



Deliverable D4.1

Dissemination and communication
strategy



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Deliverable lead	Ester Prat
Author(s)	Ester Prat, Joan Masó, Uta Wehn, Meike Remmers
Internal reviewer(s)	All partners
Contact for queries	Ester Prat, CREAM, e.prat@creaf.uab.cat
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Abstract of deliverable	Ground Truth 2.0 is a three year project funded under H2020 by the European Commission. It will deliver the demonstration and validation of 6 scaled-up citizen observatories in real, operational conditions, with 4 European and 2 African demonstration cases. Ground Truth 2.0 will demonstrate the technological feasibility, the sustained use and the societal and economic benefits of such citizen observatories. The ultimate objective is the global market uptake of the concept and enabling technologies. This document sets out the details of the dissemination and communication activities to be undertaken during the project lifetime. In addition to detailing the strategic approach, this deliverable also provides the necessary guidance for the effective implementation of the strategy. The strategy identifies communication objectives and goals, target audiences, messages and means as well as the timeline for the identified actions.

Versions and Contribution History

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List of abbreviations

CO	Citizen Observatory
GT2.0	Ground Truth 2.0
CS	Citizen Science
GEO	Group on Earth Observations
ECSA	European Citizen Science Association
SIL	International Society of Limnology
GEOSS	Global Earth Observation System of Systems
FAQ	Frequently Asked Questions
BBL	Bond Beter Leefmilieu
ICLEI	Local Governments for Sustainability
EO	Earth Observation
TC	Technical Committee
S&T	Science & Technology
EC	European Commission
EU	European Union
SADC	Southern African Development Community
MOOC	Massive Open Online Course
MOMS	Management Oriented Monitoring System
DB	Development Bank
H2020	Horizon 2020
ENEON	European Network of Earth Observation Networks
GEO-BON	Group on Earth Observations Biodiversity Observation Network
OGC	Open Geospatial Consortium
ERA	European Research Area
CSA	Coordination and Support Action
ASLO	Association for the Sciences of Limnology and Oceanography

EGU	European General Assembly
O&M	Observations and Measurements
SWE	Sensor Web Enablement
SOS	Sensor Observation Service
LUM	Land Use Mapper
EARSC	European Association of Remote Sensing Companies
AIP	Architecture and Interoperability Pilot
GD	Google Drive
W3C	World Wide Web Consortium
IEEE	Institute of Electrical and Electronics Engineers
DoA	Description of Action
GDrive	Google Drive

Executive Summary

The purpose of this document is to present a comprehensive strategy to plan the communication and dissemination activities foreseen in the Ground Truth 2.0 project. The central elements of this strategy are the characterization of the target groups, the selection of the most appropriate communication channels, the elaboration of the communication messages and the sound timing for the identified actions for dissemination and communication. The strategy is driven by specific and relevant objectives that will ensure the awareness raising and understanding of the activities and results of Ground Truth 2.0 among the identified target audiences and will promote action within the citizen science community. The sustainability and market uptake of the Citizen Observatories concept will also be addressed.

The main strategic communication objective of Ground Truth 2.0 is to communicate to the target audiences that Citizen Observatories can strengthen environmental monitoring capabilities, reduce investment in and running costs of in-situ observations, and contribute to citizens' active empowerment in planning, decision making and governance. This will be reached through five main communication goals:

- 1) To raise **awareness** of the Ground Truth 2.0 project in Europe and internationally
- 2) To create **understanding** of the Ground Truth 2.0 results among relevant target groups
- 3) To trigger **action** based on the Ground Truth 2.0 results
- 4) To communicate **business** opportunities and promote market uptake
- 5) To support the **sustainability** of the six Citizen Observatories (CO) and the Land Use Mapper beyond the lifetime of the project

The project will target seven different major stakeholder groups to disseminate and communicate the Ground Truth 2.0 results. These groups are: General public and civil society community (social), Research, innovation and practitioner community (scientific), Decision making community (political), Business community (business), stakeholders in the Ground Truth 2.0 Observatories (GT2.0 COs), GEO/GEOSS community and standards (GEO community), Donors, Local Funding Institutions (financial community).

