



Citizen Science & Open Science Community of Practice

Project of the Citizen Science Global Partnership (CSGP)

Inception Report

Prepared by Uta Wehn, Claudia Goebel and Libby Hepburn (CS & OS CoP Co-Chairs)

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List of abbreviations and acronyms

Abbreviation	Meaning
CoP	Community of Practice
CS	Citizen Science
FAIR	FAIR Guiding Principles for scientific data management and stewardship: Findable, Accessible, Interoperable, Reusable data
OS	Open Science
SDGs	Sustainable Development Goals
CSGP	Citizen Science Global Partnership

Version history

Version	Date	Summary of changes
0.1	6/08/2020	Initial version (before consultation with CoP members)
1.0	18 Sep 2020	Final version (after consultation with CoP members)

1. Introduction

1.1 Background: UNESCO Recommendation on Open Science

Open Science (OS), an approach for making research more open, accessible, efficient, democratic and transparent, has been developing since the late 1990s. Citizen Science (CS), an approach enabling public participation throughout various stages in research and innovation processes and making research accessible and relevant to the interests of individuals and communities, has been developing in parallel and benefiting from many of the technological advances that have allowed OS to flourish.

The United Nations Educational, Scientific and Cultural Organization (UNESCO) has identified the need to encourage science to be more connected to societal needs and as an enabler of equal opportunities to allow everyone to participate and benefit from what Open Science can offer. UNESCO launched a global consultation on Open Science to support the development of a UNESCO Recommendation on Open Science which shall be adopted by the UNESCO General Conference in 2021. The UNESCO Recommendation is intended to define “shared values and principles for Open Science, and point to concrete measures on Open Access and Open Data with proposals for action to bring people closer to science, and commitments for a better distribution and production of science in the world” (REF). Such recommendations are legal instruments with the aim to influence national laws and practices which the UNESCO member states will be asked to report against.

Global Citizen Science communities have been invited to contribute to this process. There is now significant expertise within both the OS and CS movements and this is an opportune time to consider together how to maximise the opportunities of collaboration to make further advances together. In order to “bring people closer to science”, the work that the CS movement is doing to “leave no one behind” and develop co-creative processes which engage communities in research and learning which is relevant to their concerns, is fundamental and can make a significant contribution to the aims of OS and UNESCO.

This opportunity also opens up a space for the citizen science community to explore and learn more about the landscape and dynamics of the Open Science approach as it exists at present and as it develops.

1.2 Why a Citizen Science & Open Science CoP?

To facilitate the input of CS communities into the UNESCO Recommendation consultative process as well as to stimulate cooperation between CS and OS communities beyond the work with UNESCO, the CS and OS Community of Practice has been established under the umbrella of the [Citizen Science Global Partnership](#) (CSGP) - the position of the CSGP as a global partnership provide the citizen science communities with a united voice that can be heard in

bodies such as UNEP, UNESCO and other organisations: something that the regional associations find difficult to achieve on their own. The aim of this new group is to reach and learn from many of the existing CS communities across the world and enable collaboration with OS communities and practitioners.

CS and/or OS practitioners and enthusiasts are warmly invited to join this CS & OS CoP! They can join as an observer or as a contributor.

The participation of the CS & OS CoP is a major opportunity for influencing the uptake of CS in policy frameworks around the globe by providing reflections of current CS practitioners' views and positions from as broad a spectrum as possible and from across the globe.

A first contribution of the CoP to the consultation process for the UNESCO Recommendation has been a short paper on 'Global Citizen Science perspectives on Open Science'. For the paper, the views of 63 Citizen Science practitioners from 24 countries were synthesised into the paper responding to UNESCO's key themes¹. This was an important step to ensure that global CS communities could seize the opportunity to feed into the formal UNESCO process for developing a global policy and regulatory agenda on OS.

As UNESCO is seeking a long term collaboration with the CS communities, the CS & OS CoP is keen to contribute to, anchor and shape the understanding, role and value of Citizen Science in the framework of UNESCO science policy.

We have received UNESCO's approval to proceed with the approach of managing input to the UNESCO process through a dedicated CSGP CoP, with the aim of collecting and synthesising diverse CS perspectives as input to the UNESCO Recommendation. UNESCO has approved Uta Wehn as the primary contact, willing to be accountable for working with members of the CSGP CS & OS CoP to provide input to the UNESCO Advisory Committee for the Recommendation on OS. Together, Uta Wehn, Claudia Göbel and Libby Hepburn are acting as interim co-Chairs of the CSGP CS & OS CoP to bring this work forward.

