



Developing metrics and instruments to evaluate citizen science impacts on the environment and society

EC Horizon-2020 Grant Agreement number 824711

Call: H2020-SwafS-2018-2020 (Science with and for Society)

Topic: SwafS-15-2018-2019

Type of action: RIA

Ethics requirements: Participant informed-consent procedures

Delivery Year: 2019



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 824711.



Document Information

Project Number	824711			Acronym	MICS
Full title	Developing metrics and instruments to evaluate citizen science impacts on the environment and society				
Project URL	www.mics.tools				
EU Project officer	Colombe Warin				
Deliverable	Number	D6.1	Title	H - Requirement No. 1	
Work package	Number	6	Title	Ethics	
Date of delivery	Contractual	Month 03 (March 2019)		Actual	Month 03 (March 2019)
Authors (Partner)	Earthwatch				
Responsible Author	Claire Williams		Email	cwilliams@earthwatch.org.uk	
	Partner	Earthwatch			
Abstract (for dissemination)	This document describes the procedures and criteria that will be used to identify/recruit research participants, and the informed consent procedures that will be implemented for the participation of humans. Templates of the informed consent forms and information sheets (in language and terms intelligible to the participants) will be kept on file, as well as copies of opinions/approvals by ethics committees and/or competent authorities for the research with humans.				
Keywords	Procedures, criteria, informed consent, ethics				
Version Log					
Version as date	Author	Partner	Change		
2019_03_01	Uta Wehn	IHE Delft	Reference documents from Ground Truth 2.0		
2019_03_15	Claire Williams	Earthwatch	Initial document creation and intermediary version for internal reviewers		
2019_03_29	Stéfani Novoa and Stephen Parkinson	Earthwatch	Review		
2019_03_29	Luigi Ceccaroni	Earthwatch	Final review		

To cite this document:

Wehn, U., Williams, C. & Ceccaroni, L. (2019). D6.1: Ethics H - Requirement No. 1. *Deliverable report of project H2020 MICS (grant agreement No 824711)*



Contents

1	Executive Summary	3
2	Introduction	4
3	Participant identification and recruitment procedures and criteria	4
3.1	Criteria for participation	5
3.2	Ethical implications of these recruitment methodologies	5
3.3	Action to mitigate discriminatory practices	5
3.4	Recruitment and consent procedures for MICS research activities	6
4	Participant informed consent procedures	7
4.1	EU legislation	7
4.2	Informed consent	8
4.3	Minors	8
5	Informed consent information sheet templates	9
5.1	Informed consent information sheet regarding personal data	9
6	Ethics committee opinions/ approvals	11
7	References.....	11

1 Executive Summary

This document details the procedures and criteria that will be used to identify and recruit research participants in MICS. It also describes the informed consent procedures that will be implemented for the participation of humans in MICS and provides the templates of the informed consent information sheets. The filing location is outlined for these templates and copies of opinions/approvals by ethics committees and/or competent authorities for the research with humans. This deliverable (6.1) is to be applied in line with D6.2 regarding the protection of personal data.



2 Introduction

The MICS project involves human participants as citizen scientists, volunteers for scientific data collection, through activities such as: online surveys, focus groups, round tables research, open consultation platform, stakeholder feedback questionnaires, field reports, local-context analysis, retrospective pre-post questionnaires and case studies to gather, discuss and generate relevant ideas on NBS-relevant research.

Since these project activities raise a number of ethical issues, this document specifies in detail how the following ethics issue raised in the MICS proposal evaluation will be addressed:

MICS - Ethics Requirement 1	
Ethics Issue Category	Ethics Requirements Description
H (Humans)	<ul style="list-style-type: none"> - The procedures and criteria that will be used to identify/recruit research participants must be submitted as a deliverable. - The informed consent procedures that will be implemented for the participation of humans must be submitted as a deliverable. - Templates of the informed consent forms and information sheets (in language and terms intelligible to the participants) must be kept on file. - Copies of opinions/approvals by ethics committees and/or competent authorities for the research with humans must be kept on file.

This deliverable is to be applied in line with D6.2 regarding the protection of personal data.

3 Participant identification and recruitment procedures and criteria

It is important to clarify that the stakeholders to be contacted for MICS are co-creators of knowledge. The data gathered during the MICS activities will be about environmental practices and citizen-science impact, and not about human beings, or their bodily or psychological characteristics.

