

ECSA Policy Paper #2

Endorsing the White Paper on Citizen Science for Europe

Key Recommendations

We endorse many of the White Paper recommendation and proposed actions for EU wide adoption of Citizen Science. In particular we call for the EU to:

- 1. Set up a "European Citizen Science Platform" (hereafter "the Platform") to provide high level guidance to the European Commission, Member States, local and regional authorities, and private actors on the transition process towards an open and inclusive engagement of citizens into research activities and policy making.
- 2. Set out a Roadmap to demonstrate how citizen science can be come a critical part of the data provision required to monitor and report on Environmental and related Directives
- 3. Recognize that Citizen Science requires new funding mechanisms to prosper as a cost effective way to support the implementation of EU Policy.
- 4. Recognise the critical role the European Citizen Science Association can play in bringing together European best practice on citizen science.

1. Introduction

The European Commission commissioned a White Paper on Citizen Science for Europe by Socientize. The paper was presented during September 2014 and contains a series of proposed "Actions", "Measures" and "Recommendations" at the Macro, Mesa and Micro scales. This paper was reviewed at the ECSA General Assembly in Berlin in 2014.

This ECSA Policy Paper has been drafted by the Policy Group following this review and has been adopted by the ECSA Steering Committee on 21st January 2016 for publication on the ECSA website. It is designed for use in discussions with the European Commission and represents the view of ECSA on the EU White Paper on Citizen Science

2. Macro Level - Policy Framework

Policy Makers & Science Funders

Recommendations, Actions and Measures – The ECSA Response

ECSA see Citizen Science, as one of the most exciting open trends in the modern era that has the potential to bring together citizens and policy makers in ways few would have predicted 5 years ago. By working together and through the development of modern Information & Communications Technology (ICT) we share the aspirations of the White Paper to open up the opportunity for all EU Citizens to become part of a community taking an active role in research, innovation and the development of evidence-based policy.

Further, ECSA recognize the importance of promoting Responsible Research and Innovation (RRI) and the principles of Open Science. We see Citizen Science as a crucial ingredient for building more inclusive and sustainable global knowledge societies. We endorse the mainstreaming and expansion of mechanisms to boost public engagement into research and innovation activities both quantitatively and qualitatively, to reduce the barriers to access scientific results, to promote the

uptake of gender and ethics in research and innovation processes and results, and to strengthen science education. Citizen Science also lies at the heart of renovating the key role of research for our economies and societies in the 21st century. Citizen Science facilitates the participatory generation of knowledge and innovations, addresses data quality and interoperability standards through dedicated practitioner associations, enhances research integrity through increasing transparency and participation and opens research to participation from all over the world.

We strongly support the White Paper that we need a *paradigm shift* and a *new contract* between all societal actors if we are going to tackle the emerging global challenges. We recognize that ICT has already started to foster new radical open, efficient and agile systems that will mobilize individual and collective engagement as we seek to build a sustainable future. We believe that we are starting to see emerge a new way to engage global citizens at the local and regional levels in solving global challenges and a new will to drive change. We recognize that the EU has undertaken considerable research into Citizen Science and we look forward to the adoption of substantial support measures to forge this new contract with citizens as well as Citizen Science programmes in support of policy delivery.

We note other global initiatives to support Citizen Science engagement in the policy process such as activities in the USA where the White House is now actively promoting Citizen Science as an effective way to gather information in support of policy delivery.

Recommendation 1 – The establishment of a Citizen Science Think Tank

We endorse the recommendation for a EU wide Citizen Science Think Tank. We call on the EU to set up a "European Citizen Science Platform" (hereafter "the Platform") to provide high level guidance to the European Commission, Member States, local and regional authorities, and private actors on the transition process towards an open and inclusive engagement of citizens into research activities and policy making. We strongly advise to pay special attention to addressing and facilitating the monitoring of environmental trends and the effectiveness of EU Environmental and Climate Policy as Citizen Science offers major resources to contribute to these fields.

We expect the platform to provide: -

- a vision on how the EU can effectively and collectively engage citizens in European wide programmes that build on local knowledge and experience;
- a clear route map for the development of ICT favoring usability, interoperability and collaboration to support the emergence of a connected, dynamic and engaged citizenship empowered to take an active part in gathering, analyzing and acting upon the evidence base of data on emerging global environmental trends;
- advice on the policy instruments and governance structures needed to ensure that
 Citizen Science as a resource for improving environmental governance is built into EU
 environmental and climate regulation as a new and powerful way of accelerating the
 changes we need to build a sustainable society.

ECSA through its Policy Group will draft clear Terms of Reference for such a Platform and campaign for its establishment with an independent Chair.

Proposed Action 1 Targeted Programming

We add our weight to the White Paper call for the Commission to recognize that Citizen Science

requires new funding mechanisms to prosper as a cost effective way to support the implementation of EU Policy. If the EU wants to build global leadership in this area it will need to nurture and effectively support the emerging Citizen Science Community.

Proposed Action 2 Mainstreaming Citizen Science

The White Paper rightly recommends that Citizen Science should be mainstreamed. We call upon the Commission to empower the Platform to set out how existing funding schemes can be modified to support the emergence of Citizen Science Programmes and for a paradigm shift in the way such funds are administered that allows emerging citizen science experts to be involved in the decision making process.

The White Paper also calls for a range of support measures covering:-

- Education;
- Evaluation and Assessment;
- Access to Technology;
- Data Policy; and
- Dissemination and Support.

ECSA will develop and submit clear proposals on each of these actions for consideration by the Commission. Should the Commission agree to set up a Citizen Science Platform we will work with them to lay out a clear "Roadmap" on how these actions can be addressed. We believe that especially support measures for data and technology require global and cross-sector co-operation. To that end we have already signed a Memorandum of Understanding with the Global Citizen Science Association (CSA) and the Australian Citizen Science Association. We also have links with the United Nations including UNEP and UNESCO and are committed to working with a broad range of stakeholders from science, industry, policy and civil society in order to advance the issues at stake.

3. Meso Level – Community Framework

Citizen Science Mediators and Facilitators

Actions and Measures – The ECSA Response

ECSA is the natural facilitator to link macro and micro initiatives on Citizen Science. We call on the EU to recognize our critical role in this process. We support the key actions proposed in the White Paper as core to the reasoning behind the formation of ECSA.

Action 1 Identification, Coordination and Support of Ongoing Initiatives

The White Paper recognizes the need to investigate the wealth of currently developing Citizen Science activities, support measures, actors and venues as well as to share expertise and facilities to increase their impact. This recommendation is at the core of why ECSA was established. We will continue to seek funding from both public and private sources to deliver key aspects of this recommendation. We call upon the Commission to recognize the key role that ECSA can have in delivering this action.

Action 2 Building Dynamic & Inclusive Communities by Defining New Interactive Channels between Policy Makers, Scientists and Society

ECSA believe we have started this process and that we have opened up new channels with the Commission as well as with civil society. We call on the EU to strengthen and widen these links through the establishment of the new Citizen Science Platform or similar communication channels.

We commit to working with the Commission and civil society organisations to make sure we genuinely open up new channels and do not reinforce the status quo.

Action 3 Integrating Research Initiated and Conducted Directly by the Public

ECSA recognize that new dynamic methods are emerging to support participatory and citizen-led research in a wide variety of fields and interdisciplinary collaborations. We agree with the need to devise new institutional arrangements to validate bottom-up knowledge claims and to establish a range of support measures covering;-

- Education, training and learning;
- Technologies, Development and Support;
- Dissemination, Awareness Raising and Outreach;
- Metrics, Monitoring, Collective & Dynamic Evaluation; and
- Data Policy including IPRs and personal rights

ECSA fully support the Action Measures proposed in the White Paper and commit to working with the Commission, civil society organisations and the international Citizen Science community to advance initiatives in these areas. As with the Macro actions ECSA will provide clear proposals on each of these actions and will offer these to any Citizen Science Platform that is developed and contribute to a "Roadmap" on how they can be delivered.

4. Micro Level Scale – Citizen Science Hands-on, Making Things Happen

Research Groups, Communities and CSO's

Support Measures – The ECSA Response

ECSA is committed to supporting local action by its members. Adding value by sharing scientific outputs, standards, tools, techniques, training materials, ICT programmes, data handling systems and technologies.

At the Micro level the White Paper calls for a range of support measures including:-

- Education Training and Learning;
- Appropriate Technologies and Methodologies for Engagement;
- Dissemination, Awareness Raising and Outreach;
- Metrics, Monitoring, Collective & Dynamic Evaluation; and
- Data Policy.

Whilst these are matters mainly for the National and Local Membership, ECSA support the ideas set out in the White Paper and will work with its Membership to deliver these aspirations. Through the various working groups that have been set out ECSA will aim to develop "best practice" in each of these fields and to share them openly with all key stakeholders. ECSA calls on the Commission and Member States to recognize the value this role will play in promoting effective local programmes and participation

ECSA will continue to champion EU demonstration programmes that build on the strength of local programmes, initiatives and projects to support EU wide Citizen Science Programmes and have already proposed significant projects covering the monitoring of Tree Health and Indicators of Climate Change addressing EU Environmental Policy needs.