The structure for this Community of Practice is modelled after the WeObserve project's four Communities of Practice², which defines the role of a CoP as consolidating practice-based expertise, sharing information and resources, and working to further develop good practice guidelines and toolkits.

¹ Wehn, U., Göbel, C., Bowser, A., Hepburn, L. and Haklay, M. (2020) Global Citizen Science perspectives on Open Science, written input by the CSGP Citizen Science & Open Science Community of Practice to the UNESCO Recommendation on Open Science, 31 May, <https://osf.io/6qjyg/>

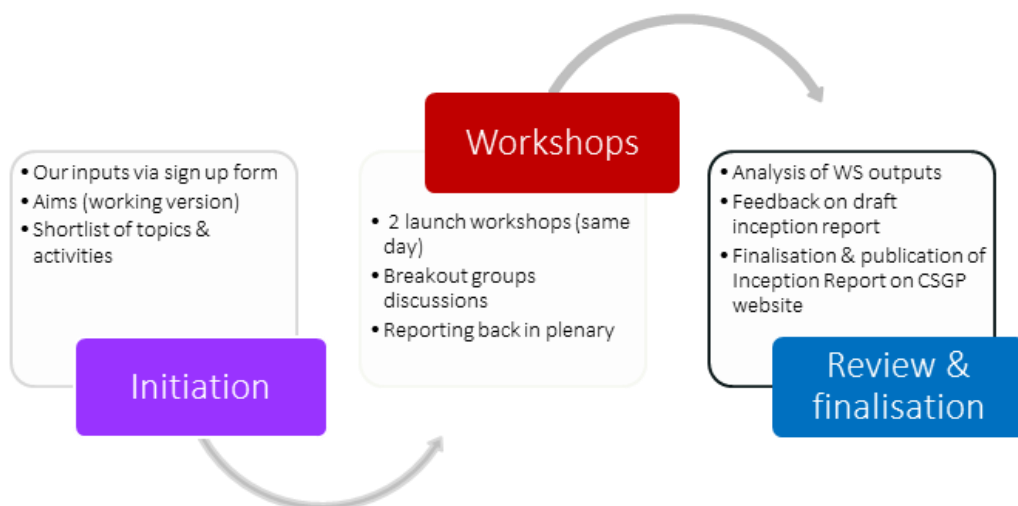
² <https://www.weobserve.eu/cops/>

This work of this CoP can only go beyond the contribution to the UNESCO policy process and evolve if it is meaningful for practitioners of CS and OS. For this purpose, a co-design approach has been chosen to shape what the CoP shall become.

1.3 Co-design of the CS & OS CoP

The process of co-designing this CS & OS CoP consists of three phases (see Figure 1):

1. Initiation: capturing interest in forming a CoP and inputs for the paper as well as other areas of work via an online survey (May 2020).
2. Launch workshops: Two online workshops were held on 16 July 2020 (different time zones) to co-design the objectives, and activities of the CS & OS CoP.
3. Review and finalisation: analysis of the workshop outputs, drafting of this inception report and its finalisation based on CoP members' feedback (Aug-Sep 2020).



The invitation to join the CoP and its launch workshops was circulated among relevant networks as widely as possible. To date, 128 people from around the globe had signed up for the CoP and 50 people joined the two launch workshops.

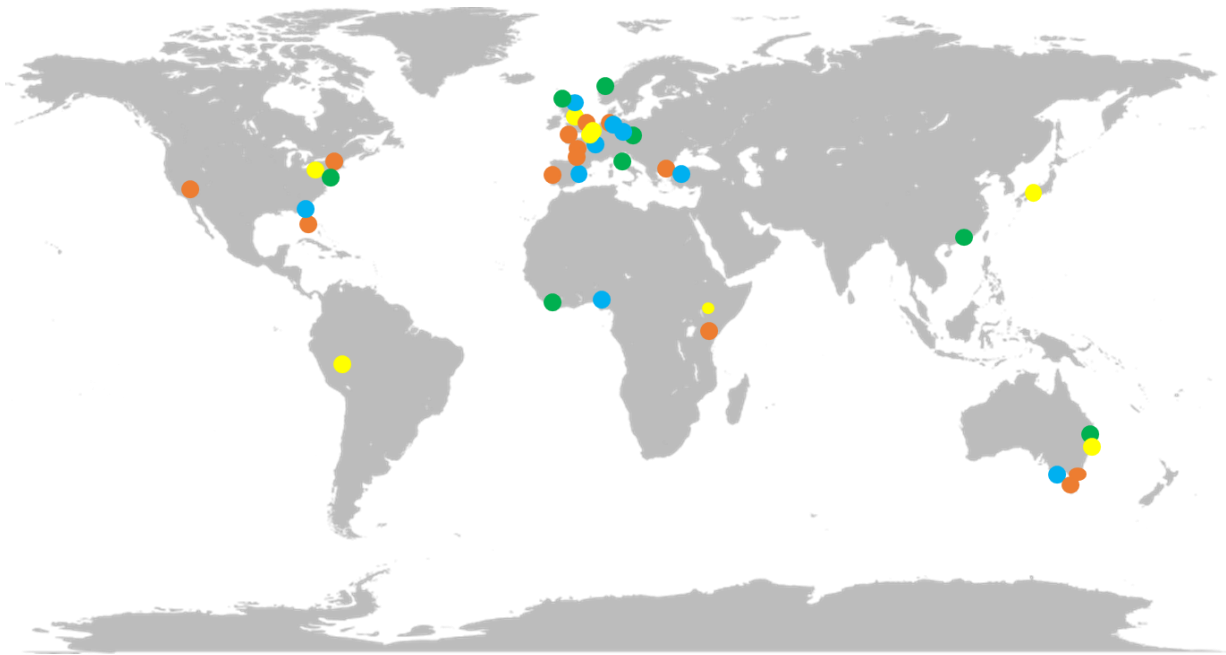


FIGURE 1: OVERVIEW OF WORKSHOP PARTICIPANTS' LOCATIONS AROUND THE GLOBE

Note: colours chosen by participants, no special significance

1.4 Purpose of this document

Before starting its activities, the CS & OS CoP needs to define its objectives, whilst taking into consideration best practices from relevant past and/or ongoing initiatives. The purpose of this inception report is to present the scope and objectives of the CS & OS CoP, target participants, its planned activities, and its ways of working.

This document will be approved by the founding members of the CS & OS CoP, i.e. attendees of the launch workshops and subscribers to the mailing list (128), and will be made public as reference for other people who may express interest in the future. Present and future members must adhere to the principles of conduct outlined in this document.

2. Scope of the CS & OS CoP

This Community of Practice is dedicated to stimulating exchange and cooperation between practitioners from the fields of CS and OS. The aim is to, in general, increase, enrich and consolidate understanding across these two movements, and, as particular occasions of cooperation arise, accompany and feed into formal processes such as the UNESCO global policy process on OS, using the collective intelligence of members to identify future goals and opportunities of the CoP.

2.1 Who is the CoP for?

The CS & OS CoP brings together practitioners from CS and/or OS perspectives who are interested in supporting continuous engagement between UNESCO and global CS communities throughout the consultation process and who want to better understand and facilitate opportunities for collaboration between CS and OS communities at the global level.

CS and/or OS practitioners and enthusiasts are warmly invited to join this CS & OS CoP! They can join as an observer or as a contributor.

- OBSERVER: Observers are included in email communication and have access to the CoP online workspace
- CONTRIBUTOR: Contributors are expected to take part in the CoP telcons, task force activities etc.

These roles are chosen by the CoP members themselves and they can switch over time as they see fit. It is important that new participants joining this CoP formally sign up [via this form](#)³, in order for the CoP to comply with EU privacy regulations and to make sure members are included in all relevant communication and activities.

2.2 Relevant themes for the CS & OS CoP to address

A set of topics and activities for this CoP to focus on were distilled from the registration forms of participants in preparation of the CoP launch workshop. In this form, registrants had been invited to share what they would be most interested in pursuing as part of this CoP. These topics, and possible avenues for work within them, were further discussed during the launch workshops held on 16 July 2020 (see table 1), with the highlights noted below.

- a. Policy - Advance CS/OS in policy agendas - high level policy issues (e.g. UNESCO recommendation, [Aarhus Convention](#))
- b. Co-created CS & OS - Goal 17 "Leave no-one behind" - recognition of individual Citizen Scientists, marginalised & Indigenous/local knowledge inclusiveness & equity/co-created CS and OS
- c. Data - Open, Accessible & FAIR⁴ data aspects, data interoperability/discoverability strategies
- d. SDGs links - Facilitate engagement with the SDGs data and SDG implementation
- e. Bridging - Serve as a bridge, communities/projects at the global level liaisons with different specific communities, different scales of projects

³ Please note that as soon as the CoP mailing list has been set up, registration for the CoP will be done via registration for that mailing list (and no longer via this dedicated form).

⁴ <https://www.go-fair.org/fair-principles/>

- f. Impact - Evaluate & promote impact of CS/OS, incl. in terms of empowerment and inclusiveness/equity
- g. Paper - refining the CoP short paper on global perspectives of CS & OS into a peer-reviewed publication
- h. Other topics (suggestions could be made live during the workshops)⁵

TABLE 1. NUMBER OF PARTICIPANTS PER BREAKOUT GROUP AT THE CoP LAUNCH WORKSHOPS

Topic	1 st workshop	2 nd workshop	Total
Policy	0	6	6
Co-created CS & OS	12	5	17
Data	3	2	5
SDG Links	5	4	9
Bridging	6	0	6
Impact	3	6	9
Paper	3	2	5
Total	32	25	57

2.3 Objectives

The Citizen Science Global Partnership is a network-of-networks that seeks to promote and advance CS for a sustainable future. Established under the CSGP, the CS & OS CoP seeks to elevate a wide range of viewpoints and perspectives and provide a coordinated point for a wide range of activities led by different CS and OS collaborative networks.

The CS & OS CoP has the core purpose of understanding and supporting the nexus of CS and OS, by bringing together the knowledge of different stakeholders from Citizen Science and Open Science.

A set of three overarching working **objectives** were distilled from the input of CoP members in the build-up to the CS & OS CoP launch workshops:

1. Stimulate exchange and cooperation between practitioners from Citizen Science and Open Science;
2. Increase, enrich and consolidate understanding across these two movements;
3. As particular occasions of cooperation arise, actively follow, collaborate with and feed into formal processes such as the UNESCO global policy process on Open Science.

⁵ Note that the topic 'Enablers & inhibitors (gate keepers)' was suggested during the workshop for a breakout group but no workshop participants chose to join that group.

The **medium term goals** of the CoP (1 June 2020- June 2025) are:

1. Continue to support engagement between UNESCO and the global CS community throughout the consultation process, including through an online virtual discussion on OS in the context of the UNESCO regional and thematic consultations beginning in June 2020;
2. Better understand and facilitate opportunities for collaboration between CS and OS communities at the global level.

3. CoP Activities

3.1 Activities per thematic focus

In order to achieve its objectives and taking into account the activities co-designed by participants of the launch workshops, this CoP aims to undertake the following activities. At the same time, the CoP will ensure it is not repeating efforts of other associations and networks (see details in Section 3.2) but will actively link to them.

a) Policy - Advance CS/OS in policy agendas - high level policy issues (e.g. UNESCO recommendation, Aarhus Convention)

One of the core activities of the CS & OS CoP shall initially be modeled closely to the process of developing the UNESCO Recommendation, which is a process of about two years (2020-2022) calling for input from experts on different topic areas at various points in time.

Under the Policy theme, three key sub-topics were identified to focus on:

- Sharing knowledge and monitoring policy processes and discussions (and how we can promote coordinated engagement in various ways);
- Identifying policy processes where we can make an impact (to decide which one(s) we can participate in and through which mechanisms);
- Providing a coordinated response to consultations (for example, contributing to the UNESCO consultation or the Aarhus convention).

b) Co-created CS & OS - Goal 17 Leave no-one behind - recognition of individual Citizen Scientists, marginalised & Indigenous/local knowledge inclusiveness & equity/co-created CS and OS

One of the key topics highlighted within the theme 'co-created CS & OS' were the barriers and challenges to achieving co-creation. In particular, the workshop participants highlighted questions over data ownership and usage, barriers to participation and decision making, and understanding how we can be inclusive in CS and OS communities.

Participants suggested that to begin work on this topic, gathering good practices and recommendations may provide a basis on which to understand the current state of the field. This is an activity that could cut across all topics, and was also addressed in the Short Paper. A toolkit or set of tips for the CS community on the meaning and importance of OS and data sharing will be explored as a potential output of this activity.

A further area of interest is the exploration of co-creation methodologies that align with the principles of CS and OS. Participants also expressed interest in elaborating and sharing good practice and tools to foster the implementation, further promotion and update of such methodologies.

c) Data - Open, Accessible & FAIR data aspects, data interoperability/discoverability strategies

Various sub-topics within the 'Data' theme were noted as potential avenues for future CoP activities. The lack of awareness of OS and best practices (regarding Open Data), with a particular focus on raising awareness about the legal issues associated with this kind of data needs to be prioritised. Additionally, existing efforts (and best practices) in awareness raising of Open Data should be identified. In addition to the handling of Open Data, workshop participants stressed that open software (and hardware) should also be considered by this CoP, not just data.

With the wide range of relevant stakeholders in the field of Open Data and given the international nature of this CoP, it was also suggested that this CoP could act as a platform for bringing these diverse communities together and discuss developments and issues such as:

- how usable datasets are for the average citizen/community group
- the tension between Open Data and privacy (particularly in the case of vulnerable and minority groups)
- how to make sure not only companies/organisations with the right resources and skills can benefit from mining open datasets, and best ways to ensure usability is a core principle of OS,
- how to integrate/manage different data protection frameworks, e.g. GDPR requirements across different CS communities/organisations across the world..

With such a diverse group of participants, this CoP is well placed to do this and ensure that expertise is not lost,

A further consideration for this CoP is data sovereignty, transparency and open infrastructure, as well as the related issues of adopting such infrastructure. This ties closely with the question of which tools to use when collecting and storing data (with attention to standards, quality and metadata), to help enhance data availability, accessibility and usability.

d) SDG links - Facilitate engagement with the SDGs data

Within the topic of SDGs linkages, the quality and access of data (due to the impact of Open Science) is a key theme that should be of interest to this CoP. In particular, the ways in which OS can improve the quality and availability of the data collected for the SDG indicators (with guides and tools for practitioners) should be a priority.

Citizen Science can also play a role in awareness raising for the SDGs. The inclusive and participatory nature of CS allows it to educate large numbers of citizens, and provides a unique opportunity to raise awareness about the SDGs.

The CoP can also act as an important voice for advocating for Open Access to SDG monitoring data, especially in close collaboration with the WeObserve Community of Practices on the SDGs and Citizen Science and the CODATA group.

e) Bridging - Serve as a bridge, communities/projects at the global level liaising with different specific communities, different scales of projects

A key focus of the CoP was suggested to be the promotion of values of empowerment, inclusiveness, equality and equity. Bridging various communities of practitioners and projects forms a central component of this.

A concrete step that could be taken to reach across communities is to develop a central space for interested parties to share local gained skills, to network with other practitioners, to highlight various grassroots projects to potential funders and to learn about the global, regional, national and local opportunities to connect to CS projects, as well as opportunities to engage in OS. Such a space/platform could tap into pre-existing databases (e.g. of local CS projects) and opportunities to learn more about the CS & OS concepts. An online tool could then connect CS and OS users internationally.

Further, connections could be developed (e.g. via webinars, short presentations) with key grassroots OS communities in schools, universities and NGOs. In this way, the CoP can further foster empowerment within CS and OS.

The option for supporting community members in "liaison" roles was also discussed. For example, one member of the CoP is also a member of the Gathering for Open Science Hardware (GOSH), and suggested that she could facilitate knowledge exchange between these two communities of practice. In principles, all CoP members are encouraged to act in such bridging roles with other Communities of Practice they are affiliated with.

f) Impact - Evaluate & promote impact of CS/OS, incl. in terms of empowerment and inclusiveness/equity

CS and OS have many nuanced impacts, making this a key topic of concern for this CoP and creates synergies with the WeObserve Community of Practice on the Impact and Value of Citizen

Science. One area of particular interest is landscape level analyses. Currently, there is a lack of tangible evidence for the (positive and negative) impacts of CS on the ground – given its composition, this CoP is well placed to make this a focus of its work.

Another key question in this area is to capture the synergies between impact through data and impact on and through people, and to measure how they reinforce each other. This is particularly relevant in how CS relates to scientific literacy. To better understand this, the CoP needs to share and articulate different CS approaches and note how they create impact.

g) Paper - refining the CoP short paper on global perspectives of CS & OS that was submitted to UNESCO into a peer-reviewed publication

A final topic that was discussed was how to develop a peer-reviewed publication via a collaborative process among CoP members from the previously written short paper on global perspectives of CS & OS that was submitted to UNESCO. As part of this, the role of the paper itself was discussed, and suggested that it can be transformed into a living document that describes what the CoP can do. This paper could also reflect and capture the state of the art of CS & OS, while outlining the CoP agenda.

From this starting point, the possible structure of the paper was discussed. Some participants suggested focusing the paper on the CoP and therefore organising the paper around the golden circle with the questions ‘Why do we exist? How do we operate? What do we want to achieve?’. An alternative idea was to create a list of sub-topics which the paper would be separated into (e.g. climate change research). Yet another approach was to build more closely on the existing short paper with its analysis of OS from CS perspectives.

(Additional) key themes to be included within the paper were also discussed, including the role of CS & OS within the social sciences; bridging the gap between CS & OS; the role of citizens beyond data collection; the role of CS & OS in the Global South; the impacts of digital feudalism; and the ethical aspects of CS & OS.

3.2 What this CoP is not doing: Linked initiatives

The CS & OS CoP will ensure it is not repeating efforts of other associations and networks. We will develop or sustain close links with the following initiatives (and additional ones over time) to ensure that we are sharing information and working separately where required:

- ECSA Working Groups on Sharing Best Practice and Building Capacity; Policy, Strategy, Governance and Partnerships; Empowerment, Inclusiveness and Equity; Learning and Education in Citizen Science; Citizen Science and Open Science.
- CSA Data and Metadata Working Group
- OPENER Community of Practice on Public Engagement in Environmental Research (UK) (<https://research.reading.ac.uk/openupsci>).
- GEO CITSCI - Earth Observations and Citizen Science Community Activity of the GEO Work Program (http://earthobservations.org/documents/gwp20_22/GEO-CITSCI.pdf).

- Socio-economic benefits of Earth Observations - Community Activity of the GEO Work Program (<http://earthobservations.org/activity.php?id=142>).
- EuroGEOSS initiative (https://ec.europa.eu/info/research-and-innovation/knowledge-publications-tools-and-data/knowledge-centres-and-data-portals/eurogeoss_en).
- MICS - Developing metrics and instruments to evaluate citizen science impacts on the environment and society (H2020 project, 2019-2021), led by Earthwatch.
- CODATA working group on citizen science and the SDGs <https://codata.org/initiatives/task-groups/citizen-science-for-the-sustainable-development-goals/>
- WeObserve CoPs
- International Network of Open Science & Scholarship Communities (INOSSC).

4. Modes of communication

It is vital that the CS & OS CoP communicates effectively not only amongst its members but also outside of the group.

4.1 Internal communication

The CS & OS CoP will set up a **mailing list**. Subscription to the email list is considered subscription to the CoP. In addition, progress of the discussions and minutes of meetings will be maintained in a shared GDrive. Working documents of CoP internal discussions, e.g. from a task force, will be presented to the CoP observers, comments will be incorporated and the final versions will be agreed.

4.2 External communication

In terms of communication to the wider public, the CoP results can be communicated and disseminated via the CSGP webpage, the CoP project page on the Open Science Framework and via its members' respective websites and communication channels. In the spirit of this CoP, all materials will be published under an open access licence such as the Creative Commons Attribution-ShareAlike 4.0 (CC BY-SA 4.0) license.

5. Ways of working

The CoP operates through regular meetings of the whole group as well as subgroup meetings and other linked activities. The establishment of clear roles, responsibilities and subgroups will be on the agenda of early CoP meetings to obtain commitment and set expectations.

5.1 Periodic activities

The CoP will meet regularly by teleconference (via ZOOM or other communications tools. The schedule of the time of online conferences should take into account locations of our members worldwide and recordings of conferences could be made available) and will also take advantage of existing opportunities (e.g. face-to-face conferences, meetings, symposia) to meet in person for longer discussions. These meetings will be driven and facilitated by co-chairs but will be composed by a much broader audience in an open and transparent manner. Subgroups will organise and meet as they see fit.

5.2 Timing of meetings

The planning of the next meetings for the remainder of 2020 is summarised in the table below.

TABLE 2: OVERVIEW OF CoP MEETINGS/EVENTS IN 2020

Date	Type (online/F2F)	Where
11 September 2020	online	ECSA conference Side Event: "Global perspectives on Citizen Science and Open Science"
October 2020	online	tbd
November 2020	online	tbd
December 2020	online	tbd

6. Policies and procedures

6.1 Opting in

Following the recently introduced General Data Protection Regulation (GDPR) in the European Union, CS & OS CoP members will be asked to sign an informed consent form (during their registration process for the CoP mailing list), indicating the following items:

- CoP members can stop their participation in the CoP at any time and can ask the co-Chairs to remove all the personal data it has stored related to them;
- CoP members give explicit consent to be contacted by the CoP members and give permission to the co-Chairs to store their personal contact details;

6.2 Principles of Conduct

a. Aspired conduct

- Extend respect and courtesy to colleagues at all times.

- Develop and test ideas and insights impartially.
- Think internationally, devising insights that meet the needs of diverse cultural contexts and operational environments.
- When attending the CS & OS CoP-facilitated meetings, be prepared to contribute to the ongoing work of the CoP.
- For any activity of the CS & OS CoP, people in charge commit to reach out to CoP members to gather a wide and balanced range of inputs and make sure to take them into account for going forward.

b. Anti-harassment

The CS & OS CoP is dedicated to providing a harassment-free experience for all participants, regardless of gender, gender identity and expression, sexual orientation, disability, physical appearance, body size, age, race, or religion. We do not tolerate harassment of participants in any form.

These principles of conduct apply to all CS & OS CoP spaces, including our mailing list and meetings, both online and offline. Anyone who violates these principles of conduct may be sanctioned or expelled from these spaces at the discretion of the CoP co-chairs.

Some CS & OS CoP spaces may have additional rules in place, which will be made clearly available to participants. Participants are responsible for knowing and abiding by these rules.

c. Reporting

If you witness a violation of these principles, please contact [csoscop\[at\]gmail.com](mailto:csoscop[at]gmail.com) (this email address will be checked by the interim co-Chairs Uta Wehn, Claudia Göbel and Libby Hepburn).

These principles of conduct draw on the anti-harassment policy text from Geek Feminism Wiki and the [principles of conduct for Communities of Practice in the EU-project WeObserve](#) to be used under CC BY-SA.

6.3 Voting for publicly released results

Principally, the CoP members agree to protect the Intellectual Property Rights of its members and the privacy of their discussions. Also, they agree to adhere to a consent process for deciding CoP-internally what content will be made public and when, as follows:

- Once outputs of CoP are finalised and acknowledgements of CoP members have been agreed, the co-Chairs will ask if there are any objections against making the results public. If there are not, they will be made public straight away. If there are objections, these will be addressed and afterwards a voting process (online if necessary) will be used, for which a 2/3 majority will be sufficient to pass a given decision.

7. Founding members

The founding members of this CS & OS CoP are those people who have been involved in the CoP from the beginning by attending the launch workshops online on 16 July 2020 or by having signed up following the first call for registrations.

A list of the foundation members for the CS & OS CoP can be found in Table 3. In August 2020, all founding members were contacted by email and asked to indicate their agreement with the inclusion of their names and their respective organisation in this inception report. The name and affiliation of those members who indicated their agreement are mentioned in Table 3. In addition, in order to adequately reflect the overall composition of this CoP, all other members are referred to anonymously in Table 3.

TABLE 3: FOUNDING MEMBERS OF CS & OS CoP

Last name	First name	Organisation
Wehn	Uta	IHE Delft Institute for Water Education
Göbel	Claudia	Institute of Higher Education Research (HoF) at the University of Halle-Wittenberg, Germany; Museum für Naturkunde Berlin
Hepburn	Libby	Australian Citizen Science Association and Citizen Science Global Partnership
Abualfailat	Malek	Euromed Alliances
Ahmat	Muhammad	Universiti Sains Malaysia
Ajates	Raquel	University of Dundee
Aktürk	Gül	TU Delft
Anand	Suchith	Global Open Data for Agriculture and Nutrition
August	Tom	UKCEH
B	Jibé	Freelance
B Nanda	Rituu	Constellation/Global Fund for Children
Ballerini	Laura	University of Oxford
Bartar	Pamela	University of Applied Arts Vienna
Benyei	Petra	ICTA-UAB
Biberhofer	Petra	Participatory Science Academy, University and ETH Zurich
Bogert	Marit	TU Delft (Science Centre Delft)
Bonet	Mary	Glideways
Bredley	Fiona	UNSW

Last name	First name	Organisation
Bresnahan	Philip	UNC Wilmington
Bryant	Selena	Cornell University
Burton	Victoria	Natural History Museum London
Calyx	Cobi	Centre for Social Impact, UNSW Sydney
Castell	Nuria	NILU, the Norwegian Institute for Air Research
Cavalier	Darlene	SciStarter
Chukwudebelu	Janet	Federal Institute of Industrial Research Oshodi (FIIRO)
Cooper	Anthony	CSIR
Crimmins	Theresa	USA National Phenology Network
Crowston	Kevin	Syracuse University School of Information Studies
Delicado	Ana	Institute of Social Sciences of the University of Lisbon
Demetrikopoulos	Melissa	Institute for Biomedical Philosophy
Dosemagen	Shannon	Open Environmental Data Project
Gutam	Sridhar	ICAR= Indian Institute of Horticultural Research
Ekill	Eponge	SUGI Creating Interfaces Project
Ellenburg	Jessa	2B Technologies
Fallou	Laure	EMSC
Fassi	Luisa	University of Oxford
Flynn	Bill	CSIRO Education and Outreach
Fraisl	Dilek	IIASA
Freyberg	Linda	Natural Science Museum Berlin
Gammelgaard	Flemming Binderup	VIA University College
Gharesifard	Mohammad	IHE Delft
Giacomelli	Andrea	pibinko.org
Giller	Onno	Radboud University Nijmegen
Gold	Margaret	ECSC & Citizen Science Lab, University of Leiden
Greshake Tzouvaras	Bastian	Center for Research and Interdisciplinarity (CRI) Université de Paris

Last name	First name	Organisation
Gresle	Anne Sophie	Barcelona Institute for Global Health and Clinic Hospital of Barcelona
Hagardt	Maria	VA Public & Science
Hager	Gerid	International Institute for Applied Systems Analysis (IIASA)
Haklay	Muki	UCL
Hall	Rick	Ignite Futures
Hecker	Susanne	Helmholtz Centre for Environmental Research - UFZ German Centre for Integrative Biodiversity Research (iDiv) Halle-Jena-Leipzig
Heinisch	Barbara	University of Vienna
Hjarding	Angelique	Young Marine Explorers & Citizen Science Association
Hsing	Pen-Yuan	MammalWeb
Kiedi	Augaly	CoronaWhy
Kiessling	Tim	Kiel Science Factory, Leibniz Institute for Science and Mathematics Education and Kiel University
Kishimura	Akihiro	Kyushu University
Kummer	Justine	Government of Alberta
Laborgne	Pia	European Institute for Energy Research
Lanzinger	Michele	Museo delle Scienze
Laure	Turcati	Sorbonne University
Le Doux	Wamba	AFVMC Assistance to Families and Victims of Clandestine Migrations
Lefkos	Ioannis	University of Macedonia
Liu	Sophia	US Geological Survey
Luis	Cristina	CIUHCT, Faculty of Sciences, University of Lisbon
Luna	Soledad	Common Wadden Sea Secretariat
Lynch	Sean	OpenLitterMap
Lysaght	Liam	National Biodiversity Centre
Maciuliene	Monika	Vilnius Gediminas Technical University
Magazzini	Tina	European University Institute
Maiolini	Carlo	MUSE - Science Museum

Last name	First name	Organisation
Marizzi	Christine	Biobis, Inc
Mayer	Katja	Center for Social Innovation, Vienna ZSI
Meloche	Metis	Woodrow Wilson International Center for Scholars
Mocek	Lukas	Sensor.Community
Molina	Janet	Ghent University
Mondardini	Maria Rosa	Citizen Science Centre Zurich
Motion	Alice	University of Sydney
Muniafu	Maina	CitSAf Africa Association
Mutuberria	Ricardso	Biook.org
Mwangi	Charles	Kenya Space Agency/GLOBE Program
Namugize	Jean N	RP-IPRC Kigali
Nantambi	Faith Gloria	Volunteer
Nickerson	Caroline	SciStarter
Nugent	Jill	University
Oliveira	Marta	Independent Consultant
Oliver	Jessie	Australian Citizen Science Association
Orzechowski	Jacek	ECSCA & Citizen Science Lab, University of Leiden
Ostermann-Miyashita	Emu-Felicitas	Leibniz Centre for Agricultural Landscape Research
Parket	Alison	The Wilson Centre
Ponti	Mariasa	University of Gothenburg
Pring	John	Geoscience Australia
Race	Rosemary	Australian Citizen Science Association
Radicchi	Antonella	TU Berlin
Randall	Kathy Ann	Doctoral student in Education specialty environmental education
Reyserhove	Lien	Research Institute for Nature and Forest
Riberia	Thiago	PUC-Rio
Riemenschneider	Dorte	ECSCA
Robinson	Cathy	Land and Water CSIRO

Last name	First name	Organisation
Roger	Erin	Australian Citizen Science Association
Rowbotham	Samantha	University of Sydney
Rufenacht	Simone	ECSA
Safaya	Smriti	CitizenScience.Asia
Salmons	Jim	Citizen Scientist
Sarretta	Alessandro	CNR-IRPI
Schragel	Phillip	Karlsruhe Institute of Technology (KIT)
Shanley	Lea	University of Wisconsin-Madison
Soleri	Daniela	UCSB
Stanton	Dan	Arizona State University/SciStarter
Teperek	Marta	TU Delft
Teperek	Marta	TU Delft
Thomas	Renie	RTGEOENVIRON Consultancy & Research, Pune
Tisue	Thomas	Muskegon Community College
Triantafyllou	Evangelina	Aalborg University
Vahidi	Hossein	Keio Uni
Vallverde	Jordi	Autonomous University of Barcelona
van Noordwijk	Toos	Earthwatch
Varese	Mariana	Wildlife Conservation Society
Velu	Renuka	University of Madras
Voigt-Heucke	Silke	Natural Science Museum Berlin
von Gavel	Stephanie	ACSA
Waswala	Olewe	Maasai Mara University
Woods	Mel	University of Dundee
Zourou	Katerina	Web2Learn
Zurita-Milla	Raul	University of Twente. Faculty ITC