Specifically, the following research-related activities will be undertaken by MICS:

- Analysis of stakeholders (WP2)
- Incentives and barriers analysis (WP2)
- Impact assessment (WP2)
- User centred co-design & co-creation (WP3)
- Stakeholder engagement (WP4)
- Validation (WP4)
- Market research and market analysis (WP5)
- Business model validation (WP5)

In principle, we rely heavily on the long-term relationships that the MICS partners have established with members of their networks and stakeholders during the last decades.

Moreover, the MICS activities will use a combination of the following procedures, as appropriate and as detailed in Table 1:

- **targeted recruitment of stakeholders** informed for example by validation site leaders, via face to face activities (e.g. dedicated events such as conferences, workshops, consultation meetings) and via the



networks of the MICS partners (including representatives of organisations that use the MICS partners' tools);

- **snowballing** – where recruited stakeholders suggest future relevant subjects from among their acquaintances/ from their network;
- **broadcast recruitment** via the MICS website, social media (e.g. Twitter), at events and via the partners' communication channels to invite participation in MICS activities;
- **self-selection**, i.e. those stakeholders interested in the MICS activities who contact MICS partners or establish contact with MICS via the website/social media.

3.1 Criteria for participation

Given that the overall aim of MICS is to measure the impact of citizen science, the criteria for participation are as simple and limited as possible in order to ensure the widest possible participation of stakeholders in the MICS activities.

We will aim to recruit participants from as wide a range of stakeholders as possible, regardless of their age, gender, profession, etc. using the following criteria:

- **Free will and informed consent** of all participants (or of their legal guardians in the case of minors) obtained prior to their involvement in the MICS project activities.
- Inevitable **implicit criteria** such as the availability of ICTs for participants and the necessary technical skills to use online tools by which input for MICS is being collected
- **Existing online activity** (e.g. on Twitter) which can result in implicit sensing. For such participation, the shared information in those platforms has already been consented by the users within the respected frameworks.
- **Implicit criteria** such as the availability of mobile devices for participants and the necessary technical skills to download, install and use the MICS related app(s). Training of interested participants will be provided as needed and within the scope of the project budget to overcome such barriers to participation.
- Citizen science can explicitly address **specific groups of society** that are expected to be willing to share observations of their environment. As each observation and each opinion counts, the consortium does not want to discourage any societal group from joining the MICS citizen science projects.

Nevertheless, selected MICS activities have specific criteria for participation regarding the expertise of the participants, as detailed in Table 1.

3.2 Ethical implications of these recruitment methodologies

In principle, the combination of procedures and the open nature of the participation criteria ensures that discrimination of potential participants is avoided as much as possible. Nevertheless, less technology-savvy citizens may find themselves excluded from participation in the research due to their lack of basic IT skills. However, other technological alternatives will be explored in order to ensure adequate citizens engagement in the validation sites where the digital divide and lack of access to advanced technologies (internet, smartphones, etc.) could negatively affect the MICS citizen science projects.

The combination of procedures and the nature of the participation criteria aligned with the objectives of the research activities ensures that discrimination of potential participants is avoided as much as possible.

3.3 Action to mitigate discriminatory practices

In order not to exclude those potential participants that are less technology-savvy, MICS engagement activities will entail user trainings to help them with the technical aspects of using the MICS apps, online platforms etc. In addition, where equipment is required (e.g. water quality recording kits) this will be provided at minimal fee/co-



funded to ensure no financial obstacles exist. It is the ambition of the MICS consortium to make the toolbox and related validation citizen science projects as user-friendly as possible. User-friendliness is crucial to ensure citizens are willing to participate and feel stimulated to continue their contributions.

3.4 Recruitment and consent procedures for MICS research activities

For each of the MICS activities that entail research involving informants (humans), relevant selection criteria, identification and recruitment procedures and informed consent procedures have been identified. These are presented in Table 1.

