Engage2020

Tools and instruments for a better societal engagement in "Horizon 2020"

Grant Agreement no. 612281
Activity acronym: Engage2020

Activity full name:
Engaging Society in Horizon 2020

D3.2 Public Engagement Methods and Tools

Due date of deliverable: August 2014
Actual submission date: October 2014

Start date of Activity: 1 September 2013 Duration: 2,25 years

Author(s): the Engage2020 Consortium

Organisation name of lead beneficiary for this deliverable: Applied Research and Communications Fund (ARC Fund)

Engage2020 Partners

Teknologirådet – Danish Board of Technology (DBT)
Toldbodgade 12, DK-1253 Copenhagen, Denmark
Contact: Marie Louise Jørgensen
mlj@tekno.dk
www.tekno.dk

Karlsruhe Institut für Technologie (KIT)
Kaiserstr. 12, 76131 Karlsruhe, Germany
Contact: Leonhard Hennen
leonhard.hennen@kit.edu
www.kit.edu

The Involve Foundation
33 Corsham Street, London, N1 6DR, United Kingdom
Contact: Edward Andersson
edward@involve.org.uk
www.involve.org.uk

Rijksuniversiteit Groningen (RUG)
Nijenborgh 4, 9747 AG Groningen, The Netherlands
Contact: Dr. Henk A.J. Mulder
h.a.j.mulder@rug.nl
www.rug.nl/wewi

Applied Research and Communications Fund (ARC Fund)
5 Alexander Zhendov str., 1113 Sofia, Bulgaria
Contact: Zoya Damianova
zoya.damianova@online.bg
www.arcfund.net

Dialogik Gemeinuetzige Gesellschaft fuer Kommunikations- und Kooperationsforschung mbH
Lerchenstrasse 22, 70176 Stuttgart, Germany
Contact: Rainer Kuhn
Kuhn@dialogik-expert.de
www.dialogik-expert.de

Introduction

It is nowadays broadly accepted that a comprehensive understanding of societal challenges as well as striving for socially robust and sustainable problem solving and innovation paths is dependent on the specific knowledge, the values and the interests of all involved societal actors. The need for broad consensus in society on research and innovation (R&I) policy and the growing criticism with regard to the management of risks and detrimental effects of the implementation of technologies led to a turn away from the established technocratic mode of governance in the field of R&I and technology to a new approach engaging the public at large by various participatory practices.

Societal actors can be involved at all levels of the R&I processes and R&I policy making. Increasing the use of engagement practices in research and innovation activities is beneficial to both researchers as well as the general public. Societal engagement is pursued for a few reasons. These are: *democratic* reasons –public engagement improves the democratic governance of science as citizens have a say on research agendas and policy frameworks in the field of R&I; *instrumental* reasons – engagement improves the research results and the relevance of policies by including societal knowledge, ideas and capacities in research and increasing the knowledge base for policy making. In addition, engagement improves citizens' awareness of science and technology development.

Societal engagement is one of the pillars of the framework for Responsible Research and Innovation (RRI), developed by the European Commission. The idea behind RRI is to improve the relevance of science in the EU to the societal challenges lying ahead of the European societies by including all societal actors throughout the whole process of research and innovation. The identified by the Commission Grand Societal Challenges, or, key issues the societies in Europe need to deal with, are:

- Health, demographic change and wellbeing
- Food security, sustainable agriculture, marine and maritime research and the bio-economy
- Secure, clean and efficient energy
- Smart, green and integrated transport
- Climate action, environment, resource efficiency and raw materials
- Inclusive, innovative and reflective societies
- Secure societies to protect freedom and security of Europe and its citizens

Thus, to meet the goals of Horizon 2020 with regard to these challenges, which stand at the core of Horizon 2020 Programme, any action will need to play an intermediate role with regard to three societal arenas: science, policy making, and the public sphere.

Engage2020 and its objectives

Engage2020 is a project funded by the European Commission (DG Research and Innovation) that looks into how members of society are involved today and, perhaps more importantly, how they could be involved in the future in science and science policy. The project investigates how, where and why societal actors such as consumers, employees, lay persons and others are being engaged in the research process, from early policy development to the delivery of research activities. The core objective of Engage2020 is to increase the use of

engagement methods by mapping what is practiced and to spread awareness of the opportunities amongst researchers, policy makers and other interested parties.

Public engagement in European research and innovation activities is relatively high by international standards, but it is unevenly distributed, both geographically and based on issue areas. The partners hope that Engage2020 will spread participative practice from the pockets of excellence, such as the foresight community and Science Shops, to wider groups. The current document aims to contribute to achieving this objective and help current and potential users of engagement practices to understand which methods they can use taking into account the different context they operate in, such as the different objectives they might have, different level of research and innovation activity, the different Grand Societal Challenges they would like to address using engagement practices and others.

The process of scanning and mapping of engagement methods and tools

With these objectives in mind, the project partners embarked on a challenging task to scan and map methods and tools currently used for societal engagement in research and innovation in Europe and beyond. The scanning was done via:

Step 1: Online survey for identifying engagement methods and tools

The online survey aimed to identify methods and tools and gather basic primary data from relevant experts on the range of practices currently employed for public engagement in research and innovation. The survey was distributed by project partners to their networks of contacts, including relevant professional associations. The result was more than 200 entries out of which 57 engagement methods and tools were identified.

Step 2: Factsheets

A factsheet template was developed to provide a framework for the information gathering on the methods and tools identified in Step 1. The data collection and completion of the factsheets was distributed among all partners. Partners completed the templates based on: i) their own experience with the respective method/tool; ii) the information and materials provided by the respondents of the online survey; iii) additional desk research and interviews with relevant experts whenever deemed necessary. To ensure the quality of the completed data, each factsheet was reviewed by another partner of the consortium.

The completed factsheets will feed into a databank/Action Catalogue of engagement methods/tools for current and potential users of public engagement practices, which will be developed at the later stages of the project. Both the factsheets and the new databank will provide a well-structured overview with a large variation of significant methods and tools for public engagement. They will help improving the understanding of engagement methods and tools, as well as allowing current and potential practitioners to take more informed decisions in terms of which methods and tools they can use in their specific context.

Mapping of engagement methods and tools

The methods and tools listed in the current document are mapped against a set of four criteria. These are:

- **the levels of application of the method/tool** (i.e. policy formulation, programme development, project definition, research activity)
- **the societal groups involved in the application of the method/tool** (i.e. CSOs, policy-makers, researchers, citizens, affected citizens, consumers, employees, users, industry)
- **the level of public involvement** of the societal groups listed above (i.e. dialogue, consulting, involving, collaborating, empowering, direct decision)
- **Grand Societal Challenge addressed** (i.e. Health, demographic change and wellbeing; Food security, sustainable agriculture and forestry, marine and maritime and inland water research, and the bioeconomy; Climate action, environment, resource efficiency and raw materials; Inclusive, innovative and reflective societies; Secure, clean and efficient energy; Secure societies - protecting freedom and security of Europe and its citizens; Smart, green and integrated transport)

The four levels of method's application, namely policy formulation, programme development, project definition, research activity, cover the whole span of activities connected to science, research and innovation. Mapping of existing engagement practices against the four levels of engagement aims at promoting the wider and more inclusive engagement at all levels, and thus to strengthen the collaborative governance and democratic elements of research and innovation. The four levels may involve different challenges and therefore, different methods and tools may be of relevance to them. The four levels of engagement in more detail are defined as:

- *Policy formation* is the praxis of defining the framework conditions for R&I activities. This includes making policies for distribution of funds between programmes, rules and instruments on responsible R&I, definition of financial instruments etc.
- *Programme development* is the process of defining the content and the calls in R&I research programmes. This is typically a process involving member state representatives, programme committees, the research community, different platforms and hearing processes.
- *Project definition* engaging society may be about inviting different groups of stakeholders to suggest focus for the specific research or innovation project, thereby increasing the chance of acceptance in society or the chance of innovations to be welcomed by the markets.
- Engaging society directly in the *research and innovation activities* may be aimed at, for example, increasing the amount of empirical data for research, allowing for clarification of normative issues in the scientific process, or improving the relevance and thereby the implementation of research and innovation results.

The participant types embraced by Engage2020 will be those, who may have relevant knowledge, can contribute with normative clarifications or have special abilities to act or decide in specific domains. Special emphasis is put on those groups which are usually not embraced by research and innovation activities as collaborators, namely CSOs, citizens, affected citizens, consumers, employees and users.

In Engage2020, we focus on genuine engagement forms which go beyond traditional one-way communication of scientific findings. Thus, engagement practices which cover the following levels of public engagement have been included in the current document:

- *Dialogue* aims to improve the "two-way" communication between scientists, policy makers and citizens to ensure a regular exchange of views.
- *Consulting* aims to obtain public feedback for decision-makers on analysis, alternatives and/or decisions.
- *Involving* aims to work directly with the public throughout the engagement process to ensure that public concerns and aspirations are consistently understood and considered in decision making processes.
- *Collaborating* implies partnering with the public in each aspect of the decision including the development of alternatives and the identification of the preferred solution.
- *Empowering* happens when the involved participants acquire certain skills/knowledge in the process of engagement.
- *Direct decision* takes place when final decision-making is in the hands of the public.

The Engage2020 project will highlight engagement policies and methods which are suited to engaging members of society in research and innovation activities related to the specific Grand Societal Challenges, as outlines by the European Commission.

Based on the data collected, the following distribution of methods according to the four above mentioned criteria has been outlined:

	CSOs	Policy-makers	Researchers	Citizens	Affected	Consumers	Employees	Users	Industry
Policy formulation	Civic dialogue; Consensus conference; Delphi method; Future panel; Future search; Group Delphi; Interdisciplinary work groups; Interviews; Open space technology; Participatory strategic planning; Perspective workshop; Q methodology-stakeholders selection; Scenario workshop; Need survey among CSOs; World café; World wide views.	Civic dialogue; Consensus conference; Future panel; Future search; Interdisciplinary work groups; Interviews; Open space technology; Participatory strategic planning; Q methodology-stakeholder selection; Scenario workshop; World café; World wide views.	Citizens' assembly; Civic dialogue; Consensus conference; Crowd wise; Deep democracy-the Lewis method; Deliberative mapping; Delphi method; Distributed dialogue; Future panel; Future search; Group Delphi; Interdisciplinary work groups; Interviews; Multi criteria decision analysis; Open space technology; Participatory strategic planning; Perspective workshop; Q methodology-stakeholder selection; Scenario workshop; Needs survey among CSOs; World café; World wide views.	Citizen compass; Citizen juries; Citizens' summit; Citizens' assembly; Citizens hearing; Civic dialogue; Consensus conference; Crowd wise; Deep democracy - the Lewis method; Deliberative mapping; Deliberative (Mini-publics_ workshop; Deliberative poll (Deliberative polling); Distributed dialogue; Interviews; Multi criteria decision analysis (MCDA); Participatory budgeting; Participatory strategic planning; Perspective workshop; Scenario workshop; World café; World wide views.	Citizens' summit; Citizens hearing; Consensus conference; Deep democracy-the Lewis method; Distributed dialogue; Interviews; Multi criteria decision analysis (MCDA); Perspective workshop; Scenario workshop; World café; World wide views.	Citizens' summit; Consensus conference; Interviews; Open space technology; Scenario workshop; World café.	Citizens' summit; Consensus conference; Crowd wise; Deep democracy-the Lewis method; Interviews; Participatory strategic planning; Perspective workshop; Scenario workshop; World café.	Citizens' summit; Consensus conference; Interdisciplinary work groups; Interviews; Scenario workshop; World café.	Civic dialogue; Consensus conference; Crowd wise; Delphi method; Future panel; Future search; Group Delphi; Interdisciplinary work groups; Interviews; Multi criteria decision analysis; Open space technology; Participatory strategic planning; Perspective workshop; Scenario workshop; World café.
Programme development	CIVISTI; Civic dialogue; Community-based (Participatory) research; Consensus conference; Delphi method; Focus groups; Future panel; Group Delphi; Interviews; Knowledge atelier; Open space technology; Participatory strategic planning; Perspective workshop; Q methodology-stakeholders selection; Reflexive interactive design; Resource flow map; Needs survey among CSOs; World café; World wide views.	Civic dialogue; Consensus conference; Future panel; Interviews; Knowledge atelier; Open space technology; Participatory strategic planning; Q methodology-stakeholder selection; Reflexive interactive design; World café; World wide views.	CIVISTI; Civic dialogue; Community-based (participatory) research; Consensus conference; Deep democracy - the Lewis method; Delphi method; Future panel; Group Delphi; Interviews; Knowledge atelier; Multi criteria decision analysis; Open space technology; Participatory strategic planning; Perspective workshop; Q methodology-stakeholder selection; Reflexive interactive design; Needs survey among CSOs; Science café; World café; World wide views.	Citizens hearing; CIVISTI; Civic dialogue; Community-based (Participatory) research; Deep democracy-the Lewis method; Deliberative (Mini-publics) workshops; Focus groups; Interviews; Knowledge atelier; Multi criteria decision analysis (MCDA); Participatory budgeting; Participatory strategic planning; Perspective workshop; Science café; World café; World wide views.	Citizens hearing; Community-based (Participatory) research; Consensus conference; Deep democracy-the Lewis method; Focus groups; Interviews; Knowledge atelier; Multi criteria decision analysis (MCDA); Perspective workshop; World café; World wide views.	Consensus conference; Focus groups; Interviews; Open space technology; Reflexive interactive design; World café.	Consensus conference; Deep democracy-the Lewis method; Focus groups; Interviews; Participatory strategic planning; Perspective workshop; World café.	Consensus conference; Focus groups; Interviews; Knowledge atelier; World café.	Civic dialogue; Consensus conference; Delphi method; Future panel; Group Delphi; Interviews; Knowledge atelier; Multi criteria decision analysis; Open space technology; Participatory strategic planning; Perspective workshop; Reflexive interactive design; World café.
Project definition	Action research; Challenge prizes; Charrette; Civil dialogue; Community-based (Participatory) research; Delphi method; E-conference; Focus groups; Group Delphi; Interviews; Knowledge atelier; Open space technology; Participatory design; Participatory strategic planning; Q methodology-stakeholder selection; Reflexive interactive design; Science shop; From question of a CSO to a research question; Needs survey among CSOs; User committee; World café; World wide views.	Charrette; Civil dialogue; Deliberative online forum; E-conference; Interviews; Knowledge atelier; Open space technology; Participatory strategic planning; Q methodology-stakeholder selection; Reflexive interactive design; World café; World wide views.	Challenge prizes; Charrette; Civic dialogue; Community-based (participatory) research; Deep democracy - the Lewis method; Delphi method; E-conference; Group Delphi; Interviews; Knowledge atelier; Open space technology; Participatory sensing, volunteer sensing, citizen observatory; Participatory strategic planning; Q methodology-stakeholder selection; Reflexive interactive design; Science shop; Needs survey among CSOs; Science café; User committee; World café; World wide views.	Action research; Challenge prizes; Charrette; Civic dialogue; Community-based (Participatory) research; Deep democracy-the Lewis method; Deliberative online forum; Democs card game; E-conference; Focus groups; Interviews; Knowledge atelier; Participatory design; Participatory sensing, volunteer sensing, citizen observatory; Participatory strategic planning; Resource flow map; Science café; World café; World wide views.	Action research; Charrette; Community-based (Participatory) research; Deep democracy-the Lewis method; Deliberative online forum; E-conference; Focus groups; Interviews; Knowledge atelier; Participatory design; Participatory sensing, volunteer sensing, citizen observatory; Resource flow map; World café; World wide views.	Focus groups; Interviews; Open space technology; Reflexive interactive design; World café.	Action research; Challenge prizes; Deep democracy-the Lewis method; Focus groups; Interviews; Participatory strategic planning; World café.	Charrette; Focus groups; Interviews; Knowledge atelier; Participatory design; User committee; World café.	Challenge prizes; Charrette; Civic dialogue; Delphi method; Group Delphi; Interviews; Knowledge atelier; Open space technology; Participatory strategic planning; Reflexive interactive design; User committee; World café.
Research activity	Action research; Challenge prizes; Charrette; Civic dialogue; Community-based (Participatory) research; Consensus conference; Delphi method; Focus groups; Future workshop; Group Delphi; Interviews; Knowledge atelier; Neo-socratic dialogue; Open space technology; Participatory design; Q methodology-stakeholder selection; Reflexive interactive design; Science shop; Integration of civil society driven research in university curricula; User committee; World café; WOrld wide views.	Charrette; Civil dialogue; Consensus conference; Future workshop; Interviews; Knowledge atelier; Neo-socratic dialogue; Open space technology; Q methodology-stakeholder selection; Reflexive Interactive design; World café; World wide views.	Challenge prizes; Charrette; Civic dialogue; Community-based (Participatory) research; Consensus conference; Crowd wise; Science week; Delphi method; Group Delphi; Integrated assessment focus group, Participatory integrated assessment (PIA) with computer models; Interviews; Knowledge atelier; Neo-socratic dialogue; Open space technology; Participatory sensing, volunteer sensing, citizen observatory; Q methodology-stakeholder selection; Reflexive interactive design; Science shop; Integration of civil society driven research in university curricula; Science café; User committee; World café; World wide views.	Action research; Challenge prizes; Charrette; Citizen science; Civic dialogue; Community-based (Participatory) research; Consensus conference; Crowd wise; Science week; Democs card game; Focus groups; Hackathon; Integrated assessment focus groups, participatory integrated assessment (PIA) with computer models; Interviews; Knowledge atelier; Mass experiment; Neo-socratic dialogue; Participatory design; Participatory sensing, volunteer sensing, citizen observatory; Resource flow map; Science café; World café; World wide views.	Action research; Charrette; Community-based (Participatory) research; Consensus conference; focus groups; Future workshop; Hackathon; Interviews; Knowledge atelier; Neo-socrtaic dialogue; Participatory design; Participatory sensing, volunteer sensing, citizen observatory; Resource flow map; World café; World wide views.	Consensus conference; Focus groups; Interviews; Neo-socratic dialogue; Open space technology; Reflexive interactive design; World café.	Action research; Challenge prizes; Consensus conference; Crowd wise; Focus group; Hackathon; Interviews; Neo-socratic dialogue; World café.	Charrette; Consensus conference; Focus groups; Hackathon; Interviews; Knowledge atelier; Neo-socratic dialogue; Participatory design; Serious gaming; User committee; World café.	Challenge prizes; Charrette; Civic dialogue; Consensus conference; Crowd wise; Delphi method; Group Delphi; Interviews; Knowledge atelier; Neo-socratic dialogue; Open space technology; Reflexive interactive design; User committee; World café.

	CSOs	Policy-makers	Researchers	Citizens	Affected	Consumers	Employees	Users	Industry
Health, demographic change and wellbeing	Action research; Challenge prizes; Civic dialogue; Community-based (Participatory) research; Consensus conference; Delphi method; Focus groups; Future panel; Future search; Future workshop; Group Delphi; Interdisciplinary work groups; Interviews; Neo-socratic dialogue; Open space technology; Perspective workshop; Scenario workshop; Science shop; From Question of a CSO to a Research question; Integration of civil society driven research in university curricula; Needs survey among CSOs; User committee; World café; World wide views.	Civic dialogue; Consensus conference; Future panel; Future search; Future workshop; Interdisciplinary work groups; Interviews; Neo-socratic dialogue; Scenario workshop; World café; World wide views.	Challenge prizes; Citizens' assembly; Civic dialogue; Community-based (Participatory) research; Consensus conference; Science week; Deep democracy-the Lewis method; Deliberative mapping; Delphi method; Distributed dialogue; Future panel Future search; Group Delphi; Interdisciplinary work groups; Interviews; Neo-socratic dialogue; Open space technology; Perspective workshop; Scenario workshop; Scenario workshop; Science shop; Integration of civil society driven research in university curricula; Needs survey among CSOs; Science café; User committee; World café; World wide views.	Action research; Challenge prizes; Citizen compass; Citizen science; Citizen juries; Citizens' summit; Citizens' assembly; Civic dialogue; Community-based (Participatory) research; Consensus conference; Science week; Deep democracy-the Lewis method; Deliberative mapping; Deliberative (Mini-publics) workshops; Deliberative poll (Deliberative polling); Democs card game; Distributed dialogue; Focus groups; Hackathon; Interviews; Neo-socratic dialogue; Perspective workshop; Scenario workshop; Science café; Science theatre; World café; World wide views.	Action research; Citizens' summit; Community-based (Participatory) research; Consensus conference; Deep democracy-the Lewis method; Distributed dialogue; Focus groups; Future workshop; Interviews; Neo-socratic dialogue; Perspective workshop; Scenario workshop; World café; World wide views.	Citizens' summit; Consensus conference; Focus groups; Interviews; Neo-socratic dialogue; Open space technology; Scenario workshop; Science theatre; World café.	Action research; Challenge prizes; Citizens' summit; Consensus conference; Deep democracy-the Lewis method; Focus groups; Hackathon; Interviews; Neo-socratic dialogue; Perspective workshop; Scenario workshop; World café.	Citizens' summit; Consensus conference; Focus groups; Hackathon; Interdisciplinary work groups; Interviews; Neo-socratic dialogue; Scenario workshop; User committee; World café.	Challenge prizes; Civic dialogue; Consensus conference; Delphi method; Future panel; Future search; Group Delphi; Interdisciplinary work groups; Interviews; Neo-socratic dialogue; Open space technology; Perspective workshop; Scenario workshop; User committee; World café.
Food security, sustainable agriculture, marine and maritime research and the bio-economy	Action research; Challenge prizes; Civic dialogue; Consensus conference; Delphi method; Focus groups; Group Delphi; Interviews; Knowledge atelier; Open space technology; Reflexive interactive design; Scenario workshop; Science shop; From Question of a CSO to a Research question; Integration of civil society driven research in university curricula; Needs survey among CSOs; User committee; World café; World wide views.	Civic dialogue; Consensus conference; Interviews; Knowledge atelier; Open space technology; Reflexive interactive design; Scenario workshop; World café; World wide views.	Challenge prizes; Civic dialogue; Consensus conference; Science week; Delphi method; Distributed dialogue; Group Delphi; Interviews; Knowledge atelier; Multi criteria decision analysis (MCDA); Open space technology; Participatory sensing, volunteer sensing, citizen observatory; Reflexive interactive design; Scenario workshop; Science shop; Integration of civil society driven research in university curricula; Needs survey among CSOs; Science café; User committee; World café; World wide views.	Action research; Challenge prizes; Citizen science; Citizens' summit; Civic dialogue; Consensus conference; Science week; Deliberative (mini-publics) workshops; Deliberative poll (Deliberative polling); Democs card game; Distributed dialogue; Focus groups; Interviews; Knowledge atelier; Mass experiment; Multi criteria decision analysis; Participatory sensing, volunteer sensing, citizen observatory; Resource flow map; Scenario workshop; Science café; Science Theatre; World café; World wide views.	Action research; Citizens' summit; Consensus conference; Distributed dialogue; Focus groups; Interviews; Knowledge atelier; Multi criteria decision analysis; Participatory sensing, volunteer sensing; citizen observatory; Resource flow map; Scenario workshop; World café; World wide views.	Citizens' summit; Consensus conference; Focus groups; Interviews; Open space technology; Reflexive interaction design; Scenario workshop; Science theatre; World café.	Action research; Challenge prizes; Citizens' summit; Consensus conference; Focus groups; Interviews; Scenario workshop; World café.	Citizens' summit; Consensus conference; Focus groups; Interviews; Knowledge atelier; Scenario workshop; User committee; World café.	Challenge prizes; Civic dialogue; Consensus conference; Delphi method; Group Delphi; Interviews; Knowledge atelier; Multi criteria decision analysis; Open space technology; Reflexive interactive design; Scenario workshop; User committee; World café.
Climate action, resource efficiency and raw materials	Action research; Challenge prizes; Charrette; CIVISTI; Civic dialogue; Community-based (Participatory) research; Consensus conference; Delphi method; Focus groups; Future search; Group Delphi; Interdisciplinary work groups; Interviews; Knowledge atelier; Participatory design; Scenario workshop; Science shop; From Question of a CSO to a Research question; Integration of civil society driven research in university curricula; Needs survey among CSOs; User committee; World café; World wide views.	Charrette; Civic dialogue; Consensus conference; Future search; Interdisciplinary work groups; Interviews; Knowledge atelier; Scenario workshop; World café; World wide views.	Challenge prizes; Charrette; Citizens' assembly; CIVISTI; Civic dialogue; Community-based (Participatory) research; Consensus conference; Crowd wise; Science week; Deliberative mapping; Delphi method; Distributed dialogue; Future search; Group Delphi; Interdisciplinary work groups; Integrated assessment focus groups, Participatory Integrated Assessment (PIA) with computer models; Interviews; Knowledge atelier; Multi criteria decision analysis; Participatory sensing, volunteer sensing, citizen observatory; Scenario workshop; Science shop; Integration of civil society driven research in university curricula; Needs survey among CSOs; Science café; User committee; World café; World wide views.	Action research; Challenge prizes; Charrette; Citizen science; Citizen juries; Citizens' summit; Citizens' assembly; CIVISTI; Civic dialogue; Community-based (Participatory) research; Consensus conference; Crowd wise; Science week; Deliberative mapping; Deliberative (Mini-publics) workshops; Deliberative poll (Deliberative polling); Democs card game; Distributed dialogue; Focus groups; Hackathon; Integrated assessment focus groups, Participatory Integrated Assessment (PIA) with computer models; Interviews; Knowledge atelier; Mass experiment; Multi criteria decision analysis (MCDA); Participatory design; Participatory sensing, volunteer sensing, citizen observatory; Scenario workshop; Science café; World café; World wide views.	Action research; Charrette; Citizens' summit; Community-based (Participatory) research; Consensus conference; Distributed F2ialogue; Focus groups; Interviews; Knowledge atelier; Multi criteria decision analysis; Participatory design; Participatory sensing, volunteer sensing, citizen observatory; Scenario workshop; World café; World wide views.	Citizens' summit; Consensus conference; Focus groups; Interviews; Scenario workshop; World café.	Action research; Challenge prizes; Citizens' summit; Consensus conference; Crowd wise; Focus groups; Hackathon; Interviews; Scenario workshop; World café.	Charrette; Citizens' summit; Consensus conference; Focus groups; Hackathon; Interdisciplinary work groups; Interviews; Knowledge atelier; Participatory design; Scenario workshop; User committee; World café.	Challenge prizes; Charrette; Civic dialogue; Consensus conference; Crowd wise; Delphi method; Future search; Group Delphi; Interdisciplinary work groups; Interviews; Knowledge atelier; Multi criteria decision analysis (MCDA); Scenario workshop; User committee; World café.

	CSOs	Policy-makers	Researchers	Citizens	Affected	Consumers	Employees	Users	Industry
Inclusive, innovative and reflective societies	Charrette; Civic dialogue; Community-based (Participatory) research; Delphi method; E-conference; Focus groups; Group Delphi; Interviews; Knowledge atelier; Participatory design; Participatory strategic planning; Perspective workshop; Scenario workshop; Science shop; From Question of a CSO to a Research question; Integration of civil society driven research in university curricula; Needs survey among CSOs; User committee; World café.	Charrette; Civic dialogue; Deliberative online forum; E-conference; Interviews; Knowledge atelier; Participatory strategic planning; Scenario workshop; World café.	Charrette; Civic dialogue; Community-based (Participatory) research; Deep democracy-the Lewis method; Delphi method; E-conference; Group Delphi; Interviews; Knowledge atelier; Participatory strategic planning; Perspective workshop; Scenario workshop; Science shop; Integration of civil society driven research in university curricula; Needs survey among CSOs; Science café; User committee; World café.	Charrette; Citizens' summit; Citizens hearing; Civic dialogue; Community-based (Participatory) research; Deep democracy-the Lewis method; Deliberative online forum; Deliberative poll (Deliberative polling); Democs card game; E-conference; Focus groups; Interviews; Knowledge atelier; Mass experiment; Participatory budgeting; Participatory design; Participatory strategic planning; Perspective workshop; Scenario workshop; Science café; World café.	Charrette; Citizens' summit; Citizens hearing; Community-based (Participatory) research; Deep democracy-the Lewis method; Deliberative online forum; E-conference; Focus groups; Interviews; Knowledge atelier; Participatory design; Perspective workshop; Scenario workshop; World café.	Citizens' summit; Focus groups; Interviews; Scenario workshop; World café.	Citizens' summit; Deep democracy-the Lewis method; Focus groups; Interviews; Participatory strategic planning; Perspective workshop; Scenario workshop; World café.	Charrette; Citizens' summit; Focus groups; Interviews; Knowledge atelier; Participatory design; Scenario workshop; User committee; World café.	Charrette; Civic dialogue; Delphi method; Group Delphi; Interviews; Knowledge atelier; Participatory strategic planning; Perspective workshop; Scenario workshop; User committee; World café.
Secure, clean and efficient energy	Action research; Challenge prizes; Charrette; Civic dialogue; Delphi method; Focus groups; Future panel; Future workshop; Group Delphi; Interviews; Knowledge atelier; Participatory design; Q methodology-stakeholder selection; Scenario workshop; Science shop; From Question of a CSO to a Research question; Integration of civil society driven research in university curricula; Needs survey among CSOs; User committee; World café; World wide views.	Charrette; Civic dialogue; Future panel; Future workshop; Interviews; Knowledge atelier; Q methodology-stakeholder selection; Scenario workshop; World café; World wide views.	Challenge prizes; Charrette; Citizens' assembly; Civic dialogue; Crowd wise; Science week; Deliberative mapping; Delphi method; Distributed dialogue; Future panel; Group Delphi; Integrated assessment focus groups, Participatory Integrated Assessment (PIA) with computer models; Interviews; Knowledge atelier; Multi criteria decision analysis; Participatory sensing, volunteer sensing, citizen observatory; Q methodology-stakeholder selection; Scenario workshop; Science shop; Integration of civil society driven research in university curricula; Needs survey among CSOs; Science café; User committee; World café; World wide views.	Action research; Challenge prizes; Charrette; Citizen compass; Citizens' summit; Citizens' assembly; Civic dialogue; Crowd wise; Science week; Deliberative mapping; Deliberative (Mini-publics) workshops; Deliberative poll (Deliberative polling); Distributed dialogue; Focus groups; Integrated assessment focus groups, Participatory Integrated Assessment (PIA) with computer models; Interviews; Knowledge atelier; Mass experiment; Multi criteria decision analysis (MCDA); Participatory design; Participatory sensing, volunteer sensing, citizen observatory; Scenario workshop; Science café; World café; World wide views.	Action research; Charrette; Citizens' summit; Distributed dialogue; Focus groups; Future workshop; Interviews; Knowledge atelier; Multi criteria decision analysis; Participatory design; Participatory sensing, volunteer sensing, citizen observatory; Scenario workshop; World café; World wide views.	Citizens' summit; Focus groups; Interviews; Scenario workshop; World café.	Action research; Challenge prizes; Citizens' summit; Crowd wise; Focus groups; Interviews; Scenario workshop; World café.	Charrette; Citizens' summit; Focus groups; Interviews; Knowledge atelier; Participatory design; Scenario workshop; Serious gaming; User committee; World café.	Challenge prizes; Charrette; Civic dialogue; Crowd wise; Delphi method; Future search; Group Delphi; Interviews; Knowledge atelier; Multi criteria decision analysis; Scenario workshop; User committee; World café.
Secure societies to protect freedom and security of Europe and its citizens	Civic dialogue; Delphi method; Focus groups; Group Delphi; Interviews; Neo-socratic dialogue; Participatory strategic planning; Perspective workshop; Science shop; From Question of a CSO to a Research question; Integration of civil society driven research in university curricula; Needs survey among CSOs; User committee; World café.	Civic dialogue; Interviews; Neo-socratic dialogue; Participatory strategic planning; World café.	Civic dialogue; Deep democracy-the Lewis method; Delphi method; Group Delphi; Interviews; Neo-socratic dialogue; Participatory strategic planning; Perspective workshop; Science shop; Integration of civil society driven research in university curricula; Needs survey among CSOs; Science café; User committee; World café.	Citizen compass; Citizens' summit; Civic dialogue; Deep democracy-the Lewis method; Deliberative poll (Deliberative polling); Focus groups; Interviews; Knowledge atelier; Neo-socratic dialogue; Participatory strategic planning; Perspective workshop; Science café; World café.	Citizens' summit; Deep democracy-the Lewis method; Focus groups; Interviews; Neo-socratic dialogue; Perspective workshop; World café.	Citizens' summit; Focus groups; Interviews; Neo-socratic dialogue; World café.	Citizens' summit; Deep democracy-the Lewis method; Focus groups; Interviews; Neo-socratic dialogue; Participatory strategic planning; Perspective workshop; World café.	Citizens' summit; Focus groups; Interviews; Neo-socratic dialogue; User committee; World café.	Civic dialogue; Delphi method; Group Delphi; Interviews; Neo-socratic dialogue; Participatory strategic planning; Perspective workshop; User committee; World café.
Smart, green and integrated transport	Challenge prizes; Charrette; CIVISTI; Civic dialogue; Delphi method; Focus groups; Future search; Future workshop; Group Delphi; Interdisciplinary work groups; Interviews; Scenario workshop; Science shop; From Question of a CSO to a Research question; Integration of civil society driven research in university curricula; Needs survey among CSOs; User committee; World café; World wide views.	Charrette; Civic dialogue; Future search; Future workshop; Interdisciplinary work groups; Interviews; Scenario workshop; World café; World wide views.	Challenge prizes; Charrette; Citizens' assembly; CIVISTI; Civic dialogue; Science week; Delphi method; Future search; Group Delphi; Interdisciplinary work groups; Interviews; Multi criteria decision analysis; Scenario workshop; Science shop; Integration of civil society driven research in university curricula; Needs survey among CSOs; Science café; User committee; World café; World wide views.	Challenge prizes; Charrette; Citizen juries; Citizens' summit; Citizens' assembly; CIVISTI; Civic dialogue; Science week; Deliberative (Mini-publics) workshops; Deliberative poll (Deliberative polling); Focus groups; Hackathon; Interviews; Mass experiment; Multi criteria decision analysis (MCDA); Scenario workshop; Science café; World café; World wide views.	Charrette; Citizens' summit; Focus groups; Future workshop; Interviews; Multi criteria decision analysis (MCDA); Scenario workshop; World café; World wide views.	Citizens' summit; Focus groups; Interviews; Scenario workshop; World café.	Challenge prizes; Citizens' summit; Focus groups; Hackathon; Interviews; Scenario workshop; World café.	Charrette; Citizens' summit; Focus groups; Hackathon; Interdisciplinary work groups; Interviews; Scenario workshop; User committee; World café.	Challenge prizes; Charrette; Civic dialogue; Delphi method; Future search; Group Delphi; Interdisciplinary work groups; Interviews; Multi criteria decision analysis; Scenario workshop; User committee; World café.

	CSOs	Policy-makers	Researchers	Citizens	Affected	Consumers	Employees	Users	Industry
Dialogue	CIVISTI; Civic dialogue; Consensus conference; E-conference; Focus groups; Future panel; Future search; Interdisciplinary work group; Neo-socratic dialogue; Open space technology; Perspective workshop; Q methodology-stakeholder selection; Scenario workshop; World café; World wide views.	Civic dialogue; Consensus conference; Deliberative online forum; E-conference; Future panel; Future search; Interdisciplinary work groups; Neo-socratic dialogue; Open space technology; Q methodology-stakeholder selection; World café; World wide views.	Citizens' assembly; CIVISTI; Civic dialogue; Consensus conference; Crowd wise; Deep democracy-the Lewis method; Distributed dialogue; E-conference; Future panel; Future search; Interdisciplinary work groups; Integrated assessment focus groups, Participatory Integrated Assessment (PIA) with computer models; Neo-socratic dialogue; Open space technology; Perspective workshop; Q methodology-stakeholder selection; Scenario workshop; Science café; World café; World wide views.	Citizen compass; Citizen juries; Citizens' assembly; Citizens hearing; CIVISTI; Civic dialogue; Consensus conference; Crowd wise; Deep democracy-the Lewis method; Deliberative online forum; Democs card game; Distributed dialogue; E-conference; Focus groups; Integrated assessment focus groups, Participatory Integrated Assessment (PIA) with computer models; Neo-socratic dialogue; Perspective workshop; Scenario workshop; Science café; Science theatre; World café; World wide views.	Citizens hearing; Consensus conference; Deep democracy - the Lewis method; Deliberative online forum; Distributed dialogue; E-conference; Focus groups; Neo-socratic dialogue; Perspective workshop; Scenario workshop; World café; World wide views.	Consensus conference; Focus groups; Neo-socratic dialogue; Open space technology; Scenario workshop; Science theatre; World café.	Consensus conference; Crowd wise; Deep democracy - the Lewis method; Focus groups; Neo-socratic dialogue; Perspective workshop; Scenario workshop; World café.	Consensus conference; Focus groups; Interdisciplinary work groups; Neo-socratic dialogue; Scenario workshop; World café.	Civic dialogue; Consensus conference; Crowd wise; Future panel; Future search; Interdisciplinary work groups; Neo-socratic dialogue; Open space technology; Perspective workshop; Scenario workshop; World café.
Consulting	CIVISTI; Consensus conference; Delphi method; E-conference; Future panel; Future search; Group Delphi; Interdisciplinary work group; Interviews; Open space technology; Q methodology-stakeholder selection; Needs survey among CSOs; World café; World wide views.	Consensus conference; E-conference; Future panel; Future search; Interdisciplinary work groups; Interviews; Open space technology; Q methodology-stakeholder selection; World café; World wide views.	CIVISTI; Consensus conference; Crowd wise; Delphi method; E-conference; Future panel; Future search; Group Delphi; Interdisciplinary work groups; Integrated assessment focus groups, Participatory Integrated Assessment (PIA) with computer models; Interviews; Open space technology; Q methodology-stakeholder selection; Needs survey among CSOs; World café; World wide views.	Citizen compass; Citizen juries; Citizens' summit; Citizens hearing; CIVISTI; Consensus conference; Crowd wise; Deliberative poll (Deliberative polling); E-conference; Integrated assessment focus groups, Participatory Integrated Assessment (PIA) with computer models; Interviews; World café; World wide views.	Citizens' summit; Citizens hearing; Consensus conference; E-conference; Interviews; World café; World wide views.	Citizens' summit; Consensus conference; Interviews; Open space technology; World café.	Citizens' summit; Consensus conference; Crowd wise; Interviews; World café.	Citizens' summit; Consensus conference; Interdisciplinary work groups; Interviews; World café.	Consensus conference; Crowd wise; Delphi method; Future panel; Future search; Group Delphi; Interdisciplinary work groups; Interviews; Open space technology; World café.
Involving	Challenge prizes; Charrette; CIVISTI; Civic dialogue; Community-based (Participatory) research; Consensus conference; E-conference; Future panel; Future search; Future workshop; Interdisciplinary work groups; Knowledge atelier; Neo-socratic dialogue; Open space technology; Participatory design; Participatory strategic planning; Reflexive interactive design; Scenario workshop; Integration of civil society driven research in university curricula; World café; World wide views.	Charrette; Civic dialogue; Consensus conference; Deliberative online forum; E-conference; Future panel; Future search; Future workshop; Interdisciplinary work groups; Knowledge atelier; Neo-socratic dialogue; Open space technology; Participatory strategic planning; Reflexive interactive design; Scenario workshop; World café; World wide views.	Challenge prizes; Charrette; Citizens' assembly; CIVISTI; Civic dialogue; Community-based (Participatory) research; Consensus conference; Science week; Deep democracy-the Lewis method; Deliberative mapping; Distributed dialogue; E-conference; Future panel; Future search; Interdisciplinary work groups; Knowledge atelier; Neo-socratic dialogue; Open space technology; Participatory sensing, volunteer sensing, citizen observatory; Participatory strategic planning; Reflexive interactive design; Scenario workshop; Integration of civil society driven research in university curricula; User committee; World café; World wide views.	Challenge prizes; Charrette; Citizen science; Citizens' assembly; Citizens hearing; CIVISTI; Civic dialogue; Community-based (Participatory) research; Consensus conference; Science week; Deep democracy - the Lewis method; Deliberative mapping; Deliberative (Mini-publics) workshops; Deliberative online forum; Deliberative poll (Deliberative polling); Distributed dialogue; E-conference; Knowledge atelier; Mass experiment; Neo-socratic dialogue; . Participatory budgeting; Participatory design; Participatory sensing, volunteer sensing, citizen observatory; Participatory strategic planning; Scenario workshop; World café; World wide views.	Charrette; Citizens hearing; Community-based (Participatory) research; Consensus conference; Deep democracy - the Lewis method; Deliberative online forum; Distributed dialogue; E-conference; Future workshop; Knowledge atelier; Neo-socratic dialogue; Participatory design; Participatory sensing, volunteer sensing, citizen observatory; Scenario workshop; World café; World wide views.	Consensus conference; Neo-socratic dialogue; Open space technology; Reflexive interactive design; Scenario workshop; World café.	Challenge prizes; Consensus conference; Deep democracy - the Lewis method; Neo-socratic dialogue; Participatory strategic planning; Scenario workshop; World café.	Charrette; Consensus conference; Interdisciplinary work groups; Knowledge atelier; Neo-socratic dialogue; Participatory design; Scenario workshop; Serious gaming; User committee; World café.	Challenge prizes; Charrette; Civic dialogue; Consensus conference; Future panel; Future search; Interdisciplinary work groups; Knowledge atelier; Neo-socratic dialogue; Open space technology; Participatory strategic planning; Q methodology - stakeholder selection; Scenario workshop; User committee; World café.
Collaborating	Action research; Challenge prizes; Charrette; CIVISTI; Civic dialogue; Community-based (Participatory) research; Consensus conference; E-conference; Future panel; Future search; Future workshop; Interdisciplinary work groups; Knowledge atelier; Open space technology; Participatory design; Participatory strategic planning; Reflexive interactive design; Science shop; From Question of a CSO to a Research question; Integration of civil society driven research in university curricula; User committee; World café.	Charrette; Civic dialogue; Consensus conference; Deliberative online forum; E-conference; Future panel; Future search; Future workshop; Interdisciplinary work groups; Knowledge atelier; Open space technology; Participatory strategic planning; Reflexive interactive design; World café.	Challenge prizes; Charrette; Citizens' assembly; CIVISTI; Civic dialogue; Community-based (Participatory) research; Consensus conference; Science week; Deliberative mapping; Distributed dialogue; E-conference; Future panel; Future search; Interdisciplinary work groups; Knowledge atelier; Open space technology; Participatory sensing, volunteer sensing, citizen observatory; Participatory strategic planning; Reflexive interactive design; Science shop; Integration of civil society driven research in university curricula; User committee; World café.	Action research; Challenge prizes; Charrette; Citizen science; Citizens' assembly; Citizens hearing; CIVISTI; Civic dialogue; Community-based (Participatory) research; Consensus conference; Science week; Deliberative mapping; Deliberative (Mini-publics) workshops; Deliberative online forum; Democs card game; Distributed dialogue; E-conference; Hackathon; Knowledge atelier; Mass experiment; Participatory design; Participatory sensing, volunteer sensing, citizen observatory; Participatory strategic planning; Resource flow map; World café.	Action research; Charrette; Citizens hearing; Community-based (Participatory) research; Consensus conference; Deliberative online forum; Distributed dialogue; E-conference; Future workshop; Hackathon; Knowledge atelier; Participatory design; Participatory sensing, volunteer sensing, citizen observatory; Resource flow map; World café.	Consensus conference; Open space technology; Reflexive interactive design; World café.	Action research; Challenge prizes; Consensus conference; Hackathon; Participatory strategic planning; World café.	Charrette; Consensus conference; Hackathon; Interdisciplinary work groups; Knowledge atelier; Participatory design; User committee; World café.	Challenge prizes; Charrette; Civic dialogue; Consensus conference; Future panel; Future search; Interdisciplinary work groups; Knowledge atelier; Open space technology; Participatory strategic planning; Reflexive interactive design; User committee; World café.
Empowering	Action research; Challenge prizes; Community-based (Participatory) research; Consensus conference; Future panel; Future search; Open space technology; Perspective workshop; World café; World wide views.	Consensus conference; Future panel; Future search; Open space technology; World café; World wide views.	Challenge prizes; Citizens' assembly; Community-based (Participatory) research; Consensus conference; Deep democracy-the Lewis method; Distributed dialogue; Future panel; Future search; Open space technology; Perspective workshop; World café; World wide views.	Action research; Challenge prizes; Citizen compass; Citizen juries; Citizens' assembly; Citizens hearing; Community-based (Participatory) research; Consensus conference; Deep democracy - the Lewis method; Democs card game; Distributed dialogue; Perspective workshop; World café; World wide views.	Action research; Citizens hearing; Community-based (Participatory) research; Consensus conference; Deep democracy - the Lewis method; Distributed dialogue; Perspective workshop; World café; World wide views.	Consensus conference; Open space technology; World café.	Action research; Challenge prizes; Consensus conference; Deep democracy - the Lewis method; Perspective workshop; World café.	Consensus conference; World café.	Challenge prizes; Consensus conference; Future panel; Future search; Open space technology; Perspective workshop; World café.
Direct Decision	Delphi method; Future panel; World café.	Future panel; World café.	Citizens' assembly; Delphi method; Future panel; Multi criteria decision analysis; World café.	Citizens' assembly; Deliberative poll (Deliberative polling); Multi criteria decision analysis (MCDA); Participatory budgeting; World café.	Multi criteria decision analysis (MCDA); World café.	World café.	World café.	World café.	Delphi method; Future panel; Multi criteria decision analysis (MCDA); World café.

	Policy formulation	Programme development	Project definition	Research activity
Dialogue	Citizen compass; Citizen juries; Citizens' assembly; Citizens hearing; Civic dialogue; Consensus conference; Crowd wise; Deep democracy - the Lewis method; Distributed dialogue; Future panel; Future search; Interdisciplinary work groups; Open space technology; Perspective workshop; Q methodology - stakeholder selection; Scenario workshop; World café; World wide views	Citizens hearing; CIVISTI; Civic dialogue; Consensus conference; Deep democracy - the Lewis method; Focus groups; Future panel; Open space technology; Perspective workshop; Q methodology - stakeholder selection; Science café; World café; World wide views.	Civic dialogue; Deep democracy - the Lewis method; Deliberative online forum; Democs card game; E-conference; Focus groups; Open space technology; Q methodology - stakeholder selection; Science café; World café; World wide views.	Civic dialogue; Consensus conference; Crowd wise; Democs card game; Focus groups; Integrated assessment focus groups, Participatory Integrated Assessment (PIA) with computer models; Neo-socratic dialogue; Open space technology; Q methodology - stakeholder selection; Science café; World café; World wide views.
Consulting	Citizen compass; Citizen juries; Citizens' summit; Citizens hearing; Consensus conference; Crowd wise; Deliberative poll (Deliberative polling); Delphi method; Future panel; Future search; Group Delphi; Interdisciplinary work groups; Interviews; Open space technology; Q methodology - stakeholder selection; Needs survey among CSOs; World café; World wide views.	Citizens hearing; CIVISTI; Consensus conference; Delphi method; Future panel; Group Delphi; Interviews; Open space technology; Q methodology - stakeholder selection; Needs survey among CSOs; World café; World wide views.	Delphi method; E-conference; Group Delphi; Interviews; Open space technology; Q methodology - stakeholder selection; Needs survey among CSOs; World café; World wide views.	Consensus conference; Crowd wise; Delphi method; Group Delphi; Integrated assessment focus groups, Participatory Integrated Assessment (PIA) with computer models; Interviews; Open space technology; Q methodology - stakeholder selection; World café; World wide views.
Involving	Citizens' assembly; Citizens hearing; Civic dialogue; Consensus conference; Deep democracy - the Lewis method; Deliberative mapping; Deliberative (Mini-publics) workshops; Deliberative poll (Deliberative polling); Distributed dialogue; Future panel; Future search; Interdisciplinary work groups; Open space technology; Participatory budgeting; Participatory strategic planning; Scenario workshop; World café; World wide views.	Citizens hearing; CIVISTI; Civic dialogue; Community-based (Participatory) research; Consensus conference; Deep democracy - the Lewis method; Deliberative (Mini-publics) workshops; Future panel; Knowledge atelier; Open space technology; Participatory budgeting; Participatory strategic planning; Reflexive interactive design; World café; World wide views	Challenge prizes; Charrette; Civic dialogue; Community-based (Participatory) research; Deep democracy - the Lewis method; Deliberative online forum; E-conference; Knowledge atelier; Open space technology; Participatory design; Participatory sensing, volunteer sensing, citizen observatory; Participatory strategic planning; Reflexive interactive design; User committee; World café; World wide views.	Challenge prizes; Charrette; Citizen science; Civic dialogue; Community-based (Participatory) research; Consensus conference; Science week; Future workshop; Knowledge atelier; Mass experiment; Neo-socratic dialogue; Open space technology; Participatory design; Participatory sensing, volunteer sensing, citizen observatory; Reflexive interactive design; Integration of civil society driven research in university curricula; Serious gaming; User committee; World café; World wide views.
Collaborating	Citizens' assembly; Citizens hearing; Civic dialogue; Consensus conference; Deliberative mapping; Deliberative (Mini-publics) workshops; Distributed dialogue; Future panel; Future search; Interdisciplinary work groups; Open space technology; Participatory strategic planning; World café.	Citizens hearing; CIVISTI; Civic dialogue; Community-based (Participatory) research; Consensus conference; Deliberative (Mini-publics) workshops; Future panel; Knowledge atelier; Open space technology; Participatory strategic planning; Reflexive interactive design; World café.	Action research; Challenge prizes; Charrette; Civic dialogue; Community-based (Participatory) research; Deliberative online forum; Democs card game; E-conference; Knowledge atelier; Open space technology; Participatory design; Participatory sensing, volunteer sensing, citizen observatory; Participatory strategic planning; Reflexive interactive design; Resource flow map; Science shop; "From Question of a CSO to a Research Question"; User committee; World café.	Action research; Challenge prizes; Charrette; Citizen science; Civic dialogue; Community-based (Participatory) research; Consensus conference; Science week; Democs card game; Future workshop; Hackathon; Knowledge atelier; Mass experiment; Open space technology; Participatory design; Participatory sensing, volunteer sensing, citizen observatory; Reflexive interactive design; Resource flow map; Science shop; Integration of civil society driven research in university curricula; User committee; World café.
Empowering	Citizen compass; Citizen juries; Citizens' assembly; Citizens hearing; Consensus conference; Deep democracy - the Lewis method; Distributed dialogue; Future panel; Future search; Open space technology; Perspective workshop; World café; World wide views.	Citizens hearing; Community-based (Participatory) research; Consensus conference; Deep democracy - the Lewis method; Future panel; Open space technology; Perspective workshop; World café; World wide views.	Action research; Challenge prizes; Community-based (Participatory) research; Deep democracy - the Lewis method; Democs card game; Open space technology; World café; World wide views.	Action research; Challenge prizes; Community-based (Participatory) research; Consensus conference; Democs card game; Open space technology; World café; World wide views.
Direct decision	Citizens' assembly; Deliberative poll (Deliberative polling); Delphi method; Future panel; Multi criteria decision analysis (MCDA); Participatory budgeting; World café.	Delphi method; Future panel; Multi criteria decision analysis (MCDA); Participatory budgeting; World café.	Delphi method; World wide views.	Delphi method; World wide views.

	Health, demographic change and wellbeing	Food security (...)	Climate action (...)	Inclusive, innovative (...)	Secure, clean and efficient energy	Secure societies	Smart, green (...)
Dialogue	Citizen compass; Citizen juries; Citizens' assembly; Civic dialogue; Consensus conference; Deep democracy - the Lewis method; Democs card game; Distributed dialogue; Focus groups; Future panel; Future search; Interdisciplinary work groups; Neo-socratic dialogue; Open space technology; Perspective workshop; Scenario workshop; Science café; Science theatre; World café; World wide views.	Civic dialogue; Consensus conference; Democs card game; Distributed dialogue; Focus groups; Open space technology; Scenario workshop; Science café; Science theatre; World café; World wide views.	Citizen juries; Citizens' assembly; CIVISTI; Civic dialogue; Consensus conference; Crowd wise; Democs card game; Distributed dialogue; Focus groups; Future search; Interdisciplinary work groups; Integrated assessment focus groups, Participatory Integrated Assessment (PIA) with computer models; Scenario workshop; Science café; World café; World wide views.	Citizen compass; Citizens hearing; Civic dialogue; Deep democracy - the Lewis method; Deliberative online forum; Democs card game; E-conference; Focus groups; Perspective workshop; Scenario workshop; Science café; World café.	Citizen compass; Citizens' assembly; Civic dialogue; Crowd wise; Distributed dialogue; Focus groups; Future panel; Integrated assessment focus groups, Participatory Integrated Assessment (PIA) with computer models; Q methodology - stakeholder selection; Scenario workshop; Science café; World café; World wide views	Citizen compass; Civic dialogue; Deep democracy - the Lewis method; Focus groups; Neo-socratic dialogue; Perspective workshop; Science café; World café.	Citizen juries; Citizens' assembly; CIVISTI; Civic dialogue; Focus groups; Future search; Interdisciplinary work groups; Scenario workshop; Science café; World café; World wide views.
Consulting	Citizen compass; Citizen juries; Citizens' summit; Consensus conference; Deliberative poll (Deliberative polling); Delphi method; Future panel; Future search; Group Delphi; Interdisciplinary work groups; Interviews; Open space technology; Needs survey among CSOs; World café; World wide views.	Citizens' summit; Consensus conference; Deliberative poll (Deliberative polling); Delphi method; Group Delphi; Interviews; Open space technology; Needs survey among CSOs; World café; World wide views.	Citizen juries; Citizens' summit; CIVISTI; Consensus conference; Crowd wise; Deliberative poll (Deliberative polling); Delphi method; Future search; Group Delphi; Interdisciplinary work groups; Integrated assessment focus groups, Participatory Integrated Assessment (PIA) with computer models; Interviews; Needs survey among CSOs; World café; World wide views.	Citizen compass; Citizens' summit; Citizens hearing; Deliberative poll (Deliberative polling); Delphi method; E-conference; Group Delphi; Interviews; Needs survey among CSOs; World café.	Citizen compass; Citizens' summit; Crowd wise; Deliberative poll (Deliberative polling); Delphi method; Future panel; Group Delphi; Integrated assessment focus groups, Participatory Integrated Assessment (PIA) with computer models; Interviews; Q methodology - stakeholder selection; Needs survey among CSOs; World café; World wide views.	Citizen compass; Citizens' summit; Deliberative poll (Deliberative polling); Delphi method; Group Delphi; Interviews; Needs survey among CSOs; World café.	Citizen juries; Citizens' summit; CIVISTI; Deliberative poll (Deliberative polling); Delphi method; Future search; Group Delphi; Interdisciplinary work groups; Interviews; Needs survey among CSOs; World café; World wide views.
Involving	Challenge prizes; Citizen science; Citizens' assembly; Civic dialogue; Community-based (Participatory) research; Consensus conference; Science week; Deep democracy - the Lewis method; Deliberative mapping; Deliberative (Mini-publics) workshops; Deliberative poll (Deliberative polling); Distributed dialogue; Future panel; Future search; Future workshop; Interdisciplinary work groups; Open space technology; Scenario workshop; Integration of civil society driven research in university curricula; User committee; World café; World wide views.	Challenge prizes; Citizen science; Civic dialogue; Consensus conference; Science week; Deliberative (Mini-publics) workshops; Deliberative poll (Deliberative polling); Distributed dialogue; Knowledge atelier; Mass experiment; Open space technology; Participatory sensing, volunteer sensing, citizen observatory; Reflexive interactive design; Scenario workshop; Integration of civil society driven research in university curricula; User committee; World café; World wide views.	Challenge prizes; Charrette; Citizen science; Citizens' assembly; CIVISTI; Civic dialogue; Community-based (Participatory) research; Consensus conference; Science week; Deliberative mapping; Deliberative (Mini-publics) workshops; Deliberative poll (Deliberative polling); Distributed dialogue; Future search; Interdisciplinary work groups; Knowledge atelier; Mass experiment; Participatory design; Participatory sensing, volunteer sensing, citizen observatory; Scenario workshop; Integration of civil society driven research in university curricula; User committee; World café; World wide views.	Charrette; Citizens hearing; Civic dialogue; Community-based (Participatory) research; Deep democracy - the Lewis method; Deliberative online forum; Deliberative poll (Deliberative polling); E-conference; Knowledge atelier; Mass experiment; Participatory budgeting; Participatory design; Participatory strategic planning; Scenario workshop; Integration of civil society driven research in university curricula; User committee; World café.	Challenge prizes; Charrette; Citizens' assembly; Civic dialogue; Science week; Deliberative mapping; Deliberative (Mini-publics) workshops; Deliberative poll (Deliberative polling); Distributed dialogue; Future panel; Future workshop; Knowledge atelier; Mass experiment; Participatory design; Participatory sensing, volunteer sensing, citizen observatory; Scenario workshop; Integration of civil society driven research in university curricula; Serious gaming; User committee; World café; World wide views	Civic dialogue; Deep democracy - the Lewis method; Deliberative poll (Deliberative polling); Participatory strategic planning; Integration of civil society driven research in university curricula; User committee; World café.	Challenge prizes; Charrette; Citizens' assembly; CIVISTI; Civic dialogue; Science week; Deliberative (Mini-publics) workshops; Deliberative poll (Deliberative polling); Future search; Future workshop; Interdisciplinary work groups; Mass experiment; Scenario workshop; Integration of civil society driven research in university curricula; User committee; World café; World wide views
Collaborating	Action research; Challenge prizes; Citizen science; Citizens' assembly; Civic dialogue; Community-based (Participatory) research; Consensus conference; Science week; Deliberative mapping; Deliberative (Mini-publics) workshops; Democs card game; Distributed dialogue; Future panel; Future search; Future workshop; Hackathon; Interdisciplinary work groups; Open space technology; Science shop; "From Question of a CSO to a Research Question"; Integration of civil society driven research in university curricula; User committee; World café.	Action research; Challenge prizes; Citizen science; Civic dialogue; Consensus conference; Science week; Deliberative (Mini-publics) workshops; Democs card game; Distributed dialogue; Knowledge atelier; Mass experiment; Open space technology; Participatory sensing, volunteer sensing, citizen observatory; Reflexive interactive design; Resource flow map; Science shop; "From Question of a CSO to a Research Question"; Integration of civil society driven research in university curricula; User committee; World café.	Action research; Challenge prizes; Charrette; Citizen science; Citizens' assembly; CIVISTI; Civic dialogue; Community-based (Participatory) research; Consensus conference; Science week; Deliberative mapping; Deliberative (Mini-publics) workshops; Democs card game; Distributed dialogue; Future search; Hackathon; Interdisciplinary work groups; Knowledge atelier; Mass experiment; Participatory design; Participatory sensing, volunteer sensing, citizen observatory; Science shop; "From Question of a CSO to a Research Question"; Integration of civil society driven research in university curricula; User committee; World café.	Charrette; Citizens hearing; Civic dialogue; Community-based (Participatory) research; Deliberative online forum; Democs card game; E-conference; Knowledge atelier; Mass experiment; Participatory design; Participatory strategic planning; Science shop; "From Question of a CSO to a Research Question"; Integration of civil society driven research in university curricula; User committee; World café	Action research; Challenge prizes; Charrette; Citizens' assembly; Civic dialogue; Science week; Deliberative mapping; Deliberative (Mini-publics) workshops; Distributed dialogue; Future panel; Future workshop; Knowledge atelier; Mass experiment; Participatory design; Participatory sensing, volunteer sensing, citizen observatory; Science shop; "From Question of a CSO to a Research Question"; Integration of civil society driven research in university curricula; User committee; World café.	Civic dialogue; Participatory strategic planning; Science shop; "From Question of a CSO to a Research Question"; Integration of civil society driven research in university curricula; User committee; World café.	Challenge prizes; Charrette; Citizens' assembly; CIVISTI; Civic dialogue; Science week; Deliberative (Mini-publics) workshops; Future search; Future workshop; Hackathon; Interdisciplinary work groups; Mass experiment; Science shop; "From Question of a CSO to a Research Question"; Integration of civil society driven research in university curricula; User committee; World café.
Empowering	Action research; Challenge prizes; Citizen compass; Citizen juries; Citizens' assembly; Community-based (Participatory) research; Consensus conference; Deep democracy - the Lewis method; Democs card game; Distributed dialogue; Future panel; Future search; Open space technology; Perspective workshop; World café; World wide views.	Action research; Challenge prizes; Consensus conference; Democs card game; Distributed dialogue; Open space technology; World café; World wide views.	Action research; Challenge prizes; Citizen juries; Citizens' assembly; Community-based (Participatory) research; Consensus conference; Democs card game; Distributed dialogue; Future search; World café; World wide views.	Citizen compass; Citizens hearing; Community-based (Participatory) research; Deep democracy - the Lewis method; Democs card game; Perspective workshop; World café.	Action research; Challenge prizes; Citizen compass; Citizens' assembly; Distributed dialogue; Future panel; World café; World wide views.	Citizen compass; Deep democracy - the Lewis method; Perspective workshop; World café	Challenge prizes; Citizen juries; Citizens' assembly; Future search; World café; World wide views.
Direct Decision	Citizens' assembly; Deliberative poll (Deliberative polling); Delphi method; Future panel; World café	Deliberative poll (Deliberative polling); Delphi method; Multi criteria decision analysis (MCDA); World café	Citizens' assembly; Deliberative poll (Deliberative polling); Delphi method; Multi criteria decision analysis (MCDA); World café	Deliberative poll (Deliberative polling); Delphi method; Participatory budgeting; World café	Citizens' assembly; Deliberative poll (Deliberative polling); Delphi method; Future panel; Multi criteria decision analysis (MCDA); World café	Deliberative poll (Deliberative polling); Delphi method; World café	Citizens' assembly; Deliberative poll (Deliberative polling); Delphi method; Multi criteria decision analysis (MCDA); World café

	Health, demographic change and wellbeing	Food security, sustainable agriculture, marine and maritime research and the bio-economy	Climate action, resource efficiency and raw materials	Inclusive, innovative and reflective societies	Secure, clean and efficient energy	Secure societies to protect freedom and security of Europe and its citizens	Smart, green and integrated transport
Policy formulation	Citizen compass; Citizen juries; Citizens' assembly; Civic dialogue; Consensus conference; Deep democracy - the Lewis method; Deliberative mapping; Deliberative (Mini-publics) workshops; Deliberative poll (Deliberative polling); Delphi method; Distributed dialogue; Future panel; Future search; Group Delphi; Interdisciplinary work groups; Interviews; Open space technology; Perspective workshop; Scenario workshop; Needs survey among CSOs; World café; World wide views.	Citizens' summit; Civic dialogue; Consensus conference; Deliberative (Mini-publics) workshops; Deliberative poll (Deliberative polling); Delphi method; Distributed dialogue; Group Delphi; Interviews; Multi criteria decision analysis (MCDA); Open space technology; Scenario workshop; Needs survey among CSOs; World café; World wide views.	Citizen juries; Citizens' summit; Citizens' assembly; Civic dialogue; Consensus conference; Crowd wise; Deliberative mapping; Deliberative (Mini-publics) workshops; Deliberative poll (Deliberative polling); Delphi method; Distributed dialogue; Future search; Group Delphi; Interdisciplinary work groups; Interviews; Multi criteria decision analysis (MCDA); Scenario workshop; Needs survey among CSOs; World café; World wide views.	Citizen compass; Citizens' summit; Citizens hearing; Civic dialogue; Deep democracy - the Lewis method; Deliberative poll (Deliberative polling); Delphi method; Group Delphi; Interviews; Participatory budgeting; Participatory strategic planning; Perspective workshop; Scenario workshop; Needs survey among CSOs; World café.	Citizen compass; Citizens' summit; Citizens' assembly; Civic dialogue; Crowd wise; Deliberative mapping; Deliberative (Mini-publics) workshops; Deliberative poll (Deliberative polling); Delphi method; Distributed dialogue; Future panel; Group Delphi; Interviews; Multi criteria decision analysis (MCDA); Q methodology - stakeholder selection; Scenario workshop; Needs survey among CSOs; World café; World wide views.	Citizen compass; Citizens' summit; Civic dialogue; Deep democracy - the Lewis method; Deliberative poll (Deliberative polling); Delphi method; Group Delphi; Interviews; Participatory strategic planning; Perspective workshop; Needs survey among CSOs; World café	Citizen juries; Citizens' summit; Citizens' assembly; Civic dialogue; Deliberative (Mini-publics) workshops; Deliberative poll (Deliberative polling); Delphi method; Future search; Group Delphi; Interdisciplinary work groups; Interviews; Multi criteria decision analysis (MCDA); Scenario workshop; Needs survey among CSOs; World café; World wide views.
Programme development	Civic dialogue; Community-based (Participatory) research; Consensus conference; Deep democracy - the Lewis method; Deliberative (Mini-publics) workshops; Delphi method; Focus groups; Future panel; Group Delphi; Interviews; Knowledge atelier; Open space technology; Perspective workshop; Needs survey among CSOs; Science café; World café; World wide views.	Civic dialogue; Consensus conference; Deliberative (Mini-publics) workshops; Delphi method; Focus groups; Group Delphi; Interviews; Knowledge atelier; Multi criteria decision analysis (MCDA); Open space technology; Reflexive interactive design; Needs survey among CSOs; Science café; World café; World wide views.	CIVISTI; Civic dialogue; Community-based (Participatory) research; Consensus conference; Deliberative (Mini-publics) workshops; Delphi method; Focus groups; Group Delphi; Interviews; Knowledge atelier; Multi criteria decision analysis (MCDA); Needs survey among CSOs; Science café; World café; World wide views.	Citizens hearing; Civic dialogue; Community-based (Participatory) research; Deep democracy - the Lewis method; Delphi method; Focus groups; Group Delphi; Interviews; Knowledge atelier; Participatory budgeting; Participatory strategic planning; Needs survey among CSOs; Science café; World café.	Civic dialogue; Deliberative (Mini-publics) workshops; Delphi method; Focus groups; Future panel; Group Delphi; Interviews; Knowledge atelier; Multi criteria decision analysis (MCDA); Q methodology - stakeholder selection; Needs survey among CSOs; Science café; World café; World wide views.	Civic dialogue; Deep democracy - the Lewis method; Delphi method; Focus groups; Group Delphi; Interviews; Participatory strategic planning; Perspective workshop; Needs survey among CSOs; Science café; World café.	CIVISTI; Civic dialogue; Deliberative (Mini-publics) workshops; Delphi method; Focus groups; Group Delphi; Interviews; Multi criteria decision analysis (MCDA); Needs survey among CSOs; Science café; World café; World wide views.
Project definition	Action research; Challenge prizes; Civic dialogue; Community-based (Participatory) research; Deep democracy - the Lewis method; Delphi method; Democs card game; Focus groups; Group Delphi; Interviews; Knowledge atelier; Open space technology; Science shop; "From Question of a CSO to a Research Question"; Needs survey among CSOs; Science café; User committee; World café; World wide views.	Action research; Challenge prizes; Civic dialogue; Delphi method; Democs card game; Focus groups; Group Delphi; Interviews; Knowledge atelier; Open space technology; Participatory sensing, volunteer sensing, citizen observatory; Reflexive interactive design; Resource flow map; Science shop; "From Question of a CSO to a Research Question"; Needs survey among CSOs; Science café; User committee; World café; World wide views.	Action research; Challenge prizes; Charrette; Civic dialogue; Community-based (Participatory) research; Delphi method; Democs card game; Focus groups; Group Delphi; Interviews; Knowledge atelier; Participatory design; Participatory sensing, volunteer sensing, citizen observatory; Science shop; "From Question of a CSO to a Research Question"; Needs survey among CSOs; Science café; User committee; World café; World wide views.	Charrette; Civic dialogue; Community-based (Participatory) research; Deep democracy - the Lewis method; Deliberative online forum; Delphi method; Democs card game; E-conference; Focus groups; Group Delphi; Interviews; Knowledge atelier; Participatory design; Participatory strategic planning; Science shop; "From Question of a CSO to a Research Question"; Needs survey among CSOs; Science café; User committee; World café.	Action research; Challenge prizes; Charrette; Civic dialogue; Delphi method; Focus groups; Group Delphi; Interviews; Knowledge atelier; Participatory design; Participatory sensing, volunteer sensing, citizen observatory; Q methodology - stakeholder selection; Science shop; "From Question of a CSO to a Research Question"; Needs survey among CSOs; Science café; User committee; World café; World wide views.	Civic dialogue; Deep democracy - the Lewis method; Delphi method; Focus groups; Group Delphi; Interviews; Participatory strategic planning; Science shop; "From Question of a CSO to a Research Question"; Needs survey among CSOs; Science café; User committee; World café.	Challenge prizes; Charrette; Civic dialogue; Delphi method; Focus groups; Group Delphi; Interviews; Science shop; "From Question of a CSO to a Research Question"; Needs survey among CSOs; Science café; User committee; World café; World wide views.
Research activity	Action research; Challenge prizes; Citizen science; Civic dialogue; Community-based (Participatory) research; Consensus conference; Science week; Delphi method; Democs card game; Focus groups; Future workshop; Group Delphi; Hackathon; Interviews; Knowledge atelier; Neo-socratic dialogue; Open space technology; Science shop; Integration of civil society driven research in university curricula; Science café; User committee; World café; World wide views.	Action research; Challenge prizes; Citizen science; Civic dialogue; Consensus conference; Science week; Delphi method; Democs card game; Focus groups; Group Delphi; Interviews; Knowledge atelier; Mass experiment; Open space technology; Participatory sensing, volunteer sensing, citizen observatory; Reflexive interactive design; Resource flow map; Science shop; Integration of civil society driven research in university curricula; Science café; User committee; World café; World wide views.	Action research; Challenge prizes; Charrette; Citizen science; Civic dialogue; Community-based (Participatory) research; Consensus conference; Crowd wise; Science week; Delphi method; Democs card game; Focus groups; Group Delphi; Hackathon; Integrated assessment focus groups, Participatory Integrated Assessment (PIA) with computer models; Interviews; Knowledge atelier; Mass experiment; Participatory design; Participatory sensing, volunteer sensing, citizen observatory; Science shop; Integration of civil society driven research in university curricula; Science café; User committee; World café; World wide views.	Charrette; Civic dialogue; Community-based (Participatory) research; Delphi method; Democs card game; Focus groups; Group Delphi; Interviews; Knowledge atelier; Mass experiment; Participatory design; Science shop; Integration of civil society driven research in university curricula; Science café; User committee; World café.	Action research; Challenge prizes; Charrette; Civic dialogue; Crowd wise; Science week; Delphi method; Focus groups; Future workshop; Group Delphi; Integrated assessment focus groups, Participatory Integrated Assessment (PIA) with computer models; Interviews; Knowledge atelier; Mass experiment; Participatory sensing, volunteer sensing, citizen observatory; Q methodology - stakeholder selection; Science shop; Integration of civil society driven research in university curricula; Science café; Serious gaming; User committee; World café; World wide views.	Civic dialogue; Delphi method; Focus groups; Group Delphi; Interviews; Neo-socratic dialogue; Science shop; Integration of civil society driven research in university curricula; Science café; User committee; World café	Challenge prizes; Charrette; Civic dialogue; Science week; Delphi method; Focus groups; Future workshop; Group Delphi; Hackathon; Interviews; Mass experiment; Science shop; Integration of civil society driven research in university curricula; Science café; User committee; World café; World wide views.