The communication activities will be undertaken mainly with the following communication channels and tools: a Ground Truth 2.0 website/blog, different Communication toolkits, a multimedia communications package, Social Media activities and networking. Each activity is related to a target dissemination group and to a specific communication objective. The planning of all activities is detailed in a progress table.

During the project, a set of key indicators will be used to measure the success of the dissemination and communication activities in ensuring that the Ground Truth 2.0 project is achieving its expected impact; progress against these indicators will be reported as part of the regular WP5 reporting process. Progress will be measured regularly using these indicators and the dissemination plan will be updated accordingly once a year, if needed. Additionally, a contingency plan will be devised to identify possible alternatives in case distinct activities are not delivering the expected results.

1 Introduction

1.1 Background and purpose of this document

Ground Truth 2.0 is a three year project funded under H2020 by the European Commission. It will deliver the demonstration and validation of 6 scaled-up citizen observatories in real, operational conditions, with 4 European and 2 African demonstration cases. Ground Truth 2.0 will demonstrate the technological feasibility, the sustained use and the societal and economic benefits of such citizen observatories. The ultimate objective is the global market uptake of the concept and enabling technologies.

This is done via the following Work Packages:

- WP1 Social dimensions: co-designing citizen observatories
- WP2 Enabling technologies: customization, deployment and upscaling
- WP3 Business development to accelerate uptake
- WP4 Dissemination and communication
- WP5 Project management

The main objective of WP4 is to effectively communicate and disseminate information about the activities, progress and results of Ground Truth 2.0 to the widest possible range of key stakeholders in Africa and Europe. This WP is complementary to WP1 (which focuses on enhancing stakeholder engagement in the Ground Truth 2.0 demonstration cases) and WP3 (which covers the business development and market exploitation of the Ground Truth 2.0 solution), whereby WP4 will create awareness of the Ground Truth 2.0 activities and results among the widest possible audience in Europe as well as globally. This means that the engagement activities aimed at promoting the participation in the GT2.0 CO are outside the scope of this deliverable, as they are covered within the WP1 tasks and deliverables. The same happens for the impact assessment of the GT2.0 CO (e.g. re policy making processes), as they are covered within task T1.6.

Dissemination activities consist of the public disclosure of the GT2.0 project results by appropriate means while communication activities promote the existence of the project and its results, by providing targeted information to multiple audiences (including the media and the public) in a strategic and effective manner. The purpose of this document is to present a comprehensive strategy for the communication and dissemination activities foreseen by the Ground Truth 2.0 project.

The central elements of this strategy are the characterization of the target groups, the selection of the most appropriate communication channels and the elaboration of the communication messages and the sound timing for the identified actions for dissemination and communication. The strategy is driven by specific and relevant objectives that will ensure the awareness raising and understanding of the activities and results of Ground Truth 2.0 among the identified target audiences and will promote action within the citizen science community. The sustainability and market uptake of the Citizen Observatories concept will also be addressed.

The dissemination and communication strategy is work in progress in that it will evolve as the project progresses. For this reason, it will be updated annually to include revisions to address new communication requirements.

It is important to acknowledge that dissemination activities are common efforts by the whole Consortium. For this purpose, each partner has established a contact person - often a communication officer - responsible for collaborating in the dissemination activities:

Table 1 Communication officers of each GT2.0 partner organisation

Partner	Communication officer	E-mail
Akvo	Alvaro de Salvo	alvaro@akvo.org
HR	Bianca Dijkshoorn	bianca.dijkshoorn@hydrologic.com
Tygron	Hansje Hooghiemstra	hansje@tygron.com
Altran	Alberto Masa	alberto.masa@altran.com
Stockholm University	Myrsini Glinos	myrsini@dsv.su.se
VITO	Katrien Bultynck	katrien.bultynck@vito.be
UNESCO-IHE	Meike Remmers	m.remmers@unesco-ihe.org
CREAF	Anna Ramon	a.ramon@creaf.uab.es
Starlab	Elizabeth Gil-Roldán	elizabeth.gil-roldan@starlab.es
Gavagai	Jussi Karlgren	jussi@gavagai.se
Upande	Mark de Blois	mark@upande.com
TAHMO	Frank Annor	annorfrank@tahmo.org
Earthwatch	Emily Anderson	eanderson@earthwatch.org.uk
WWF Zambia	Eneya Botoman Phiri	ebphiri@wwfzam.org

Demonstration Case leaders in each Citizen Observatory will take responsibility to lead the dissemination activities in their local region, supported by other partners in the Consortium. This requires proper steering, coordination, planning, and documentation of activities, which is the purpose of this communication strategy.

