Foresight and Public Engagement in Research and Innovation

PACITA: Parliaments and Civil Societies for Technology Assessment

2015 marked the end of a successful project and a great learning experience for all parties involved – the **Parliaments and Civil Societies for Technology Assessment (PACITA)** project, which was supported through the EU's 7th Framework Program for Research and Innovation and involved 15 partners from 13 European countries. Partner institutions included national and regional parliamentary offices for science and technology, science academies, research institutions, universities, and civil society organizations. The project ran from March 2011 to March 2015.

In early January 2015, following a round of national-level events on the topic of Sustainable Consumption, showcasing the World Wide Views engagement method, a policy report was released, summarizing the results of the method's application. ARC Fund took part in a joint meeting with European Commission representatives in Brussels, where the report's findings were presented and further discussed. The policy report details specific recommendations, based on the input of more than 1000 citizens across Europe.

In February, a team from ARC Fund participated in an international Technology Assessment conference in Berlin, Germany. The conference was a significant and highly visible international event of the PACITA project and aimed to further support the exchange of experience and capacity building in the field of TA across Europe and the world. In March 2015, ARC Fund welcomed the entire PACITA consortium in Sofia, hosting its final meeting, which marked the official closure of the project.

A long-anticipated outcome of the project was published at the end of 2015 by Palgrave Macmillan. The book "Policy-Oriented Technology Assessment across Europe - Expanding Capacities," which

was authored by the PACITA partners, offers an up-to-date account of the expansion of technology assessment capacities across Europe, and particularly in Member States without established technology assessment traditions. ARC Fund's team co-authored several chapters of the book focusing on i) training TA professionals and enhancing capacity for knowledge-based policy making; ii) adopting TA in Central and Eastern European Countries; and iii) the application of the World Wide Views engagement method on the topic of Sustainable Consumption across Europe.

ARC Fund takes special pride in being a pioneer in championing the concept of technology assessment and practice within the domestic policy discourse. We build on our strong track record in supporting the development and implementation of innovation policies, in performing high-quality applied research, in networking with policy institutions and science centers, and in mainstreaming technological advances and solutions.



Second European Technology Assessment conference in Berlin, Germany (25 February 2015)

ENGAGE2020: Engaging Society in Horizon 2020

2015 was the final year of implementation of the **Engage2020** project (Engaging Society in Horizon 2020), which was launched in the autumn of 2013 and was financed by the Seventh Framework Program for Research and Innovation of the European Union. A major objective of the project was to **promote and facilitate the use of public engagement methods and instruments in research and innovation** (R&I), as well as to explore how members of society are involved in R&I today, and how they could be involved in the future.

The Engage2020 consortium included six organizations from 5 countries: ARC Fund, the Danish Board of Technology Foundation (Denmark), the Karlsruhe Institute of Technology (Germany), the University of Groningen (the Netherlands), INVOLVE (the United Kingdom) and DIALOGIK (Germany). The consortium mobilized experts and practitioners with competencies in the areas of technology assessment, foresight, science shops and other approaches for societal engagement in research and the innovation.

In the frame of the project, ARC Fund's team coordinated two major project outcomes and contributed to a range of other project activities. ARC Fund coordinated the completion of a thorough mapping of existing methods and tools that engage societal actors in research and innovation.

The results of this mapping were used to produce an online Action Catalogue, which is available at: http://actioncatalogue.eu/. The online tool helps current and potential practitioners to select and apply the right method/tool for public engagement according to their purposes and resources.

The organization also coordinated the development and publication of a total of 6 policy briefs on different aspects of public engagement. These policy briefs were based on the results of the analysis conducted in the frame of the project and summarized the most pertinent conclusions, reached by project partners. The policy briefs are available at: http://engage2020.eu/publications-page/.



Engage2020 Policy Brief, Issue 6 (October 2015)



Engage2020 Online Action Catalogue

CASI: Public Participation in Developing a Common Framework for Assessment and Management of Sustainable Innovation

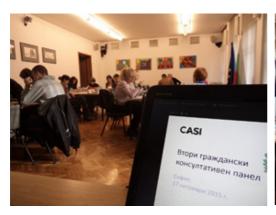
With the end of 2015, ARC Fund marked another successful year of implementation of the CASI action, focused on public participation in developing a common framework for assessment and management of sustainable innovation. The CASI project is an FP7-funded action, coordinated by ARC Fund. The consortium consists of 19 partner organizations from 12 European countries. CASI responds to the 5th Grand Societal Challenge as set out in the Horizon 2020 program of the European Commission, namely "Climate Action, Environment, Resource Efficiency and Raw Materials." The partners are supported by an extended network of national experts in the remaining 16 EU countries not part of the consortium, as well as by an Advisory Panel of leading experts in the field of environment, sustainability and innovation. CASI investigates the scope of sustainable innovation as a societal phenomenon, exploring not only the impacts of social and technological innovation on European and global society, but also the types of actors involved and their inherent interests.