Table 1: Overview of recruitment procedures for MICS research activities

MICS research activity	Criteria for participation	Identification and Recruitment Procedure
Analysis of stakeholders (WP2)	Interest in citizen science and/or natural resources management.	Targeted recruitment via the MICS partners' networks and contacts at the validation sites. Snowballing via already recruited/engaged stakeholders
Incentives and barriers analysis (WP2)	Interest in citizen science and/or natural resources management; participants and non-participants in MICS.	Targeted recruitment of stakeholders informed by the stakeholder analysis in WP2 and via the MICS partners' networks and contacts in the validation sites. Broadcast recruitment via the MICS platform, social media (e.g. Twitter), at events and via the partners' website and communication channels to invite participation. Snowballing via already recruited/engaged stakeholders. Self-selection , i.e. those stakeholders interested in participating who establish contact via MICS partners, the project platform or the validation site activities.
Impact assessment (WP2)	Interest in citizen science and natural resources management; Relevant expert knowledge, experience and insights	Targeted recruitment of stakeholders informed by the stakeholder analysis in WP2 and via the MICS partners' networks and contacts as well as participants in the validation sites. Broadcast recruitment via the MICS platform, social media (e.g. Twitter), at events and via the partners' website and communication channels to invite participation. Snowballing via already recruited/engaged stakeholders. Self-selection , i.e. those stakeholders interested in participating in the impact assessment who establish contact MICS partners, the project platform or the validation site activities.
User centred co-design & co-creation (WP3)	Interest in citizen science and/or natural resources management.	Targeted recruitment of stakeholders informed by the stakeholder analysis in WP2 and via the MICS partners' networks and contacts at the validation sites to participate in the co-design sessions. Broadcast recruitment via the MICS platform, social media (e.g. Twitter) and the partners' website and communication channels to invite participation. Self-selection , i.e. those stakeholders interested in participating who establish contact via MICS partners, the project platform or the validation site activities.



Stakeholder engagement (WP4)	Interest in citizen science and/or natural resources management.	<p>Targeted recruitment of stakeholders informed by the stakeholder analysis in WP2 and via the MICS partners' networks and contacts in the validation sites.</p> <p>Broadcast recruitment via the MICS platform, social media (e.g. Twitter) and the partners' website and communication channels to invite participation.</p> <p>Snowballing via already recruited/engaged stakeholders</p> <p>Self-selection, i.e. those stakeholders interested in participating who establish contact via MICS partners, the project platform or the validation site activities. Citizens interested in the respective MICS observatory, can download the app and/or engage in the online platform even without any previous recruitment activities.</p>
Validation (WP4)	Interest in citizen science and natural resources management.	<p>Targeted recruitment of stakeholders informed by the stakeholder analysis in WP2 and via the MICS partners' networks and contacts as well as participants in the validation sites.</p> <p>Broadcast recruitment via the MICS platform, social media (e.g. Twitter), at events and via the partners' website and communication channels to invite participation.</p> <p>Snowballing via already recruited/engaged stakeholders.</p> <p>Self-selection, i.e. those stakeholders interested in participating in the validation who establish contact via MICS partners, the project platform or the validation site activities.</p>
Market research and market analysis (WP5)	Relevant expert knowledge, experience and insights	<p>Targeted recruitment of individuals (whether users or experts) informed by the stakeholder analysis in WP2 to participate in interviews (and workshops) to share their knowledge and experience.</p> <p>Snowballing via already recruited/engaged individuals.</p>
Business model validation (WP5)	Relevant expert knowledge, experience and insights	<p>Targeted recruitment of individuals (whether users or experts) informed by the stakeholder analysis in WP2 to participate in interviews (and workshops) to share their knowledge and experience.</p> <p>Snowballing via already recruited/engaged individuals.</p>

4 Participant informed consent procedures

Participation of persons in the MICS project activities will be entirely voluntary and we will obtain the informed consent of informants in advance. The following aspects are involved in the informed consent procedures of all partners.

4.1 EU legislation

All activities procedures will be designed according to the following EU documents and guidelines of which the consortium is aware:



Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation).

4.2 Informed consent

All participants in MICS research activities incl. explicit sensing (i.e. the active collection and contribution of observations) must be informed in detail of the activity procedures and all possible consequences of the procedures. Without the informed consent of the participant, project activities will not be conducted. Any written information related to obtaining informed consent will be in the language of the participant, or in a language that is understandable to the participant. For implicit sensing activities (i.e. observations such as text, photos or videos provided via social media but not directly to the MICS research activities), participants have already agreed to the consent procedures of the social media platform providers. The MICS analysis of their data will adhere to the terms and conditions stipulated by those social media platform providers and will use such data only in aggregated and anonymized form.

Participants in the MICS activities will be provided with an ‘**information sheet**’ (digital or in print) that:

- is in a language and in terms fully understandable to them (i.e. English, Italian, Hungarian, Romanian);
- describes the aims, methods and implications of the research, the nature of the participation and any benefits, risks or discomfort that might be involved;
- explicitly states that participation is voluntary and that anyone has the right to refuse to participate and to withdraw their participation, samples or data at any time (except for data already processed and included in reports, etc.)- without any consequences.