In the following pages, you will find factsheets containing description of the engagement methods and tools. These descriptions contain information concerning the specificity of the individual method, e.g. the objectives of methods/tools application, results and products of methods' application, level of stakeholder involvement, engaged stakeholders, strengths and weaknesses and others. The descriptions presented are not comprehensive. More information can be found using the links provided in the section Sources.

The majority of the factsheets describe engagement methods; a few, however, describe tools used for engagement. **A method is a well-defined process that is fit to perform a certain set of roles[1]. 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 in within methods, and which is less role-specific.**

Besides the above listed four criteria, against which the methods/tools were mapped, the following two definitions related to the involved stakeholders will be useful in reading the factsheets:

- **Direct participant** is considered to be the stakeholder group which has been engaged in the process
- **Beneficiary** is the users of the results of the method.

[1] Note that often, specific impacts can only be reached through use of a combination of methods.

FACTSHEETS

Name of the engagement method (alias)	**1. Action Research** (also called: Participatory Action Research)
Short description of the method	Action research is the practice of embedding research in society by democratising knowledge making and grounding it in real community needs. Action research has been applied in several fields of practice including the workplace, education, public health, and development aid. The science shop concept (see the separate fact sheet) can be regarded as an example of action research in practice. In contrast to citizen science, it comprises not only the practical engagement of laypeople in research, but also aims at transformative action by involving people in the scientific exploration of their own living conditions and everyday problems, and those related to the environment, in order to induce a change in these conditions initiated by people themselves. It is a communicative process that is based on the acknowledgment of different equitable forms of knowledge (i.e. scientific knowledge as well as that of citizens).
Long description of the method	Action research started as (and still is) a movement of democratising science and doing science in the interest of the under-privileged. It emphasizes the practical purpose and origin of knowledge and directs research at the needs of people rather than framing it as merely a "ivory tower" academic pursuit. This implies that action research starts from a practical problem emanating from a community and explores this problem in a learning process that involves scientists as well as lay persons. It is undertaken in order to inform and empower action in terms of the community's ability to solve or adapt to problems at hand. The concept of action research starts from the notion that objective knowledge is impossible to have since the researcher is always part of the world he/she studies. Additionally, the research process cannot be ideologically neutral, but is always suffused with political undertones which are aimed at serving particular purposes (Reason & Bradbury, Handbook of Action Research 2001/2008). One of the "fathers" of action research described the actual process of action research as a scientific approach to planned change (the practical, problem-oriented starting point of action research). This process is made up of a spiral of steps, each of which is "a circle of planning, action, and fact finding about the result of the action" (Lewin 1948, see Wikipedia article on "participatory action research"). In this process, researchers and laypeople are always involved and are engaged in a joint learning process. The process circles comprise the following: • Planning for improving the situation at hand; • Acting on the basis of the decided plan; • Observing the effects of action; • Reflecting on these effects and adopting the plan of action accordingly. The different steps are performed jointly by the researchers and the community members. The tools applied in this process are mainly those used in qualitative social research and include: keeping a research journal, document collection and analysis, participant observation recordings, questionnaire surveys, interviews and case studies (O'Brien 1998). The first step in action research is essential and includes: "… the formation of a communicative space which is embodied in networks of actual persons." Such a communicative space "… is constituted as issues or problems are opened up for discussion, and when participants experience their interaction as fostering the democratic expression of diverse views". This eventually allows people "… to achieve mutual understanding and consensus about what to do" (Kemmis Handbook of Action Research 2001, p. 100).
Objective of application of the method	☐ Policy formulation ☐ Programme development ☒ Project definition ☒ Research activity ☒ Others: Political empowerment of people
Results and products of the method application	The final objective of the action research process goes beyond the production of scientific advice on addressing a particular challenge. It also includes the learning process itself, which includes a change in the abilities of participants to articulate the problem and to act in the best interests of the community involved.

Level of stakeholder/public involvement, i.e. objective of public participation through the method's application	☐ Dialogue ☐ Consulting ☐ Involving ☒ Collaborating ☒ Empowering ☐ Direct decision
Engaged stakeholders in the process of method application	

Category	**Organiser**	**Direct participant**	**Beneficiaries**
CSOs	☐	☒	☐
Policy-makers	☐	☐	☐
Researchers	☒	☐	☐
Citizens	☐	☒	☒

	Affected	☐	☒	☒
	Consumers	☐	☐	☐
	Employees	☐	☒	☒
	Users	☐	☐	☐
	Industry	☐	☐	☐

Geographical scope of application (On what level has the method already been used?)	☐International	☐ EU	☐ National	☒ Regional	☐ Local
Societal challenges the method has been trying to address	☒Health, demographic change and wellbeing	☒Food security, sustainable agriculture, marine and maritime research and the bio-economy	☒Secure, clean and efficient energy	☐Smart, green and integrated transport	
	☒Climate action, resource efficiency and raw materials	☐Inclusive, innovative and reflective societies	☐Secure societies to protect freedom and security of Europe and its citizens	☐ Others:	

Specific **strengths and weaknesses** of the method vis-à-vis the challenge(s)addressed	The strength of the approach is the possibility to align research with the interests of a community. This implies good access to information and data on the actual problems and deficits, as well as the resources that are available and at hand in the community involved. Research thus can also serve the needs of a community in the best and most direct way. However, this strength implies a weakness, as action research can be challenged as being biased and not open to other perspectives of the problem at stake.
Timeframe for the application of the method	Depends on the issue at stake and the nature of the process induced.

Skills required in order to properly apply the method

Skills	No such skills required	Basic	Intermediate	Advanced
Subject-matter expertise				**X**
IT skills				
Facilitation skills				**X**
Event organisation skills			**X**	
Project management skills				**X**
Other skills:				

What are the **issues of concern that organisers need to take into account** when applying the method?	The biggest challenges are to establish a communicative space for actors to be involved, and a common commitment to joint problem solving. This also includes the willingness of actors to question their own beliefs.

Examples of use of the method

Project name	Organisation	Contact persons	Timeframe	Web address
For examples see the fact sheet on "Science Shops"				

Additional information of relevance (such as historical background, where the method has already been applied, etc.)	Action research is a particular approach to research which includes public engagement, rather than being a method of public engagement itself. The term 'action research' was coined by Kurt Lewin in the 1940's in the USA. Elements of action research, however, can also be found prior to this in the work of the American philosopher John Dewey ("learning by doing"). The approach of combining research with direct "emancipatory" intervention in the field of research is not only applied in community-based research (which is in the focus of this fact sheet) but also in organisational development, professional development, social psychology and in other fields.
Sources (names of interviewees, links to relevant websites, etc.)	Wikipedia Article: "Participatory Action Research", www.wikipedia O'Brien, R., 1998: An Overview of the Methodological Approach of Action Research, University of Toronto, www.web.ca/robrien/papersarfinal.html (16.07.2014) Handbook of Action Research (second edition), edited by Peter Reason and Hilary Bradbury, Sage Publications 2008

Author: **Leo Hennen**
Organisation: **ITAS**
Date: **18.07.2014**
Revision date: **20.09.2014**
Reviewed by: **DIALOGIK**

Name of the engagement method (alias)	**2. Challenge Prizes** (also called: 'inducement' prizes)
Short description of the method	Challenge prizes offer a reward to whoever can first or most effectively meet a defined challenge. They act as an incentive for addressing a specific problem, rather than being a reward for past achievements. A challenge prize can incentivise innovation, focus attention on a particular issue and unlock financing and other resources.
Long description of the method	**Background** Challenge Prizes have prompted a range of developments in science and technology across the world. Often they aim to solve big problems and, if successful, can produce major breakthroughs in human knowledge and practice. Challenge Prizes are not always aimed at making radical leaps or achieving complex goals, they are also used to raise awareness or encourage investment in a neglected issue or problem. They can also encourage new collaborations and partnerships, gather new information or data, identify good ideas or excellent practices, and build capacity of new innovators. **Methods and Approaches** Challenge Prizes have made a comeback in recent years, with a renewed interest across the private, public and non-profit sectors. This increase is accompanied by experimentation and innovation in the types of methods and approaches to running challenge prizes. In particular, prizes are thriving in the context of collaboration and partnership building offered by the internet and social media. Using digital platforms, organisers can publicise challenges and reach out to communities on a global scale. Over the last decade there has been a proliferation of online solutions and market places designed to support people in proposing challenges and in receiving solutions. These include InnoCentive.com, Changemakers.com and Kaggle.com. For governments and funders, challenge prizes can be used as part of a toolkit that includes other support mechanisms such as grants and loans. Challenge prizes are based on a simple idea. The problem is identified, the challenge is publicised and the person with the best solution is awarded the prize. Challenge prizes can be structured as a pure prize, where the prize giver is not involved in the development of solutions, or as a grant/incubation hybrid where the prize giver offers support to drive up the quality of solutions. Organisers need to find ways to incentivise individuals or teams to share the risks associated with an uncertain reward. They will also need to measure and judge performance and lay the groundwork for the uptake of solutions following the awarding of the prize. It is also important for them to understand why the challenge has not been met (if indeed it hasn't) and whether the right conditions can be created to address this.
Objective of application of the method	☐ Policy formulation ☐ Programme development ☒ Project definition ☒ Research activity ☐ Others:
Results and products of the method application	• Radical leaps towards ambitious and complex goals; • Increased attention to a specific/neglected issue or problem; • Generation of funding and resources; • New collaborations and partnerships; • New products and services brought to market; • New information and data gathered on an issue; • Increased capacity of innovators; • Good ideas and practice identified.

Level of stakeholder/public involvement, i.e. objective of public participation through the method's application	☐ Dialogue ☐ Consulting ☒ Involving ☒ Collaborating ☒ Empowering ☐ Direct decision			
Engaged stakeholders in the process of method application	Category	**Organiser**	**Direct participant**	**Beneficiaries**
	CSOs	☒	☒	☒
	Policy-makers	☒	☐	☒

	Researchers	☐	☒	☒	
	Citizens	☐	☒	☐	
	Affected	☐	☐	☐	
	Consumers	☐	☐	☐	
	Employees	☐	☒	☐	
	Users	☐	☐	☐	
	Industry	☐	☒	☒	

Geographical scope of application (On what level has the method already been used?)	☒ International	☒ EU	☒ National	☐ Regional	☐ Local

Societal challenges the method has been trying to address	☒ Health, demographic change and wellbeing	☒ Food security, sustainable agriculture, marine and maritime research and the bio-economy	☒ Secure, clean and efficient energy	☒ Smart, green and integrated transport
	☒ Climate action, resource efficiency and raw materials	☐ Inclusive, innovative and reflective societies	☐ Secure societies to protect freedom and security of Europe and its citizens	☐ Others:

Specific **strengths and weaknesses** of the method vis-à-vis the challenge(s) addressed

- Challenge prizes can help funders maximise value and manage risk because resources are allocated to competitors who deliver innovation.
- Challenge prizes stimulate and support new ideas and new people/groups to become active problem solvers.
- Setting up a prize often requires a significant amount of research in order to identify the right challenge. Failure to set a suitable end goal is likely to fundamentally undermine the effectiveness of the challenge.
- The competitive nature of challenge prizes may not be best suited to complex societal issues.
- Challenge prizes tend to be technology/product innovation focused rather than social innovation focused. Some recent challenges have focussed on complex social/environmental problems. For example, NESTA's The Big Green Challenge was designed to encourage a community led approached to climate change.

Timeframe for the application of the method

Challenge prizes are likely to take around a year to set up and could take several years to complete.

Skills required in order to properly apply the method

Skills	No such skills required	Basic	Intermediate	Advanced
Subject-matter expertise			X	
IT skills			X	
Facilitation skills				
Event organisation skills			X	
Project management skills			X	
Other skills:				

<table>
<tr><td>What are the issues of concern that organisers need to take into account when applying the method?</td><td colspan="5">

Stimulating enough attention around the challenge to encourage individuals or teams to carry the risks associated with working towards an uncertain reward.
Understanding why a challenging issue has not been met is crucial since a prize may not resolve the deep systemic barriers to innovation.
Narrowly defined challenges may risk excluding more unpredictable solutions. Therefore, the problem and solution must be defined appropriately or left open in a way that allows for unpredictable effective solutions to emerge.
Crowdsourcing exercises to define ‘challenges’, rather than just crowdsourcing ‘solutions’, may lead to social innovations that are human focused rather than technology focused

</td></tr>
<tr><td rowspan="8">Examples of use of the method</td><td>Project name</td><td>Organisation</td><td>Contact persons</td><td>Timeframe</td><td>Web address</td></tr>
<tr><td>UK Centre for Challenge Prizes</td><td>NESTA</td><td>+44 (0)20 7438 2500
information@nesta.org.uk</td><td>2012 - present</td><td>http://www.nesta.org.uk/our-projects/centre-challenge-prizes</td></tr>
<tr><td>Project name</td><td>Organisation</td><td>Contact persons</td><td>Timeframe</td><td>Web address</td></tr>
<tr><td>European Social Innovation Competition</td><td>European Commission</td><td>luisa.deamicis@euclidnetwork.eu</td><td>2012 – present (yearly prize)</td><td>http://www.euclidnetwork.eu/projects/current-projects/social-innovation-competitions/european-social-innovation-prize-competition.html</td></tr>
<tr><td>Project name</td><td>Organisation</td><td>Contact persons</td><td>Timeframe</td><td>Web address</td></tr>
<tr><td>Composites Grand Challenge

Saltaire Challenge Prize</td><td>Scottish Government</td><td>Scottish Government, Offshore Renewables Policy Team

0300 244 1228</td><td>2008 -2014</td><td>http://www.saltireprize.com/</td></tr>
<tr><td>Project name</td><td>Organisation</td><td>Contact persons</td><td>Timeframe</td><td>Web address</td></tr>
<tr><td>NHS Breakthrough Challenges</td><td>NHS</td><td>See http://www.nhschallengeprizes.org/contact-us/</td><td>2010 - ongoing</td><td>http://www.nhschallengeprizes.org/breakthroughchallenges/</td></tr>
<tr><td>Additional information of relevance (such as historical background, where the method has already been applied, etc.)</td><td colspan="5">Challenge Prizes have a long history and have accelerated progress towards ambitious goals. The Longitudinal Prize offered in 1714 for a simple and practical method for the precise determination of a ship’s longitude is one example. They have also created new markets and prompted the development of new industries. For example, when Charles Lindberg became the first pilot to fly non-stop from New York to Paris, winning the Orteig Prize in 1927, his celebrity transformed the aviation industry.

Further information

“The focus of this guide is the challenge prize, a tool for stimulating, supporting and testing innovation, particularly among new groups of people. We have found that our Big Green Challenge programme and ‘Mass Localism’ report, alongside recent developments in methods such as crowdsourcing and co-production, have struck a chord with funders and policymakers looking for new ways to generate ideas from community-based innovators”.

“Social Challenge Prize Guide | Nesta.” Accessed September 16, 2014. http://www.nesta.org.uk/publications/social-challenge-prize-guide</td></tr>
</table>

Sources (names of interviewees, links to relevant websites, etc.)	"Challenge Prizes: A Practice Guide." Accessed September 16, 2014. http://www.nesta.org.uk/publications/challenge-prizes-practice-guide https://www.innocentive.com/files/node/casestudy/white-paper-challenges-prize-programs-and-opportunity-government.pdf http://www.nesta.org.uk/sites/default/files/social_challenge_prizes.pdf

Author: **Houda Davis**
Organisation: **Involve**
Date: **18/07/14**
Revision date: **16/09/14**
Reviewed by: **University of Groningen**

Name of the engagement method (alias)	**3. Charrette** (also called: Design Charrette, Enquiry by Design) *Similarities to Scenario Workshop
Short description of the method	Charrettes are used in urban planning to facilitate input from the community in a specific geographic area. They are intensive workshops for many stakeholders to work together, including policy-makers, experts and the general public. A key element is the integration of design activities in an early phase to make implementation plans and/or research proposals.
Long description of the method	Charrettes are used in urban planning to facilitate input from the community in a specific geographic area. They are intensive workshops for many stakeholders to work together, including policy-makers, experts and the general public. A key element is the integration of design activities in an early phase to make implementation plans and/or research proposals. Origins of the term "Charrette" *The word Charrette is French for "cart" or "chariot". In the École des Beaux-Arts in Paris in the 19th century, it was not unusual for student architects to continue working furiously in teams at the end of the allotted term, up until a deadline, when a Charrette would be wheeled among the students to pick up their work for review while they, each working furiously to apply the finishing touches, were said to be working en Charrette, in the cart. […] The term metamorphosed into the current design-related usage in conjunction with working right up until a deadline.* [2] At the core of the method is an event called the Charrette workshop which aims to have the right ingredients and environment to stimulate a creative process with stakeholders. Usually this takes place over a number of days. This needs extensive planning and preparation but also a thorough follow-up. There are many variations on this format and one of the defining elements is the number of participants[3]. 1. Preparation phase The main workshop is prepared by a steering committee of 10 to 15 people. They decide on the focus of the Charrette and require input from stakeholders. This should be done both by involving a number of representatives of stakeholders in the committee, and by tapping into the networks the members have in the community. This will also facilitate the process of inviting a broad range of participants. The steering committee is also responsible for the gathering of information that feeds the Charrette workshop. This should be a wide range of data related to the specific area but can also include expert opinions and example projects from other areas. 2. The Charrette workshop There are examples of Charrette workshops with more than 1000 participants. Generally, the Charrette team consists of about 50 people and also includes an event open to the general public. The Charrette consists of a number of sessions and usually there are three types of sessions before the public session including: i. Getting to know each other and the core issues; It can be useful to do a site visit but the information that has been gathered beforehand to bring the participants up to speed is the key. ii. Gathering input from the participants' In-depth interviews in subgroups should be held to gain insight into the views of each stakeholder. Each participant also prioritises the issues that they raise. iii. Integration; Finally the collected information is integrated and analysed in preparation for the public meeting. This involves brainstorming and analysis to make some initial recommendations. The purpose of the public event is to check the direction of the Charrette team effort. They present their preliminary analysis and the overview of goals and objectives that has been gathered from the stakeholders. Based on the feedback, the focus can be adjusted if necessary. After the public event, the Charrette team has a number of sessions alternating between working in small groups and working in a plenary setting. The groups are divided in order to work on one specific issue with at least one relevant expert in the team. They generate proposals for their specific issue and present them to the

[2] "Charrette". Wikipedia, the Free Encyclopaedia, 13th July 2014. http://en.wikipedia.org/w/index.php?title=Charrette&oldid=595193961.
[3] This description is mainly based on the *Participatory Methods Toolkit. A practitioner's manual,* which was published in 2006 by two Belgian foundations. http://www.kbs-frb.be/publication.aspx?id=294864&langtype=1033

	whole group. The responses on their presentations are then used as feedback during the design process in the sub-group sessions. 3. The follow-up The Charrette generates many ideas and possible solutions. These need to be shared with the general public in a second open meeting. This phase includes the preparation of the event and presentation, but also a final document which needs to be readable for the general public.
Objective of application of the method	☐ Policy formulation ☐ Programme development ☒ Project definition ☒ Research activity ☐ Others: *Note: a* Charrette *can be seen as a design research, in which participants are actively engaged in the research activity, but it can also be seen as the preparation of research proposals, in which participants are actively engaged in defining the projects.*
Results and products of the method application	The process ends with a public presentation of a design. This is supported by documentation covering a summary of the process and the proposed projects, key findings and recommendations. The intended outcome is to develop feasible implementation plans and/or focused research projects that are based on early participation of stakeholders in an urban planning process. For example, the Charrette Rijnenburg in the province of Utrecht, Netherlands, had 4 themes[4]: 1. Physical infrastructure of a new district (5000-7000 homes); how to deal with soil, water and the landscape? 2. Society: how can we ensure that the inhabitants together form a sustainable and climate-change resilient society? 3. How to make sure the district functions in a sustainable way in relation to its surroundings? 4. How to ensure that the various elements (buildings, roads, etc.) are produced in a sustainable way that can cope with climate-change? They led to implementation plans, e.g. in soil, water, and the landscape: • By creating natural boundary areas, (bio)diversity in soil, water and landscape is maximized. • The water system will be fit for multiple purposes. • The sharp border between city and polder landscape, marked by the high way, should be seamless. • New forms of agriculture will be developed on the many bodies of water in the area. And they led to research questions, e.g. in soil, water, and the landscape: • Will the spatial planning be temporary or permanent? • How high do weirs and dikes need to be, to keep adjacent cities safe from peaks in water levels? • How much water can the area hold, and which measures does this require? • How large should a unit/village be to be self-supporting (energy and society)? • How to remove the visible barrier formed by the high way?

Level of stakeholder/public involvement, i.e. objective of public participation through the method's application	☐ Dialogue ☐ Consulting ☒ Involving ☒ Collaborating ☐ Empowering ☐ Direct decision			
Engaged stakeholders in the process of method application	Category	**Organiser**	**Direct participant**	**Beneficiaries**
	CSOs	☐	☒	☐
	Policy-makers	☒	☒	☒
	Researchers	☒	☒	☐
	Citizens	☐	☒	☐
	Affected	☐	☒	☐
	Consumers	☐	☐	☐
	Employees	☐	☐	☐
	Users	☐	☒	☐
	Industry	☐	☒	☐

[4] http://www.prodoconsult.nl/user_files/downloads/boekje_rijnenburg_kopie_0.pdf

<table>
<tr><td>Geographical scope of application (On what level has the method already been used?)</td><td>☐ International ☐ EU ☐ National ☒ Regional ☒ Local</td></tr>
<tr><td>Societal challenges the method has been trying to address</td><td>☐ Health, demographic change and wellbeing
☐ Food security, sustainable agriculture, marine and maritime research and the bio-economy
☒ Secure, clean and efficient energy
☒ Smart, green and integrated transport
☒ Climate action, resource efficiency and raw materials
☒ Inclusive, innovative and reflective societies
☐ Secure societies to protect freedom and security of Europe and its citizens
☒ Others:
Conflicts in interests in local land use – urban planning</td></tr>
<tr><td>Specific strengths and weaknesses of the method vis-à-vis the challenge(s) addressed</td><td>Strengths:
The face to face interaction over a number of days makes it possible to build bridges across old divides in a community. It can be a fragile process which yields valuable outcomes for the community.
Weaknesses:
In many countries there is also a formal urban planning process which follows on from the Charrette. Excellent participation in the Charrette does not guarantee a trouble free procedure for all parties in the further development and implementation of the projects. On the other hand, the Charrette process does build relationships and knowledge that helps overcome the differences which can arise in the following steps.
The Charrette may be useful in all grand challenges.</td></tr>
<tr><td>Timeframe for the application of the method</td><td>Preparation phase: Two to four months.
The Charrette workshop: This should at least take one day, but preferably four.
The follow-up: finalising the Charrette workshop findings can take one to two months, which eventually can lead to a number of other projects.
There are often two public events which also need timely planning and communication. The first is during the Charrette workshop and the second at the end of the project.</td></tr>
<tr><td>Skills required in order to properly apply the method</td><td>
<table>
<tr><th>Skills</th><th>No such skills required</th><th>Basic</th><th>Intermediate</th><th>Advanced</th></tr>
<tr><td>Subject-matter expertise</td><td></td><td></td><td></td><td>X</td></tr>
<tr><td>IT skills</td><td></td><td>X</td><td></td><td></td></tr>
<tr><td>Facilitation skills</td><td></td><td></td><td></td><td>X</td></tr>
<tr><td>Event organisation skills</td><td></td><td></td><td></td><td>X</td></tr>
<tr><td>Project management skills</td><td></td><td></td><td>X</td><td></td></tr>
<tr><td>Other skills:</td><td></td><td></td><td></td><td></td></tr>
</table>
</td></tr>
<tr><td>What are the issues of concern that organisers need to take into account when applying the method?</td><td>The Participatory Methods Toolkit mentions two issues of concern:
- Depending on the definition of ‘expertise’, an emphasis on specialist participation in a Charrette may exclude community voices from the process. This could cast doubt on the credibility of the overall public involvement plan of which the group is a part.
- The continuous nature of a longer Charrette may exclude some participants who are hindered by a disability.</td></tr>
<tr><td>Examples of use of the method</td><td>
<table>
<tr><th>Project name</th><th>Organisation</th><th>Contact persons</th><th>Timeframe</th><th>Web address</th></tr>
<tr><td>A number of</td><td>Prodoconsult & KNN</td><td>Klaas Jan Noorman</td><td>2000 – 2014</td><td>http://www.prodoconsult.</td></tr>
</table>
</td></tr>
</table>

	Charrettes in the North of the Netherlands	Advies			nl/?module=pages&id=39
	Project name	**Organisation**	**Contact persons**	**Timeframe**	**Web address**
	Charrette Rijnenburg	Prodo consult		2008	http://www.prodoconsult.nl/user_files/downloads/boekje_rijnenburg_kopie_0.pdf
	Project name	**Organisation**	**Contact persons**	**Timeframe**	**Web address**
	Charrette's on public transport	Federal Transport Authority, USA		2006-2009	http://www.fta.dot.gov/about_FTA_10015.html
	Project name	**Organisation**	**Contact persons**	**Timeframe**	**Web address**

Additional information of relevance (such as historical background, where the method has already been applied, etc.)

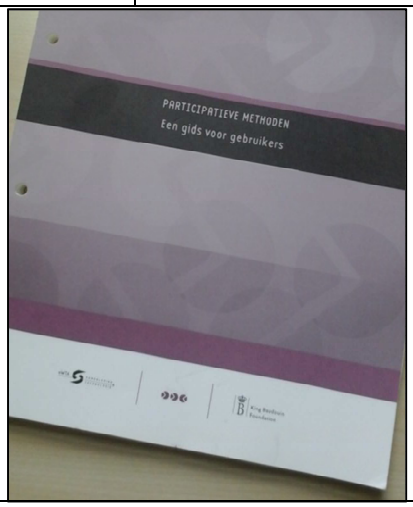
"Participatory Methods Toolkit. A practitioner's manual. New edition".

http://www.kbs-frb.be/publication.aspx?id=294864&langtype=1033
Accessed 28th July 2014.

This is available in:

- Dutch
- French
- English

The Charrette Institute also offers a Handbook: http://www.charretteinstitute.org/



Sources (names of interviewees, links to relevant websites, etc.)

Main sources mentioned above and in the project list. But also:

"Charrette". Wikipedia, the Free Encyclopaedia, 13th July 2014. http://en.wikipedia.org/w/index.php?title=Charrette&oldid=595193961

Further information can be found:

"The Charrette Workshop - Ball State University." Accessed September 25, 2014. http://cms.bsu.edu/academics/centersandinstitutes/cbp/aboutus/charrettewkshop.

Segedy, J, Johnson, B. "The Neighborhood Charrette Handbook." Accessed September 25, 2014. http://www.michigantownships.org/downloads/charrette_handbook_2.pdf.

Author: **Jako Jellema**
Organisation: **University of Groningen**
Date: **29/7/2014**
Revision date: **22/09/2014**
Reviewed by: **ITAS**

Name of the engagement method (alias)	**4. Citizen compass** (in German: Bürgerkompass)
Short description of the method (max 300 characters)	The citizen compass is a format of participation where citizens (randomly selected) evaluate the work of the government using criteria they develop. On this basis the citizens propose measures for the future work of the government. The citizen compass offers a platform for politicians to learn what citizens think about political topics and what recommendations they would give for policy making.
Long description of the method (min 1500 characters, max 3000 characters)	The "citizen compass" is a method which was developed by the Bertelsmann Stiftung and the office of the prime minister of Saxony, Germany. So far, it has been only conduced once, in November 2012 in Saxony. The following questions guide the citizen compass: How are political decisions perceived by the citizens? How are they evaluated by citizens? Which concrete wishes do citizens address to politics? Which are their proposals for political measures? The main event of the citizen compass is a moderated meeting with around 200 citizens which are randomly selected (representative sample regarding age, education, gender, origin). In three steps, the citizens work in this meeting on their recommendation to politics: 1) The citizens develop assessment criteria, which they find relevant to assess the "success" of the government; 2) Citizens judge the political work along these criteria; 3) Starting from the identified deficits, citizens propose suggestions for improvement for the work of the government. At the end of the event, the results are passed to political representatives who then assess, comment, and give feedback to the citizens as well as the public. Suitable proposals will be integrated in their further political work. However, the participatory process starts before the *preparation* of the main event: a smaller group, around 20 participants, chooses the topics which should be discussed at the main event as well as the information material. Here, it is necessary to narrow the scope of the topics which can be discussed (for the example of Saxony: topics had to be within the area of responsibility of regional politics. The topics chosen were: "Economy and social policy", "Education", "Infrastructure"). Thus, it is important to define the scope of influence as well as the general framework right at the beginning of the process to have a clear purpose and a basis for realistic expectation for the citizens. Another crucial aspect is the *follow-up* of the participatory main event. In the case of Saxony, the state government evaluated the proposals. During a final event the governor of Saxony as well as his ministers responded to the recommendations of the citizens and explained how they would like to deal with them in the future. Furthermore, a website compiled the results of the citizen compass Saxony and also documented the whole process.
Objective of application of the method	☒ Policy formulation ☐ Programme development ☐ Project definition ☐ Research activity ☐ Others:
Results and products of the method application	So far, the method was only conducted once, by the office of the governor of Saxony, Germany. What was achieved was a very concrete collection of citizen's opinions on specific topics of policy making on the regional level in Saxony. Here, citizens expressed very specific concerns for their county regarding e.g. the educational system (like shortage of teachers, too large school classes), the job market (especially low wages) as well as their worries with respect to infrastructure measures (especially job cuts at the police force). These concerns were taken up by the governor as well the government at least in a written response. However, the way in which the proposals of the citizens are implemented in the political process remains open.
Level of stakeholder/public involvement, i.e. objective of public participation through the method's application	☒ Dialogue ☒ Consulting ☐ Involving ☐ Collaborating ☒ Empowering ☐ Direct decision
Engaged stakeholders in the process of method application	

Category	Organiser	Direct participant	Beneficiaries
CSOs	☒	☐	☒
Policy-makers	☒	☐	☒
Researchers	☒	☐	☒
Citizens	☐	☒	☒
Affected	☐	☐	☐
Consumers	☐	☐	☐

	Employees	☐	☐	☐	
	Users	☐	☐	☐	
	Industry	☐	☐	☐	
Geographical scope of application (On what level has the method already been used?)	☐ International	☐ EU	☐ National	☒ Regional	☒ Local
Societal challenges the method has been trying to address	☒ Health, demographic change and wellbeing	☐ Food security, sustainable agriculture, marine and maritime research and the bio-economy	☒ Secure, clean and efficient energy	☐ Smart, green and integrated transport	
	☐ Climate action, resource efficiency and raw materials	☒ Inclusive, innovative and reflective societies	☒ Secure societies to protect freedom and security of Europe and its citizens	☐ Others:	

Specific **strengths and weaknesses** of the method vis-à-vis the challenge(s) addressed

The method has, on the one hand, specific strengths. It thus can be applied in a fruitful way:
- When a general expression of opinions to policies and to the work of the government should be obtained;
- When citizens proposals to different topics should be developed;
- When a broad spectrum of citizens should be included.

In principle, the method is really helpful to know how the work of the government is perceived by citizens and how citizens measure the success/ failure of a government. This is also the context for which it was developed and applied.

On the other hand, the method also has weaknesses, which should be kept in mind when thinking about applying the method. Thus the method should not be applied when:
- There is a situation of conflict;
- There is a solution needed for specific problems;
- Specific expertise is desired.

In order to conduct the method successfully, the focus of the citizen compass should be clearly defined beforehand in order to address the right actors. If an open process is wanted, all actors who are interested in the topic should be invited. When the process aims at a specific topic, it should be conducted with very specific groups only.

Timeframe for the application of the method

The citizen compass itself takes place during 1 day. Furthermore, there is a half day preparation meeting before the event, as well as a final event (1 day).

In addition to the time needed for the events, there are several months needed in advance for preparation (organisation of the process, selection of citizens, etc.) as well as for the follow up (documenting results, response from politics).

Skills required in order to properly apply the method

Skills	No such skills required	Basic	Intermediate	Advanced
Subject-matter expertise			X	
IT skills		X		
Facilitation skills				X
Event organisation skills				X
Project management skills				X
Other skills:				

What are the **issues of concern that organisers need to take into account** when applying the method?	The main issues of concern are how the results of the process are finally used and taken up by the government. There is a danger that expectations are raised by the broad integration of citizens which come to very specific proposals which cannot be addressed/ fulfilled in the subsequent political process.				
Examples of use of the method	**Project name**	**Organisation**	**Contact persons**	**Timeframe**	**Web address**
	Citizen Compass Saxony	Office of the governor of Saxony and the Bertelsmann Stiftung	Burkhard Beyer (Office of the governor of Saxony) Christina Tillmann (Bertelsmann Stiftung)	2,5 days for events, but several months for preparation and follow-up	http://www.ministerpraesident.sachsen.de/buergerkompass.htm
Additional information of relevance (such as historical background, where the method has already been applied, etc.)	This method is rather a "new" method which was only applied once. Thus, so far the experiences with the method are limited to the case of Saxony. Here, it seemed that the process itself, which was initiated by the governor of Saxony (belonging to the Christian democrats) went well. However, in the aftermath of the citizen compass, there was a lot of debate (and critique) by the other parties - the social democrats and "die Linke" stated that the votes of the citizens and the outcomes of the participation process were not reflected in following political decisions. Furthermore, there is no scientific analysis on this method so far.				
Sources (names of interviewees, links to relevant websites, etc.)	On the method: http://www.bertelsmann-stiftung.de/cps/rde/xbcr/SID-B0D1B820-D5CF37AD/bst/xcms_bst_dms_38715__2.pdf http://www.bertelsmann-stiftung.de/cps/rde/xchg/SID-C800158F-2ED681A6/bst/hs.xsl/118283.htm http://www.beteiligungskompass.org/article/show/840 http://www.dialoggestalter.de/projekte/buergerkompass-sachsen.html On the process in Saxony: http://www.ministerpraesident.sachsen.de/buergerkompass.htm http://www.ministerpraesident.sachsen.de/download/2013-03-02_Buergervorschlaege_Positionen_Staatsreg.pdf http://www.mdr.de/nachrichten/landtag238_zc-e9a9d57e_zs-6c4417e7.html http://bundespresseportal.de/sachsen/item/7249-besier-tillichs-%E2%80%9Eb%C3%BCrgerkompass%E2%80%9C-imagination-von-b%C3%BCrgern%C3%A4he.html				

Author: **Linda Nierling**
Organisation: **ITAS**
Date: **11.08.2014**
Revision date: **2.10.14**
Reviewed by: **DIALOGIK**

Name of the engagement method (alias)	**5. Citizen Science** *Field of Practice: Citizen Science cannot be regarded as being one method, but is rather a field of activities to engage lay people in scientific research in many ways (depending on the nature of the research project).
Short description of the method	Citizen Science is the inclusion of lay persons in scientific research by asking questions and/or collecting or analysing data as part of a scientific project. Citizens are actively engaged in scientific work, so that scientific research is being done by the citizen and not just for the citizen. Nowadays Citizen Science is an organized, and in many cases hierarchical, process meaning that citizen science projects are mostly (not necessarily) initiated and supervised by professional scientists. Citizen Science projects are carried out for research that affords a great number of spatially dispersed contributions (such as for weather or environmental observations) or involves a great amount of tedious work that does not necessarily involve expert knowledge.
Long description of the method	Internet-based communication allows scientists to easily connect big groups of people all over the world, and devices such as the smartphone make it possible to instantly report observations to scientific databases. Particular software (for mobile phones and PDAs) that supports monitoring and data collection is provided, which enables even non-literate communities to record animal observations as part of biodiversity research projects. Projects like "Polymath"(a successful joint approach to a mathematical problem organized by a world leading mathematician and involving professional and hobby mathematicians, students and school teachers all over the world), or "Galaxy Zoo" are often referred to as proving enormous potential of engaging the wisdom of the crowd for scientific problems. "Galaxy Zoo" started at the University of Oxford in 2007 when a group of researchers planned to inspect 930,000 images of distant galaxies in order to understand the formation of galaxies. Since the researchers could not rely on computer scanning (the potential of computers for image identification is still quite restricted) they started to involve "the crowd" by setting up the internet platform "Galaxy Zoo" (the initiative was publicized by a blog on the BBC webpage). "Before the project started, the largest published study was based on 3000 galaxies. Seven months after the project was launched about 900.000 galaxies had been coded and multiple classifications of a given galaxy by different volunteers were used to reduce the incidence of incorrect coding, for a total of roughly 50 million classifications. For an individual scientist, 50 million classifications would have required more than 83 years of full-time effort." (Franzoni/Sauermann 2014: 5f.) The results have been made publicly available and have been referred to in more than 100 pertinent scientific papers. Moreover, a new, not known before, quasar like object had been spotted by a Dutch school teacher involved in the project. Several follow up activities and new projects have been started by the University of Oxford team. Cooperation with other projects led to the setup of a joint platform for citizen science projects called Zooniverse (www.zooniverse.org) including projects form fields as diverse as astronomy, marine biology, climatology and medicine (Franzoni/Sauermann 2014). The ICT technologies involved in these and other new formats of internet based citizen science are manifold (websites, mobile phones, blogs, social media). One of the most interesting trends is the development of special computer games that allow a broad community of gamers to support research in a playful manner, such as Eyewire (http://blog.eyewire.org) or Fold.it (http://fold.it/portal/) which involve laypeople in mapping protein structures. As these projects show, online gaming is obviously a way of substantially managing mapping tasks, with lay people contributing to the research process creatively, and also by developing suggestions for improving the process. In some cases, these playful forms of engagement are reported to involve up to 200,000 gamers (Franzoni/Sauermann 2014).
Objective of application of the method	☐ Policy formulation ☐ Programme development ☐ Project definition ☒ Research activity ☐ Others:
Results and products of the method application	The product of a citizen science project usually does not differ from the product of a usual research project. Citizens provide data that are used in environmental monitoring or as input into computer models (e.g. of climate change) as well as interpretations of data (as in the galaxy zoo project on classifying images of galaxies). Most projects result in scientific reports and scientific journal articles.

Level of stakeholder/public involvement, i.e. objective of public participation through the method's application	☐ Dialogue ☐ Consulting ☒ Involving ☒ Collaborating ☐ Empowering ☐ Direct decision			
Engaged stakeholders in the process of method application	Category	**Organiser**	**Direct participant**	**Beneficiaries**
	CSOs	☐	☐	☐

	Policy-makers	☐	☐	☐	
	Researchers	☒	☐	☒	
	Citizens	☐	☒	☐	
	Affected	☐	☐	☐	
	Consumers	☐	☐	☐	
	Employees	☐	☐	☐	
	Users	☐	☐	☐	
	Industry	☐	☐	☐	
Geographical scope of application (On what level has the method already been used?)	☒ International	☒ EU	☒ National	☒ Regional	☒ Local
Societal challenges the method has been trying to address	☒ Health, demographic change and wellbeing	☒ Food security, sustainable agriculture, marine and maritime research and the bio-economy	☐ Secure, clean and efficient energy	☐ Smart, green and integrated transport	
	☒ Climate action, resource efficiency and raw materials	☐ Inclusive, innovative and reflective societies	☐ Secure societies to protect freedom and security of Europe and its citizens	☒ Others: the method is applied in almost all fields of scientific research	
Specific **strengths and weaknesses** of the method vis-à-vis the challenge(s) addressed	The strength of the method lays in the fast collection of great amounts of data, observations and/or ideas for problem solving. Besides this "functional" benefit for research, citizen science can help strengthen the ties between science and society and raise awareness on scientific work among the wider public. The direct involvement of citizens in research, which can help to make people learn about what research implies in terms of methods, skills and reasoning, is another strength of the method. The method does usually not imply the influence of laypeople on project design and is not tailored towards engaging people in problem definitions and setting research objectives (but it might be possible to include these as well in case of research done on socially defined problems).				
Timeframe for the application of the method	The time frame of citizen science projects varies a lot. Projects can be done on single issues, such as categorising or sorting a given set of data, all the way up to long term monitoring projects (e.g. on biodiversity or environmental quality) with a time frame of several years. Preparation includes the design of research in a way that is understandable or manageable for laypeople, as well as finding a group of lay supporters of appropriate size.				

Skills required in order to properly apply the method

Skills	No such skills required	Basic	Intermediate	Advanced
Subject-matter expertise				X
IT skills			X	
Facilitation skills			X	
Event organisation skills	X			
Project management skills				X

	Other skills:				Communication on scientific issues with lay people

What are the **issues of concern that organisers need to take into account** when applying the method?	A main barrier or challenge is developing a connection between scientists and possibly interested volunteers. This is made easier nowadays by social media and by web platforms (such as www.scistarter.com) which provide overviews of running projects and help to connect scientists with volunteers. A main issue to be dealt with by organisers is ensuing the quality of research carried out and data provided by lay people. Research being done in that respect shows that it is not necessarily the case that citizen science would not match the standards of professional science. The quality of data and interpretations provided varies widely among individual laypeople but often is as good as research done by scientists. Some rely on the sheer amount of people involved thus levelling out outliers in data quality. In other projects, special measures for quality control by cross checking results are integrated. The proper structuring of problems and definition of subtasks are essential, as well as good quality training and instructions for lay people.

Examples of use of the method

Project name	**Organisation**	**Contact persons**	**Timeframe**	**Web address**
Eyewire	MIT Brain and Cognitive Science Department, MIT media Lab	See web address	running	http://blog.eyewire.org
Project name	**Organisation**	**Contact persons**	**Timeframe**	**Web address**
Galaxy Zoo	University of Oxford	Chriss Lintott (Uni Oxford)	7 Months	www.galaxyzoo.com
Project name	**Organisation**	**Contact persons**	**Timeframe**	**Web address**
European Bird Census	European Bird Census Council	Dr. Ruud Foppen (Chairman)	running	www.ebcc.info

Additional information of relevance (such as historical background, where the method has already been applied, etc.)	Citizen science, as a modern phenomenon of involving lay persons in scientific inquiry, was first developed in weather observation and in the field of biology in projects about monitoring and reporting about the migration or distribution of species. The so called "Christmas Bird Count" in the United States dates back to 1900. Nowadays there are schemes of ornithology societies and institutes for cooperating with lay birdwatchers in many countries. Many collections of specimens in natural science museums, as well as data sets about annual bird migration, weather, flowering periods of plants dating back hundred years, have been assembled by large groups of amateur scientists, and now form a basis for research about climate change or biodiversity. In the last couple of years, citizen science has seen an enormous development in terms of research fields covered and number of people and organisations involved. The use of modern communication technology and especially internet- based collaboration can be regarded as the main factor providing new momentum for citizen science. The concept has been taken up by research and funding institutions of the scientific mainstream. It is very useful for scientists when they need to analyse huge amounts of data, or collect large volumes of field data over a wide (sometimes global) geographical area and - in terms of budget and time – is often the only option to collaborate with large groups of volunteers. Citizen science is especially attractive for ecological science when observing climate change, invasive species, conservation biology, environmental quality monitoring (water, air), population monitoring and other areas. Besides the functionality of involving lay people in research projects, there are other benefits regularly mentioned in pertinent literature, such as its positive effects on learning, and improving public understanding of science as well as on raising awareness of scientific working methods among the public. In general, Citizen Science is held to contribute to what can be called a democratization of science or, less ambitiously, a contribution to a better integration of science with civil society.
Sources (names of interviewees, links to relevant websites, etc.)	• Bonney, R., Ballard, H., Jordan, R., McCallie, E., Phillips, T., Shirk, J., & Wilderman, C. C. (2009): Public participation in scientific research: Defining the field and assessing its potential for informal science education. A CAISE Inquiry Group Report. Washington, DC: Center for Advancement of Informal Science Education (CAISE) • European Commission (2014): Green paper on citizen science: Citizen Science for Europe – Towards a better society of empowered citizens and enhanced research. Brussels http://ec.europa.eu/digital-agenda/en/news/green-paper-citizen-science-europe-towards-society-empowered-citizens-and-enhanced-research-0 • Franzoni, C., Sauermann, H. (2014): Crowd Science: The organization of scientific research in open collaborative projects. Research Policy, 43, 1-20

Author: **L. Hennen**
Organisation: **ITAS**
Date: **16.07.2014**
Revision date:
Reviewed by: **Involve**

<table>
<tr><td>Name of the engagement method (alias)</td><td>6. Citizen juries
(also called: Planning cells; in German: Plannungszelle)</td></tr>
<tr><td>Short description of the method</td><td>A citizen jury is organized in order to consult a governmental body on a problem which is relevant for current public policies. Within a jury, the opinions and perspectives of citizens, who are all policy stakeholders, are revealed and a common decision of the participants is made. Against this background, citizen juries are most applicable if a political problem can be solved in a number of ways. This jury then explores one or several of these political options.</td></tr>
<tr><td>Long description of the method</td><td>The method is predominantly applied on the local or regional government level. Normally, an administrative body contracts an independent organization to facilitate and supervise this participation process. The organization randomly selects 12-25 citizens who should find solutions for the pre-defined problem. Sometimes participants receive an honorarium or some form of financial compensation for their time.

The relevant people should be those who might be affected by the potential decision. Typical demographic variables (age, education, gender, geographic location and race) should be representative. A further criterion might be reasonable if it can be related to the issue at stake. To recruit the jurors, it is best to randomly send a survey to the relevant people. Depending on the answers, the jurors can be selected.

A jury shares similar principles as a legal jury. Citizens come together and are confronted with a problem that they should work on. Similar to the legal model, the jury calls for experts which are named witnesses. Either the experts are selected by the responsible organization or by the citizens themselves. After hearing the experts, the citizens work together in small groups on different parts of the problem. They come to a decision and several recommendations are written down in a report. The report must be presented to the governmental body who contracted the jury, and the members of the body are expected to formally respond to the results presented.

The citizens turn into informed decision makers during the procedure. Usually, not only one jury or planning cell, but several, are organized so that the contracting body gains a clear picture of what kind of possibilities, opportunities and threats are foreseen. In addition, normally one political option is favored by participating citizens. Thus, the more planning cells they are organized, the less probable it is that individual ideological tendencies dominate the overall outcomes.

Normally, the organization process is accompanied by an advisory board which either consists of experts in the field or of stakeholders. The selection of board members might depend on the degree of the conflict between the stakeholders. If tensions are high, then the advisory board might not be able to make any clear statements. Furthermore, extra working groups consisting of members of the sponsor and members of the advisory committee might ensure that the jury will fulfill all expectations. There should also be facilitators who are aware of the method in detail.</td></tr>
<tr><td>Objective of application of the method</td><td>☒ Policy formulation ☐ Programme development ☐ Project definition ☐ Research activity ☐ Others:</td></tr>
<tr><td>Results and products of the method application</td><td>Lots of experiences can be observed in health policy-decision making. A literature study from Jackie Street et al. reviews articles describing a total of 66 citizen juries in this field, covering ethical topics, questions of priority-setting and resource allocation, health policy issues like mammography screening, telemedicine or health system reform, environmental health issues like nanotechnology or GM foods, and community wellbeing (Street et al. 2014).

In the European Water Framework Directive further regulation on the application of participation is included (Bos-Gorter et al. 2006). Between 2003 and 2006 several citizen juries were organized, and one of them was funded by the EU Commission “as an experiment to assess the usefulness of the method in the drafting of water-basin-management plans” (Huitema et al. 2010). In all cases, politicians or representatives of the administration discussed the recommendations at the end. The consent the jurors aimed at was problematized by the politicians “in order to be able to emphasize those aspects in the jury recommendations that would fit their political point of view” (Bos-Gorter et al. 2006). In interviews the political representatives stated that they could make little use out of the recommendations (Huitema et al. 2010).</td></tr>
<tr><td>Level of stakeholder/public involvement, i.e. objective of public participation through the method’s application</td><td>☒ Dialogue ☒ Consulting ☐ Involving ☐ Collaborating ☒ Empowering ☐ Direct decision</td></tr>
<tr><td>Engaged stakeholders in the process of method application</td><td>
<table>
<tr><th>Category</th><th>Organiser</th><th>Direct participant</th><th>Beneficiaries</th></tr>
<tr><td>CSOs</td><td>☒</td><td>☐</td><td>☒</td></tr>
<tr><td>Policy-makers</td><td>☒</td><td>☐</td><td>☒</td></tr>
<tr><td>Researchers</td><td>☒</td><td>☐</td><td>☒</td></tr>
</table>
</td></tr>
</table>

	Citizens	☐	☒	☒	
	Affected	☐	☐	☐	
	Consumers	☐	☐	☐	
	Employees	☐	☐	☐	
	Users	☐	☐	☐	
	Industry	☐	☐	☐	
Geographical scope of application (On what level has the method already been used?)	☐ International	☒ EU	☒ National	☒ Regional	☒ Local
Societal challenges the method has been trying to address	☒ Health, demographic change and wellbeing	☐ Food security, sustainable agriculture, marine and maritime research and the bio-economy	☐ Secure, clean and efficient energy	☒ Smart, green and integrated transport	
	☒ Climate action, resource efficiency and raw materials	☐ Inclusive, innovative and reflective societies	☐ Secure societies to protect freedom and security of Europe and its citizens	☐ Others:	
Specific **strengths and weaknesses** of the method vis-à-vis the challenge(s) addressed	Ordinary citizens can develop, reflect on, and recommend different policy options. Their involvement allows "understanding of underlying reasons for specific attitudes or beliefs" (Renn et al. 1984, p. 43). The observation of planning cells facilitates the estimation of public attitudes towards policies and especially to foresee resistance towards regulations. However, there are disadvantages, too: citizens are not able to develop completely new approaches for conflict resolution and they tend to make no compromises. It is rather difficult for observers to find clear estimations of preferences because group dynamics vary a lot. Mostly, the participating citizens learn a lot. Compared to that, it is rather a matter of hope that political representatives attending an event at the end of a jury process can claim the same benefit. Only three studies of 66 citizen juries indicate that a governmental body would consider the recommendations (Street et al. 2014). However, it should be the minimal requirement that decision makers show up and discuss the results. However, this final element of citizen juries is rarely observable. A citizen jury or a planning cell should be organized according to given standards, e.g. facilitators should be motivated and skilled, the process should be transparent and open, all interests should be represented and voiced, and enough resources should be available to compensate the participants (Bos-Gorter et al. 2006; Huitema et al. 2010). Another weakness is that a citizen jury may not feed into a policy making process. It is crucial that organisers are clear with participating citizens at the outset regarding intended and realistic outcomes.				
Timeframe for the application of the method	The jury takes place over 4-5 days. However several months are needed for preparation: • Establish a working group (week 1) (preparation); • Select an advisory committee (week 2) (preparation); • Consult with working group (week 3) (preparation); • Develop Agenda (week 4) (preparation); • Design a survey to select the jurors (week 5) (preparation); • Review of the process by sponsor (week 6) (preparation); • Conduct the survey (week 7) (preparation); • Select jurors (week 8) (preparation); • Finalize agenda and preparation (week 9) (preparation); • Recruit witnesses (week 10) (preparation); • Prepare handbooks (week 11) (preparation); • Make the jury happen (week 12) (organisation); • Issue final report (week 13) (final implementation).				

Skills required in order to properly apply the method

Skills	No such skills required	Basic	Intermediate	Advanced
Subject-matter expertise			X	
IT skills		X		
Facilitation skills				X
Event organisation skills			X	
Project management skills			X	
Other skills:				

What are the **issues of concern that organisers need to take into account** when applying the method?

The length of the process can vary a lot. Additionally, the experts might not be from the same region as where the process takes place. This is why sufficient financial resources often poses one of the biggest challenges.

Another issue of concern are the ideological biases of the preparing staff. The topics of concern of a citizen jury are usually quite contentious. That is why the staff needs to be neutral and the advisory board needs to supervise this neutral attitude.

Getting the buy-in of policy makers at the outset will increase the likelihood that the outcome of the jury may lead to policy developments.

Examples of use of the method

Project name	Organisation	Contact persons	Timeframe	Web address
Swedish Citizens'Jury on Exploring the Future of the Motala Ströms River Basin Area	Linköping University Research Team	Gooch, Geoffrey	Two days of organisation time	http://ec.europa.eu/ourcoast/download.cfm?fileID=815
Project name	**Organisation**	**Contact persons**	**Timeframe**	**Web address**
Citizens'Jury in Estonia: Water transport on the Emajõgi River in the Alam-Pedja Nature Reserve	Peipsi Center for Transboundary Cooperation	Peeter Unt	two days of organisation time	http://www.worldlakes.org/shownews.asp?newsid=1515
Project name	**Organisation**	**Contact persons**	**Timeframe**	**Web address**
Planungszelle zum Tempelhofer Feld Berlin	Nexus GmbH	Angela Jain	two days of organisation time	http://www.tempelhoferfreiheit.de/fileadmin/user_upload/Ueber_die_Tempelhofer_Freiheit/Planung/Oeffentlichkeitsbeteiligung/2014-03_Buergergutachten.pdf
Project name	**Organisation**	**Contact persons**	**Timeframe**	**Web address**
Dealing with the Deficit	Britain Thinks	Viki Cooke	3 ½ days	http://www.pwcwebcast.co.uk/dpliv_mu/dealing_with_the_deficit/citizens_review.pdf

Additional information of relevance (such as historical background, where the method has already been applied, etc.)	The planning cell, citizen juries or consultative approaches such as hearings, have become popular methods. The Aarhus convention of 1998, which entered into force in 2001, marked a watershed event for participation (http://www.unece.org/fileadmin/DAM/env/pp/documents/cep43e.pdf). It is an international treaty with a geographical focus on Europe, which gives citizens and the civil society several rights. Public authorities are obliged to provide everybody access to environmental information. Moreover, "[a]rrangements are to be made by public authorities to enable the public and environmental non-governmental organisations to comment on, for example, proposals for projects affecting the environment, or plans and programmes relating to the environment, these comments to be taken into due account in decision-making, and information to be provided on the final decisions and the reasons for it" *European Commission*, 2014a: The Aarhus Convention. Brussels; http://ec.europa.eu/environment/aarhus/ (downloaded 6.3.2014). If decisions are made without respecting the rights of free availability, of information or participation, then these decisions can be reviewed by judges (Keupp, Zschiesche 2010).
Sources (names of interviewees, links to relevant websites, etc.)	*Aldred, J.; Jacobs, M.*, 2000: Citizens and wetlands: evaluating the Ely citizens' jury, In: Ecological Economics 34/2 (2000), p. 217–232. *Bos-Gorter, L.*, *Huitema, D.*, *van de Kerkhof, Marleen*, 2006: Public participation on its own barricades: citizens' jury on water management from experiment to instrument? Edinburgh; http://www.macaulay.ac.uk/pathconference/outputs/PATH_abstract_5.1.3.pdf (download 7.3.2014). *Crosby, N.*, 1995: Citizens' juries: one solution for difficult environemtnal questions. In: Renn, O.; Webler, T.; Wiedemann, P.M. (eds.): Fairness and competence in citizen participation. Evaluating models for environmental discourse. Dordrecht, Boston, p. 154–174. *Dienel, H.-L.*, 2009: Public Participation Procedures in Germany: An Overview. In: Liu ping; Traub-Merz, R. (eds.): Public participation in local decision-making : China and Germany. Shanghai, p. 139-154. *Dienel, P.; Renn, O.*, 1995: Planning cells: a gate to 'fractal' mediation. In: Renn, O.; Webler, T.; Wiedemann, P.M. (eds.): Fairness and competence in citizen participation. Evaluating models for environmental discourse. Dordrecht, Boston, p. 117–140. *Gregory, R.; Failing, L.; Ohlson, D. et al.*, 2006: Some pitfalls of an overemphasis on science in environmental risk management decisions, In: Journal of Risk Research 9/7 (2006), p. 717–735. *Henderson, J.; House, E.; Coveney, J. et al.*, 2013: Evaluating the use of citizens' juries in food policy: a case study of food regulation, In: BMC Public Health 13/1 (2013), p. 596. *Hendriks, C.*, 2005: Consensus conferences and planning cells. In: Gastil, J.; Levine, P. (eds.): The deliberative democracy handbook. Strategies for effective civic engagement in the twenty-first century. San Francisco, p. 80–110. *Huitema, D.; Cornelisse, C.; Ottow, B.*, 2010: Is the jury still out? toward greater insight in policy learning in participatory decision processes-the case of dutch citizens' juries on water management in the rhine basin, In: Ecology and Society 15/1 (2010). *Keupp, S.*, *Zschiesche, M.*, 2010: Die Aarhus-Konvention - Bürgerbeteiligung in neuer Qualität? *Lovan, W.R.*, *Murray, M.*, *Shaffer, R. (eds.)*, 2004a: Participatory governance. Planning, conflict mediation and public decision-making in civil society. Aldershot, Hants, England, Burlington, VT. *Renn, O.; Stegelmann, H.U.; Albrecht, G. et al.*, 1984: An empirical investigation of citizens' preferences among four energy scenarios, In: Technological Forecasting and Social Change 26/1 (1984), p. 11–46. *Sellereit, K.*, 2010: Planning Cells; http://participedia.net/de/methods/planning-cells (download 7.3.2014). *Sloccum, N.*, 2003: Participatory Methods toolkit. A practitioner's manual; http://archive.unu.edu/hq/library/Collection/PDF_files/CRIS/PMT.pdf (download 7.3.2014). *Street, J.; Duszynski, K.; Krawczyk, S. et al.*, 2014: The use of citizens' juries in health policy decision-making: A systematic review, In: Social Science & Medicine (2014). *Wakeford, T.*, 2002: Citizens Juries: a radical alternative for social research; http://sru.soc.surrey.ac.uk/SRU37.pdf (download 7.3.2014).

Author: **Simon Pfersdorf**
Organisation: **ITAS**
Date: **28.07.2014**
Revision date: **15.09.2014**
Reviewed by: **Involve**

Name of the engagement method (alias)	**7. Citizens' summit**
Short description of the method	The citizens' summit is a method to find out the citizens' attitudes about political priorities and possible courses of action provided on an informed basis. The objective of the method is to provide advice and inspiration for the political decision-making process. Politicians are not obliged to abide by the voting results; yet, the summit provides a clear indication about citizens' attitudes, which implies some degree of commitment by the policy-makers.
Long description of the method	The citizens' summit is a large-scale (typically between 200--5000 people) deliberative public meeting. It combines small-scale face-to-face deliberations in groups with the impact of large group collective decision-making through voting. An important part in the implementation of the method is the use of communication technologies such as electronic voting, text messages, and online surveys to facilitate discussions. The **participants** are ordinary/lay citizens interested in the summit issue and the political decisions and priorities that are to be debated. The aim is to achieve the best representative spread of age, gender and employment. When the objective is to identify a particular target group's attitudes, participants can be selected according to more specific issue criteria. Usually, the organisers invite a number of **speakers**, which may be politicians, interested parties or experts. The presentations either take the form of opposing views or one speaker expresses the opposing points of view. Their task is to present the summit topics and the possible courses of action, which are to be voted on. The Citizens' Summit is divided into themes. The topics under consideration are discussed and voted on one at a time. Each topic is allocated a total of 45 minutes. After this, the summit deals with the next topic. The sessions are organised in the following way: a speaker/ video clip gives around 10 minutes presentation on the first topic (the presentation might also touch upon 5 pre-determined courses of action and their possible consequences). Following this is a 30-minute debate of the first topic *at the tables*. Citizens are divided in small groups of 7-8 people led by a facilitator. In each group there is a policy maker – not in their usual role as politician but as a table moderator. It is important to ensure that everyone is given the chance to make their views known. After the debate, the courses of action are voted on. Participants select their top priority by casting an electronic ballot. The results appear on a big screen which can be seen by everyone. The citizens' summit can also include the gathering of participants' ideas and more qualitative discussions. In this case, there should be a reporter at each table who notes down comments and ideas from the table. Furthermore, the last 5 minutes of each discussion session can be used to gather ideas from the participants in the groups. These ideas and comments can be used by a commentator who, while discussing the voting results, can comment on the ideas that have been gathered from the various tables. The result of the citizens' summit is a prioritised list of visions and possible courses of action within the given area. This gives the politicians a sense of citizens' priorities, thus, political decisions can be based on citizens' wishes and achieve greater anchorage, acceptance and permanence.
Objective of application of the method	☒ Policy formulation ☐ Programme development ☐ Project definition ☐ Research activity ☐ Others:
Results and products of the method application	The major outputs from the implementation of citizens' summits are: • List of prioritised citizens' visions to inform politicians about the attitudes of citizens in the respective area; • Prioritised list of possible courses of action within a given area; • Citizens' ideas and important comments related to the topic of discussion.

Level of stakeholder/public involvement, i.e. objective of public participation through the method's application	☐ Dialogue ☒ Consulting ☐ Involving ☐ Collaborating ☐ Empowering ☐ Direct decision

Engaged stakeholders in the process of method application

Category	Organiser	Direct participant	Beneficiaries
CSOs	☒	☐	☒
Policy-makers	☒	☐	☒
Researchers	☒	☐	☒

Citizens	☐	☒	☐	
Affected	☐	☒	☐	
Consumers	☐	☒	☐	
Employees	☐	☒	☐	
Users	☐	☒	☐	
Industry	☐	☐	☐	

Geographical scope of application (On what level has the method already been used?)	☒ International	☒ EU	☒ National	☒ Regional	☒ Local
Societal challenges the method has been trying to address	☒ Health, demographic change and wellbeing	☒ Food security, sustainable agriculture, marine and maritime research and the bio-economy	☒ Secure, clean and efficient energy	☒ Smart, green and integrated transport	
	☒ Climate action, resource efficiency and raw materials	☒ Inclusive, innovative and reflective societies	☒ Secure societies to protect freedom and security of Europe and its citizens	☐ Others:	

Specific **strengths and weaknesses** of the method vis-à-vis the challenge(s) addressed

Strengths:

- Brings together many citizens in a single one-day session, thus increasing representativeness of the results;
- Engaging a large number of participants in a meaningful dialogue;
- Recording large numbers of discussions and opinions at the same time via communications technology;
- Participants may find the scale of the event inspiring;
- The issue in question can be given focus if the event attracts media attention. Thus, an official debate on the subject can be kick-started;
- Direct involvement of policy makers.

Weaknesses:

- High costs;
- It requires a lot of staff time and planning; it requires advanced specific skills such as managing advanced technology;
- Good results require a very diverse (representative) group of participants in the room;
- Reliant on technology, thus, digitally illiterate groups might be excluded.

Timeframe for the application of the method

Usually a 1-day event; preparation varies depending on the time and human resources committed to it, as well as depending on the level of experience of the organising staff.

Skills required in order to properly apply the method

Skills	No such skills required	Basic	Intermediate	Advanced
Subject-matter expertise				**X**
IT skills				**X**
Facilitation skills				**X**
Event organisation skills				**X**
Project management skills				**X**
Other skills:				

<table>
<tr><td>What are the issues of concern that organisers need to take into account when applying the method?</td><td colspan="5">

Particular attention should be paid to the inclusion of marginalised groups, as it is important to obtain a representative selection of participants. In addition, the recruitment process should be as transparent as possible in order to be able to substantiate the validity and unbiasedness of the results;
The summits can generate large amounts of data, which is difficult to deal with if not planned properly;
Impacts might be poor unless senior management and decision-makers commit to cooperate;
Participants might have unrealistic expectations if the organisers do not carefully communicate the objectives of the event.

</td></tr>
<tr><td rowspan="6">Examples of use of the method</td><td>Project name</td><td>Organisation</td><td>Contact persons</td><td>Timeframe</td><td>Web address</td></tr>
<tr><td>The Pilot Phase of National Parks in Denmark - Kongernes Nordsjælland</td><td>DBT</td><td>Søren Gram, Project Manager, sg@tekno.dk</td><td>2005</td><td>http://www.tekno.dk/subpage.php3?article=1795&toppic=kategori7&language=dk</td></tr>
<tr><td>Project name</td><td>Organisation</td><td>Contact persons</td><td>Timeframe</td><td>Web address</td></tr>
<tr><td>BaltCICA</td><td>DBT</td><td>Søren Gram, Project Manager sg@tekno.dk Bjørn Bedsted, Project Manager bb@tekno.dk</td><td>2009 - 2012</td><td>http://www.tekno.dk/subpage.php3?article=1595&survey=15&language=uk</td></tr>
<tr><td>Project name</td><td>Organisation</td><td>Contact persons</td><td>Timeframe</td><td>Web address</td></tr>
<tr><td>SurPRISE</td><td>DBT</td><td>Jacob Skjødt Nielsen, Project Managerjsn@tekno.dk</td><td>2012 - 2015</td><td>http://surprise-project.eu/events/citizen-summits/</td></tr>
<tr><td>Project name</td><td>Organisation</td><td>Contact persons</td><td>Timeframe</td><td>Web address</td></tr>
<tr><td>´Regional development in North Jutland, Denmark</td><td>DBT</td><td>Marie Louise Jørgensen, Project Manager mlj@tekno.dk</td><td>2011</td><td>http://www.rn.dk//Regional-Udvikling/Strategier-og-planer/RUP</td></tr>
<tr><td>Additional information of relevance (such as historical background, where the method has already been applied, etc.)</td><td colspan="5">The method is inspired from The America Speaks organization in the USA where it is known as a “Citizen Summit”.</td></tr>
<tr><td>Sources (names of interviewees, links to relevant websites, etc.)</td><td colspan="5">Sources:
http://engagementguide.nhshull.nhs.uk/page/citizen-panel
http://www.beteiligungskompass.org/article/show/170
http://www.tekno.dk/subpage.php3?article=1232&toppic=kategori12&language=uk</td></tr>
</table>

Author: **Blagovesta Chonkova**
Organisation: **ARC Fund**
Date: **15.07.2014**
Revision date: **23.09.2014**
Reviewed by: **DBT**

Name of the engagement method (alias)	**8. Citizens' Assembly**
Short description of the method	A citizens' assembly is a body of citizens brought together to deliberate on an issue or issues of local, regional or national importance. The purpose is to employ a representative selection of the public who can learn about a topic, assess options and make recommendations without any influence from policy makers and politicians.
Long description of the method	A citizens' assembly usually has four phases: a selection phase; a learning phase; a public hearings or consultation phase; and a deliberation phase. It often produces a report with recommendations which is later presented to relevant policy makers or put to citizens in the form of a referendum. Citizens' assemblies usually need a chair and a secretariat to organise the process. Both are usually appointed by the authority setting up the assembly. They must be independent of the commissioning authority. The method can be quite resource intensive. The timing of each phase depends on a number of factors, for example, the topic, how many opportunities there are for citizens outside the assembly to participate, and how much time participants are expected to invest in the process. Processes often take around one year to complete with selection being quite often the longest phase. Citizens' assemblies can involve hundreds of people. However, in most cases membership ranges from 100 to 160 participants. It can be more difficult to ensure broad and equal representation among participants in larger assemblies. Citizens' assemblies usually attempt to create a mini-public that is representative of a wider population. This is sometimes achieved through random selection from the electoral register. Members are then selected from a pool of respondents through stratified sampling based on various demographics such as gender, age, ethnic group etc. Special efforts are often made to ensure that usually marginalised groups are not excluded. A central part of a citizens' assembly process is the learning phase. Participants are often provided with learning materials that introduce them to the topic being discussed before the assembly starts. This is followed by a series of workshops designed and conducted by engagement specialists. Here participants are likely to hear from 'experts' related to the topic including academics, stakeholders and policy makers. Participants are expected to deliberate and develop their own ideas throughout this process. Sometimes the wider public is engaged online where resources are published and debates can take place on online forums, and through consultations and public meetings. Insights from these wider conversations can be fed back into the assembly process. Assembly meetings are increasingly being broadcast on the internet. The deliberation phase of the assembly involves members coming to some conclusions on what they have learnt through the assembly process. Most large assemblies will do this through voting systems, but smaller assemblies might use consensus conference decision making (a method first used by the Danish Board of Technology which highlights both areas of agreement and disagreement amongst groups). The outcomes of the assembly are often presented to the commissioning authority or other public policy making body for consideration and response. The nature of this response will depend on the purpose and scope of the Assembly.
Objective of application of the method	☒ Policy formulation ☐ Programme development ☐ Project definition ☐ Research activity ☐ Others:
Results and products of the method application	What is achieved and produced will very much depend on the scope or remit of the citizens' assembly. This can be outlined in a memorandum of agreement between commissioners, policy makers and the citizens' assembly members prior to the assembly commencing. Usually, members of a citizens' assembly will produce a formal report on findings or a set of recommendations. In two relatively unusual cases (British Columbia Citizens Assembly and Ontario Citizens Assembly), both on electoral reform, the process led directly to a referendum where the public was able to vote on whether to change the way politicians are elected. In both cases the public voted against electoral reform.

Level of stakeholder/public involvement, i.e. objective of public participation through the method's application	☒ Dialogue ☐ Consulting ☒ Involving ☒ Collaborating ☒ Empowering ☒ Direct decision

Engaged stakeholders in the process of method application

Category	Organiser	Direct participant	Beneficiaries
CSOs	☒	☐	☒
Policy-makers	☒	☐	☒
Researchers	☒	☒	☒
Citizens	☐	☒	☒
Affected	☐	☐	☒
Consumers	☐	☐	☐
Employees	☐	☐	☐
Users	☐	☐	☐
Industry	☐	☐	☐

Geographical scope of application (On what level has the method already been used?)

☐ International ☐ EU ☒ National ☒ Regional ☒ Local

Societal challenges the method has been trying to address

☒ Health, demographic change and wellbeing	☐ Food security, sustainable agriculture, marine and maritime research and the bio-economy	☒ Secure, clean and efficient energy	☒ Smart, green and integrated transport
☒ Climate action, resource efficiency and raw materials	☐ Inclusive, innovative and reflective societies	☐ Secure societies to protect freedom and security of Europe and its citizens	☒ Others:

Specific **strengths and weaknesses** of the method vis-à-vis the challenge(s) addressed

Strengths:

- Can bring diverse perspectives on complex problems (Health, Food security, Energy, Climate Change);
- High profile and often linked closely to policy making processes;
- Learning phase can change participant's perspectives /or behaviour;
- Building support for controversial issues, i.e., renewable energy;
- Increased transparency in policy-making might increase trust in policy makers;
- Increasing skills and knowledge of participants.

Weaknesses:

- Very intensive and resource demanding processes;
- Sometimes assemblies do not lead to significant outcomes;
- Some assemblies can appear as tokenism or "participation-wash", whereby citizens have no real say and the event is more about gaining good publicity or a citizen engagement box ticking exercise;
- Usually one off engagement;
- Can be expensive.

Timeframe for the application of the method

Organising a citizen's assembly is likely to take more than a year. Recruitment often takes the longest. The citizens' assembly itself could take place over a number of months or could be repeated over a longer period.

Skills required in order to properly apply the method

Skills	No such skills required	Basic	Intermediate	Advanced
Subject-matter expertise				**X**
IT skills		**X**		
Facilitation skills				**X**

	Event organisation skills			**X**	
	Project management skills			**X**	
	Other skills:				

What are the issues of concern that organisers need to take into account when applying the method?

- A lack of buy in from policy-makers can mean no clear policy change/action happens as a result of the assembly.
- No follow up – citizens' assemblies are usually one off events which can appear as tokenistic in terms of sustainable engagement between policy makers and citizens;
- Gaining a broad representative group of people can be challenging and expensive;
- Running a citizens' assembly is a highly complex process requiring significant resources and expertise;
- Wider engagement (beyond assembly participants) can be challenging (consultation phase).

Examples of use of the method

Project name	Organisation	Contact persons	Timeframe	Web address
British Columbia Citizens' Assembly	British Columbia Provincial Government		2003 - 2004	http://www.leg.bc.ca/cmt/37thparl/session-5/citizen/reports/Rpt-37-5-Final-CA.htm

Project name	Organisation	Contact persons	Timeframe	Web address
The Halton Region Citizens' Reference Panel on the Strategic Work (2011-2014)	Halton Regional Council	accesshalton@halton.ca	2011 - 2014	https://www.halton.ca/cms/One.aspx?portalId=8310&pageId=78434

Project name	Organisation	Contact persons	Timeframe	Web address
We The Citizens Ireland – Citizens' Assembly (2011)	We the Citizens, a year-long initiative set up by the Political Studies Association Ireland (PSAI) in partnership with the Irish Universities Association	The initiative no longer exists. Could contact PSAI.	Jan 2011 – Dec 2011	http://www.wethecitizens.ie/index.php

Project name	Organisation	Contact persons	Timeframe	Web address
The Ontario Citizens' Assembly on Electoral Reform (2006)	Ontario Regional Government	info@citizensassembly.gov.on.ca.	2006 - 2008	http://www.citizensassembly.gov.on.ca/en-CA/Home%20Page.html http://www.citizensassembly.gov.on.ca/

Additional information of relevance (such as historical background, where the method has already been applied, etc.)	For a comprehensive review of historical background and innovative new practices see: Smith, G. (2009) Democratic Innovations: Designing Institutions for Citizen Participation (Theories of Institutional Design) Fishkin, J. (2009) When the People Speak: Deliberative Democracy and Public Consultation. New York: Oxford University Press. Pal, M. (2012) The Promise and Limits of Citizens Assemblies: Deliberations, Institutions and the Law of Democracy, http://queensu.ca/lawjournal/issues/7-Pal.pdf For a practical case studies see: Farrell, D., O'Malley, E., and Suiter, J. (2013) Deliberative Democracy in Action Irish-style: The 2011 We the Citizens Pilot Citizens' Assembly. Irish Political Studies, 28(1): 99-113. So Say Scotland Treasure Trove Report (2013) http://issuu.com/sosayscotland/docs/sosayscotland-treasuretrove-thinking For guidance on design ideas see: Fung, A. (2003b) Survey Article: Recipes for Public Spheres: Eight Institutional Design Choices and Their Consequences, The Journal of Political Philosophy, 11(3).
Sources (names of interviewees, links to relevant websites, etc.)	http://unlockdemocracy.org.uk/page/-/publications/Citizens%20Assembly%20briefing.pdf http://participationcompass.org/ http://participedia.net/

Author: **Houda Davis**
Organisation: **Involve**
Date: **18/07/14**
Revision date: **24/09/14**
Reviewed by: **DBT**

Name of the engagement method (alias)	**9. Citizens Hearing** (in Danish "Borgerhøring")
Short description of the method	The purpose of a citizens hearing is to inform and create discussion among citizens. The method uses brainstorming, dialogue, prioritization, reasoning and voting. Through dialogue and without interference of either experts or politicians, the citizens formulate their own suggestions and ideas (as to how a political (technological) problem can be dealt with) and present them to politicians.
Long description of the method	20-25 citizens are gathered for one day to discuss challenges and potential solutions. The day starts with expert presentations to reflect different societal priorities and tools to handle the problem. With this information the citizens have to formulate challenges and come up with potential solutions in smaller groups. Two plenum sessions during the day narrow down the challenges to one for each group. At the end of the day the challenges are presented to the present politicians. **Who participates in the various roles** *Project management* The team consists of 1-2 project managers and a project assistant. They organize the citizen hearing and publish the citizen catalogue of ideas. The project management team has to act as a neutral third party to ensure citizens a credible and balanced hearing. *Planning group* The planning group consists of experts and stakeholders in the field. They help the project management to select a programme, topics for the hearing and formulate the information material. *Participants* The participants are interested citizens or members of "the active democracy". To ensure a broad range of participants, the project management sends personal invitations to a random cross-section of citizens at different ages (about 1,000 citizens) as well as placing advertisements in different media. **The citizen hearing** The procedure gives all participants the opportunity of being heard. It is the citizens' ideas and suggestions that are the central output. Citizens are not asked to consider specific challenges or remedies – they formulate these themselves. A citizen hearing lasts a whole day. The citizens receive information material before the hearing and are further introduced to the topic by experts at the beginning of the hearing. After the introduction, the citizens are divided into four workshop groups with 4-6 citizens at each group. The groups brainstorm on the challenges perceived by each of them. The groups determine which 6-8 challenges they assess as most important. Each group appoints a chairman and the chairmen from the four groups meet to decide on 6-12 challenges for further discussion. The selected challenges are presented in plenum, assigned points by the citizens and one challenge is selected for each group. In the afternoon, the participants work on their selected challenges. Each group has to recommend possible solutions and proposed courses of action for their respective challenge. Finally, the challenges are once more presented in plenum for the participants, policy makers and media, accompanied by the suggested solutions and courses of action. Following this presentation, the participants assign points to the challenges and courses of action.
Objective of application of the method	☒ Policy formulation ☒ Programme development ☐ Project definition ☐ Research activity ☐ Others:
Results and products of the method application	**Direct results** The results give an overview of what the citizens find to be the most important and challenging aspects of the given topic together with their suggestions as to how these challenges should be met. The citizens' ideas and solutions are gathered in a catalogue of ideas which includes the day's overall results of the citizen's findings. These results are displayed at the hearing so that they can be viewed by participants, politicians, the press and other interested parties.

	The project management publishes the catalogue with the ideas of the citizens, which are divided into topics, but otherwise uninterpreted. The Citizens Hearing produces ideas based on dialogues between citizens – it does not provide recommendations or priorities for the policy makers. The catalogue of ideas is sent to relevant politicians in municipal government as well as the Parliament and the press, and is published online. **Indirect results** A citizens hearing can help to bring citizens and politicians closer together, promote democracy for the citizens and provide politicians with a better understanding of what is important to people. By getting the citizens' views, the politicians can increase their confidence when making deliberate changes with support from the public. It opens for more transparency in the decision making process and more sustainable solutions.

Level of stakeholder/public involvement, i.e. objective of public participation through the method's application	☒ Dialogue ☒ Consulting ☒ Involving ☒ Collaborating ☒ Empowering ☐ Direct decision

Engaged stakeholders in the process of method application

Category	Organiser	Direct participant	Beneficiaries
CSOs	☒	☐	☒
Policy-makers	☒	☐	☒
Researchers	☒	☐	☒
Citizens	☐	☒	☒
Affected	☐	☒	☒
Consumers	☐	☐	☒
Employees	☐	☐	☒
Users	☐	☐	☒
Industry	☐	☐	☒

Geographical scope of application (On what level has the method already been used?)	☐ International	☐ EU	☒ National	☒ Regional ☒ Local
Societal challenges the method has been trying to address	☐ Health, demographic change and wellbeing	☐ Food security, sustainable agriculture, marine and maritime research and the bio-economy	☐ Secure, clean and efficient energy	☐ Smart, green and integrated transport
	☐ Climate action, resource efficiency and raw materials	☒ Inclusive, innovative and reflective societies	☐ Secure societies to protect freedom and security of Europe and its citizens	☐ Others:
Specific **strengths and weaknesses** of the method vis-à-vis the challenge(s) addressed	**Strengths** The method does not require much time for preparation. It delivers fast and qualified ideas of how a group of citizens view a certain problem and gives access to the citizens' special knowledge. The method is rather cheap (depending on how many citizens are involved) and easy adjustable to include a small or large number of citizens. The method is suitable in cases where politicians want to assess public opinion regarding a given topic, for example in connection with the implementation of major political initiatives in the particular area. The method can be used on a local government level or in connection with regional or national issues. The citizens have time for dialogue and debate in the smaller groups to brainstorm on the topic which allows			

them to share knowledge and opinions on the given topic and, thus, produce informative and deliberate outcomes/ideas.
A citizens hearing is particularly well suited for the initial stages of a political initiative that is to continue after the hearing.

Weaknesses

These are primarily active citizens who participate in a citizen hearing. The results do not reflect the voices of those with a small motivation for attending public debates.

The method is made for brainstorm and for producing ideas inspiring further political processes.

Timeframe for the application of the method

1. Month: Idea workshop with experts and stakeholders. The information material is being produced.

4. Month: The day of the citizen hearing

7. Month: Collection of the material from the hearing in themes, presenting it to the politicians and a political debate on the results.

The method can be done in shorter time as well.

Skills required in order to properly apply the method

Skills	No such skills required	Basic	Intermediate	Advanced
Subject-matter expertise			X	
IT skills		X		
Facilitation skills				X
Event organisation skills				X
Project management skills				X
Other skills:				

What are the **issues of concern that organisers need to take into account** when applying the method?

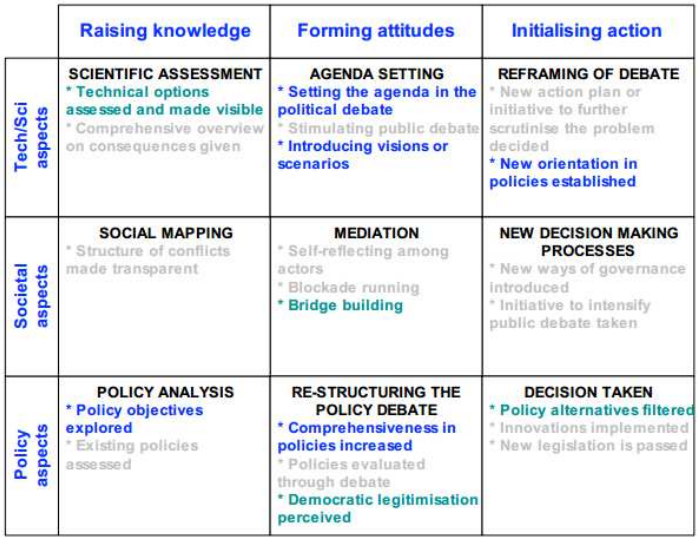
It is import that the method is not used with other purpose than collecting ideas. The politicians have to be careful not to over-interpret the ideas as they only are ideas.

Some citizens can have doubt or uncertainties about what their efforts at the hearing will contribute to. It is important to have politicians present at the hearing to welcome the citizens and reassure them that the politicians are excited to learn about their views and ideas and that these will be used in political processes and development.

It is important to have a neutral third party (which usually is the organiser of the event) to ensure a credible and balanced hearing of the citizens' views.

Examples of use of the method

Project name	Organisation	Contact persons	Timeframe	Web address
Sustainable growth	The Danish Board of Technology	Ida Leisner	2001	http://www.tekno.dk/subpage.php3?article=609&language=dk&category=7&toppic=kategori7
Project name	**Organisation**	**Contact persons**	**Timeframe**	**Web address**
Regional Development in Copenhagen	The Danish Board of Technology	Jørgen Madsen	2007	http://www.tekno.dk/subpage.php3?article=1445&toppic=kategori7&language=dk

Additional information of relevance (such as historical background, where the method has already been applied, etc.)	The method has been used in a larger scale to shape and collect the citizens' views on regional development in Copenhagen with 167 citizens. The method is simple to implement and is widely used at workshops all over the world under various names. Impacts of Citizen Hearing (Lars Kluver, http://www.oeaw.ac.at/ita/fileadmin/redaktion/Veranstaltungen/konferenzen/ta11/ta11_kluever.pdf) 
Sources (names of interviewees, links to relevant websites, etc.)	Gy Larsen, Project Manager, DBT. www.tekno.dk Lars Klüver, Director, DBT. www.tekno.dk http://www.tekno.dk/subpage.php3?article=1445&toppic=kategori7&language=dk http://www.tekno.dk/subpage.php3?article=816&toppic=kategori12&language=uk

Author: **Cecilie Neumann Hansen**
Organisation: **DBT**
Date:
Revision date: **22.09.2014**
Reviewed by: **ARC Fund**

Name of the engagement method (alias)	**10. Citizen Visions on Science, Technology and Innovation (CIVISTI)**
Short description of the method (max 300 characters)	The CIVISTI method is based upon the idea that the process of defining relevant and forward-looking research and innovation agendas could, in many respects, be improved by including consultations with citizens in their development. The method uses citizens' concerns about societal development as a stepping stone for developing priorities in research programmes.
Long description of the method	CIVISTI is a participatory method for identifying forward looking activities. It fosters demand-side approaches and identifies societal demands for future developments. CIVISTI does not aim to develop models of the real world, but rather asks citizens what a desired future would look like. Applying the CIVISTI method enables citizens to develop their visions regarding a desirable future on the basis of their individual backgrounds and their creativity. Generally, the process starts with a group of 25 citizens, chosen on the basis of a standardised methodology. These citizens produce ten visions with a time horizon of 30-40 years, within the framework of a two-day workshop. On the basis of the values, hopes and fears that are incorporated into the visions, multidisciplinary teams of experts and stakeholders formulate recommendations for different addressees and on different time scales (i.e. R&D policy, technology developers, city planners or administrators). These results are then presented to all participants of the process for validation and prioritisation, in order to ensure the internal legitimacy and loyalty to the initial ten visions. The method consists of 4 stages. First, citizens develop visions. Second, criteria for the visons are developed. Third, experts and stakeholders extract recommendations from these visions. Finally, citizens validate and prioritise the recommendations. More specifically, these stages include: a) Consulting national citizen panels through an informed deliberation process, focussing on long term visions, needs and concerns of citizens; b) Developing criteria for the transformation of the visions into relevant areas for future science, technology and innovation activities; c) Using the criteria, through stakeholder and expert participation processes, to analyse the citizen visions and transform them into possible priorities for research programmes; d) Validating and supplementing the priorities through a second round of citizen consultations.
Objective of application of the method	☐ Policy formulation ☒ Programme development ☐ Project definition ☐ Research activity ☐ Others:
Results and products of the method application	The priority setting for research programmes, which is the outcome of the process, is presented in a report and at a policy workshop. The main political actors are invited to the workshop.

Level of stakeholder/public involvement, i.e. objective of public participation through the method's application	☒ Dialogue ☒ Consulting ☒ Involving ☒ Collaborating ☐ Empowering ☐ Direct decision

Engaged stakeholders in the process of method application

Category	Organiser	Direct participant	Beneficiaries
CSOs	☐	☒	☐
Policy-makers	☒	☐	☒
Researchers	☒	☒	☒
Citizens	☐	☒	☐
Affected	☐	☐	☐
Consumers	☐	☐	☐
Employees	☐	☐	☐

	Users	☐	☐	☐	
	Industry	☐	☐	☐	
Geographical scope of application (On what level has the method already been used?)	☐ International	☒ EU	☐ National	☒ Regional	☐ Local
Societal challenges the method has been trying to address	☐ Health, demographic change and wellbeing	☐ Food security, sustainable agriculture, marine and maritime research and the bio-economy	☐ Secure, clean and efficient energy	☒ Smart, green and integrated transport	
	☒ Climate action, resource efficiency and raw materials	☐ Inclusive, innovative and reflective societies	☐ Secure societies to protect freedom and security of Europe and its citizens	☐ Others:	
Specific **strengths and weaknesses** of the method vis-à-vis the challenge(s) addressed	It is an intensive method, requiring many human and financial resources and significant preparation. The method distinguishes itself from other methods by separating citizens and scientific experts. The advantage of this is that the experts' agendas do not frame or influence the discussions of the citizens. A disadvantage, however, is that the citizens cannot adjust their visons to the context of what is technically, financially, or politically possible at present.				
Timeframe for the application of the method	In the original CIVISTI project the timeframe was: Month 1: Framing of subject, definitions, delimitation. Month 1: Training of facilitators of citizens consultations. Month 3-6: Information/prompting of citizens. Month 8-9: First round of citizen consultations. Month 18: Expert/stakeholder workshop. Month 26: Second round of citizen consultations. Month 29: Policy workshop. The CIVISTI timeframe has been scaled down in the EU project Public Participation in Developing a Common Framework for Assessment and Management of Sustainable Innovation (CASI): Month 1: Framing of subject, definitions, delineation. Month 5: Training of facilitators of citizens consultations. Month 6-7: Information/prompting of citizens. Month 8: First round of citizen consultations. Month 10: Expert/stakeholder workshop. Month 14: Second round of citizen consultations. After: Report + Policy workshop.				

Skills required in order to properly apply the method

Skills	No such skills required	Basic	Intermediate	Advanced
Subject-matter expertise			X	
IT skills	X			
Facilitation skills				X
Event organisation skills			X	
Project management skills				X
Other skills:				

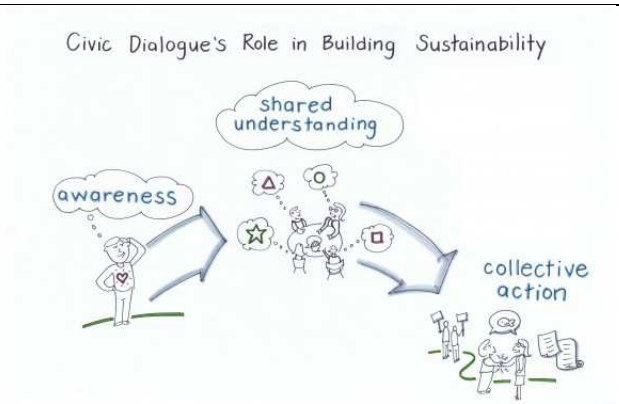
<table>
<tr><td>What are the issues of concern that organisers need to take into account when applying the method?</td><td colspan="5">An important issue of concern when running a full scale CIVISTI process is that it can be difficult to retain the same group of citizens between the first consultation and the second one. It takes the organiser a lot of effort to prevent this.</td></tr>
<tr><td rowspan="8">Examples of use of the method</td><td>Project name</td><td>Organisation</td><td>Contact persons</td><td>Timeframe</td><td>Web address</td></tr>
<tr><td>CIVISTI</td><td>EU consortium led by The Danish Board of Technology</td><td>Anders Jacobi</td><td>06/2009-05/2011</td><td>www.civisti.org</td></tr>
<tr><td>Project name</td><td>Organisation</td><td>Contact persons</td><td>Timeframe</td><td>Web address</td></tr>
<tr><td>CIVISTI – Ambient Assessed Living</td><td>ITA</td><td></td><td>02/2013 - 08/2014</td><td>http://www.oeaw.ac.at/ita/en/projects/civisti-aal</td></tr>
<tr><td>Project name</td><td>Organisation</td><td>Contact persons</td><td>Timeframe</td><td>Web address</td></tr>
<tr><td>Public Participation in Developing a Common Framework for Assessment and Management of Sustainable Innovation (CASI)</td><td>EU consortium led by ARC Fund, Bulgaria</td><td>Zoya Damianova</td><td>01/2014-07/2017, CIVISTI method used medio 2014-ultimo 2015</td><td>www.casi2020.eu</td></tr>
<tr><td>Project name</td><td>Organisation</td><td>Contact persons</td><td>Timeframe</td><td>Web address</td></tr>
<tr><td></td><td></td><td></td><td></td><td></td></tr>
<tr><td></td><td></td><td></td><td></td><td></td></tr>
<tr><td>Additional information of relevance (such as historical background, where the method has already been applied, etc.)</td><td colspan="5">The CIVISTI method was developed as a part of a European research foresight project funded by the Socio-economic, Sciences and Humanities (SSH) portion of the Seventh Framework Programme. The aim of the CIVISTI project was to identify new, emerging topics for EU research and development policy. This happened through the consultation of citizens in 7 European countries.
 

[</td></tr>
</table>

Sources (names of interviewees, links to relevant websites, etc.)	http://www.civisti.org/the_projekt Anders Jacobi, Former Senior Project Manager, The Danish Board of technology In Danish: http://www.tekno.dk/subpage.php3?article=1592&language=dk&category=7&toppic=kategori7 Lars Klüver, Director, The Danish Board of Technology

Author: **Siri Dencker**
Organisation: **The Danish Board of Technology**
Date: **28-07-2014**
Revision date: **18-09-2014**
Reviewed by: **University of Groningen**

Name of the engagement method (alias)	**11. Civic dialogue**
Short description of the method	Civic dialogue is a structured format for public dialogue that creates understanding among diverse people. It can build broad-based consensus and commitment around complex and/or controversial issues. Civic dialogue can be used in multiple contexts to help people communicate in a productive way.
Long description of the method	**Description** Civic dialogue cannot be regarded as one method; it is rather a range of associated methods used to engage people in complex and controversial issues. Civic dialogues are public conversations on a particular topic of societal relevance. The aim is to encourage individuals to try to better understand each other's positions on a particular topic and, thus, creating mutual understanding is at its core. The major purpose of civic dialogues is encouraging innovation, trust and confidence to facilitate the creation of a legitimate roadmap for moving forward in a particular direction. It is believed that civic dialogues can achieve fundamental, deep and broad changes as they are built around education and understanding. They use techniques that allow for mitigating conflict opinions and which address controversial topics in a productive way. The participants are different members of society. Diversity of the group is important; diversity of opinions and knowledge is welcome. In most cases, professional facilitators are used to help design, manage and evaluate the process. **Common Models of Civic Dialogue** Civic dialogue can take many forms. Dialogues vary in size, in organizers, in techniques used and in the emphasis on producing outputs. Dialogue is mainly conducted through workshops and similar meetings. The minimum aim is to find a mutually acceptable compromise, but ideally the process seeks to build on common ground and reach a proactive consensus. Every dialogue process is tailor-made to suit the situation, the people involved and to deliver the agreed outcomes. The main types of civic dialogue are: <u>Type 1: Public inquiries</u> Policy-makers can achieve more thoughtful opinions through initiating inquiries and commissions which gather public opinion on challenging or controversial topics, using civic dialogue. The events are usually open to all who wish to attend. <u>Type 2: Open public conversations</u> The open public conversation can be initiated by any kind of entity - government, business, NGOs, academia or private citizens. The events are usually open to most who want to attend. Public conversations can accommodate a multitude of participants, depending on the objectives of the event. <u>Type 3: Selective participation</u> Some civic dialogues choose participants based on certain characteristics. Yet, in order to include a representative sample of the society in the civic dialogue, relevant expertise might be needed.



Source: http://nbs.net/knowledge/civic-dialogue/executive-report/

Objective of application of the method	☒ Policy formulation ☒ Programme development ☒ Project definition ☒ Research activity ☐ Others:
Results and products of the method application	• Reports and action plans; • Feedback from the civil society on a particular controversial topic; • Encouraging civil cooperation between different groups in the society; • Reality check whether public services meet the appropriate needs; • Raising awareness about hot topics.

Level of stakeholder/public involvement, i.e. objective of public participation through the method's application	☒ Dialogue ☐ Consulting ☒ Involving ☒ Collaborating ☐ Empowering ☐ Direct decision

Engaged stakeholders in the process of method application

Category	Organiser	Direct participant	Beneficiaries
CSOs	☒	☒	☒
Policy-makers	☒	☒	☒
Researchers	☒	☒	☒
Citizens	☐	☒	☐
Affected	☐	☐	☐
Consumers	☐	☐	☐
Employees	☐	☐	☐
Users	☐	☐	☐
Industry	☐	☒	☐

Geographical scope of application (On what level has the method already been used?)	☒ International ☒ EU ☒ National ☒ Regional ☐ Local

Societal challenges the method has been trying to address	☒ Health, demographic change and wellbeing	☒ Food security, sustainable agriculture, marine and maritime research and the bio-economy	☒ Secure, clean and efficient energy	☒ Smart, green and integrated transport
	☒ Climate action, resource efficiency and raw materials	☒ Inclusive, innovative and reflective societies	☒ Secure societies to protect freedom and security of Europe and	☐ Others:

<table>
<tr><td></td><td>its citizens</td></tr>
<tr><td>Specific strengths and weaknesses of the method vis-à-vis the challenge(s) addressed</td><td>Strengths:
Allows for in-depth discussions, learning and deliberation;
Allows for an exchange of ideas, views and knowledge among different stakeholder groups, thus, has the potential to mitigate conflicts of opinions among the participants;
Allows for inquiring on the diverse perspectives for future actions;
Encourages increased collaboration between various groups;
Civic dialogues can achieve fundamental, deep and broad change as it is based on learning and sharing knowledge and opinions;
As civic dialogues are rooted in democratic processes, they have a degree of social legitimacy.
Weaknesses:
It may serve as lobbying for personal/organisational interests;
If it goes poorly: reinforced negative public attitudes;
It may not always lead to policy developments or significant changes.</td></tr>
<tr><td>Timeframe for the application of the method</td><td>Dialogue projects have a tendency to be most effective over a long period of time due to the slow process of building relationships and trust between groups. It also depends on whether dialogues are planned to be one off or ongoing events, and how complex or controversial the discussed issues are.</td></tr>
<tr><td>Skills required in order to properly apply the method</td><td>
<table>
<tr><th>Skills</th><th>No such skills required</th><th>Basic</th><th>Intermediate</th><th>Advanced</th></tr>
<tr><td>Subject-matter expertise</td><td></td><td></td><td>X</td><td>X</td></tr>
<tr><td>IT skills</td><td></td><td>X</td><td></td><td></td></tr>
<tr><td>Facilitation skills</td><td></td><td></td><td></td><td>X</td></tr>
<tr><td>Event organisation skills</td><td></td><td></td><td></td><td>X</td></tr>
<tr><td>Project management skills</td><td></td><td></td><td></td><td>X</td></tr>
<tr><td>Other skills:</td><td></td><td></td><td></td><td>Communication skills</td></tr>
</table>
</td></tr>
<tr><td>What are the issues of concern that organisers need to take into account when applying the method?</td><td>High quality facilitation is key, particularly for complex and controversial issues;
If the organizer does not provide credible, non-biased and appropriate documentation/information in advance, there might be misunderstanding of the topic;
The different participating groups might not be willing to achieve a compromise/agreement and the facilitator should try to foster common ground and mutual understanding;
Political buy-in from relevant organisations is really important if changes to policy are expected outcomes;
Managing expectations of participants and stakeholders – if an expected outcome is not achieved, participants may feel disillusioned with the process and they may not participate in future activities.</td></tr>
<tr><td>Examples of use of the method</td><td>
<table>
<tr><th>Project name</th><th>Organisation</th><th>Contact persons</th><th>Timeframe</th><th>Web address</th></tr>
<tr><td>High-level dialogue on International Migration and Development 2013</td><td>United Nations</td><td></td><td>Every five years starting from 2008</td><td>http://hldcivilsociety.org/</td></tr>
<tr><th>Project name</th><th>Organisation</th><th>Contact persons</th><th>Timeframe</th><th>Web address</th></tr>
<tr><td>Civic Dialogues on Sustainability: A Business Briefing</td><td>Network for Business Sustainability</td><td>Tara Hadler</td><td></td><td>http://nbs.net/knowledge/civic-dialogue/executive-report/</td></tr>
</table>
</td></tr>
</table>

	Project name	Organisation	Contact persons	Timeframe	Web address
	European Civic Forum (FCE)	Citizens for Europe		Ongoing public hearings, Annual Citizenship award, European civic days in different locations, Civil Society day (6th of May)	http://www.civic-forum.eu/
	Project name	**Organisation**	**Contact persons**	**Timeframe**	**Web address**
	Turkish-Greek Civic Dialogue Project	AEGEE	Ceren Gergeroglu (PR) Burcu Becermen (Coord.)	Ongoing	http://projects.tigweb.org/trgr/about/
Additional information of relevance (such as historical background, where the method has already been applied, etc.)	See also http://participationcompass.org/article/show/130				
Sources (names of interviewees, links to relevant websites, etc.)	Sources: http://ejournal.missouristate.edu/wp-content/uploads/2013/04/civildialogue.pdf http://nbs.net/wp-content/uploads/NBS-Civic-Dialogue-Best-Practices.pdf http://europeangovernance.livingreviews.org/open?pubNo=lreg-2012-2&page=articlese2.html http://ejournal.missouristate.edu/wp-content/uploads/2013/04/civildialogue.pdf http://www.sciencedirect.com/science/article/pii/S1877042813034381 http://nbs.net/wp-content/uploads/CD-Illustrations.pdf				

Author: **Blagovesta Chonkova**
Organisation: **ARC Fund**
Date: **21 July 2014**
Revision date: **19 Sept 2014**
Reviewed by: **INVOLVE**

Name of the engagement method (alias)	**12. Community-Based (Participatory) Research** (CB(P)R). *CBR has similarities to Science Shops (Civil Society Driven Research). CBPR has similarities to Participatory Action Research.
Short description of the method	The community is involved in all stages of the research process, from setting the questions, to framing and doing the research, interpreting the results and communication. Research is focused on better understanding and then improving a certain situation. If combined with actions to implement findings, this leads to a cycle of participatory action research.
Long description of the method	*Community-based participatory research is a "collaborative approach to research that equitably involves all partners in the research process and recognizes the unique strengths that each brings. CBPR begins with a research topic of importance to the community, has the aim of combining knowledge with action and achieving social change to improve health outcomes and eliminate health disparities."* **WK Kellogg Foundation Community Health Scholars Program** CBPR is a collaborative research approach that is designed to ensure and establish structures for participation by communities affected by the issue being studied, representatives of organisations, and researchers in all aspects of the research process to improve health and well-being through taking action, including social change. CBPR involves: Co-learning and reciprocal transfer of expertise by all research partners with particular emphasis on the issues being studied with CBPR methods; Shared decision-making power; and mutual ownership of the processes and products of the research enterprise (http://accelerate.ucsf.edu/files/CE/manual_for_researchers_agencies.pdf) The community is thus involved in all stages of the research process, from setting the questions, to framing and doing the research, to interpreting the results and communication. Research is focused on better understanding and then improving a certain situation. If combined with actions to implement findings, this leads to a cycle of participatory action research. A “community” can be a community of place and/or a community based on a shared issue or interest. What exactly constitutes the “community” is often self-defined, and not always codified in a legal status as, e.g., a formal association. In the descriptions of this approach it is good to realise that ‘community’ is the North American term for what in European English would be called civil or civic society. This method combines elements of Science Shops (Civil Society Driven Research) and Participatory Action Research, and Citizen Science as well. Projects can be part of larger themes of continuous attention (i.e. programmes). Students and research institutes can also be part of the research groups. Community-researchers can be trained as well. The element of ‘learning’ is integrated throughout, for all involved. The facilitating centres are either a separate entity (NGO) or, in some cases, part of a university. To start the contact with a community organisation (or civil society organisation in European English), see the Fact Sheets for Science Shops / Civil Society Driven Research (Method, and accompanying Tools). For performing the research, see Fact Sheet on Participatory Action Research. Methods from the Citizen Science group of methods and tools could also be useful. A useful guide is given by University of California in San Francisco: http://accelerate.ucsf.edu/files/CE/manual_for_researchers_agencies.pdf
Objective of application of the method	☐ Policy formulation ☒ Programme development ☒ Project definition ☒ Research activity ☐ Others:
Results and products of the method application	New knowledge is co-created that can improve the situation of communities. The US National Institutes of Health give the following advantages of community-based participatory research: • Joining partners with diverse expertise to address complex public health problems; • Improving intervention design and implementation by facilitating participant recruitment and retention; • Increasing the quality and validity of research; • Enhancing the relevance and use of data; • Increasing trust and bridging cultural gaps between partners; • Providing resources for the communities involved; • Benefiting the community and researchers alike through the knowledge gained and actions taken; • The potential to translate research findings to guide the development of further interventions and policy change.

<table>
<tr><td>Level of stakeholder/public involvement, i.e. objective of public participation through the method's application</td><td>☐ Dialogue ☐ Consulting ☒ Involving ☒ Collaborating ☒ Empowering ☐ Direct decision</td></tr>
<tr><td>Engaged stakeholders in the process of method application</td><td>
<table>
<tr><th>Category</th><th>Organiser</th><th>Direct participant</th><th>Beneficiaries</th></tr>
<tr><td>CSOs</td><td>☒</td><td>☒</td><td>☒</td></tr>
<tr><td>Policy-makers</td><td>☐</td><td>☐</td><td>☐</td></tr>
<tr><td>Researchers</td><td>☒</td><td>☒</td><td>☒</td></tr>
<tr><td>Citizens</td><td>☐</td><td>☒</td><td>☒</td></tr>
<tr><td>Affected</td><td>☐</td><td>☒</td><td>☒</td></tr>
<tr><td>Consumers</td><td>☐</td><td>☐</td><td>☐</td></tr>
<tr><td>Employees</td><td>☐</td><td>☐</td><td>☐</td></tr>
<tr><td>Users</td><td>☐</td><td>☐</td><td>☐</td></tr>
<tr><td>Industry</td><td>☐</td><td>☐</td><td>☐</td></tr>
</table>
</td></tr>
<tr><td>Geographical scope of application (On what level has the method already been used?)</td><td>☐ International ☐ EU ☐ National ☒ Regional ☒ Local</td></tr>
<tr><td>Societal challenges the method has been trying to address</td><td>☒ Health, demographic change and wellbeing
☐ Food security, sustainable agriculture, marine and maritime research and the bio-economy
☐ Secure, clean and efficient energy
☐ Smart, green and integrated transport
☒ Climate action, resource efficiency and raw materials
☒ Inclusive, innovative and reflective societies
☐ Secure societies to protect freedom and security of Europe and its citizens
☐ Others:

The method can be applied to any Grand Challenge, but is most commonly seen in Health and Inclusive societies; and Environment as well.</td></tr>
<tr><td>Specific strengths and weaknesses of the method vis-à-vis the challenge(s) addressed</td><td>Commitment from both community and researchers; tailored research approach to serve community needs.
In extreme cases, CBR can be negatively view mainstream academic knowledge (just like vice versa). In good partnerships, any bias from any participant should be challenged and discussed.
Beware whether community members are integrated as researchers or participate as respondents.</td></tr>
<tr><td>Timeframe for the application of the method</td><td>Anything from 1 month upon to continuous, depending on already established partnerships.</td></tr>
<tr><td>Skills required in order to properly apply the method</td><td>
<table>
<tr><th>Skills</th><th>No such skills required</th><th>Basic</th><th>Intermediate</th><th>Advanced</th></tr>
<tr><td>Subject-matter expertise</td><td></td><td></td><td>X</td><td></td></tr>
<tr><td>IT skills</td><td></td><td>X</td><td></td><td></td></tr>
<tr><td>Facilitation skills</td><td></td><td></td><td></td><td>X</td></tr>
</table>
</td></tr>
</table>

Event organisation skills		**X**		
Project management skills				**X**
Other skills:				

What are the issues of concern that organisers need to take into account when applying the method?

Do mind: Equality in partnerships, expectations management

Examples of use of the method

Project name	Organisation	Contact persons	Timeframe	Web address
Centre for Community Based Research	Centre for Community Based Research	Joana Ochoka	Since 1982	http://www.communitybasedresearch.ca/
Project name	**Organisation**	**Contact persons**	**Timeframe**	**Web address**
CCPH	Community Campus Partnerships for Health (USA)	network	Since 1997	https://ccph.memberclicks.net/participatory-research
Project name	**Organisation**	**Contact persons**	**Timeframe**	**Web address**
CBRC	Community-Based Research Canada	network	Since 2008	http://communityresearchcanada.ca/
Project name	**Organisation**	**Contact persons**	**Timeframe**	**Web address**
CURL	Centre for Urban Research and Learning, Loyola University, Chicago	Prof. Phil Nyden	Since 1996	http://www.luc.edu/curl/

Additional information of relevance (such as historical background, where the method has already been applied, etc.)

Community is the Northern American term for what in European English would be called Civil or Civic Society.

The similarities to the European Science Shops are large, though in community-based research, the research is done *with* the community organisation as well, whereas in Science Shops this is not always so to the full extend. In both cases, research is done *for* the community organisation though.

CBR finds its origins in the same places as participatory action research.

https://ccph.memberclicks.net/participatory-research
http://accelerate.ucsf.edu/files/CE/manual_for_researchers_agencies.pdf
http://www.kellogghealthscholars.org/about/community.cfm

Sources (names of interviewees, links to relevant websites, etc.)

Author: **Henk Mulder**
Organisation: **University of Groningen**
Date: **24/7/2014**
Revision date: **02/10/2014**
Reviewed by: **DIA**

Name of the engagement method (alias)	**13. Consensus Conference**
Short description of the method	The purpose of the consensus conference is to enrich and expand a debate on a socially controversial topic. A group of citizens rather than experts and politicians get together and set the agenda and the basis for assessment within a problem area.
Long description of the method	A group of 10-30 citizens give their views on a specific technological problem or a problem area. They debate, consult experts and formulate recommendations during a 3-4 daylong conference. The citizen panel consists of 10-30 people selected randomly from the population. They meet in two weekends prior to the conference to broaden their knowledge on the topic from experts and documentation. The panel formulates a set of key questions they present to a panel of experts and citizens at the conference. During the first two days the experts present different views and citizen cross-examination of the questions. Then the citizen panel composes a report based on what they have learnt. On the last day they present the recommendations to experts, policy makers, stakeholders, the public and the media in hopes of broadening the debate on the subject. *Persons involved in the consensus conference:* - Project management (director, assistant and clerical staff) - Advisory/steering committee (5-6 persons) - Citizen panel (10-30 persons) - Expert panel (approximately 20 persons) - Facilitator *Project management:* The project management are in charge of the process and contract to different partners, recruit citizens and experts, and manage communications and the budget. They also assist the citizen panel in disseminating the recommendations and document the conference. *Advisory/Steering committee:* The advisory committee consists of stakeholders such as regulators, policy makers, scientists, industry and non-governmental agencies. They are selected for their knowledge, expertise and different views. They are responsible for securing a democratic approach while the process is transparent and fair. *The citizen panel* The citizen panel plays the leading role and consists of 10-30 people. The panel is composed of participants with varied backgrounds regarding age, gender, education, occupation and geographical location. They are non-experts but are expected to ask critical questions to the information presented to them. *The expert panel* The expert panel is selected to ensure professional and different aspects and views to the discussions at the conference. *Facilitator* The facilitator has to manage the dialogue and processes and have experience with participatory and consensus-based processes. *The consensus conference process* Day one: The experts present their answers to the questions from the citizen panel. Second day: Clarification of the questions and time for discussion with the expert panel, the citizen panel and the audience. Second and third day: The citizen panel produces the final document. Forth day: The citizen panel presents their conclusions and recommendations to the experts and the audience, including the press. The experts can correct misunderstandings and factual errors, but are no longer allowed to influence the views of the citizen panel. The final document is a result of the consensus reached by the citizen panel. *Aims* The consensus conference aims to give citizens a meaningful opportunity to influence on policy decisions and assessing issues relevant for society. It has also been used for social experiments, research projects and as a means for promoting social awareness and public debate.

	A good conference topic is: of current interest; requires expert knowledge, which is also available; is possible to delimit; and involves conflicts and unresolved issues regarding attitudes to questions such as applications and regulation.
Objective of application of the method	☒ Policy formulation ☒ Programme development ☐ Project definition ☒ Research activity ☐ Others:
Results and products of the method application	**Direct results** The recommendations are the outcome of discussions and consensus reached during the citizens' panel. These are summarised and presented in the final document, published, and sent to all conference participants, MPs, stakeholders and other important decision-makers in the field. **Indirect results** The recommendations from the consensus conference provide a clear and important input to the debate on the topic and create a new understanding. The results give decision makers a rich source of socially relevant evidence/knowledge on a specific topic which can feed into decision making to create policies/projects which resonate with societal needs and are therefore more legitimate and sustainable. Such engagement activities, if carried out in early stages of policy/programme development, may also reduce controversy around contentious science and technology developments. When getting the citizens' views, the politicians can have a greater confidence in making deliberate changes with support from the public. It opens for more transparency in the decision making process and more sustainable solutions.

Level of stakeholder/public involvement, i.e. objective of public participation through the method's application	☒ Dialogue	☒ Consulting	☒ Involving	☒ Collaborating	☒ Empowering ☐ Direct decision
Engaged stakeholders in the process of method application	Category	**Organiser**	**Direct participant**	**Beneficiaries**	
	CSOs	☐	☒	☒	
	Policy-makers	☒	☒	☒	
	Researchers	☒	☒	☒	
	Citizens	☒	☒	☒	
	Affected	☐	☒	☒	
	Consumers	☐	☒	☒	
	Employees	☐	☒	☒	
	Users	☐	☒	☒	
	Industry	☐	☒	☒	
Geographical scope of application (On what level has the method already been used?)	☐ International	☐ EU	☒ National	☒ Regional	☒ Local
Societal challenges the method has been trying to address	☒ Health, demographic change and wellbeing	☒ Food security, sustainable agriculture, marine and maritime research and the bio-economy	☐ Secure, clean and efficient energy	☐ Smart, green and integrated transport	
	☒ Climate action, resource efficiency and raw materials	☐ Inclusive, innovative and reflective societies	☐ Secure societies to protect freedom and security of Europe and its citizens	☐ Others:	

Specific **strengths and weaknesses** of the method vis-à-vis the challenge(s) addressed	**Strengths** The consensus conference gives an opportunity to hear citizen voices – a large group of society who are usually not asked about their view on a specific problem. The inclusion can reduce democratic deficit of the citizens and give them ownership of the process and a sense of living in a successful democracy as they act advisors to the politicians. The consensus reached by the citizens' panel contributes to politicians, experts and society as a whole on the ideas and concerns of ordinary citizens. As it often is experts and policy makers who sets the agenda, the consensus conference allows for ordinary citizens to have a say and influence the debate. The voice of the citizens reflects views and concerns that politicians don't necessarily see. The citizens' panel make recommendations with awareness and knowledge and this can influence the policy making process in a new way. This opens for a more comprehensive decision-making. The consensus conference is well suited for a new topic early in the development process to frame the debate. It can help shape a problem area that is not yet widely discussed by different parties especially at the political level. It is also suitable for topics in need of new inputs, development or a new agenda. **Weaknesses** The recommendations can't be used if the development or application of the technology or problem is not an object of political decision making. The consensus conference is most suited to topics which do not have a clear policy option. The media may focus on the disagreements rather than the agreements. The eternal criticism: Can the recommendations formed by 10-30 citizens be regarded as the general opinions of the entire population? Using random stratified sampling can create a group that is demographically representative of a population. The results of the consensus conference will not be the only form of evidence that decision makers use. The consensus conference does not match a problem area that is too far in the development process.
Timeframe for the application of the method	The process requires 12 months of preparation. (the process has been completed in 7 months but 12 is preferable) *1. Month:* Recruit the advisory/steering committee. Setting the context for the conference. Contacting potentially funding resources. *6. - 8. Month:* Recruit and select the citizens' panel. Information material is being produced. *9. Month:* Send information to the citizens' panel. *10. Month:* The first study week is held. Citizens' panel is introduced to the topic, they identify key issues and question. *11. Month:* Further education on the topic, finalisation of the key questions, finalising the selection of experts for the conference and planning the conference agenda. *12. Month: The consensus conference weekend:* The public event normally covers three to four days. *13. Month:* The final report disseminated to policy makers, industry, nongovernmental organisations and other interested groups and individuals. *14. – 20. Month:* The evaluation is conducted
Skills required in order to properly apply the method	

Skills	No such skills required	Basic	Intermediate	Advanced
Subject-matter expertise			**X**	
IT skills		**X**		
Facilitation skills				**X**
Event organisation skills				**X**

	Project management skills				**X**
	Other skills:				

What are the issues of concern that organisers need to take into account when applying the method?

Making contact and collaborating with decision makers early in the process is important to ensure success.
The procedure of the consensus conference is expensive.
Recruiting a representative group of participants will increase the legitimacy of the process.

Examples of use of the method

Project name	Organisation	Contact persons	Timeframe	Web address
Testing our genes	The Danish Board of Technology	Mette Højbjerg	2002	http://www.tekno.dk/subpage.php3?article=496&language=uk&category=11&toppic=kategori11
Project name	**Organisation**	**Contact persons**	**Timeframe**	**Web address**
Gene Therapy	The Danish Board of Technology	Ida-Elisabeth Andersen	1995	http://www.tekno.dk/subpage.php3?article=501&language=uk&category=11&toppic=kategori11
Project name	**Organisation**	**Contact persons**	**Timeframe**	**Web address**
Biomonitoring	Environmental Health Department at the Boston University School of Public Health	info@biomonitoring06.org	2006	http://www.biomonitoring06.org/
Project name	**Organisation**	**Contact persons**	**Timeframe**	**Web address**
EUROPTA: The Ozone Consensus Conference in Austria	Institute of Technology Assessment Austrian Academy of Sciences	Helge Torgersen	1997	http://www.tekno.dk/subpage.php3?article=797&language=uk&category=11&topic=kategori11

Additional information of relevance (such as historical background, where the method has already been applied, etc.)

The Danish Board of Technology is the creator of the method and since 1987, has held a number of consensus conferences in Denmark. Over the years DBT has acted as inspirer and consultant for conferences based on the Danish model held in countries as Holland, England, France, Switzerland and Norway and non-European countries as Canada, Australia, Japan, Korea and Israel.

Sources (names of interviewees, links to relevant websites, etc.)

Participatory methods toolkit, A practitioner's manual. Author: Dr. Nikki Slocum. King Baudouin Foundation. 2003, pages 57-73.
Danish participatory models. By Ida-Elisabeth Andersen and Birgit Jæger. Science and public Policy, volume 26, number 5, October 1999, pages 331-340, Beech Tree Publishing, 10 Watford Close, Guildford, Surrey GU1 2EP, England
http://www.tekno.dk/subpage.php3?article=468&toppic=kategori12&language=uk

Author: **Cecilie Neumann Hansen**
Organisation: **The Danish Board of Technology**
Date:
Revision date: **22.09.2014**
Reviewed by: **Involve**

Name of the engagement method (alias)	**14. Crowd Wise** *similar to Consensus Voting
Short description of the method	Crowd Wise is a community participation method, which aims to encourage consensus-based decisions. Consensus emerges in stages through a combination of discussion and voting on a set of previously formed options. The number of citizens participating can vary greatly depending on the specific objectives of the organisers.
Long description of the method	Crowd Wise is a participative method, which aims to encourage consensus-based decisions in a variety of context, for example: setting policy priorities, allocating organisational budgets, and consulting. Its outcomes are more likely to be supported by participants, as consensus emerges in stages through a combination of discussion and voting on a set of previously formed options. An important part of the preparation of the method is coming up with a proper question. The question should be open and it should suggest the need to make options. Finding relevant speakers is also crucial. These are experts in the topic being discussed. Usually one speaker presents one of the developed options. The **stages in consensus development** are the following: 1) Developing a range of options to the question which reflect the views of the participants. The options can be developed by the participants, or, be preliminary chosen but adapted in a way to reflect the values and interests of the participants. Speakers present the different options and usually one speaker presents one option; 2) Discussion: Participants are divided into small groups. Discussions aim to adapt the options in order to stir consensus. Sometimes original options are merged to formulate new option. The role of the speakers is not to stay on the panel and respond to the answers of the participants but rather to engage with them and help them improve the options. Before discussing how the original options can be adapted, however, a session can be added to the program in which small groups discuss each option separately (one group discusses one option). Presentations follow with each group presenting in the plenary the option they discussed. This is done in order for participants to better understand the presented options. Then, discussions follow on how the options can be adapted. This stage of the method can vary in time, but typically lasts between 50 min and 1h and 30 min; 3) Voting on the options through 'consensus voting'/'preference voting'. Participants are invited to rank the adapted options in order of preference giving greater number of points to options they prefer; 4) Counting votes: Everyone's full set of preferences (points given to each option) is taken into account in the tallying. The higher the number of points earned by the top option, the greater the degree of consensus. The chosen option is often a composite of some or all of the original options. A major goal of the method is to help p**articipants find common ground, thus reduce** polarisation of opinions in the group. There is no voting *against* options. Participants vote for all options, assigning different number of points to each option. Participants are, thus, incentivized to engage with the other participants, to understand how they can make their preferred option more appealing to the others. Different numbers of participants ranging from 15 to 1500 can take part in the method, depending on the specific objectives of the initiative.
Objective of application of the method	☒ Policy formulation ☐ Programme development ☐ Project definition ☒ Research activity ☐ Others:
Results and products of the method application	The method can be used in variety of contexts, for example urban planning, policy development, and organisational development. Thus, the results vary according to the specific objectives and the context of the method's application. Yet, the major result of the method is moving closer to or reaching consensus on a certain question and developing options/solutions that work for most of the participants.

Level of stakeholder/public involvement, i.e. objective of public participation through the method's application	☒ Dialogue ☒ Consulting ☐ Involving ☐ Collaborating ☐ Empowering ☐ Direct decision			
Engaged stakeholders in the process of method application	Category	**Organiser**	**Direct participant**	**Beneficiaries**
	CSOs	☒	☐	☒

	Policy-makers	☒	☐	☒	
	Researchers	☐	☒	☐	
	Citizens	☐	☒	☐	
	Affected	☐	☐	☐	
	Consumers	☐	☐	☐	
	Employees	☐	☒	☐	
	Users	☐	☐	☐	
	Industry	☒	☒	☒	

Geographical scope of application (On what level has the method already been used?)	☐ International	☐ EU	☒ National	☒ Regional	☒ Local

Societal challenges the method has been trying to address	☐ Health, demographic change and wellbeing	☐ Food security, sustainable agriculture, marine and maritime research and the bio-economy	☒ Secure, clean and efficient energy	☐ Smart, green and integrated transport
	☒ Climate action, resource efficiency and raw materials	☐ Inclusive, innovative and reflective societies	☐ Secure societies to protect freedom and security of Europe and its citizens	☐ Others:

Specific **strengths and weaknesses** of the method vis-à-vis the challenge(s) addressed

Strengths:

• The method can overcome polarisation of views;

• It allows finding decisions that work for most participants;

• Encourages people to try to better understand each other's' positions.

Weaknesses:

• The method is based on the assumption that participants will be willing to make compromises with their positions in order to find a solution that works for everybody. Yet, this might not be the case with all participants.

Timeframe for the application of the method

The method's duration typically lasts for 2.5-3 hours. If more interaction among the participants is needed, it can be organised in more sessions over a longer period of time.

The introduction, speakers' presentations, the voting, and presenting the results take more or less a fixed amount of time. It is usually the discussions that vary in time (50 min to 1h 30 min).

Skills required in order to properly apply the method

Skills	No such skills required	Basic	Intermediate	Advanced
Subject-matter expertise				**X**
IT skills		**X**		
Facilitation skills			**X**	
Event organisation skills			**X**	
Project management skills			**X**	
Other skills:				

<table>
<tr><td>What are the issues of concern that organisers need to take into account when applying the method?</td><td>The sessions can take longer if consensus is not reached.

It is important how the question is being asked. It should be an open question, suggesting the need to make options. The Guide on How to Organize Public Debate via Crowd Wise (https://www.box.com/shared/static/k6u1n4cyjs6sywm61hph.pdf) gives examples of well formulated and unsuitable questions. An unsuitable question would be: “Is the north-east infrastructure fit for purpose?”. A well formulated question for the purpose of Crowd Wise would be: “What infrastructure do we need to prioritise to develop the region’s potential?”</td></tr>
<tr><td>Examples of use of the method</td><td>
<table>
<tr><th>Project name</th><th>Organisation</th><th>Contact persons</th><th>Timeframe</th><th>Web address</th></tr>
<tr><td>Crowd Wise</td><td>New Economics Foundation</td><td>Perry Walker</td><td>2010</td><td>www.neweconomics.org</td></tr>
<tr><th>Project name</th><th>Organisation</th><th>Contact persons</th><th>Timeframe</th><th>Web address</th></tr>
<tr><td>Report on the Great Fracking Debate</td><td>The Great Debate</td><td>Caspar J M Hewett</td><td></td><td>https://app.box.com/s/b4glmkuponvjrav8g86b</td></tr>
<tr><th>Project name</th><th>Organisation</th><th>Contact persons</th><th>Timeframe</th><th>Web address</th></tr>
<tr><td>Electing Leaders at Sheppard Moscow</td><td>Sheppard Moscow</td><td></td><td>2008</td><td>http://www.crowd-wise.org/Crowd_Wise/Case_Studies_files/CrowdWise_SheppardMoscow_CaseStudy.pdf</td></tr>
<tr><th>Project name</th><th>Organisation</th><th>Contact persons</th><th>Timeframe</th><th>Web address</th></tr>
<tr><td>Sustained Engagement</td><td>The Royal Academy Of Engineering</td><td>Perry Walker</td><td>2011/2012</td><td></td></tr>
</table>
</td></tr>
<tr><td>Additional information of relevance (such as historical background, where the method has already been applied, etc.)</td><td>This method has been adapted from the publication 'Crowd Wise: Turning Differences into Effective Decisions' by the New Economics Foundation (UK). The Royal Academy of Engineering was the first to use Crowd Wise.</td></tr>
<tr><td>Sources (names of interviewees, links to relevant websites, etc.)</td><td>Sources:

http://www.crowd-wise.org/Crowd_Wise/Home.html

A Guide on How to Organise a Public Debate Using Crowd Wise: https://www.box.com/shared/static/k6u1n4cyjs6sywm61hph.pdf

http://participationcompass.org/article/show/198

http://www.neweconomics.org/publications/entry/crowd-wise</td></tr>
</table>

Author: **Blagovesta Chonkova**
Organisation: **ARC Fund**
Date: **22 July 2014**
Revision date: **22/09/2014**
Reviewed by: **ITAS**

Name of the engagement method (alias)	**15. Science week** (in Danish: Dansk Naturvidenskabsfestival)
Short description of the method	Danish Science Week is a method to communicate science to a wide target audience. The purpose of the method is to create enthusiasm for science, technology and health among children and the youth, and to strengthen and develop interest in the science curricula in primary, secondary and upper secondary schools.
Long description of the method	Danish Science Week is an annual event. However, it can also be viewed as an approach consisting of many methods which aim at communicating science to students in primary, secondary and upper secondary schools. Every year, the event has a new theme, and more than 100.000 children and youth take part in the activities. The project organisation Danish Science Factory is responsible for Danish Science Week. Its secretariat produces a catalogue of ideas which comprises a number of different activities that the participating schools can carry out. The secretariat coordinates these activities, and sees to it that the event is introduced to schools and the press. The activities are developed in collaboration with many different stakeholders, for instance universities and companies. Overall, Danish Science Week provides the setting for the activities. In practice, it iss the teachers who organise the event at their local schools and apply the methods with their pupils. There is no attendance fee, and the individual participating school decides how many of the proposed activities they want to carry out or participate in. **One of Danish Science Week's Methods: "Mass Experiment"** One of the methods applied during Danish Science Week is the "Mass Experiment". The purpose of this experiment is to give children and youths insights into scientific methods through the medium of an issue which relates to their everyday lives. Every year, the Danish Science Factory develops a new experiment in collaboration with one or more research institutions. Around 1000 school classes - or between 20,000 and 30,000 children and youth - take part in the experiment. The pupils conduct experiments and collect data, and afterwards, they report their results to Danish Science Factory and the scientists who analyse the data and write a final report (for more on results, see below). Besides the "Mass Experiment", Danish Science Week offers a number of different methods which communicate science. For instance, one of these is, "Book a Lecture" where scientists visit schools and share their experiences with science. During Science Week, between 500 and600 lectures are given. Furthermore, many external partners organise activities, so Science Week does not only take place in the classroom.
Objective of application of the method	☐ Policy formulation ☐ Programme development ☐ Project definition ☒ Research activity ☒ Others: Supports and inspires education
Results and products of the method application	As mentioned above, Danish Science Week reaches more than 100,000 children and youth throughout the country every year. One third of Danish primary and secondary schools participate, whereas two thirds of Danish upper secondary schools take part in the event. Moreover, external partners such as libraries, museums and companies are involved on an extensive scale. Even though the result isn't directly measurable, this considerable interest indicates that Danish Science Week lives up to its purpose. In 2013, Mikkel Bohm, director of Danish Science Factory, received the award “H.C. Ørsted Prisen”. This award is given to a person who has contributed to making science accessible for the general public. When it comes to direct results, it is worth mentioning the "Mass Experiment" as a citizen science initiative to collaborate in collecting data. In 2009, the experiment was about the indoor climate in Danish schools. The results showed that more than half of the classrooms had a CO2-level that didn't live up to the recommendations of the Danish Health and Medicines Authority. In 2014, the schools that participated in the experiment will test if the indoor climate in Danish schools has improved since 2009. All in all, the "Mass Experiment" generates new and relevant knowledge.

Level of stakeholder/public involvement, i.e. objective of public participation through the method’s application	☐ Dialogue	☐ Consulting	☒ Involving	☒ Collaborating	Empowering ☐ Direct decision
Engaged stakeholders in the process of method application	Category	**Organiser**	**Direct participant**	**Beneficiaries**	
	CSOs	☒	☐	☐	

	Policy-makers	☐	☐	☒	
	Researchers	☒	☒	☐	
	Citizens	☐	☒	☒	
	Affected	☐	☐	☐	
	Consumers	☐	☐	☐	
	Employees		☐	☐	
	Users	☐	☐	☐	
	Industry	☐	☐	☐	
Geographical scope of application (On what level has the method already been used?)	☐ International	☐ EU	☒ National	☐ Regional	☐ Local
Societal challenges the method has been trying to address	☒Health, demographic change and wellbeing	☒Food security, sustainable agriculture, marine and maritime research and the bio-economy	☒Secure, clean and efficient energy	☒Smart, green and integrated transport	
	☒Climate action, resource efficiency and raw materials	☐ Inclusive, innovative and reflective societies	☐ Secure societies to protect freedom and security of Europe and its citizens	☐ Others:	
Specific **strengths and weaknesses** of the method vis-à-vis the challenge(s) addressed	**Strengths:** - The method reaches a large audience. - The partnerships with universities, companies, etc. provide an opportunity for children and young people to realise how science is used in real life. The method contributes to building bridges between schools and society. - The method is really flexible. The secretariat leaves it to the schools to decide how, and to what extent, they want to participate in the event. **Weaknesses:** - Danish Science Week isn't in control of the direct application of the method(s). It is up to the local teachers and schools to make *their* Science Week a success. - It can be difficult to measure direct results of the application of the method.				
Timeframe for the application of the method	The theme is planned three years ahead. It takes place on the same week every year.				

Skills required in order to properly apply the method

Skills	No such skills required	Basic	Intermediate	Advanced
Subject-matter expertise			X	
IT skills				X
Facilitation skills			X	
Event organisation skills				X
Project management skills				X
Other skills:				

What are the **issues of concern that organisers need to take into account** when applying the method?	- Finances are a main concern when applying this method. Organisers will have to spend a lot of time on fund-raising. Danish Science Week is non-commercial. Besides receiving governmental grants, it is supported financially by a number of sponsors. - Networking is a keyword. The successful application of the method depends a great deal on establishing external partnerships with universities, companies, etc.

Examples of use of the method	**Project name**	**Organisation**	**Contact persons**	**Timeframe**	**Web address**

	Danish Science Week	Danish Science Factory	Mikkel Bohm, director	1998-*ongoing*	http://naturvidenskabsfestival.danishsciencefactory.dk/what-danish-science-week
	Project name	**Organisation**	**Contact persons**	**Timeframe**	**Web address**
	Project name	**Organisation**	**Contact persons**	**Timeframe**	**Web address**
	Project name	**Organisation**	**Contact persons**	**Timeframe**	**Web address**
Additional information of relevance (such as historical background, where the method has already been applied, etc.)	In 2014, Danish Science Week will take place for the fourteenth time. The 2014 theme is "The road to the future". - National Science & Technology week in Brasil "SAGE: Encyclopedia of Science and Technology Communication: Susanna Hornig Priest: 9781412959209." – - Weekend of Science in the Netherlands				
Sources (names of interviewees, links to relevant websites, etc.)	Mikkel Bohm, director, Danish Science Factory, mb@danishsciencefactory.dk http://naturvidenskabsfestival.danishsciencefactory.dk/what-danish-science-week www.formidling.dk/sw53217.asp *(in Danish)* http://naturvidenskabsfestival.danishsciencefactory.dk/ *(in Danish)* http://masseeksperimentet.danishsciencefactory.dk/ *(in Danish)* "SAGE: Encyclopedia of Science and Technology Communication: Susanna Hornig Priest: 9781412959209." Accessed July 7, 2014. http://www.uk.sagepub.com/books/9781412959209.] - Weekend of Science in the Netherlands http://www.hetweekendvandewetenschap.nl/]				

Author: **klj**
Organisation: **The Danish Board of Technology**
Date: **August 2014**
Revision date: **18-09-2014**
Reviewed by: **University of Groningen**

Name of the engagement method (alias)	**16. Deep Democracy - The Lewis Method**
Short description of the method	Deep Democracy is an advanced group facilitation method used primarily to access and bring out the wisdom already within a group, and particularly to release the creative potential that results from conflict. The focus is on inviting and spreading dissenting voices and encouraging exploration of places where groups or individuals are emotionally stuck. Thus, the method is particularly useful in 'conflict resolution'.
Long description of the method	The Deep Democracy method is designed to bring out underlying emotions which prevent a group of people from moving forward. The method focuses on roles and relationships rather than on individuals. A role in this sense means what is expressed by a person, which can be an opinion, idea, emotion, physical sensation, parent/ child, teacher/ student, and so on. An individual usually holds more than one role and one role is usually held by more than one individual. The roles of the participants need to be fluid and shared: - If one person is alone in a role, it may become a burden to that person. - If roles are too fixed, the organisation or group isn't growing. - The role of the facilitator in the method is to help people make their roles more fluid, to become aware of their own roles and the roles of the others, to understand their interdependence. Major principles of the Deep Democracy are: 1. In traditional majority democracy, people vote and then move forward with a decision. In Deep Democracy, the facilitator should encourage the minority voice to be expressed. 2. The facilitator needs to encourage people to express their disagreement; the participants should not feel afraid to say "no". 3. Once somebody expresses their disagreement, the other participants are also asked whether they agree with it. This process' aim is to avoid scapegoating and people being singled out and ostracised for disagreeing. The idea is to bring the present conflict on the surface and encourage everybody to express their concerns and opinions so that these can be heard by the other participants and possibly be addressed. 4. When the majority decides to follow in a certain direction, the minority is asked what they need in order to go along with the majority. The minority elaborates on the decision which has been taken by the majority, helping the group to come to a more conscious decision. 5. When a participant speaks in a way that is indirect, the facilitator goes in and speaks for that person, amplifying what they are saying, making it more direct and "taking out the politeness" (to see how this is done in practice, watch https://www.youtube.com/watch?v=N7oGw48OcC8).
Objective of application of the method	☒ Policy formulation ☒ Programme development ☒ Project definition ☐ Research activity ☐ Others:
Results and products of the method application	• Exploring and addressing the roots of existing conflicts; • Improving decision making and efficiency; • Improving different stakeholders' relationships; • Promoting and enabling cross-cultural programs; • Empowering minority groups.

Level of stakeholder/public involvement, i.e. objective of public participation through the method's application	☒ Dialogue ☐ Consulting ☒ Involving ☐ Collaborating ☒ Empowering ☐ Direct decision

Engaged stakeholders in the process of method application

Category	Organiser	Direct participant	Beneficiaries
CSOs	☒	☐	☒
Policy-makers	☐	☐	☒
Researchers	☐	☒	☐
Citizens	☐	☒	☐
Affected	☐	☒	☐
Consumers	☐	☐	☐
Employees	☐	☒	☐

	Users	☐	☐	☐	
	Industry	☒	☐	☒	
Geographical scope of application (On what level has the method already been used?)	☐ International	☐ EU	☒ National	☒ Regional	☒ Local
Societal challenges the method has been trying to address	☒ Health, demographic change and wellbeing	☐ Food security, sustainable agriculture, marine and maritime research and the bio-economy	☐ Secure, clean and efficient energy	☐ Smart, green and integrated transport	
	☐ Climate action, resource efficiency and raw materials	☒ Inclusive, innovative and reflective societies	☒ Secure societies to protect freedom and security of Europe and its citizens	☐ Others:	
Specific **strengths and weaknesses** of the method vis-à-vis the challenge(s) addressed	**Strengths:** • Recognising the important role that emotional dynamics can play in incorporating wisdom into decision-making; • The participants are not allowed to get stuck in a role which gives them a different point of view and better understanding of the conflict. **Weaknesses:** • If the facilitator does not have the desired metaskills to mediate the conflict, the minority group may feel even more excluded and unwilling to share opinion; • It might be a frustrating experience for the participants.				
Timeframe for the application of the method	1 or 2 days of intensive dialogues and sessions				

Skills required in order to properly apply the method

Skills	No such skills required	Basic	Intermediate	Advanced
Subject-matter expertise	X			X X
IT skills				
Facilitation skills				X
Event organisation skills			X	
Project management skills		X		
Other skills:				

What are the **issues of concern that organisers need to take into account** when applying the method?

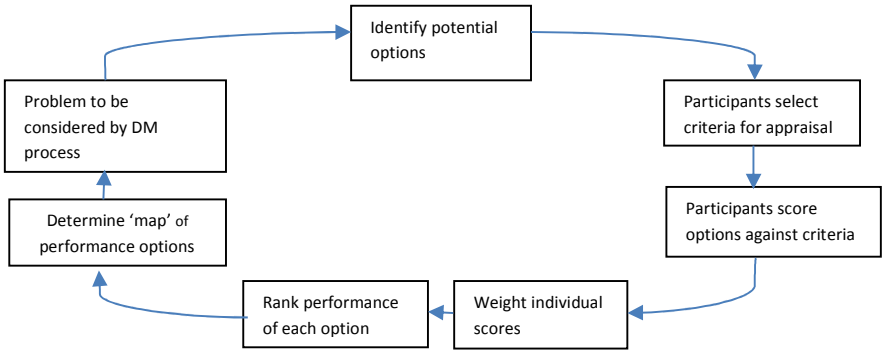
- Having experienced and well-trained facilitators is key;
- Openness to diversity and dialogue between various views needs to be demonstrated by the facilitator in order to reach the method's objectives.

Examples of use of the method

Project name	Organisation	Contact persons	Timeframe	Web address
Saving Each Other: Using Historic Preservation as a Tool for Therapeutic City Planning	University of Pennsylvania	Aftab Erfan	- 2012	http://repository.upenn.edu/cgi/viewcontent.cgi?article=1219&context=hp_theses

	Project name	Organisation	Contact persons	Timeframe	Web address
	Conversation Across the Socio-Economic Divide	-	Aftab Erfan		http://www.academia.edu/2043494/Conversation_Across_the_Socio-Economic_Divide_Deep_Democracy_in_Action_
Additional information of relevance (such as historical background, where the method has already been applied, etc.)	Deep Democracy was first implemented in South Africa's national utility company. Greg and Myrna Lewis were asked to help build a new workplace environment overcoming the deeply rooted racial, cultural and gender-based tensions, where people cooperate as team members. They used the complex theories of Mindell's Process Orientated Psychology and applied it to the corporate environment. Later on, they discovered that their methods work just as well for educators, students, communities, families and couples. Today, the methodology is used in different sectors of society and in over 20 countries. For more information on the method's purposes and principles, watch a c with Myrna Lewis: https://www.youtube.com/watch?v=9L1cDUzk-Ps; An example of the method's application can be viewed here: https://www.youtube.com/watch?v=N7oGw48OcC8				
Sources (names of interviewees, links to relevant websites, etc.)	Sources: http://www.deepdemocracyinstitute.org/deep-democracy-explained.html http://www.collectivewisdominitiative.org/papers/pioneers_dialogue/07_deep.pdf				

Author: **Blagovesta Chonkova**
Organisation: **ARC Fund**
Date:
Revision date: **22.09.2014**
Reviewed by: **Involve**

Name of the engagement method (alias)	**17. Deliberative Mapping**
Short description of the method	Deliberative Mapping (DM) involves both specialists and members of the public. It combines varied approaches to assess how participants rate different policy options against a set of defined criteria. The method allows substantial involvement of public participants in shaping the scope of the questions discussed.
Long description of the method	**Description** Deliberative mapping originated in social research, and is based on Multi-Attribute Decision Analysis (MADA). The process is designed to assess a complex problem for which there is no single obvious way forward to judge how well different courses of action might perform according to a set of economic, social, ethical and scientific criteria. The aim is to use the process as the basis for more robust, democratic and accountable decision making which better reflects public values. Fundamental to this approach is the involvement of both 'specialists' and members of the public. A sample of the public (around 40 people) from varied backgrounds is recruited onto citizens' panels. The experts (around 20) are selected to reflect on the full spectrum of specialist knowledge in an area. The citizen and expert participants are divided into panels (often according to gender and socio-economic backgrounds). The citizens' panels, and the experts, consider the issue both separately from one another and together at a joint workshop. This process allows both groups to learn from each other without the experts dominating. The emphasis of the process is not on integrating expert and public voices, but understanding the different perspectives each offer to a policy process. The process aims to avoid problems which feature in other participatory methods such as expert-dominated discussion in other participatory methods and is able to deliver both an overview and in-depth analysis of public opinion. Participants: • Decide in groups, through a deliberative process on criteria they will use to score the policy options against (policy options are likely to have been developed by experts and policy makers working in the field); • Systematically weigh up the pros and cons of each of the potential 'options' under consideration; • integrate their individual assessments to help identify a possible future course of action. Deliberative Mapping incorporates both quantitative and qualitative methods. The approach integrates two independent but complementary approaches to informing decision making: ● Stakeholder decision analysis (SDA) which is a qualitative group based process (see additional information); ● Multi-Criteria Mapping (MCM) which is a quantitative, computer-assisted interview process. **Process** Citizens and specialists follow the same basic framework for optional appraisal:  Citizens' Panels and Joint Workshop: • Meeting 1: Introduce panellists and facilitation team, agree ground rules, discuss initial thoughts about problem in question and provide information; • Meeting 2: Clarify, discuss and then agree meanings, definitions and implications of the options to be appraised; • Meeting 3: Discuss and agree a shared set of criteria to be used by the panel to judge the pros and cons of the

	different options; • Meeting 4: Panellists score options under chosen criteria. Panel reviews performance patterns then decides what issues to take to joint workshop; • Joint workshop: Panellists join specialists to discuss issues raised in their deliberations; • Meeting 5: Discuss workshop outcomes, then the panellists re-score options and weight criteria to reflect priorities; • Meeting 6: Panellists discuss individual and full panel results. They evaluate the process. Specialists' Interviews and Workshops: • Scoping interview: Discuss project and views about the problem in question; • First MCM interview: Use MCM (Multi-Criteria Mapping is a quantitative, computer-assisted interview process software) to structure the appraisal of options under weighted criteria; • Joint workshop: Specialists exchange views with citizens and respond to questions; • Second MCM interview: Use MCM process to elicit any changes in specialist appraisals; • Specialist workshop: Specialists reflect on the various perspectives and emerging findings; they evaluate the process.
Objective of application of the method	☒ Policy formulation ☐ Programme development ☐ Project definition ☐ Research activity ☐ Others:
Results and products of the method application	Greater legitimacy for decisions; information about public preferences towards policy options; information on the different aspects of an issue and the considerations around them**.**

Level of stakeholder/public involvement, i.e. objective of public participation through the method's application	☐ Dialogue ☐ Consulting ☒ Involving ☒ Collaborating ☐ Empowering ☐ Direct decision
Engaged stakeholders in the process of method application	

Category	Organiser	Direct participant	Beneficiaries
CSOs	☐	☐	☒
Policy-makers	☒	☐	☒
Researchers	☐	☒	☒
Citizens	☐	☒	☐
Affected	☐	☐	☒
Consumers	☐	☐	☐
Employees	☐	☐	☐
Users	☐	☐	☐
Industry	☐	☐	☐

Geographical scope of application (On what level has the method already been used?)	☐ International	☐ EU	☒ National	☒ Regional	☐ Local
Societal challenges the method has been trying to address	☒ Health, demographic change and wellbeing	☐ Food security, sustainable agriculture, marine and maritime research and the bio-economy	☒ Secure, clean and efficient energy	☐ Smart, green and integrated transport
	☒ Climate action, resource efficiency and raw materials	☐ Inclusive, innovative and reflective societies	☐ Secure societies to protect freedom and security of Europe and	☐ Others:

<table>
<tr><td></td><td>its citizens</td></tr>
<tr><td>Specific strengths and weaknesses of the method vis-à-vis the challenge(s) addressed</td><td>Strengths
Deliberative Mapping balances a variety of specialist and citizen perspectives which may help foster more productive discussions about policy;
The results are considered opinions rather than articles of faith or rash judgement;
Specialists contribute to the process without dominating;
Combination of different approaches creates a deep and comprehensible understanding of public priorities.
Weaknesses
Difficult to involve large numbers;
High in cost and time commitment;
The results can be contradictory views that leave decision-makers without clear guidance;
Very few people have practical experience of running this kind of process;
No guarantee that the outcomes will feed into policy-making processes.</td></tr>
<tr><td>Timeframe for the application of the method</td><td>Various: 4 months to over a year</td></tr>
<tr><td>Skills required in order to properly apply the method</td><td>
<table>
<tr><th>Skills</th><th>No such skills required</th><th>Basic</th><th>Intermediate</th><th>Advanced</th></tr>
<tr><td>Subject-matter expertise</td><td>X</td><td></td><td></td><td></td></tr>
<tr><td>IT skills</td><td></td><td>X</td><td></td><td></td></tr>
<tr><td>Facilitation skills</td><td></td><td></td><td></td><td>X</td></tr>
<tr><td>Event organisation skills</td><td></td><td></td><td></td><td>X</td></tr>
<tr><td>Project management skills</td><td></td><td></td><td></td><td>X</td></tr>
<tr><td>Other skills:</td><td></td><td></td><td></td><td></td></tr>
</table>
</td></tr>
<tr><td>What are the issues of concern that organisers need to take into account when applying the method?</td><td>Deliberative Mapping is a demanding process;- it is complex, time consuming and expensive. It requires strong project management and high quality facilitation skills. It can be demanding on sponsors, practitioners and participants, particularly if the issue being discussed is controversial. On the plus side, it allows a structured and in-depth exploration that most other methods don’t. Here are a number of key issues which policy makers and researchers should consider before using Deliberative Mapping to investigate citizen and specialist perspectives on a particular issue:
Recruitment of panellists – socioeconomic and demographic characteristics should inform the criteria for recruitment to ensure diversity;
Understanding of the perspective of panellists – facilitators need to make it clear to participants that their contribution is valued (valuing all opinions, maintaining confidentiality, sharing results with participants);
Providing quality information (this might include specially prepared booklets, as well as providing space for questions to be answered);
Quality and level of facilitation – this will involve supporting participants at all stages, creating a safe space, enabling dialogue, supporting group development, and resolving conflict;
Evaluation is critical at all stages from design to implementation and analysis;
There is no guarantee that the outcomes will be fed successfully into the policy-making process.
The method is not useful where citizens need to make decision or if consensus is a required outcome</td></tr>
<tr><td>Examples of use of the method</td><td>
<table>
<tr><th>Project name</th><th>Organisation</th><th>Contact persons</th><th>Timeframe</th><th>Web address</th></tr>
<tr><td>Kidney transplants in the UK</td><td>Wellcome Trust</td><td></td><td>2001 - 2003</td><td>No web address. Briefing report here http://www.sussex.ac.uk/Users/prfh0/DM%20Briefing%203.pdf</td></tr>
</table>
</td></tr>
</table>

	Project name	Organisation	Contact persons	Timeframe	Web address
	Disposal of UK's legacy of radioactive waste	Government's independent Committee for the Management of Radioactive Wastes		2004	https://www.gov.uk/government/organisations/committee-on-radioactive-waste-management
	Project name	**Organisation**	**Contact persons**	**Timeframe**	**Web address**
	"'Opening up' geoengineering appraisal: Deliberative Mapping of options for tackling climate change	School of Environmental Sciences University of East Anglia	Rob Bellamy		https://ueaeprints.uea.ac.uk/48787/1/PhD_Thesis_-_Rob_Bellamy_%28e-thesis%29.pdf
Additional information of relevance (such as historical background, where the method has already been applied, etc.)	The first application of Deliberative Mapping in the UK was to the problem of the 'kidney gap' – the disparity between the number of people waiting for a kidney and the much lower number of kidneys available. Thirty eight citizens and seventeen experts agreed to attend six evening meetings and a one day joint workshop to assess the performance of different options. This application demonstrated that quantitative and qualitative appraisal techniques, and individual and group-based methods, can be combined to form a deliberative and inclusive process. This process produced a high level of agreement between specialist and citizens which may not always occur in every context, but the results will always provide a detailed picture of relative performance of different options. Stakeholder decision analysis (SDA) involves facilitated discussions with groups of people (up to 20) who meet for five sequential sessions to deliberate each stage of the appraisal process. Group members work interactively, using low tech pen and paper techniques throughout. (see Burgess et al. (2007) Deliberative mapping: a novel analytic-deliberative methodology to support contested science-policy decisions, *Public Understanding of Science* 16 277-322)				
Sources (names of interviewees, links to relevant websites, etc.)	Sources: http://ncdd.org/rc/wp-content/uploads/DeliberativeMapping.pdf http://www.involve.org.uk/wp-content/uploads/2011/03/People-and-Participation.pdf http://www.sussex.ac.uk/Users/prfh0/DM%20Briefing%202.pdf http://www.sussex.ac.uk/Users/prfh0/DM%20Briefing%203.pdf http://www.sussex.ac.uk/Users/prfh0/DM%20Briefing%204.pdf http://participationcompass.org/article/show/133				

Author: **Houda Davis**
Organisation: **Involve**
Date: **20/07/14**
Revision date:
Reviewed by: **ARC Fund**

Name of the engagement method (alias)	**18. Deliberative (Mini-publics) Workshops** *The method might also be referred to as Public Dialogue Workshops in the UK, Deliberative Policy Workshops or upstream engagement.
Short description of the method	Deliberative Workshops refer to dialogue events where the focus is on having in-depth informed discussions on a complex or controversial issues to gather social intelligence to inform policy, anticipate regulation, exchange opinion or raise awareness. Deliberative workshops have also been used to develop research agendas and objectives that more closely reflect public views (see for example Sciencewise Drug Futures Dialogue). Deliberative Workshops developed out of focus groups and other related methods as a more in-depth and deliberative alternative.
Long description of the method	Deliberative Workshops are a form of facilitated group discussions that provide participants with the opportunity to consider an issue in depth, challenge each other's opinions and develop views and arguments to reach an informed position. They allow the organisers conducting the event to have a greater understanding of what may lie behind an opinion or how people's views change as they are given new information or deliberate on an issue. Deliberative Workshops can be similar to focus groups, although there tends to be a greater emphasis on deliberation. **Participant Selection: Forming a Mini-Public** Deliberative workshops often involve recruiting a group of people that broadly reflects a wider population – these are often referred to as 'mini-publics' (see additional information section below for a more detail explanation). Deliberative Workshops typically involve 8 to 16 participants (although it can be larger). The choice of participants will depend on the issue at stake; participants could be selected on the basis of demographics, interest group or through a random selection. Random selection is often used to overcome bias (although this can add significant costs to the process), this is intended to create a group that is an inclusive different opinions representative of a wider population – these are often referred to as mini-publics. In some cases participants are recruited to reflect affected groups (e.g. in DNA Database Dialogue where Black males were recruited for a separate group as they were disproportionately targeted in the database). **Process** The format usually involves presentations of information from 'experts'. Any experts presenting or observing are briefed beforehand so they clearly understand their role. The majority of time is allocated to participants' discussions. These may take the form of plenary and/or small group discussions (depending on the size of the group). Expert facilitators ensure there is enough time for everyone to express their views and that all views are valued equally (not just that of 'experts'). Discussions are carefully recorded. There are many tools and techniques used in deliberative workshops and those chosen will depend on the size of the group and nature of the topic. Ideally, organisers should vary the ways in which participants can express their views throughout the process – collectively in group discussions and individually through other methods such as voting, postcards, flipcharts and post-it notes. Plenary feedback and summing up is used so that participants can check and validate points that are being interpreted as the main results.
Objective of application of the method	☒ Policy formulation ☒ Programme development ☐ Project definition ☐ Research activity ☐ Others:
Results and products of the method application	Deliberative workshops have been used to: • Understand how people's views about a controversial scientific research or policy can change as they are given new information or deliberate an issue; • Explore how policies, or new activities, would impact communities and stakeholders, as well as to develop alternatives that result in better-informed decisions; • Consult on conflicting beliefs or values around certain policies; • Stimulate interest in specific scientific or societal issues among participants; • Provide valuable insight and input into the concerns of peers and the wider public about an emerging, controversial research or policy agenda which may have impacts on wider society in the future; • Enhance understanding and the relationship between science and wider society.

Level of stakeholder/public involvement, i.e. objective of public participation through the method's application	☐ Dialogue ☐ Consulting ☒ Involving ☒ Collaborating ☐ Empowering ☐ Direct decision
Engaged stakeholders in the process of method application	Category | **Organiser** | **Direct participant** | **Beneficiaries**

	CSOs	☐	☐	☐	
	Policy-makers	☒	☐	☒	
	Researchers	☒	☐	☒	
	Citizens	☐	☒	☐	
	Affected	☐	☐	☐	
	Consumers	☐	☐	☐	
	Employees	☐	☐	☐	
	Users	☐	☐	☐	
	Industry	☐	☐	☐	

Geographical scope of application (On what level has the method already been used?)	☐ International	☐ EU	☒ National	☒ Regional	☒ Local

Societal challenges the method has been trying to address	☒ Health, demographic change and wellbeing	☒ Food security, sustainable agriculture, marine and maritime research and the bio-economy	☒ Secure, clean and efficient energy	☒ Smart, green and integrated transport
	☒ Climate action, resource efficiency and raw materials	☐ Inclusive, innovative and reflective societies	☐ Secure societies to protect freedom and security of Europe and its citizens	☐ Others:

Specific **strengths and weaknesses** of the method vis-à-vis the challenge(s) addressed

Strengths

• Provides participants with the time and resources to consider an issue in-depth, including costs, benefits and long-term consequences;
• Discussing with others gives participants an insight into alternative perspectives, allowing their own views to be developed and challenged;
• It can build and improve relationships between participants;
• Involving citizens in a deliberative workshop can be empowering and provide new knowledge and skills; participants can act as spokespeople for the process which in some cases can strengthen the legitimacy of the process.

Weaknesses

• Like all forms of qualitative research, Deliberative Workshops are open to manipulation: how the discussions/activities are framed, how the participants are introduced to the topic, and what questions are asked will all influence the results.
• Deliberative Workshops only involve small numbers of people and therefore can't be used to gather statistically significant data to accurately measure public opinion.
• The fact that participants' views are developed through deliberation may also mean that the final views are not representative of the views of the wider public, since they have not experienced the deliberative process.

Timeframe for the application of the method

It takes between 3 months and 1 year to organise and run.

Skills required in order to properly apply the method

Skills	No such skills required	Basic	Intermediate	Advanced
Subject-matter expertise				**X**
IT skills			**X**	
Facilitation skills				**X**
Event organisation skills				**X**

	Project management skills			**X**	
	Other skills:				

What are the issues of concern that organisers need to take into account when applying the method?

There are various considerations to make in advance of a deliberative process. For example, organisers and facilitators should:

- Be aware the recruitment for deliberative workshops can be time consuming and expensive, particularly if using random selection or purposive sampling; sometimes organisers pay participants a small amount of money to incentivise participation which can add significantly to costs; other costs incurred by participants include childcare and organisers may also cover these to ensure inclusivity;
- Be aware as to whether a workshop will influence decisions and make this clear to participants; tokenistic deliberation can reduce the trust of participants in those taking the decisions;
- Participants are kept informed after the event; summaries of the views should be provided and it should be made clear to participants how their input has made a difference;
- The participant's views are developed through deliberation and the processing of new information and arguments and this may mean they are not representative of the views of the wider public and should therefore not be claimed as such;
- Building in evaluation to the process can help assess outcomes and improve future practice.

Examples of use of the method

Project name	Organisation	Contact persons	Timeframe	Web address
Experiment Earth? Public Dialogue on Geoengineering (UK)	The Natural Environment Research Council (NERC) in association with the Sciencewise Expert Resource Centre	Natural Environment Research Council	2010	Project report can be found at http://www.esrc.ac.uk/my-esrc/grants/RES-568-28-5001/outputs/read/36e66b68-68d2-4155-855e-a61f34d905ad
Project name	**Organisation**	**Contact persons**	**Timeframe**	**Web address**
The Use of Hybrid and Chimera Embryos in Research	The Human Fertilisation and Embryology Authority	Project Manager: Helen Coath Email: Helen.coath@hfea.gov.uk Tel: 020 7291 8238	2006	http://www.sciencewise-erc.org.uk/cms/assets/Uploads/Publications/Hybrid-Chimera-FINAL.pdf
Project name	**Organisation**	**Contact persons**	**Timeframe**	**Web address**
Project name	**Organisation**	**Contact persons**	**Timeframe**	**Web address**

Additional information of relevance (such as historical background, where the method has already been applied, etc.)

The term mini-public is contested. Definitions often refer back to Robert Dhal's vision of the 'minipopulus'. The term refers the group of participants who are involved in a range of different public engagement designs with very different democratic qualities and functions, these include: deliberative polls (random selection of 250-500 citizens brought together for 1-2 days to hear evidence from experts and deliberate in small groups), Citizens Assemblies, Planning cells, citizen juries, consensus conferences and 21st century town meetings. A more expansive definition may also include participants involved in participatory budgeting and Chicago Community Policing.

For further explanation see https://www.academia.edu/3999460/Defining_Mini-publics_Making_sense_of_existing_conceptions

Sources (names of interviewees, links to relevant websites, etc.)	Sources: http://participationcompass.org/article/show/153 https://www.academia.edu/3999460/Defining_Mini-publics_Making_sense_of_existing_conceptions [In the abstract he uses minipublics as a concept, but uses other words further on. This is more about the institutionalising of deliberative workshops:] Lewanski, Rodolfo. "Institutionalizing Deliberative Democracy: The 'Tuscany Laboratory.'" Journal of Public Deliberation 9, no. 1 (April 30, 2013). http://www.publicdeliberation.net/jpd/vol9/iss1/art10

Author: **Houda Davis**
Organisation: **Involve**
Date: **22/07/14**
Revision date: **23/09/14**
Reviewed by: **University of Groningen**

Name of the engagement method (alias)	**19. Deliberative online forum**
Short description of the method	Web-based discussions in online forums between informed individuals about issues which concern them, leading to some form of consensus and collective decision.
Long description of the method	**Features of deliberation** It is argued by deliberative theorists that one of the necessary features of democracy is indeed publicity. The main arguments are that issues in a democracy should be publicly debated and recognized, just like the processes in democratic institutions should be public and subjects to critical observations. Moreover, not only citizens need to be provided with information, but also ensured that the use of a public form is the main method to ground political decisions, rather than rely on sources of authority available only to a segment of the society. The public nature of the reason used to ground political decisions generates outcomes that are fair and reasonable but subject to revision if warranted by new information or further deliberation. It is believed that the most reasonable political outcomes are generated when there are a strong inclusion of citizens and variety of viewpoints. The more-inclusive deliberative processes, the fairer they are as more viewpoints are taken into account. It doesn't really matter whether a citizen's view is present in the outcome, it has at least been figured into the debate by fellow citizen deliberators. There is a variety of ways of implementing public deliberation. There are different kinds of issues that can be sought by public input and the social and institutional contexts within which a public deliberation might be conducted and acted upon constitute important constraints. Therefore, every unique deliberative forum should be tailored at least partly to the issues and contexts at hand. Deliberative forums usually consist of facilitated, democratic conversations during evaluative inquiry. The principles of democratic pluralism are reinforced by consciously positioning people with different opinions and authority in evaluative discourse. The methodology of the deliberative forum is an instrumental tool for bringing the theory of deliberative democratic evaluation into practice. Deliberative forums can be reformulated throughout the inquiry of an evaluation, but most commonly they are useful when crafted into the unfolding dialogue during the design. The main goal of the deliberative forum is the differences of perception among evaluation stakeholders. **Elements** There are 3 main elements when designing deliberative online forum: 1. **Communicative structure of discussion space** consisting of the technical architectures of the online discussion space (chat-rooms, forums) and the way the online discussion spaces are organised (identification, openness and freedom of speech, moderation, agenda setting); 2. **"Major" v/s "Minor" discussion** spaces - if the participants in the online public sphere are likely to have a major impact on some concrete political outcomes, we may define it as a major one. Otherwise, we classify an online public space as minor; 3. **Political culture and** ideology, meaning the socio-political context (the country, political actors, ideology, topic of the debate).
Objective of application of the method	☐ Policy formulation ☐ Programme development ☒ Project definition ☐ Research activity ☐ Others:
Results and products of the method application	• Policy document; • Public opinion surveys; • Agenda setting proposal.

Level of stakeholder/public involvement, i.e. objective of public participation through the method's application	☒ Dialogue ☐ Consulting ☒ Involving ☒ Collaborating ☐ Empowering ☐ Direct decision			
Engaged stakeholders in the process of method application	Category	**Organiser**	**Direct participant**	**Beneficiaries**
	CSOs	☒	☐	☐

	Policy-makers	☐	☒	☐	
	Researchers	☐	☐	☒	
	Citizens	☐	☒	☐	
	Affected	☐	☒	☐	
	Consumers	☐	☐	☐	
	Employees	☐	☐	☐	
	Users	☐	☐	☐	
	Industry	☐	☐	☐	
Geographical scope of application (On what level has the method already been used?)	☒ International	☒ EU	☒ National	☒ Regional	☐ Local
Societal challenges the method has been trying to address	☐ Health, demographic change and wellbeing	☐ Food security, sustainable agriculture, marine and maritime research and the bio-economy	☐ Secure, clean and efficient energy	☐ Smart, green and integrated transport	
	☐ Climate action, resource efficiency and raw materials	☒ Inclusive, innovative and reflective societies	☐ Secure societies to protect freedom and security of Europe and its citizens	☐ Others:	

Specific **strengths and weaknesses** of the method vis-à-vis the challenge(s) addressed

Strengths:

- Citizens engage not only in registering preferences, but also in discussing them;
- Large-scale access to discussions;
- Exchange of know-how, new ideas and viewpoints;
- Citizens may exercise their freedom of speech more easily;
- Citizens may still do their daily jobs and still can participate in online discussions;
- Online discussion spaces could enhance the visibility and the role of minor political actors;
- Can create dialogue/engagement with citizens over a long period of time;
- Can provide policy makers with an understanding about how the public might change their opinion and/or behaviours if provided with relevant information.

Weaknesses:

- The anonymity may lead to more lobbying;
- If the participants are not knowledgeable enough, the discussion may not lead to fruitful results;
- If only certain modes of expression, forms of argument, and cultural styles are publicly acceptable, then the voices of certain citizens will be excluded;
- Social conditions, such as already existing structural inequalities, pluralism, social complexity, the increasing scope of political concerns, and the impracticality of affected citizens having forums in which to deliberate may lead to biased results;
- The online discussion spaces might be chaotic and used by like-minded people;
- Sometimes they are perceived as 'showtrials' used by those in power to attract publicity rather than meaningful engagement.

Timeframe for the application of the method

Two to three hours into a week-long online experience.

Skills required in order to properly apply the method

Skills	No such skills required	Basic	Intermediate	Advanced
Subject-matter expertise			**X**	
IT skills				**X**

	Facilitation skills			**X**	
	Event organisation skills		**X**		
	Project management skills				
	Other skills:				

What are the issues of concern that organisers need to take into account when applying the method?

- Deliberation is dependent on design and choice, therefore a weak design may lead to poor execution;
- If there is a lack of excellent ICT infrastructure, there might be misrepresentation and exclusion of various actors.

Examples of use of the method

Project name	Organisation	Contact persons	Timeframe	Web address
Online Deliberative Democracy	Deliberative-democracy	Matt Leighninger	Ongoing	http://www.deliberative-democracy.net/index.php?option=com_content&view=category&id=53:online-deliberation
Project name	**Organisation**	**Contact persons**	**Timeframe**	**Web address**
Effective Health Care (EHC) Program	The Agency for Healthcare Research and Quality (AHRQ)	Joanna Siegel	Between August and November 2012	http://effectivehealthcare.ahrq.gov/ehc/assets/File/Demonstration-Methods-Deliberative-130213.pdf
Project name	**Organisation**	**Contact persons**	**Timeframe**	**Web address**
Deliberative workshops: People's Inquiry on Nanotechnology and the Environment	Environment Agency	Steve Killeen	three days at the beginning of 2006	http://www.sciencewise-erc.org.uk/cms/assets/Uploads/Project-files/NanodialoguesA-peoples-inquiry.pdf
Project name	**Organisation**	**Contact persons**	**Timeframe**	**Web address**
Consensus Conference: A Danish description	The Danish Board of Technology		1989 to date	http://www.co-intelligence.org/P-ConsensusConference1.html

Additional information of relevance (such as historical background, where the method has already been applied, etc.)

Features of deliberation

Deliberative theorists tend to argue that publicity is a necessary feature of legitimate democratic processes. First, issues within a democracy should be public and should be publicly debated. Second, processes within democratic institutions must be public and subject to public scrutiny. Finally, in addition to being provided with information, citizens need to ensure the use of a public form of reason to ground political decisions, rather than rely on sources of authority available only to a segment of the citizenry. The public nature of the reason used to ground political decisions generates outcomes that are fair and reasonable but subject to revision if warranted by new information or further deliberation.

Most theories of deliberative democracy hold that the maximum inclusion of citizens and viewpoints generates the most legitimate and reasonable political outcomes. In addition to improving the level of discussion and accounting for the most arguments, more-inclusive deliberative processes are fairer because more people have their views considered. Whether or not a citizen's view is present in the outcome, it has at least been figured

	into the debate by fellow citizen deliberators. The first citizens' forums emerged in the mid-1970s from the area of planning and technology assessment in the form of Planungszelle (Planning Cells). Since then a range of innovative processes have been developed, including consensus conferences, citizens' juries, and a number of hybrid methods. Whilst there are some differences between these processes, they seek to bring a small panel of randomly selected lay citizens together to deliberate on a policy issue. After hearing from, and questioning a number of experts such as academics and interest groups, the citizen panel develops a set of written recommendations. This document then feeds into the policy process either directly (eg. tabled in parliament) or indirectly through wide public dissemination.
Sources (names of interviewees, links to relevant websites, etc.)	Sources: http://www.edemocracycentre.ch/files/onlineforums.pdf http://www.etchouse.com/mcma503/readings.old/wright-2007.pdf http://wms-soros.mngt.waikato.ac.nz/NR/rdonlyres/eilowwx6btce727spubq7txgd6mzs33pfivi5vm6rbt7k3k25o36ulwte46n6v66v2nkkwiyldeetp/DeliberativeDialogueforsustainablebiotechnologygov.pdf

Author: **Blagovesta Chonkova**
Organisation: **ARC Fund**
Date:
Revision date: **28.09.2014**
Reviewed by: **DBT**

Name of the engagement method (alias)	**20. Deliberative Poll (Deliberative Polling®)**
Short description of the method	Deliberative Polling®, developed by James Fishkin, is a method which combines deliberation in small group discussions with scientific random sampling to provide public consultation for public policy and for electoral issues.
Long description of the method	Deliberative Polling is a method which combines deliberation in small group discussions with scientific random sampling to provide public consultation for public policy and for electoral issues. The main characteristics of a Deliberative Poll include random recruitment of participants, informational input about the issues discussed in balanced briefing materials, moderated small group discussions, plenary sessions in which questions from the small groups are answered, and repeated attitude measurement. A control group and a systematic recording of all verbal interactions is a common feature in most cases (also in the small group discussions). Deliberative Polls make a systematic effort at recruiting a random and representative microcosm, often referred to as a mini-public, of the reference population. It is large enough to allow for statistical procedures to be used and for the evaluation of both representativeness and opinion changes. The process begins with a baseline poll, in which members of the sample are invited to gather at a single place for a weekend in order to discuss the issues. Briefing materials are sent to the participants and are also made publicly available. The participants engage in a dialogue with competing experts and political leaders based on questions they develop in small group discussions with trained moderators. Parts of the weekend events are broadcast on television, either live or in taped and edited form. After the deliberations, the sample is again asked the original questions. The resulting changes in opinion represent the conclusions the public would reach, if people had the opportunity to become more informed and more engaged by the issues. The process should have the statistical representativeness of a scientific sample but it also should have the concreteness and immediacy of a focus group or a discussion group. Taped and edited accounts of the small group discussions should provide an opportunity for the public to reframe the issues in terms that connect with ordinary people. A number of Deliberative Polls have been conducted in various countries around the world.
Objective of application of the method	☒ Policy formulation ☐ Programme development ☐ Project definition ☐ Research activity ☐ Others:
Results and products of the method application	Taped and edited accounts of the small group discussions provide an opportunity for the public to reframe the issues in terms that connect with ordinary people. The process provides the data to evaluate both the representativeness of each microcosm and the statistical significance of the changes in opinion.

Level of stakeholder/public involvement, i.e. objective of public participation through the method's application	☐ Dialogue ☒ Consulting ☒ Involving ☐ Collaborating ☐ Empowering ☒ Direct decision
Engaged stakeholders in the process of method application	

Category	Organiser	Direct participant	Beneficiaries
CSOs	☐	☐	☐
Policy-makers	☒	☐	☐
Researchers	☒	☐	☐
Citizens	☐	☒	☒
Affected	☐	☐	☐
Consumers	☐	☐	☐
Employees	☐	☐	☐
Users	☐	☐	☐
Industry	☐	☐	☐

Geographical scope of application (On what level has the method already been used?)	☐ International ☒ EU ☒ National ☒ Regional ☒ Local
Societal challenges the method has been trying to address	☒ Health, demographic change and wellbeing ☒ Food security, sustainable agriculture, marine and maritime research and the bio-economy ☒ Secure, clean and efficient energy ☒ Smart, green and integrated transport ☒ Climate action, resource efficiency and raw materials ☒ Inclusive, innovative and reflective societies ☒ Secure societies to protect freedom and security of Europe and its citizens ☒ Others:
Specific **strengths and weaknesses** of the method vis-à-vis the challenge(s) addressed	Deliberative Polling® is especially suitable for issues where the public may have little knowledge or information, or where the public may have failed to confront the trade-offs applying to public policy. It is a social science experiment and a form of public education in the broadest sense.
Timeframe for the application of the method	3-4 weeks before the event takes place, all invited participants should be supplied with information material; 2-4 days: The main event where all participants come together; 2-4 months: measuring attitudes of the participants before, during and after the event.

Skills required in order to properly apply the method

Skills	No such skills required	Basic	Intermediate	Advanced
Subject-matter expertise			**X**	
IT skills			**X**	
Facilitation skills				**X**
Event organisation skills			**X**	
Project management skills			**X**	
Other skills:			Survey design	

What are the **issues of concern that organisers need to take into account** when applying the method?	The recruitment of a Deliberative Poll should follow representativeness as compared to the general population. Deliberative Polls include survey methods like CATI/CAPI.

Examples of use of the method

Project name	Organisation	Contact persons	Timeframe	Web address
Deliberative Poll about Unemployment and Job Creation in the Area of Kaposvár	Corvinus University of Budapest, Institute of Sociology and Social Policy , Centre for Empirical Social Research (CESR)	György Lengyel	2 months	http://www.uni-corvinus.hu/index.php?id=20961
Project name	**Organisation**	**Contact persons**	**Timeframe**	**Web address**
London Power 2010: Countdown to New Politics United Kingdom	The Joseph Rowntree Charitable Trust	Pam Giddy; Mark Ross	1 year (2 days event)	http://www.power2010.org.uk/pages/79/

	Project name	Organisation	Contact persons	Timeframe	Web address
	EuroPolis - Deliberative Poll	Universita` di Siena; Stanford University, Stanford, CA	Pierangelo Isernia, James S. Fishkin	1 year	http://cdd.stanford.edu/polls/eu/
	Project name	**Organisation**	**Contact persons**	**Timeframe**	**Web address**
	Issue of Korean Unification (First Deliberative Polling® in Korea)	Institute of Communication Research of Seoul National University	Professor Kyu S. Hahn	1 year (1 day event)	http://cdd.stanford.edu/polls/korea/
Additional information of relevance (such as historical background, where the method has already been applied, etc.)	Professor James Fishkin of Stanford University originated the concept of Deliberative Polling® in 1988. He has served as either Director or Academic Advisor for all of the Deliberative Polling® events conducted thus far. Previously he was the Director of the Center for Deliberative Polling® at the University of Texas at Austin. The Austin Center was moved to Stanford on September 1st, 2003 and has continued under the new name Center for Deliberative Democracy. The center focuses on research and application of Deliberative Polling®. Deliberative Polling is a registered trademark and fees from the trademark go to the Center to support research. The Center for Deliberative Democracy has received generous support from the William and Flora Hewlett Foundation and from Stanford University.				
Sources (names of interviewees, links to relevant websites, etc.)	Fishkin, J.S.: Executive Summary: Deliberative Polling®. The center for deliberative democracy at Statford University: http://cdd.stanford.edu/polls/docs/summary/ Isernia, P.; Fishkin, J.S. (2014): The EuroPolis Deliberative Poll, European Union Politics, eup.sagepub.com Nanz, P.; Fritsche, M. (2012): Handbuch Bürgerbeteiligung. Bpb, Bonn. The center for deliberative democracy at Statford University: http://cdd.stanford.edu/				

Author: **Rainer Kuhn**
Date: **07-16-14**
Revision date: **07-21-14**
Reviewed by: **Involve**

Name of the engagement method (alias)	**21. Delphi method** (also called: Delphi technique, Delphi survey)
Short description of the method	The Delphi method is a multiple iteration survey method that enables anonymous, systematic refinement of expert opinion with the aim of arriving at a combined or consensual position. Its purpose is to generate discussion and enable a judgement on a specified topic to be made so that policy decisions can be taken which can claim to represent a given group's wants and views.
Long description of the method	There are four features which characterize the Delphi method and distinguish it from other group decision making processes. They are anonymity, iteration with controlled feedback, statistical group response and expert input. The Delphi method is presented as an alternative to the committee process or the one-off questionnaire as a means of obtaining a group's opinion or judgement on a topic. It is often seen as having an important contribution to make in facilitating controlled and rational group communication. The method has been extensively used for exploring policy issues and facilitating decision making by business organisations and government agencies, as well as foresight studies.
Objective of application of the method	☒ Policy formulation ☒ Programme development ☒ Project definition ☒ Research activity ☐ Others:
Results and products of the method application	• Consensual Expert judgement; • Foresight studies; • Group's communication; • Group decision making processes; • Panel.
Level of stakeholder/public involvement, i.e. objective of public participation through the method's application	☐ Dialogue ☒ Consulting ☐ Involving ☐ Collaborating ☐ Empowering ☒ Direct decision

Engaged stakeholders in the process of method application

Category	Organiser	Direct participant	Beneficiaries
CSOs	☒	☒	☒
Policy-makers	☒	☐	☒
Researchers	☒	☒	☒
Citizens	☐	☐	☒
Affected	☐	☐	☒
Consumers	☐	☐	☒
Employees	☐	☐	☒
Users	☐	☐	☒
Industry	☒	☒	☒

Geographical scope of application(On what level has the method already been used?)	☒ International ☒ EU ☒ National ☒ Regional ☒ Local

Societal challenges the method has been trying to address

☒Health, demographic change and wellbeing	☒Food security, sustainable agriculture, marine and maritime research and the bio-economy	☒Secure, clean and efficient energy	☒Smart, green and integrated transport
☒Climate action, resource efficiency and raw materials	☒ Inclusive, innovative and reflective societies	☒Secure societies to protect freedom and security of Europe and its citizens	☐ Others:

Specific **strengths and weaknesses** of the method vis-à-	The method offers a number of benefits, such as the use of an expert panel, controlled anonymous feedback, and development of consensus. The anonymous feedback supports interdependent feedback not based on

<table>
<tr><td>vis the challenge(s) addressed</td><td>personal differences or hierarchies between the involved experts.

The Delphi method is an alternative to the committee process, or one-off questionnaire, although its ability to produce a convergence and consensus of opinion on a given topic should be viewed with caution.
The Delphi method takes more time, than a survey.
It requires a lot of resources (a high number of experts involved in the panel, and is time-consuming).</td></tr>
<tr><td>Timeframe for the application of the method</td><td>The Delphi method needs a one year timeframe at a minimum, (1-2 years).
There are different phases including: survey, data analysis and feedback (next survey round).
Before the process begins it is not possible to predict how many rounds the whole process of the Delphi would need.</td></tr>
<tr><td>Skills required in order to properly apply the method</td><td>
<table>
<tr><th>Skills</th><th>No such skills required</th><th>Basic</th><th>Intermediate</th><th>Advanced</th></tr>
<tr><td>Subject-matter expertise</td><td></td><td></td><td></td><td>X</td></tr>
<tr><td>IT skills</td><td></td><td>X</td><td></td><td></td></tr>
<tr><td>Facilitation skills</td><td></td><td></td><td></td><td>X</td></tr>
<tr><td>Event organisation skills</td><td>X</td><td></td><td></td><td></td></tr>
<tr><td>Project management skills</td><td></td><td></td><td>X</td><td></td></tr>
<tr><td>Other skills:</td><td></td><td></td><td>X</td><td></td></tr>
</table>
</td></tr>
<tr><td>What are the issues of concern that organisers need to take into account when applying the method?</td><td>In order to be part of the panel participants need expert/scientific knowledge or at least tacit knowledge connected to the main topic of the Delphi.</td></tr>
<tr><td>Examples of use of the method</td><td>
<table>
<tr><th>Project name</th><th>Organisation</th><th>Contact persons</th><th>Timeframe</th><th>Web address</th></tr>
<tr><td>NIPSTEP Delphi</td><td>Science and Technology Foresight Center Japan</td><td></td><td>9 Delphi surveys in 40 years</td><td>http://www.nistep.go.jp</td></tr>
<tr><th>Project name</th><th>Organisation</th><th>Contact persons</th><th>Timeframe</th><th>Web address</th></tr>
<tr><td>Delphi 98 Studie zur globalen Entwicklung von Wissenschaft und Technik</td><td>Frauenhofer Institut für Systemtechnik und Innovationsforschung</td><td>Kerstin Cuhls</td><td>1,5 years</td><td>http://www.isi.fraunhofer.de/isi-media/docs/v/de/Delphi98-Ergebnisse.pdf</td></tr>
</table>
</td></tr>
<tr><td>Additional information of relevance (such as historical background, where the method has already been applied, etc.)</td><td>The Delphi method is a survey method of research which aims to structure group opinion and discussion. It was first developed in the 1950s by the Rand Corporation in California as an attempt to eliminate interpersonal interactions as the controlling variables in decision making, as usually happens when groups of experts interact in meetings.

An early study attempted to predict the effects and probable policy implications of a massive atomic bombing of America, while the first test attempted to predict the results of a horse race.

The technique takes its name from the Greek god Apollo Pythios who, as a master of Delphi, was renowned for his ability to predict the future.</td></tr>
</table>

Sources (names of interviewees, links to relevant websites, etc.)	Bowles, Nick (1999): The Delphi technique. Nursing Standard 13, 45, S.32-36. Cuhls, Kerstin; Blind, Knut; Grupp, Hariolf (1998): Delphi ´98 Studie zur globalen Entwicklung von Wissenschaft und Technik. FraunhoferInstitutfürSystemtechnik und Innovationsforschung. Dalkey, Norman C. (1969): The Delphi Method: An experimental Study of Group Opinion. Report prepared for United States Air Force Project RAND. RAND Corporation, Santa Monica. Goodman, Claire M. (1987): The Delphi technique: a critique. In: Journal of Advanced Nursing Nr.12, S.729-734. Häder, Michael (2009): Delphibefragungen. Ein Arbeitsbuch. Wiesbaden: VS Verlag für Sozialwissenschaften. NISTEP (2010): The 9th Science and Technology Foresight – Contribution of Science and Technology to Future Society – The 9th Delphi Survey (Summary). A report on study supported by Special Coordination Funds for Promoting Science and Technology, FY2009. NIPSTEP report No.140.

Author: **Rainer Kuhn**
Organisation: **Dialogik**
Date: **05-19-14**
Revision date: **08-09-14**
Reviewed by: **ARC Fund**

Name of the engagement method (alias)	**22. Democs card game** (also called: Deliberative Meeting Of Citizens)
Short description of the method	Democs is both a card game and a policy-exploration tool that enables small groups of people to engage with complex public policy issues. It aims to help people find out about a topic, express their views, seek common ground with the other participants, and state their preferred policy position.
Long description of the method	Democs is a conversation game developed by the New Economics Foundation (NEF) that helps small groups discuss public policy issues. No speakers or experts are needed, as prepared cards contain all the necessary facts. It works best for six people over two hours, but it is flexible. It is a low intensity process which allows people with no pre-existing knowledge to take part in a relatively short period of time. Usually Democs processes are open to anyone, but sometimes specific groups are sought on particular issues. Individual sessions take 1 to 4 hours. There are already a number of Democs kits on different issues which can be bought or downloaded for free from NEF or Play Decide. Developing a new kit can cost between £5-10,000. Recruiting participants and analysing the results would require additional resources. Democs help participants to take in information and to make that learning meaningful to their context. The process involves a number of stages: 1. The information on the topic is provided on playing cards which are dealt out in two rounds. Each time, people reflect on their cards and choose one or two that they feel are most important. 2. Participants take turns to read them out, explaining why they have chosen them, and then place them on the table. 3. Next participants cluster the cards, with each group representing a key issue relating to the topic. 4. Participants then vote on a range of responses or policy positions and try to create a response that everyone in the group can agree with. Finally participants fill in a short form explaining the results of the discussion and send them back to the organisation running the Democs.
Objective of application of the method	☐ Policy formulation ☐ Programme development ☒ Project definition ☒ Research activity ☐ Others:
Results and products of the method application	Democs was designed to facilitate deliberation in some Citizens' Juries and Deliberative Polls. It has been used in other contexts to enable small groups of people to engage with complex public policy issues. Democs can also be used to help groups plan activities and services for their local area.

Level of stakeholder/public involvement, i.e. objective of public participation through the method's application	☒ Dialogue	☐ Consulting	☐ Involving	☒ Collaborating	☒ Empowering	☐ Direct decision

Engaged stakeholders in the process of method application	Category	**Organiser**	**Direct participant**	**Beneficiaries**
	CSOs	☒	☐	☒
	Policy-makers	☒	☐	☒
	Researchers	☒	☐	☒
	Citizens	☒	☒	☒
	Affected	☐	☐	☐
	Consumers	☐	☐	☐
	Employees	☐	☐	☐
	Users	☐	☐	☐
	Industry	☐	☐	☐

Geographical scope of application (On what level has	☐ International	☐ EU	☐ National	☒ Regional	☐ Local

<table>
<tr><td>the method already been used?)</td><td></td></tr>
<tr><td>Societal challenges the method has been trying to address</td><td>
☒ Health, demographic change and wellbeing
☒ Food security, sustainable agriculture, marine and maritime research and the bio-economy
☐ Secure, clean and efficient energy
☐ Smart, green and integrated transport
☒ Climate action, resource efficiency and raw materials
☒ Inclusive, innovative and reflective societies
☐ Secure societies to protect freedom and security of Europe and its citizens
☐ Others:
</td></tr>
<tr><td>Specific strengths and weaknesses of the method vis-à-vis the challenge(s) addressed</td><td>
Strengths
• Encourages people to form an opinion on complex topics;
• Avoids the passivity that can come with experts lecturing people;
• Provides a safe place that will appeal to inexperienced participants;
• Can be used easily by any group of people, and does not need facilitation;
• The game format helps people to enjoy themselves while they talk.

Weaknesses
• Can work better with a facilitator;
• The group is unlikely to reach a consensus;
• The results are unlikely to be representative;
• It is hard to feed the results of a Democs process into decision-making;
• Democs cannot deliver lengthy deliberation, direct decisions, tangible outcomes or a follow up in itself;
• Democs games can be time consuming to develop and is hence not suitable for urgent issues.
</td></tr>
<tr><td>Timeframe for the application of the method</td><td>Various: one off event could be organised in a month, this could be repeated over a longer period.

Individual sessions can take between 1-4 hours.</td></tr>
<tr><td>Skills required in order to properly apply the method</td><td>
<table>
<tr><th>Skills</th><th>No such skills required</th><th>Basic</th><th>Intermediate</th><th>Advanced</th></tr>
<tr><td>Subject-matter expertise</td><td>X</td><td></td><td></td><td></td></tr>
<tr><td>IT skills</td><td>X</td><td></td><td></td><td></td></tr>
<tr><td>Facilitation skills</td><td>X</td><td></td><td></td><td></td></tr>
<tr><td>Event organisation skills</td><td>X</td><td></td><td></td><td></td></tr>
<tr><td>Project management skills</td><td>X</td><td></td><td></td><td></td></tr>
<tr><td>Other skills:</td><td></td><td></td><td></td><td></td></tr>
</table>
</td></tr>
<tr><td>What are the issues of concern that organisers need to take into account when applying the method?</td><td>
Democs is generally either used in national programmes as one of a set of methods to engage participants, or in grassroots organisations and/or educational settings. Events run by community organisations or civil society have tended to be most successful, offering a new way to engage the public as an alternative to traditional formal political processes. However small scale activities do not allow a significantly sized samples of the population to achieve representative results.

Some programmes have had difficulty in attracting citizens to play Democs games on more complex subjects such as synthetic biology. Citizens might also not have confidence that their opinions will make a difference.

Materials are prepared in advance by experts, and information introduced on complex subject matters can create difficulties. To mitigate this, information is usually presented in bite-sized chunks and should aim to represent a variety of viewpoints.
</td></tr>
</table>

Examples of use of the method	**Project name**	**Organisation**	**Contact persons**	**Timeframe**	**Web address**
	ESNATS Project : Stem Cells to test Pharmacueticals	Ediethnics	info@edinethics.co.uk	Ongoing	http://www.edinethics.co.uk/stem/esnats-democs/esnats-democsgame.htm
	Project name	**Organisation**	**Contact persons**	**Timeframe**	**Web address**
	Public engagement on synthetic biology: development of a 'Democs' tool	ESRC Genomics Policy & Research Forum	Dr Christine Knight christine.knight@ed.ac.uk 0131 651 4743	August and October 2009	http://www.genomicsnetwork.ac.uk/gengage/projects/57
	Project name	**Organisation**	**Contact persons**	**Timeframe**	**Web address**
	BBSRC Bioenergy dialogue	BBSRC	Emma Longridge, Public Dialogue and Accountability Officer emma.longridge@bbsrc.ac.uk Tel: +44 (0)1793 413302	Dec 2013	http://www.bbsrc.ac.uk/society/dialogue/activities/bioenergy-dialogue/bioenergy-dialogue-project.aspx
	Project name	**Organisation**	**Contact persons**	**Timeframe**	**Web address**
	The DECIDE project – Deliberative Citizens Debates in European Science Centres and Museums	At-Bristol, UK, /www.at-bristol.org.uk PARTNERS: ECSITE, Belgium, www.ecsite.eu La Cité des Science et de l'Industrie, France, http://www.cite-sciences.fr/ La Città della Scienza, Italy, http://www.cittadellascienza.it/ Heureka, Finland, http://www.heureka.fi/	Project manager Andrea Bandelli, andrea@bandelli.com	January 2006 and July 2006	http://ec.europa.eu/research/science-society/pdf/portfolio/governance-decide_en.pdf
Additional information of relevance (such as historical background, where the method has already been applied, etc.)	Gaming/Deliberative Democracy: Designed by the New Economics Foundation to provide some of the deliberation of Citizens' Juries and Deliberative Polls, but for a wider use. • There are already a number of Democs kits on different issues which can be bought or downloaded for free: at NEF or Play Decide. • Developing a new kit can cost between £5-10,000. Recruiting participants and analysing the results will also require additional resources.				

Sources (names of interviewees, links to relevant websites, etc.)	Sources: http://participedia.net/en/methods/democs http://participationcompass.org/article/show/145 http://participationcompass.org/article/show/321 http://participationcompass.org/article/show/93 http://www.neweconomics.org/publications/community-empowerment-discussion-toolkit

Author: **Houda Davis**
Organisation: **Involve**
Date: **22/07/14**
Revision date: **19.09.2014**
Reviewed by: **DBT**

Name of the engagement method (alias)	**23. Distributed Dialogue**
Short description of the method	Distributed dialogue is an approach to public engagement that aims to develop ongoing, embedded discussions around a topic; parts of the engagement are often self-organised by groups of participants. The approach aims to engage a wide range of research communities, stakeholders and members of the public to inform strategy and policy development. It often involves a number of dialogue events organised by researchers and other interested parties, held across different geographic areas and through a range of mediums.
Long description of the method	A number of science-based consultations have involved elements of distributed dialogue, whereby stakeholders, citizen groups and others, external to the organiser, set up their own events to discuss a topic. These efforts have been driven by the limitations of more traditional methods, which include: a lack of flexibility and innovation, audiences confined to recruited or well-organised groups; limited numbers of researchers that can be involved; high costs of centrally organized events, and the top-down nature of traditional consultation and engagement methods. A distributed dialogue approach is based on the idea that complex issues need to involve a range of conversations that happen in different spaces. This is intended to give multiple entry points for citizens and other stakeholders to take part. Dialogue which is dispersed across multiple local areas, will ensure that larger numbers of people can engage meaningfully in the debate and will tap into the expertise and experiences of a wide range of people. Common characteristics of a distributed dialogue are : • **Devolved** – this involves connecting with a variety of actors, for example community activists, who will be able to reach citizens at the local level. A clear channel to communicate results will need to be established to feed conversations back into decision making processes and also communicate decision making processes back to participants. • **Well promoted** – it is essential to promote activities to potential participants and wider audiences through mass media. This will help a dialogue process to reach beyond the 'usual suspects' (see Pathways Through Participation for more information on what factors promote or block the engagement of citizens). Engaged participants can then take conversations deeper into communities. • **Collaborative** – distributed dialogue should promote a shift towards a long-term participatory relationship between citizens and decision makers which moved beyond the view of citizens as sources of information. Success will require building the capacity of confidence of citizens to engage with debates. • **Open rather than closed** – a distributed dialogue should be built upon with both top-down engagement and bottom-up approaches. • **Of mixed methodology** – a distributed dialogue is not a new methodology; rather, it is a framework within which decision makers, citizens and other stakeholder can work together to solve complex problems. • **Influential –** the outcome of the dialogue must be linked to decision making cycles. • **Continuous** - dialogue should also move from one-off engagement towards more ongoing conversations (although the overall process usually has an end point). Distributed dialogues often have toolkits that can be used by external groups to develop dialogue events in collaboration with academics and science communicators. Often these decentralised events run in parallel with events organised from the centre. Toolkits usually include guidelines for running events, a set of future scenarios and associated discussion materials. Distributed dialogues are likely to involve a range of methods and approaches, including: • **Deliberative engagement exercises** held across different regions which might invite participants to engage with debates around an issue and formulate workable policy recommendations; • **Devolved activities**, for example through local civil society organisations or schools and supporting these groups by making venues available, providing materials and advice and providing funding; • **Setting up an online forum** to allow a wide range of people to join the conversation; • **Working with existing networks** to promote dialogue involving a wide range of voices in a number of local areas. For a more detailed discussion of distributed dialogue including case studies and a typology of issues see Talking For a Change .

Objective of application of the method	☒ Policy formulation ☐ Programme development ☐ Project definition ☐ Research activity ☐ Others:
Results and products of the method application	• A distributed dialogue can lead to decision making that is informed by a range of perspectives and policies that therefore better meets the needs of ordinary citizens. • Complex issues will have a range of impacts and repercussions at a number of levels and a distributed dialogue approach can allow action at these different levels. • A distributed dialogue can lead to processes in which a wide range of community leaders feel a shared ownership and responsibility of their areas and motivation to take action. • A distributed dialogue could potentially contribute to strengthening and improving representative democracy.

Level of stakeholder/public involvement, i.e. objective of public participation through the method's application	☒ Dialogue ☐ Consulting ☒ Involving ☒ Collaborating ☒ Empowering ☐ Direct decision
Engaged stakeholders in the process of method application	

Category	Organiser	Direct participant	Beneficiaries
CSOs	☐	☐	☐
Policy-makers	☒	☐	☒
Researchers	☒	☒	☒
Citizens	☐	☒	☒
Affected	☐	☒	☐
Consumers	☐	☐	☐
Employees	☐	☐	☐
Users	☐	☐	☐
Industry	☐	☐	☐

Geographical scope of application (On what level has the method already been used?)	☒ International ☒ EU ☒ National ☒ Regional ☐ Local
Societal challenges the method has been trying to address	☒ Health, demographic change and wellbeing ☒ Food security, sustainable agriculture, marine and maritime research and the bio-economy ☒ Secure, clean and efficient energy ☐ Smart, green and integrated transport ☒ Climate action, resource efficiency and raw materials ☐ Inclusive, innovative and reflective societies ☐ Secure societies to protect freedom and security of Europe and its citizens ☐ Others:
Specific **strengths and weaknesses** of the method vis-à-vis the challenge(s) addressed	**Strengths:** • The method presents a new approach to public dialogue; • Ability to engage a large number of researchers, public and stakeholders in different locations; • Reveals useful insights into hopes, concerns and aspirations of those who take part; • Could save money by accessing venues and staff in external organisations. **Weaknesses:** • Encouraging others to run workshop can be time consuming and resource intensive; • Data collected can be inconsistent; • Creating a representative group of participants for distributed workshops is challenging.

Timeframe for the application of the method

It takes more than a year to organise and facilitate.

Skills required in order to properly apply the method

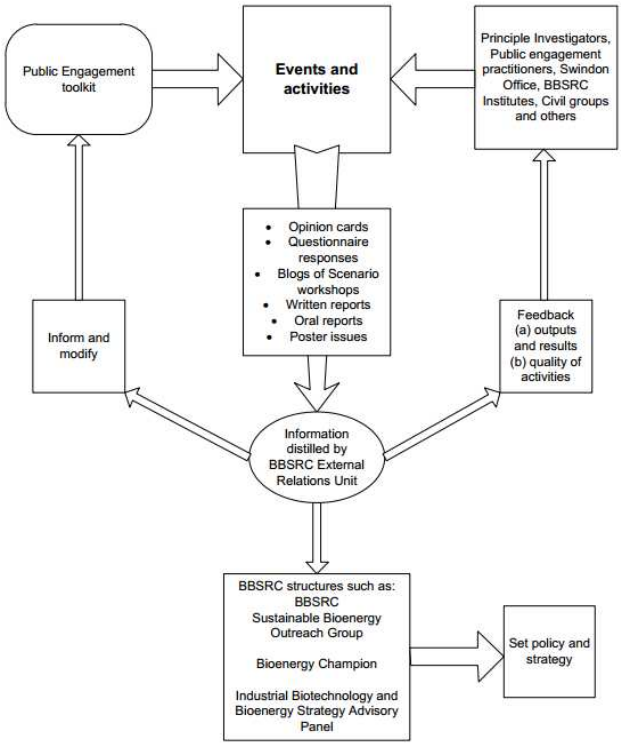
Skills	No such skills required	Basic	Intermediate	Advanced
Subject-matter expertise			X	
IT skills			X	
Facilitation skills				X
Event organisation skills				X
Project management skills				X
Other skills:				

What are the **issues of concern that organisers need to take into account** when applying the method?

- Encouraging and supporting others to run dialogues can be time consuming and expensive;
- Collecting feedback and evaluating projects can be challenging;
- Tapping into existing networks and promoting a dialogue requires a significant time commitment;
- Some institutions will have to change rapidly to a more open way of working that relinquishes control to other organisations and individuals; they will be required to facilitate, support and coordinate far more;
- Decision makers will still need to decide which issues to engage the public in, how and when; strong leadership will be required to hold the framework of deliberative dialogue together;
- Organisers and decision makers may face strong stakeholder groups who pursue narrow perspectives and might try to destroy the process. Therefore, building and sustaining relations and consensus will be essential to the process.

Examples of use of the method

Project name	Organisation	Contact persons	Timeframe	Web address
Bioenergy Dialogue	BBSRC with co-funding from Sciencewise	Marta Entradas, Bioenergy Dialogue Co-ordinator Marta.Entradas@bbsrc.ac.uk	September 2012 - December 2013	http://www.bbsrc.ac.uk/society/dialogue/activities/bioenergy-dialogue/bioenergy-dialogue-project.aspx
Project name	**Organisation**	**Contact persons**	**Timeframe**	**Web address**
World Wide Views	Danish Board of Technology in collaboration with the World Wide Views Alliance	Bjørn Bedsted Project manager and global coordinator +45 3078 5171 bb@tekno.dk	2009, 2012	http://www.wwviews.org/
Project name	**Organisation**	**Contact persons**	**Timeframe**	**Web address**
G1000	Foundation for Future Generations	Min Reuchamps min.reuchamps@uclouvain.be	2010 - 2011	http://www.g1000.org/en/
Project name	**Organisation**	**Contact persons**	**Timeframe**	**Web address**
My Estonia	Network of Estonian Nonprofit Organizations	Network of Estonian Nonprofit Organizations Rotermanni 8 10111 Tallinn Estonia	2009	http://www.minueesti.ee/?lng=en

Additional information of relevance (such as historical background, where the method has already been applied, etc.)	The UK Biotechnology and Biological Social Research Council (BBSRC) created an ongoing, embedded discussion between BBSRC, its research community, the public and other stakeholders that would engage a larger number of researchers and members of the public in a cost effective way. The following is a typical event structure that other organisers could follow when setting up workshops of their own: • An introduction: a brief explanation of the aims of the dialogue project, expected outcomes and overview of the event structure; • The scenarios: Participants are split into groups of 6-8 people, usually with one facilitator (responsible for guiding the discussion) and one researcher (responsible for providing information on bioenergy, if participants ask). They are asked to read one of the scenarios either as a story or a short play. Facilitators use 'cue cards' and 'character cards' to help encourage discussion. The scenarios can be used in different ways and it is up to the facilitator to decide which resources to use and how to use them. A voting-type activity is often used to help clarify the issues (by writing them down) and help participants think about which are the most important to them. This is often the focus of the plenary discussion which is encouraged. • Feedback: 10-15 minutes are recommended to allow participants to fill in the feedback forms. These capture views, demographic information, information about the event and process (i.e. how materials were received) and perceptions about what the impacts of the dialogue might be.  Figure 1: A distributed model for BBSRC public engagement around bioenergy
Sources (names of interviewees, links to relevant websites, etc.)	*Talking For Change*, a publication produced by Involve gives a detailed argument for a distributed approach to public dialogue based on a typology of issues and case studies. See http://www.involve.org.uk/blog/2010/04/06/talking-for-a-change/ http://www.bbsrc.ac.uk/society/dialogue/activities/bioenergy-dialogue/dialogue-materials.aspx http://www.bbsrc.ac.uk/web/FILES/Resources/future-scanarios-toolkit-guidelines.pdf http://www.involve.org.uk/wp-content/uploads/2011/03/Involve2010TalkingforaChange2.pdf

Author: **Houda Davis**
Organisation: **Involve**
Date: **22/07/13**
Revision date: **23/09/14**
Reviewed by: **ITAS**

Name of the engagement method (alias)	**24. E-conference** (Tool)
Short description of the method	An e-conference is a temporary online forum on a specific topic.
Long description of the method	With the development of the internet and the new technologies, nowadays one of the ways of communication and information exchange is by e-conferencing. E-conferencing can be used for business meetings, educational sessions or other types of events. E-conferences are typically carefully planned out, have clear time frames and focus around specific topics. **Software used:** E-conferencing is usually done via the Web. There is the possibility for server-based e-conferencing as well. E-conferencing can also take the form of audio and/or video conversations, message swapping, file sharing and other forms of electronic interaction. All these aim at simulating the experience of being in the same room. E-conferencing can happen in real time, with everyone interacting at once, which is called 'synchronous conferencing". It delivers live streaming audio and video from the multiple participants of the conference. "Asynchronous e-conferencing" is when there is a time lag between messages, posts or information, for example when presentations are pre-recorded and subsequent viewed. The main steps when organizing an e-conference are: 1. Choosing the relevant topic; 2. Choosing a "digital venue" (the platform/software to be used); 3. Choosing time spot which is suitable to the different participants; 4. Appointing the discussion chair person; 5. Contacting speakers and participants; 6. Promoting the e-conference.
Objective of application of the method	☐ Policy formulation ☐ Programme development ☒ Project definition ☐ Research activity ☐ Others:
Results and products of the method application	• Better understanding of the discussed topic; • Networking; • Final synthesis document which discusses and summarises the major themes and findings of the conference discussion.

Level of stakeholder/public involvement, i.e. objective of public participation through the method's application	☒ Dialogue ☒ Consulting ☒ Involving ☒ Collaborating ☐ Empowering ☐ Direct decision
Engaged stakeholders in the process of method application	

Category	Organiser	Direct participant	Beneficiaries
CSOs	☒	☒	☐
Policy-makers	☒	☒	☐
Researchers	☐	☒	☒
Citizens	☐	☒	☐
Affected	☐	☒	☐
Consumers	☐	☐	☐
Employees	☐	☐	☐
Users	☐	☐	☐
Industry	☐	☐	☐

Geographical scope of application (On what level has the method already been used?)	☒ International ☒ EU ☒ National ☒ Regional ☐ Local
Societal challenges the method	☐ Health, demographic ☐ Food security, ☐ Secure, clean and ☐ Smart, green

has been trying to address	change and wellbeing	sustainable agriculture, marine and maritime research and the bio-economy	efficient energy	and integrated transport
	☐ Climate action, resource efficiency and raw materials	☒ Inclusive, innovative and reflective societies	☐ Secure societies to protect freedom and security of Europe and its citizens	☐ Others:

Specific **strengths and weaknesses** of the method vis-à-vis the challenge(s) addressed

Strengths:

- Participants can be located all over the globe;
- It is cheaper to participate in e-conference than to attend a meeting;
- Synergy with face-to-face activities.

Weaknesses:

- Vulnerable to technical breakdowns;
- If the internet connection is not good, key speakers, presenters or guests may get disconnected from the conference, missing or taking with them valuable information.

Timeframe for the application of the method

Depending on the project needs the timeline may vary.

Skills required in order to properly apply the method

Skills	No such skills required	Basic	Intermediate	Advanced
Subject-matter expertise			X	
IT skills				X
Facilitation skills				X
Event organisation skills				X
Project management skills		X		
Other skills:				

What are the **issues of concern that organisers need to take into account** when applying the method?

- Access to appropriate technology by all participants;
- Availability of proper platform/software, which serves as the "venue" of the meeting;
- Language barriers;
- Different paradigms for sharing information.

Examples of use of the method

Project name	Organisation	Contact persons	Timeframe	Web address
Bled eConference	The eCenter of University of Maribor Faculty of Organizational Sciences, Slovenia	Petra Gorjanc	1988 to date	http://bledconference.org/index.php/eConference/2014
Project name	**Organisation**	**Contact persons**	**Timeframe**	**Web address**
E4 conference (Engendering Empowerment: Education and Equality)	UNGEI		5 weeks, between April 12th and May 14th	http://www.e4conference.org/e4e
Project name	**Organisation**	**Contact persons**	**Timeframe**	**Web address**

	World E-Conferences (Series I) in Engineering - Chemistry - Energy - Computer Science - Business, Management & Accounting - Medicine & Dentistry - Pharmacology - Veterinary Sciences - Education - Social Science	World Standard Organization		December 25, 2013, Amsterdam	http://conferences.standard.org/
Additional information of relevance (such as historical background, where the method has already been applied, etc.)	The origin of e-conferencing can be traced back to the 1960s with the creation of PLATO by the University of Illinois. This self-contained system used a classroom of computers physically connected to one main computer or mainframe. The computers were then allowed to communicate with each other. The availability of the Internet in the 1990s made such systems obsolete but allowed people to use similar concepts to connect multiple computers wirelessly through the Internet.				
Sources (names of interviewees, links to relevant websites, etc.)	**Sources:** http://www.bvsde.paho.org/bvsacd/wisirc/vreke.pdf				

Author: **Blagovesta Chonkova**
Organisation: **ARC Fund**
Date:
Revision date: **18.09.2014**
Reviewed by: **DBT**

Name of the engagement method (alias)	**25. Focus Groups** (Tool)
Short description of the method	The focus group is a qualitative method which is used to determine the preferences of people or to evaluate strategies and concepts. The method has originally been designed for market research. Participants are selected according to certain characteristics in common that relate to the research topic and are grouped into 8-10 people. The method is often used to generate or evaluate hypotheses and ideas.
Long description of the method	The focus group is a method similar to needs assessment surveys and is designed to help learning more about community and groups preferences and opinions. The participants' responses to a certain topic are typically spoken, qualitative and open-ended, therefore the information is open to more interpretation. The answers have more depth, nuance, and variety. Group interactions and non-verbal communication can also be observed. The focus groups can reveal what the participants are really thinking and feeling, even though their responses may be harder to score on a scale. There are 3 main characteristics of the focus groups: - The group focuses on a specific topic; - There is a facilitator (or trained leader) and his/her job is to keep the group focused on discussing the specific topic; - There is some careful planning behind the group's composition and the group discussion in order to create a nonthreatening environment, in which people are free to talk openly. Members are actively encouraged to express their own opinions, and also respond to other members, as well as to questions posed by the leader. The focus groups are structured and directed, but in the same time expressive, therefore they can gather a lot of in-depth information in a relatively short time .The method is often used to generate or evaluate hypotheses and ideas and the information can be used in various fields. In the end of the focus group discussion, the information should be written, summarized and eventually put in a report.
Objective of application of the method	☐ Policy formulation ☒ Programme development ☒ Project definition ☒ Research activity ☐ Others:
Results and products of the method application	- A summary of the group results; - Research data; - Reliable knowledge on people's preferences with regard to the technologies, risks and chances, problem solutions of the specific research topic; - The method allows direct observation of the participants' reactions during the focus group session, which adds to the data collected via the method.

Level of stakeholder/public involvement, i.e. objective of public participation through the method's application	☒ Dialogue	☐ Consulting	☐ Involving	☐ Collaborating	☐ Empowering ☐ Direct decision
Engaged stakeholders in the process of method application	Category	**Organiser**	**Direct participant**	**Beneficiaries**	
	CSOs	☒	☒	☒	
	Policy-makers	☐	☐	☒	
	Researchers	☒	☐	☒	
	Citizens	☐	☒	☐	
	Affected	☐	☒	☐	
	Consumers	☐	☒	☐	
	Employees	☐	☒	☐	
	Users	☐	☒	☐	
	Industry	☒	☐	☒	
Geographical scope of application (On what level has	☐ International	☒ EU	☒ National	☒ Regional	☒ Local

<table>
<tr><td>the method already been used?)</td><td></td></tr>
<tr><td>Societal challenges the method has been trying to address</td><td>☒ Health, demographic change and wellbeing
☒ Food security, sustainable agriculture, marine and maritime research and the bio-economy
☒ Secure, clean and efficient energy
☒ Smart, green and integrated transport
☒ Climate action, resource efficiency and raw materials
☒ Inclusive, innovative and reflective societies
☒ Secure societies to protect freedom and security of Europe and its citizens
☒ Others:</td></tr>
<tr><td>Specific strengths and weaknesses of the method vis-à-vis the challenge(s) addressed</td><td>Strengths:
More interactive environment and better flow of ideas than the individual interviews;
This method can produce deeper insights on the participants' attitudes, ideas and preferences than other methods as it allows for direct observation of the participants' immediate reactions as well as more in-depth discussions on the research topic.
Weaknesses:
Due to the small number of participants, the results are not representative for the target group.</td></tr>
<tr><td>Timeframe for the application of the method</td><td>Sessions should last around 1.5 - 2 hours.</td></tr>
<tr><td>Skills required in order to properly apply the method</td><td>
<table>
<tr><th>Skills</th><th>No such skills required</th><th>Basic</th><th>Intermediate</th><th>Advanced</th></tr>
<tr><td>Subject-matter expertise</td><td></td><td></td><td></td><td>X</td></tr>
<tr><td>IT skills</td><td>X</td><td></td><td></td><td></td></tr>
<tr><td>Facilitation skills</td><td></td><td></td><td></td><td>X</td></tr>
<tr><td>Event organisation skills</td><td></td><td></td><td>X</td><td></td></tr>
<tr><td>Project management skills</td><td></td><td></td><td>X</td><td></td></tr>
<tr><td>Other skills:</td><td></td><td></td><td></td><td></td></tr>
</table>
</td></tr>
<tr><td>What are the issues of concern that organisers need to take into account when applying the method?</td><td>The individual characteristics of the participants can present challenges for the moderator/facilitator.</td></tr>
<tr><td>Examples of use of the method</td><td>
<table>
<tr><th>Project name</th><th>Organisation</th><th>Contact persons</th><th>Timeframe</th><th>Web address</th></tr>
<tr><td>Focus groups & IDIs</td><td>Focus Groups of Cleveland</td><td>Montina Gilson</td><td></td><td>http://focusgroupsofcleveland.com/focus-groups-and-idis</td></tr>
<tr><th>Project name</th><th>Organisation</th><th>Contact persons</th><th>Timeframe</th><th>Web address</th></tr>
<tr><td>Focus Group on Smart Water Management</td><td>Telecommunication Standardization Sector (ITU-T)</td><td>Venkatesen Mauree</td><td>Geneva, 4-7 June 2013</td><td>http://www.itu.int/en/ITU-T/focusgroups/swm/Pages/default.aspx</td></tr>
<tr><th>Project name</th><th>Organisation</th><th>Contact persons</th><th>Timeframe</th><th>Web address</th></tr>
</table>
</td></tr>
</table>

	Focus Group on Bridging the Gap: From Innovation to Standards	Telecommunication Standardization Sector (ITU-T)	Ajay Ranjan Mishra	6th of May 2014	http://www.itu.int/en/ITU-T/focusgroups/innovation/Pages/default.aspx
	Project name	**Organisation**	**Contact persons**	**Timeframe**	**Web address**
	Librarian Focus Group	The American Geophysical Union		4th of February 2014	http://www.sspnet.org/events/librarian-focus-groups/
Additional information of relevance (such as historical background, where the method has already been applied, etc.)					
Sources (names of interviewees, links to relevant websites, etc.)	Sources: http://ctb.ku.edu/en/table-of-contents/assessment/assessing-community-needs-and-resources/conduct-focus-groups/main http://www.marketingresearch.org/focus-groups http://assessment.aas.duke.edu/documents/How_to_Conduct_a_Focus_Group.pdf http://www.nngroup.com/articles/focus-groups/ http://www.publicengagement.ac.uk/do-it/techniquesapproaches/focus-groups				

Author: **Blagovesta Chonkova**
Organisation: **ARC Fund**
Date:
Revision date: **24.09.2014**
Reviewed by: **ITAS**

Name of the engagement method (alias)	**26. Future Panel**
Short description of the method	A future panel includes all political parties within a national parliament and creates a collaborative framework between politicians, experts and CSO´s in the form of a temporary committee. The goal is to create a space for the politicians to debate freely and bring knowledge from societal actors and experts on a societal challenge together. This will open a venue for reflection, far-sightedness and visions for the parliament in a specific field.
Long description of the method	At a future panel, the parliament appoints up to 20 MPs which, over a period of 2-4 years, is charged with carrying out a long-term, cross-sectorial, cross-party project. The future panel arranges from 3 to 4 public hearings, two or more seminars, and several hearings on the societal challenge, involving experts and CSO´s in knowledge building, planning and performing. The project creates an overview of the political tasks connected with the social or political challenge. This process requires visionary thinking that crosses the boundaries of different sectors, spheres of competence, and professional disciplines. **Project management** The project management team consists of a project manager, a project assistant, a secretary and an information project manager. The management team records the hearings and gathers up the discussions. This provides for a consultation document for the future panel's concluding debates. **The future panel** The parliament appoints up to 20 MPs from all political parties and selected parliamentary committees for the future panel. The panel is involved in organizing the project, participates in seminars and hearings, and has a central role in the formulation of strategies and political action proposals. **Steering group** The steering group comprises some of the key players among experts and CSO´s within the subject area, and assists the management team in collaborating with the future panel, organising hearings, and in the collation and the presentation of results. **Introductory seminar** At the introductory meeting, the steering group and future panel create a draft for the coming project and decide the general content for the four hearings. **Hearings** At the four hearings, the politicians serving on the future panel question a panel of experts and CSO´s. Two future panel chairmen are appointed for each hearing. Immediately after each hearing, the future panel, the steering group, and the project management meet to evaluate what was learned at the hearing, and use this insight in order to plan the next hearing. A newsletter is published after each hearing and sent to parliament and the public. There are also midterm seminars to organize the hearings. **Concluding seminar** Following the four hearings, the future panel, the steering group and the management team organise a concluding seminar to produce a joint report on the political challenges addressed at the hearings.
Objective of application of the method	☒ Policy formulation ☒ Programme development ☐ Project definition ☐ Research activity ☐ Others:
Results and products of the method application	**Direct results** The results reflect the discussions between the politicians. The future panel presents robust solutions that have undergone a thorough calculation and review by several institutions. The involved politicians and the actors from the steering group produce well-balanced ideas that are realistic and ambitious. There is a close dialogue between the steering group and the MP's in the future panel. The work of the future panel is documented in a report that is published. The report can form basis for the debate in the parliamentary committees. There is also a report produced from each hearing containing a summary, a transcript from the hearing and written presentations by the hearing's experts. Policy briefs/

	newsletters are produced during the process. The reports are distributed to MPs, hearing participants, government ministries, research institutions, interest groups and other interested parties. **Indirect results** The results can form the basis for more sustainable solutions and be relevant for the parliament, the government, and legislature's committees. In addition to the hearings, other activities can be arranged for concerned citizens, the press, experts and other interested parties. This can lead to greater public awareness about the particular problem. A future panel allows for discussions, disagreements and new turnings to find a common ground for important challenges in the future. The process opens the door for the involvement of politicians and representatives from different actors within the field of work, who have different objectives, opinions and calculations.

Level of stakeholder/public involvement, i.e. objective of public participation through the method's application	☒ Dialogue ☒ Consulting ☒ Involving ☒ Collaborating ☒ Empowering ☒ Direct decision

Engaged stakeholders in the process of method application

Category	Organiser	Direct participant	Beneficiaries
CSOs	☐	☒	☒
Policy-makers	☒	☒	☒
Researchers	☐	☒	☒
Citizens	☐	☐	☐
Affected	☐	☐	☐
Consumers	☐	☐	☒
Employees	☐	☐	☐
Users	☐	☐	☐
Industry	☐	☒	☒

Geographical scope of application (On what level has the method already been used?)	☐ International	☐ EU	☒ National	☐ Regional ☐ Local
Societal challenges the method has been trying to address	☒ Health, demographic change and wellbeing	☐ Food security, sustainable agriculture, marine and maritime research and the bio-economy	☒ Secure, clean and efficient energy	☐ Smart, green and integrated transport
	☐ Climate action, resource efficiency and raw materials	☐ Inclusive, innovative and reflective societies	☐ Secure societies to protect freedom and security of Europe and its citizens	☐ Others:
Specific **strengths and weaknesses** of the method vis-à-vis the challenge(s) addressed	**Strengths** The work of the future panel can be compared to the work of a commission. This secures politically relevant work as the future panel contributes to an ongoing discussion between politicians and other interested parties. This allows project ideas and suggestions to emerge in the public debate during the course of the project.			

The method is well suited to far-reaching problems. The subject theme should also require central political initiatives and action.

With the future panel method, the policy-makers get the chance to have a serious dialogue with experts and CSO´s engaged in the societal challenge at stake. This process prevents lobbying and biased agendas, as the politicians get a thorough knowledge of the subjects. With the future panel, the politicians get the possibility to research and collaborate with the experts and stakeholders within the framework of a trustworthy relationship.

The future panel opens up an honest and broad discussion with the possibility to weigh different suggestions, and also the pros and cons of each.

The future panel organises both hearings, open for the public, but also seminars and meetings behind closed doors with only experts and stakeholders. This provides the politicians with broad knowledge from all parts of society.

Weaknesses

It is only relevant to form a future panel if there is political agreement, as all political parties in parliament have to participate for the future panel to happen. The process is very time consuming, expensive and requires a common understanding and commitment prior to the activities and challenges.

The method generates ideas on a general political level, which are important for new political activities, legislative processes and research programs. The level of detail in this model is not very high. Other methods can give more detailed results.

Timeframe for the application of the method

The timeframe can change during the project and the following timeline is to be regarded as a loose guide. It is possible to arrange the hearings and seminars in a different order and to have more seminars.

Month 1: Introduction seminar for future panel and steering group.

Month 4: First hearing.

Month 9: Seminar with the future panel and steering group.

Month 13: Second hearing.

Month 16: Third hearing.

Month 19: Forth hearing.

Month 21: Concluding seminar.

Month 24: Final report.

Skills required in order to properly apply the method

Skills	No such skills required	Basic	Intermediate	Advanced
Subject-matter expertise			X	
IT skills		X		
Facilitation skills				X
Event organisation skills				X
Project management skills				X
Other skills:				

<table>
<tr><td>What are the issues of concern that organisers need to take into account when applying the method?</td><td>It is time consuming to implement the future panel. You need commitment from all political parties in parliament before you can start the actual future panel. This part can take several months. There is many sub elements in the method as seminars, hearings and meetings. All these elements require preparation before implementation and thorough work when finishing the process.

It can be challenging to have different future panels overlapping as they require intensive commitment from all parties.

The theme of the future panel has tended to be of great societal importance and with a broad political interest.</td></tr>
<tr><td>Examples of use of the method</td><td>
<table>
<tr><th>Project name</th><th>Organisation</th><th>Contact persons</th><th>Timeframe</th><th>Web address</th></tr>
<tr><td>The aging population</td><td>The Danish Board of Technology</td><td>Ida E. Andersen</td><td>2001-2006</td><td>http://www.tekno.dk/subpage.php3?article=483&toppic=kategori11&language=uk</td></tr>
<tr><th>Project name</th><th>Organisation</th><th>Contact persons</th><th>Timeframe</th><th>Web address</th></tr>
<tr><td>The future Danish energy system</td><td>The Danish Board of Technology</td><td>Gy Larsen</td><td>2004-2007</td><td>http://www.tekno.dk/subpage.php3?article=1085&toppic=kategori11&language=uk</td></tr>
</table>
</td></tr>
<tr><td>Additional information of relevance (such as historical background, where the method has already been applied, etc.)</td><td>The future panel contributes with a new working method for the politicians in the parliament.

They can get thorough and nuanced knowledge from experts and CSO´s on a specific topic. They create knowledge and solutions on a complex societal challenge on a systemic basis.

The future panel can be seen as a temporary parliamentary committee.

The future panel is an attempt for the politicians to do more thorough work. It can be viewed as a development of the hearing with more preparation and follow-through of work.</td></tr>
<tr><td>Sources (names of interviewees, links to relevant websites, etc.)</td><td>http://www.tekno.dk/subpage.php3?article=815&toppic=kategori12&language=uk

Gy Larsen. Project Manager, DBT

Lars Klüver. Director, DBT</td></tr>
</table>

Author: **Cecilie Neumann Hansen**
Organisation: **The Danish Board of Technology**
Date:
Revision date: **25.09.2014**
Reviewed by: **ITAS**

Name of the engagement method (alias)	**27. Future Search**
Short description of the method	The purpose of the method is to encourage participants to think about a problem or conflict in a new way. Participants who come from various stakeholder groups must abandon their usual rhetoric and open their minds to new ideas and action proposals which can gain wide support. The aim of the conference is to find a common basis which all the participants can endorse. Participants do not seek to solve their disagreements. These are "set aside" so that the time can be spent on constructive and insightful debate. Suitable for locally embedded conflicts in which the problem, the key players and decision makers are identified.
Long description of the method	The future search conference lasts for 3 days. The conference starts on the afternoon of the first day, continues the whole next day and ends on the third day at noon. A feature of the conference is that 2 days' work is fitted into 3 days to enable the participants to rest between the sessions. The conference usually brings together 60-80 participants (it could also be done with hundreds of participants in parallel rooms) from different stakeholder groups. In the ideal case, these would be represented by equal numbers of participants so that throughout the conference the participants can switch between peer groups and mixed groups. Basically, there are three major types of stakeholders: 1. persons with professional knowledge and information; 2. persons with authority and resources for action; 3. persons who are or will be influenced by the conference and its results. The conference programme comprises 5 phases, each with its own separate task: **1. Recalling the past** In the first phase, the participants establish a personal relation with the given theme and reflect upon the most important local and global historical milestones in relation to the problem. The aim of the discussions and subsequent milestone reviews is to establish a common experience of the past among the participants and thereby create the stepping stone for the next phase. **2. Examining the present** The second phase is a mind mapping session in which all participants contribute. The purpose is to map current trends influencing the conference theme. Each participant indicates the seven trends they deem the most important. Thus, participants assess the trends and choose how they should be prioritized. By the end of the second phase, each participant has thus contributed in the production of a collective consensus regarding the problem. **3. Create ideal future scenarios** In the third phase, the groups create future scenarios. They ought to be realistic, not utopic, and only concerning trends the group members can come to an agreement about. Participants then discuss the positive aspects of current behavior in terms of the specific scenarios – as well as areas that need to be improved. **4. Identify common visions or projects people have jointly agreed to work on.** The next step is for mixed groups of participants to consider a desired future scenario in relation to the conference topic. The groups imagine how the situation will look like in ten years. The task involves imagining which remedies to use to create the perfect future scenario as well as imagining the barriers and challenges that must be overcome to reach this future goal. The groups continue working on their visions and may convert them into common projects. **5. Prepare action plans** On the third and last day, participants are asked to write down which of the suggestions from the previous day they wish to continue working on. They must differentiate between short- and long-term initiatives. Participants jointly discuss possible initiatives and actions relevant and possible.
Objective of application of the method	☒ Policy formulation ☐ Programme development ☐ Project definition ☐ Research activity ☐ Others:
Results and products of the method application	**Direct result:** Using a carefully orchestrated process, the conference results are written down on flipcharts, timelines and mind maps. The conference ends with each group presenting 1 or 2 proposals for a common platform, which is then discussed in a plenum. The common features and common understanding of the plenum represent the conference result. **Indirect result:**

	The conference sets the basis for a strong network of the main actors and stakeholders in a certain field.
Level of stakeholder/public involvement, i.e. objective of public participation through the method's application	☒ Dialogue ☒ Consulting ☒ Involving ☒ Collaborating ☒ Empowering ☐ Direct decision

Engaged stakeholders in the process of method application

Category	Organiser	Direct participant	Beneficiaries
CSOs	☐	☒	☒
Policy-makers	☐	☒	☒
Researchers	☒	☒	☒
Citizens	☐	☐	☐
Affected	☐	☐	☐
Consumers	☐	☐	☐
Employees	☐	☐	☐
Users	☐	☐	☐
Industry	☐	☒	☒

Geographical scope of application (On what level has the method already been used?)	☐ International	☐ EU	☒ National	☒ Regional ☐ Local
Societal challenges the method has been trying to address	☒ Health, demographic change and wellbeing	☐ Food security, sustainable agriculture, marine and maritime research and the bio-economy	☐ Secure, clean and efficient energy	☒ Smart, green and integrated transport
	☒ Climate action, resource efficiency and raw materials	☐ Inclusive, innovative and reflective societies	☐ Secure societies to protect freedom and security of Europe and its citizens	☐ Others:
Specific **strengths and weaknesses** of the method vis-à-vis the challenge(s) addressed	**Strengths:** The method is suitable for defining common goals and possible courses of action for a society or a particular local problem. It is particularly suitable for controversial and conflict-ridden topics where disagreements are "set aside" in order to focus on other aspects of the topic. The conflicting parts meet face to face for three days and get to know each other as persons, not only as representatives for certain interests. Therefore, the participants create a strong network being useful after the conference. **Weaknesses:** Might be difficult to get the key actors dedicate three days in a row for a conference. The relevance of the conference decreases if a central player refuses to take part.			
Timeframe for the application of the method	It is most thoroughly done over a period of 6 months. It can be done in 4 months as well. Month 1: The idea Month 1-6: Planning, i.e. mapping and invitation of stakeholders, programme, facilities, catering Month 6: Three day's conference			

Skills required in order to properly apply the method

Skills	No such skills required	Basic	Intermediate	Advanced
Subject-matter expertise			**X**	
IT skills	**X**			

	Facilitation skills				X
	Event organisation skills			X	
	Project management skills				**X**
	Other skills:				

What are the issues of concern that organisers need to take into account when applying the method?

It is important that all key stakeholders and decision makers are present at the conference. Therefore the method is mainly suitable for locally embedded conflicts, where it is possible to identify local decision makers and stakeholders as key players in the conflict.

Experience has shown that invitation of more persons from each group of stakeholders is useful, because participants might unsubscribe before the conference.

Examples of use of the method

Project name	Organisation	Contact persons	Timeframe	Web address
Grønland: The Living Ressources	The Danish Board of Technology	Søren Gram	2004	
Project name	**Organisation**	**Contact persons**	**Timeframe**	**Web address**
Traffic in the Major Cities	The Danish Board of Technology	Søren Gram	1998	
Project name	**Organisation**	**Contact persons**	**Timeframe**	**Web address**
I Dream of Peace - A Future Search for the Children of Southern Sudan	A UNICEF-sponsored effort called Operation Lifeline Sudan		1999	https://www.futuresearch.net/method/applications/world/africa/dream_of_peace.cfm
Project name	**Organisation**	**Contact persons**	**Timeframe**	**Web address**
Future Search in the Context of Public Health	Milwaukee Common Ground, USA		1994, 1995, and 2000	https://www.futuresearch.net/method/applications/world/north_america/milwaukee.cfm

Additional information of relevance (such as historical background, where the method has already been applied, etc.)

The method was invented in The United States (see the manual "Future search" written by Weisbord and Janoff (1995)). In 1992 the first public Future Search Learning Conference for 72 people demonstrated widespread interest in the method.

Sources (names of interviewees, links to relevant websites, etc.)

Søren Gram, senior project manager, The Danish Board of Technology, sg@tekno.dk

http://www.tekno.dk/subpage.php3?article=1235&toppic=kategori12&language=uk#search

The Danish Board of Technology: "Storbyens trafik - et ønske om politisk koordinering". In Fra rådet til tinget, no. 115, May 1998.

Marvin R. Weisbord and Sandra Janoff (1995): Future Search. An action guide to finding sommon ground in organizations and communities. San Francisco: Berrett-Koehler Publishers

http://www.futuresearch.net/

Author: **Siri Dencker**
Organisation: **The Danish Board of Technology**
Date: **31-07-2014**
Revision date:
Reviewed by: **ARC Fund**

Name of the engagement method (alias)	**28. Future workshop**
Short description of the method (max 300 characters)	A Future Workshop is a method for planning and forming a vision of the future in a specific geographical area. Workshops help define aims and identify problems by local stakeholders.
Long description of the method	A Future Workshop is a method for planning and forming a vision of the future in a specific geographical area. Workshops help define aims and identify problems by local stakeholders. The purpose of a future workshop method is to formulate concrete solutions and action proposals with a group of participants based on their own experiences. Future Workshops are usually held on a local issue or challenge or in connection with the planning of a local action concerning a particular development. A Future Workshop usually involves 15-25 participants. Usually these workshops are open to all with some targeted selection. The aim is to involve participants who are directly affected by a problem and are in a position to remedy it. Future workshops incorporate a three phase process, sometimes preceded by presentations which outline the workshop objectives: • Critical analysis phase involving detailed analysis of the situation/technology; • Visionary phase where future visions are built upon the analysis in the first phase; these are then subject to a reality check; • Implementation phase where the visions are turned into actions. Following the completion of the workshop, the action plan should be monitored and if necessary adjusted with more workshops planned. A future workshop can last from a few hours to a few days. One of the most common model involves a one day workshop where the critical phase takes place in the morning, the visionary phase takes place in the early afternoon, and the implementation takes place in the second half of the afternoon.
Objective of application of the method	☐ Policy formulation ☐ Programme development ☐ Project definition ☒Research activity ☐ Others:
Results and products of the method application	The future workshop method is particularly suited to assessing technological issues at the local level. The results of a future workshop may be included in a report, but most importantly they should lead to action and /or the creation of a new interest group. The idea is to work towards action proposals the participants can implement themselves.

Level of stakeholder/public involvement, i.e. objective of public participation through the method's application	☐ Dialogue	☐ Consulting	☒ Involving	☒ Collaborating	☐ Empowering ☐ Direct decision

Engaged stakeholders in the process of method application	Category	**Organiser**	**Direct participant**	**Beneficiaries**
	CSOs	☐	☒	☐
	Policy-makers	☒	☒	☒
	Researchers	☒	☐	☒
	Citizens	☐	☐	☒
	Affected	☐	☒	☒
	Consumers	☐	☐	☐
	Employees	☐	☐	☐
	Users	☐	☐	☐
	Industry	☐	☐	☒

Geographical scope of	☐ International	☐ EU	☐ National	☒ Regional	☒ Local

<table>
<tr><td>application (On what level has the method already been used?)</td><td></td></tr>
<tr><td>Societal challenges the method has been trying to address</td><td>☒ Health, demographic change and wellbeing
☐ Food security, sustainable agriculture, marine and maritime research and the bio-economy
☒ Secure, clean and efficient energy
☒ Smart, green and integrated transport
☐ Climate action, resource efficiency and raw materials
☐ Inclusive, innovative and reflective societies
☐ Secure societies to protect freedom and security of Europe and its citizens
☐ Others:</td></tr>
<tr><td>Specific strengths and weaknesses of the method vis-à-vis the challenge(s) addressed</td><td>Strengths:
Can be helpful in integrating a citizen-led perspective into local decision making;
Can help participants overcome their own bias in relation to a specific technology and encourage them to hypothesise future forms and uses of technology;
Can empower usually marginalised groups.
Weaknesses:
Sometimes group dynamics and strong interests can affect the outcome of a deliberative process;
Participants may spend too much time on one issue, for example the technology, failing to fully evaluate social, economic and political implications of associated sector changes;
Workshop evaluations have a tendency to overestimate potential for action.</td></tr>
<tr><td>Timeframe for the application of the method</td><td>From 1 to 3 months planning. The workshops themselves are likely to be held over 1-2 days.</td></tr>
<tr><td>Skills required in order to properly apply the method</td><td>
<table>
<tr><th>Skills</th><th>No such skills required</th><th>Basic</th><th>Intermediate</th><th>Advanced</th></tr>
<tr><td>Subject-matter expertise</td><td></td><td></td><td>X</td><td></td></tr>
<tr><td>IT skills</td><td></td><td>X</td><td></td><td></td></tr>
<tr><td>Facilitation skills</td><td></td><td></td><td></td><td>X</td></tr>
<tr><td>Event organisation skills</td><td></td><td></td><td></td><td>X</td></tr>
<tr><td>Project management skills</td><td></td><td></td><td></td><td>X</td></tr>
<tr><td>Other skills:</td><td></td><td></td><td></td><td></td></tr>
</table>
</td></tr>
<tr><td>What are the issues of concern that organisers need to take into account when applying the method?</td><td>Future Workshops are not suitable for narrow issues;
Additionally, organising participants from across the community can be difficult, because it requires a good amount of planning to ensure diversity of participants and a rewarding workshop session;
Group dynamics can affect the outcome of the deliberative process. For instance, different exercises will have similar results.</td></tr>
<tr><td>Examples of use of the method</td><td>
<table>
<tr><th>Project name</th><th>Organisation</th><th>Contact persons</th><th>Timeframe</th><th>Web address</th></tr>
<tr><td>Technological solutions for small communities</td><td>Danish Board of Technology</td><td>Marie-Louise Jørgensen</td><td>2002</td><td>http://www.tekno.dk/subpage.php3?article=1235&toppic=kategori12&language=uk#future</td></tr>
</table>
</td></tr>
</table>

Additional information of relevance (such as historical background, where the method has already been applied, etc.)	[The Heino Apel article could be used for further background information] "*The future workshop is a futures technique developed by Robert Jungk, Ruediger Lutz and Norbert R. Muellert in the 1970s. It enables a group of people to develop new ideas or solutions of social problems. A future workshop is particularly suitable for participants who have little experience with processes of creative decision making, for example children or youth. However it requires an intensive preparation and support by trained moderators. It is used in spatial planning to involve citizens in the planning process.*" "Future Workshop - Wikipedia, the Free Encyclopedia." Accessed September 18, 2014. http://en.wikipedia.org/wiki/Future_workshop.] See also the Engage2020 Scenario Workshop fact sheet. The scenario workshop developed by the Danish Board of Technology is a further development of the future workshop. It follows the same 3 basic phases: the critical analysis phase, the visionary phase and the implementation phase. The main difference between a scenario workshop and a Futures Workshop is that it is based on scenarios of future technological development in the area. Scenarios are formulated in advance. Participants' own experiences and criticism of these scenarios form the basis for future visions and action plans. http://www.tekno.dk/subpage.php3?article=1235&toppic=kategori12&language=uk#scenario
Sources (names of interviewees, links to relevant websites, etc.)	http://www.tekno.dk/subpage.php3?article=1235&toppic=kategori12&language=uk http://participedia.net/en/methods/scenario-workshop [sw?] http://www.die-bonn.de/esprid/dokumente/doc-2004/apel04_02.pdf Some further info on: http://en.wikipedia.org/wiki/Future_workshop

Author: **Houda Davis**
Organisation: **Involve**
Date: **22/07/14**
Revision date: **18/09/14**
Reviewed by: **University of Groningen**

Name of the engagement method (alias)	**29. Group Delphi** (also called: expert Delphi, expert workshop; in German: Gruppendelphi)
Short description of the method	A group Delphi is a variation on the conventional Delphi exercise which is designed to consolidate expert opinion in a short time period. The Delphi technique, of repetitious questionnaires and feeding results back into the process, is exploited to encourage consensus about particular issues. What is typical for the Group Delphi is that the aspect of anonymity is given up, scaling is employed to define deviant opinions, and the feedback process is conducted as a conference.
Long description of the method	Delphi has been used extensively to resolve uncertainty about future conditions. Besides technological event and trend forecasting, the Delphi process has been used to evaluate budgets, define policy options, expose hidden agendas, and assess the significance of past events. The Group Delphi is a variation on the conventional Delphi exercise which is designed to consolidate expert opinion in a short time period. In the Group Delphi, the feedback process is conducted as a conference. The Group Delphi process is efficient at bringing about consensus because of its two-tiered structure. Participants need expert/scientific knowledge in the field discussed at the Delphi workshop. All participants should have a more or less equal status, which is dependent upon careful recruitment. Experts are initially brought together in a plenary where the process is introduced and questions are answered. Next they are divided into several small groups and given the questionnaire. Each small group works in a private room and is instructed to try to reach consensus on each question, although majority/minority votes are allowed in the first round. The plenary is reassembled and the moderator presides, systematically reviewing the questionnaire results, identifying deviations, and asking the subgroups to justify their positions. The expert panels are asked to use known cause-effect relationships to extrapolate conditions of likely scenarios within scopes of predefined epistemological frameworks. The moderator permits discussion when it may be helpful in having the group reach consensus, but when it is clear that two camps are firmly established, the moderator redirects the group focus to the next item. In the second round, the membership of the small groups is shuffled and the questionnaire can be redesigned during the plenary. The results of the second round are assessed as before, and the plenary review process is repeated. This tends to move much faster as, on many points, consensus is achieved in the first round.
Objective of application of the method	☒ Policy formulation ☒ Programme development ☒ Project definition ☒ Research activity ☐ Others:
Results and products of the method application	- Consensual expert judgements or consent about a dissent, which marks future research needs; - Expert judgements about future action and developments; - All arguments for the different judgements are captured in the process.

Level of stakeholder/public involvement, i.e. objective of public participation through the method's application	☐ Dialogue	☒ Consulting	☐ Involving	☐ Collaborating	☐ Empowering	☐ Direct decision

Engaged stakeholders in the process of method application

Category	**Organiser**	**Direct participant**	**Beneficiaries**
CSOs	☒	☒	☒
Policy-makers	☒	☐	☒
Researchers	☒	☒	☒
Citizens	☐	☐	☒
Affected	☐	☐	☒
Consumers	☐	☐	☒
Employees	☐	☐	☒
Users	☐	☐	☒
Industry	☒	☒	☒

Geographical scope of application (On what level has	☒ International	☒ EU	☒ National	☒ Regional	☒ Local

the method already been used?)	
Societal challenges the method has been trying to address	☒ Health, demographic change and wellbeing ☒ Food security, sustainable agriculture, marine and maritime research and the bio-economy ☒ Secure, clean and efficient energy ☒ Smart, green and integrated transport ☒ Climate action, resource efficiency and raw materials ☒ Inclusive, innovative and reflective societies ☒ Secure societies to protect freedom and security of Europe and its citizens ☐ Others:
Specific **strengths and weaknesses** of the method vis-à-vis the challenge(s) addressed	There are three major advantages to having face-to-face communication instead of a conventional feedback process. First, criticism of the conventional Delphi is that information from respondents may be distorted, intentionally or unintentionally, by the moderator; because views are discussed openly in the Group Delphi, there is direct and immediate feedback. Any ambiguities are immediately clarified. Second, the justifications given for dissenting viewpoints also give secondary insights into which deviations are accepted by the panel. Third, these discussions provide an internal check for consistency in accepted viewpoints. A group Delphi is efficient at bringing about consensus because of its two-tiered structure. A group Delphi is an effective technique for reducing uncertainty surrounding knowledge about predictions and interpretations. A group Delphi captures justification given for the dissent. Heavy emphasis is placed on assembling an expert panel that represents all points of view (difficult recruitment). Unlike the conventional Delphi, it demands that the anonymity of the panel be given up.
Timeframe for the application of the method	Recruitment: 3 – 4 months before the workshop; Data analysis: 1 week; Questionnaire design: 2-3 months (Optional: Pretest: Saves time at the workshop itself). Workshop: 1-2 days; Optional: Feedback on results by the panel: 1-2 months.

Skills required in order to properly apply the method

Skills	No such skills required	Basic	Intermediate	Advanced
Subject-matter expertise				**X**
IT skills			**X**	
Facilitation skills				**X**
Event organisation skills			**X**	
Project management skills			**X**	
Other skills:			Time management	Moderation

What are the **issues of concern that organisers need to take into account** when applying the method?	Participants need expert/scientific knowledge in the field discussed on the Delphi workshop. All participants should have a more or less equal status, which is dependent upon careful recruitment. The analysis of the questionnaires has to be done in the lunch/coffee breaks. Practice with the software and the construction of the questionnaire is necessary. Related to this, time management and flexibility of the agenda is important.

Examples of use of the method

Project name	Organisation	Contact persons	Timeframe	Web address
SAUBER +	Dialogik	Marion Dreyer	5 months	http://www.sauberpl

			Rainer Kuhn		us.de/
	Project name	**Organisation**	**Contact persons**	**Timeframe**	**Web address**
	PROSUITE	Dialogik	Piet Sellke Rainer Kuhn	4 months	http://www.prosuite.org
	Project name	**Organisation**	**Contact persons**	**Timeframe**	**Web address**
	OSIRIS	Dialogik	Michal Ruddat	6 months	http://www.osiris-reach.eu/
	Project name	**Organisation**	**Contact persons**	**Timeframe**	**Web address**
	Sound Exposure and risk assessment of wireless network devices (SEAWIND)	Dialogik	JörgHilpert Rainer Kuhn Viola Schetula	4 months	www.seawind-fp7.eu
Additional information of relevance (such as historical background, where the method has already been applied, etc.)	The method was developed from the Delphi method, which was designed by the RAND Co. in the 1950s. Webler et al. used elements like plenary sessions and small group discussions in this method in the 1990s, to include discursive elements.				
Sources (names of interviewees, links to relevant websites, etc.)	Kuhn, Rainer; Tampe-Mai, Karolin; Mack, Birgit (2014): Das Gruppendelphi - eine diskursive Methode zur Erhebung von Expertenurteilen. Veranschaulicht am Beispiel eines Projekts zu Smart Metering. In: Zeitschrift für Umweltpsychologie, Nr. 34, 1/2014 Niederberger, M. & Kuhn, R. (2013). Das Gruppendelphi als Evaluationsinstrument. Zeitschriftfür Evaluation (1/13). Schulz, M. &Renn, O. (2009). Das Gruppendelphi: Konzept und Fragebogenkonstruktion. Wiesbaden: VS Verlag für Sozialwissenschaften. Webler, T., Levine, D., Rakel, H. &Renn, O. (1991): The Group Delphi: A Novel Approach to Reducing Uncertainty. Technological Forecasting and Social Change 39/3, S.253-263.				

Author: **Rainer Kuhn**
Organisation: **Dialogik**
Date: **05-12-14**
Revision date: **09-16-14**
Reviewed by: **ARC Fund**

Name of the engagement method (alias)	**30. Hackathon**
Short description of the method	A Hackathon is an event where people come together and use technology to collaboratively improve upon or build new software. Hackathons are sometimes undertaken to achieve a specific goal, but often they are an opportunity for organisations/groups to explore open ended citizen/public led, innovative ideas.
Long description of the method	**Background** Hackathons can last between a few hours and a week. Events often have a specific focus but are generally used for innovation, education or social purposes, and there is often a goal to create usable software or other technological improvements or innovations. More recently, the hackathon has also been used as a term for more general innovation efforts that include non-coders and community members such as the Start-up Weekend Glasgow's 54 hour hackathon in October, 2013 which aimed to increase the use of innovation and technology to drive changes in sustainability. Hackathons have also been used in the life sciences to advance informatics infrastructure that supports research, and also by neuroscientists to bring scientists and developers together to address issues focusing on specific information systems. There have been a number of Hackathons devoted to improving government. One example is the annual National Hack The Government run by Rewired State, which aims to improve transparency, open data and relationships between the Government and active hacking citizens. **Structure** Hackthons typically start with one or more presentations about the event and the specific subject (if there is one). Participants then suggest ideas and form teams based on individual interests and skills. The Hackathon then begins and can last anywhere from several hours to several days. Sometimes there is an element of competition with prizes for the best ideas. At the end of the Hackathon there are usually demonstrations in which each team demonstrates their results.
Objective of application of the method	☐ Policy formulation ☐ Programme development ☐ Project definition ☒ Research activity ☐ Others:
Results and products of the method application	In many cases, the goal of a Hackathon is to produce usable software. It is also a social opportunity to network (people forming new connections). It contributes to improvements in existing IT systems, as well.

Level of stakeholder/public involvement, i.e. objective of public participation through the method's application	☐ Dialogue ☐ Consulting ☐ Involving ☒ Collaborating ☐ Empowering ☐ Direct decision
Engaged stakeholders in the process of method application	

Category	Organiser	Direct participant	Beneficiaries
CSOs	☒	☐	☐
Policy-makers	☒	☐	☐
Researchers	☒	☐	☒
Citizens	☒	☒	☒
Affected	☐	☒	☒
Consumers	☐	☐	☒
Employees	☐	☒	☒
Users	☐	☒	☐
Industry	☒	☐	☒

Geographical scope of application (On what level has	☐ International ☐ EU ☐ National ☒ Regional ☐ Local

<table>
<tr><td>the method already been used?)</td><td></td></tr>
<tr><td>Societal challenges the method has been trying to address</td><td>☒ Health, demographic change and wellbeing
☐ Food security, sustainable agriculture, marine and maritime research and the bio-economy
☐ Secure, clean and efficient energy
☒ Smart, green and integrated transport
☒ Climate action, resource efficiency and raw materials
☐ Inclusive, innovative and reflective societies
☐ Secure societies to protect freedom and security of Europe and its citizens
☐ Others:</td></tr>
<tr><td>Specific strengths and weaknesses of the method vis-à-vis the challenge(s) addressed</td><td>Strengths:
Opens up a pool of expertise for relatively little cost/risk;
Stimulates innovation;
Good for network building;
Opportunity to develop skills and expertise;
Opportunity to gather data.
Weaknesses:
Short term public engagement, may not have significant impacts on policy making.</td></tr>
<tr><td>Timeframe for the application of the method</td><td>Hackathons may take several months to organize. The event itself can last between a few hours to a week.</td></tr>
<tr><td>Skills required in order to properly apply the method</td><td>
<table>
<tr><th>Skills</th><th>No such skills required</th><th>Basic</th><th>Intermediate</th><th>Advanced</th></tr>
<tr><td>Subject-matter expertise</td><td></td><td></td><td>X</td><td></td></tr>
<tr><td>IT skills</td><td></td><td></td><td>X</td><td></td></tr>
<tr><td>Facilitation skills</td><td></td><td></td><td>X</td><td></td></tr>
<tr><td>Event organisation skills</td><td></td><td></td><td></td><td>X</td></tr>
<tr><td>Project management skills</td><td></td><td></td><td></td><td>X</td></tr>
<tr><td>Other skills:</td><td></td><td></td><td></td><td></td></tr>
</table>
</td></tr>
<tr><td>What are the issues of concern that organisers need to take into account when applying the method?</td><td>Organising a hackathon event takes significant planning. The following highlights some key issues organisers need to consider when planning:
Organisers need to think carefully about the date, avoiding weekends with similar events scheduled, politically significant dates, and holiday weekends.
Choosing the right kind of venue is important, particularly in terms of accessibility. The venue must also have a good internet connection. Other equipment, such as extension cables, will also be essential.
A technical person will be needed to help set up and continue to be available in case of problems. Food and refreshments are usually provided for participants.
A facilitator can help participants think beyond what they already know, allowing new ideas to emerge.
Occasionally, recruiters will attend to recruit people for their companies or projects. This can be disruptive to work in progress. Organising a social event might be a better forum for people to discuss employment opportunities.
Organisers should be aware that people are giving up their time for free and it might be worth considering prizes to incentivise participation.</td></tr>
<tr><td>Examples of use of the method</td><td>
<table>
<tr><th>Project name</th><th>Organisation</th><th>Contact persons</th><th>Timeframe</th><th>Web address</th></tr>
<tr><td>NHS Hack Day</td><td>NHS</td><td>hello@openhealthcare.org.uk</td><td>Regular 2 day Weekend events</td><td>http://nhshackday.com/</td></tr>
</table>
</td></tr>
</table>

	Project name	Organisation	Contact persons	Timeframe	Web address
	National Hack the Government 2014	Rewired State	+44 (0)845 835 8553	2 days	http://nationalhackthegovernment.wordpress.com
	Project name	**Organisation**	**Contact persons**	**Timeframe**	**Web address**
	Semantic Web Applications and Tools for Life Sciences Hackathon	Open Knowledge Foundation	m.mahey@ukoln.ac.uk	2 days	http://www.ukoln.ac.uk/events/devcsi/life-sciences-hackdays/
	Project name	**Organisation**	**Contact persons**	**Timeframe**	**Web address**
	OHBM Hackathon, Berlin	Organisation for Human Brain Mapping	info@humanbrainmapping.org	3 days (5-7 June 2014)	http://www.brainhack.org/
Additional information of relevance (such as historical background, where the method has already been applied, etc.)	Hackathon events became widespread in the middle to late 2000s when computer programmers and others involved in software development (including graphic designers, interface designers and project managers), started collaborating intensively on software projects. Events often have a specific focus but are generally used for innovation, education or social purposes, although there is often a goal to create usable software or other technological improvements or innovations.				
Sources (names of interviewees, links to relevant websites, etc.)	Sources: http://open.glasgow.gov.uk/category/hackathon/ http://www.ukoln.ac.uk/events/devcsi/life-sciences-hackdays/ http://brainhack.org/ http://rewiredstate.org/hacks/NHTG14				

Author: **Houda Davis**
Organisation: **Involve**
Date: **22/07/14**
Revision date: **16/09/14**
Reviewed by: **ITAS**

Name of the engagement method (alias)	**31. Interdisciplinary Work Groups**
Short description of the method	The purpose of the method is partly to take professional stock of the situation and partly to propose possible courses of action to ensure, initiate, promote or check development in the area. The work of the group is rooted in the existing knowledge base. The interdisciplinary work group is independent, problem-oriented and focuses on solutions – not only assessment. The method is suitable for intersecting topics, traditional institutional and disciplinary lines and creates holistic robust recommendations. Useful for political/strategic development.
Long description of the method	The organizing partner appoints an inter-disciplinary work group so that an assessment is carried out by several specialists with different approaches to the subject (both stakeholders and professionals with academic background). **When to use the method?** The method is suitable for topics requiring professional assessments intersecting traditional sectors, institutional authorities, stakeholders and disciplinary lines. Therefore, the topic is large and is often related to a broader problem than a single technology or legislation, etc. which has to be assessed. It needs to be a problem characterised by a societal agreement on the idea that "something" needs to be done – without having a clear idea about what exactly to do. Often there will be a requirement for collection of existing knowledge covering the field. **Work group members** The interdisciplinary work group consists of 5-8 specialists appointed by the organiser. The term specialists are taken to mean traditional experts who carry out research in the subject area at universities and institutions of higher education, civil servants and people from organisations with a vested interest in the area. Members are personally selected and thus do not represent their respective institutions or organisations. To ensure an inter-disciplinary holistic assessment and a treatment of all aspects of the topic, it is crucial to appoint group members on the basis of different technical approaches, knowledge and networks. If the group members feel there is an insufficient basis for professional assessment of the topic, more experts can be appointed to the group. Sometimes the group appoints a chairman from among its members. The organiser appoints a project management team that guides and assists the work group. A writer, such as a science journalist, may be appointed to shape the content of the report – based on the concrete guidelines of the work group The work group is characterised by a shared commitment to produce the analysis and recommendations and writing the final report itself. Thus, the work of the work group is broader than a traditional advisory board. **Process** The method involves 4 phases: preparation of the first analysis, midway seminar, preparation of the final analysis, and publication of the analysis i.e. at a conference. The group decides what goes into the report and sometimes shares the written tasks among its members, although as previously mentioned, these are usually farmed out to an external writer, such as a science journalist. Alternatively, the organising project manager writes the report on behalf of the group. The group can also opt to outsource other concrete tasks to specialists with the necessary professional competences - for example, in connection with factual information gathering, data overview, etc. Sometimes the interdisciplinary work group forms sub groups carrying out scientific research, modelling work etc. During the first phase of the project, the work group prepares a preliminary report which may contain initial assessments along with proposed courses of action. To ensure that the final report is based on the best possible professional foundation, the organiser holds a midway seminar. Between 20 and 25 scientific experts and stakeholders parties are invited to comment on the group's preliminary report and put forward suggested amendments. The participants cover the (cross) disciplinary angles of the project so that all important aspects can be discussed at the seminar. The aim of the seminar is to clarify the technical foundation and for this reason, political debate takes a back seat. Possible technical and political solutions are also discussed. Typically, the seminar will consist of presentations by work group members and debate – partly in a plenum and partly in groups when dealing with the more specific topics. Individual members are often appointed to oppose selected parts of the report. The seminar provides the work group with useful input about amendments and improvements to their report, and the group decides how best to use these suggestions in its work. In this way, the group's preliminary findings and action proposals are "tested" by other experts and interested parties. Armed with this input, the work group prepares the final report containing the group's assessments and recommendations. Before

<table>
<tr><td></td><td>publishing, the report may be sent for a final round of comments from selected specialists, e.g. participants from the group's seminar who consider possible factual errors and omissions, significant oversights or aspects that have been downplayed, the need for the updating of data in the event of new data or further data, further references, etc.
As a final phase, the group can hold a briefing session at which it presents its assessments and recommendations to the parliamentary committee covering the field.

The aim is for the group to reach a consensus as regards the scientific foundation and action proposals. This may be an arduous process, but in doing so the group ensures that its messages will achieve a greater penetrative effect in the subsequent political process and in relation to other decision-makers. In some occasions it can happen that minority opinions are reached outside the consensus but consensus is still the goal.</td></tr>
<tr><td>Objective of application of the method</td><td>☒ Policy formulation ☐ Programme development ☐ Project definition ☐ Research activity ☐ Others:</td></tr>
<tr><td>Results and products of the method application</td><td>The aim is for the group to reach a consensus as regards the technical foundation and action proposals. This may be an arduous process, but in doing so the group ensures that its messages will achieve a greater penetrative effect in the subsequent political process and in relation to other decision-makers.
Often the recommendations outlined by the group are directed at MPs, councils and municipalities, but other key decision-makers may also be the target of the group's work.
Direct results
The method ends with a report that can be sent to relevant players and to MPs. The report contains an interdisciplinary assessment of the topic and robust, holistic recommendations for future action delivered by the central players in the field.
Indirect results
The method can often help to create (renewed) debate about a given topic. In the work group, experts work together across disciplines and with colleagues with whom they have not worked before. The midway seminar and the final conference often leads to new lasting collaborative networks and can thus help to support continued development in the area.</td></tr>
<tr><td>Level of stakeholder/public involvement, i.e. objective of public participation through the method's application</td><td>☒ Dialogue ☒ Consulting ☒ Involving ☒ Collaborating ☐ Empowering ☐ Direct decision</td></tr>
<tr><td>Engaged stakeholders in the process of method application</td><td>
<table>
<tr><th>Category</th><th>Organiser</th><th>Direct participant</th><th>Beneficiaries</th></tr>
<tr><td>CSOs</td><td>☒</td><td>☒</td><td>☒</td></tr>
<tr><td>Policy-makers</td><td>☒</td><td>☒</td><td>☒</td></tr>
<tr><td>Researchers</td><td>☒</td><td>☒</td><td>☒</td></tr>
<tr><td>Citizens</td><td>☐</td><td>☐</td><td>☐</td></tr>
<tr><td>Affected</td><td>☐</td><td>☐</td><td>☐</td></tr>
<tr><td>Consumers</td><td>☐</td><td>☐</td><td>☐</td></tr>
<tr><td>Employees</td><td>☐</td><td>☐</td><td>☐</td></tr>
<tr><td>Users</td><td>☐</td><td>☒</td><td>☒</td></tr>
<tr><td>Industry</td><td>☐</td><td>☒</td><td>☒</td></tr>
</table>
</td></tr>
<tr><td>Geographical scope of application (On what level has the method already been used?)</td><td>☐ International ☐ EU ☒ National ☐ Regional ☐ Local</td></tr>
<tr><td>Societal challenges the method has been trying to address</td><td>☒ Health, demographic change and wellbeing
☐ Food security, sustainable agriculture, marine and maritime research and the bio-economy
☐ Secure, clean and efficient energy
☒ Smart, green and integrated transport
☒ Climate action, resource efficiency and raw materials
☐ Inclusive, innovative and reflective societies
☐ Secure societies to protect freedom and security of Europe and
☐ Others:</td></tr>
</table>

<table>
<tr><td></td><td>its citizens</td></tr>
<tr><td>Specific strengths and weaknesses of the method vis-à-vis the challenge(s) addressed</td><td>Strength: The method facilitates a holistic approach to the problem by making stakeholders, scientific experts, etc. normally separated by interests, sectional, institutional or disciplinary divisions meet and collaborate in order to analyse the problem and reach a common set of political recommendations. This results in very robust recommendations and sheds light over agreements and disagreements within the field.
Weakness: The group members have to take responsibility for the whole process, because there is not a Secretariat or a chairman carrying out the work for them. Therefore, the group will often work "on the edge of chaos". The method requires very good facilitation and moderation skills. If the moderator is weak, certain stakeholders may dominate the work of the group and the facilitator might tend to take the role as chairman. The result (analysis and suggestions for actions) might not be easily feasible in the current political landscape.</td></tr>
<tr><td>Timeframe for the application of the method</td><td>The work of the interdisciplinary work group extends over a specific period, typically 6-8 months, but can also be years. 5-10 work group meetings in total.

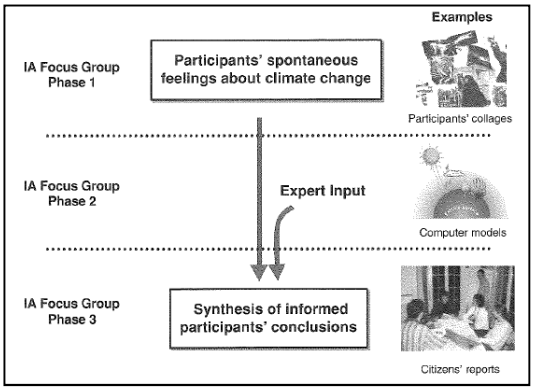
Before the first meeting: Invite central scientific experts and stakeholders to take part in the interdisciplinary workgroup
M1-3: Preparation of the first analysis, the group members try to find a common ground
M3: Midway seminar with stakeholders and scientific experts
M4-6: Final analysis
M6: Publication of analysis and recommendations at the conference.</td></tr>
<tr><td>Skills required in order to properly apply the method</td><td>
<table>
<tr><th>Skills</th><th>No such skills required</th><th>Basic</th><th>Intermediate</th><th>Advanced</th></tr>
<tr><td>Subject-matter expertise</td><td></td><td></td><td>X</td><td></td></tr>
<tr><td>IT skills</td><td>X</td><td></td><td></td><td></td></tr>
<tr><td>Facilitation skills</td><td></td><td></td><td></td><td>X</td></tr>
<tr><td>Event organisation skills</td><td></td><td>X</td><td></td><td></td></tr>
<tr><td>Project management skills</td><td></td><td></td><td></td><td>X</td></tr>
<tr><td>Other skills:</td><td></td><td></td><td></td><td></td></tr>
</table>
</td></tr>
<tr><td>What are the issues of concern that organisers need to take into account when applying the method?</td><td>One typical obstacle to the work of the group is when the group members stay “too” loyal towards their organisational interests and refuse to discuss potential compromises. The first meetings are often characterised by ‘position struggles’, where the members refuse to work together in order to develop a common understanding of the problem.

This is not necessarily a negative starting point, but it requires a strong facilitator being able to constantly reminding the members that when stepping into the group they agreed on trying to collaborate about developing new ideas, not only reproducing existing not inter-linkable interests. They are obliged to create a usable product. The individual members cannot just withdraw from the work because they disagree with other group members. The organiser must throughout the process keep the focus on making the members listen to each other and decide when disagreements between the members are so big that they cannot be solved and therefore have to be let out of the work. Throughout the process a ‘peeling’ of the focus of the work group will therefore take place.</td></tr>
<tr><td>Examples of use of the method</td><td>
<table>
<tr><th>Project name</th><th>Organisation</th><th>Contact persons</th><th>Timeframe</th><th>Web address</th></tr>
<tr><td>A sustainable Danish Transport System</td><td>The Danish Board of Technology</td><td>Ida Leisner, former Projekt manager</td><td>2010-2011</td><td>http://www.tekno.dk/subpage.php3?article=1782&language=uk&category=11&toppic=kategori11

http://www.tekno.dk/pdf/projekter/p10_baeredygtigt_transportsystem/p10_baeredygtigt_transport</td></tr>
</table>
</td></tr>
</table>

					system_projektbeskrivelse.pdf
	Project name	**Organisation**	**Contact persons**	**Timeframe**	**Web address**
	People with complex communication needs	The Danish Ministry of Children, Gender Equality, Integration and Social Affairs		Jun. 2011-maj 2013	The report (in Danish): http://kommunikation.socialstyrelsen.dk/media/Rapport_om_Mennesker_med_komplekse_kommunikati.pdf
	Project name	**Organisation**	**Contact persons**	**Timeframe**	**Web address**
	Implant/Medical Equipment (fast working)	The Danish Board of Technology	Søren Gram	2001	(In Danish:) http://www.tekno.dk/subpage.php3?article=379&language=dk&category=7&toppic=kategori7
Additional information of relevance (such as historical background, where the method has already been applied, etc.)	The method has been applied by the Danish Board of Technology during the last 20 years. The Norwegian and Danish Boards of Technology have developed a short version of the interdisciplinary workgroup lasting for only one month.				
Sources (names of interviewees, links to relevant websites, etc.)	Gy Larsen, senior project manager, The Danish Board of Technology, gla@tekno.dk Lars Klüver, director, The Danish Board of Technology, lk@tekno.dk http://www.tekno.dk/subpage.php3?article=467&toppic=kategori12&language=uk Jon Fixdal, project manager, The Norwegian Board of Technology, jon.fixdal@teknologiradet.no, has used the short version of the method. http://teknologiradet.no/wp-content/uploads/sites/16/2013/08/Rapport-Samfunnsdialog-om-forskning-og-teknologi.pdf				

Author: **Siri Dencker**
Organisation: **The Danish Board of Technology**
Date: **29-07-2014**
Revision date: **20.09.2014**
Reviewed by: **ITAS**

Name of the engagement method (alias)	**32. Integrated Assessment Focus Groups, Participatory Integrated Assessment (PIA) with computer models** (This method is related to Focus Groups *, Participatory Modelling and Serious Gaming *) * See the related factsheets
Short description of the method	Focus groups are useful for gaining insight into various viewpoints on issues. In Integrated Assessment Focus Groups, separate sessions are organised where participants interact with computer models to gain insight into the effects of interventions on complex systems. The use of computer models during a focus group has certain advantages. These Integrated Assessment models serve as tools for analysing complex issues, such as climate change, together with citizens.
Long description of the method	Focus groups are useful for gaining insight into various viewpoints on issues. This has been described in detail in a separate fact sheet. In Integrated Assessment Focus Groups, separate sessions are organised where participants interact with computer models to gain insight into the effects of interventions on complex systems. The use of Integrated Assessment (IA) models during a focus group has certain advantages. These models serve as tools for analysing complex issues by including expert input. This is given both in face-to-face interaction, and by inviting the participants to interact with scientific models with a user-friendly computer interface. The participants get a feeling for the effects of all types of interventions in complex systems, and the potential results are predicted by underlying numerical models. This has been described in detail in the chapter 'Citizen interaction with computer models' (Dahinden et al., 2003). When looking at climate change models four complexity dimensions are recognised: - Spatial – there are links between local activities and global influences and vice versa; - Temporal – there are both short term and long term perspectives which are very relevant; - Uncertainties – in the assumptions on cause and effect in the systems; - Policies – of different entities across the world which influence the system strongly. The use of IA models helps to cope with these complexities simultaneously. When building the models knowledge from various disciplines is integrated and is used to predict cause and effect of a large number of variables. A lot of work on the Integrated Assessment Focus Group has been specifically designed for climate change, so that will be the primary focus here, but the method can be also applied in other areas.  **Process** The three main steps in the series of events called the Integrated Assessment Focus Group, from 'Citizen participation in sustainability assessments' (Kasemir et al. 2003) are: 1. Gathering the participants opinions about climate change; 2. Expert input, including the use of computer models; 3. Synthesis, including a reflection on the credibility of the results of the model. The first and third steps are similar to the steps taken in a Focus Group. The computer models are presented by an expert and are followed by participants' interaction with the models. Preferably, there is direct access – so people can touch the buttons themselves. In the ULYSSES project there were a number of variations. For example two separate models were used, one with an emphasis on a global perspective and the other on more local systems. Due to the complexity of the models, and interfaces in some sessions, there was an expert directly involved in helping the participants use the systems.
Objective of application of the method	☐ Policy formulation ☐ Programme development ☐ Project definition ☒ Research activity ☐ Others:
Results and products of the method application	Focus groups as a research activity can lead to policy recommendations. According to Kasemir (2003) '*a crucial feature of IA Focus Groups is that they explore the border between private decision-making and public debates*' (page 20). The models can support discussion on complex issues by providing new information and insights. So they also facilitate learning with the participants. In many cases the developers of the model have been involved and the experiences in the sessions have been used to further develop the models.

<table>
<tr><td>Level of stakeholder/public involvement, i.e. objective of public participation through the method's application</td><td>☒ Dialogue ☒ Consulting ☐ Involving ☐ Collaborating ☐ Empowering ☐ Direct decision</td></tr>
<tr><td>Engaged stakeholders in the process of method application</td><td>
<table>
<tr><td>Category</td><td>Organiser</td><td>Direct participant</td><td>Beneficiaries</td></tr>
<tr><td>CSOs</td><td>☐</td><td>☐</td><td>☐</td></tr>
<tr><td>Policy-makers</td><td>☐</td><td>☐</td><td>☒</td></tr>
<tr><td>Researchers</td><td>☒</td><td>☒</td><td>☒</td></tr>
<tr><td>Citizens</td><td>☐</td><td>☒</td><td>☐</td></tr>
<tr><td>Affected</td><td>☐</td><td>☐</td><td>☐</td></tr>
<tr><td>Consumers</td><td>☐</td><td>☐</td><td>☐</td></tr>
<tr><td>Employees</td><td>☐</td><td>☐</td><td>☐</td></tr>
<tr><td>Users</td><td>☐</td><td>☐</td><td>☐</td></tr>
<tr><td>Industry</td><td>☐</td><td>☐</td><td>☐</td></tr>
</table>
</td></tr>
<tr><td>Geographical scope of application (On what level has the method already been used?)</td><td>☐ International ☐ EU ☒ National ☒ Regional ☒ Local</td></tr>
<tr><td>Societal challenges the method has been trying to address</td><td>☐ Health, demographic change and wellbeing
☐ Food security, sustainable agriculture, marine and maritime research and the bio-economy
☒ Secure, clean and efficient energy
☐ Smart, green and integrated transport
☒ Climate action, resource efficiency and raw materials
☐ Inclusive, innovative and reflective societies
☐ Secure societies to protect freedom and security of Europe and its citizens
☐ Others:</td></tr>
<tr><td>Specific strengths and weaknesses of the method vis-à-vis the challenge(s) addressed</td><td>Strengths:
- The integration of expert knowledge using computer models to analyse complex issues;

Weaknesses:
- If the model guides the discussions too much, it can limit the discussions based on the assumptions behind the model.
- Some users in IA Focus Groups expected gaming environments and were frustrated by complex interfaces.</td></tr>
<tr><td>Timeframe for the application of the method</td><td>The development time of Integrated Assessment Models is significant as they are complex information systems. A common time frame for the IA Focus Groups is 5 sessions of 2.5 hours over a number of days.</td></tr>
<tr><td>Skills required in order to properly apply the method</td><td>
<table>
<tr><th>Skills</th><th>No such skills required</th><th>Basic</th><th>Intermediate</th><th>Advanced</th></tr>
<tr><td>Subject-matter expertise</td><td></td><td></td><td>X</td><td></td></tr>
<tr><td>IT skills</td><td></td><td></td><td></td><td>X</td></tr>
<tr><td>Facilitation skills</td><td></td><td></td><td>X</td><td></td></tr>
</table>
</td></tr>
</table>

Event organisation skills			X	
Project management skills			X	
Other skills:				

What are the issues of concern that organisers need to take into account when applying the method?

Three issues raised by Dahinden (2003) for models used in these sessions:

1. user-friendly;
   If a model has not been designed for lay people it will be necessary to offer continual technical assistance.

2. transparency;
   Participants learn more from systems which reveal some of the intermediate results and allow users to understand relationships between variables.

3. credibility;
   For the process to have results, the users need to trust the models and the experts supporting the process.

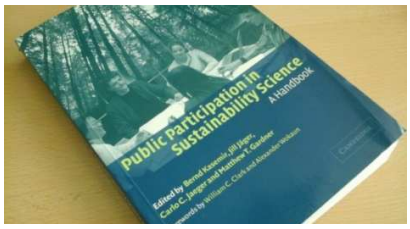
Examples of use of the method

Project name	Organisation	Contact persons	Timeframe	Web address
Urban LifestYles, SuStainability and Integrated Environmental Assessment (ULYSSES)	Lead partner: Stockholm Environment Institute	Mans Nilsson	1996 – 1999	

Additional information of relevance (such as historical background, where the method has already been applied, etc.)

ULYSSES was a project funded by the Sixth Framework Programme of the EU. It held IA focus groups in 7 cities in the following countries:

- Greece;
- Spain;
- Germany;
- UK;
- Sweden;
- Zurich;
- United States of America (by a partner organisation).



Kasemir, Bernd. Public Participation in Sustainability Science: A Handbook. Cambridge University Press, 2003. Which includes the following articles:

- Dahinden, Urs, Cristina Querol, Jill Jäger, Mans Nilsson. "Citizen interaction with computer models". http://dx.doi.org/10.1017/CBO9780511490972.010.
- Kasemir, Bernd, Carlo C. Jaeger, Jill Jäger. "Citizen participation in sustainability assessments". http://dx.doi.org/10.1017/CBO9780511490972.005.

Integrated assessment modelling *is a type of scientific modelling that is increasingly common in the environmental sciences and environmental policy analysis. The modelling is integrated because environmental problems do not respect the borders between academic disciplines. Integrated assessment models therefore integrate knowledge from two or more domains into a single framework. Integrated modelling is referred to as assessment because the activity aims to generate useful information for policy making, rather than to advance knowledge for knowledge's sake. Integrated assessment modelling is that part of integrated assessment that relies on the use of numerical models.*

	Integrated assessment modelling has a long history, and scholars disagree on the first precedent. However, it became recognizable as a sub- or inter-discipline in the late 1980s with a focus on understanding and regulating acidification. Integrated assessment modelling was further developed in the area of climate change, inter alia in the context of the Energy Modeling Forum. *Notable centres of integrated assessment modelling are IIASA, MIT, RIVM and International Futures. Notable scholars are Bill Nordhaus, Robert Mendelsohn, Rich Richels, Michael Schlesinger, Stephen Schneider, Richard Tol, John Weyant, and Gary Yohe.* "Integrated Assessment Modelling". Wikipedia, the Free Encyclopedia, 13th July 2014. http://en.wikipedia.org/w/index.php?title=Integrated_assessment_modelling&oldid=545097775. Further reading: Gregor Dürrenberger. "Focus Groups in Integrated Assessment A manual for a participatory tool". Accessed 31st July 2014. http://www.jvds.nl/ulysses/eWP97-2.pdf.
Sources (names of interviewees, links to relevant websites, etc.)	Some further reading on participatory modelling, not necessarily in the context of focus groups: Natalie A Jones, Pascal Perez. "Evaluating participatory modeling: developing a framework for cross-case analysis." Environmental management 44, nr. 6 (2009): 1180–95. doi:10.1007/s00267-009-9391-8. The Quintel model There are a number of models at both a global and regional scale in the energy sector. One example is the Energietransitiemodel that was originally built by Quintel with funding by GasTerra B.V. The model has a number of different versions: - A model of the Dutch energy system which has been used in a number of settings: - TV program: http://www.wattnu.nl/; - in depth interviews with professionals (see link below); - focus group type setting / workshops; - a table top interactive game for discussions at events; - a game about energy at home. "Energy Transition Model - Scenario by Jako Jellema." Accessed August 1, 2014. http://beta.et-model.com/presets/jellema. There have been some discussions about transparency and credibility of the model. The model has been made open source and has been validated by a number of partner organisations. "Energy Transition Model » GasTerra." Accessed August 1, 2014. http://www.gasterra.nl/en/csr/green/energy-transition-model.

Author: **Jako Jellema**
Organisation: **University of Groningen**
Date: **1/8/2014**
Revision date: **30/9/2014**
Reviewed by: **ITAS**

Name of the engagement method (alias)	**33. Interviews** (Tool)
Short description of the method	Interviews can be used to explore the views, normative positions, experiences, beliefs and motivations of an individual participant.
Long description of the method	Interviews are used to explore the views, experiences, beliefs and motivations of individuals on specific matters. Interviews as a qualitative method are believed to provide a more in-depth understanding of a certain topic than would be obtained from purely quantitative methods (for example questionnaires). Interviews are, therefore, most appropriate where: i) little is known about the phenomenon under investigation; and ii) detailed insights are required from individual participants. In addition, they are appropriate for exploring sensitive topics, where participants may not want to talk about such issues in a group environment. There are 3 fundamental types of research interviews. These are: 1. **Structured interviews –** a list of predetermined questions are asked. There is little or no variation in the questions. There is no scope for follow-up questions to responses. This type of interview is quick and easy to conduct. However, it is hard to collect deep answers through structured interviews. 2. **Semi-structured –** it consists of several key questions that help to define the areas to be explored, but also allows the interviewer or interviewee to diverge from the list of predetermined questions in order to explore an idea or response in more detail. It allows for the elaboration of the topic. 3. **Unstructured** – this interview typically starts with an open question and then develops according to the response given. It can be difficult to manage, and to participate in, as the lack of predetermined interview questions provides little guidance on what to talk about which many participants find confusing and unhelpful. However, being the most explorative type, unstructured interviews might prove the best option when "depth" is needed.
Objective of application of the method	☒ Policy formulation ☒ Programme development ☒ Project definition ☒ Research activity ☐ Others:
Results and products of the method application	• Transcripts (as a basis for a content analysis and further conclusions); • 'Field notes' during and immediately after each interview about observations, thoughts and ideas about the interview, as this can help in the data analysis process; • The interviewer can get individual persons insights on a research topic, which can have different depth depending on the type of the interview.

Level of stakeholder/public involvement, i.e. objective of public participation through the method's application	☐ Dialogue ☒ Consulting ☐ Involving ☐ Collaborating ☐ Empowering ☐ Direct decision
Engaged stakeholders in the process of method application	

Category	Organiser	Direct participant	Beneficiaries
CSOs	☒	☒	☒
Policy-makers	☒	☒	☒
Researchers	☒	☒	☒
Citizens	☐	☒	☐
Affected	☐	☒	☐
Consumers	☐	☒	☐
Employees	☐	☒	☐
Users	☐	☒	☐
Industry	☒	☒	☒

Geographical scope of application (On what level has the method already been used?)	☒International ☒ EU ☒ National ☒ Regional ☒ Local
Societal challenges the method has been trying to address	☒Health, demographic ☒Food security, ☒Secure, clean and ☒Smart, green and

	change and wellbeing	sustainable agriculture, marine and maritime research and the bio-economy	efficient energy	integrated transport
	☒Climate action, resource efficiency and raw materials	☒Inclusive, innovative and reflective societies	☒Secure societies to protect freedom and security of Europe and its citizens	☐ Others:

Specific **strengths and weaknesses** of the method vis-à-vis the challenge(s) addressed

Strengths:

- Useful to obtain detailed information about personal feelings, perceptions and opinions;
- More detailed questions can be asked;
- High response rate;
- Ambiguities can be clarified and incomplete answers followed up;
- Interviewees are not influenced by others in the group.

Weaknesses:

- Face-to-face interviews can be time-consuming and costly. If available resources are limited, telephone/Skype interviews can be done instead;
- Different interviewers may understand and transcribe interviews in different ways.

Timeframe for the application of the method

Time should be allocated for preparing questions for structured or semi-structured interviews. Preparation time can vary greatly depending on the complexity of the topic and the level of expertise of the interviewer.

The length of an interview varies as well. One interview typically lasts from around 30 minutes to 2 hours. The length of the interview depends on the complexity of the topic, on the complexity and number of questions asked, on the specific circumstances. Personal interviews would typically last longer than telephone/skype interviews.

After the interview, time should be allocated for transcribing the interview and analysing the results.

Skills required in order to properly apply the method

Skills	No such skills required	Basic	Intermediate	Advanced
Subject-matter expertise				**X**
IT skills	**X**			
Facilitation skills				**X**
Event organisation skills		**X**		
Project management skills		**X**		
Other skills:				Ability to listen, adopting open and emotionally neutral body language

<table>
<tr><td>What are the issues of concern that organisers need to take into account when applying the method?</td><td>

Can the question be easily understood?
Is the question biased?
Will interviewees be willing to provide the information?
Is the question applicable to all interviewees?
Does the question allow interviewees to offer their opinions/expand on basic answers?
Are follow up questions likely to be required?
Will it be straightforward to analyse?

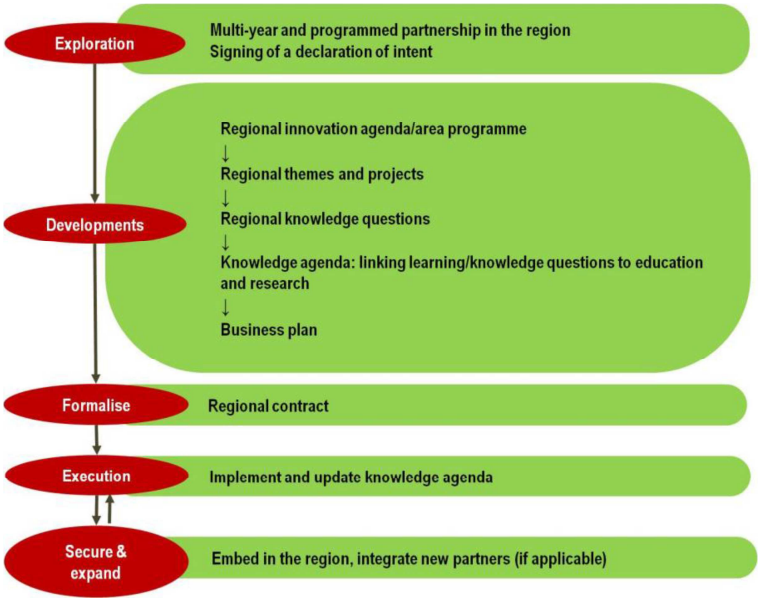
When considering face-to-face vs. telephone interviews, it should be kept in mind that telephone interviews are less suitable for exploring complex topics or the attitudes of the interviewee.
</td></tr>
<tr><td>Examples of use of the method</td><td>
<table>
<tr><th>Project name</th><th>Organisation</th><th>Contact persons</th><th>Timeframe</th><th>Web address</th></tr>
<tr><td>Sauber+</td><td>DIALOGIK</td><td>Marion Dreyer</td><td>4 months (1hour)</td><td>www.sauberplus.de</td></tr>
<tr><th>Project name</th><th>Organisation</th><th>Contact persons</th><th>Timeframe</th><th>Web address</th></tr>
<tr><td>PACITA</td><td>DBT</td><td>Marie Louise</td><td>2012</td><td>http://www.pacitaproject.eu/</td></tr>
<tr><th>Project name</th><th>Organisation</th><th>Contact persons</th><th>Timeframe</th><th>Web address</th></tr>
<tr><td>Boo-Games</td><td>Coventry University Enterprises Limited (CUE)</td><td>Ms Soizic Tsin</td><td>2012-2014</td><td>http://www.boogames.eu/</td></tr>
<tr><th>Project name</th><th>Organisation</th><th>Contact persons</th><th>Timeframe</th><th>Web address</th></tr>
<tr><td></td><td></td><td></td><td></td><td></td></tr>
</table>
</td></tr>
<tr><td>Additional information of relevance (such as historical background, where the method has already been applied, etc.)</td><td>Some advantages of the telephone/Skype interview vs. the personal interview include: i) no matter what the geographical location of the interviewee – he/she can be reached rather inexpensively; ii) representativeness can be achieved, as a higher number of people can be reached as it is inexpensive and time-saving. Yet, telephone interviews are less suitable for exploring complex topics or the attitudes of the interviewee.

A study by John Colombotos (1969) on the effect of personal vs. telephone interview on responses: http://www.jstor.org/discover/10.2307/4593676?uid=3737608&uid=2129&uid=2&uid=70&uid=4&sid=21104646550627</td></tr>
<tr><td>Sources (names of interviewees, links to relevant websites, etc.)</td><td>Sources:

http://www.amu.apus.edu/career-services/interviewing/types.htm

http://www.academia.edu/746649/Methods_of_data_collection_in_qualitative_research_interviews_and_focus_groups</td></tr>
</table>

Author: **Blagovesta Chonkova**
Organisation: **ARC Fund**
Date:
Revision date: **21.09.2014**
Reviewed by: **DIALOGIK**

Name of the engagement method (alias)	**34. Knowledge Atelier** (in Dutch: Kenniswerkplaats) * Similar and related to: - Science Shops / Civil Society Driven Research (See separate factsheet) - Community-Based Participatory Research or Community-Based Research (See separate factsheet) - Participatory Action Research (See separate factsheet)
Short description of the method	A kenniswerkplaats (knowledge atelier) is a network of regional authorities, business, civil society organisations and education institutes aiming to strengthen a region's competitiveness through innovation by collaboration. Research on particular questions related to the specific region's development is done as part of regional development plans, by students in their curriculum. This method provides an infrastructure for doing participatory action research and learning to contribute to regional development.
Long description of the method	The goal is to strengthen the region's competitiveness through innovation. Innovation is achieved by collaboration; regional development, sharing and valorising knowledge are important aspects of each Kenniswerkplaats. The method requires cooperation between regional authorities, business, civil society organisations, and education institutes. Research is done as part of regional development plans by students in their curriculum. The kenniswerkplaats contributes to answering regional questions and creating new partnerships. By working together with students, organisations meet potential new employees and gain new ideas. Regional development, sharing and valorising knowledge are important aspects of each Kenniswerkplaats. The regional actors typically involved in kenniswerkplaats, both in agenda setting and funding, are: - Local and regional authorities: provinces, municipalities and water boards;- Businesses/ Entrepreneurs: Chambers of Commerce, Small and Medium-Sized Enterprises (SMEs), , consultancy offices, Syntens (Ministry of Economic Affairs Consultants for SMEs) and Greenports (the clusters of Dutch horticulture stakeholders);- Non-profit organisations, including: welfare organisations, interest organisations, foundations and associations. Costs are shared among regional authorities, business and education institutes (in some cases, e.g. InterREG, subsidies were used as well). Each region has a co-ordinator. Foorthuis *et al*[5] describe the Kenniswerkplaats as follows: "*Kenniswerkplaats is a place of innovation. On the one hand, a highly streamlined and controlled knowledge infrastructure, and on the other, an open research centre for the SME segment. And yet, at the same time, a workshop and meeting place for students, teachers, researchers, public officials, entrepreneurs and the public. Anyone in the region with a knowledge question (or better still, a learning question) can come here for answers. The questions may come from a wide variety of areas: sustainability, social-economic development, spatial issues or innovation. Anything goes, so long as the region determines and establishes the focus. The region, rather than the knowledge institution, has the initiative. The regional Kenniswerkplaats realisations in the Netherlands (now numbering eight) have a permanent staff.[…] This is the way to create a national infrastructure. From within regional innovative knowledge agendas, work is being done on projects and processes for competency development, and in these the educational and research segments are working together in close partnership. This creates not only a regional but a national knowledge agenda that facilitates coordination. Through this, Kenniswerkplaats offers new inroads, from the*  **The way to set up a regional Kenniswerkplaats (from Foorthuis *et al*.)**

[5] http://www.wageningenur.nl/upload_mm/3/e/c/f9279329-9054-4a70-8ac4-305c308a4494_Knowledge-Arrangement-for-the-Learning-Region.pdf

	intermediate vocational education level through to university, for regional and area-oriented research, from large to small and from concrete to abstract. At this point we have also seen that the activities in Kenniswerkplaats generate a need for further academic research. We have also seen opportunities to better combine academic research with higher education. And the cooperation between students and researchers on projects often offers cost advantages, and can enhance the market position of the participating research". The Kenniswerkplaats has similarities to the Science Shop (Civil Society Driven Research, see separate Fact Sheet). The Science Shop provides an option to have research done for civil society organisations. The Kenniswerkplaats offers less diversity in research questions being taken in, but can go much more in-depth because of its focus. Also, more stakeholders are involved over a longer period; research is not done for a single stakeholder. Kenniswerkplaats and Science Shops are thus quite complementary and their close contacts guarantee synergy.
Objective of application of the method	☐ Policy formulation V Programme development V Project definition V Research activity ☐ Others:
Results and products of the method application	**Nine Dutch regions have a Kenniswerkplaats, which published many studies on issues of regional concern.** *"In each Kenniswerkplaats, three traditional universities, eleven universities of applied sciences and nine intermediate vocational education institutions invested a total of 126,580 student hours in the 2010-2012 period. An additional 26,000 teaching hours and 321 researcher hours went into projects, which also included the involvement of 612 enterprises and almost 600 individual citizens. Thanks to these efforts, for the 2012-2013 period each Kenniswerkplaats is strived for a commitment of 100,000 student hours per Kenniswerkplaats. This demands a dynamic and reliable infrastructure connecting knowledge institutions and the 'real world'."* (Foorthuis *et al., ibid)* **Some example results from the *Peat Colonies* Kenniswerkplaats, are[6]:** - Mathematical model to compare different types of renewable energy; - Feasibility study of alternative forms of energy supply; - A multi-touch table was developed, to advance imagination in spatial planning of energy supply; - Research on the reinvention of a district; - An investigation into the Albrecht method (fertilization); - Project Proleaf to get more value from beet-leaves; - Research on yield increase of the main local crops; - Investigation of the possibilities of growing protein rich crops for animal feed production on the farm or for regional markets.

Level of stakeholder/public involvement, i.e. objective of public participation through the method's application	☐ Dialogue ☐ Consulting ☒ Involving ☒ Collaborating ☐ Empowering ☐ Direct decision
Engaged stakeholders in the process of method application	

Category	**Organiser**	**Direct participant**	**Beneficiaries**
CSOs	☐	☒	☒
Policy-makers	☐	☒	☒
Researchers	☒	☒	☒
Citizens	☐	☒	☒
Affected	☐	☒	☒
Consumers	☐	☐	☐
Employees	☐	☐	☐
Users	☐	☒	☒
Industry	☐	☒	☒

[6] http://www.kenniswerkplaats.eu/images/publicaties/Kenniswerkplaats%20Veenkolonien%202012-2013.pdf

<table>
<tr><td>Geographical scope of application (On what level has the method already been used?)</td><td>☐ International ☐ EU ☐ National ☒ Regional ☒ Local</td></tr>
<tr><td>Societal challenges the method has been trying to address</td><td>☐ Health, demographic change and wellbeing
☒ Food security, sustainable agriculture, marine and maritime research and the bio-economy
☒ Secure, clean and efficient energy
☐ Smart, green and integrated transport
☒ Climate action, resource efficiency and raw materials
☒ Inclusive, innovative and reflective societies
☐ Secure societies to protect freedom and security of Europe and its citizens
☐ Others:</td></tr>
<tr><td>Specific strengths and weaknesses of the method vis-à-vis the challenge(s) addressed</td><td>The long-term agenda and network of organisations is a context where local research projects can easily build on the results of previous projects. The trust and co-operation creates an environment to learn together (participatory action research and learning).
The network approach is both a strength and a weakness. For example, sometimes maintaining momentum and funding has been challenging.</td></tr>
<tr><td>Timeframe for the application of the method</td><td>Setting up new co-operations may take time (1-2 years). Within an existing kenniswerkplaats new projects are developed more easily (less than 1 a year).</td></tr>
<tr><td>Skills required in order to properly apply the method</td><td>
<table>
<tr><th>Skills</th><th>No such skills required</th><th>Basic</th><th>Intermediate</th><th>Advanced</th></tr>
<tr><td>Subject-matter expertise</td><td></td><td></td><td>X</td><td>X</td></tr>
<tr><td>IT skills</td><td></td><td>X</td><td></td><td></td></tr>
<tr><td>Facilitation skills</td><td></td><td></td><td></td><td>X</td></tr>
<tr><td>Event organisation skills</td><td></td><td>X</td><td></td><td></td></tr>
<tr><td>Project management skills</td><td></td><td></td><td></td><td>X</td></tr>
<tr><td>Other skills:</td><td></td><td></td><td></td><td></td></tr>
</table>
</td></tr>
<tr><td>What are the issues of concern that organisers need to take into account when applying the method?</td><td>The organisers need to take care to ensure equality in the partnerships within the co-operation. In the setting up of the partnership it is also necessary to manage expectations to keep everyone involved.
In the planning of projects within the kenniswerkplaats, awareness of students needs is an issue that needs early consideration.</td></tr>
<tr><td>Examples of use of the method</td><td>
<table>
<tr><th>Project name</th><th>Organisation</th><th>Contact persons</th><th>Timeframe</th><th>Web address</th></tr>
<tr><td>Kenniswerkplaats NE Fryslan</td><td>Knowledge Atelier Northeast Fryslan</td><td></td><td>2011-</td><td>http://www.kenniswerkplaats.eu/images/publicaties/KWP-NOF-EN.pdf</td></tr>
<tr><th>Project name</th><th>Organisation</th><th>Contact persons</th><th>Timeframe</th><th>Web address</th></tr>
<tr><td>Kenniswerkplaats Veenkolonien</td><td>Knowledge Atelier Peat Colonies</td><td></td><td>2009-</td><td>http://www.veenkolonien.nl/kenniswerkplaats/187-wat-is-de-kwp.html</td></tr>
</table>
</td></tr>
</table>

	Project name	Organisation	Contact persons	Timeframe	Web address
	Knowledge Atelier at Wageningen University	Wageningen University and Research Centre	Ilse Markensteijn	2008-	www.wageningenur.nl/kenniswerkplaats
	Project name	**Organisation**	**Contact persons**	**Timeframe**	**Web address**
	Kenniswerkplaats	Kenniswerkplaats		2008-	www.kenniswerkplaats.eu

Additional information of relevance (such as historical background, where the method has already been applied, etc.)

www.kenniswerkplaats.eu
www.wageningenur.nl/kenniswerkplaats

In 2008, this programme developed an initial knowledge arrangement in cooperation with the Veenkoloniën (Peat District Region), which was then set out in a Regional Contract by thirteen cooperating regional government parties, five (green and non-green) knowledge institutions and the Ministry of Economic Affairs, Agriculture and Innovation (then Agriculture, Nature and Food Quality). Along with the learning/knowledge arrangement currently in implementation in the Peat District Region, the following regions are also currently developing or implementing multiyear arrangements:

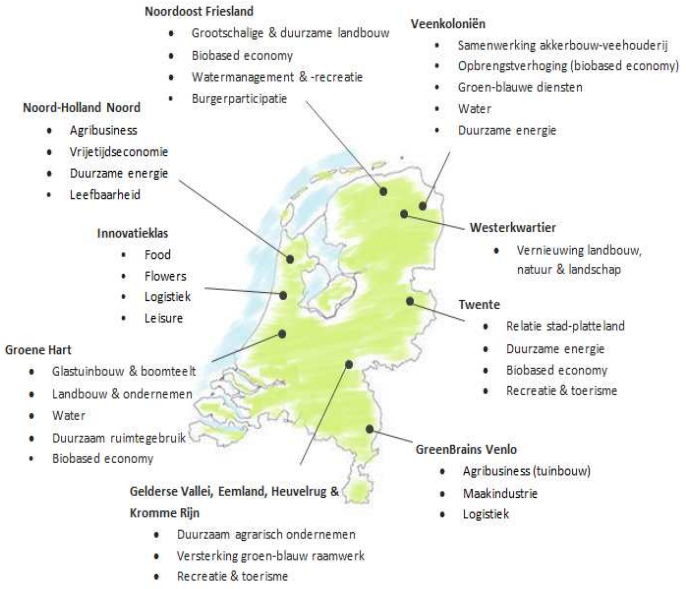


Figure 1 Nine kenniswerkplaatsen in the Netherlands and their main focus areas (in Dutch)

Region Green Knowledge Port Twente (lead: AOC Oost) Region Southwestern Delta (lead: Edudelta Onderwijsgroep) Edudelta Education Group Region Gelderse Vallei and Eemland (lead: Aeres Group) Region Green Heart (lead: Inholland) Region Almere (lead: Aeres Group) Region Northeast Fryslân (leads: AOC Friesland/AOC Terra) Region Westerkwartier – in partnership with Veenkoloniën (leads: AOC Friesland/AOC Terra) Region Noord-Holland North (lead: Clusius College).

Sources (names of interviewees, links to relevant websites, etc.)

Author: **Henk Mulder**
Organisation: **University of Groningen**
Date: **29/7/2014**
Revision date:
Reviewed by: **ARC Fund**

Name of the engagement method (alias)	**35. Mass Experiment** *similar to Citizen Science (see separate factsheet)
Short description of the method	Mass experiments involve volunteering citizens/lay persons in scientific research with the aim to collect data as part of a scientific project. Mass experiments are useful when collection of data requires a great number of spatially dispersed individual contributions. Often mass experiments involve students in order to link education to research, giving them insights into research methods and scientific thinking.
Long description of the method	Mass participation events are getting more popular over the last few years. The method is a new way of collecting data. The final outcomes are of benefit to: i) the researchers conducting the experiment as they could get more data and more widely geographical spread than they would otherwise collect; ii) the participants get the opportunity to participate in real research. When mass experiment is executed with educational purposes, students usually gather data guided by their teachers. One of the selection factors of the research projects is how well they fit into the curriculum. Researchers can communicate directly with individual teachers and students using various social medias such as Twitter, Facebook and Instagram.
Objective of application of the method	☐ Policy formulation ☐ Programme development ☐ Project definition ☒ Research activity ☐ Others:
Results and products of the method application	• Instructions and teachers' manuals • New research data collection • New material into the curriculum

---

Level of stakeholder/public involvement, i.e. objective of public participation through the method's application	☐ Dialogue	☐ Consulting	☒ Involving	☒ Collaborating	☐ Empowering ☐ Direct decision

Engaged stakeholders in the process of method application	Category	**Organiser**	**Direct participant**	**Beneficiaries**
	CSOs	☐	☐	☐
	Policy-makers	☐	☐	☐
	Researchers	☒	☐	☒
	Citizens	☐	☒	☐
	Affected	☐	☐	☐
	Consumers	☐	☐	☐
	Employees	☐	☐	☐
	Users	☐	☐	☐
	Industry	☐	☐	☐

Geographical scope of application (On what level has the method already been used?)	☒ International	☒ EU	☒ National	☒ Regional	☒ Local

Societal challenges the method has been trying to address	☐ Health, demographic change and wellbeing	☒ Food security, sustainable agriculture, marine and maritime research and the bio-economy	☒ Secure, clean and efficient energy	☒ Smart, green and integrated transport
	☒ Climate action, resource efficiency and raw materials	☒ Inclusive, innovative and reflective societies	☐ Secure societies to protect freedom and security of Europe and its citizens	☒ Others: Everything related to science

Specific **strengths and weaknesses** of the method vis-à-	**Strengths:** • If the participants are from the same group/background the sample will be well-targeted and

<table>
<tr><td>vis the challenge(s) addressed</td><td>coherent;
• Interactive way of exchanging ideas;
• Good volume of data collection;
• The method can strengthen the link between researchers and lay persons.

Weaknesses:
• The method will not be suitable in case too complex scientific issues are dealt with. It only suits topics which are easy to understand by the general public and do not require specific scientific knowledge.</td></tr>
<tr><td>Timeframe for the application of the method</td><td>The experiment itself might take different amount of time depending on the topic.</td></tr>
<tr><td>Skills required in order to properly apply the method</td><td>
<table>
<tr><th>Skills</th><th>No such skills required</th><th>Basic</th><th>Intermediate</th><th>Advanced</th></tr>
<tr><td>Subject-matter expertise</td><td></td><td></td><td></td><td>X</td></tr>
<tr><td>IT skills</td><td></td><td></td><td>X</td><td></td></tr>
<tr><td>Facilitation skills</td><td></td><td></td><td>X</td><td></td></tr>
<tr><td>Event organisation skills</td><td></td><td>X</td><td></td><td></td></tr>
<tr><td>Project management skills</td><td></td><td></td><td></td><td>X</td></tr>
<tr><td>Other skills:</td><td></td><td></td><td></td><td></td></tr>
</table>
</td></tr>
<tr><td>What are the issues of concern that organisers need to take into account when applying the method?</td><td>Having in mind the amount of people participating in mass experiments, the coordination should be on a very good level and clear instructions should be provided. Moreover, the topic must have broad appeal to the audience.

If the software infrastructure used is not optimal, it might be difficult to structure and interpret the results.

The method needs sustained contributions from the involved participants thus contributors' motivations and expectations should be managed properly.</td></tr>
<tr><td>Examples of use of the method</td><td>
<table>
<tr><th>Project name</th><th>Organisation</th><th>Contact persons</th><th>Timeframe</th><th>Web address</th></tr>
<tr><td>Laugh Lab</td><td>The BA</td><td>Richard Wiseman</td><td>A year long project

In which years?</td><td>http://www.saasta.ac.za/scicom/pcst7/nelson2_ppt.pdf

http://laughlab.co.uk/</td></tr>
<tr><th>Project name</th><th>Organisation</th><th>Contact persons</th><th>Timeframe</th><th>Web address</th></tr>
<tr><td>Researchers' Night - Swedish pupils recording data on their consumption of fruits and vegetables which helps he Swedish National Food Agency to find out about eating habits of pupils.</td><td>VA (Public & Science)</td><td>Lotta Tomasson</td><td>Every autumn since 2009</td><td>http://v-a.se/in-english/projects/activity-projects/researchers%E2%80%99-night/mass-experiments/</td></tr>
<tr><th>Project name</th><th>Organisation</th><th>Contact persons</th><th>Timeframe</th><th>Web address</th></tr>
<tr><td>#Hooked</td><td>Wellcome Trust</td><td>Emily Philippou</td><td>2013 – 2014</td><td>http://www.wellco</td></tr>
</table>
</td></tr>
</table>

		Engagement and Museum of Science and Industry, Manchester (MOSI)	Media Officer T 020 7611 8726 E e.philippou@wellcome.ac.uk		me.ac.uk/News/Media-office/Press-releases/2013/Press-releases/WTP054263.htm
Additional information of relevance (such as historical background, where the method has already been applied, etc.)	The method is closely linked to Citizen Science. See the related fact sheet for more information.				
Sources (names of interviewees, links to relevant websites, etc.)	Sources: http://www.earnest-agency.com/entertainment/ideas-and-insight/earnest-blog/the-increasing-popularity-of-mass-participation-events-and-the-need-for-intelligent-marketing/				

Author: **Blagovesta Chonkova**
Organisation: **ARC Fund**
Date:
Revision date: **22/09/2014**
Reviewed by: **ITAS**

Name of the engagement method (alias)	**36. Multi Criteria Decision Analysis (MCDA)**
Short description of the method	MCDA is a tool that can be applied to complex decision making processes. MCDA techniques can be used to identify a single most preferred option, to rank options, to short-list a limited number of options for subsequent detailed appraisal, or simply to distinguish acceptable from unacceptable possibilities.
Long description of the method	MCDA is both an approach and a set of techniques, with the goal of ordering a set of options from the most preferred to the least preferred option. There is usually a conflict or trade-off involved in options and no one option will be best in achieving all objectives. Costs and benefits usually conflict in addition to short and long term benefits. MCDA is a way of looking at complex problems which might be characterised by a mixture of monetary and non-monetary objectives. It aims to break the problem up into manageable pieces to allow data judgements to be made, and then reassembling the pieces to form an overall coherent picture to present to policy makers. The purpose is to aid thinking about the problem, not solve the problem. **Process:** **1. Establish the decision context:** • Establish aims of the MCDA, and identify decision makers and other key players; • Design the socio-technical system for conducting the MCDA; • Consider the context of the appraisal. **2. Identify the options to be appraised.** **3. Identify objectives and criteria**: • Identify criteria for assessing the consequences of each option; • Organise the criteria by clustering them under high-level and lower-level objectives in a hierarchy. **4. 'Scoring'- Assess the expected performance of each option against the criteria. Then assess the value associated with the consequences of each option for each criterion:** • Describe the consequences of the options; • Score the options on the criteria; • Check the consistency of the scores on each criterion. **5. 'Weighting'- Assign weights for each of the criterion to reflect their relative importance to the decision.** **6. Combine the weights and scores for each option to derive an overall value:** • Calculate overall weighted scores at each level in the hierarchy; • Calculate overall weighted scores. **7. Examine the results.** **8. Sensitivity analysis:** • Conduct a sensitivity analysis: do other preferences or weights affect the overall ordering of the options? • Look at the advantages and disadvantages of selected options, and compare pairs of options; • Create possible new options that might be better than those originally considered; • Repeat the above steps until a 'requisite' model is obtained.
Objective of application of the method	☒ Policy formulation ☒ Programme development ☐ Project definition ☐ Research activity ☐ Others:
Results and products of the method application	• Weighted public preferences towards different options, based on a variety of criteria; • Detailed and thorough assessment of scientific or analysis area.

Level of stakeholder/public involvement, i.e. objective of public participation through the method's application	☐ Dialogue ☐ Consulting ☐ Involving ☐ Collaborating ☐ Empowering ☒ Direct decision				
Engaged stakeholders in the process of method application	Category	**Organiser**	**Direct participant**	**Beneficiaries**	
	CSOs	☐	☐	☐	

	Policy-makers	☒	☐	☒	
	Researchers	☒	☒	☐	
	Citizens	☐	☒	☐	
	Affected	☐	☒	☐	
	Consumers	☐	☐	☐	
	Employees	☐	☐	☐	
	Users	☐	☐	☐	
	Industry	☐	☒	☐	
Geographical scope of application (On what level has the method already been used?)	☐ International	☐ EU	☒ National	☒ Regional	☒ Local
Societal challenges the method has been trying to address	☐ Health, demographic change and wellbeing	☒ Food security, sustainable agriculture, marine and maritime research and the bio-economy	☒ Secure, clean and efficient energy	☒ Smart, green and integrated transport	
	☒ Climate action, resource efficiency and raw materials	☐ Inclusive, innovative and reflective societies	☐ Secure societies to protect freedom and security of Europe and its citizens	☐ Others:	
Specific **strengths and weaknesses** of the method vis-à-vis the challenge(s) addressed	**Strengths:** • The choice of objectives and criteria that any decision making group may make are open to analysis and change if they are felt to be inappropriate. **Weaknesses:** • Decision making which establishes objectives and criteria, estimating importance and weights, and judging the contribution of each, is subjective.				
Timeframe for the application of the method	The organisation of this method could take up to a year. The event itself could last several days.				

Skills required in order to properly apply the method

Skills	No such skills required	Basic	Intermediate	Advanced
Subject-matter expertise		**X**		
IT skills		**X**		
Facilitation skills				**X**
Event organisation skills			**X**	
Project management skills			**X**	
Other skills:				

<table>
<tr><td>What are the issues of concern that organisers need to take into account when applying the method?</td><td>A MCDA carried out very early in the life of a new project can usefully guide the search for further information, since the first attempt at modelling will highlight many inadequacies in identifying and defining options and criteria, as well as judging trade-offs.

MCDA is likely to contribute to the decision-making process, i.e. the first answer might not necessarily support a decision.

MCDA is a socio-technical process. The technical tools are only part of the process and designing the social process within which the technical modelling will take place is crucial to the process.

The MCDA process should be done iteratively and every input might not be correct on the first attempt. Organisers should draw on participants' judgements, even if they are not sure, to help them with the process.

Other key issues include: who defines the initial criteria; what alternatives are available to the decision-maker; and how the different criteria are translated into a numerical score in order to rank the different alternatives.</td></tr>
<tr><td>Examples of use of the method</td><td>
<table>
<tr><th>Project name</th><th>Organisation</th><th>Contact persons</th><th>Timeframe</th><th>Web address</th></tr>
<tr><td>PorGrow</td><td>University of Sussex and NEST (funded by the EC)</td><td>Dr Tim Lobstein and Professor Erik Millstone (SPRU, University of Sussex)</td><td>July 2004 - December 2006</td><td>http://www.sussex.ac.uk/spru/research/kplib/archives/porgrow</td></tr>
<tr><th>Project name</th><th>Organisation</th><th>Contact persons</th><th>Timeframe</th><th>Web address</th></tr>
<tr><td>Nano technology (US)</td><td>US Environmental protection agency</td><td></td><td>2007 – 2008</td><td>http://nepis.epa.gov/Adobe/PDF/P100CH93.pdf</td></tr>
<tr><th>Project name</th><th>Organisation</th><th>Contact persons</th><th>Timeframe</th><th>Web address</th></tr>
<tr><td>Rethinking Risk: A pilot multi-criteria mapping of genetically modified crop in agricultural systems in the UK</td><td>SPRU in association with GeneWatch</td><td>Andy Stirling</td><td>1999</td><td>http://www.sussex.ac.uk/Users/prfh0/Rethinking%20Risk.pdf</td></tr>
<tr><th>Project name</th><th>Organisation</th><th>Contact persons</th><th>Timeframe</th><th>Web address</th></tr>
<tr><td>Trade off analysis for marine protected area management</td><td>Centre for Social and Economic Research on the Global Environment, University of East Anglia</td><td>Katrina Brown, W. Neil Adger, Emma Tompkins, Peter Bacon, David Shim, and Kathy Young</td><td>2000-02</td><td>http://www.cserge.ac.uk/sites/default/files/gec_2000_02.pdf</td></tr>
</table>
</td></tr>
<tr><td>Additional information of relevance (such as historical background, where the method has already been applied, etc.)</td><td>Tools associated with MCDA have been used in complex science and technology issues such as GM foods and nanotechnology.</td></tr>
<tr><td>Sources (names of interviewees, links to relevant websites, etc.)</td><td>For a detailed manual on MCDA see:

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/7612/1132618.pdf

For a journal article on MCDA for nanotechnology, see:

http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2988199/

For a review of MCDA approach to mapping policy options for obesity in France see:

http://www.ncbi.nlm.nih.gov/pubmed/17371308</td></tr>
</table>

	For an article on MCDA and environmental risk assessment for nanomaterials see: http://www.nanoarchive.org/774/1/opr000VH.pdf

Author: **Houda Davis**
Organisation: **Involve**
Date: **23/07/14**
Revision date: **25/09/14**
Reviewed by: **Gy Larsen**

Name of the engagement method (alias)	**37. Neo-Socratic Dialogue (NSD)**
Short description of the method	Neo-Socratic Dialogue (NSD) is a method for resolving ethical questions as a means of discussing ethical problems with the respective stakeholders. The method makes an inquiry into ideas aiming to establish consensus on a given topic through joint deliberation and the weighing of arguments.
Long description of the method	NSD typically starts with a general question. The questions (usually drawn from ethics, politics, epistemology, mathematics and psychology), are of a general and fundamental nature. They should concern basic, essential issues and should be answerable by thinking without prior training needed. The question should be formulated in a way that is understandable, allowing the participants to find relevant examples from their everyday life. Initially, each participant of the group proposes a relevant case study. Participants are provided with criteria to help select suitable cases. One of the case studies is chosen for further investigation and discussion. Relevant questions to ask during the discussions are: What kinds of views were presented? What were the reasons of the different views? What kinds of principles and values were revealed? Were there any conflicts among them? What consensus and answers were elucidated? The common objective is to reach consensus, not as an aim in itself, but as a means to deepen the investigation. The method implies a systematic investigation of viewpoints, assumptions and reasons. **Participants:** minimum 5 to maximum 15 people from diverse backgrounds. No prior philosophical training is needed. **Facilitating:** the facilitator can write the main points on a flip chart; a transcriber writes down participants statements on a computer; the discussions can be recorded on an IC recorder with the participants' agreement to supplement these documents. **The phases of NSD:**  ➢ A general question must be formulated. ➢ The participants give concrete examples from their personal experience in which the question of discussion plays a key role. ➢ The group selects one example (case study), which is the basis of analysis and argumentation throughout the discussion. ➢ During the Neo-Socratic Dialogue, the participants examine the validity of judgments step by step. Judgments represent standpoints. Examining the backing rules means examining the reasons given for the judgment. Uncovering the principles and values means looking for the reasons behind the rule(s). The Neo-Socratic Dialogues aims to *discover the backing rules* and *test the validity of rules and principles* related to the particular case study.
Objective of application of the method	☐ Policy formulation ☐ Programme development ☐ Project definition ☒ Research activity ☐ Others:
Results and products of the method application	- Explore the rules and principles of given case studies; - Reach consensus in regard to the rules and principles underlying a thematic case study; - Encourage consent among participants through deep investigation of their principles and values.

<table>
<tr><td>Level of stakeholder/public involvement, i.e. objective of public participation through the method's application</td><td>☒ Dialogue ☐ Consulting ☒ Involving ☐ Collaborating ☐ Empowering ☐ Direct decision</td></tr>
<tr><td>Engaged stakeholders in the process of method application</td><td>
<table>
<tr><th>Category</th><th>Organiser</th><th>Direct participant</th><th>Beneficiaries</th></tr>
<tr><td>CSOs</td><td>☒</td><td>☒</td><td>☒</td></tr>
<tr><td>Policy-makers</td><td>☐</td><td>☒</td><td>☒</td></tr>
<tr><td>Researchers</td><td>☒</td><td>☒</td><td>☒</td></tr>
<tr><td>Citizens</td><td>☐</td><td>☒</td><td>☐</td></tr>
<tr><td>Affected</td><td>☐</td><td>☒</td><td>☐</td></tr>
<tr><td>Consumers</td><td>☐</td><td>☒</td><td>☐</td></tr>
<tr><td>Employees</td><td>☐</td><td>☒</td><td>☐</td></tr>
<tr><td>Users</td><td>☐</td><td>☒</td><td>☐</td></tr>
<tr><td>Industry</td><td>☐</td><td>☒</td><td>☐</td></tr>
</table>
</td></tr>
<tr><td>Geographical scope of application (On what level has the method already been used?)</td><td>☐International ☐ EU ☒ National ☒ Regional ☒ Local</td></tr>
<tr><td>Societal challenges the method has been trying to address</td><td>
<table>
<tr><td>☒Health, demographic change and wellbeing</td><td>☐Food security, sustainable agriculture, marine and maritime research and the bio-economy</td><td>☐Secure, clean and efficient energy</td><td>☐Smart, green and integrated transport</td></tr>
<tr><td>☐Climate action, resource efficiency and raw materials</td><td>☐Inclusive, innovative and reflective societies</td><td>☒Secure societies to protect freedom and security of Europe and its citizens</td><td>☐ Others:</td></tr>
</table>
</td></tr>
<tr><td>Specific strengths and weaknesses of the method vis-à-vis the challenge(s) addressed</td><td>Strengths:
It enables both laypersons and experts to engage in systematic reflection of the ethics of science and technology;
It attracts attention to the topic and provokes public debate in the media.
Weaknesses:
The connection with political decision-making is indirect and unclear;
Limited representativeness.</td></tr>
<tr><td>Timeframe for the application of the method</td><td>The actual NSD session typically continues for around 1 day.</td></tr>
<tr><td>Skills required in order to properly apply the method</td><td>
<table>
<tr><th>Skills</th><th>No such skills required</th><th>Basic</th><th>Intermediate</th><th>Advanced</th></tr>
<tr><td>Subject-matter expertise</td><td></td><td></td><td></td><td>X</td></tr>
<tr><td>IT skills</td><td>X</td><td></td><td></td><td></td></tr>
<tr><td>Facilitation skills</td><td></td><td></td><td></td><td>X</td></tr>
</table>
</td></tr>
</table>

	Event organisation skills		**X**		
	Project management skills		**X**		
	Other skills:				

What are the **issues of concern that organisers need to take into account** when applying the method?	An important factor influencing the method's application is the participants' level of information about the discussed topic. Furthermore, the participants will ideally be 'open-minded' persons who show a willingness to reveal and to rethink their own standpoints and values. If not, mediation and bargaining might prove more useful. Considering that NSD is focused on ethical implications and problems only, and does not cover all aspects of political decision-making, it is considered useful to integrate the method, combined with other participatory methods, such as consensus conferences.

Examples of use of the method

Project name	Organisation	Contact persons	Timeframe	Web address
Defining futile life-prolonging treatments through Neo-Socratic Dialogue		Kuniko Aizawa, Atsushi Asai and Seiji Bito		http://www.biomedcentral.com/1472-6939/14/51

Project name	Organisation	Contact persons	Timeframe	Web address
'Increasing Public Involvement in Debates on Ethical Questions of Xenotransplantation (XENO)'	Institut for Advanced Studies (IHS)		2002 - 2004	http://space.ihs.ac.at/departments/soc/xeno-pta/

Additional information of relevance (such as historical background, where the method has already been applied, etc.)	This method was formulated by Leonard Nelson (1882–1927). It is presently used in Germany, England, and Holland in philosophical training, dialogue-based education, problem discovery, and for establishing consensus. Recent attempts have been made to apply the method to ethical and social discussions in the medical and healthcare fields. The method is often used in education and consultancy.
Sources (names of interviewees, links to relevant websites, etc.)	Sources: http://www.biomedcentral.com/1472-6939/14/51#B11 http://society-for-philosophy-in-practice.org/journal/pdf/6-2%20056%20Griessler%20-%20Xenotransplantation.pdf http://space.ihs.ac.at/departments/soc/xeno-pta/xeno_gronke.pdf

Author: **Blagovesta Chonkova**
Organisation: **ARC Fund**
Date: **20.07.2014**
Revision date: **21.09.2014**
Reviewed by: **DIALOGIK**

Name of the engagement method (alias)	**38. Open Space Technology**
Short description of the method	The Open Space Technology is a method to organize participation events basically of large and medium scale (although events of 5 to 1000 and more participants have been reported yet within the OST-community). The method is based on the principles of passion, responsibility and commitment, bearing in mind the assumption that the most productive way to work is to work on a topic for which one cares.
Long description of the method	A one day Open Space event has three parts: i) An introduction to the whole plenum, explaining the method and what is expected of the participants in order to have a successful event. It is followed by the agenda setting, where workshop sessions are announced and scheduled and where the participants register for the workshops of their choice (It all takes a maximum of 1 hour – 15min for the introduction and the rest of the time is dedicated to agenda setting and enlisting). ii) The sessions themselves, where multiple workshops are conducted simultaneously. iii) A final round with the whole plenum in which the facilitator summarizes the events of the day and gives participants the opportunity to comment on their experiences and lessons learned. **Rules:** In the introduction, the facilitator should explain clearly how the event is going to work. The method's originator Harris Owen offers four principles and one law as framework rules for an Open Space event: P1) "Whoever comes is the right people.": Especially important at stakeholder events with a broad scope of participating organizations, or where differences in status and hierarchic position may occur. P2) "Whatever happens is the only thing that could have happened." : Sometimes the expectations of the participants differ from what the event is really like, be it the event in general or discussion dynamics. P3) "Whenever it starts is the right time." & P4) "When it is over, it is over.": These two principles concern the productive time spent in a workshop session. When there is nothing worthwhile to discuss anymore, it is better to close the workshop and join another one or have a break instead of clinging on the scheduled 90 minutes. This leads to the "Law of two feet" which says that you are allowed to switch workshops within an ongoing session or separate for a more intense discussion in a smaller group or even a break. If a participant feels, he or she is neither able to learn nor to contribute something to the discussion, or the discussion turns into a direction which is of no interest for him or her, he or she should not waste time and leave the workshop and go to another one which he or she finds more interesting. Neither should the left group feel offended about this nor the person who left have a guilty conscience. Additionally, it is a possibility to avoid or leave workshops where a single person dictates the discussion dynamics, issues and accepted facts without paying regard to the opinions of the others. **Agenda setting:** After explaining the general rules, the facilitator describes the agenda setting process. The participants are bid to approach the table in the middle, write down on the provided sheets the title of the workshop(s) they want to convene, introduce themselves shortly (!) via microphone, announce the workshop and afterwards pin it on a free timeslot of their choice on the bulletin board. To run the agenda setting more smoothly, the board should be divided in session columns, for example 'morning', 'midday' and 'afternoon', and provide post-its with a space number and a timeframe to attach to the workshop sheets. The participants do not have to wait till one of them is finished with his announcement in the middle of the circle; in fact, to achieve a more dynamic process, they should be encouraged to write their own workshops down, while another one is announced. The participants are allowed to convene several workshops but they are not obliged to convene at least one. They can simply participate in the proposed ones. After the bulletin board is filled with workshop sheets, the so called 'market place' is opened by the facilitator, in which all participants are free to enlist in any workshop of their interest by writing their name on the workshop sheet on the board. The participants are free to trade slots, if, for example, the convener wants to attend another workshop in the same timeframe, to merge workshops, if they address the same issues or to split groups (with or without defining the workshop title more precisely), if the number of participants is too high to have an intense discussion. It is possible to set participant limits beforehand. One or two staff members should be present to answer questions. **Workshop sessions:** After completing the agenda setting, the participants should commence immediately with the workshops themselves and gather at the announced spaces. The spaces should be equipped with pencils and paper to note down the discussions and results and maybe a flipchart to give the opportunity to support the discussion with visualizations. After the end of the last workshop follows a final plenum session in which the facilitator summarizes the events of the day and gives the participants the opportunity to comment on their experiences and lessons learned.

	Follow up: A book of proceedings should be sent to the participants only a few days after the event. It is a summary of the outputs of all workshop sessions with a short overview evaluation. Then the gathered data can be analyzed more closely to produce a report fitting to the objectives of the project/funder/… **Duration:** The duration of the event has an influence on what can be achieved. A single day event can produce a lot of information and data, lead to intense discussions, information translation between stakeholders, networking and ideas for new projects or other follow up actions. A two day event allows better recording and the opportunity to convene new workshops which have developed out of the discussion process and dynamics of the first day (e.g. the planning of a new proposal/project or issues which arose in one workshop and could not be discussed completely). Additionally, a three day event allows more time for reflection. What is more it is possible to make a book of proceedings till the end of the third day and give it as a take home gift for the participants (in this case without an evaluation). In a two or three day event there should be a news session in the morning and in the afternoon to summarize what has been achieved before and announce new workshops or shifts in the agenda. **Recruiting:** Despite the principle of voluntary self-selection, the people/homepages/distribution lists, etc. to which the invitation is send should be chosen accordingly to the objectives of the event. For example, making sure that every stakeholder is represented sufficiently.
Objective of application of the method	☒ Policy formulation ☒ Programme development ☒ Project definition ☒ Research activity ☒Others:
Results and products of the method application	Book of Proceedings: Summary of the outputs of all workshop sessions with a short evaluation, to be handed out a few days after the event had taken place (in best case scenarios such book of proceedings to be available at the end of the 3-day events – in this case without an evaluation) Recommendation for research strategies Knowledge dissemination of the project and information translation between stakeholder groups

Level of stakeholder/public involvement, i.e. objective of public participation through the method's application	☒ Dialogue ☒ Consulting ☒ Involving ☒ Collaborating ☒ Empowering ☐ Direct decision
Engaged stakeholders in the process of method application	

Category	**Organiser**	**Direct participant**	**Beneficiaries**
CSOs	☒	☒	☐
Policy-makers	☐	☒	☒
Researchers	☒	☒	☒
Citizens	☐	☐	☐
Affected	☐	☐	☐
Consumers	☐	☒	☐
Employees	☐	☐	☐
Users	☐	☐	☐
Industry	☐	☒	☐

Geographical scope of application (On what level has the method already been used?)	☒ International	☒ EU	☒ National	☒ Regional ☐ Local
Societal challenges the method has been trying to address	☒Health, demographic change and wellbeing	☒Food security, sustainable agriculture, marine and maritime research and the bio-economy	☐Secure, clean and efficient energy	☐Smart, green and integrated transport

	☐Climate action, resource efficiency and raw materials ☐Inclusive, innovative and reflective societies ☐Secure societies to protect freedom and security of Europe and its citizens ☐ Others:
Specific **strengths and weaknesses** of the method vis-à-vis the challenge(s)addressed	The method is based on the principles of passion, responsibility and commitment; bearing in mind the assumption that the most productive way to work is to work on a topic for which one cares. The method with its core driver voluntary self-selection ensures, first of all, a huge variety of discussed topics relevant to the participants and thus a huge amount of information and data in a short period of time. Secondly, no participants have to take part in workshops they are not interested in and thus are more motivated to contribute to the event.
Timeframe for the application of the method	Depends on the scale of the event: search for venue, recruiting process, organizational tasks (accommodation, catering, event set up).

Skills required in order to properly apply the method

Skills	No such skills required	Basic	Intermediate	Advanced
Subject-matter expertise		X		
IT skills		X		
Facilitation skills			X	
Event organisation skills			X	
Project management skills			X	
Other skills:				

What are the **issues of concern that organisers need to take into account** when applying the method?

- Make sure that OST is really the right method for your objectives
- Provide a robust framework and infrastructure to give stability to such an open method.
- Participants should be well informed in advance about the method and its objectives, otherwise it is possible that their expectations are not met which leads to dissatisfaction and destroys the method's dynamics of self-organisation through commitment.
- Due to the little structured method, make sure there is always a spot where the participants can ask questions about what they should do now, especially in case of large scale events.
- Make sure that the workshop sessions are well recorded (minutes, digital audio recording, etc.). Sometimes participants tend to neglect this important for the organizers/clients/funders part of the workshop sessions.

Examples of use of the method

Project name	Organisation	Contact persons	Timeframe	Web address
Inprofood	Dialogik, EUFIC, SPI, Uni Hohenheim	Ludger Benighaus, Christian Hofmaier	6 months	http://www.inprofood.eu/events/

Additional information of relevance (such as historical background, where the method has already been applied, etc.)

Sources (names of interviewees, links to relevant websites, etc.)

Website of the Method's originator Harris Owen: http://www.openspaceworld.com/brief_history.htm

EU-Project's podcast about an Open Space Conference 2013 in Brussels: http://www.inprofood.eu/events/

Author: **Christian Hofmaier**
Organisation: **Dialogik**
Date: **14-30-07**
Revision date: **14-30-07**
Reviewed by: **DBT**

Name of the engagement method (alias)	**39. Participatory Budgeting**
Short description of the method	Participatory budgeting is an umbrella term which covers a variety of mechanisms that delegate power or influence over local budgets, investment priorities and economic spending to citizens.
Long description of the method	Participatory budgeting (PB) involves citizens directly in making decisions about budget issues and priorities. This can take place on a small scale at the service or neighbourhood level, or it can be done at the city or state level. PB is not traditionally used in science; however, as participation moves into research funding, it may become more common. PB can be run as a one-off process, but long-term benefits such as social capital and ownership, require a reoccurring, cyclical process. Discussions are often limited to new investments rather than discussing spending as a whole. Participatory budgeting can deliver increased transparency and re-establish the legitimacy of government budget decisions. It has also been shown to build the skills and awareness of participants through the process of deliberation. Peer grant giving has also been carried out under the banner of participatory budgeting. This allows a group of citizens the power to assign grants for community projects and other spending. The total number of participants in all meetings in city-wide processes can be tens of thousands (see for example PB in Puerto Alegre). In Europe and North America the numbers have tended to be more modest, in the hundreds at most. The scale of citizen participation has ranged from single neighbourhoods, to an entire state (with a population of millions). Participatory budgeting can be done with direct participation of citizens or through directly elected citizen representatives. The larger, city wide processes often combine the two with direct participation at neighbourhood level where representatives are elected for city wide forums (Smith 2009). There is no universal way of applying participatory budgeting. The main features of participatory budgeting include: • A geographically defined area such as a local authority, a decentralised district of a local authority, or a defined neighbourhood; • Regularly scheduled meetings and debates in each geographical unit; • A cycle of activities closely following the local budgeting cycle; • A network of individuals and organisations involved in training, informing and mobilising local citizens; • Direct involvement of policy-makers in the PB process. Though each experience is different, most follow a similar basic process. Residents brainstorm spending ideas, volunteer budget delegates develop proposals based on these ideas, residents vote on proposals, and the government implements the top projects. For example, if community members identify recreation spaces as a priority, their delegates might develop a proposal for basketball court renovations. The residents would then vote on this and other proposals, and if they approve the basketball court, the city pays to renovate it.
Objective of application of the method	☒ Policy formulation ☒Programme development ☐ Project definition ☐ Research activity ☐ Others:
Results and products of the method application	The power delegated to the citizens in the decision processes varies in practice, from providing decision-makers with information about citizen preferences, to processes that place parts of the budget under direct citizen control. Generally, the amount of power devolved has tended to be larger in Latin America where participatory budgeting was more developed compared to Europe and North America.

Level of stakeholder/public involvement, i.e. objective of public participation through the method's application	☐ Dialogue ☐ Consulting ☒ Involving ☐ Collaborating ☐ Empowering ☒ Direct decision

Engaged stakeholders in the process of method application

Category	Organiser	Direct participant	Beneficiaries
CSOs	☐	☐	☐
Policy-makers	☒	☐	☐
Researchers	☐	☐	☐

	Citizens	☐	☒	☒	
	Affected	☐	☐	☐	
	Consumers	☐	☐	☐	
	Employees	☐	☐	☐	
	Users	☐	☐	☐	
	Industry	☐	☐	☐	
Geographical scope of application (On what level has the method already been used?)	☐ International	☐ EU	☐ National	☒ Regional	☒ Local
Societal challenges the method has been trying to address	☐ Health, demographic change and wellbeing	☐ Food security, sustainable agriculture, marine and maritime research and the bio-economy	☐ Secure, clean and efficient energy	☐ Smart, green and integrated transport	
	☐ Climate action, resource efficiency and raw materials	☒ Inclusive, innovative and reflective societies	☐ Secure societies to protect freedom and security of Europe and its citizens	☐ Others:	
Specific **strengths and weaknesses** of the method vis-à-vis the challenge(s) addressed	**Strengths:** • Involves decisions about spending and devolving real power; • Can be a very public process, which conveys legitimacy beyond the immediate participants; • By being exposed to the trade-offs surrounding financial decisions, participants can acquire a deeper understanding of the work of government; • The fact that Participatory Budgeting often involves control over actual resources can be a catalyst for civic mobilisation, especially in poorer areas. In Porto Alegre, Brazil (the city with the longest running participatory budgeting process) there has been a significant reallocation of resources towards spending in poorer areas as well as increased efficiency and reduced corruption as a result of participatory budgeting; • Better interaction and understanding between citizens and policy makers. **Weaknesses:** • Can create unrealistic expectations amongst participants if managed badly; • Works best where there are high levels of community activism to begin with; • Doesn't work well where central targets and restricted budgets limit the amount of power that can be given to citizens; • Policy makers may not engage in the recommendations from citizens ; • In most processes, meetings are open to all, creating the risk of certain groups dominating the proceedings.				
Timeframe for the application of the method	From 1 to 6 months for a once off. Could also be held on a continuous basis.				

Skills required in order to properly apply the method

Skills	No such skills required	Basic	Intermediate	Advanced
Subject-matter expertise			**X**	
IT skills			**X**	
Facilitation skills				**X**

	Event organisation skills				**X**
	Project management skills				**X**
	Other skills:				

What are the issues of concern that organisers need to take into account when applying the method?

- Participation in participatory budgeting is based on self-selection and often fails to involve underrepresented groups, for example, immigrants, the elderly and those with young families. However, research into participatory budgeting in Porto Alegre shows that the poorest neighborhoods have actually been the more active participants. This can probably be linked to the fact that poorer neighbourhoods feel a more pressing need for improved services.
- Citizens are only allowed to make suggestions with regards to a very narrow set of budgetary issues. Citizens' feedback may improve, to some extent, the quality of their lives, but their preferences cannot influence general questions of budgetary priorities and policies.
- It can take a long time before citizens feel the benefit of the process as the implementation of projects often takes up to two years. Many of the suggestions were also rejected because they were deemed unviable. It is important to keep citizens informed of developments.
- The outcomes of the participatory process lack a binding status and largely depend on the willingness of the borough council to adopt them.

Examples of use of the method

Project name	Organisation	Contact persons	Timeframe	Web address
Participatory budgeting in Porto Alegre, Brazil	Porto Alegre Municipal Council		1989 - ongoing	

Project name	Organisation	Contact persons	Timeframe	Web address
Participatory Budgeting in Berlin-Lichtenberg	Berlin-Lichtenberg borough council		2005 - ongoing	https://www.buergerhaushalt-lichtenberg.de/

Project name	Organisation	Contact persons	Timeframe	Web address
You Say, We Pay!	Stockport Metropolitan Borough Council	Central management team on 0161 218 1351 teamcentral@stockport.gov.uk	2010 - ongoing	http://www.stockport.gov.uk/services/communitypeopleliving/yourcommunity/communityandneighbourhood/neighbourhoodmanagement/central/centralyousaywepay

Project name	Organisation	Contact persons	Timeframe	Web address
£eith decides	Participatory Budgeting Unit	Loraine.duckworth @edinburgh.gov.uk Tel: 0131 529 6194	2010 - ongoing	http://www.edinburghnp.org.uk/neighbourhood-partnerships/leith/about/%C2%A3eith-decides/

Additional information of relevance (such as historical background, where the method has already been applied, etc.)	PB was first developed in Brazil in 1989, and there are now over 1,500 participatory budgets around the world. Most of these are at the city level, for the municipal budget. PB has also been used, however, for counties, states, housing authorities, schools and school systems, universities, coalitions, and other public agencies. For a more detailed discussion of Participatory Budgeting in Puerto Alegre see Smith, G. (2009) Democratic Innovations: Designing Institutions for Citizen Participation For a guide to organising a PB process at community level see: http://www.participatorybudgeting.org/participate/organize/
Sources (names of interviewees, links to relevant websites, etc.)	Sources: http://participationcompass.org/article/show/155 http://participedia.net/en/methods/participatory-budgeting http://www.participatorybudgeting.org/2014/

Author: **Houda Davis**
Organisation: **Involve**
Date: **22/07/14**
Revision date: **25/09/14**
Reviewed by: **Gy Larsen**

Name of the engagement method (alias)	**40. Participatory Design** (Co-design and practice-based research) Including various other tools: – Consultation; – Workshops; – Design Workbooks (interaction design, research through design, ideation). *This method is related to: – Citizen Science (See separate factsheet) – Participatory Action Research (See separate factsheet) – Charrette (See separate factsheet) – Participatory Mapping (See separate factsheet)
Short description of the method	Participatory design can be done together with citizens concerned about a certain issue (e.g. the environment). The starting point is consultation with individuals and community organisations. This is followed by an interactive design process which includes field tests with the users of the developed technologies and devices.
Long description of the method	Participatory design can be done together with citizens concerned with a certain issue (e.g. the environment). The starting point is consultation with individuals and community organisations. This is followed by an interactive design process which includes field tests with the users of the developed technologies and devices. Designing for users is a common practice in the field of industrial design. The user is also seen as a customer and the future buyer of the product. Participatory design with citizens who are, for instance, concerned with their local and global environment, has a different approach. There are a number of interesting projects which are pioneers in the area of participatory design. An example of participatory design is the Energy and Co-Designing Communities (ECDC) project[7]. They "*work with existing communities engaged in reducing energy demand, to understand the range of perspectives and knowledge they embody*". The project's website says about the uniqueness of their approach: "*While many researchers approach such questions, this is typically from the traditional perspective of mapping what people do and think in the context of 'useful' technologies. Obviously, this is very important, but we are interested in getting at what is often neglected in such studies: the imaginative, playful, emotional and potential aspects of people's use of technologies. […]* *The aim is to engender creative discussion and debate around matters of trust, responsibility and community ownership of energy demand reduction."*[8] ECDC is funded as part of RCUK's Energy Program, which studies ways for the UK to reduce its carbon emissions with 80% by 2050. A presentation on the project can be seen here: https://www.youtube.com/watch?v=ttwV_tQWszg ***Process*** The ECDC project uses *materials drawn from field trips, workshops and probes,* with which they *"will design novel devices and give them to participating communities to test in their own settings."* The process used in the ECDC can be summarized as follows: 1. Workshop with communities (citizens engaged in a certain issue), academics & local government, including: - Collaborative mapping sessions; - Probes and workbooks to feed the discussion; 2. Fieldwork; 3. Design & adaptation during deployment.

[7] www.ecdc.ac.uk – see the pages 'background' and 'process'
[8] http://research.gold.ac.uk/4782/1/ecdc_poster_4.pdf

ECDC - "The energy community workshop held at the GeffryeMuseum in London, July 2011"

Probes and Workbooks[9]:

Probes given to participants, they are drawn on and written into, capture material that is used for making design proposals

The ECDC website explains probes: *Each pack contained a series of evocative tasks related to energy consumption: writing an obituary for an electric appliance, confessing an energy usage guilty secret, taking a picture of something that should go faster.*

The Probe Packs will allow us to gather different insights on energy and community practices. Some tasks might seem vague and unconventional, but it is through this ambiguity that we are hoping to elicit inspirational responses. The probes are open to interpretation. Our volunteers can decide how to respond to each task, some probes might provoke while others might remain ignored. This diversity of reactions will enrich our views on energy and communities.

The workbook is used to suggest separate themes or directions for design by presenting on each page a mix of comments, images and a title.
How workbooks work is described here: http://www.ecdc.ac.uk/wp-content/uploads/2011/06/workbooks.pdf

Objective of application of the method	☐ Policy formulation ☐ Programme development ☒ Project definition ☒ Research activity ☐ Others:
Results and products of the method application	There seems to be no evaluation report of the impact of the example project. The example project ECDC led to a device called the Energy Babble, which is *"something like an internet radio appliance, designed for domestic and public spaces and dedicated to the topic of energy demand reduction. The devices are networked, drawing content from online sources and allowing responses using a built-in microphone.*

[9] EnergiseHastings. "Energy babble-energise-hastings-sm". http://www.slideshare.net/EnergiseHastings/energy-babbleenergisehastingssm

	Presenting a mixed and sometimes humorous polyphony of energy-related content, the intention is to expose the variety of discourses around environmental issues and to invite listeners to take part within it".[10] It has a speaker, a (glass) megaphone, and a microphone. It thus connects communities and allows awareness raising in other places (e.g. museums, public spaces).  The Energy Babble at home http://www.ecdc.ac.uk/2013/09/30/deploying-at-home/

Level of stakeholder/public involvement, i.e. objective of public participation through the method's application	☐Dialogue ☐Consulting ☒Involving ☒Collaborating ☐Empowering ☐Direct decision
Engaged stakeholders in the process of method application	

Category	**Organiser**	**Direct participant**	**Beneficiaries**
CSOs	☐	☒	☒
Policy-makers	☐	☐	☐
Researchers	☒	☐	☒
Citizens	☐	☒	☒
Affected	☐	☒	☒
Consumers	☐	☐	☐
Employees	☐	☐	☐
Users	☐	☒	☒
Industry	☐	☐	☐

Geographical scope of application (On what level has the method already been used?)	☐ International	☐ EU	☐ National	☒ Regional ☒ Local
Societal challenges the method has been trying to address	☐ Health, demographic change and wellbeing	☐ Food security, sustainable agriculture, marine and maritime research and the bio-economy	☒ Secure, clean and efficient energy	☐ Smart, green and integrated transport
	☒ Climate action, resource efficiency and raw materials	☒ Inclusive, innovative and reflective societies	☐ Secure societies to protect freedom and security of Europe and its citizens	☐ Others:
Specific **strengths and weaknesses** of the method vis-à-	**Strengths:** - The engagement process is intensive and strongly grounded in local communities and the needs that			

[10] http://www.ecdc.ac.uk/wp-content/uploads/2013/09/Energy-Babble_InteractionResearchStudio.pdf

<table>
<tr><td>vis the challenge(s) addressed</td><td>they have. The design process can lead to weird and unexpected outcomes such as the Energy Babble.
Weaknesses:
- Co-creation is a fragile process which requires a lot of attention to truly listen and be sensitive. It requires excellent facilitation and a participatory mind set to be effective.</td></tr>
<tr><td>Timeframe for the application of the method</td><td>The research is co-ordinated and facilitated by the research organisations.
The ECDC project received funding for a three-year period. On their website they have a blog which gives a good impression of the timeline of their activities. Intensive engagement with communities in product and service development and testing is a slow process.</td></tr>
<tr><td>Skills required in order to properly apply the method</td><td>
<table>
<tr><th>Skills</th><th>No such skills required</th><th>Basic</th><th>Intermediate</th><th>Advanced</th></tr>
<tr><td>Subject-matter expertise</td><td></td><td></td><td>X</td><td></td></tr>
<tr><td>IT skills</td><td></td><td></td><td></td><td>X</td></tr>
<tr><td>Facilitation skills</td><td></td><td></td><td>X</td><td></td></tr>
<tr><td>Event organisation skills</td><td></td><td></td><td>X</td><td></td></tr>
<tr><td>Project management skills</td><td></td><td></td><td>X</td><td></td></tr>
<tr><td>Other skills:</td><td></td><td></td><td></td><td></td></tr>
</table>
</td></tr>
<tr><td>What are the issues of concern that organisers need to take into account when applying the method?</td><td>As mentioned earlier, co-creation is a fragile process which requires a lot of attention to truly listen and be sensitive. It requires excellent facilitation and a participatory mind set to be effective.
Product development is an intensive process in resources. The added costs and benefits of doing this in a participatory way are difficult to discern.</td></tr>
<tr><td>Examples of use of the method</td><td>
<table>
<tr><th>Project name</th><th>Organisation</th><th>Contact persons</th><th>Timeframe</th><th>Web address</th></tr>
<tr><td>Energy and Co-Designing Communities (ECDC)</td><td>Centre for the Study of Invention and Social Process, University of London</td><td>William Gaver</td><td>2011-2014</td><td>www.ecdc.ac.uk</td></tr>
</table>
</td></tr>
<tr><td>Additional information of relevance (such as historical background, where the method has already been applied, etc.)</td><td>For more information on Design Workbooks which were used in the ECDC see:
• Gaver, William. “Making Spaces: How Design Workbooks Work”. In Proceedings of the SIGCHI Conference on Human Factors in Computing Systems, 1551–60. CHI ’11. New York, NY, USA: ACM, 2011. doi:10.1145/1978942.1979169.
A draft is also available on the download page of the ECDC website.</td></tr>
<tr><td>Sources (names of interviewees, links to relevant websites, etc.)</td><td>This fact sheet is mainly based on one case in the energy sector. http://www.powermatchingcity.nl/site/pagina.php?id=61
Engage2020 survey
- Co-design and practice-based research. Jennifer Gabrys j.gabrys@gold.ac.uk Goldsmiths, University of Londonwww.gold.ac.uk; www.citizensense.net http://www.jennifergabrys.net/
Further reading:
Live Methods Goldsmiths, University of London Les Back and Nirmal Puwar http://www.gold.ac.uk/methods-lab/publications/livemethods/</td></tr>
</table>

Author: Jako Jellema
Organisation: University of Groningen
Date: 31/7/2014

Revision date: 25/9/2014
Reviewed by: DIALOGIK

Name of the engagement method (alias)	**41. Participatory Sensing, Volunteer Sensing, Citizen Observatory** *This method is related to Citizen Science (See separate factsheet)
Short description of the method	Participatory sensing projects involve volunteers in the gathering of data for research. This process is facilitated with ICT platforms which often include the use of handheld devices such as smartphones. This is one of the methods which is used within various forms of Citizen Science.
Long description of the method	**Background** Data collection is a fundamental part of many natural sciences and can be an expensive component of research projects. Historically, there are interesting examples of involving citizens and lay experts in these processes. In some cases biologists have recruited participants in their data gathering campaigns for over 100 years. This has been done in the Audubon Society's Christmas Bird Count, which claims to be the longest running citizen science survey in the world. In the last decade, the participation in data collection has become easier due to developments in information and communication technologies. This has become an important factor for making the gathering of data cheaper and also for facilitating the communication with volunteers during the recruitment, data collection and in the data analysis phase. **Roles of participation** The core activity of the volunteers in the project is the gathering of data, usually at a specific location and sometimes also at a specific time. The platform needs to facilitate the easy submission of data to a central location. Other possible roles of citizens can be in analyzing the data. Sometimes this only concerns their own data but it can also relate to the whole dataset or a subset in which they are personally interested. There are also examples of projects where Civil Society Organizations are involved in the project definition of a project and also involve their own members in the execution. In general there are often benefits for the volunteers, which can be in the form of increased knowledge of the subject matter. **Infrastructure and tools** There are large variations among the types of participatory sensing projects. An important distinction is to what extent at the start of the project the tools are already available for the data collection. In some projects the tools have been developed from scratch and subsequent projects have a much shorter lead time and lower investment of time and money. For example, the tools developed in the original NoiseTube project in Paris have been published with an open source license and other parties are encouraged to organize their own participatory noise mapping projects with the open framework. **Participatory design of sensing instruments** The identification of which issues to address, and which sensing instruments to apply, can be done in a participatory way as well. An example can be found in the EU funded project Citizen Sense: "*The Citizen Sense project is both research and practice-based, and undertakes a review of existing practices and technologies while also testing, modifying and further developing sensing kits for use by participants. We undertake a participatory design process, where with participants and community groups we collaboratively develop concerns to be monitored, as well as sites, technologies and practices for monitoring. We do this through initial consultation, walking seminars where the kit is deployed and tested, interim site visits, as well as a follow-up workshop.*" Project leader Jennifer Gabrys of Goldsmiths, University of London – Engage2020 survey (2014). This way, participatory sensing is undertaken using compete collaboration in all aspects of the method.  *Citizen Sense – field tests with a monitoring kit*

Objective of application of the method	☐ Policy formulation ☐ Programme development ☒ Project definition ☒ Research activity ☐ Others:
Results and products of the method application	- Data for research. Cost effective data collection and presentation; - Large volumes of data, for some projects this can be referred to as 'big data'; - Possibly some analysis by citizens/affected/employees; - Engagement in research on (local) challenges; - Access to free or cheap publicity/dissemination; - If designed in a participatory way: social and technological innovation co-produced by citizens, civil society driven research. For example, in the Citizen Sense project innovative and cheap pollution monitoring kits are now used by citizens as data collection tools:  *Citizen Sense – pollution sensing*

Level of stakeholder/public involvement, i.e. objective of public participation through the method's application	☐ Dialogue ☐ Consulting ☒ Involving ☒ Collaborating ☐ Empowering ☐ Direct decision
Engaged stakeholders in the process of method application	

Category	Organiser	Direct participant	Beneficiaries
CSOs	☐	☐	☐
Policy-makers	☐	☐	☒
Researchers	☒	☒	☒
Citizens	☐	☒	☒
Affected	☐	☒	☒
Consumers	☐	☐	☐
Employees	☐	☐	☐
Users	☐	☐	☐
Industry	☐	☐	☐

Note: For designing projects, community organisations can be involved as participant

Geographical scope of application (On what level has the method already been used?)	☒ International ☒ EU ☒ National ☒ Regional ☒ Local

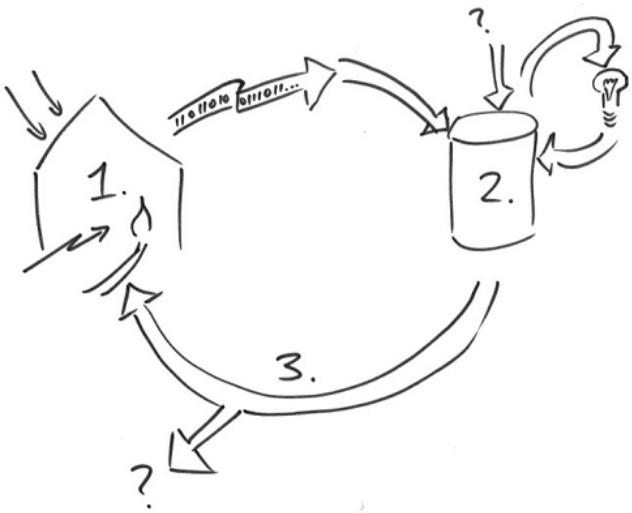
<table>
<tr><td>Societal challenges the method has been trying to address</td><td>☐ Health, demographic change and wellbeing
☒ Food security, sustainable agriculture, marine and maritime research and the bio-economy
☒ Secure, clean and efficient energy
☐ Smart, green and integrated transport
☒ Climate action, resource efficiency and raw materials
☐ Inclusive, innovative and reflective societies
☐ Secure societies to protect freedom and security of Europe and its citizens
☐ Others:</td></tr>
<tr><td>Specific strengths and weaknesses of the method vis-à-vis the challenge(s) addressed</td><td>Strengths:
- Cost effective data collection and presentation;
- Engaging citizens (or other stakeholder groups, such as affected employees) in research on (local) challenges;
- Access to free or cheap publicity/dissemination.

Weaknesses:
- A potential weakness is the quality assurance of the collected data. Research has already been done on the quality of large volumes of data of cheap sensors and volunteers compared to other data collection approaches with more expensive sensors by professionals, but smaller data volume. See for example research done for the NoiseTube tools.
- Investment in platform development and infrastructure, including relations with participants, can be slow and large. Once the infrastructure has been implemented it can be a source of ‘big data’.</td></tr>
<tr><td>Timeframe for the application of the method</td><td>The complexity of data collection activities varies with the different systems. Some require very little user training or instruction and can be applied in a one-time event. On the other hand, some may be more complicated and require multiple data capture moments and more user training. Most systems require a significant amount of time for the development of the platform. Follow-up projects, or projects using existing tools, will then usually have shorter lead times.</td></tr>
<tr><td>Skills required in order to properly apply the method</td><td>
<table>
<tr><th>Skills</th><th>No such skills required</th><th>Basic</th><th>Intermediate</th><th>Advanced</th></tr>
<tr><td>Subject-matter expertise</td><td></td><td></td><td>X</td><td></td></tr>
<tr><td>IT skills</td><td></td><td>X (For project implementations)</td><td></td><td>X (platform development)</td></tr>
<tr><td>Facilitation skills</td><td></td><td></td><td>X</td><td></td></tr>
<tr><td>Event organisation skills</td><td></td><td>X</td><td></td><td></td></tr>
<tr><td>Project management skills</td><td></td><td></td><td>X</td><td></td></tr>
<tr><td>Other skills:</td><td></td><td></td><td></td><td></td></tr>
</table>
</td></tr>
</table>

What are the **issues of concern that organisers need to take into account** when applying the method?

Motivations for participation

Keeping volunteers connected and active in the project has proven to be an obstacle for some projects. There are various motivations for participating in scientific research. Often within one project there can also be multiple motivators which vary across the 'crowd' of volunteers which contribute to a crowd sourcing project. In the MinderGas project (aimed at reducing natural gas use in households), for example, the primary motivator is for users of home energy systems to gain insight into their own energy use. The platform facilitates this feedback but simultaneously serves as a platform for aggregating the data and creating new value. In the EnergySense Living Lab, the following picture summarizes the fundamental point of there being some form of feedback to the contributors of the data. In this case, the data is generated by households, aggregated and processed in an ICT platform and the results are used for, among other things, scientific research, services development, and feedback to the participant households.



Confidentiality and security

The participation of volunteers in data collection with electronic systems will often include data which relates directly to the personal lives of the citizens involved. For example, in the projects linked to InfluenzaNet, people register factors related to their health as well as the area in which they work and live. There needs to be a system for protecting confidential information. Sometimes anonymizing the data will be sufficient, but often the data includes location and time information which can easily be related to specific users of the system. Various solutions are available to organize access and accountability to confidential information to protect volunteers and to comply with the relevant privacy legislation.

Expectations management

Expectations management is important. For example, in the iSpex project, participants thought they were monitoring particulate matter at street level, but in reality the measurements were taken through the whole atmospheric column to which their sensor was pointed, including higher layers. The results were thus not directly relevant to them, but more of interest to researchers.

Examples of use of the method

Project name	Organisation	Contact persons	Timeframe	Web address
ISPEX	Leiden University (consortium leader)	Frans Snik	Ongoing, sometimes only a one day measuring campaign.	www.ispex.nl
Project name	**Organisation**	**Contact persons**	**Timeframe**	**Web address**
InfluenzaNet	Acquisto Inter BV	Ronald Smallenburg	Annual winter data collection	www.influenzanet.eu
Project name	**Organisation**	**Contact persons**	**Timeframe**	**Web address**
EnergySense	Energy Academy Europe	Anne Beaulieu	Ongoing, participation for at least 5 years as a volunteer.	www.energyacademy.org/EnergySense

	Project name	Organisation	Contact persons	Timeframe	Web address
	NoiseTube	Vrije Universiteit Brussel	Ellie D'Hondt	Ongoing, measuring campaigns can take 3 months.	www.noisetube.net
	Project name	**Organisation**	**Contact persons**	**Timeframe**	**Web address**
	MinderGas	MinderGas.nl	David La Hei	Ongoing	www.mindergas.nl
	Project name	**Organisation**	**Contact persons**	**Timeframe**	**Web address**
	Citizen Sense	Goldsmiths, University of London	Jennifer Gabrys	2013-2017	www.citizensense.net
Additional information of relevance (such as historical background, where the method has already been applied, etc.)					
Sources (names of interviewees, links to relevant websites, etc.)	**ERC PROJECT:** ***Citizen Sensing and Environmental Practice: Assessing Participatory Engagements with Environments through Sensor Technologies*** http://cordis.europa.eu/project/rcn/106442_en.html "Participatory Sensing." Wikipedia, the Free Encyclopedia, July 3, 2014. http://en.wikipedia.org/w/index.php?title=Participatory_sensing&oldid=615497456.				

Author: **Jako Jellema**
Organisation: **University of Groningen**
Date: **30/4/2014**
Revision date: **22/9/2014**
Reviewed by: **ARC Fund**

Name of the engagement method (alias) If appropriate, please also insert the name of the method in other languages.	**42. Participatory Strategic Planning**
Short description of the method	The Participatory Strategic Planning process is a consensus-building method that helps communities come together and explain how they envision the development of their organisation/ community in the next few years.
Long description of the method	Participatory Strategic Planning is an approach used to reach consensus or encourage a spirit of commitment in a group and essentially promote organisational/community change. The method can foster direct decisions and clear ideas of where the community/organisation should go, as well as a compromise about the tools that are going to be used. The number of participants usually varies between 5 and 50. The method is more effective if there are participants from all levels of the organisation or community, as it is designed to be inclusive. The four major stages of the method are: 1) The group creates a clear vision for the future of the organisation/community; 2) The group discusses the potential threats that might prevent them from reaching their vision; 3) The group moves on to agree methods that will let them cope with the obstacles and reach the vision; 4) The final stage is about implementation planning (such as timeframe for the different activities that are going to take place). Each of the stages is based on the workshop process and it starts with brainstorming for the generation of ideas and with developing agreement of the different groups. Each workshop involves a combination of group work and plenary sessions. A team consisting two facilitators with good training and experience is needed during the planning process.
Objective of application of the method	☒ Policy formulation ☒ Programme development ☒ Project definition ☐ Research activity ☐ Others:
Results and products of the method application	• A strategic document specifying organisational/community goals and an implementation plan on how to achieve these goals; • Recommendation report about the organisational/community visions; • Promotion of consent in the respective organisation/community; • Promote organisational/community change.

Level of stakeholder/public involvement, i.e. objective of public participation through the method's application	☐ Dialogue	☐ Consulting	☒ Involving	☒ Collaborating	☐ Empowering	☐ Direct decision

Engaged stakeholders in the process of method application

Category	Organiser	Direct participant	Beneficiaries
CSOs	☒	☒	☒
Policy-makers	☒	☒	☒
Researchers	☒	☒	☐
Citizens	☒	☒	☒
Affected	☐	☐	☐
Consumers	☐	☐	☐
Employees	☒	☒	☐
Users	☐	☐	☐
Industry	☒	☒	☒

Geographical scope of application (On what level has	☐ International	☐ EU	☒ National	☒ Regional	☒ Local

the method already been used?)	

Societal challenges the method has been trying to address	☐ Health, demographic change and wellbeing	☐ Food security, sustainable agriculture, marine and maritime research and the bio-economy	☐ Secure, clean and efficient energy	☐ Smart, green and integrated transport
	☐ Climate action, resource efficiency and raw materials	☒ Inclusive, innovative and reflective societies	☒ Secure societies to protect freedom and security of Europe and its citizens	☐ Others:

Specific **strengths and weaknesses** of the method vis-à-vis the challenge(s) addressed

Strengths:

- Flexible and applicable to multiple settings;
- A remarkably quick way of enabling a diverse group to reach agreement;
- Works for people with auditory as well as visual preferences;
- Participants often find the process and outcome inspiring.

Weaknesses:

Participatory Strategic Planning cannot deliver the fine detail of plans which need to be developed in smaller groups.

Timeframe for the application of the method

A two day event with a recommended follow-up after 6 months.

Skills required in order to properly apply the method

Skills	No such skills required	Basic	Intermediate	Advanced
Subject-matter expertise			X	
IT skills	X			
Facilitation skills				X
Event organisation skills				X
Project management skills			X	
Other skills:				

What are the **issues of concern that organisers need to take into account** when applying the method?

- If the goals are not well-set and if the way to achieve them is not well developed, the process of applying the method might be vague and inefficient. Therefore, trained and experienced facilitators are needed to guide the participants throughout the process.
- The participants need to see and hear each other and the facilitator clearly; therefore the venue should be carefully selected.
- A large, flat area of wall-space is best for organising participants' ideas, written on cards.
  The method should not be used in a hierarchical situation where there is no commitment from the top to allow the group to make decisions and for them to be taken forward.

Examples of use of the method

Project name	Organisation	Contact persons	Timeframe	Web address
Participatory Strategic Planning	ICA:UK	louise@ica-uk.org.uk	1-2 October 2014, London	http://www.ica-uk.org.uk/psp-participatory-strategic-planning/
Project name	**Organisation**	**Contact persons**	**Timeframe**	**Web address**

	Sustainable Integrated Development and Biodiversity Conservation in the Grenadine Islands	Caribbean Conservation Association	Ms. Bernadette Sylvester	2002, Barbados	http://cermes.cavehill.uwi.edu/publications/Strategicplanningsummaryreport.pdf
	Project name	**Organisation**	**Contact persons**	**Timeframe**	**Web address**
	Quality Improvement of Higher Education	George Washington University	Yaroslav Prytula Stuart A. Umpleby	October – December 2003	http://www.gwu.edu/~umpleby/recent_papers/2008%20SPAR%20Prytula_Umpleby%203.pdf
Additional information of relevance (such as historical background, where the method has already been applied, etc.)	This method has been developed over 30 years by the Institute of Cultural Affairs, working with local communities around the world. It is now being applied widely in voluntary, public and private sectors. Participatory Strategic Planning is one of the group facilitation methods known collectively as the Technology of Participation.				
Sources (names of interviewees, links to relevant websites, etc.)	Sources: http://participationcompass.org/article/show/150				

Author: **Blagovesta Chonkova**
Organisation: **ARC Fund**
Date:
Revision date: **18.09.2014**
Reviewed by: **INVOLVE**

Name of the engagement method (alias)	**43. Perspective Workshop**
Short description of the method	The purpose of this SWOT-inspired workshop method is to explore possible myths, generate new perspectives, and put forward guidelines on a given technology or technological development. The method is especially applicable for slightly broader technological topics with no prior consensus.
Long description of the method	The purpose of this SWOT-inspired workshop method is to explore possible myths, generate new perspectives, and put forward guidelines on a given technology or technological development. The method is especially applicable for slightly broader technological topics with no prior consensus. The perspective workshop is a technology assessment method. It involves people who are affected by the technology. As a point of departure, the method uses the SWOT-analysis. SWOT stands for *strengths*, *weaknesses*, *opportunities* and *threats*. The perspective workshop comprises 36-48 participants, and normally lasts one and a half day. The idea behind this method is that the programme and the tasks are completely set, whereas the end result is open. Contrary to other workshop models, the perspective workshop doesn't only focus on local actions. The participants' perspectives can be directed to all levels; i.e. from micro to macro and local to international. **Before the workshop** The organiser appoints an external planning group which comprises a number of people with specialist knowledge on the workshop topic. This group's primary task is to qualify the content and process of the workshop. Based on the planning group's guidance, 12 articles are written. These articles present possibilities and threats regarding the topic. Participants are carefully selected, and they are asked to read the articles and prepare a home assignment. The group should involve relevant CSOs and stakeholders regarding the topic of the Perspective Workshop to secure a broad focus on the issues at stake. **During the workshop** The workshop combines group work and plenary sessions. Participants are divided into groups of 6-8 people, and after each round, the groups present their results in plenum. A process consultant is responsible for facilitating the workshop. The workshop is divided into four rounds: 1) *The present situation:* Starting from their own experience, participants describe the current situation and problems posed by the technology or technological development in question. This description can list both positive and negative aspects. 2) *Consequences:* In this round, participants discuss the possible consequences of the technology. This consequence analysis is carried out on the basis of the 12 articles, and the presented possibilities and threats are evaluated against participants' description of the present situation. 3) *The future scenario:* In the third round, participants imagine what the future will look like. On the basis of the results from the previous rounds and their imagination, they produce positive and negative future scenarios on the topic. After the groups have presented their results, the scenarios are divided into themes. The participants choose the theme that they have an interest in, and thus, new groups are formed. 4) *Perspectives:* The fourth and final round is action-oriented. The participants produce their own perspectives for moving from the present situation to the hoped-for future. Participants discuss the perspectives for future action necessary to achieve the desired development. All in all, the workshop ends with drafting an action proposal composed of participants' perspectives. **After the workshop** This method doesn't end after the fourth round. The organiser plays an important role in disseminating the results of the workshop (for more on this, see below).
Objective of application of the method	☒ Policy formulation ☒ Programme development ☐ Project definition ☐ Research activity ☐ Others:

Results and products of the method application	All projects have been concluded with a final report in which workshop results have been published. In the process of disseminating the results, the organisers have carried out different debate-generating activities which are a very important feature in regard to this method. Direct results of these activities include among other things the following: - The project *IT and working conditions* had articles published in trade unions' member's magazines, and stakeholder organisations acted on the results of the project by holding conferences and after-work meetings on the topic. - The project *IT and influence* published its workshop material in a debate book. Along with this book, the project composed a detailed script on how to organise and facilitate a perspective workshop. Thus, the two publications were a ready-made package for local stakeholders to facilitate a perspective workshop on IT and influence and thus calling for a debate on the topic at the local level. The publications are available at Danish public libraries.
Level of stakeholder/public involvement, i.e. objective of public participation through the method's application	☒ Dialogue ☐ Consulting ☐ Involving ☐ Collaborating ☒ Empowering ☐ Direct decision

Engaged stakeholders in the process of method application

Category	Organizer	Direct participant	Beneficiaries
CSOs	☒	☒	☒
Policy-makers	☐	☐	☒
Researchers	☒	☒	☒
Citizens	☐	☒	☐
Affected	☐	☒	☒
Consumers	☐		☐
Employees	☐	☒	☐
Users	☐		☐
Industry	☒	☒	☒

Geographical scope of application (On what level has the method already been used?)	☐ International	☐ EU	☒ National	☐ Regional ☐ Local

Societal challenges the method has been trying to address	☒ Health, demographic change and wellbeing	☐ Food security, sustainable agriculture, marine and maritime research and the bio-economy	☐ Secure, clean and efficient energy	☐ Smart, green and integrated transport
	☐ Climate action, resource efficiency and raw materials	☒ Inclusive, innovative and reflective societies	☒ Secure societies to protect freedom and security of Europe and its citizens	☐ Others:

Specific **strengths and weaknesses** of the method vis-à-vis the challenge(s) addressed	**Strengths:** - In preparation for the workshop, the participants have read a discussion paper with 12 articles. Besides different personal competences and experience, this gives them a shared starting point which qualifies the dialogue and the output of the workshop as well. - The discussion paper is not only useful in the workshop setting, but also in the process of disseminating the results and calling for a debate in the general public. **Weaknesses:** - The end result of the workshop is open. Thus, the result depends a great deal on the participants contributions.

	- Hands-on experience shows that the workshop participants found it easier to produce negative scenarios; i.e. the participants had to put more effort into generating positive ones.
Timeframe for the application of the method	**Month 1:** Appoint an external planning group **Month 2-4:** Prepare the workshop - Hold meetings with the planning group - Write 12 articles about possibilities and threats regarding the topic - Invite participants - Send workshop material to participants (articles, home assignment and programme) **Month 5:** Carry out the workshop over the period of one and a half days. **Month 6:** Final report - Hold meetings with the planning group - Write report with workshop results - Disseminate the output

Skills required in order to properly apply the method

Skills	No such skills required	Basic	Intermediate	Advanced
Subject-matter expertise				X
IT skills		X		
Facilitation skills				X
Event organisation skills				X
Project management skills				X
Other skills:				

What are the **issues of concern that organisers need to take into account** when applying the method?	- It is a time-consuming task to find workshop participants. First of all, the organisers must carefully select participants in order to get as many different inputs as possible. Secondly, it can be difficult to recruit participants for a one and a half day-long workshop. - While facilitating the workshop, the process consultant (the workshop leader) has to encourage participants to generate both positive and negative future scenarios (see strengths and weaknesses).

Examples of use of the method

Project name	Organisation	Contact persons	Timeframe	Web address
IT & working conditions	Danish Board of Technology	Gy Larsen, project manager, gl@tekno.dk	2001-2002	http://www.tekno.dk/subpage.php3?article=380&language=dk&category=7&toppic=kategori7 *(in Danish)*
Project name	**Organisation**	**Contact persons**	**Timeframe**	**Web address**
RFID - Risks and Opportunities	Danish Board of Technology	The project was organized by Ida Leisner, former project manager. For more information contact Gy Larsen, project manager, gl@tekno.dk	2005-2006	http://www.tekno.dk/subpage.php3?article=1281&language=uk&category=11&toppic=kategori11
Project name	**Organisation**	**Contact persons**	**Timeframe**	**Web address**
IT & influence	Danish Board of Technology	The project was organized by Steffen Stripp, former project manager. For more	1998	http://www.tekno.dk/subpage.php3?article=108&language=dk&category=6&toppic=kategori6 *(in*

			information contact Gy Larsen, project manager, gl@tekno.dk		*Danish)*
Additional information of relevance (such as historical background, where the method has already been applied, etc.)	The perspective workshop is closely related to other workshop methods; i.e. the scenario workshop, future search conference, and, last but not least, the future workshop, which is the prototype for the workshop models. Overall, the different workshop methods aim at preparing an action proposal through dialogue between stakeholders. The Danish Board of Technology has developed the perspective workshop, and, so far, the method has only been applied by this organisation and only to a limited extent.				
Sources (names of interviewees, links to relevant websites, etc.)	Lars Klüver, director, Danish Board of Technology, lk@tekno.dk Gy Larsen, project manager, Danish Board of Technology, gl@tekno.dk http://www.tekno.dk/subpage.php3?article=1235&toppic=kategori12&language=uk#perspective http://www.tekno.dk/subpage.php3?article=108&language=dk&category=6&toppic=kategori6 *(in Danish)* http://www.tekno.dk/pdf/projekter/p98_info.pdf *(in Danish)* http://www.tekno.dk/pdf/projekter/p04_RFID.pdf *(in Danish)* http://www.tekno.dk/pdf/projekter/p01_it-og-arbejdsvilkar-fuld-rapport.pdf *(in Danish)*				

Author: **klj**
Organisation: **Danish Board of Technology**
Date: **10.08.2014**
Revision date: **18.09.2014**
Reviewed by: **University of Groningen**

Name of the engagement method (alias)	**44. Q methodology - stakeholder selection** (also called: Q Method, Q Methode, Q Methodologie)
Short description of the method	Controversial issues in public debates involve stakeholders and experts with a wide variety of viewpoints. The Q methodology is a research tool from the social sciences which can be used to gain insight into the diversity of perspectives. Furthermore, it can be used to select relevant participants for further dialogue about the issues at hand.
Long description of the method	The Q Methodology was developed in the 1930 by the psychologist William Stephenson to find correlations between diverse individual viewpoints. The method is applied by social scientists across a wide range of fields. In the Netherlands, a number of researchers have applied it as a tool to uncover perspectives on controversial subjects in the field of energy. **Stakeholder selection** When organising a dialogue, it is fundamental to facilitate the meeting of stakeholders with diverse viewpoints on the issue under discussion. Often the assumption is made that by selecting participants on the basis of their affiliation, a wide range of views is represented. The Q methodology can be a tool for stakeholder selection where the emphasis lies on the representation of diverse perspectives in the dialogue. **Three step process** The Q methodology involves three main steps: *1. Definition of the concourse* When looking at a specific issue, the 'concourse' is the sum of all the statements about the issue. This step results in a set of statements called the Q-sort which defines the discourse. For example, in the Dutch biomass dialogue in 2007, there was an active public debate. So a desktop analysis of newspaper articles could be used to sketch the concourse. Sometimes this approach is not effective because of a lack of public debate. Then a different approach may be necessary. In a recent study on the acceptability of hydrogen technologies, focus groups were organised to gather data for the Q-sort. *2. Interviews and perspective identification* The sample of statements collected in the first phase is presented to the interviewees, who each make a Q-sort. This is a ranking of the statements in the Q-set according to their personal agreement or disagreement with the statements. At the end of each of the sessions the interviewer has two sets of data, the Q-sort and the narrative where the interviewee explains their choices.  **Figure 2: An interviewee making a Q-sort (Wikipedia)** The whole set of interviewees is called the P-set. They are selected to represent a variety of viewpoints. One purposive sampling approach is to snowball, by asking each participant for names of people with similar and different views. This can then be used to invite more participants and to monitor whether the interviewees represent groups with a wide variety of viewpoints. *3. Analysis & Conclusions* A statistical analysis of the Q-sort finds correlations between individual viewpoints. There are various software packages, such as PQMethod, that can support this analysis. Together with the analysis of the narrative, this leads to conclusions about the shared ways of thinking.
Objective of application of the method	☒ Policy formulation ☒ Programme development ☒ Project definition ☒ Research activity ☐ Others:
Results and products of the method application	- An overview of the variety of subjective perspectives on an issue; - An overview of the participants indicating their affiliation and type of perspective. This can then feed the selection process for a dialogue on the issue at hand. See below for an example from the Dutch biomass discussion (Cuppen, 2010).

The six perspectives for the 75 participants from 6 actor types are:
1: Keep all options open;
2: Hit the brakes;
3: Support small-scale innovative initiatives;
4: Security of supply with global, certified, 2nd generation biomass ;
5: Efficiency the goal: biomass a means?
6: Just do it, step by step.

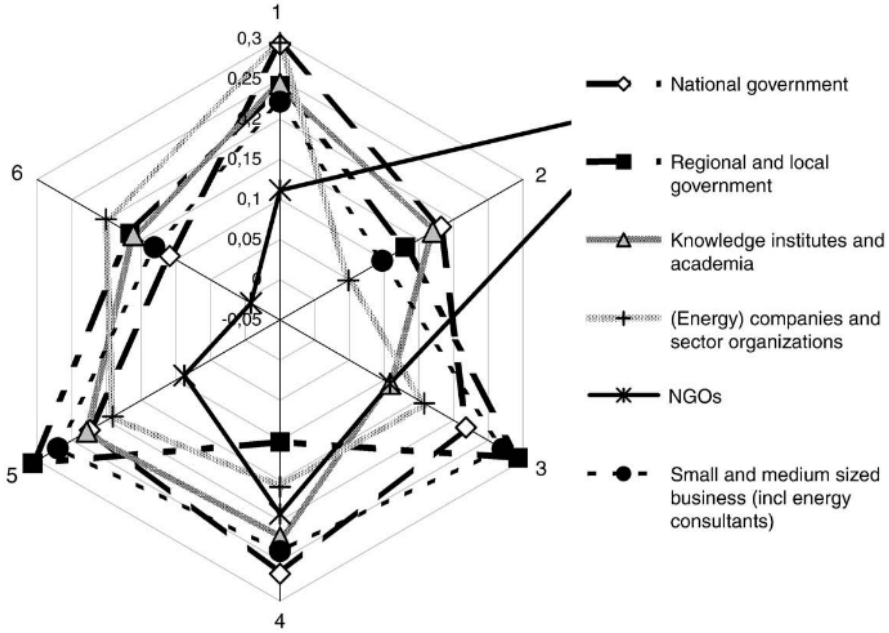


Figure 3 A graph indicating the average level of agreement with each of the six perspectives for participants from various types of stakeholders

Level of stakeholder/public involvement, i.e. objective of public participation through the method's application	☒Dialogue ☒Consulting ☐Involving ☐Collaborating ☐Empowering ☐Direct decision
Engaged stakeholders in the process of method application	

Category	**Organiser**	**Direct participant**	**Beneficiaries**
CSOs	☐	☒	☐
Policy-makers	☐	☒	☒
Researchers	☒	☒	☒
Citizens	☐	☐	☐
Affected	☐	☐	☐
Consumers	☐	☐	☐
Employees	☐	☐	☐
Users	☐	☐	☐
Industry	☐	☐	☐

Geographical scope of application (On what level has the method already been used?)	☐ International ☐ EU ☒ National ☒ Regional ☐ Local

Societal challenges the method has been trying to address

☐ Health, demographic change and wellbeing	☐ Food security, sustainable agriculture, marine and maritime research and the bio-economy	☒ Secure, clean and efficient energy	☐ Smart, green and integrated transport
☐ Climate action, resource efficiency and raw materials	☐ Inclusive, innovative and reflective societies	☐ Secure societies to protect freedom and security of Europe and its citizens	☐ Others:

Specific **strengths and weaknesses** of the method vis-à-vis the challenge(s) addressed

Strengths:
- Gaining an overview of a variety of perspectives in public debates about controversial issues, which allows the creation of a dialogue among stakeholders with different perspectives.

Weaknesses:
- This method is not suitable for finding out the level of support for a specific perspective. There is some measure of the extent to which they are represented with various stakeholders, but due to the purposive sampling there is no measure of the extent to which each perspective is supported by a wider public.
- Compared to other more straightforward approaches to selecting stakeholders, this is a time consuming process.

Timeframe for the application of the method

1. Definition of the concourse -

When an issue is controversial and there is an active public debate, this makes this phase relatively easy to do in a matter of weeks with desktop research.

2. Interviews and perspective identification -

An interview process with many stakeholders requires a lot of time from the researcher. In the Dutch biomass dialogue, over a three month period, 75 people were interviewed in sessions of between 60 and 90 minutes. This is the most intensive part of the method, and the registration of the data is time consuming.

3. Analysis & Conclusions

This phase takes a number of weeks.

A logical next step is the organisation of a dialogue.

Skills required in order to properly apply the method

Skills	No such skills required	Basic	Intermediate	Advanced
Subject-matter expertise			X	
IT skills	X			
Facilitation skills			X	
Event organisation skills	X			
Project management skills		X		
Other skills: Statistical analysis			X	

What are the **issues of concern that organisers need to take into account** when applying the method?

The Q methodology is a research tool which can be used to select stakeholders for a dialogue by consulting them in the preparation phase. In the execution of the next phases, effective engagement of stakeholders builds on the results of this exercise. In general, it will be necessary to inform participants on the following steps, while at the same time managing expectations, as not all participants will be involved in the dialogue.

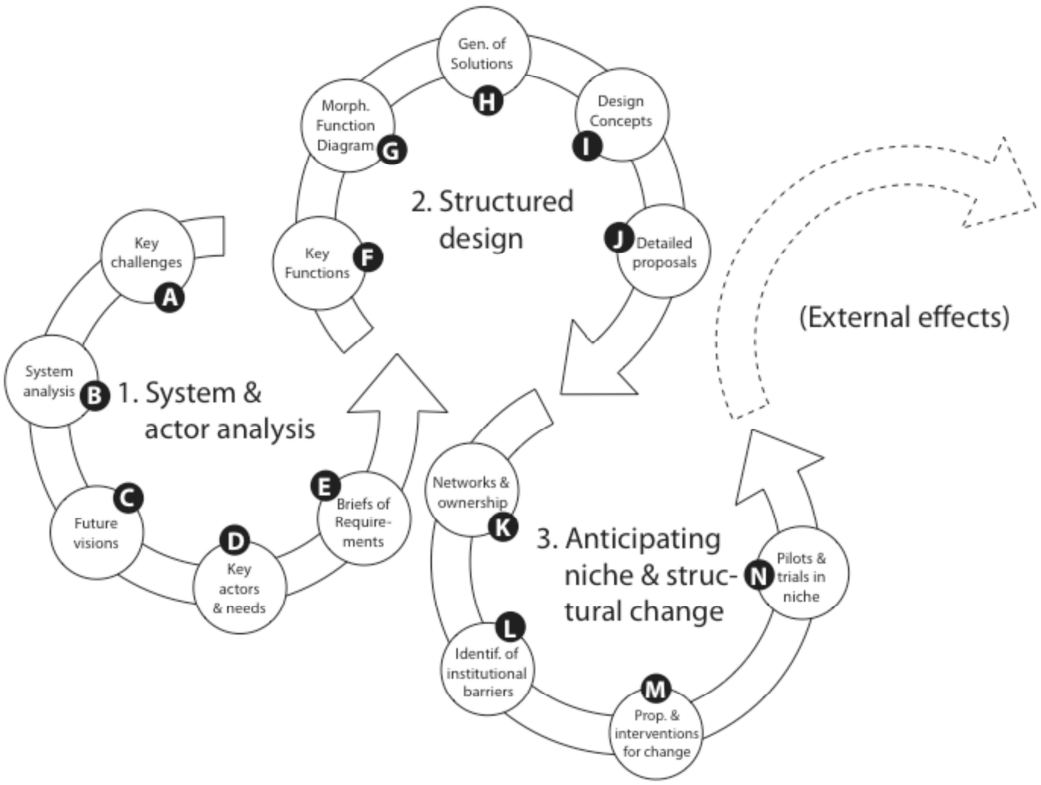
Examples of use of the method

Project name	Organisation	Contact persons	Timeframe	Web address
Biomass dialogue	Institute for Environmental Studies, Vrije Universiteit	Eefje Cuppen	2007	

		Amsterdam			
	Project name	**Organisation**	**Contact persons**	**Timeframe**	**Web address**
	Public acceptance of hydrogen	Faculty of Technology, Policy and Management. Technical University of Delft	Olga Di Ruggero		
	Project name	**Organisation**	**Contact persons**	**Timeframe**	**Web address**
	Socially responsible smart grids	Faculty of Technology, Policy and Management. Technical University of Delft	Andreas Ligtvoet	2012-2013	http://responsibleinnovation.eu/research/mvi-project-smart-grids/
Additional information of relevance (such as historical background, where the method has already been applied, etc.)	**Articles about recent projects:** Cuppen, Eefje, Sylvia Breukers, MatthijsHisschemöller, and Emmy Bergsma. "Q Methodology to Select Participants for a Stakeholder Dialogue on Energy Options from Biomass in the Netherlands." Ecological Economics 69, no. 3 (January 15, 2010): 579–91. doi:10.1016/j.ecolecon.2009.09.005. Di Ruggero, O., W. A. H. Thissen, TU Delft: Technology, Policy and Management: Multi Actor Systems, and TU Delft, Delft University of Technology. "Anticipating Public Acceptance: The Hydrogen Case." Delft University of Technology, April 25, 2014. http://resolver.tudelft.nl/uuid:b3d0443c-a425-4abd-94d1-be9ca77267e6. **Background information:** "Q Methodology." Wikipedia, the Free Encyclopedia, May 24, 2014. http://en.wikipedia.org/w/index.php?title=Q_methodology&oldid=609913902. "The International Society for the Scientific Study of Subjectivity (ISSSS) is the official organization committed to the ideas and concepts of Q methodology as enunciated by William Stephenson. ISSSS administers an email discussion list dedicated to exchange of information related to Q Methodology." www.qmethod.org/about				
Sources (names of interviewees, links to relevant websites, etc.)	Dr. ir. Eefje Cuppen http://www.tbm.tudelft.nl/en/about-faculty/departments/values-technology-and-innovation/tdsd-section/staff/eefje-cuppen/eefje-cuppen/ Drs. S. Sleenhoff (filled in her contact details in the Engage2020 survey) http://staff.tudelft.nl/en/S.Sleenhoff/				

Author: **Jako Jellema**
Organisation: **University of Groningen**
Date: **24/7/2014**
Revision date: **25/9/2014**
Reviewed by: **DIALOGIK**

Name of the engagement method (alias)	**45. Reflexive Interactive Design** (in Dutch: Reflexiefinteractiefontwerpen, RIO)
Short description of the method	In this method, stakeholders, consumers, NGO's and citizens define what the crucial characteristics of a sustainable production-consumption system are and then together design a production system that meets all these demands.
Long description of the method	The reflexive interactive design process consists of different stages, which could be seen as separate methods; the combination makes it unique and effective. This method is applied when sectors have arrived at a lock-in situation, where different stakeholders disagree on values or the nature of the problem. It is based on theories about systems learning, systems research and takes an integrative approach on problem-solving within unsustainable systems. **Interviews** Interviews are done with numerous stakeholders in the sector, as well as NGO's and the relevant ministry, to identify the sustainability problem(s) of the subsectors. Experts, guided by the project team, collectively analyse the current production-consumption system. They then create an IF-framework. **Collective System Analysis (CSA):** After the interviews are done, a workshop is organised. This CSA workshop is attended by participants that showed a willingness and ability to innovate and think outside the box during the interview. The aim is to get insight into the whole production-consumption system and especially to identify the main points where this system is blocking innovation and where possibilities for innovation lie. In the workshop, all participants write down the barriers they feel are blocking sustainable development on post-its. These post-its are placed on an Innovation Systems framework (a matrix showing the entire sector and all its interactions), while the participants explain them to the rest of the participants. Then, all participants reflect on the barriers listed, trying to determine the main underlying causes. In the next round, the same procedure is followed for current developments in or outside the sector, that offer windows of opportunity for innovation towards sustainability. At the end, one of the group members presents the results to the other groups in a plenary discussion and possible actions for improvement are proposed. **Design Atelier(s)**: The interested participants from the CSA workshop, then come together for two days to: 1) Identify what they feel are important characteristics of a sustainable production system; 2) Design a production system that meets these demands. An artist is present and draws these designs at the end of the day. In a plenary discussion these designs are assessed and pros and cons of the designs are identified. This method provides a way to force stakeholders of a sector to come together with citizens and NGO's to actively analyse the situation they are in and to challenge the existing presumptions about the system. By bringing all stakeholders together, innovations can be made that would not be possible when the system 'naturally' progresses. Depending on how the method is used and what the purpose of the project it is used in is, it could be used for working on the level of programme definition, project definition and/or for research activities. When it is used to make a design for a system that is then tested, it works on the level of project definition. When it is used as the main research method, and the research only aims to create a design, the participants actively participate in the research activity.



For a more detailed description and the purpose of all steps in the RIO method, see: http://www.transitiepraktijk.nl/files/Bos%202010%20WLR%20Rapport%20Reflexief%20Interactief%20Ontwerpen.pdf

Objective of application of the method	☐Policy formulation ☒ Programme development ☒ Project definition ☒ Research activity ☐Others:
Results and products of the method application	The method creates innovative designs for production systems; the next step could be to experiment with the implementation of this new production system.

Level of stakeholder/public involvement, i.e. objective of public participation through the method's application	☐Dialogue ☐Consulting ☒ Involving ☒ Collaborating ☐Empowering ☐Direct decision

Engaged stakeholders in the process of method application

Category	**Organiser**	**Direct participant**	**Beneficiaries**
CSOs	☐	☒	☒
Policy-makers	☐	☒	☒
Researchers	☒	☒	☒
Citizens	☐	☐	☒
Affected	☐	☐	☒
Consumers	☐	☒	☒
Employees	☐	☐	☐

	Users	☐	☐	☒	
	Industry	☐	☒	☐	
Geographical scope of application (On what level has the method already been used?)	☐International	☐ EU	☒ National	☐ Regional	☐ Local
Societal challenges the method has been trying to address	☐Health, demographic change and wellbeing	☒Food security, sustainable agriculture, marine and maritime research and the bio-economy	☐Secure, clean and efficient energy	☐Smart, green and integrated transport	
	☐Climate action, resource efficiency and raw materials	☐Inclusive, innovative and reflective societies	☐Secure societies to protect freedom and security of Europe and its citizens	☐ Others:	
Specific **strengths and weaknesses** of the method vis-à-vis the challenge(s) addressed	**Strengths:** It brings together different parties that normally would not choose to sit together and innovate together. Also, because of the strongly participative character of the design process, the participants are more likely to accept the final design and have a sense of ownership. Because of this, they are stimulated to actually translate the new ideas into real initiatives in the field. **Weaknesses:** There is a risk that the innovations that were designed in the Design Ateliers are just that: designs. If they stay only theoretical and on paper, these do not mean much. The challenge lies in taking this method one step further and using these designs in further research and innovation steps. In most of the projects listed at the end of this fact sheet, one or more of the designs that came out of the design atelier have been taken into practice and are being tested. This ROI method is developed by the WUR and has been used only by them – as far as we are aware. They have used the method in the agricultural sector to create innovations to make subsectors more sustainable. However this method might provide a way to also force other systems or technological sectors to come to new solutions for sustainability problems.				
Timeframe for the application of the method	The whole process can take 2 to 6 months. -The interviews and workshop preparation are usually done over a period of up to three months. -The collective System Analysis workshop will typically be held on one day. -The design workshop is usually a two day session.				

Skills required in order to properly apply the method

Skills	No such skills required	Basic	Intermediate	Advanced
Subject-matter expertise			X	
IT skills		X		
Facilitation skills				Key: Be able to make different parties communicate
Event organisation skills			X	
Project management skills			X	
Other skills:				

<table>
<tr><td>What are the issues of concern that organisers need to take into account when applying the method?</td><td colspan="5">Crucial to this method is the selection of participants.

The willingness of the participants to cooperate and to find solutions together is a key condition for the workshops to be successful. Some stakeholders in a sector may not feel the need or may not be able to think outside the box. A balanced group of participants is important, but researchers have pointed out that creating a completely representative group is not only impossible, but may also be inefficient when trying to create innovative designs over a short period of time.

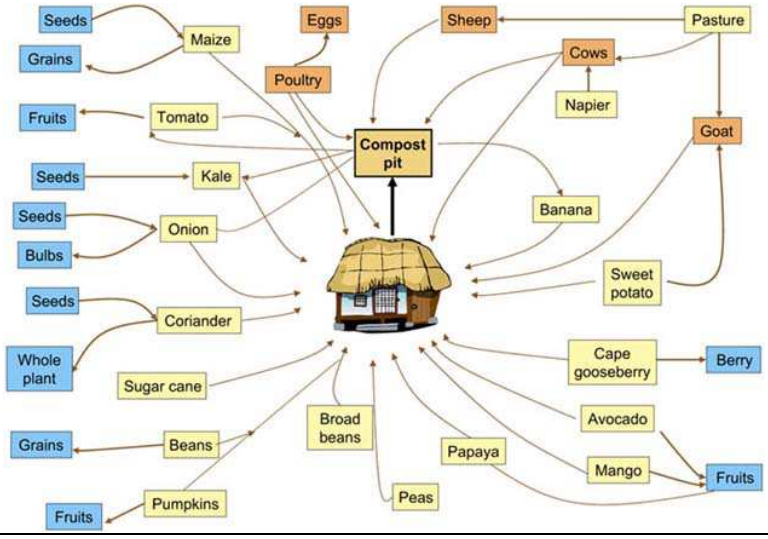
Preliminary interviews with potential participants serve to identify those parties that show a willingness to cooperate, innovate and think outside the box. These have an important role in choosing the right design atelier participants.

Knowing the sector in which you want to innovate and from which you want to choose participants is important, in order to be able to identify the bottlenecks in the sector in which innovation is being blocked or where there are possibilities for further innovation. So, overall, the preparation of the design atelier is essential in creating an efficient design process and a truly innovative product.</td></tr>
<tr><td rowspan="11">Examples of use of the method</td><td>Project name</td><td>Organisation</td><td>Contact persons</td><td>Timeframe</td><td>Web address</td></tr>
<tr><td>Pluimvee met smaak (Tasteful Poultry)*</td><td>WUR</td><td>dr. AP (Bram) Bos</td><td>2009-2011</td><td>http://www.wageningenur.nl/nl/show/Pluimvee-met-Smaak.htm</td></tr>
<tr><td>Project name</td><td>Organisation</td><td>Contact persons</td><td>Timeframe</td><td>Web address</td></tr>
<tr><td>Well-Fair Eggs</td><td>WUR</td><td>HJE (Ellen) van Weeghel MSc</td><td>2010-2013</td><td>http://www.wageningenur.nl/nl/show/WellFair-Eggs.htm</td></tr>
<tr><td>Project name</td><td>Organisation</td><td>Contact persons</td><td>Timeframe</td><td>Web address</td></tr>
<tr><td>Houden van Hennen (Caring for Hens)*</td><td>WUR</td><td>dr. AP (Bram) Bos</td><td>2010-2013</td><td>http://www.wageningenur.nl/nl/show/Houden-van-Hennen-1.htm</td></tr>
<tr><td>Project name</td><td>Organisation</td><td>Contact persons</td><td>Timeframe</td><td>Web address</td></tr>
<tr><td>Varkansen (Pigchances)*</td><td>WUR</td><td>-</td><td>2010-2013</td><td>http://www.wageningenur.nl/nl/show/Varkansen-1.htm</td></tr>
<tr><td>Project name</td><td>Organisation</td><td>Contact persons</td><td>Timeframe</td><td>Web address</td></tr>
<tr><td>Kracht van Koeien (Power from Cows)*</td><td>WUR</td><td>dr. AP (Bram) Bos</td><td>2010-2013</td><td>http://www.wageningenur.nl/nl/show/Kracht-van-Koeien-1.htm</td></tr>
<tr><td>Project name</td><td>Organisation</td><td>Contact persons</td><td>Timeframe</td><td>Web address</td></tr>
<tr><td>Vooruit met de geit (Onwards, with Goats)*</td><td>WUR</td><td>ir. MH (Martien) Bokma-Bakker</td><td>-</td><td>http://www.wageningenur.nl/nl/Expertises-Dienstverlening/Onderzoeksinstituten/livestock-research/Expertisegebieden/Veehouderijsystemen/Projecten/Vooruit-met-de-Geit.htm</td></tr>
<tr><td colspan="6">* most of the project names have double meanings in Dutch and are difficult to translate.</td></tr>
</table>

Name of the engagement method (alias)	**46. Resource Flow Map (RFM)** *a form of Participatory Mapping
Short description of the method	The making of Resource Flow Maps allows researchers to gain insight into farming systems by letting the farmers themselves draw a map of the resource flows. By using units of measurement that they understand, farmers can better understand the quantities. It is a form of participatory action research which has been applied for decades in the agricultural sector in developing countries.

Additional information of relevance (such as historical background, where the method has already been applied, etc.)	Applied in The Netherlands. Variations to the approach may have been applied elsewhere as well.
Sources (names of interviewees, links to relevant websites, etc.)	See table with examples.

Author: **Simone Hansen**
Organisation: **University of Groningen**
Date: **30-4-2014**
Revision date: **25-9-2014**
Reviewed by: **DIALOGIK**

Long description of the method	The making of Resource Flow Maps allows researchers to gain insight into peasant farming systems by letting the farmers themselves draw a map of the resource flows. By using units of measurement they understand, farmers can better understand the quantities. It is a form of participatory action research which has been applied for decades in the agricultural sector in developing countries. The method starts with large sheets of blank paper. Test farmers draw the different elements of their farms, such as fields, grain and fodder stores, animal pens, compost pits, etc. For each field, both present and preceding crops are noted. Afterwards, farmers draw arrows to represent resource flows entering and leaving the farm, and flows between fields and other farm components. It also includes the utilisation of last years' crop residues, organic manure and fertiliser application, and externally acquired resources entering the farm. The percentages of each of the different destinations of crop residues are estimated using pie diagrams. For transported material, quantification takes place in locally known units of measurement, such as donkey cart loads, bags or baskets. The arrows are labelled with the estimated quantities and percentages (Defoer et al., 1998).  *An example of a Resource Flow Map. In the project these were drawn on large sheets of packing paper by the test-farmers themselves.*
Objective of application of the method	☐ Policy formulation ☐ Programme development ☒ Project definition ☒ Research activity ☐ Others:
Results and products of the method application	By creating these maps, it is possible to visualise what the current state of the farming system is and how improvements can be identified. After the improvements are implemented, comparison between the past and current state are clearer. When quantifying resource flows on the map with locally known units of measurement, it becomes possible to gather quantitative data on the resource flows. In many citizen science projects, the intermediate results, and also conclusions, are relevant for all parties involved. This is the case here as the farmers gain knowledge about their own farming system and researchers gather data and insights to feed their research.

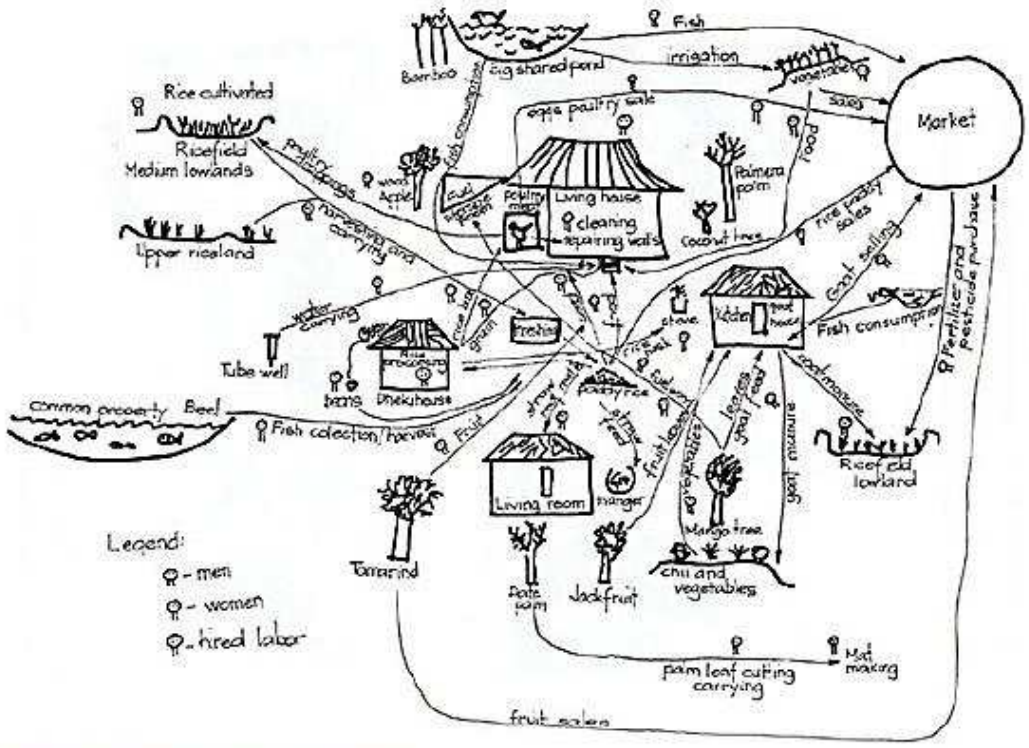


Figure 34: Example of a farm's resource flows
(from Lightfoot, Clive, Shelley Feldman and M. Zainul Abedin. 1991. Households, agroecosystems and rural resources management: a guidebook for broadening the concepts of gender and farming systems. ICLARM Educ. Series 12. Bangladesh Agricultural Research Institute, Joydebpur, Bangladesh, and International Center for Living Aquatic Resources Management, Manila, Phillipines: p.60)

Another example of a Resource Flow Map, this time hand-made.

Level of stakeholder/public involvement, i.e. objective of public participation through the method's application	☐ Dialogue	☐ Consulting	☐ Involving	☒ Collaborating	☐ Empowering ☐ Direct decision

Engaged stakeholders in the process of method application	Category	**Organiser**	**Direct participant**	**Beneficiaries**
	CSOs	☐	☐	☐
	Policy-makers	☐	☐	☐
	Researchers	☒	☐	☒
	Citizens	☐	☒	☒
	Affected	☐	☒	☒
	Consumers	☐	☐	☐
	Employees	☐	☐	☐
	Users	☐	☐	☐
	Industry	☐	☐	☐

Geographical scope of application (On what level has the method already been used?)	☐ International	☐ EU	☐ National	☐ Regional	☒ Local

Societal challenges the method has been trying to address	☐ Health, demographic change and wellbeing ☒ Food security, sustainable agriculture, marine and maritime research and the bio-economy ☐ Secure, clean and efficient energy ☐ Smart, green and integrated transport ☐ Climate action, resource efficiency and raw materials ☐ Inclusive, innovative and reflective societies ☐ Secure societies to protect freedom and security of Europe and its citizens ☐ Others:
Specific **strengths and weaknesses** of the method vis-à-vis the challenge(s) addressed	**Strengths:** The use of RFM's is a good way of gathering insights into the farm's system. It builds capacity for the participants and allows them to engage more fruitfully in the farm analysis. In a project in Mali, the farmers were enthusiastic about the use of these drawings (Defoer, 2000). For the first time, they could visualize what is actually going in and out of their farm, which left them with knowledge they needed to identify improvements in their system themselves. The RFM's have been used in other research settings as well, for example in rural Egypt and Zimbabwe. Another important quality of this method is the ability for it to combine Participatory Action Research and quantitative data collection, which has been difficult in the past. In various projects it has been shown that this can be done, if the local units are calculated to scientific units of measurement. Apart from making it more instrumentally valuable, this means that the effects of the implemented soil fertility management strategies on the soil nutrient balance can also be assessed more accurately. **Weaknesses:** This method requires researchers that are experienced and skilled in interacting with local smallholder farmers, when one wants to apply this method in a developing country. The drawing of the RFM's needs to be well taught to the researcher and the process needs to be well described in a research guide. Otherwise, RFM's from different farmers cannot be compared. There must be consensus on, for example, the symbols that are used.
Timeframe for the application of the method	To successfully apply the method a number of agricultural seasons needs to be monitored, so the method takes at least one calendar year.

Skills required in order to properly apply the method

Skills	No such skills required	Basic	Intermediate	Advanced
Subject-matter expertise			**X**	
IT skills			**X**	
Facilitation skills				**X**
Event organisation skills			**X**	
Project management skills			**X**	
Other skills: Working in an intercultural environment			Could be very relevant	

What are the **issues of concern that organisers need to take into account** when applying the method?	To assure the quality and comparability of the RFM's it is important to be aware of the following: - Skilled researchers and a practitioners guide should be used to make sure the RFM is made in a structured way. - Symbols should be standardised.

Examples of use of the method

Project name	Organisation	Contact persons	Timeframe	Web address
Soil fertility management in Southern Mali		T. Defoer	1994 - 1999	
Project name	**Organisation**	**Contact persons**	**Timeframe**	**Web address**

	Integrated Soil Water and Nutrient Management and Dry Season Feeding of Livestock Farmer Field Schools in Zimbabwe	International Crops Research Institute for the Semi-Arid Tropics (ICRISAT) and Wageningen University & Research centre (WUR)	B. Ncube	2003-2005	www.icrisat.org
Additional information of relevance (such as historical background, where the method has already been applied, etc.)	**Articles and books about the RFMs:** Corbett, Jon. "Good practices in participatory mapping: a review prepared for the International Fund for Agricultural Development (IFAD)." (2003) Defoer, Toon. "Learning about methodology development for integrated soil fertility management". Agricultural Systems 73, nr. 1 (July 2002): 57–81. doi:10.1016/S0308-521X(01)00100-7. Defoer, T., A. Budelman, C. Toulmin, en S. E. Carter. "Managing Soil Fertility in the Tropics. Building Common Knowledge: Participatory Learning and Action Research.", 2000, 207 pp. Defoer, T, H De Groote, T Hilhorst, S Kanté, en A Budelman. "Participatory action research and quantitative analysis for nutrient management in southern Mali: a fruitful marriage?" Agriculture, Ecosystems & Environment 71, nr. 1–3 (1 december 1998): 215–28. doi:10.1016/S0167-8809(98)00142-X. **The two examples used in this factsheet:** http://www.fao.org/docrep/006/y5066e/y5066e08.htm http://www.agriculturesnetwork.org/resources/learning/mod1-online/edu-res/r1/r1.1 The UK National Co-ordinating Centre for Public Engagement did an interesting summary of RFM which opens the field for other disciplines. "Participatory mapping is a group-based qualitative research method that gives participants freedom to shape discussion on a given topic with minimal intervention from researchers. Mapping can generate a rich understanding of the connections between people, places and organisations over space and/or time." "Participatory mapping | NCCPE". Accessed 17 July 2014. https://www.publicengagement.ac.uk/do-it/techniquesapproaches/participatory-mapping.			
Sources (names of interviewees, links to relevant websites, etc.)	Comment by Simon-Philipp Pfersdorf, in relation to the introduction & participatory action research : From this perspective the method seems to rather benefit the farmers/affected; maybe it could also be part of the method catalogue of citizen science because researchers could use the data for their own research; could you discuss the two perspectives somewhere in the sheet?! Jako: I agree that this is part of the citizen science family. Due to time limitations only a short addition to the fact sheet. In results added: 'In many citizen science projects the intermediate results and also conclusions are relevant for all parties involved. This is the case here as the farmers gain knowledge about their own farming system and researchers gather data and insights to feed their research. "				

Author: **Simone Harmsen**
Organisation: **University of Groningen**
Date: **17/7/2014**
Revision date: **01.10.2014**
Reviewed by: **ITAS**

Name of the engagement method (alias)	**47. Scenario Workshop**
Short description of the method	The scenario workshop is an instrument for participatory planning, based on dialogue and collaboration between a group of local citizens, stakeholders, experts and policy makers. The method aims to stir dialogue, provide the opportunity for exchanging experience and knowledge about existing barriers and possible solutions, enhance the understanding on the central topic/problem of discussion, and facilitate consensus on proposed solutions among the involved groups.
Long description of the method	The purpose of the scenario workshop is to assess different solutions to a specific problem. The solution can be technical, regulatory or an alternative method to organise or manage a problem. The scenario workshop is a two day meeting involving 25-30 local representatives such as citizens, policy makers, stakeholders, technology experts and private sector representatives. Before the workshop, a set of scenarios is developed and used as visions and inspiration at the scenario workshop. From these the participants develop visions in groups through discussion such as local plans of action to solve the problem. **Before the workshop** The organiser appoints an external planning group which comprises a number of people with specialist knowledge on the workshop topic. A set of scenarios is written, describing alternative ways of development. The scenarios represent different technical and organisational solutions with social and political values. Participants are carefully selected, and they are asked to read the scenarios beforehand. **During the workshop** The workshop is guided by a facilitator and the participants are divided in 'role groups' or 'theme groups' according to experience and interests. The workshop combines group work with brainstorm, debate, voting, presentation and plenary sessions. The process is divided into the following three phases: **Phase 1 'Critical analysis':** The participants comment on the scenarios based on their views, knowledge and experiences, providing both positive and negative feedback and highlighting barriers. It should be made clear to participants that the scenarios are not predictions and the aim is not to select or assess the scenarios. The primary objective is to use particular scenarios to help participants develop their own visions. **Phase 2 'Vision making':** Using the knowledge gained from the critical analysis phase, the visionary phase focuses on developing personal visions for future development. The participants' personal visions are discussed in the group. Each participant can choose elements and parts from the critical analysis phase to create their own vision. The participants continue to work in groups within their expertise theme and formulate different visions. **Phase 3 'Implementation':** The visions have to undergo a process to become realistic, and the group has to consider barriers such as economic, cultural, social, organisational, political or technical. All groups present their ideas in plenum and there is time for discussion, clarification and priority. The visions turn into action proposals that are gathered in a final action plan. The action plan contains the visions with a focus on the solutions about implementation.
Objective of application of the method	☒ Policy formulation ☐ Programme development ☐ Project definition ☐ Research activity ☐ Others:
Results and products of the method application	**Direct results** • An action plan, including the created visions, and new ideas and recommendations for future actions, policies and initiatives. • The method is a networking opportunity for citizens, stakeholders and policy makers, allowing them to interact, exchange knowledge and experiences, develop common visions and produce a plan of solutions for future action on a specific problem.; • Historically scenario workshops have had some direct impacts on decisions taken. **Indirect results** • The politicians can gain new knowledge about the citizens' discussions and assessment of technological development. • The citizens gain new knowledge and awareness in a technological area. • The method can contribute to better and more sustainable decisions in fields where future changes depend on the engagement and participation of citizens. • The workshop brings people together who usually don't meet and discuss local problems. This can dissolve prejudices that can be a barrier in local issues.

<table>
<tr><td>Level of stakeholder/public involvement, i.e. objective of public participation through the method's application</td><td colspan="4">☒ Dialogue ☐ Consulting ☒ Involving ☐ Collaborating ☐ Empowering ☐ Direct decision</td></tr>
<tr><td>Engaged stakeholders in the process of method application</td><td colspan="4"><table>
<tr><th>Category</th><th>Organiser</th><th>Direct participant</th><th>Beneficiaries</th></tr>
<tr><td>CSOs</td><td>☒</td><td>☒</td><td>☒</td></tr>
<tr><td>Policy-makers</td><td>☒</td><td>☒</td><td>☒</td></tr>
<tr><td>Researchers</td><td>☒</td><td>☒</td><td>☒</td></tr>
<tr><td>Citizens</td><td>☐</td><td>☒</td><td>☐</td></tr>
<tr><td>Affected</td><td>☐</td><td>☒</td><td>☐</td></tr>
<tr><td>Consumers</td><td>☐</td><td>☒</td><td>☐</td></tr>
<tr><td>Employees</td><td>☐</td><td>☒</td><td>☐</td></tr>
<tr><td>Users</td><td>☐</td><td>☒</td><td>☐</td></tr>
<tr><td>Industry</td><td>☐</td><td>☒</td><td>☐</td></tr>
</table></td></tr>
<tr><td>Geographical scope of application (On what level has the method already been used?)</td><td colspan="4">☐ International ☒ EU ☒ National ☒ Regional ☒ Local</td></tr>
<tr><td>Societal challenges the method has been trying to address</td><td colspan="4">☒ Health, demographic change and wellbeing
☒ Food security, sustainable agriculture, marine and maritime research and the bio-economy
☒ Secure, clean and efficient energy
☒ Smart, green and integrated transport
☒ Climate action, resource efficiency and raw materials
☒ Inclusive, innovative and reflective societies
☐ Secure societies to protect freedom and security of Europe and its citizens
☐ Others:</td></tr>
<tr><td>Specific strengths and weaknesses of the method vis-à-vis the challenge(s) addressed</td><td colspan="4">Strengths:
The method is well suited for local and regional problems that need immediate action.
It is also well suited to controversial and complex topics to help people create a common vision.
The participating citizens are an equal group alongside the other actors. The citizens can be defined as experts because of their local experience and knowledge that is crucial in solving local problems.
The method has a broad and open approach and includes citizens' visions on innovation and technological design.
The scenarios are often thoroughly worked on and have such value they can be used in new contexts and other projects as well.
The method can be used for creating the scenarios needed for the scenario workshop and other coherent processes.
The method involves the affected parties in solving a local problem.
The method allows for in-depth discussions during the two days of the workshop.
The method allows for an exchange of ideas, views and knowledge among different stakeholder groups.
The method allows for the promotion of new ideas and recommendations for future actions.
The method allows for the instigation of public discussion in the local communities with respect to the role technology has to play.
The method creates a local action catalogue to the political level.
The method focuses on local problems and local solutions and is able to handle multi-technological and non-technological problems.
The visions include 'who' will be acting and 'how' they will act.
Weaknesses:
The parties involved in the specific problem such as citizens, stakeholders and policy makers have to participate at the scenario workshop for it to result in sustainable solutions.</td></tr>
</table>

<table>
<tr><td></td><td>

- The results can be difficult to use at a general level because the method is very locally oriented.
- One scenario workshop is sometimes not enough to bring consensus.
- Implementing outcomes will depend on support from key decision makers which can be challenging to secure.

</td></tr>
<tr><td>Timeframe for the application of the method</td><td>

Month 1: Appoint an external planning group
Month 2-4: Prepare the workshop:
- Hold meetings with the planning group;
- Write scenarios;
- Invite participants;
- Send workshop material to participants (programme and scenarios).
Month 5: Carry out the workshop
Month 6: Final report:
- Hold meetings with the planning group;
- Write report with workshop results;
- Disseminate the output.

</td></tr>
<tr><td>Skills required in order to properly apply the method</td><td>

Skills	No such skills required	Basic	Intermediate	Advanced
Subject-matter expertise				**X**
IT skills		**X**		
Facilitation skills				**X**
Event organisation skills				**X**
Project management skills				**X**
Other skills:				

</td></tr>
<tr><td>What are the issues of concern that organisers need to take into account when applying the method?</td><td>

- For the workshop to be successful, the beneficiary has to have a need and interest in the results at a local, regional, national or international level.
- It is very important to find the right topic for the workshop. It must not be too narrow, and it should focus on the assessment of, and choice between, different types of technology/development. It is also important that the topic affords participants the possibility for action, i.e. that they can bring their influence to bear and that all the decisions have not already been taken. It must be a topic of social relevance and where there is a lack of consensus about the need for local action.
- The participants have to have knowledge on the workshop topic for them to gain influence. It doesn't have to be academic knowledge, but can also be experience from their everyday lives, or from their work.
- It can be a challenge to establish good contact with politicians, and policy makers, which is important for the uptake of the results. The same goes for media. Prepare to put some efforts into this.
- The recruitment of participants for two whole days can be difficult. More senior staff might be prevented to attend the event because of the duration of the event.
- Make sure that the developed scenarios reflect different kind of developments in a way that is understandable to the participating groups, and that they encourage discussions. For example, the scenarios describing a day in the life of a family in the future, portraying four different kinds of living. Also, make sure that the scenarios were presented as visions, not predictions. They are there to inspire criticism which can lead to new visions and action proposals. Presenting too tightly constructed scenarios might channel the ideas of the participants into specific direction and obstruct the development of new ideas.
- There is an important task with facilitation on the workshop, both in plenary and in the smaller groups. Citizens might be reluctant to share their experiences and opinions in front of experts. The exchange of technical insight and user experience must lead to the creation of new knowledge. This might need some w experience in facilitation.
- Sometimes, it can be useful to have the participants divided into groups of similar participants, and at other times have them work in groups across participant types.

</td></tr>
<tr><td>Examples of use of the method</td><td>

Project name	Organisation	Contact persons	Timeframe	Web address
PACITA – Scenario workshops	PACITA Consortium	Marianne Barland, project manager, The Norwegian	2013-2014	http://wp6.pacitaproject.eu/home/

</td></tr>
</table>

	on future ageing – tele assistance in ageing societies		Board of Technology marianne.barland@teknologiradet.no		
	Project name	**Organisation**	**Contact persons**	**Timeframe**	**Web address**
	Barriers to Urban Ecology	Danish Board of Technology	Lars Klüver, director, lk@tekno.dk	1991-1993	Not available
	Project name	**Organisation**	**Contact persons**	**Timeframe**	**Web address**
	New Technology in Eldercare	Danish Board of Technology	Marie Louise Jørgensen, project manager, mlj@tekno.dk	2006-2007	http://www.tekno.dk/subpage.php3?article=1339&toppic=kategori7&language=dk *(in Danish)*
	Project name	**Organisation**	**Contact persons**	**Timeframe**	**Web address**
	The Library of the Future	Danish Board of Technology	Lars Klüver, director, lk@tekno.dk	1995-1996	http://www.tekno.dk/subpage.php3?article=311&toppic=kategori7&language=dk *(in Danish)*
	Project name	**Organisation**	**Contact persons**	**Timeframe**	**Web address**
	European Awareness Scenario Workshop	European Commission DG XIII D		1994	http://cordis.europa.eu/easw/home.html
Additional information of relevance (such as historical background, where the method has already been applied, etc.)	**Historical background** The Danish Board of Technology developed the method in the early 90's to meet the need for new and integrated ways of handling environmental problems – in connection to the project Barriers to Urban Ecology. The Scenario Workshop is a developed form of the "Future Workshop" and basically it follows the same three phases for criticism, vision, and fantasy. However, the Scenario Workshop is based on a presentation of possible future developments in the area - Scenarios - formulated in advance. The project resulted in a national action plan. Inspired by this plan, the Minister of Environment in Denmark established a national committee on urban ecology in 1993. The Danish scenario workshop was later adapted for use across Europe as the European Awareness Scenario Workshop. The European Awareness Scenario Workshop (EASW) Initiative was launched by the European Commission DG XIII D in 1994 as a pilot action to explore new possible actions and social experiments for the promotion of a social environment favouring innovation in Europe. The EASW has been registered as a trademark since 9 June 1999. **Differences/alternative ways of implementing** It is possible to have the scenario workshop as a stand-alone event, but DBT recommends having several scenario workshops in the same project process. This can be done as independent workshops on the same topic with different scenarios. It can also be done in several workshops with the same participants developing the scenarios. If time and resources allow it, the inclusion of citizens in the development of the scenario workshop, at the stage of design and selection of criteria for developing technology can be undertaken. Some versions of the scenario workshops use voting. This is not necessarily a part of the method. Voting does not allow for the consideration of all valuable ideas and for working with them constructively. It can be very useful to include a workshop in the process of writing the scenarios, where different kinds of experts contribute with knowledge, including: researchers, policy-makerss, NGOs, and others.				

Sources (names of interviewees, links to relevant websites, etc.)	Marie Louise Jørgensen, project manager, Danish Board of Technology, mlj@tekno.dk Andersen, Ida-Elisabeth & Birgit Jæger (1999): "Danish Participatory Models. Scenario workshops and consensus conferences: towards more democratic decision-making". In *Science and Public Policy* 26(5): 331-340. http://www.tekno.dk/subpage.php3?article=1235&toppic=kategori12&language=uk#scenario http://cordis.europa.eu/easw/home.html http://www.cipast.org/cipast.php?section=1012 http://pubs.iied.org/pdfs/G01933.pdf ftp://ftp.cordis.europa.eu/pub/easw/docs/easw-annual-report-1998.pdf

Author:
Organisation: **ARC Fund & DBT**
Date:
Revision date: **21.09.2014**
Reviewed by: **Involve**

Name of the engagement method (alias)	**48. Science Shop** *Also called: Civil Society Driven Research; Collaborative Research *Similarities to Community-Based Research, sometimes used interchangeably. *Science Shops also operate under the following names: Wetenschapswinkel - Boutique de Science - Epylion - Videnskabsbutiken – Wissenschaftsladen - IntHum - Bazar de las Ciencias – InterMediu – Interchange – Community University Partnership Program Help Desk - Community Knowledge Exchange - Research Shop - Echop a Sciences - Forskningstorg - Knowledge Co-Op - Community Based Research Center - Students Learning With Communities - Teadusturg – Centre for Urban Research and Learning – Shop Front - Office of Community Based Research – Kennispunt – Kennisklik – Community-Academic Research Links. Science Shop Type of projects are also performed separately, without the full infrastructure in place
Short description of the method	Students and researchers do research requested by Civil Society Organizations (CSOs). The research project is defined together based on the CSOs needs. The CSO can have varying degrees of involvement in the actual research process. The results of the research are made public.
Long description of the method	The core activities of universities are teaching and research, but many have a third mission to transfer knowledge to society. The democratic idea is that research should be accessible to everyone, including civil society organisations and non-profits (complementary to curiosity driven or commercial research). A Science Shop thus is a unit that provides independent and participatory research support in response to concerns experienced/expressed by civil society. Science Shops were established in the 1970s in the Netherlands (with similar developments in e.g. Canada and USA), and are now active in many countries. Civil society driven research leads to interesting research topics for staff and students, and offers social and political learning for students, next to developing problem-solving skills. It offers good PR for the university. This is a win-win-win situation. Policy makers benefit from additional knowledge to base decisions on. In an initial-meeting, the research objectives and time frame are agreed, expectations managed, and sources of knowledge identified. The CSO participates in the sounding-board of the project. Results are made public. Through this co-operation, the research is both independent and participatory. Further involvement of the CSO is possible, depending on the context (cf Community Based Research, Citizen Science). In university based Science Shops, the university has final responsibility for a product abiding by academic quality standards. Other Science Shops are stand-alone organisations, who usually work in partnership projects with CSOs and research institutes, or perform part of the research themselves. Responsibilities are distributed within the team. Because at universities' Science Shops the research is mostly done in the curricula, there are low costs involved. Mostly, bachelor or master thesis research is used to perform research for a CSO. For professors, supervising this research counts towards their teaching hours. At the same time, working with students also has limitations, especially in time planning. When additional funding is available, researchers can be hired. The Science Shop, as infrastructure, offers an existing network of CSOs in the region, in which trust relations have been established. When starting from scratch, a needs survey among CSOs can be done, to see if the expressed needs match research interest/capacity within the institute, or the consortium submitting a research proposal. Science Shop staff have good experience in process management of these co-operative projects.
Objective of application of the method	☐ Policy formulation ☐ Programme development ☒ Project definition ☒ Research activity* ☐ Others: * During Research activity CSO is part of advisory board, not necessarily of the research itself
Results and products of the method application	The method co-creates new knowledge. This is often codified in reports (theses, sometimes edited; brochures, advisory letters, designs, press-releases, etc). Seminars and follow-up research proposals can also be the result. Among the other results of the Science Shop are: co-creation of knowledge, empowered CSOs, motivated students, and PR for the participating research institute.

Level of stakeholder/public involvement, i.e. objective of public participation through the method's application	☐ Dialogue ☐ Consulting ☐ Involving ☒ Collaborating ☐ Empowering ☐ Direct decision
Engaged stakeholders in the process of method application	

Category	**Organiser**	**Direct participant**	**Beneficiaries**
CSOs	☒	☒	☒
Policy-makers	☐	☐	☒
Researchers	☒	☒	☒

	Citizens	☐	☐	☒	
	Affected	☐	☐	☒	
	Consumers	☐	☐	☒	
	Employees	☐	☐	☒	
	Users	☐	☐	☒	
	Industry	☐	☐	☐	
Geographical scope of application (On what level has the method already been used?)	☒ International	☒ EU	☒ National	☒ Regional	☒ Local
Societal challenges the method has been trying to address	☒ Health, demographic change and wellbeing	☒ Food security, sustainable agriculture, marine and maritime research and the bio-economy	☒ Secure, clean and efficient energy	☒ Smart, green and integrated transport	
	☒ Climate action, resource efficiency and raw materials	☒ Inclusive, innovative and reflective societies	☒ Secure societies to protect freedom and security of Europe and its citizens	☒ Others:	
Specific **strengths and weaknesses** of the method vis-à-vis the challenge(s) addressed	The method combines different types of knowledge, builds on issues defined by civil society, and makes output usable to civil society. Additional benefits are co-creation of knowledge, empowered CSOs, motivated students, and PR for the involved research institute. Since the method works with students in their curricula, timing can be an issue. With sufficient funding, this can be overcome, since a researcher can be hired.				
Timeframe for the application of the method	If infrastructure already exists, projects may be set up in a time frame of 3-6 months, though availability of students may prolong the time frame with another 6-12 months. It takes 1-2 years to start a full Science Shop as infrastructure. Maintaining contacts is a continuous effort.				

Skills required in order to properly apply the method

Skills	No such skills required	Basic	Intermediate	Advanced
Subject-matter expertise		X	X	
IT skills		X		
Facilitation skills				X
Event organisation skills		X		
Project management skills			X	
Other skills:				

What are the **issues of concern that organisers need to take into account** when applying the method?	The timing of student researchers vs. time frame of CSO is a critical factor. Student curricula can be more or less rigid in different countries. CSOs can become impatient. Staff supervision: there are still few incentives for supervisors to spend additional time on these projects. What is more, when a project comes in from outside, it is usually on the edge of their current knowledge, sometimes making them uncomfortable. Thus, expectations management is the most crucial. The more funding that is available, the more can be achieved. Since this is non-profit research, the process management can be seen as costly and be subject to budget cuts. However, dedicated brokering staff who are good process and expectations managers are the key to success here.

Examples of use of the method	Project name	Organisation	Contact persons	Timeframe	Web address
	All Known Science Shops	Living Knowledge – The International Network of Science Shops	Norbert Steinhaus, Henk Mulder	Since 2001	www.livingknowledge.org/livingknowledge/science-shops/contact-points
	Project name	**Organisation**	**Contact persons**	**Timeframe**	**Web address**
	Community-Academic Research Links	University College Cork, Ireland	Dr Kenneth Burns	Since 2010	http://carl.ucc.ie
	Project name	**Organisation**	**Contact persons**	**Timeframe**	**Web address**
	Community Knowledge Exchange	University of Cambridge	Nicola Buckley	Since 2009	www.cam.ac.uk/public-engagement/voluntary-sector/community-knowledge-exchange
	Project name	**Organisation**	**Contact persons**	**Timeframe**	**Web address**
	Science Shops	University of Groningen	Henk Mulder	Since 1979	www.rug.nl/wewi
	Project name	**Organisation**	**Contact persons**	**Timeframe**	**Web address**
	Knowledge Co-Op (Collaborative Research)	University of Cape Town	Barbara Schmid	Since 2010	www.knowledgeco-op.uct.ac.za/
	Project name	**Organisation**	**Contact persons**	**Timeframe**	**Web address**
	Shop Front	University of Technology Sydney	Lisa Andersen	Since 1996	http://www.shopfront.uts.edu.au/

Additional information of relevance (such as historical background, where the method has already been applied, etc.)	The method has been applied all over the world, though most prominently in Europe, originating from the Netherlands in the mid-1970s, and in parallel with developments in Canada (and developments of Participatory Action Research World wide). Most current Science Shops can be found here: www.livingknowledge.org/livingknowledge/science-shops/contact-points More background can be found here: http://www.livingknowledge.org/livingknowledge/science-shops/documentation
Sources (names of interviewees, links to relevant websites, etc.)	**Science Shops offer infrastructure. The actual projects done within this structure in its participatory way can be within all grand challenges. I list a random set of examples below and could complete & update this for every aspect of all challenges.** The items within all grand challenges can be found here: http://ec.europa.eu/programmes/horizon2020/en/h2020-section/societal-challenges **Examples of Science Shop Projects under the Grand Challenges** **Health, demographic change and wellbeing** Ouderen en geneesmiddelenonderzoek. Informatie voor voorschrijvers en patienten. (Elderly people and medicin research. Information for subscribers and patients). Science Shop, University of Groningen. Henk Mulder. 2003. http://geneesmiddelen.wewi.eldoc.ub.rug.nl/root/Rapporten/2003/Ouderen/ Mindfulnesstraining en kwaliteit van leven van mantelzorgers. De rol van ervaren druk, ervaren grip op het leven, sociaal functioneren, hulp vragen en sociale steun. (Mindfulnesstraining and quality of life of lay carers).

Science Shop Medicin and Public Health, University of Groningen. Jolanda Tuinstra. 2013 http://umcg.wewi.eldoc.ub.rug.nl/root/Rapporten/2013/Mindfulness/

Food security, sustainable agriculture, marine and maritime research and the bio-economy

De groene kant van rood: Milieugerichte levenscyclusanalyse van rode textielkleurstoffen: alizarine uit meekrap en synthetische kleurstoffen. Vergelijking milieuprofiel natuurlijk alizarine met synthetische alizarine en naftol-itr; inclusief verbeteroptie). (LCA study of red dyes either made from plants or from oil). Science Shop, University of Groningen. Karin Ree. 1998. http://chemie.wewi.eldoc.ub.rug.nl/root/rapp/1998/C86/

Secure, clean and efficient energy

Groener drogen . Zijn er kansen voor groenvoerdroging met restwarmte? (Greener drying. Can fodder by dried with rest heat?). Science Shop, University of Groningen. Karin Ree. 2012. http://beta.wewi.eldoc.ub.rug.nl/root/2012/2012-2/

Towards small scale use of asphalt as a fuel. Science Shop, University of Groningen. Henk Mulder. 2002. http://chemie.wewi.eldoc.ub.rug.nl/root/rapp/2002/C-102/

Smart, green and integrated transport

A Study of Household Energy Consumption and Road Trafin Brasov, Using West-European Methods. Science Shop, University of Groningen. Henk Mulder. 2006. http://chemie.wewi.eldoc.ub.rug.nl/root/rapp/2006/Roemenie/

Climate Action, Environment, Resource Efficiency and Raw Materials

Ballast water risk assessment in the North Sea. Science Shop, University of Groningen. Karin Ree. 2012. http://beta.wewi.eldoc.ub.rug.nl/root/2012/2012-3/

Inclusive, innovative and reflective societies

Sociale hulp- en dienstverlening bij huisvesting in Noord-Nederland (Social care and service provision for housing in the North of The Netherlands). Science Shop Economics and Business Management, University of Groningen. Martijje Lubbers. 2010. http://eb.wewi.eldoc.ub.rug.nl/rapporten/2010/WD2010-3/

Secure societies to protect freedom and security of Europe and its citizens

Scheuren niet zeuren (Cracks don't Complain). A portal to keep track of earth quake damage on the gasfields of The Netherlands. Science Shop, University of Groningen. Henk Mulder. 2003-2007. http://scheurennietzeuren.nl/

Equity Index for Police Patrolling. Jacksonville Community Council. 1994. See: http://www.loka.org/CRN/lokareport.pdf, p. 9

Others: Too many to mention

Author: **Henk Mulder**
Organisation: **University of Groningen**
Date: **30/4/2014**
Revision date: **22/9/2014**
Reviewed by: **ARC Fund**

Name of the engagement method (alias)	49. "**From Question of a CSO to a Research Question"** (Tool - part of overall Science Shop Method)
Short description of the method	The Intake (a structured conversation) of a Question from a CSO transfers it into a Research Question. It articulates the 'question behind the question' (the real problem), the objective and gives clarity on required timing and information already available.
Long description of the method	The question a CSO may have to research is most often not yet a research question. In a conversation, preferably face to face, a research question can be articulated together. Usually, a mediator/broker, a researcher and a CSO representative sit around the table. Questions to be posed are: -For what purpose does the CSO need the question answered, what do they want to achieve with it and how? When do they need results for this purpose? (This should give clarity on the context of the issue, identify stakeholders, and decide whether research can be useful). It can be that their question is part of a wider problem (e.g. a CSO may ask for an inventory of complaints, but they may be interested in knowing possible solutions respondents have found as well; the survey will then need to be more extensive than just an inventory). -What information is already available that they know of, and which steps have already been taken by them or others? What can the input of the CSO be during the research process or do they think it is possible to engage other stakeholders in it? -What are their own hypotheses on the situation? (Data, correlations, causalities, possible solutions) -Would there be additional funding options? Then a preliminary research question can be formulated. Some steps in that process: - Sometimes pre-existing assumptions need to be tested first (e.g. if an issue is deemed to generally concern a specific group of citizens, but no statistical data are available, this may have to be tested in a survey first, before starting to work on this issue that is maybe just perceived as 'big'. For example, in medical research, a treatment may be proposed for assessment which works on a body process not known to be linked to the disease the treatment wants to fight, in which case first an investigation of the relationship between the body process and the disease is needed, before assessing the specific therapy); - The research question can then be made as objective and neutral as possible (e.g. 'are police harassing immigrants and if so, why' Instead of 'why are police harassing immigrants'); - A quick scan of literature may quickly provide an answer, without new research being needed; - The framing of the research may be done in different ways, leading to the involvement of different disciplines (e.g. pollution prevention may be framed as a technical issue or as a legal/economical issue). - The question may be too broad or too narrow. In the first situation, one can start with one case or a part of the issue (e.g. question on animal wellbeing in industry is started with wellbeing of pigs). In the second case, one can try to generalize and broaden the scope of the research (e.g. if an index of animal welfare is asked for pigs, one can make that more general to apply to cows and poultry as well). Of course, there may be many more considerations. In chemical testing it may be required to develop specific analysis techniques before measurements can be done; mathematical models may have to be made first before they can be applied, etc. Also, if research needs to be in the curriculum (see separate TOOL), or if scientific peer reviewed output is wished as well, projects can be adapted to that, by either chopping them in smaller parts or adding some more methodology development or theoretical questions to them. Finally, one can have a go/no-go meeting and decide whether there is a good match between research demand and research possibilities. Then, roles and responsibilities, research methods, timing and expectations of the project, need to be fully clear.
Objective of application of the method	☐ Policy formulation ☐ Programme development ☒ Project definition ☐ Research activity ☐ Others:
Results and products of the method application	Through this initial phase, research is set-up that is feasible and useful and trust is created among partners.

Level of stakeholder/public involvement, i.e. objective of public participation through the method's application	☐ Dialogue ☐ Consulting ☐ Involving ☒ Collaborating ☐ Empowering ☐ Direct decision

Engaged stakeholders in the process of method application

Category	Organiser	Direct participant	Beneficiaries
CSOs	☐	☒	☒
Policy-makers	☐	☐	☐

	Researchers	☒	☐	☒	
	Citizens	☐	☐	☐	
	Affected	☐	☐	☐	
	Consumers	☐	☐	☐	
	Employees	☐	☐	☐	
	Users	☐	☐	☐	
	Industry	☐	☐	☐	
Geographical scope of application (On what level has the method already been used?)	☐ International	☐ EU	☐ National	☒ Regional	☒ Local
Societal challenges the method has been trying to address	☒ Health, demographic change and wellbeing	☒ Food security, sustainable agriculture, marine and maritime research and the bio-economy	☒ Secure, clean and efficient energy	☒ Smart, green and integrated transport	
	☒ Climate action, resource efficiency and raw materials	☒ Inclusive, innovative and reflective societies	☒ Secure societies to protect freedom and security of Europe and its citizens	☐ Others:	
Specific **strengths and weaknesses** of the method vis-à-vis the challenge(s) addressed	This is a good way to creatively find an overlap in interest among researchers and CSOs. A face to face meeting offers the opportunity to create trust, remove misunderstandings and conclude on a way forward that is relevant for both parties (or, if no common ground can be found, it makes that clear as well). This works better than electronic communication, which is usually delayed in response time, and hampered by the use of text as only communication means. In face to face meetings it is easy to draw tables, figures, plans, etc. as well. The method, of course, depends on willingness of both sides to listen and understand and be open on agenda's. A moderator/facilitator experienced in bridging research and civil society worlds is beneficial.				
Timeframe for the application of the method	This can be done within a week, with two 1-2 hour conversations and some work in-between.				

Skills required in order to properly apply the method

Skills	No such skills required	Basic	Intermediate	Advanced
Subject-matter expertise				**X** (or access to)
IT skills	**X**			
Facilitation skills			**X**	**X**
Event organisation skills		**X**		
Project management skills			**X**	
Other skills:				

What are the **issues of concern that organisers need to take into account** when applying the method?	Be open and creative, look at options first and bottlenecks later.

Examples of use of the method

Project name	Organisation	Contact persons	Timeframe	Web address
Science Shops	Living Knowledge	Henk Mulder	ongoing	www.scienceshops.org

Additional information of relevance (such as historical background, where the method has already been applied, etc.)	This tool is part of the standard operating procedure at university based Science Shops. Some different intake forms and guides, and examples of agreements, can be found here: http://www.livingknowledge.org/livingknowledge/wp-content/uploads/2011/11/1-NI-01Overview-of-science-shop-BelfastI.pdf http://www.livingknowledge.org/livingknowledge/wp-content/uploads/2011/11/3-VUB-03-NGOchecklist.pdf http://www.livingknowledge.org/livingknowledge/wp-content/uploads/2011/11/3-VUB-01NGOonlinesubmissionform.pdf http://www.livingknowledge.org/livingknowledge/wp-content/uploads/2011/11/3-IC-08-NGOProjectChecklist.pdf http://www.livingknowledge.org/livingknowledge/wp-content/uploads/2011/11/3-UT-01Blueprintresearchproposal.pdf http://www.livingknowledge.org/livingknowledge/wp-content/uploads/2011/11/3-VUB-02-Research-agreement-form.pdf				
Sources (names of interviewees, links to relevant websites, etc.)					

Author: **Henk Mulder**
Organisation: **University of Groningen**

Date: **14-7-2014**
Revision date: **1-10-2014**
Reviewed by: **DIALOGIK**

Name of the engagement method (alias)	**50. Integration of civil society driven research in university curricula** (Tool – part of the Science Shop Method)
Short description of the method	Good and cost-efficient research for Civil Society Organisations (CSOs) can be done by integrating real-life research questions in the curricula of universities. This is a win-win situation where research and education is combined. When research is included in the curriculum of students, it will be cheaper because students have to obtain course credits anyway and professors have to supervise that already. At the same time young researchers gain valuable transferable employability skills and social/political awareness. Various options exist.
Long description of the method	When one wants to place research projects for Civil Society Organisations in the curriculum, various options exist. The first step is to identify curriculum elements already suitable for this. Check the course catalogue for words (depending on the situation) like: Problem-based / Internship / Communication / Skills / Ethics / Multidisciplinary / Case / Interdisciplinary / Transdisciplinary / Applied / Research / Thesis / Colloquium / Participatory / Community / Social / Society / Public / Optional / Voluntary / Student selected / Environment / Sustainability / Energy / Health / etc. In a practicum, e.g., students may analyse real data instead of teacher-given. The disciplinary learning will be the same, with value added for the requesting organisation. Internships could be undertaken at a CSO. Most common is using the Bachelor or Master thesis research to do research based upon a question from a CSO. Occasionally, PhD thesis work can be used (though usually, PhD projects are not covered by regular financing of Higher Education and additional funds may be required). Smaller parts of projects may be handled by undergraduate students, either individually or in groups, such as collecting data or making a literature overview, if there is a course in which that is the learning objective. In some cases, doing research for civil society organisations can count towards skills portfolios. Making research reports accessible may be an assignment for students in communication related studies, or even event organisation. If not enough suitable options are present, one can start new ones. For example, in student-selected compounds or optional courses one could start a new course, called 'research with and for society' and do a civil society driven research project in that. Alternatively, one can start a minor on that topic or set-up an honours course – usually the objectives of honours programs align quite well with solving real life issues. There are three main strategies to make the research project fit a curriculum part: 1) Chop up a project in smaller parts, for either parallel or subsequent processing by different students; 2) Employ a (multi-disciplinary) student-team in a group project; 3) Enlarge the project with a theoretical component so a more basic question gets suitable for thesis work (the original question then being one of the case studies being dealt with in the thesis). This is the core 'supply' of research capacity at university-based Science Shops (see separate Fact sheet).
Objective of application of the method	☐ Policy formulation ☐ Programme development ☐ Project definition ☒ Research activity ☐ Others:
Results and products of the method application	By doing research with students in the curriculum, this can be done cost-effective with added value for all. It helps students to achieve the competences required by HE standards (such as the Dublin descriptors and similar). For example , Duiblin descriptors require: -For Master level "problem solving abilities [applied] in new or unfamiliar environments within broader (or multidisciplinary) contexts", "the ability to integrate knowledge and handle complexity, formulate judgements with incomplete data", "communicating conclusions and the underpinning knowledge and rationale (restricted scope) to non-specialist audiences", and the ability to "study in a manner that may be largely self-directed or autonomous". -For Bachelor level "gathering and interpreting relevant data" and "communicating information, ideas, problems and solutions" and "skills needed to study further with a high level of autonomy" are required, and a PhD graduate should be able to do "critical analysis, evaluation and synthesis of new and complex ideas", and to "communicate with society in general (dialogue) about their areas of expertise (broad scope)" Benefits for society are further mentioned in the Science Shop Fact Sheet (Civil Society Driven Research). Science Shops apply this method broadly. See www.scienceshops.org The Fact Sheet on Science Shops states the general advantages of the method to Civil Society.

Level of stakeholder/public involvement, i.e. objective of public participation through the method's application	☐ Dialogue ☐ Consulting ☒ Involving ☒ Collaborating ☐ Empowering ☐ Direct decision

Engaged stakeholders in the process of method application

Category	Organiser	Direct participant	Beneficiaries
CSOs	☒	☒	☒
Policy-makers	☐	☐	☐
Researchers	☒	☒	☒
Citizens	☐	☐	☐
Affected	☐	☐	☐
Consumers	☐	☐	☐
Employees	☐	☐	☐
Users	☐	☐	☐
Industry	☐	☐	☐

Geographical scope of application (On what level has the method already been used?)	☐ International ☐ EU ☒ National ☒ Regional ☒ Local

Societal challenges the method has been trying to address

☒ Health, demographic change and wellbeing	☒ Food security, sustainable agriculture, marine and maritime research and the bio-economy	☒ Secure, clean and efficient energy	☒ Smart, green and integrated transport
☒ Climate action, resource efficiency and raw materials	☒ Inclusive, innovative and reflective societies	☒ Secure societies to protect freedom and security of Europe and its citizens	☐ Others:

Specific **strengths and weaknesses** of the method vis-à-vis the challenge(s) addressed

Strength:

Point of attention: Timing of student schedule vs. needs of CSOs.

CSOs usually want answers fast, but this cannot be guaranteed. However, the method is free, cheap or at least cost-effective to Civil Society. Quality can be safeguarded with the Academic supervision. If students score below a certain standard, one could decide not to publish the (full) results.

Strength of the method is its cost effectiveness and the learning by students.

For further strengths and weaknesses see the overall method this tool is part of (Fact Sheet on Science Shops).

Timeframe for the application of the method	6 months to one year.

Skills required in order to properly apply the method

Skills	No such skills required	Basic	Intermediate	Advanced
Subject-matter expertise				**X**
IT skills		**X**		
Facilitation skills			**X**	**X**
Event organisation skills		**X**		

	Project management skills			**X**	**X**
	Other skills:				

What are the **issues of concern that organisers need to take into account** when applying the method?	Point of attention: Timing of student schedule vs needs of CSOs. Remember that students need to learn; simple 'production work' (applying methods without question) is often not suitable. Of course, this depends on the level of the curriculum element used (so for 1st year students obviously different requirements apply than for 3rd year students).				
Examples of use of the method	**Project name**	**Organisation**	**Contact persons**	**Timeframe**	**Web address**
	Science Shops	Living Knowledge	Henk Mulder	Since the 1970s	www.sciencesops.org
Additional information of relevance (such as historical background, where the method has already been applied, etc.)	Paper by Arie Fokkink and Henk Mulder on Curriculum Development through Science Shops: http://www.livingknowledge.org/livingknowledge/wp-content/uploads/2012/02/fokkink-and-mulder-iceem2004.pdf				
Sources (names of interviewees, links to relevant websites, etc.)					

Author: **Henk Mulder**
Organisation: **University of Groningen**
Date: **14-7-2014**
Revision date: **2-10-2014**
Reviewed by: **DIALOGIK**

Name of the engagement method (alias)	**51. Needs Survey among CSOs** *Tool: part of the overall Science Shop method
Short description of the method	A survey is sent to all registered CSOs/NGOs in a region. This shows in which field they potentially have research questions and can lead to follow-up discussions to articulate research questions (see separate fact sheet). A more informal approach is to go and talk with umbrella organizations in a specific field (e.g. health; environment).
Long description of the method	If one wants to do research in partnership with Civil Society Organisations (CSOs) it is important to look for CSOs that have issues for which they would appreciate research support. A survey is a formal way to make an inventory of this (and can at the same time promote the research offer). Addresses of Non-Governmental Organisations (NGOs) can usually be obtained from a registering office, like the Chamber of Commerce. Many of the CSOs found will be sports associations and it is worth considering excluding these from the survey as this in general lowers response rate. An example questionnaire used in a number of countries is available (see bottom of this Fact Sheet). CSOs without a legal status are not reached this way. An alternative is to approach umbrella organizations to see which research themes they or their members would want to explore. For example, in The Netherlands, there is a federation of patient organisations, and in the environmental field there are provincial federations of local environmental groups. This might also reach CSOs that don't have their own legal status, but are a voluntarily run local group. Finally, one can of course browse media to check for hot topics and stakeholders involved, or do a web search, to see if there would be partners interested in collaborative research.
Objective of application of the method	☒ Policy formulation ☒ Programme development ☒ Project definition ☐ Research activity ☐ Others:
Results and products of the method application	The survey method has been used to prepare the establishment of a Science Shop in a number of countries. The direct approach of umbrella organisations is good practice in many university-based Science Shops. Browsing media can be a good first step as well. These results can be integrated into a business plan for a Science Shop. The needs survey gives both a comprehensive overview of challenges experienced by CSOs in a number of fields, and contact information for potential partners in future research. Therefore, it is possible to do follow-ups with CSOs on their specific questions after checking the availability of the internal expertise at the Science Shop or university. See also the fact sheet "From Question of a CSO to a Research Question". Furthermore, the overview can help convince the policy makers of the relevance of research with and for society.

Level of stakeholder/public involvement, i.e. objective of public participation through the method's application	☐ Dialogue ☒ Consulting ☐ Involving ☐ Collaborating ☐ Empowering ☐ Direct decision

Engaged stakeholders in the process of method application

Category	Organiser	Direct participant	Beneficiaries
CSOs	☐	☒	☒
Policy-makers	☐	☐	☐
Researchers	☒	☒	☒
Citizens	☐	☐	☐
Affected	☐	☐	☐
Consumers	☐	☐	☐
Employees	☐	☐	☐
Users	☐	☐	☐
Industry	☐	☐	☐

Geographical scope of application (On what level has the method already been used?)	☐ International	☐ EU	☒ National	☒ Regional ☒ Local
Societal challenges the method has been trying to address	☒ Health, demographic change and wellbeing	☒ Food security, sustainable agriculture, marine and maritime	☒ Secure, clean and efficient energy	☒ Smart, green and integrated transport

<table>
<tr><td></td><td>research and the bio-economy

☒ Climate action, resource efficiency and raw materials
☒ Inclusive, innovative and reflective societies
☒ Secure societies to protect freedom and security of Europe and its citizens
☐ Others:</td></tr>
<tr><td>Specific strengths and weaknesses of the method vis-à-vis the challenge(s) addressed</td><td>This method gives good insight in what issues concern civil society and how research can help them. This is especially useful at the start-up of a Science Shop or periodically when considering renewed strategies. In general, a running Science Shop will continually monitor needs and not require an extensive survey.</td></tr>
<tr><td>Timeframe for the application of the method</td><td>A few months' time frame is needed to prepare and follow up.</td></tr>
<tr><td>Skills required in order to properly apply the method</td><td>
<table>
<tr><th>Skills</th><th>No such skills required</th><th>Basic</th><th>Intermediate</th><th>Advanced</th></tr>
<tr><td>Subject-matter expertise</td><td></td><td></td><td>X</td><td></td></tr>
<tr><td>IT skills</td><td></td><td>X</td><td></td><td></td></tr>
<tr><td>Facilitation skills</td><td></td><td></td><td>X</td><td></td></tr>
<tr><td>Event organisation skills</td><td></td><td>X</td><td></td><td></td></tr>
<tr><td>Project management skills</td><td></td><td></td><td>X</td><td></td></tr>
<tr><td>Other skills:</td><td></td><td></td><td></td><td></td></tr>
</table>
</td></tr>
<tr><td>What are the issues of concern that organisers need to take into account when applying the method?</td><td></td></tr>
<tr><td>Examples of use of the method</td><td>
<table>
<tr><th>Project name</th><th>Organisation</th><th>Contact persons</th><th>Timeframe</th><th>Web address</th></tr>
<tr><td>Science Shops Flanders/Brussels</td><td>Science Shops Flanders/Brussels</td><td></td><td>2003</td><td>www.wetenschapswinkel.be</td></tr>
<tr><th>Project name</th><th>Organisation</th><th>Contact persons</th><th>Timeframe</th><th>Web address</th></tr>
<tr><td></td><td></td><td></td><td></td><td></td></tr>
<tr><th>Project name</th><th>Organisation</th><th>Contact persons</th><th>Timeframe</th><th>Web address</th></tr>
<tr><td>Science Shop Estonia</td><td>Institute for Baltic Studies</td><td>Nastja Pertsjonok</td><td>2011</td><td>http://www.ibs.ee/en/main</td></tr>
</table>
</td></tr>
<tr><td>Additional information of relevance (such as historical background, where the method has already been applied, etc.)</td><td>The survey has been developed and first applied in Belgium, by Edith Donders. Her results can be found here (in Dutch):

Flanders Region: http://universitaireassociatiebrussel.be/wp-content/uploads/2012/09/wewi_licentieverhandeling_Edith.pdf

Brussels Region: http://universitaireassociatiebrussel.be/wp-content/uploads/2012/09/wewi_rapport_Edith.pdf

The Questionnaire in English is available here: http://www.livingknowledge.org/livingknowledge/wp-content/uploads/2014/07/Toolbox_Questionnaire_needssurvey2002_2003.docx</td></tr>
</table>

Sources (names of interviewees, links to relevant websites, etc.)	

Author: **Henk Mulder**
Organisation: **University of Groningen**
Date: **15-7-2014**
Revision date: **25-9-2014**
Reviewed by: **DBT**

Name of the engagement method (alias)	**52. Science Café** (also called: Café Scientifique – Kennis Café – Wissenschaftscafé)
Short description of the method	A Science Café is an event organised in an informal setting as a place of dialogue with participants coming from all walks of life and academia. An expert presents a subject in a concise and open manner after which the floor is open for a discussion. The moderator facilitates the sharing of a wide range of views on the subject at hand.
Long description of the method	Across the world there are hundreds of Science Café events being held every month, excellently prepared in an informal setting. It is a meeting of minds and a dialogue outside of the usual spaces. Scientific experts are invited to give a short talk and then the floor is open for discussion. The Science Cafés are known under a number of different names and various flavours. Key ingredients are the bringing together of lay people and experts outside of an academic context. There is room for a presentation by an expert, but the event includes interaction and discussion. The organisers are usually not–for-profit organisations that regularly organise these events. **Level of engagement** Publishing findings is a major part of the scientific process. Sharing knowledge with the general public by researchers is encouraged by many scientific institutions. Science Cafés offer an infrastructure for interaction which goes beyond informing the audience. In the face-to-face interaction, the experts have ample opportunity to gather responses to their message and take away new questions. Often this is a way to gather alternative views and relevant narratives, especially when the events focus on controversial issues. From the perspective of the general public, the science café is often seen as a place for gaining knowledge and forming opinions. The interaction is not only with the expert but also with the other participants in the discourse. **Planning and roles** Short films for organisers of science cafes on the involved practical issues are available on the ScienceCafe.org website. The events are usually less than two hours long and presentations by speakers should be short. These could be around 40 minutes, but some cafes limit it to five minutes in a total session of one hour. Some facilitators prefer presentations without slides to encourage a more informal interaction. Generally there is one speaker, but there are also models with multiple experts. A key ingredient is a moderator who should also prepare the experts to ensure there are lively and useful discussions.  4- A poster for a Science Cafe in Deventer (NL)
Objective of application of the method	☐ Policy formulation ☒ Programme development ☒ Project definition ☒ Research activity ☐ Others:
Results and products of the method application	New perspectives for all the participants in the events. Participants can gain new knowledge, hear alternative views on the topic of discussion and form opinions. New questions are often raised by the participants for the researchers, who can also get informed on alternative views and relevant narratives, especially when the events focus on controversial issues.

Level of stakeholder/public involvement, i.e. objective of public participation through the method's application	☒ Dialogue ☐ Consulting ☐ Involving ☐ Collaborating ☐ Empowering ☐ Direct decision
Engaged stakeholders in the process of method application	

Category	**Organiser**	**Direct participant**	**Beneficiaries**
CSOs	☒	☐	☐
Policy-makers	☐	☐	☐
Researchers	☒	☒	☒

	Citizens	☐	☒	☒
	Affected	☐	☐	☐
	Consumers	☐	☐	☐
	Employees	☐	☐	☐
	Users	☐	☐	☐
	Industry	☐	☐	☐

Geographical scope of application (On what level has the method already been used?)	☐ International	☐ EU	☐ National	☒ Regional	☒ Local

Societal challenges the method has been trying to address	☒ Health, demographic change and wellbeing	☒ Food security, sustainable agriculture, marine and maritime research and the bio-economy	☒ Secure, clean and efficient energy	☒ Smart, green and integrated transport
	☒ Climate action, resource efficiency and raw materials	☒ Inclusive, innovative and reflective societies	☒ Secure societies to protect freedom and security of Europe and its citizens	☐ Others:

Specific **strengths and weaknesses** of the method vis-à-vis the challenge(s) addressed	Commenting on the types of challenges that can be addressed with this method, Ann Grand of Café Scientifique in the UK, indicated that it is suitable for ´Every subject under the sun!'. This is certainly the main strength of the method. Suitable topics include those that provoke reactions among the audience – scientific developments that have major impact on people's life or create ethical dilemmas and topics currently being discussed in the news. Participants in science café events can gain new knowledge and perspectives on a certain topic through their interaction with the experts and the rest of the attendees. In addition, new questions are often raised by the participants for the researchers, who can also get informed on alternative views and relevant narratives, especially when the events focus on controversial issues. Science cafes are designed to be inexpensive to plan and run. The major expenses associated with the events are the promotional materials.
Timeframe for the application of the method	The event is usually held in the evening and efforts should be made for publicity with posters, mailings, social media, etc. Usually the events are organised on a regular basis by a non-profit organisation. The practicalities of organising an event in a public space are not complicated but need to be done securely. The moderator has an active role during the evening but also needs to inform the expert during the invitation process on the approach and setup so that this can be included in the preparation of the presentation. In general, the events are held on a regular basis at a specific location. Thus, the method has an element of being organised on a continuous basis. For a specific evening, the planning is mostly related to the timely invitation of the expert and having sufficient time for PR activities. The events are usually less than two hours long and presentations by speakers should be short. These could be around 40 minutes, but some cafes limit it to five minutes within a total session of one hour.

Skills required in order to properly apply the method

Skills	No such skills required	Basic	Intermediate	Advanced
Subject-matter expertise			**X**	
IT skills				
Facilitation skills				**X**
Event organisation skills			**X**	

	Project management skills		X		
	Other skills:				

What are the **issues of concern that organisers need to take into account** when applying the method?

Central in the concept of the Science Café is the informal setting and approach during the evening. This relates to many aspects of organizing the event. It starts with the selection of the location which needs to be outside of the regular research institutional setting. Science Cafés have usually been held in pubs, coffeehouses, bookstores, restaurants, and art galleries. The venue should be large enough to accommodate 30-50 people (the usual number of attendees) and at the same time small enough to allow the participants to hear each other and the presenters.

Not all experts can easily present and interact in an informal setting. To a certain extent the moderator can give guidelines, but some care should be taken in inviting people capable of interacting in this way. Therefore, the role of the moderator and expert are critical for the success of a Science Café event. Some Science Café´s discourage or prohibit the use of PowerPoint presentations as this can create a formal lecture type atmosphere.

5 -Café Scientifique Orlando, October 2010, foto by Chad Miller (flickr)

Examples of use of the method

Project name	Organisation	Contact persons	Timeframe	Web address
Cafe Scientifique – 'Science for the price of a coffee'	Cafe Scientifique (UK)	Ann Grand	Continuous	www.cafescientifique.org
Project name	**Organisation**	**Contact persons**	**Timeframe**	**Web address**
Science Café Deventer	Stichting Science Cafe Deventer	Anne Dijkstra	Continuous	www.sciencecafedeventer.nl

Additional information of relevance (such as historical background, where the method has already been applied, etc.)

Some guides on organising Science Cafes including some inspiring videos

- "Science Cafés | NOVA." Accessed June 13, 2014. http://sciencecafes.org/for-organizers/.
- "Science Cafe Guide | NISE Network." Accessed July 7, 2014. http://www.nisenet.org/catalog/tools_guides/science_cafe_guide

Some further background information:

- "Café Scientifique - Wikipedia, the Free Encyclopedia." Accessed July 7, 2014. http://en.wikipedia.org/wiki/Science_Cafe.
- Navid, Erin L., and Edna F. Einsiedel. "Synthetic Biology in the Science Café: What Have We Learned about Public Engagement?," November 27, 2012. http://jcom.sissa.it/archive/11/04/Jcom1104%282012%29A02/Jcom1104%282012%29A02.pdf
- "SAGE: Encyclopedia of Science and Technology Communication: Susanna Hornig Priest: 9781412959209." Accessed July 7, 2014. http://www.uk.sagepub.com/books/9781412959209.

Find examples of Science café's:

- "Kenniscafé Groningen: Schaliegas | Nieuws | Energy | Speerpunten | Ons Toponderzoek | Onderzoek | Rijksuniversiteit Groningen." Accessed May 31, 2014.

	http://www.rug.nl/research/energy/news/agenda/kenniscafe-groningen-schaliegas. - "Find Your Local Cafe." Accessed June 13, 2014. http://www.cafescientifique.org/index.php?option=com_iyosismaps&view=map&id=1&Itemid=477.
Sources (names of interviewees, links to relevant websites, etc.)	In the survey we had contributions from the following people and projects: - Science Café, Norbert Steinhaus, norbert.steinhaus@wilabonn.de, Wissenschaftsladen Bonn - Bonn Science Shop www.wilabonn.de - Edna Einsiedel, einsiede@ucalgary.ca, Univ. of Calgary [only contact details] - Anna Dijkstra (zie projects above) - Ann Grand (zie examples above) Image sources: - Miller, Chad. Café Scientifique Orlando, 6 October 2010, October 6, 2010. http://www.flickr.com/photos/chadmiller/5059385083/. - "Bouwen Met DNA | Science Café Deventer." Accessed June 13, 2014. http://www.sciencecafedeventer.nl/2013/bouwen-met-dna/.

Author: **Jako Jellema**
Organisation: **University of Groningen**
Date: **16/7/2014**
Revision date: **22/9/2014**
Reviewed by: **ARC Fund**

Name of the engagement method (alias)	**53. Science Theatre**
Short description of the method	Theatre based participation methods have become more widespread. These methods allow creative ways to bring complex topics to life; often to audiences who would not take part in a more traditional process.
Long description of the method	Theatre based participation methods have become more widespread. There are limited examples of theatre being used in research and innovation around science and technology, however the use of this method in other areas such as health engagement suggests it could also be a useful method to engage society in science and technology issues. Collaborations between artists and scientist are becoming more common in the UK as regular arts budgets are cut and funding from institutions such as the Welcome Trust and the Science and Technology Facilities Council are looking more attractive to artists. These collaborations also reflect growing pressure on scientists to communicate their research to the public. This is reflected in an increasing number of popular science events such as The Brighton Science Festival which combines elements of science communication and performance in a range of different events. These methods allow creative ways to bring complex topics to life, often to audiences who would not take part in a more traditional process. Theatre based approaches to engagement have a long history dating back to work on Forum Theatre/Theatre of the Oppressed in Brazil in the 1970s (Boal, 2000). Some participatory theatre has engaged people in frank conversations about health related issues such HIV/AIDS. Most 'science theatre' attempts to communicate science and technology to the public rather than engaging people in decision making. Usually the educators or artists present a play which is followed by a workshop. The aim of this is to allow participants to put what they have learnt into practice. Theatre is not always about transmitting knowledge. It can also be used to spark rich discussions around the social, ethical and political dimensions of a scientific or technological development and is often inspired by social crisis that is a result of scientific advancement (Priest, 2014). Science theatre uses the medium of participative theatre to explore different views on scientific issues and ideas. One attempt to take science theatre beyond just communication is the *Our Food* project which aims to allow citizens to explore the issues around global food security and provide an opportunity to shape policy in the UK. *Our Food* aims to contribute to the development of new ways for people with differing perspectives to talk together about the production and consumption of food with the intention of creating a research agenda that is based on collaboration between people with a wide variety of experiences and expertise. This process involved workshops which brought together a range of participants with an interest in food. Later, four actors dramatised and explored these issues raised in a performance. The play highlighted how people's desire for a healthy diet has been stifled for over a generation by a range of factors, including the narrow agendas of researchers, successive governments and the food industry. People were able to articulate their experiences and concerns during the workshops and the play, generating a list of topics to discuss with researchers and scientists in the next stage of the process which involved workshops held at universities and research institutions across the UK.
Objective of application of the method	☐ Policy formulation ☐ Programme development ☐ Project definition ☐ Research activity ☒ Others: Science communication
Results and products of the method application	• The method can allow complex scientific issues to be explored in a more creative way • Theatre based methods can be useful with groups that are not used to discuss scientific issues

Level of stakeholder/public involvement, i.e. objective of public participation through the method's application	☒ Dialogue ☐ Consulting ☐ Involving ☐ Collaborating ☐ Empowering ☐ Direct decision

Engaged stakeholders in the process of method application

Category	Organiser	Direct participant	Beneficiaries
CSOs	☒	☐	☒
Policy-makers	☐	☐	☒
Researchers	☒	☐	☒
Citizens	☐	☒	☒

	Affected	☐	☐	☐	
	Consumers	☐	☒	☐	
	Employees	☐	☐	☐	
	Users	☐	☐	☐	
	Industry	☐	☐	☐	
Geographical scope of application (On what level has the method already been used?)	☐ International	☐ EU	☐ National	☒ Regional	☒ Local
Societal challenges the method has been trying to address	☒ Health, demographic change and wellbeing	☒ Food security, sustainable agriculture, marine and maritime research and the bio-economy	☐ Secure, clean and efficient energy	☐ Smart, green and integrated transport	
	☐ Climate action, resource efficiency and raw materials	☐ Inclusive, innovative and reflective societies	☐ Secure societies to protect freedom and security of Europe and its citizens	☐ Others:	
Specific **strengths and weaknesses** of the method vis-à-vis the challenge(s) addressed	• Can broaden appeal of engagement • Can lead to more creative discussions • May be perceived to be less serious than other forms of engagement				
Timeframe for the application of the method	Timescales will be similar to other theatrical productions. From 4 months to over 1 year.				

Skills required in order to properly apply the method

Skills	No such skills required	Basic	Intermediate	Advanced
Subject-matter expertise			X	
IT skills	X			
Facilitation skills				
Event organisation skills			X	
Project management skills			X	
Other skills: Theatrical skills				X

What are the **issues of concern that organisers need to take into account** when applying the method?

- The method requires knowledgeable practitioners when it comes to theatre based methodologies
- Developing the play or scenario to explore can be time consuming
- It can be very useful to get members of the public involved in this kind of method as actors or co designers of the scenarios [see Our Food and Co-production in Learning Together for Better Health projects]

Examples of use of the method

Project name	Organisation	Contact persons	Timeframe	Web address
Curious Directive	Curious Directive	jack@curiousdirective.com	2008 - ongoing	http://www.curiousdirective.com/
Project name	**Organisation**	**Contact persons**	**Timeframe**	**Web address**
Openmind	Pavlov E-Lab	nathalie@pavlov.nl		http://www.pavlov.nl/elab/openmind

	Project name	Organisation	Contact persons	Timeframe	Web address
	Our Food	University of Edinburgh	Tom Wakeford	2011-2013	http://ourfooduk.files.wordpress.com/2013/09/our-food-final-report-v2.pdf
	Project name	**Organisation**	**Contact persons**	**Timeframe**	**Web address**
	Co-production in Learning Together for Better Health	Health Education England	Hamet Patel - director@ocp-ltd.com Penny Morris - Penny.MORRIS@southlondon.hee.nhs.uk	June 2013 - ongoing	http://participationcompass.org/article/show/467
Additional information of relevance (such as historical background, where the method has already been applied, etc.)	For background reading on theatre and science education see: "SAGE: Encyclopedia of Science and Technology Communication: Susanna Hornig Priest: 9781412959209." Accessed July 7, 2014. http://www.uk.sagepub.com/books/9781412959209.] Boal, A. (2000) *Theatre of the Oppressed,* Pluto Press, London **Curious Directive** is a multi-award winning British Theatre company . The company is an ensemble of theatre makers and scientists. Their productions are devised and written by members of the company, dealing with themes of science. The company uses many threads of theatre tools including cameras, projection, live music and movement. Recent productions have explored astro-biology, the NHS, myrmecology, cognitive neuroscience, light, architecture, genetics, motion and bio-politics.				
Sources (names of interviewees, links to relevant websites, etc.)	http://www.theguardian.com/science/2014/aug/03/curious-directive-theatre-company-experiments-scientific-subjects http://en.wikipedia.org/wiki/Curious_Directive Consider getting in touch with Nathalie Beekman / artistic director / nathalie@pavlov.nl http://www.pavlov.nl/elab/ See also http://www.pavlov.nl/elab/openmind https://www.facebook.com/LAMP050 - Lab at my place. Doing experiments with secondary school children in a home environment. Facilitated by Pavlov. Possible start for further research [mostly dutch] http://www.denachtvankunstenwetenschap.nl/programma/theater-dans-cabaret/ e.g: http://www.denachtvankunstenwetenschap.nl/acts/knaw-ontdekkerscafe-lieven-scheire/ http://en.wikipedia.org/wiki/Lieven_Scheire]]]				

Author: **Houda Davis**
Organisation: **Involve**
Date: **20/07/14**
Revision date: **23/09/14**
Reviewed by: **University of Groningen**

Name of the engagement method (alias)	**54. Serious Gaming**
Short description of the method	The primary objective of 'serious games' or 'applied games' is to train and/or educate the user. These games serve as tools for acquiring complex knowledge in fields such as health care, defence, education, engineering, city planning, emergency management, etc. Some serious games simulate real-life events and/or processes, thus providing the user with a problem-solving training environment. Furthermore, 'serious games' can be used in order to develop innovative products and services.
Long description of the method	**Gaming in household Energy** Most 'serious games' have an element of education or training for the users of the gaming environment. In the Netherlands, a number of such games have been designed to entice the households to be more aware of their energy use, and to encourage other behaviour to reach a more energy efficient way of life. In a research project involving a number of households, home energy management systems were implemented which used a gaming environment to give feedback to the users in their homes. An example is the E-aquarium project of the Delft University of Technology:  **Figure 6 - E-quarium – A game environment for energy visualization and advice (TU Delft)** *"The E-quarium aims to bridge the gap between maximum (theoretical) efficiency gains and actual efficiency gains by providing consumers with an interface which is visually intuitive and engaging. Users are provided with meaningful context aware feedback by means of messages provided by the fish actor relieving the need for users to analyze their own energy data to benefit from the system."* Games are designed to be captivating. Successful games manage to find a good balance between developing skills and being challenged. The game simulates real-life events, or even monitors real-life actions, always with the chance of 'winning' (or improving your level) as the game element. The gamer learns through inquiry-based learning and experimentation. A basic idea behind the serious game approach is that this can be used to change behaviour. **Organising a serious game** The development of a game is a specialised activity. Sometimes games using ICT are first developed with simple game boards. Some games involve group interaction, but there are also online versions that can be played alone or in a group. 
Objective of application of the method	☐ Policy formulation ☐ Programme development ☐ Project definition ☒ Research activity ☐ Others:

Results and products of the method application	- Engagement with users of innovative systems under development; - Interaction with users to test new concepts; - New insights for users and experts.

Level of stakeholder/public involvement, i.e. objective of public participation through the method's application	☐ Dialogue ☐ Consulting ☒ Involving ☐ Collaborating ☐ Empowering ☐ Direct decision

Engaged stakeholders in the process of method application

Category	**Organiser**	**Direct participant**	**Beneficiaries**
CSOs	☐	☐	☐
Policy-makers	☐	☐	☐
Researchers	☒	☐	☒
Citizens	☐	☐	☐
Affected	☐	☐	☐
Consumers	☐	☐	☐
Employees	☐	☐	☐
Users	☐	☒	☒
Industry	☐	☐	☒

Geographical scope of application (On what level has the method already been used?)	☐ International ☐ EU ☐ National ☐ Regional ☒ Local

Societal challenges the method has been trying to address	☐ Health, demographic change and wellbeing	☐ Food security, sustainable agriculture, marine and maritime research and the bio-economy	☒ Secure, clean and efficient energy	☐ Smart, green and integrated transport
	☐ Climate action, resource efficiency and raw materials	☐ Inclusive, innovative and reflective societies	☐ Secure societies to protect freedom and security of Europe and its citizens	☐ Others:

Specific **strengths and weaknesses** of the method vis-à-vis the challenge(s) addressed	**Strengths:** - A successful game manages to involve users by building in intrinsic rewards which motivates participation. **Weaknesses:** - It can be complicated to sustain momentum and, therefore, it is important to keep a good balance between the challenges and the required skill level.
Timeframe for the application of the method	Depending on the type of game used, the development of the game can be a large investment of time and money, with lead times of over a year. The actual game can be: - An online interaction for a user which can take less than an hour; - An evening group activity with a board game; - A long term experimental setup in a home with regular interactions with a home system.

Skills required in order to properly apply the method

Skills	No such skills required	Basic	Intermediate	Advanced
Subject-matter expertise			**X**	
IT skills		**X** (if board game)		**X** (if on-line)
Facilitation skills		**X**		
Event organisation skills			Depends on the type of game	
Project management skills			**X**	
Other skills:				

What are the **issues of concern that organisers need to take into account** when applying the method?

In many of the online systems, information is stored and used which can have a confidential nature. Therefore, it is important to inform the users of the systems and also to respect their privacy.

Examples of use of the method

Project name	Organisation	Contact persons	Timeframe	Web address
E-quarium	Delft University of Technology - Faculty Industrial Design Engineering	Prof.dr. D.V. Keyson (David)		www.suslab.eu http://www.io.tudelft.nl/?id=98425

Project name	Organisation	Contact persons	Timeframe	Web address
Energie-besparing bij DWA'ers thuis (energy saving at home for DWA eployees)	DWA B.V.	Dick van 't Slot		www.dwa.nl

Additional information of relevance (such as historical background, where the method has already been applied, etc.)

Gamification as a trend

The Gartner group have analysed the trend of gamification across a number of sectors. Where gaming is a growing industry in the creative sector, they see an expansion to other fields, such as the gamification of innovation and knowledge management. The trend is supported by socio-technological developments, such as the ubiquity of internet access, location based services, and access to social media with mobile devices. This facilitates the integration of game mechanics, such as various types of incentives and rewards, into the daily lives of users.

Similarly to 'serious games', games like role playing, management games, and simulation games, have been used in education for a long time; the focus being learning and opinion forming of the participants. The look and feel, however, are not specifically aimed at being similar to currently popular 'games' that are played on smart phones, tablets or computers. However, these games may be modified for use by other groups, for learning, and opinion forming. This does not lead to a real engagement in the research and innovation process itself directly, but may raise awareness for people to better participate in the democratic decision making on science and technology related issues.

Further reading on serious gaming:

"Serious Game". Wikipedia, the Free Encyclopedia, 13 July 2014. http://en.wikipedia.org/w/index.php?title=Serious_game&oldid=616375855.

"Gamification: Engagement Strategies for Business and IT | Gartner". Accessed 17 July 2014. http://www.gartner.com/technology/research/gamification/.

"The Gamification of Business". Forbes. Accessed 17 July 2014.

	http://www.forbes.com/sites/gartnergroup/2013/01/21/the-gamification-of-business/. **Some example projects:** "E-quarium". TU Delft. Accessed 17 July 2014. http://www.io.tudelft.nl/actueel/congressen-en-symposia/design-for-our-future-13-september-2013/delft-design-labs/applied-labs/e-quarium/ "Energy Battle - Serious Gaming". Accessed 18 July 2014. http://sega.tech.nhl.nl/wiki/index.php/Energy_Battle "Maatschappelijk Verantwoord Ondernemen (MVO) - DWA". Accessed 18 July 2014. http://www.dwa.nl/mvo/?detail_id=39. – short description in Dutch Geelen, Daphne, David Keyson, Stella Boess, en Han Brezet. "Exploring the use of a game to stimulate energy saving in households". Journal of Design Research 10, nr. 1 (1 January 2012): 102–20. doi:10.1504/JDR.2012.046096.
Sources (names of interviewees, links to relevant websites, etc.)	**DISCLAIMER / DISCUSSION** To what extent are the users of the gaming environment : *1. subjects of the studies* *OR* *2. actually engaged participants of an innovative design process?* *3. active learners on relation of science/technology to solving Grand Societal Challenges* If it is only the first then for Engage2020 this cannot be qualified as truly engaged RR&I. If it is only the third, this seems a grey area: true engagement or not? **What has been happening in other areas? Here some things on health:** http://www.gamesforhealtheurope.org/ - a conference "Building on the successful editions in Boston (USA), Games for Health reached Europe in 2011. The non-profit Games for Health Europe is the official sister conference of the Games for Health project. Together with the USA organisation, we aim to bring serious gaming and healthcare together in order to contribute to more advanced healthcare across Europe" http://www.gamesforhealtheurope.org/contact-us/games-for-health-project http://academy.seriousgamessociety.org/search?q=energy&search_type=entities&entity_type=object&entity_subtype=articles Bard O. Wartena. "Ludo Modi Varietas : A Game - architecture inspired design approach for BCSS". Checked 18 july 2014. http://ceur-ws.org/Vol-1153/Paper_8.pdf. http://www.seriousgames.com.au/MechanicsWorkshop_ICEC2013.php - possibly of interest as starting point for further research **NOTE: Various projects use the expression 'Energy Battle'** You see this both in the project in Delft and Leeuwarden. But it is also used in another context where it is more a hackathon/big idea competition, competitions between other types of communities. http://www.klimaatverbondenergybattle.nl/ - a competition between municipalities http://www.nrgbattle.nl/ - idea competition between student teams together with industry http://www.energychallenges.nl/ - competitions between schools

Author: **Jako Jellema**
Organisation: **University of Groningen**
Date: **22/7/2014**
Revision date: **25/9/2014**
Reviewed by: **ARC Fund**

Name of the engagement method (alias)	**55. User committee** (also called: Valorisatie commissie, Valorisatie panel, Valorisation panel)
Short description of the method	This method involves users and other stakeholders in the formal monitoring and steering of the research and innovation process.
Long description of the method	This method involves users and other stakeholders in the formal monitoring and steering of the research and innovation process. The Dutch Responsible Innovation Program (NWO-MVI) has required valorisation panels since 2009. In the 2014 call, the following instructions for the user-committee were given[11]: "*Applicants must always put together a valorisation panel and produce a valorisation plan. Besides representatives of the private partners, the valorisation panel includes all other actual and potential users and/or user groups. Relevant societal stakeholders can also be included in the valorisation panel. Also representatives from organisations that are willing to disseminate the research results and to valorise these among the target group that they represent can be included in the valorisation panel.* *The valorisation panel is put together during the drawing up of the full proposal, is involved in writing the proposal, and remains involved in the project throughout its entire duration. More specifically, the valorisation panel's main task is to contribute its knowledge and expertise, and to confront the researchers with the everyday user practice, so that the researchers can incorporate this in their choices. At the very least it has a supportive role in:* • *articulating the research question;* • *drawing up the valorisation plan;* • *reporting about the research;* • *disseminating and communicating the research results.* *The valorisation plan is aimed at making the relevant research results available for and usable by top sectors (research priority conglomerates, ed.), societal partners and/or other interested parties from inside and outside of the established scientific community. Besides an overview of the costs associated with the valorisation, it also describes the role of the valorisation panel.* *Applicants of research proposals awarded funding are required to organise an initial valorisation workshop immediately after the start of the project. The results of the first workshop will be monitored by the MVI Steering Group. Applicants from projects awarded funding will receive further information about this with the funding decision. They will also be informed about how the valorisation pathway will be monitored throughout the course of the project".* Other research programs, e.g. the ones operated by the Dutch Technology Foundation STW, have a more traditional industrial user approach to the role of a user committee (described in http://stw.nl/sites/stw.nl/files/mediabank/TaskAndMethod-STW-UserCommittee.pdf)
Objective of application of the method	☐ Policy formulation ☐ Programme development ☒ Project definition ☒ Research activity ☐ Others:
Results and products of the method application	The exact impact of the user-committee on the final outcomes of the research is not transparent; this is even more so for the specific impact of the CSO representatives on the research process. To assess this, more research on this issue would be required, such as through interviews.

Level of stakeholder/public involvement, i.e. objective of public participation through the method's application	☐ Dialogue ☐ Consulting ☒ Involving ☒ Collaborating ☐ Empowering ☐ Direct decision			
Engaged stakeholders in the process of method application	Category	**Organiser**	**Direct participant**	**Beneficiaries**
	CSOs	☐	☒	☒
	Policy-makers	☐	☐	☐
	Researchers	☒	☒	☒

[11] http://www.nwo.nl/binaries/content/documents/nwo-en/common/documentation/application/gw/responsible-innovation-mvi---call-for-proposals/ENG_Call+for+Proposals_MVI_2014.pdf, p12.

	Citizens	☐	☐	☐	
	Affected	☐	☐	☐	
	Consumers	☐	☐	☐	
	Employees	☐	☐	☐	
	Users	☐	☒	☒	
	Industry	☐	☒	☒	
Geographical scope of application (On what level has the method already been used?)	☐ International	☐ EU	☒ National	☒ Regional	☐ Local
Societal challenges the method has been trying to address	☒ Health, demographic change and wellbeing	☒ Food security, sustainable agriculture, marine and maritime research and the bio-economy	☒ Secure, clean and efficient energy	☒ Smart, green and integrated transport	
	☒ Climate action, resource efficiency and raw materials	☒ Inclusive, innovative and reflective societies	☒ Secure societies to protect freedom and security of Europe and its citizens	☐ Others:	
Specific **strengths and weaknesses** of the method vis-à-vis the challenge(s) addressed	**Strengths:** Instrumental (and democratic) value in making input to research and innovations that are in-line with users' (and societal) needs and demands. Applicable in any (multi-disciplinary) field/grand challenge. **Weaknesses:** Strongly dependent on how the engagement process within the committee works and who is represented. Typically, there is a kick-off, a mid-term, and a final workshop. How these workshops are shaped is still open. Also, the consulting process during the writing of the proposal for the research is not defined.				
Timeframe for the application of the method	Required preparation time totally depends on pre-existing contacts with relevant stakeholders. The committee engagement is continuous from the writing of the proposal, throughout the research activity, and through to the dissemination phase.				

Skills required in order to properly apply the method

Skills	No such skills required	Basic	Intermediate	Advanced
Subject-matter expertise				**X**
IT skills		**X**		
Facilitation skills			**X**	
Event organisation skills		**X**		
Project management skills			**X**	
Other skills:				

<table>
<tr><td>What are the issues of concern that organisers need to take into account when applying the method?</td><td>

Equitability of the process and expectations management. What is the real influence of the committee and its individual members?
Representativeness of the committee (typically, there are many representatives of industry as ‘users’, instead of the end-user (the consumer); also, CSOs are underrepresented (typically, most NGOs that participate represent a branch organisation). There are exceptions of course. (Project summaries published in 2010 for the NWO-MVI program show 16 user committees. Of the total 135 member organizations, 21 can be classified a CSO. One project had 6 CSOs on 10 members; another project had no CSOs on 14 members). http://www.nwo.nl/binaries/content/documents/nwo-en/common/documentation/application/qw/responsible-innovation/responsible-innovation---project-summaries/Responsible+Innovation+%7C+Project+Summaries.pdf

</td></tr>
<tr><td>Examples of use of the method</td><td>
<table>
<tr><th>Project name</th><th>Organisation</th><th>Contact persons</th><th>Timeframe</th><th>Web address</th></tr>
<tr><td>Technology & human - development a capability approach</td><td>Technical University Delft & 3TU.Centre for Ethics and Technology</td><td>Jeroen van den Hoven</td><td>2012-2013</td><td>responsibleinnovation.eu/research/mvi-project_information</td></tr>
<tr><th>Project name</th><th>Organisation</th><th>Contact persons</th><th>Timeframe</th><th>Web address</th></tr>
<tr><td>Nieuwe mensen met nieuwe energie (proposal in 2nd stage of evaluation at NWO-MVI)</td><td>Science and Society Group at the University of Groningen</td><td>Henny van der Windt</td><td>2014 – 2019</td><td></td></tr>
<tr><th>Project name</th><th>Organisation</th><th>Contact persons</th><th>Timeframe</th><th>Web address</th></tr>
<tr><td>NWO Responsible Research & Innovation Program</td><td>Netherlands Organisation for Scientific Research (NWO)</td><td>Jasper Roodenburg</td><td>2009 - 2015</td><td>www.nwo.nl/en/research-and-results/programmes/responsible+innovation</td></tr>
</table>
</td></tr>
<tr><td>Additional information of relevance (such as historical background, where the method has already been applied, etc.)</td><td>The method is probably used in many places, to various degrees of engagement, under various names. For example, it is known in ICT development.

Working in a supplier/user frame seems common for research to benefit industry; users will help guide the research.

The examples given here are from Dutch practice, given the fact that ‘responsible’ innovation has been a separate funding scheme of the national research council NWO since 2009. This extended the traditional user committee’s mandate and composition, and led to an option for civil society engagement.</td></tr>
<tr><td>Sources (names of interviewees, links to relevant websites, etc.)</td><td>Jako Jellema participated in the Valorisation panel as an industry partner when he was working for 2-B Energy B.V., an offshore wind turbine developer. The panel also included a CSO, the North Sea Foundation, which is based in the Netherlands (www.noordzee.nl) http://responsibleinnovation.eu/research/mvi-project-offshore-wind-energy-systems/

A very brief literature scan showed two hits on user committees that were more or less reflective, and could be used to think about user committees in responsible research and innovation. However, I suppose that there are more relevant studies somewhere in the STS domain. I would appreciate suggestions!

http://dx.doi.org/10.1287/isre.1.1.89 Information Systems Research 1 (1), 1990, pp. 89-113 is a paper describing and integrating 4 models of User Involvement as an Interaction Process (Michael Newman & Faith Noble, Department of Accounting and Finance, University of Manchester). User involvement is recommended to analysts as a technique of successful system development, but as a process it is little understood. This case study compares four process models of user involvement–learning, conflict, political and garbage-can-with each other and with an empirical example of system development. Different models are seen as appropriate to explaining</td></tr>
</table>

	the nature of user involvement in different stages of development and contexts. Structural conditions and issues of power are shown to be decisive in the development of conflict and conflict resolution. A two-stage model of user involvement based on Robey and Farrow's work (1982) is proposed which distinguishes conflict development from conflict resolution. http://dx.doi.org/10.1080/09578810410001688806 James Manor, in The European Journal of Development Research, Volume 16, Issue 1, 2004, describes user committees from their use in development co-operation, and signals that their composition are essential, if they are to truly give the end-users (local people) a say. *User committees: a potentially damaging second wave of decentralisation?*, pp. 192-213. *Decentralisations in the 1980s transferred powers to multi-purpose local governments. In recent years, international donors and central governments are increasingly turning towards single-purpose user committees. Although these committees appear to be less democratically accountable and less representative than local government, donors view user committees as a mechanism to give local peoples greater say over the development decisions that affect them. Central government officials establish user committees at the insistence of donors but then manipulate them by selecting committee members and by reigning in their powers. This contribution explores how these proliferating single-purpose committees are undermining the democratic processes that were presumably institutionalised with the creation and strengthening of elected local governments in Third World countries. This new approach fragments local participation, reducing its coherence and effectiveness; the poor may even be worse off than before. These committees appear to usurp local government functions and deprive local governments of revenues. These myriad problems result in destructive conflicts and the undermining of local government authority*.

Author: **Henk Mulder**
Organisation: **University of Groningen**
Date: **30/7/2014**
Revision date: **25/9/2014**
Reviewed by: **DBT**

Name of the engagement method (alias)	**56. World Café**
Short description of the method	World Café is a method for engaging groups, both within organisations and in the public sphere. World Cafés are based on seven design principles and a simple method. World Cafés should offer an antidote to the fast-paced fragmentation and lack of connection in today's world. It is founded on the assumption that people have the capacity to work together, no matter who they are.
Long description of the method	World Café is a method conducted in a workshop format which follows the principle of a good conversation, where anybody is able to talk about things that matter to them. In the 1990s it was created by Juanita Brown and David Isaacs who wanted to design a method that is based on two principles: first, humans want to talk together about things that matter to them and second, if they do, they could create collective power. The method design is based on the normative assumption that people already have within them the wisdom and creativity to confront even the most difficult challenges. World Café can be modified to meet a wide variety of needs. Specifics of context, numbers, purpose, location, and other circumstances are factored into each event's unique invitation, design, and question choice, but the following five components form the basic model. The setting should create an environment which is most often modelled like a café (including round tables with 4 or 5 chairs). The host should begin with a welcome and an introduction in the process and the "Café Etiquette". A World Café process begins with the first of three or more twenty minute rounds of conversation for the small group seated around a table. After the first round each member of the small groups moves to another table. One person will stay at the table and is a table host for the next round and briefly fills them in on what happened in the previous round. Each round of a World Café is prefaced with a question designed for the specific context and desired purpose of the session. After the small groups, the participants are invited to share results from their conversations with the rest of the whole group. These results are reflected visually in a variety of ways, most often using graphic recorders in the front of the room. Summed up, a World Café follows seven core design principles: (1) Set the Context; (2) Create Hospitable Space; (3) Explore Questions That Matter; (4) Encourage Everyone's Contribution; (5) Cross-Pollinate and Connect Diverse Perspectives; (6) Listen Together for Patterns, Insights, and Deeper Questions; and (7) Harvest and Share Collective Discoveries.
Objective of application of the method	☒ Policy formulation ☒ Programme development ☒ Project definition ☒ Research activity ☒ Others: Open for all applications
Results and products of the method application	A main result is graphic recording, which involves capturing people's ideas and expressions in words, images and colour. This documentation is created by the participants of the World Café. It allows the group's collective work to be shared with others as a framework and guide. A further analysis is the basis for written and visual documentation of the methods results and recommendations. A personal presentation of these outcomes in the workshop provides the platform for a discussion of their practical consequences and implementation. World Cafés can create results to generate new ideas, to enable joint decision-making on key strategic issues, to discover new ways for collaboration, to reflect on the implications of a complex issue and in identifying specific step(s) for further exploration and implementation.

Level of stakeholder/public involvement, i.e. objective of public participation through the method's application	☒ Dialogue ☒ Consulting ☒ Involving ☒ Collaborating ☒ Empowering ☒ Direct decision
Engaged stakeholders in the process of method application	

Category	**Organiser**	**Direct participant**	**Beneficiaries**
CSOs	☒	☒	☒
Policy-makers	☒	☒	☒
Researchers	☒	☒	☒
Citizens	☐	☒	☒
Affected	☐	☒	☒

	Consumers	☐	☒	☒	
	Employees	☐	☒	☒	
	Users	☐	☒	☒	
	Industry	☒	☒	☒	
Geographical scope of application (On what level has the method already been used?)	☒ International	☒ EU	☒ National	☒ Regional	☒ Local
Societal challenges the method has been trying to address	☒ Health, demographic change and wellbeing	☒ Food security, sustainable agriculture, marine and maritime research and the bio-economy	☒ Secure, clean and efficient energy	☒ Smart, green and integrated transport	
	☒ Climate action, resource efficiency and raw materials	☒ Inclusive, innovative and reflective societies	☒ Secure societies to protect freedom and security of Europe and its citizens	☒ Others: Open for all topics and areas which be defined at the beginning of the process	
Specific **strengths and weaknesses** of the method vis-à-vis the challenge(s) addressed	The World Café is a method for collaborative learning and knowledge evolution. It is one path for stimulating conversation about questions that matter to participants, especially in large group settings. World Cafés try to combine the knowledge of today with the "wisdom needed to create the future we want" The World Café Community (2005). Depending on the flexibility and the future perspective of the method, it is not possible to plan any results or a strict agenda.				
Timeframe for the application of the method	Recruitment: 3 – 4 month before the workshop; Data analysis: 1 – 2 months; Feedback/Information of results: 1-2 weeks; Preparation of materials: 1-2 weeks; Room booking: 1-6 months;				

Skills required in order to properly apply the method

Skills	No such skills required	Basic	Intermediate	Advanced
Subject-matter expertise		X		
IT skills		X		
Facilitation skills				X
Event organisation skills				X
Project management skills		X		
Other skills:				

<table>
<tr><td>What are the issues of concern that organisers need to take into account when applying the method?</td><td colspan="5">The basic process is simple and simple to learn, but complexities and nuances of context, numbers, question crafting and purpose may mean an experienced host needs to be recruited to help.

World Café events require experience and specialised skills.

The World Café is a trademark of the World Café Community Foundation. There is the World Café Hosting and Consulting Services which provides professional hosting and consulting services.

The World Café name and logo are protected under international copyright law. The name "World Café" should not be used as part of a formal organisational name, product, or service. If organisers use the term "World Café" to describe an event, they must acknowledge the World Café Community Foundation as the source of the name and method by including a link to their website: http://www.theworldcafe.com.</td></tr>
<tr><td rowspan="3">Examples of use of the method</td><td>Project name</td><td>Organisation</td><td>Contact persons</td><td>Timeframe</td><td>Web address</td></tr>
<tr><td>EVAA – European Voices on Active Ageing</td><td>Aip² Italy</td><td>Rudolf Lewanski</td><td>2 years</td><td>http://aip2italia.org/risorse/world-cafe-evaa/</td></tr>
<tr><td>Project name</td><td>Organisation</td><td>Contact persons</td><td>Timeframe</td><td>Web address</td></tr>
<tr><td></td><td>Developing an Active Aging Network</td><td>World Café Europet</td><td>Jeffrey Beeson & Patricia Munro (Executive Board Members)</td><td>1 year</td><td>http://www.worldcafe-europe.net/frontend/index.php?folder_id=45&ses_id=204c21f8d3a50a251080ecdd829cd40c</td></tr>
<tr><td>Additional information of relevance (such as historical background, where the method has already been applied, etc.)</td><td colspan="5">World Café was conducted in the spirit of Appreciative Inquiry, an approach to organizational learning and development originated by David Cooperrider et al.</td></tr>
<tr><td>Sources (names of interviewees, links to relevant websites, etc.)</td><td colspan="5">Brown, J.; Isaacs, D.; The World Café Community (2005): World Café - Shaping Our Futures Through Conversations That Matter. Berrett-Koehler Publishers, Inc., San Fransisco.

EVAA World Café: http://aip2italia.org/risorse/world-cafe-evaa/

IAF methods database: http://www.iaf-methods.org

Rudolf Lewanski: rodolfo.lewanski@unibo.it

The World Café™ Services: http://www.theworldcafe.com

World Café Europe: http://www.worldcafe-europe.net</td></tr>
</table>

Author: **Rainer Kuhn**
Organisation: **Dialogik**
Date: **07-12-14**
Revision date: **07-17-14**
Reviewed by: **Involve**

Name of the engagement method (alias)	**57. World Wide Views (WWV)**
Short description of the method	The purpose of the WWV method is to engage citizens in debates about important, but often complex, issues with the aim of giving advice to politicians. The method is designed to minimize the democratic gap between citizens and policy makers as more and more policy making becomes global in scale.
Long description of the method	Citizens at multiple sites debate the same policy related questions on a given issue on the same day. The citizens are given information material before and during the day and vote on a set of predefined questions. The votes are collected and reported online for comparison. The results are analysed and presented to policymakers. **The WWV meetings** All WWV meetings are held all over the world at the same day. There are 100 citizens at each meeting. Before and during the meetings, the citizens receive detailed and accessible information to prepare them for discussion and voting. All meetings have the same format. The day is divided in 4-5 thematic sessions. Each session starts with an information video and groups of 5-7 citizens deliberate on questions assisted by a trained table facilitator with 5-7 citizens at table. After each session the participants vote on 3-5 questions. The votes are collected and immediately reported online. It is possible to compare the votes across countries, continents, gender, age and other criteria. All partners can choose a fifth and regional theme or let the citizens produce their own recommendations to the decision makers. **Selecting the partners** The partners are responsible for organizing the WWV meetings in their countries or regions. The partners should preferably have some experience with citizen participation, be unbiased on the subject, able to follow the guidelines and able to self- or co-finance their participation in WWV. **Questions and information material for the citizens** The information material is designed to present citizens with pros and cons of voting one way or another. The questions and issue information material is identical in all countries. A scientific advisory board is responsible for assuring the quality of the information material that covers an information booklet, information videos and questions. **The web tool** The citizens' answers are collected online at a web tool. The web tool has to show the results statistically with the function of comparison between countries, continents, gender and so on. **Training of partners** The partners are responsible for having the meeting and selecting citizens, finding the right venue, translating the information material and getting financial support. The coordinators lead the partners through a training process preparing them to host the meetings and introduce the online web tool to report the results. **Citizens** Participating citizens are lay people, chosen to reflect the demographic diversity within their country, with regards to age, gender, occupation, education, and geographical zone of residency (i.e. city and countryside). As non-specialists, citizens are in a unique position to weigh the pros and cons of different technological and political initiatives and to evaluate scientific progress from moral, social and cultural perspectives.
Objective of application of the method	☒ Policy formulation ☒ Programme development ☒ Project definition ☒ Research activity ☐ Others:
Results and products of the method application	**Direct results** The results are based on views from citizens from all over the world. A WWV project produces a results web page. From the page it is possible to compare results across countries, development and developed countries, continents, age, gender, and much more. The results are analyzed by the coordinators, communicated, and published in a results report. The partners have this responsibility to present the WWV results and results report at a national level. Some partners make national reports as well. The coordinators present the results and results report at a global level e.g. at UN conferences.

	Indirect results The method creates a comprehensive political debate on citizens' views on a specific topic nationally and internationally. The method has proved that it is possible to do successful citizen involvement internationally. This is the first and only method to achieve this. By pointing out concerns and priorities central to the public understanding of the theme, the result can inform future policy initiatives. Furthermore, by examining public awareness on the theme, the results will also form an important baseline for future awareness raising initiatives.

Level of stakeholder/public involvement, i.e. objective of public participation through the method's application	☒ Dialogue	☒ Consulting	☒ Involving	Collaborating	☒ Empowering	Direct decision

Engaged stakeholders in the process of method application	Category	**Organiser**	**Direct participant**	**Beneficiaries**
	CSOs	☒	☒	☒
	Policy-makers	☐	☒	☒
	Researchers	☒	☒	☒
	Citizens	☐	☒	☐
	Affected	☒	☒	☒
	Consumers	☐	☐	☐
	Employees	☐	☐	☐
	Users	☐	☐	☐
	Industry	☐	☐	☐

Geographical scope of application (On what level has the method already been used?)	☒ International	☒ EU	☒ National	☐ Regional	☐ Local

Societal challenges the method has been trying to address	☒ Health, demographic change and wellbeing	☒ Food security, sustainable agriculture, marine and maritime research and the bio-economy	☒ Secure, clean and efficient energy	☒ Smart, green and integrated transport
	☒ Climate action, resource efficiency and raw materials	☐ Inclusive, innovative and reflective societies	☐ Secure societies to protect freedom and security of Europe and its citizens	☐ Others:

Specific **strengths and weaknesses** of the method vis-à-vis the challenge(s) addressed	**Strengths** The WWV method can support and expand a democratic culture in governance by engaging and giving the citizens more political influence in countries with little or no experience or history with citizen participation. These organisations, decision makers and countries also develop capacity when contributing or involved in the project. The method has established an international network of organisations capable of implementing international citizen participation. The WWV meetings can engage a large and diverse number of citizens in discussions on political matters that affect a lot of people. It also increases the public awareness and opinion on a specific problem and engages different parties on political matters. The method delivers a trans-national understanding of how citizens in the participating countries view the topic, and what they want to tell the policy makers. The multisite aspects of the method gives the citizens the chance to discuss a theme with other citizens in their own language, at the same time as other citizens in a different part of the world are doing exactly the same. The meetings are connecting with skype during the day and the facilitator is able to announce and compare results from other countries as they tick in online. This creates a global sense of community for the participating citizens. The method is capable of simultaneously addressing researchers and politicians at a national, regional and international level as some partner countries choose to have regional meetings. The national face-to-face deliberations with comparable online results allows for more participating countries, than if you collected citizens from different nationalities at one venue. The effect of the global meetings involving 3-4000 citizens allows areas of agreement and disagreement to emerge. This contributes to a transparency in important international debates and tells the political decision makers what they think about alternative political strategies. Themes that contain obvious conflicts and dilemmas combined with well-documented scientific knowledge and a need for political action are well suited for this method. Combined with this, issues that need an international coordinated assessment are also ideal for this method. The WWV method is not a campaign trying to tell citizens what they should think, but a method allowing citizens to tell policymakers what they think. **Weaknesses** It is difficult to give the citizens a meaningful co-influence on the themes and questions they discuss at the meetings. The WWV process is expensive to carry out. Funding at a transnational level is difficult to obtain. The partner partially has to fundraise their own meeting and fundraising is challenging and comprehensive. This may exclude some partners if they are not able to fund the process and the meeting. Since the meetings are global it is comprehensive and difficult to involve all relevant stakeholders and decision makers. The WWV method is designed to address specific problems or projects that have reached a certain point. It may not be suitable for projects in early stages of development. The WWV method is not suitable for projects and problems that do not have clear political options. The method is not made to give the citizens the possibility to frame the following debate. The method has strict guidelines and the citizens have to navigate within the given rules.
Timeframe for the application of the method	The process requires 18 months of preparation. *1. month:* The idea *1. month and onward:* The WWV design

3. – 15. Month: Selecting the partners
5. month and onward: Production of questions and information material for the citizens
8. month: The web tool
13. month: Training of partners
14. – 17. month: Selecting the participating citizens
15. month and onwards: Contact to media
18. month: WWV day
18. month and onward: Making the citizens' views heard

Skills required in order to properly apply the method

Skills	No such skills required	Basic	Intermediate	Advanced
Subject-matter expertise			X	
IT skills				X
Facilitation skills				X
Event organisation skills				X
Project management skills				X
Other skills:				

What are the **issues of concern that organisers need to take into account** when applying the method?

Be prepared to apply considered amount of time and resources and to work with multiple languages and different political cultures.

The process requires a lot of coordination and is very time consuming.

Examples of use of the method

Project name	Organisation	Contact persons	Timeframe	Web address
World Wide Views on Global Warming	The Danish Board of Technology	Bjørn Bedsted	2 years 2009	http://globalwarming.wwviews.org/
Project name	**Organisation**	**Contact persons**	**Timeframe**	**Web address**
World Wide Views on Biodiversity	The Danish Board of Technology	Bjørn Bedsted	1 ½ years 2012	http://biodiversity.wwviews.org/
Project name	**Organisation**	**Contact persons**	**Timeframe**	**Web address**
French National Debate on Energy Transition Debate (small scale)	Ministry of Ecology, Sustainable Development and Energy and Mission Publiques	Yves Matthieu	¾ year 2013	http://www.developpement-durable.gouv.fr/-Nouveau-modele-energetique,7507-.html
Project name	**Organisation**	**Contact persons**	**Timeframe**	**Web address**
Danish Debate on the Health System (small scale)	The Danish Board of Technology	Jacob Skjødt Nielsen	½ year 2011	www.tekno.dk
Project name	**Organisation**	**Contact persons**	**Timeframe**	**Web address**
Europe wide Views on sustainable consumption	The Danish Board of Technology	Marie Louise Jørgensen	2014	http://www.pacitaproject.eu/?page_id=1519

Additional information of relevance (such as historical background, where the method has already been applied, etc.)	The WWV method was developed by The Danish Board of Technology and other partners in the World Wide Views Alliance which was established in 2007 for this purpose prior to the climate COP15 in Copenhagen in 2009. The aim was to develop a method that would be cheap and easy to use for partners in all parts of the world; a method that would produce results that could be easily communicated to policy makers; and a method that would provide participating citizens with balanced information and give them the opportunity to discuss the issues at hand with other citizens. The method has achieved international recognition by the UN and considered to be both a means for awareness raising and a participatory endeavor. At COP11 in India in 2012 it was included in the final decision text to call on all countries to support projects such as the World Wide Views on Biodiversity. The WWV is structured as a global alliance of institutions – public councils, parliamentary technology assessment institutions, civil society organisations and universities. The members of the WWV Alliance draw the overall methodology, questions to citizens, information material, media relations and contact to decision makers. The results, video and background material has also contributed to educational courses and material at schools and science museums.				
Sources (names of interviewees, links to relevant websites, etc.)	Bjørn Bedsted, project manager, DBT. www.wwviews.org http://www.tekno.dk/subpage.php3?article=1927&toppic=kategori12&language=uk http://biodiversity.wwviews.org/the-method/ The World Wide Views Citizen Consultations. A pTA Response to a Global Challenge. By Bjørn Bedsted. Proceedings from the PACITA 2013 Conference in Prague. Part III. Participation in technology assessment. The story of World Wide Views. By Bjørn Bedsted, Søren Gram and Lars Klüver. Citizen participation in global environmental governance. Edited by Mikko Rask, Richard Worthington and Minna Lammi. 2012				

Author: **Cecilie Neumann Hansen**
Organisation: **The Danish Board of Technology**
Date:
Revision date: **18.09.2014**
Reviewed by: **Involve**