In 2015, the consortium advanced towards achieving one of the major CASI objectives, namely the elaboration of an assessment and management framework for sustainable innovation practices. The draft framework is based on the extensive mapping of 540 sustainable innovation cases from the 28

EU member states, which was completed by the consortium in the beginning of the year. The draft framework was discussed with stakeholders in all 12 CASI countries with view of improving it, so as to serve a wide range of actors in planning and implementing sustainable innovation practices. As part of this endeavor, on 22 October ARC Fund hosted a stakeholder workshop attended by 12 representatives of the business sector, government, civil society and academia. The draft framework was presented and participants were asked to test it in a real-case simulation. This exercise kick-started an interesting and thoughtful discussion and valuable opinions were offered as to how the framework could be further improved and successfully applied.

A major CASI activity in 2015 was the organization of national citizen consultation panels in 12 European countries (involving altogether close to 250 citizens) for the discussion and elaboration of citizen visions for a more sustainable future in 2050. The vision elaboration reflects individual and societal concerns, fears, aspirations, challenges, hopes and dreams for the future, and is seen as "ideal picture of a desired reality." The Bulgarian panel met on 25 April and included 25 citizens.

Following all twelve national panels, a panel of leading European experts in inno-





Second national Citizen Panel in Sofia, Bulgaria (17 October 2015)

vation and sustainability convened in Copenhagen in June to analyze 50 citizens' visions and translate them into 27 research priorities to offer for consideration to the European Commission in its subsequent program planning cycle. To strengthen the validity of these priorities, the same citizens were invited for a second round of consultations. ARC Fund hosted the Bulgarian consultation on 17 October and participants ranked their top 10 priorities. Having analyzed all national inputs and rankings, the project elaborated a list of 10 research priorities for the EU. A policy recommendations report will be finalized in early 2016.

ARC Fund has also designed and conducted an EU-wide online survey on sustainable innovation, receiving 1,793

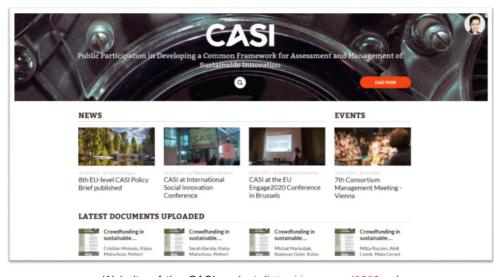
responses from innovation and sustainability experts across the EU. The survey was closed at the end of September. Early analyses of the data indicate a strong interest in sustainable innovation management and assessment across all organizational and professional domains.

In December, CASI's results were shared with a wide range of experts and interested parties in a 2-day webinar, discussing various CASI-related themes. As part of the webinar's program, ARC Fund's team presented the CASI project and held a session on the topic of "Why sustainability is driving innovations today." More information about CASI activities is available on the project's website at: http://www.casi2020.eu.





CASI Expert workshop in Copenhagen, Denmark (8 June 2015)



Website of the CASI project (http://www.casi2020.eu)

SI-DRIVE: Social Innovation - Driving Force of Social Change

ARC Fund continued to work on the SI-Drive project, launched in the beginning of 2014. In January, the ARC Fund team performed a thorough desk research in order to identify social innovation (SI) practices in three policy fields - education, environment and energy. The examined education cases included SI initiatives from Bulgaria, the Czech Republic, Hungary and Poland: the environmental cases were from Bulgaria only and the energy actions were from Bulgaria, Estonia, Latvia, Lithuania, Poland, and Romania. These case studies were then clustered according to the social need that they were responding to. The final step was to group them into "practice fields" depending on the specific field/topic/issue they were addressing (e.g. acquisition of ICT skills and new teaching practices are two practice fields in education).

The next phase of the project methodology was focused on the preparation of country reports, analyzing the overall SI environment in the target states. ARC Fund prepared such reports in the environmental field, the education field, and the energy field for all the countries it has studied during the identification of cases. The reports included information on the governance structure, national challenges as well as more comprehensive information on the SI practice fields and corresponding SI projects/initiatives in the respective area. Thus, an overview of social innovation and its different regional characteristics,

stemming from culture and other factors, was provided. These country reports were then incorporated into Policy Field Reports, together with the country reports, prepared by the other project partners. As a result, three Policy Field Reports, namely Education Policy Field Report, Energy Policy Field Report, and Environment Policy Field Report were developed.

In the next stage, some of the SI initiatives were shortlisted for further study. ARC Fund completed an online survey of 35 cases in the areas of education, energy and environment. The survey was the basis for establishing the project's database with SI practices, aiming to contribute to the global mapping of social innovations.

In November, ARC Fund prepared an **Eastern European Regional Report**, including information about Bulgaria, Hungary, Poland, Slovakia, and the Czech Republic. The report focused on general social innovation strategies, which were defining social innovation in Eastern Europe. It also presented social needs, challenges and opportunities that drive social innovation in the region, describing relevant governance, networks and actors as well as emerging trends and impacts of social innovation.

What lies ahead in 2016 is further in-depth analysis of a number of SI cases selected across the various practice fields.





SI-Drive Conference "Social Innovation 2015: Pathways to Social Change" in Vienna, Austria (18 November 2015)

BSH: Black Sea Horizon

The year 2015 marked the launch of the Black Sea Horizon project, which has been designed to sustainably enhance science, technology and innovation (STI) cooperation between EU member states and countries in the Black Sea region. The project brings together 19 partners from 16 countries, including Bulgaria, Austria, Germany, Greece, Turkey, Hungary, France, Moldova, Poland, Portugal, Romania, Armenia, Russia, Ukraine, Georgia and Azerbaijan. The action aims at supporting the EU's external relations with the target region through contributing to STI policy dialogues and by increasing the knowledge base about the EU's external environment. It will stimulate bi-regional STI cooperation and strengthen the EU's economic competitiveness. The project will also facilitate the pooling of resources, and to this end, it brings together a group of committed funding parties, endowed with a functional call infrastructure and a clear set of rules and regulations, ready to implement a joint call for proposals. Furthermore, the project will increase understanding of cluster policies and cluster management, will establish direct business contacts between cluster managers from the EU and the target countries and will raise awareness on the programming and the advantages of inclusive, sustainable and social innovation.

The first task of ARC Fund, executed in the framework of the Black Sea Horizon project, was the development of a guide on quality assurance of project results, which provides a thorough description of the process of preparing high quality deliverables. Throughout the whole project, ARC Fund will supervise the timely submission of these deliverables according to the rules and procedures, set out in the quality assurance guidelines document.

In the autumn, ARC Fund began with the preparation of the upcoming (in March 2016) workshop on innovative materials, which will be held in Sofia. The working title of the event is "Applied research in chemistry: Smart materials for a smart future." The aim of the workshop is to discuss and identify pertinent research topics in the field of advanced materials, which are of mutual interest for research. technology and innovation cooperation among the EU Member States and the countries of the Black Sea region for further uptake in forthcoming Horizon 2020 calls for proposals as well as in future international or regional bilateral and multilateral research programs. Further steps in the organization of the workshop, including identification of potential participants and logistics, will be undertaken in the beginning of January 2016.

CIMULACT: Citizen and Multi-Actor Consultation on Horizon 2020

In 2015, ARC Fund commenced the implementation of the project "Citizen and Multi-Actor Consultation on Horizon 2020" (CIMULACT), in which the organization is partnering with 29 organizations from across Europe. It is a three-year endeavor that aims to contribute to the greater proliferation of responsible research and innovation (RRI) in Europe through inclusion of many relevant actors (citizens, stakeholders, scientists and policy-makers) in the co-creation of research agendas, based on real and validated societal visions, needs and demands. The action will expand the outlook and debate on STI issues, increase scientific literacy in a broad sense, and will thus help improve

the understanding of the societal role of Science, Technology and Innovation (STI), and create shared understanding between scientific stakeholders, policy-makers and citizens. This multi-actor approach will embrace EU28 plus Norway and Switzerland. CIMULACT is supported under Horizon 2020.

National Citizen Vision Workshops were organized in the autumn of 2015 (a few will take place in January 2016) in order to gather citizens' visions for desirable and sustainable future. In a friendly and very collaborative environment at these workshops, citizens were asked to imagine

a possible (ideal) future (30-40 years from now) and describe it into a consistent "vision" – a picture of a desired future. The method used builds upon the so-called CIVISTI methodology, co-developed by ARC Fund in 2007-2008, and frequently used for organizing participatory citizen consultations across the EU.

ARC Fund organized the national workshop for Bulgaria in November 2015 in the town of Plovdiv. Thirty-six citizens participated in the event. They were divided into groups of six people, each producing a vision. Thereby, six visions for desirable and sustainable future were generated:

- 1) The smart city this is me!;
- 2) Green planet everyone's responsibility;

- 3) Family, personal development and value system;
- 4) Good education the way towards human and social development;
- 5) Towards better life through a change in thinking and attitudes of people;
- 6) Evolution in health care.

At a later stage of the project, all the visions created as a result of the National Citizen Vision Workshops will be transformed into recommendations and policy options for research and innovation policies and topics, which in turn will provide concrete input to Horizon 2020.





National Citizen Vision Workshop in Plovdiv, Bulgaria (22 November 2015)