Once the participant has understood what they will be involved in, they are given the opportunity to either participate in the research activities or to opt out (e.g. by simply not pursuing the interview/focus group discussion/workshop or online survey).

4.3 Minors

Minors may be recruited upon their own consent, except where the law requires otherwise. School pupils recruited as part of MICS engagement efforts will be informed using the information sheet as well as according to the prevailing school policy. Minors outside the school context will be required to present the information sheet to their legal guardians before they participate in the research activities. Minors will under no circumstances be asked to provide information on other family members or family characteristics, such as their parents’ occupation, financial information, sociological or any other manner of data, without the consent of the individuals concerned. (The age of minors is not defined by MICS, but by the recruitment context.)

Table 2: Overview of consent procedures for the participation of humans in MICS activities

MICS research activity	Informed consent procedures
Analysis of stakeholders (WP2)	During the mapping process, stakeholders will be identified but not actively engaged. When we look to engage the stakeholders in research activities of MICS, we will obtain informed consent based on the information sheet before their participation as appropriate (see rows below).



Incentives and barriers analysis (WP2)	Informed consent based on the information sheet during the event organization procedure (i.e. before the interview/workshops).
Impact assessment (WP2)	Informed consent based on the information sheet during the event organization procedure (i.e. before the interview/workshops).
User centred co-design & co-creation (WP3)	Informed consent based on the information sheet during the event organization procedure (i.e. before the interview/workshops).
Stakeholder engagement (WP4)	Informed consent based on the information sheet in the various tools (app, online platform, serious gaming application, etc.)
Validation (WP4)	Informed consent based on the information sheet during the event organization procedure (i.e. before the interview/workshops).
Market research and market analysis (WP5)	Informed consent based on the information sheet given prior to interviews/workshops.
Business model validation (WP5)	Informed consent based on the information sheet given prior to interviews/workshops.

5 Informed consent information sheet templates

Templates of the informed consent forms and information sheets (in language and terms intelligible to the participants) will be kept on file in the MICS project document sharing repository (SharePoint).

5.1 Informed consent information sheet regarding personal data

Presented below is the template for the information sheet about the collection, use and disclosure of an individual's personal data in the context of online environments such as the MICS platforms, online surveys and for face-to-face events such as MICS conference events, or workshops. This information sheet (digital or print) will be distributed upon registration in English and/or local languages (as applicable in the validation sites) to inform individuals about the collection, use and disclosure of an individual's personal data. This information sheet will also be available on the MICS website [mics.tools]. Depending on the national legislation, additional information may be included in the template.



The following information sheet reflects the European GDPR regulations that aim to protect all EU citizens from privacy and data breaches in an increasingly data-driven world.

MICS information sheet re. personal data



The MICS consortium appreciates your interest and participation in MICS project-related activities. You might get involved in a number of ways: these include interactions via the MICS online platform, online surveys, and various events (such as workshops and conference). Your participation in MICS activities is voluntary and you have the right to refuse to participate and to withdraw your participation at any time without any consequences.

The MICS project may maintain certain personal information about you as part of our general project activities (such as your address and contact details, educational background, areas of expertise). We might become aware of this information in a number of ways - directly from you, from others or over time through our relationship with you - and might receive and/or retain it in various forms (whether in writing, electronically, verbally or otherwise).

We use this information for a variety of project-related purposes only. For example, we need this information to identify participants for MICS events, MICS citizen-science projects at our test and validation sites, and for expert interviews and workshops. For interviews and focus group discussions, personal data will be kept in a protected file, separate from the users' anonymised responses. We will not use your personal information for commercial purposes. We ensure that your personal data are stored safely. We guarantee that all personal data obtained from you will be treated in compliance with applicable national and international legislation, including GDPR.

If you participate in MICS events, your name, organisational affiliation and email address may be distributed and made available to other participants. You will be asked to confirm that you are happy with this distribution at each event.

By continuing to participate in the MICS activities you are giving the MICS project explicit consent to maintain, use and share amongst project partners your personal data.

If you wish to retract your personal data, make a formal complaint or exercise the rights of access, cancellation, rectification and opposition, please identify yourself and contact us via email (micsprivacy@earthwatch.org.uk).

More information about the MICS project is available at [www.mics.tools].

Yours truly,

Luigi Ceccaroni
Coordinator of the MICS consortium

6 Ethics committee opinions/ approvals

Copies of opinions/approvals by ethics committees and/or competent authorities for the research with humans will be kept on file in the MICS project internal document shared repository.

7 References

Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation)