Living Knowledge network
9. Training materials and mentoring

Tool-kit Scenario Workshop

A Scenario Workshop Tool-kit has been developed as part of work package 1, which focuses on mentoring to support the development of new science shop initiatives and sharing of expertise on science shop procedures and processes.

Mentoring support is helpful for emerging Science Shops because it provides a means for matching experienced science shop staff with those who are new to the process. One of the means for helping new science shop staff, as well as initiatives aiming at starting a science shop, is to give them competence and hands on experience in conducting the Scenario Workshop methodology. This also initiates the local and regional dialogue regarding about the needs and the aims of a science shop and the potential of this activity. It will enable (new) Science Shops to raise awareness on the importance of citizen access to science, to involve relevant key-actors (e.g. universities, policy makers, civil society groups), and to develop future perspectives for the science shop and its cooperation with relevant key actors. (Ganiger and Schroffenegger, 2008)

VECTOR

The project **Visualisation of the exposure of cyclists to traffic on roads**[35] assessed the exposure of cyclists to traffic exhaust, especially to fine particles throughout Europe (i.e. in NL, DE, HU and LT) using a "measurement bike", specially developed in a previous initiative by the Dutch Cyclists Association, for a real - time visualisation. The high risks of exposure of cyclists could be reduced through diverse infrastructural measures, such as separate cycling paths. The information gathered through the tests were subsequently used to inform local authorities, interest groups and other stakeholders about exposure whilst cycling.

[34] http://www.livingknowledge.org/science-shops/faq/
[35] http://cordis.europa.eu/result/rcn/47497_en.html

WINDFARM-PERCEPTION

As a result of the growing opposition of population living next to wind farms to wind turbines, the **"Visual and acoustical impact of wind farms on residents"**[36] project involved Dutch community in a research project for evaluation of their perception on this issue. 2,000 addresses were selected for evaluation via a questionnaire. The conclusions reached have highlighted the fact that the noise was the most annoying aspect, besides the visual impact.

2.6 Other initiatives

ACCESS ALLIANCE

Access Alliance Multicultural Health and Community Services (Access Alliance), as a community health centre established in Toronto in 2001, "*provides services and addresses system inequities to improve health outcomes for the most vulnerable immigrants, refugees, and their communities"*. Access Alliance founded the Toronto Community-Based Research Network in 2007.

Community-Based Research Toolkit: Resources and Tools for Doing Research with Community for Social Change

The CBR Team at Access Alliance developed a toolkit dedicated to those interested in doing CBR (Access Alliance, 2012). It is an excellent collection of lots of tools and templates grouped in:

- Information Handouts
- Templates
- Activities and Worksheets
- Checklists

The resources are covering some of the main topics in relation with CBR: planning, developing partnerships, working with communities, designing the research project, ethics, data collection for project implementation, data analysis, dissemination, creating policy change and project evaluation.

CARL

Community-Academic Research Links (CARL) is an initiative at University College Cork which gives independent research support to CSOs, e.g. community and voluntary groups, in the region. The research is undertaken by students in collaboration with the community partners across a wide range of disciplines and usually free of charge.

Manual University College Cork

The aim of the manual is to assist CSOs (CSOs), students, supervisors and all those involved in the CARL Initiative at UCC in understanding and engaging with community-based research. The first part of the guide refers to the initial meetings, whether it is with the community

[36] http://cordis.europa.eu/result/rcn/47811_en.html

group or students. The second part is focused on the development of the research request, i.e. things to watch out for as the request progresses (UCC CARL, 2013).

INRO

The Romanian network of Science Shops "Romania Association INTERMEDIUNET" was established in 2002 MATRA project, finance by the Dutch Ministry of Foreign Affairs. In 2006, there were more than 15 Science Shops in Romania. INRO developed a brief guide for establishing a Science Shop in a HEI.

Guideline on the Establishment of an InterMEDIU Centre

In 2002 INRO designed a guideline on the establishment of an InterMEDIU Centre. The activity of the Romanian Science Shops, as members of this association, focuses mainly on environmental issues. The guide introduces the definition of the "InterMEDIU Centre" as "an organization that offers independent research support in response to the civil society requests" and gives information about objectives, possible science shop mother organisations, and main activities, highlighting the importance of students' involvement. It provides a brief guide to establish an InterMEDIU Centre/Science Shop in a university (INTERMEDIUNET, 2006).

PARTICIPEDIA

Participedia's research goal is to develop a large **article and database that will support evidence-based answers to the question** what kind of participatory processes work best, for what purposes, and under what conditions? The authors' intention was to make practitioners, academics, and students to contribute to the database by sharing their work or by disseminating information found on this site. Participedia website includes a large collection of **case studies** from all over the world.[37]

UNESCO Chair in Community Based Research & Social Responsibility in Higher Education

The Programme **UNITWIN/UNESCO Chair in Community Based Research & Social Responsibility in Higher Education** fosters international inter-university cooperation and networking to enhance institutional capacities through knowledge sharing and collaborative work and supports the establishment of UNESCO Chairs and UNITWIN Networks in key priority areas, falling under UNESCO's fields of competence.

The UNITWIN/UNESCO Chairs Programme, involving 116 countries and more than 700 institutions was initiated in 1992, include the UNESCO Chair at the University of Victoria and PRIA (India) that is involved in Community Based Research & Social Responsibility in Higher Education. It is an international capacity promoting community based participatory research for universities' staff and members of community-based organisations and movements. They carry out research activities trying to find the most effective ways to conduct research partnerships between community and university, and how CBPR can best be expanded to regional and national impact. In June 2017, a **network of training hubs**, **Knowledge for Change International Consortium (K4C),** was launch in all regions of the world for providing *training opportunities for a new generation of community-based researchers*.

[37] https://participedia.net/en/browse/cases

On its website[38], UNESCO Co-Chair shares with the international community guidelines, reports about the community engagement in research, training materials, etc.:

- Social Outreach in Higher Education: Knowledge Paper
- **Guidelines** for Universities Engaging in Social Responsibility
- Epistemologies of the South: Justice against Epistemicide
- GUNi World Report on Higher Education 6: Towards a Socially Responsible University; Balancing the Global with the Local
- Book on 'Knowledge & Engagement: Building Capacity for the Next Generation of Community Based Researchers
- **Training** the Next Generation of Community Based Researchers: A Guide for Trainers
- **Training** in Community Based Research: Annotated Bibliography
- Resource Guide for Video Collection of Training in Community Based Research
- Governance and Citizenship
- Indigenous People and Perspectives in Latin America Final Report
- Asset-based development
- Water Governance
- Indigenous Research Methodologies Final Report
- E-book: Strengthening Community University Research Partnerships: GLOBAL PERSPECTIVES
- Global trends in training CBR in Higher Educational Institutions and Civil Society Organizations: Survey Results, July 2015
- IDRC Survey Results 2014

One of the tools that are offering guidelines for engaging Universities in CBR is the "User's Manual on Institutionalizing Community University Research Partnerships".

User's Manual on Institutionalizing Community University Research Partnerships

The manual[39] was published by the organisation in 2015 (UNESCO Chair, 2015). The HEIs are considered as adequate institutional structures for setting up, develop and improvement of the Community University Research Partnership initiatives. This manual describes, quoting Tremblay (2014), "the architecture of institutional structures that support CURP is as multi-level, complex and dynamic one having different levels in the ecosystem of its institutional structures". Six levels are defined: **authorities and organisations** (including the private ones) responsible for higher education; **universities, colleges and other HEIs; internal structures** of universities; community organisations; intermediate structures between universities and community structures (that includes the Science Shops); and the networks that develop the partnership at the local, national and international spheres.

The manual is addressed to university staff for promoting the community-university engagement in CBR guiding the HEIs' administrators and giving concise **examples of good**

[38] https://dspace.library.uvic.ca/handle/1828/6017
[39] http://www.livingknowledge.org/fileadmin/Dateien-Living-Knowledge/Dokumente_Dateien/Toolbox/LK_A_Community_University_Research_Partnerships_Manual.pdf

practices from all over the world. It is an excellent tool for introducing in the community – university research partnership: why and how it starts, how it works and evolves and how the knowledge is generated and shared, scaling up the **positive impacts**. These three stages are conceptualised as pre-institutionalization phase, institutionalization phase, and post-institutionalization phase.

The **references and recommended readings** gives an **international dimension** to the involvement of HEIs in the community-based research and social responsibility.

2.7 Networks

A number of national, regional, European and international networks involved in community based and participatory research are described briefly in this section.

APUCEN

Asia-Pacific University-Community Engagement Network is a regional network of academic institutions of higher learning that fosters the culture of university-community engagement, relying on proactive, inclusive, holistic and participatory approaches. APUCEN is animated by the conviction that higher education institutions and the community can co-create knowledge to enhance the sustainability of the society of the Asia-Pacific region.[40]

ASBC

Association Science et Bien Commune is a not-for-profit organization founded in July 2011 in Quebec, aiming at stimulating vigilance and action for an open and democratized science for the benefit of the common good, focusing on:

- *Defending and promoting a vision of science serving the common good;*
- *Collecting, analyzing, producing and disseminating information on science - society relationships;*
- *Supporting, promoting or organizing democratization experiments in science;*
- *Organizing experiments of public debate on different aspects of science;*
- *Setting - up meetings between the scientific world and social spheres such as arts and policy;*
- *Providing guidance for civil society groups in the academic world;*
- *Providing, subject to national legislation on education, courses on social responsibility, science with citizens and ethics of science.*

CASC

Canadian Association of Science Centres [41] is a national platform for Canada's Science Centres and informal science engagement, founded in 1985 with the aims of: creating synergy among Canada's science centres and science-related museums; assisting in finding solutions to the challenges faced by these institutions; and providing a unified voice before government**.** Science Centres are essential meeting places for science and society and have relevance to all sectors of society. Free-choice science learning is the distinctive label of the science centre offering.

[40] https://apucen.usm.my/index.php/en/
[41] http://www.canadiansciencecentres.ca/

CBRC

The **Community-Based Research Canada** network is a Canadian champion and promoter of CBR and campus-community engagement in Canada which brings together over 300 key players of community-campus partnerships. Their network builds capacity for academia and broader communities to collaborate and use research as a tool to mobilize community participation and action, addressing the country's social, economic and environmental priorities.[42] Their main purpose is "to build an inclusive and open network, engaging already existing networks, to build support for community-campus partnerships in CBR and community engagement".

The CBRC shares on its website[43] a full list of reports, publications, resources, etc. Some examples are related to the impact the activities have had on the community.

- **Global Survey Results on Community-University Research Partnerships**
- **Research Impact Canada**
- **Community First: Impacts of Community Engagement**

CBRC facilitates webinars and presentations to provide members with opportunities to network and learn about CBR focused resources. [44]

CRN

The **Community Research Network** (CRN) was a trans-national network of research and grassroots organizations that runs CBR to promote social change. The term "community" designates not strictly a geographic area, but accommodates as well, communities of interest, occupation, history, language etc. CNR's mission is to create a system through which grassroots, worker, public-interest organizations and local governments can find solutions to social and environmental problems and engage more actively in public policy. The website was last updated in 2004, but there are still some useful resources like **An Introductory Reconnaissance, Including Twelve Organizational Case Studies and Comparison with the Dutch Science Shops and the Mainstream American Research System,** that introduces the CBR in US through case studies in the '90 (Sclove, R., Scammell, M. and Holland, B., 1998).

CTB

The **Community Tool Box**[45] is a free, online resource, developed in 1994 as public service by the Centre for Community Health and Development (CCHD) within the University of Kansas. It has been extensively used world-wide in teaching, training, and technical support and is currently available in English, Spanish, and Arabic. CTB's mission is to foster community health and development and bring about social change, by connecting people, ideas, and resources. It also contributes to CCHD's role as a designated World Health Organization Collaborating Centre for Community Health and Development.[46]

[42] https://communityresearchcanada.ca/
[43] https://communityresearchcanada.ca/index.php?htaccess_qs=resources
[44] https://communityresearchcanada.ca/presentationsandwebinars
[45] ctb.ku.edu/en
[46] http://communityhealth.ku.edu

ECAST

Formally established in 2010, the **Expert and Citizen Assessment of Science and Technology** network connects academic research, informal science education, citizen science programs, and non-partisan policy analysis to engage citizens. To better inform and improve decision-making, ECAST devises peer-to-peer deliberations to inform citizens about and solicit their point of view on science and technology policy issues. ECAST has organized large-scale public deliberations in the United States on policy issues pertaining to biodiversity, space missions, climate and energy[47].

ECSA

The non-profit **European Citizen Science Association** (ECSA) was established to encourage and increase the participation of the Citizen Science movement in Europe. It initiates and supports citizen science projects as well as performing research on citizen science. The association considers citizen science as an open and comprehensive approach by supporting and being part of citizen science movement.[48] It gathers more than 200 individual and organizational members from over 28 countries across the European Union and beyond. ECSA provides networking opportunities among groups and disciplines for developing citizen science through H2020 projects, policy briefs and open science policy platform.

ECSITE

The European network of science centres and museums[49] was founded in 1989 and has continuously evolved in size and scope, joining over 350 organisations in Europe and world-wide, acting as a catalyst to foster creativity and critical thinking in the European society, creating momentum for its citizens to engage with science and society. ECSITE members are science centres, museums, aquaria and zoos, festivals, planetariums, universities and open labs, foundations and learned societies, companies, and local authorities. ECSITE acts as a platform to:

- Shape the future of science engagement
- Watch trends, boost creativity and learn from each other
- Harness its members' collective powers and catalyse social impact

ERRIN

European Regions Research and Innovation Network was established in 2001 representing Brussels-based platform of more than 120 regional stakeholder organisations. ERRIN promotes knowledge exchange between its members, focusing on joint actions and project partnerships to strengthen regional research and innovation capacities. Through these actions ERRIN seeks to contribute to the implementation of the Europe 2020 Strategy, the Innovation Union flagship initiative and Smart Specialisation strategies.[50]

[47] https://ecastnetwork.org/
[48] https://ecsa.citizen-science.net/
[49] http://www.ecsite.eu/about
[50] www.errin.eu/content/about-us

EUSEA

The **European Science Engagement Association** is an international community of public engagement professionals, a living network of excellence in European Science Communication. EUSEA is an international knowledge-sharing platform and accelerator of innovation in the fields of public engagement. The association addresses experts involved in the design, organisation and implementation of public engagement activities across Europe. EUSEA is an active consortium member in projects funded by the European Commission and supports partners in European funding policies.[51]

Francophone Network

Francophone Network[52] gathers about twenty organizations in three continents (Africa, Europe and North America). The Francophone network was established in 2015 and collaborates at European level and worldwide. It includes a wide diversity of science shop models all aiming at providing research capability and expertise to answer the needs from CSOs or organized citizens.

Co-creation of knowledge, participatory action research, communication services or legal counselling are some of the many kinds of activities proposed by these Science Shops.

GUNi

The Global University Network for Innovation (GUNi) is an international network created in 1999 and supported by the UNESCO, the United Nations University (UNU) and the Catalan Association of Public Universities (ACUP), which hosts its secretariat and presidency. GUNi headquarters are located in Barcelona. The Secretariat and Presidency of GUNi are hosted by ACUP.[53]

GUNi has regional offices in Asia and the Pacific, Latin America and the Caribbean, Sub-Saharan Africa, the Arab States, and Europe and North America (USA and Canada).

GUNi's main goal is to gather knowledge and innovative experiences, based on a holistic vision, aimed at supporting higher education institutions and systems in their engagement in and an influence on the development of their communities.

Living Knowledge

The Living Knowledge (LK) Network is composed of persons active in -or supportive of- Science Shops and Community Based Research. Living Knowledge aims to foster public engagement with, and participation in, all levels of the research and innovation process.

The LK network website provides a comprehensive set of tools for those empowering new Science Shops and working in community-based research. It includes relevant documentation on Science Shop procedures, processes and guidelines grouped under six topics:

1. Organisational Elements of Science Shops
2. Implementing a Science Shop Project - Methodological Elements
3. Manuals, Tools, Guides

[51] http://www.eusea.info/
[52] http://www.livingknowledge.org/contact/national-science-shop-networks/
[53] http://www.guninetwork.org/presentation

4. Working in / with Higher Education
5. Science Shops and the Policy Context
6. Communication and Public Awareness[54]

Living Knowledge Network facilitates cooperation with CSOs to generate research ideas, questions and agendas. They perform research in response to these questions, either themselves or with the assistance of others researchers, notably higher education students. The goal is to co-create research to find solutions and therefore make a positive impact on real world problems.

By doing this, they promote community focused cooperation between civil society and those involved in teaching, research and innovation, particularly in higher education. The process of engaging with society aims to strengthen both the research process and its outcomes for all partners, and thus contribute to research excellence and innovation outcomes that meet views, wishes and demands of civil society.

Community-Based Participatory Research - A Training Manual for Community-Based Researchers

The manual (Shallwani and Mohammed, 2007) and contain training modules and handouts for a 3 weeks training workshop held in Pakistan in 2006. It was supposed to be the first contact of the community members with the role of community-based researchers in a community-based participatory action research project. More research methodologies were introduced: surveys, interviews, focus group discussions, PhotoVoice, community timelines, and community mapping.

5th Living Knowledge Conference - RE-Imagining Research Relationships. Co-Creating Knowledge In A Democratic Society - 2012

The LK 5 Conference abstract book [55] includes a large number of extended abstracts of original work on research and innovation based on societal questions and concerns.

6th Living Knowledge Conference - An Innovative Civil Society: Impact through Co-creation and Participation - 2014

The LK 6 Conference abstract book[56] offers an extensive image of the worldwide interest in doing research through co-creation and participatory involvement of civil society as well as the contribution of Science Shops in these initiatives.

7th Living Knowledge Conference Inspire – Integrating community-based partnership into learning and teaching for RRI - 2016

The LK 7 Conference abstract book[57] offers interesting examples of case studies, projects and organisations dealing with RRI and, especially, with public engagement.

[54] http://www.livingknowledge.org/resources/toolbox/#c999
[55]http://www.livingknowledge.org/fileadmin/Dateien-Living-Knowledge/Library/Project_reports/PERARES_LK_5_Conference-book_2012.pdf
[56]http://www.livingknowledge.org/lk6/wp-content/uploads/2014/04/LK6_abstract-book_update_28-04-2014.pdf

The network provides sets of factsheets, newsletters, leaflets, and is hosting the outcomes of projects.

Wetenschapswinkels

Wetenschapswinkels is a network of Science Shops covering a total of twelve cities in the Netherlands and the Flemish speaking part of Belgium. They serve as intermediaries for knowledge transfer between society and university.[58] Researchers and expert intermediaries are inspired by signals from society and the Science Shops are open to requests for knowledge and/or research. Applications lead to research projects that are very diverse in nature and cover various areas of work. The network can also provide help with practical or substantive advice, or with a referral to another knowledge institute or social institution (knowledge link). This is how social organizations can: realize an idea, solve a knowledge problem or get a topic on the social agenda.

Wissnet

A German speaking Science Shop Network founded in 2013 that aims to convey knowledge at local and regional levels, to trigger discussions between like-minded people and dissidents and to build a bridge between citizens and science institutions. It includes Germany, Switzerland and Austria.[59] The Wissnet network engaged in projects covering varied topics such as: using and protecting the oceans, approaches and methods of citizen - cantered knowledge transfer, citizen participation in research and innovation, participation in research policy.

2.8 Conferences

The events organized under the auspices of ongoing H2020 projects are under way at the time of writing this study. However, SciShop will continuously monitor the organization of training sessions, events like summer schools and knowledge cafes under European and international Science Shops coordination.

Some of the Conferences that will be organised by H2020 projects and related networks are listed below.

Eusea Annual Conference 2018, Madrid, 17th -18th May 2018[60]

The 2nd **HEIRRI** Conference "**Education towards a responsible society, transforming universities through RR**I" will present the results of nearly three years of project activities designed to promote the integration of RRI within the education of scientists, engineers and other professionals involved in the R&D process. Participants, including high-level education representatives, academics, industry, international associations and other stakeholders, will have the opportunity to discuss the HEIRRI training programmes and their piloting, to join debates on the future of RRI in Europe and beyond, to discover other initiatives on RRI training, and to engage in multidisciplinary sessions. A combination of keynote talks, parallel thematic sessions, RRI initiatives speed dating and a poster

[57] http://www.livingknowledge.org/lk7/wp-content/uploads/2016/06/7LK_Book-of-Abstracts.pdf
[58] http://www.wetenschapswinkels.nl/
[59] http://www.wissnet.de/
[60] http://www.eusea.info/annual-conference/

session are bound to make for an engaging and enriching event**. The conference will also allow for networking.**

The 8th Living Knowledge Conference, Budapest, 30th May – 1st June 2018

Living Knowledge 8th Conference 2018[61] (“**Enriching Science and Community Engagement”)** will approach topics in relation with:

- building on and enriching the public engagement in research practices;
- identifying the most valued aspects of community-based engaged scholarship;
- assessing the impacts in science-community partnerships;
- fostering the debate about the place and role of “society in science” / “science in society,” and encouraging the systematic and ethical involvement of civil society actors and their societal concerns in research and innovation processes;
- making new arrangements for achieving successful “engagement” by science event organisers, educators, community organisers;
- community engagement: fulfil promises, critiques and expectations from institutions aiming at community engagement.

The 2nd International Citizen Science Conference - Geneva, June 3rd-5th, 2018

The ECSA organized its first conference in Berlin 2016. The second International Citizen Science Conference is organized by *Foundation Science et Cité* and is intended for actors of the citizen science, organized in local, national and international networks, and offers a framework which enables the sharing of knowledge and new ideas and allows to learn from each other’s[62]. This second International ECSA conference (“**Citizen Science: Empowering citizens, social innovation, scientific literacy**”) takes place from June 3rd to June 5th 2018 in Geneva, Switzerland trying to answer the questions: “Why do citizens collaborate? What is their motivation to volunteer? Do they develop a deeper interest and engagement in science? Do they have suggestions for improving collaborations? These and other questions will be at the heart of our next conference.”[63]

The 29th ECSITE Conference of the European network of science centres and museums, Geneva, June 7th-9th 2018

The Conference[64] will be hosted by the Natural History Museum of Geneva in partnership with CERN, University of Geneva Scienscope, and Campus Biotech. A pre-conference event will offer training sessions about science engagement and communication. Its theme is “**Creative Collisions**” coming from the generous idea that “in a society where thoughts, words and deeds are increasingly standardised, placing different worldviews on a collision course can be a source of innovation and creativity”.

[61] http://www.livingknowledge.org/lk8/cfp/
[62] https://www.science-et-cite.ch/en/europaeische-citizen-science-konferenz-2018-2
[63]https://ecsa.citizen-science.net/events/call-proposals-open-second-international-ecsa-conference-2018-geneva-switzerland
[64] http://www.ecsite.eu/annual-conference

NUCLEUS Annual Conference 2018, Malta, 11th -12th October 2018[65]

The Conference[66] will be hosted by the University of Malta and invites the organisations from the fields of RRI, Public Engagement and Open Science.

The 30th ECSITE Conference of the European network of science centres and museums, Copenhagen, June 6th-8th 2019

The 2019 edition of ECSITE Conference[67] will be hosted by Experimentarium science centre of Denmark, a non-profit foundation that explores the world of science and technology together with children and adults.

Conference	Date		City
EUSEA Annual Conference	2018	April 27	Viena
2nd Conference **HEIRRI**	2018	May 17-18	Madrid
The 8th Living Knowledge Conference – **InSPIRES** project	2018	May 30 – June 1	Budapest
The 2nd International Citizen Science Conference – **ECSA Network**	2018	June 3-5	Geneva
The 29th **ECSITE** Conference of the European network of science centres and museums	2018	June 7-9	Geneva
NUCLEUS project- Annual Conference	2018	October 11-12	Malta
The 30th **ECSITE** Conference of the European network of science centres and museums	2019	June 6-8	Copenhagen

Table 9. Conferences to be held in the coming period

2.9 Synergy Matrix I

The *Synergy Matrix I* was designed based on the findings presented in *Section* ***Error! Reference source not found. Error! Reference source not found.*** and have been grouped under 18 types of synergies laid out in *Table 9*.

	Synergy type (short name)	Brief description
1	**Assessment**	Research and best practice assessment of participatory and CBR

[65]http://www.nucleus-project.eu/2017/12/07/welcome-to-malta-host-of-the-nucleus-annual-conference-2018/
[66]http://www.nucleus-project.eu/2017/12/07/welcome-to-malta-host-of-the-nucleus-annual-conference-2018/
[67]http://www.ecsite.eu/activities-and-services/ecsite-events/annual-conferences/ecsite-annual-conference-2019

2	**RRI tools**	RRI tools
3	**Case studies**	Case studies of successful participatory community-based research
4	**Surveys**	Surveys on Science Shops and/or CBPR
5	**Collection & Classification**	Classification of the existing Science Shops - Science Shops taxonomy
6	**Challenges and impacts**	Assessment of challenges and impacts of existing Science Shops
7	**Stakeholders**	Experts and advisory board/Stakeholders
8	**Engagement**	Engagement strategy on CBPR
9	**Events**	Events - knowledge transfer and training, co-creation and knowledge cafés
10	**Methods**	Methods, RRI tools for an effective knowledge exchange
11	**Training**	Modules for training Science Shops' staff developed by other projects
12	**Guidelines for NSS**	Guidelines for New Science Shops (NSS) establishment, running, evaluation as well as capacity building
13	**PR Strategies**	Participatory research strategy in communities for Science Shops/ Strategy for capacity building of ESS/Engagement Strategy
14	**Twinning**	Training new Science Shops through twinning
15	**Platform for resources**	Existing online platforms with best practices, guidelines and recommendations for networking that could be used for SciShops.eu dissemination and communication
16	**Dissemination**	Dissemination: website, factsheets, newsletters, solution leaflets, scientific publications, conferences
17	**Networking**	Establishing partnerships and collaborations through existing networks with Science Shops, project consortia, and other organisations that have similar aims with Science Shops.
18	**Conferences**	Organisation/Participation in RRI or CBR/CBPR European conferences, SciShops.eu Symposium and other similar events.

Table 10. Identified synergy types

During the ranking of the potential synergies between SciShops.eu and other projects, the next issues have been taken into account:

- **Time scale.** When the project is closed or will end in first months of SciShops.eu project, no dynamic synergies can be planned. The **static synergies** could be created by means of consolidation, combination or customisation of the project existing resources. The **dynamic synergies** could be created by means of connection with the ongoing projects or active initiatives or networks; nevertheless, no dynamic synergies can be created when the project is closed or will end in the next few months. Many of the ongoing projects did not publish yet any of the project reports, and did not organise significant events.
- **Project completion**. Even if a project is closed, the ex-consortium partners can be contacted for surveys, opinions and partnerships, or for including them in the group of experts or advisory board. In this way, the collaboration will create dynamic synergies.
- **Resources relevance.** Not all the resources generated by the identified projects have the same degree of relevance in creating synergies with SciShops.eu. For example, the reports related to RRI tools are approaching all RRI dimensions equally and they could be less relevant for the topics that are strictly linked only to public engagement in research. For this reason, the resources were ranked based on the potential of creating strong synergies. The relevance will be considered answering to the question "to what extent are the resources generating a potential strong synergy?".
- **Dynamic synergies.** For the purpose of SciShops.eu project, it is considered that dynamic synergies for activities like: training, conferences, dissemination, various events and conferences could be built up with the ongoing projects and the relevant networks. However, twinning will be possible only with existing Sciences Shops.
- **Networks**. At this stage, only the relevant networks for SciShops.eu were considered; thus, Synergy Matrix I includes only 6 out of 16 Science Shops/CBR/CBPR Networks.

The **Synergy Matrix I** should be continuously updated taking into account that only three out of eleven H2020 projects are closed or will be closed in a few months. For the ongoing projects, more resources/reports will be produced and many events will be organised in the next years. For this purpose, SciShops.eu will have to establish good contacts with those projects for which the likelihood of creating potential strong synergies is high.

	Project acronym	Assessment	RRI tools	Case studies	Surveys	Collection and Classification	Challenges and impacts	Stakeholders	Engagement	Events	Methods	Training	Guidelines for NSS	PR Strategies	Twinning	Platforms	Dissemination	Networking	Conferences
		1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*	*13*	*14*	*15*	*16*	*17*	*18*
	H2020																		
1	**Big Picnic**							***	***		**			***					
2	**CIMULACT**							*						**					
3	**EnRRICH**		***	*				**				***	**		**				***
4	**FoTRRIS**															***			
5	**HEIRRI**		***																**
6	**InSPIRES**	***			***		***	***	***	*	**	***	***		**			*	***
7	**JERRI**		**				***												
8	**NewHoRRizon**		*																*
9	**NUCLEUS**		***										*						***
10	**SiS.net2**															***			
11	**SPARKS**		**								***								
	FP7																		
1	**ENGAGE2020**		***					**	**		***					***			
2	**PE2020**		**					*	**										
3	**PERARES**		*		*	*	***	**				***	***						
4	**RRI TOOLS**		***	***					**		**	**				***	***	***	
5	**SCICOM**								**				*						

This project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under Grant Agreement No 741657.

	Project acronym	Assessment	RRI tools	Case studies	Surveys	Collection and Classification	Challenges and impacts	Stakeholders	Engagement	Events	Methods	Training	Guidelines for NSS	PR Strategies	Twinning	Platforms	Dissemination	Networking	Conferences
		1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*	*13*	*14*	*15*	*16*	*17*	*18*
6	VOICES			***							*	*							
	FP6, FP5																		
1	CIPAST							*				*							
2	EFSUPS			*															
3	INMOSION			***								**							
4	ISSNET																	**	
5	INTERACTS							**											
6	NEWCOM			***					**										
7	SCIPAS						**					**	**						
8	TRAMS											**	**						
9	VECTOR			***															
10	WINDFARM - PERCEPTION			***															
	Other initiatives																		
1	Access Alliance		*						**			***							
2	CARL								*			***					*	*	
3	INRO												***						
4	Participedia			***												**			
5	UNESCO Chair			***					***				***				**	***	
	Networks																		
1	CBRC				**		**		**			***		*		**	*	***	
2	ECSA							**	**								*		

	Project acronym	Assessment	RRI tools	Case studies	Surveys	Collection and Classification	Challenges and impacts	Stakeholders	Engagement	Events	Methods	Training	Guidelines for NSS	PR Strategies	Twinning	Platforms	Dissemination	Networking	Conferences
3	ECSITE							**	**								*		
4	ERRIN							**	**								*		
5	EUSEA							**	**								*		
6	Living Knowledge			***				***	***			***				***	***	***	***

Table 11. Synergy Matrix I

Ranking of existing resources was done by answering to the question "to what extent are the **existing resource** generating a potential strong synergy?":

*** - large – the resource is relevant for SciShops.eu objectives
** - moderate – the resource could be relevant for SciShops.eu objectives
* - little – the resource is relevant for the general topic
- - not at all[68]

	Static synergies could be created by means of consolidation, combination or customisation of the project resources.
	Dynamic synergies could be created by means of connection with the ongoing projects or active initiatives or networks. The synergy process is open for these projects, initiatives and networks.
	No dynamic synergies can be created because the project is closed or will be ended in the next few months

[68] The empty cells indicate the lack of relevance for a specific topic; however, the resource might be relevant for a different topic assessed.

3 Strong synergies and connections with European projects and other initiatives

3.1 The need for strong synergies in the Science Shops Ecosystem

Many Science Shops and similar organisations have been established in Europe by the EU funded projects, MATRA projects (funded by the Dutch Ministry of Foreign Affairs), etc. **SciShops.eu project** aims at expanding and further building on the capacity of the Science Shops ecosystem in Europe and beyond. During the SciShops.eu project timeframe, at least ten new university- and non-university-based Science Shops are being established in Europe by project partners.

The connection and partnership with the existing Science Shops could be set up through the **Living Knowledge Network** that connects Science Shops with the organisations of CBR. Living Knowledge aims to foster public engagement with, and participation in all levels of the research and innovation process and facilitates cooperation with CSOs to generate research ideas, questions and agendas. Some of the SciShop.eu project partners are already members of the Living Knowledge Network (UPB, VA). A good example for potential synergy is the two deliverables **"Science Shops taxonomy"** and **"Existing Science Shops assessment"** that will use as starting point for their research the information provided by the Living Knowledge network database and the available resources from projects that either set up new Science Shops or involve Science Shops. Through their local, national and international contacts, the consortium members will make possible the identification of Science Shops and similar organisations from different countries at regional and local level, institutional sectors and diverse culture.

Generally, creating synergies is a significant process that emphasizes the importance of working together in a cooperative and coordinated fashion. It requires partnership and collaboration between partners or between project consortia. The synergies can be created between projects taking advantage of opportunities identified by considering their objectives, actions and outcomes, targeting the resource valorisation, cooperation and establishment of concrete interactions between the EU granted projects and other initiatives. The expected effects achieved through the synergy process can be attributed to various factors, such as collaboration, complementarity, combined expertise etc. It is expected that the synergic process will produce greater impact at a larger societal scale.

The European projects related with SciShops.eu project, were financially supported by EU in the Sixth Framework Programme "Science and Society", in the Seventh Framework Programme "Science in Society" as well as in Horizon 2020 "Science with and for Society". A total of 27 European projects and 21 other initiatives and Science Shops/CBR/CBPR, relevant for creating synergies with SciShops.eu project, have been identified. Some of them produced valuable resources that could be consolidated or combined to create a greater value pool of resources through a synergic process.

The conclusion that emerges from reviewing the resources generated by previous projects, is that a great amount of effort has been made at European level for developing resources in the field of CBR/CBPR. Many of these resources will be used for a synergic process in reaching SciShops.eu objectives. Based on these resources, it will be possible to bring an important contribution to the Science Shops ecosystem enhancement.

In the context of the SciShops.eu project, synergy can be defined as *the concept that the value and outcomes of two projects combined will be greater than the sum of the separate individual parts.* "When two or more activities and processes complement one another to the extent that when undertaking in unison, the total output is significantly greater than when they are done individually"[69]

The synergies with past projects could be developed by using the results produced by past projects to combine, adapt and finally generate, for example, new methods and tools. In this way the use of the lessons learned in the past will be updated and maximised by adding new value to the resources produced in the past. SciShops.eu will establish contacts and interact on regular basis with the Science Shops/partners of the past projects and finding out what kind of collaboration could empower the current project results. The created synergies will be shared with the partners of the closed project.

In the case of the synergies with ongoing projects and initiatives, mutual interactions are expected between identified ongoing European projects and SciShops.eu. Even if the interactions have to be planned and managed, opportunities for establishing unexpected synergies may arise during the projects lifetime. Synergies can be created by using the resources already produced by ongoing projects (static synergy) or by direct contacts for partnership and collaboration with project consortia. The latter one is a dynamic synergy; it has to be planned and agreed upon. In this regard, a strategic plan and a timeline has to be established by a mutual agreement between project consortia.

3.2 Resources for synergies with European projects

This section gathers all the resources identified in Chapter 2. In the following tables they are organised in accordance with the topics for establishing synergies (Table 3).

Existing and new Science Shops

This group includes existing resources produced by closed projects, funded mainly by EU, which specifically refer to organizational aspects of existing and new Science Shops. They have been detailed in Section 2.

[69] Osito Odiyo, Wilson J., 2013, Synergies Created by a Strategic Fit between Business and Human Resource Strategies, Cambridge Scholars Publishing

Resources for Existing Science Shops and Capacity Building *	Type of Synergy	Task/WP
EnRRICH - **The EnRRICH tool for educators: (Re-)Designing curricula in higher education from a "Responsible Research and Innovation" perspective**	static	T4.2 methodology for capacity building
EnRRICH - **G6025 Community Based Participatory Research - Course Pack and Information**	static	T4.2 methodology for capacity building
SPARKS **- THE SPARKS' HANDBOOK - A guideline of innovative formats for participatory activities & more**	static	T4.5 strategy for participatory research in communities
ENGAGE2020 - **Action Catalogue**	static	T4.5 strategy for participatory research in communities
PERARES - **Evaluation Projects of Public Engagement with Research and Research Engagement with Society**	static	T4.2 methodology for capacity building
SCIPAS - **SCIPAS report nr. 6 The impact of Science Shops on university curricula and research**	static	T4.1 predict the challenges
UNESCO Co-Chairs - **User's Manual on Institutionalizing Community University Research Partnerships**	static	T4.1 predict the challenges T4.2 capacity building

Table 12. Resources for Existing Science Shops and Capacity Building *

Resources for New Science Shops	Type of Synergy	Task/WP
EnRRICH - **G6025 Community Based Participatory Research - Course Pack and Information**	static	T4.3 development of modules for training new Science Shops
SPARKS **- THE SPARKS' HANDBOOK - A guideline of innovative formats for participatory activities & more**	static	T4.5 strategy for participatory research in communities
ENGAGE2020 - **Action Catalogue**	static	T4.5 strategy for participatory research in communities
PERARES - **Supporting new Science Shops Report**	static	WP4 WP6
PERARES - **Evaluation Projects of Public Engagement with Research and**	static	T4.2 methodology for capacity building

Research Engagement with Society		
PERARES - **Feasibility report - The Grenoble Science Shop**	static	T4.1 development (life cycle) of a science shop T4.4 Create a guide for establishment and running of Science Shops
TRAMS - **Emerging of Science Shop CREA Barcelona 2006**	static	T4.3 modules for training new Science Shops
TRAMS/Living Knowledge - **Frequently Asked Questions at Living Knowledge website**	static	T4.3 modules for training new Science Shops
Trams - **Tool-kit Scenario Workshop**	static	T4.3 modules for training new Science Shops
SCIPAS - **SCIPAS report nr. 1 Science Shops: Operational options**	static	T4.3 modules for training new Science Shops
SCIPAS - **SCIPAS report nr. 2 Success and failure in starting Science Shops**	static	T4.1 predict the challenges T4.3 modules for training new Science Shops
INRO - **Guideline on the Establishment of an Intermediu Centre**	static	T4.3 modules for training new Science Shops
CARL - **Manual University College Cork**	static	T4.3 modules for training new Science Shops
PARTICIPEDIA - **Database**	static	T4.1 key use cases

Table 13. Resources for New Science Shops

Methods, guidelines and tools for RRI

A comprehensive collection of RRI tools relevant for Science Shops was compiled under the Task 2.2 of SciShops.eu. That will be used as an internal resource but also will be included on the SciShops.eu Platform.

Many resources have been produced by European projects and are presented in the Table 14.

Resources for methods, guidelines and tools for RRI	Type of Synergy	Task/WP
ENGAGE2020 - **Action Catalogue**	dynamic	T2.2 aggregate RRI tools
ENGAGE2020 - **Current praxis of policies and activities that support societal engagement in research and innovation in Europe and beyond**	static	T2.2 aggregate RRI tools

PE2020 - **Toolkit on Public Engagement with Science**	static	T4.3 design of modules, pedagogy and training of trainers for participatory research
Living Knowledge - **Community-Based Participatory Research - A Training Manual for Community-Based Researchers**	static	T4.3 design of modules, pedagogy and training of trainers for participatory research
Access Alliance - **Community-Based Research Toolkit: Resources and Tools for Doing Research with Community for Social Change**	static	T4.3 design of modules, pedagogy and training of trainers for participatory research
OTHER RESOURCES identified under T2.2 Tools for RRI – public engagement		

Table 14. Resources for methods, guidelines and tools for RRI

Good practice case studies

Examples of successful appliance of participatory CBR and their impact on community were described by European projects and not only (see Table 15).

Resources for Good practice case studies	Type of Synergy	Task/WP
ENGAGE - **RRI in Curricula - Good Practices and Case Studies**	static	T2.2 case studies demonstrating successful appliance of participatory community-based research T2.5 impacts Science Shops had on their community
VOICES - **Voices for responsible research and innovation: Engaging citizens to shape EU research policies on urban waste**	static	T2.2 case studies demonstrating successful appliance of participatory community-based research T2.5 impacts Science Shops had on their community
PARTICIPEDIA - **Database**	static	T2.2 case studies demonstrating successful appliance of participatory community-based research T2.5 impacts Science Shops had on their community

VECTOR - **Visualisation of the exposure of cyclists to traffic on roads** WINDFARM-PERCEPTION - **Visual and acoustical impact of wind farms on residents**	static	T2.2 case studies demonstrating successful appliance of participatory community-based research T2.5 impacts Science Shops had on their community
INMOSION - **Science shop for innovative mobility solutions for mobility challenged Europeans**	static	T2.2 case studies demonstrating successful appliance of participatory community-based research T2.5 impacts Science Shops had on their community
NEWCOM - **New Communities and Mental Health? A Needs Analysis**	static	T2.2 case studies demonstrating successful appliance of participatory community-based research T2.5 impacts Science Shops had on their community
EnRRICH - **RRI in Curricula - Good Practices and Case Studies**	static	T2.2 case studies demonstrating successful appliance of participatory community-based research T2.5 impacts Science Shops had on their community

Table 15. Resources for Good practice case studies

Experts. Advisory board. Stakeholders.

A comprehensive collection of stakeholders (science shops, universities and research institutes) will be created under Task 3.2. SciShops.eu consortium will collect a vast pool of experts that will be organised not only geographically but also by sector and expertise. All actor groups will be taken into consideration for an accurate assessment of the science shops ecosystem. This collection could include the resources from Table 16, but also the partners of the 27 projects identified for creating synergies.

Resources for Experts, Advisory board, Stakeholders	Type of Synergy	Task/WP
SiS.net - **SWAFS Stakeholder Database - Search the database**	dynamic	T2.3 identify stakeholders

Big Picnic - **Partner recruitment[70] guidelines and consent. Data use. Ethical guidelines for non EU-countries**	static	T3.5 involve stakeholders from community

Table 16. Resources for Experts. Advisory board. Stakeholders

Stakeholder and engagement strategies on participatory research in communities

Over the past decade, stakeholder engagement has come to be viewed as essential to fostering more responsible and sustainable research. Engagement strategies depend on the reasons for engagement and level of stakeholder involvement. The selected resources (Table 17) refer to different stakeholders and different types of involvement.

Resources for engagement strategies on participatory research in communities	Type of Synergy	Task/WP
Big Picnic - **Stakeholder Engagement Strategy**	static	T3.2 stakeholder engagement strategy
ENGAGE2020 - **Current praxis of policies and activities that support societal engagement in research and innovation in Europe and beyond**	static	T3.2 stakeholder engagement strategy
ENGAGE2020 - **What the Future Holds for Societal Engagement -Future Engagement Report**	static	T3.2 stakeholder engagement strategy T3.3 identify current perceptions, experiences, attitudes and challenges on participatory community-based research
PERARES - **Participatory Research Programmes - Views of stakeholders**	static	T3.3 identify current perceptions, experiences, attitudes and challenges on participatory community-based research
PERARES - **Handbook of Models of Community Engagement Strategies in Higher Education Institutions: Policy and Curriculum Development**	static	T3.2 stakeholder engagement strategy
PERARES - **Practical Guide to Developing Policy and Strategy**	static	T3.2 stakeholder engagement strategy
PERARES - **Sustainability for Science Shops. A Practical Guide to**	static	T3.2 stakeholder engagement strategy

[70] to join co-creation teams

Developing Policy and Strategy.		
PERARES - **Structuring PER in HE through research with CSOs**	static	T3.2 stakeholder engagement strategy
PERARES - **Structuring PER in Social Sciences Research and forgotten citizens of Europe**	static	T3.2 stakeholder engagement strategy

Table 17. Resources for engagement strategies on participatory research in communities

Tools, guidelines and platforms for participatory dialogue

The **Resource Pools** section of SciShops.eu platform will include, for the use of new Science Shops and not only, background knowledge and training materials customised according to the mother organisation. In order to prepare and set up a science shop, background knowledge and material will be provided within the multilingual resource pool. The synergic process will allow to consolidate, combine and customise the identified resources (see Table 18) for generating higher value guidelines, tools and resources for participatory dialogue.

Resources for tools, guidelines and platforms	Type of Synergy	Task/WP
BigPicnic - **Blueprint of toolkit for co-creation**	static	T3.5 topic selection for co-creation events and knowledge cafés
BigPicnic - **Partner recruitment guidelines and consent. Data use. Ethical guidelines for non-EU-countries**	static	T3.2 - identify and recruit participants to join the co-creation teams T3.5
CIMULACT - **Social needs based research programme scenarios – set of research topics based on European citizens' needs - including 10 to 15 simulated calls for H2020**	static	T3.5 topic selection for co-creation events and knowledge cafés
CIMULACT - **Posters of the European Citizens' Needs**	static	T4.5 enhancement of the civil society to formulate research questions
JERRI - **Description of specified RRI goals at TNO**	static	T4.2 goals, demands, expectations and visions articulated by the stakeholders for the RRI dimensions
JERRI - **Description of specified RRI goals at Fraunhofer**	static	T4.2 goals, demands, expectations and visions articulated by the stakeholders for the RRI dimensions
PE2020 - **Toolkit on Public**	static	T3.5

Engagement with Science		topic selection for co-creation events and knowledge cafés
RRI Tools - **RRI Tools Platform**	dynamic	T2.2 aggregate RRI tools

Table 18. Resources for tools, guidelines and platforms for participatory dialogue

Training Science Shops resources

Table 19 includes resources, methods and tools, which can be applied for staff training of most of the Science Shops models, as well as resources for capacity building including other types of methods and activities, including consensus seminars, interactive workshops and dissemination, valorisation events, etc.

Training events	Type of Synergy	Task/WP
SCIPAS - **SCIPAS report nr. 3 Training programmes for Science Shops**	static	T3.4 the training of new science shops' staff
PERARES - **Guide to organizing scenario workshop to develop partnerships between researchers and CSOs**	static	T3.4 the training of new science shops' staff
UNESCO Co-Chairs - **Guidelines for Universities Engaging in Social Responsibility**	static	T3.4 the training of new science shops' staff
UNESCO Co-Chairs - **Book on 'Knowledge & Engagement: Building Capacity for the Next Generation of Community Based Researchers**	static	T3.4 the training of new science shops' staff
UNESCO Co-Chairs - **Training the Next Generation of Community Based Researchers: A Guide for Trainers**	static	T3.4 the training of new science shops' staff
UNESCO Co-Chairs - **Training in Community Based Research: Annotated Bibliography**	static	T3.4 the training of new science shops' staff
UNESCO Co-Chairs - **Resource Guide for Video Collection of Training in Community Based Research**	static	T3.4 the training of new science shops' staff
UNESCO Co-Chairs - **Global trends in training Community-Based Research (CBR) in Higher Educational Institutions and Civil Society Organizations: Survey Results**	static	T3.4 the training of new science shops' staff
Living Knowledge - **Community-Based**	static	T3.4

Participatory Research - A Training Manual for Community-Based Researchers		the training of new science shops' staff

Table 19. Training Science Shops resources

Communication events

Several relevant conferences will be held in the coming period (see **Error! Reference source not found.**). A continuous update of the list of the conferences organised by other projects will be carried out under WP7.

Other events will be organised in the next two years (Table 20). Many of them have not yet been announced. A continuous keeping track of the relevant events to be held (summer schools, workshops, etc.) will be carried out under WP7.

Conferences/Dissemination	Type of Synergy	Task
NewHoRRIzon organises 18 Social Labs and co-create pilot actions and activities and develop narratives and storylines based on the experience from these pilots	dynamic	WP7 DISSEMINATE

Table 20. Other relevant events to be held in the coming period

Networks

The collaborative networks of CBR/CBPR organisations or Science Shops represent an important component of success in the Science Shop's Ecosystem. Organizations and people engaged in collaboration via networks will get benefits greater than the time, effort, and other resources it takes to collaborate. In this way networks themselves represent synergic dynamic structures. SciShops.eu and the new Science Shops involvement in active networks, based on the affiliation to various research field at national, regional or international level, will be a success factor in achieving their goals and carrying out their objectives. A total of 16 networks of national, regional, European and international networks (see Section 2.8) were identified, many of them being Science Shop networks. Some of the SciShops.eu actions of developing an online collaborative network for CBPR via Science Shops, might be supported by the selected networks through:

- dissemination of the SciShops.eu results;
- reaching European policy makers, private sector, research and education sector, as well as the civil society;
- conducting research in collaboration with other CBPR entities/networks throughout EU;
- enhancement of Science Shop Ecosystem.

Networks/Networking	Type of Synergy	Task
CBRC - Network	dynamic	WP7 DISSEMINATE
Living Knowledge Network	dynamic	WP7 DISSEMINATE
UNESCO CBR - Program	dynamic	WP7 DISSEMINATE
NewHoRRIzon - create a RRI Network including the national funding agencies and develop a RRI community starting with a RRI Ambassadors programme	dynamic	WP7 DISSEMINATE
ISSNET **- To be continued - Recommendations for structuring and funding the Living Knowledge network**	static	WP7 DISSEMINATE
SCIPAS **- SCIPAS report nr. 7 Living Knowledge: the network**	static	WP7 DISSEMINATE
RRI Tools - Platform	dynamic	WP7 DISSEMINATE
ENGAGE2020 – **Action Catalogue**	dynamic	WP7 DISSEMINATE

Table 21. Resources for collaborative networking

3.3 Synergy Matrix II

The "Synergy Matrix II" highlights the projects and initiatives which can be the basis for developing strong synergies. Based on the evaluation of their relevance with the SciShops.eu topics (in "Synergy Matrix I"), only the synergies ranked with *** or ** were retained as potential strong synergies. They were assembled in five tables: one for each of the Work Packages 2, 3, 4, 6, and 7, which include the projects and the strong synergy topics[71]. Three different types of synergies are shown in the following tables:

	Dynamic synergies with ongoing projects
	Dynamic synergies with networks and other initiatives
	Static synergies with closed projects/in the process of closing, or initiatives

[71] See Table 10.

	Project/Network acronym	Synergy topic
H2020		
1	EnRRICH	RRI Tools
2	InSPIRES	Impact, Assessment, Survey,
3	JERRI	RRI Tools
4	NUCLEUS	RRI Tools, Challenges and impact
FP7		
1	ENGAGE2020	RRI Tools
2	PE2020	RRI Tools
3	PERARES	Challenges and impact
4	RRI TOOLS	RRI Tools, Case Studies
5	VOICES	Case Studies
FP6, FP5		
1	INMOSION	Case Studies
2	NEWCOM	Case Studies
3	SCIPAS	Case Studies, Challenges and impact
4	VECTOR	Case Studies
5	WINDFARM -PERCEPTION	Case Studies
Other initiatives		
1	Participedia	Case Studies
2	UNESCO Chair	Case Studies
Networks		
1	Participedia	Survey, Challenges and impact
2	UNESCO Chair	Case Studies

Table 22. Strong synergies with WP2 "EXPLORE: Base Research and European Participatory CBR Assessment"

	Project/Network acronym	Synergy topic
H2020		
1	Big Picnic	Stakeholders, Engagement
2	EnRRICH	Stakeholders
3	InSPIRES	Stakeholders, Engagement
4	SiS.net2	Stakeholders
FP7		
1	ENGAGE2020	Stakeholders, Engagement
2	PE2020	Engagement
3	PERARES	Stakeholders
4	RRI TOOLS	Engagement
FP6, FP5		
1	NEWCOM	Engagement
Other initiatives		
1	Access Alliance	Engagement
2	UNESCO Chair	Engagement
Networks		
1	CBRC	Engagement
2	ECSA	Stakeholders, Engagement
3	ECSITE	Stakeholders, Engagement
4	ERRIN	Stakeholders, Engagement
5	EUSEA	Stakeholders, Engagement
6	Living Knowledge	Stakeholders, Engagement

Table 23. Strong synergies with WP3 "ENGAGE: Stakeholder analysis, involvement, knowledge exchange roadmap"

	Project/Network acronym	Synergy topic
H2020		
1	Big Picnic	Methods, Participatory research strategy
2	EnRRICH	Training for Science Shops, Guidelines for Science Shops
3	InSPIRES	Training for Science Shops, Guidelines for Science Shops
FP7		
1	ENGAGE2020	Methods and RRI tools
2	PERARES	Training, Guidelines for NSS
3	RRI TOOLS	Methods and RRI tools
FP6, FP5		
1	SCIPAS	Training, Guidelines
2	TRAMS	Training, Guidelines
Other initiatives		
1	Access Alliance	Training
2	CARL	Training
3	INRO	Guidelines
4	UNESCO Chair	Guidelines
Networks		
1	CBRC	Training
2	Living Knowledge	Training

Table 24. Strong synergies with WP4 "GENERATE: Strategy for CBR and science shops' further development"

	Project acronym	Synergy topic
H2020		
1	InSPIRES	Twinning (New Science Shops)

Table 25. Strong synergies with WP6 "ESTABLISH: New science shops, twinning them with experienced ones for effective knowledge exchange"

	Project acronym	Synergy topic
H2020		
1	FoTRRIS	Platforms
2	InSPIRES	Conferences
3	NUCLEUS	Conferences
FP7		
1	RRI TOOLS	Platforms, Dissemination, Networking
Other initiatives		
1	UNESCO Chair	Platforms, Dissemination
Networks		
1	CBRC	Platforms, Networking
2	Living Knowledge	Platforms, Dissemination, Networking, Conferences

Table 26. Strong synergies with WP7 "DISSEMINATE: Project Communication, Publications, Networking, and Exploitation"

Based on the assessment done by this report, SciShops.eu could establish connections and partnerships and built strong dynamic synergies with the projects/initiatives/networks presented in Table 27.

Project/Initiative/Network	WP2	WP3	WP4	WP6	WP7
BigPicnic		Yes	Yes		
FoTRRIS	Yes				Yes
JERRI	Yes				
InSPIRES	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**
NUCLEUS	Yes				Yes
Access Alliance		Yes	Yes		
CARL			Yes		
UNESCO Chair	**Yes**	**Yes**	**Yes**		**Yes**
CBRC	**Yes**	**Yes**	**Yes**		**Yes**

ECSA		Yes			
ECSITE		Yes			
ERRIN		Yes			
EUSEA		Yes			
Living Knowledge	**Yes**	**Yes**	**Yes**		**Yes**

Table 27. Synergy Matrix II for ongoing projects

Project/Initiative/Network	WP2	WP3	WP4	WP6	WP7
ENGAGE2020	**Yes**	**Yes**	**Yes**		
PE2020	Yes	Yes			
PERARES	**Yes**	**Yes**	**Yes**		
RRI TOOLS	**Yes**	**Yes**	**Yes**		**Yes**
VOICES	Yes				
INMOSION	Yes				
NEWCOM	Yes	Yes			
SCIPAS	Yes		Yes		
VECTOR	Yes				
TRAMS			Yes		
WINDFARM -PERCEPTION	Yes				

Table 28. Synergy Matrix II for closed projects

The scan for projects specifically addressing Science Shops/CBR/CBPR has found 11 H2020 projects, 6 FP7 projects, 10 FP5 and FP6 projects, 5 other initiatives and 16 networks. From a total of 32 European projects and other initiatives more than 70 valuable resources for establishing synergies have been identified.

Based on the "**Synergy Matrix I**" and "**Synergy Matrix II**", the partners will be able to select and use, and furthermore to establish synergies with selected European projects/initiatives for producing other resources with a high added value.

"**Synergy Matrix II**" highlights the **ongoing projects** that are most likely to create **strong dynamic synergies**. InSPIRES project is the most relevant and is considered as the SciShops.eu's sister project. The closed projects whose results are important resources for static synergy process are RRI-Tools, PERARES and ENGAGE2020.

Selection of the most appropriate projects for synergies is amendable, because it targets projects that cover most WPs. In this way valuable resources can be omitted; therefore, it is recommended to use the Synergy Matrix I as well to ensure that no useful resource has been lost. In addition, a more detailed analysis should be undertaken for each WP synergies by the lead partner.

To plan, coordinate and create synergies, a strategic plan has to be conceived. It is needed especially for the dynamic strategies and it has to be particularized for each project with which synergies will be achieved. The *Strategic Plan of SciShops.eu Synergy Process* is presented in the next chapter.

4 Strategic Plan of SciShops.eu Synergy Process

SciShops.eu project develops a strong strategy for growing and building capacity in the European Science Shops ecosystem through conducting an extensive assessment and analysis of existing Science Shops and other concepts of participatory and CBR across Europe and beyond.

Another main goal of the project is to establish at least ten new Science Shops. The novelty in the field is brought by the type of organizations starting a science shop: SMEs, large enterprises, universities, NGOs and research institutes.

The present Strategic Plan sets the vision, goals and main objectives of the **SciShops.eu Synergy Process** for the project length (2018 – 2020) in accordance with project objectives. This document identifies short term objectives, to be achieved during the two-year period.

At this early stage, the *Strategic Plan of SciShops.eu Synergy Process* is a general one; it should be finalised after selecting the projects with which dynamic synergies will be established. All static synergies that were identify can be used, in certain conditions, without any strategy.

Strategic Plan of SciShops.eu Synergy Process

A. The Vision

To build a sustainable science shop ecosystem *through synergy processes between European and global initiatives in participatory and community-based research.*

B. The Mission

The mission of SciShops.eu Synergy Process is to initiate, support and assist adding value to the entire science shop ecosystem by creating, developing and strengthening synergies between European projects and international initiatives in participatory and community-based research.

C. Goals

Goal no. 1. **To create, develop and expand synergies with European projects and Science Shops, and similar organisations, for the enlargement of the participatory and community-based research**
Objectives a. Continually c*ollaborate in and outside of SciShops.eu consortium for identifying and establishing synergies* with other projects and initiatives at European and international level. b. Establish and develop synergies and links between SciShops.eu activities and similar activities of H2020 ongoing projects c. Build up a wide-range of *synergies between SciShops.eu and ended related projects (FP7 and other European Projects).*

d. Foster collaboration and maintain an active relationship with projects and Science Shops at local, regional, national and international level through consortium partners.

Goal no. 2.

To develop tools associated with the synergic projects for enhancing access and assisting in the synergy process

Objectives

a. Develop SciShops.eu Web Platform including the experts identified in the process of establishing synergies with other projects.

b. Develop Digital Twinning Services on SciShops.eu Web Platform together with partners from synergic projects.

c. Include synergic project partners in the usability tests and feedback surveys for SciShops.eu Web Platform.

Goal no. 3.

To use and to provide new and old Science Shops with a synthetic selection of resources and tools produced by closed and ongoing projects

Objectives

a. Continually update the synergic outcomes developed by the H2020 projects.

b. Select the resources identified as valuable for new and old Science Shops and share it inside SciShops.eu Consortium via the Web Platform.

Goal no. 4.

To increase visibility of synergies between SciShops.eu and other projects

Objectives

a. Promote the SciShops.eu Web Platform through links on existing Web Platforms, Networks and initiatives associated with Science Shops and/or participatory and CBR organisations.

b. Promote the synergic projects through SciShops.eu Web Platform.

Goal no. 5.

To promote the SciShops.eu project in the European and international science shop ecosystem

Objectives

a. Develop links and bridge with relevant participatory and CBR organisations.

b. Network and develop partnerships with Science Shops, relevant organizations or projects in Europe.

c. Develop links with relevant international organisations.

Goal no. 6. **To consider and investigate possible future synergic developments**
Objectives a. Establish and maintain contacts to develop joint activities with the partners of synergic projects. b. Share questionnaires and surveys for a better response rate. c. Identify potential collaborations based on the project activities: organising joint training sessions and knowledge transfer events, cross mentoring, symposiums and conferences, etc.

D. Actions that will be deployed to achieve the goals

The actions can be developed in conjunction with the ongoing or ended projects/initiatives. *Not all of the following steps are always necessary (*).* The research results are usually public and there is no need to contact or meet the representatives of synergic initiatives/projects.

Find and contact the synergic projects
a. Identify synergic projects (see previous Chapters) and synergies. * b. Contact the project coordinators or event's organisers to agree on collaborations respectively involvement in event organisation. *
Meet the synergy partners
a. Agree on, plan and organise meetings (face-to-face, video and voice calls, during conferences and workshops, etc.) with the coordinators of synergic projects long before the collaboration will start. *
b. Set up list of meetings where synergies could be identified and developed. *
c. Contact the selected networks; apply for membership.
Plan and promote synergic events
a. Plan and include the synergies in: • Events roadmap 1 • Events roadmap 1 • Knowledge Exchange Roadmap 1 • Knowledge Exchange Roadmap 2
b. Involve synergic project partners: Identify the common interests and subjects, methods and tools that can be applied - in training activities and involve synergic project partners in training of new Science Shop staff in: • Summer Schools • Twinning meetings

• Mutual learning events   ○ In knowledge transfer from New Science Shops to the community • Knowledge transfer from New Science Shops to the community • Co-creation events • Knowledge cafes
c. Participate in dissemination activities (e.g. conferences) organised by synergic projects. The event's organisers will be contacted by SciShop.eu management to agree on collaborations, involvement in conference organisation. d. Participate in events organized by these networks and projects.
e. Exchange information about projects activities on regular basis.
f. Invite and involve synergic project consortia to SciShops.eu Symposium.
Use training resources
Use of the materials and manuals produced by SciShops.eu and by the previous projects.
Staff Exchange for the organizations starting a new science shop or experienced ones
Find staff exchange opportunities with similar organizations (other Science Shops, members of synergic project consortia, research centres, etc.) in order to transfer their knowledge or to learn from others 'experience.
Evaluate the success of collaboration
Establish the significance of synergic effects that were generated and its impact on • project outcomes; • partnerships.
Decide on further actions
• future collaborations; • other synergies; • synergies to be developed with other projects/partners.

* Recommended for ongoing projects

5 Conclusions

In accordance with the expected impact of the topic SwafS-01-2016, *Participatory research and innovation via Science Shops*, SciShops.eu promotes "*the growth and capacity building of science shops for socially responsible CBR and citizen science. … At the same time, it will* ***connect with relevant international initiatives*** *so as to ensure mutual learning across borders*". Accordingly, the report investigated the possible synergies and links that could be developed with other European projects and initiatives. The existence of an ample documentation sources makes possible to create synergies between the projects already closed or ongoing, leading to the addition of added value and use of existing resources.

The scan for projects specifically addressing Science Shops/CBR/CBPR has found 11 H2020 projects, 6 FP7 projects, 10 FP5 and FP6 projects, 5 other initiatives and 16 networks. From a total of 32 European projects and other initiatives more than 70 valuable resources for establishing synergies have been identified. Two matrices were elaborated ("**Synergy Matrix** I" and "**Synergy Matrix II**") to select in 2 steps the projects for building synergies. The partners will be able to select and use, and furthermore to establish synergies with selected European projects/initiatives for producing other resources with a high added value. A *Strategic Plan of SciShops.eu Synergy Process* to plan, coordinate and create synergies is presented in the last chapter.

Developing synergies evaluation tools will become very important in selecting and ranking the projects for which there is considerable potential in establishing synergies. The tools will be influenced by the selected scenarios for achieving synergies.

The stimulation of strategic cooperation between stakeholders involved in RRI and the encouragement of the synergies among European related projects should represent a priority for Research and Innovation European programs. Interaction and synergies between various types of stakeholders, organisations and projects have to be promoted and the projects themselves should generate synergies.

6 References

All the websites have been accessed/checked on 23.12.2017

Access Alliance (2012) *Community-Based Research Toolkit: Resources and Tools for Doing Research with Community for Social Change*. Available at http://accessalliance.ca/wp-content/uploads/2015/03/CBR_Toolkit_Jan2012.pdf

ADReCA (2011) PERARES – WP 4 Feasibility report - The Grenoble Science Shop. Available at http://www.livingknowledge.org/fileadmin/Dateien-Living-Knowledge/Library/Project_reports/PERARES_New_Science_Shop_Grenoble_ADReCA_FeasibilityReport_WP4_15jan2011.pdf

BigPicnic (2016a) *Deliverable D1.1 Stakeholder Engagement Strategy.* Available at https://www.bigpicnic.net/media/documents/BigPicnic_Deliverable_D1.1_Stakeholder_Engagement_Strategy.pdf

BigPicnic (2016b) *Deliverable 2.1 - Blueprint of toolkit for co-creation.* Available at https://www.bigpicnic.net/resources/co-creation-toolkit-and-partner-strategies-co-creation/

BigPicnic (2016c) *Deliverable 2.2 - Draft partner strategies for co-creation.* Available at https://www.bigpicnic.net/resources/co-creation-toolkit-and-partner-strategies-co-creation/

Broerse J.E.W., van der Ham, L. Tielemans, B., Mazzonetto, M. (2014) *Voices for Responsible Research and Innovation: Engaging Citizens to Shape EU Research Policy on Urban Waste*. Available at https://ec.europa.eu/research/swafs/pdf/pub_featured/voices_for_responsible_research_and_innovation_engaging_citizens_to_shap.pdf

Buckley N. (2014) PERARES *Deliverable D2.1 - Living Knowledge Online Debates – Final Summary Report.* Available at http://www.livingknowledge.org/fileadmin/Dateien-Living-Knowledge/Library/Project_reports/PERARES_LK_Online_Debates_Summary_Report_D_2.1.pdf

Chopyak, C. (2001) *SCIPAS report nr. 5 - Development of a Public Internet Database of Science Shops,* Available at http://www.livingknowledge.org/fileadmin/Dateien-Living-Knowledge/Library/Project_reports/SCIPAS_report_nr._5_2001.pdf

CIMULACT (2017) *Deliverable 2.2 – Social needs based research programme scenarios including 10 to 15 simulated calls for H2020.* Available at http://www.cimulact.eu/wp-content/uploads/2017/03/CIMULACT-Deliverable-2.2-2017_low_res.pdf

De Bok, C. (2001) *SCIPAS report nr. 3 - Training Programmes for Science Shops,* Available at http://www.livingknowledge.org/fileadmin/Dateien-Living-Knowledge/Library/Project_reports/SCIPAS_report_nr._3_2001.pdf

De Bok, C. (2005) ISSNET WP1 *To be continued - Recommendations for structuring and funding the Living Knowledge network.* Available at http://www.livingknowledge.org/fileadmin/Dateien-Living-Knowledge/Library/Project_reports/ISSNET_WP1_report_2005.pdf

EC-DGRI (2016) *Ex-post evaluation of science in society in FP7 (Final report – Study)*, Available at https://publications.europa.eu/en/publication-detail/-/publication/b810ca5b-32bb-11e6-b497-01aa75ed71a1/language-en, retrieved on 21.12.2017

EC-DGRI (2016a) *Ex-post Evaluation of Science in Society in FP7 – Unit RTD B7 response to recommendations*, Available at https://ec.europa.eu/research/swafs/pdf/fp7_sis_ex-post_evaluation_policy_responses.pdf, retrieved on 21.12.2017

ENGAGE2020 (2014a) *Deliverable 3.1 - Current Praxis of Policies and Activities Supporting Societal Engagement in Research and Innovation.* Available at http://engage2020.eu/media/D3.1-Current-Praxis-of-Policies-and-Activities.pdf

ENGAGE2020 (2014b) *Deliverable 3.2 - Public Engagement Methods and Tools.* Available at http://engage2020.eu/media/D3-2-Public-Engagement-Methods-and-Tools-3.pdf

ENGAGE2020 (2014c) *Deliverable 4.1 - Policy options for engagement in science and innovation within the frame of Horizon2020.* Available at http://engage2020.eu/media/D4.1-policy-options.pdf

ENGAGE2020 (2015) *Deliverable 4.2 - What the Future Holds for Societal Engagement Future Engagement Report.* Available at http://engage2020.eu/media/D4.2-Future-Engagement.pdf

EnRRICH (2016) *Deliverable 2.3 - The EnRRICH tool for educators: (Re-) Designing curricula in higher education from a "Responsible Research and Innovation" perspective.* Available at http://www.livingknowledge.org/fileadmin/Dateien-Living-Knowledge/Dokumente_Dateien/EnRRICH/D2.3_The_EnRRICH_Tool_for_Educators.pdf

Málovics, G., Mihók, B., Jakab, L., Lakatos, L., Balázs, B., Pataki, G., Herrmann, P., Kingston, A., Gonzalez, A.G., Rué, L., Ruiz, L. (2012) PERARES Deliverable 6.1 - Multi-annual PER action plan. Forgotten Citizens of Europe - Participatory Action Research for Local Human Rights. Available at http://www.livingknowledge.org/fileadmin/Dateien-Living-Knowledge/Library/Project_reports/PERARES_Structuring_PER_in_Social_Sciences_Research_and_forgotten_citizens_of_Europe_D6.1.pdf

Martin, E, McKenna, E., Treasure, K. (2011) PERARES Report - Structuring PER in HE through research with CSOs. Available at http://www.livingknowledge.org/fileadmin/Dateien-Living-Knowledge/Library/Project_reports/PERARES_Structuring_PER_in_HE_through_research_with_CSOs_D7.2_2011.pdf

Millot, G. and Buckley, N. (2013) *PERARES Deliverable 3.2 - Guide to organizing scenario workshop to develop partnerships between researchers and CSOs.* Available at http://www.livingknowledge.org/fileadmin/Dateien-Living-

Knowledge/Library/Project_reports/PERARES_Guide_to_organize_scenario_workshops_to_develop_partnerships_between_reseachers_and_CSOsD3.1.pdf

Millot, G. (2014) PERARES *Deliverable 8.2 - Programmes de recherche participative– Points de vue d'acteurs,* http://www.livingknowledge.org/fileadmin/Dateien-Living-Knowledge/Library/Project_reports/PERARES__Programmes_de_recherche_participative_D8.2_2014.pdf

Gnaiger A. and Martin, E. (2001) *SCIPAS report nr. 1 - Science Shops: Operational Options,* Available at http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.199.1021&rep=rep1&type=pdf

Gnaiger, A. and Schroffenegger, G. (2008) *Tool-kit Scenario Workshop.* Available at http://fbi.or.at/download/2008_Scenario_Workshop.pdf

HEIRRI (2017) *Deliverable 3.2 - Training Programmes.* Available at http://www.guninetwork.org/files/images/imce/heirri_wp3_d3.2.pdf

Hende, M. and Jørgensen, M. S. (2001) *SCIPAS report nr. 6 - The impact of Science Shops on university curricula and research,* Available at http://www.livingknowledge.org/fileadmin/Dateien-Living-Knowledge/Library/Project_reports/SCIPAS_report_nr._6_2001.pdf

INTERMEDIUNET (2006) *Guideline on the Establishment of an InterMEDIU Center*. Available at http://www.livingknowledge.org/fileadmin/Dateien-Living-Knowledge/Dokumente_Dateien/Toolbox/LK_B_Guidelines.pdf

JERRI (2017a) *Deliverable D3.2 - Description of specified RRI goals at TNO.* Available at https://www.jerri-project.eu/jerri-wAssets/docs/deliverables/wp-3/JERRI_Deliverable_D3_2_Description-of-specified-RRI-goals-at-TNO.pdf

JERRI (2017b) *Deliverable D2.2* - Description of specified RRI goals at Fraunhofer Available at https://www.jerri-project.eu/jerri-wAssets/docs/deliverables/wp-2/JERRI_Deliverable_D2_2_Description-of-specified-RRI-goals-at-Fraunhofer.pdf

Lüsen, M. and Sclove, D. (2001) SCIPAS report nr. 7 Living Knowledge: the network. Accomplishments and Further Opportunities for Developing an International Network of Science Shops, Available at http://www.livingknowledge.org/fileadmin/Dateien-Living-Knowledge/Library/Project_reports/SCIPAS_report_nr._7_2001.pdf

Martin, E. and McKenna, E. (2013a) PERARES *Deliverable 7.1 - Handbook of Models of Community Engagement Strategies in Higher Education Institutions.* Available at http://www.livingknowledge.org/fileadmin/Dateien-Living-Knowledge/Library/Project_reports/PERARES_Handbook_of_Models_of_Community_Engagement_Strategies_in_Higher_Education_Institutions_-_Policy_and_Curriculum_Development_D.7.1_2013.pdf

Martin, E. and McKenna, E. (2013b) *Sustainability for Science Shops - A Practical Guide To Developing Policy And Strategy*. Available at http://www.livingknowledge.org/fileadmin/Dateien-Living-Knowledge/Dokumente_Dateien/Toolbox/LK_C_Practical-guide-developing-policy-and-strategy.pdf

Mulder, H. A. J., Auf der Heyde, T., Goffer, R., Teodosiu, C. (2001) *SCIPAS report nr. 2 - Success and Failure in Starting Science Shops,* Available at http://www.livingknowledge.org/fileadmin/Dateien-Living-Knowledge/Library/Project_reports/SCIPAS_report_nr._2_2001.pdf

Mulder, H.A.J. (2014) PERARES *Deliverable D4.2 - Supporting new Science Shops.* Available at http://www.livingknowledge.org/fileadmin/Dateien-Living-Knowledge/Library/Project_reports/PERARES_Supporting_new_Science_Shops_Report_D4.2.pdf

PE2020 (2014) *Deliverable 1.1 - Inventory of PE mechanisms and initiatives.* Available at http://pe2020.seravo.fi/wp-content/uploads/2014/02/PE2020-FINAL-D.1.1-report.pdf

Puranam P. and Vanneste B. (2016) *What Corporate Strategists Need to Know About Synergies,* Available https://knowledge.insead.edu/strategy/what-corporate-strategists-need-to-know-about-synergies-4617

Sclove, R., Scammell, M. and Holland, B, (1998) An Introductory Reconnaissance, Including Twelve Organizational Case Studies and Comparison with the Dutch Science Shops and the Mainstream American Research System,

Shallwani, S. and Mohammed, S. (2007) *Community-Based Participatory Research - A Training Manual for Community-Based Researchers.* Available at http://www.livingknowledge.org/fileadmin/Dateien-Living-Knowledge/Dokumente_Dateien/Toolbox/LK_A_Training_manual.pdf

Steinhaus, N. (2001) *SCIPAS report nr. 4 - The Development of an International Science Shop Magazine,* Available at http://www.livingknowledge.org/fileadmin/Dateien-Living-Knowledge/Library/Project_reports/SCIPAS_report_nr._4_2001.PDF

Steinhaus, N., Martin, E., McKenna, E, Shields, M., Kött, A., Millot, G, Neubauer, C., Stanescu, R. (2013) PERARES Deliverable 8. Experience and attitudes of research funding organisations towards public engagement with research with and for society and its organisations. Available at https://www.researchgate.net/publication/272795481_Experiences_and_attitudes_of_Research_Funding_Organisations_towards_public_engagement_with_research_with_and_for_civil_society_and_its_organisations_-_Full_Report_PERARES_Deliverable

UCC CARL Committee (2013) *CARL Manual University College Cork (version 1.7)* Available at https://www.ucc.ie/en/media/research/carl/CARL_CBR_Manual.doc

UNESCO Chair in Community Based Research and Social Responsibility in Higher Education (2015) *Institutionalizing Community University Research Partnerships. A user's manual*, Available at http://www.livingknowledge.org/fileadmin/Dateien-Living-Knowledge/Dokumente_Dateien/Toolbox/LK_A_Community_University_Research_Partnerships_Manual.pdf