2 Goals and objectives

The main strategic communication and dissemination objective of Ground Truth 2.0 is to communicate to the target audiences that Citizen Observatories can strengthen environmental monitoring capabilities, reduce investment in and running costs of in-situ observations, and contribute to citizens' active empowerment in planning, decision making and governance. This will be achieved through five main communication and dissemination goals:

- 1) To raise **awareness** of the Ground Truth 2.0 project in Europe and internationally
- 2) To create **understanding** of the Ground Truth 2.0 results among relevant target groups
- 3) To trigger **action** based on the Ground Truth 2.0 results
- 4) To communicate **business** opportunities and promote market uptake
- 5) To support the **sustainability** of the six Citizen Observatories (CO) and the Land Use Mapper beyond the lifetime of the project

These five main goals can be accomplished by achieving the following specific objectives:

Table 2 Main goals and specific objectives of the Ground Truth 2.0 communication strategy

Goal	Specific objectives within the goal
G1: To raise awareness of the Ground Truth 2.0 project in Europe and internationally	SO1.1. To raise awareness of the existing activities and scope of the Ground Truth 2.0 project in Europe and internationally. SO1.2. Create a recognized brand for GT2.0.
G2: To create understanding of the Ground Truth 2.0 results among relevant target groups	SO2.1. Increase awareness of the benefits of the GT 2.0 CO based data collection. SO2.2. Generate trust in the citizen sensed data among target groups. SO2.3. Increase understanding of CO as a vehicle for cooperative planning and evidence-based policies based on the GT2.0 concept. SO2.4. Increase the understanding of the GT2.0 Land Use Mapper and land use change.
G3: To trigger action based on the Ground Truth 2.0 results	SO3.1. Promote the use of the GT 2.0 technologies and demonstration results among authorities. SO3.2. Promote the use of the Ground Truth 2.0 concept among relevant target groups. SO3.3. Promote the data management standards applied in the GT2.0 among the Citizen Science community.
G4: To communicate business opportunities and promote market uptake	SO4.1. Promote European market uptake and exploitation of the Ground Truth 2.0 technologies, services and standards.
G5: To support the sustainability of the six Citizen Observatories (CO) and the Land Use Mapper beyond the lifetime of the project	SO5.1. Provide the GT2.0 COs with communication and promotional tools SO5.2. Demonstrate the results of the GT2.0 citizen observatories among local and international funding institutions. SO5.3. Promote the continuity of the Land Use Mapper.

The following diagram illustrates the alignment between the main communication goals of this communication strategy and the overall Ground Truth 2.0 project objectives:

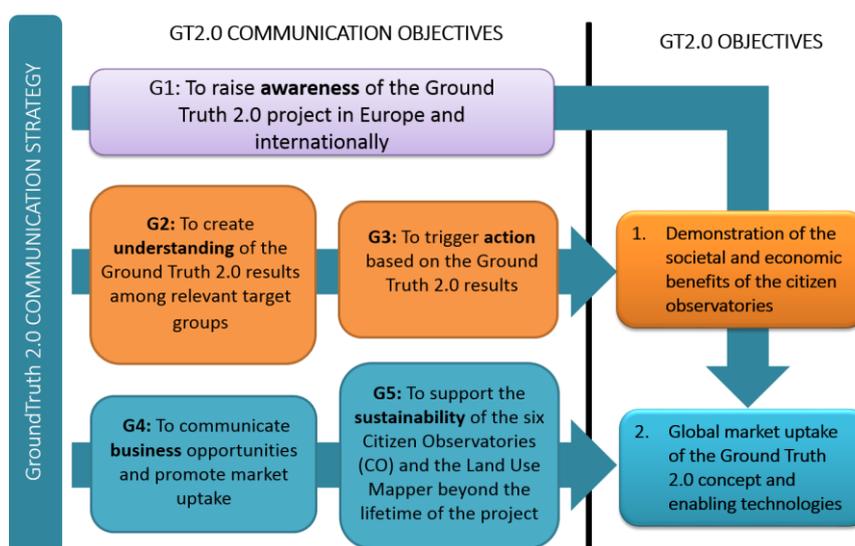


Figure 1 The main Ground Truth 2.0 communication goals in relation with the overall project objectives

3 Target audiences

Ground Truth 2.0 intends to reach the largest number of key stakeholders at local, national, regional and global level. The aim is to influence, through a bottom up approach, the decision makers on citizen observatory activities related to land-use actions, environmental quality, water and conservation to ensure that both EU and Africa are better prepared in land-use management. Specifically, the project will target seven different major stakeholder groups to disseminate and communicate the Ground Truth 2.0 results. These groups are:

Table 3 Identified GT2.0 target audiences and their interest in the project results

Target audience	Interest in the GT2.0 project results
General public and civil society community (social)	Empowerment of civil society in decision making and cooperative planning; improved services for their area of interest; evidence for lobby and advocacy, environmental awareness.
Research, innovation and practitioner community (scientific)	Additional sources of observation and extensive coverage, more dense data gathering and interpretation; citizen participation in environmental management. Use data from many citizen observatories in a harmonised way.
Decision making community (political)	Complementary data acquisition to meet EU and national monitoring requirements; involving citizens in the decision making process and monitoring the results of on-going management solutions; offering an efficient platform for civil participation to help authorities involve citizens to co-create projects.
Ground Truth 2.0 Observatories (GT2.0 CO stakeholders)	Communication and promotional materials for a common dissemination of their activities.
Business community (business)	Citizen observatories as additional sources of data as well as new end user markets for value added services.
GEO/GEOSS community and standards (GEO community)	Standardisation process and standard adoption; data contributions to GEOSS; exchange of data between different citizen observatories.
Donors, Local Funding Institutions (financial community)	Citizen observatories as a means to foster sustainable environmental stewardship and governance; increased data availability to promote sustainable policy goals and reducing monitoring costs.

4 Key messages

Giving that the objective of the Ground Truth 2.0 dissemination is to communicate to the target audiences that Citizen Observatories can strengthen environmental monitoring capabilities, reduce investment in and running costs of in-situ observations, and contribute to citizens' active empowerment in planning, decision making and governance, these should be the key messages to communicate. These messages are tailored to the different identified target groups in the following way:

Table 4 Key messages and proposed slogans per GT2.0 target group

GT2.0 target group	Key messages to disseminate	Proposed slogans
All groups	Ground Truth 2.0 promotes the knowledge discovery of human sensed data (SO1.1)	<i>From data sharing to knowledge discovery.</i>
All groups	Ground Truth 2.0 is interesting for you. (SO1.2).	<i>Observe. Share. Discover. Change.</i>
Social group Scientific group	The Land Use Mapper improves land-use mapping, the availability of land-use data and the accessibility to land-use information (SO2.4).	<i>Get access to the widest global land use map. Want to participate in a collaborative land use map? Collaborate in the mapping of your region!</i>
Political group Social group Scientific group	Citizen Observatories connect policy and decisions with citizens and scientists (SO3.2)	<i>Make the difference with Citizen Observatories. Citizen Observatories for smart decisions.</i>
Political group Social group Scientific group GEO community	You can base on data management standards applied in the GT2.0 (SO3.3).	<i>Be standard! Gain from standardization. Manage standard data.</i>
Social group	Citizen Observatories provide improved services for citizens (SO2.1)	<i>Your environment can change with the help of your knowledge. You can get better knowledge of your environment.</i>
	Citizen privacy is preserved (SO2.2)	<i>Personal data are not collected, your privacy will be protected.</i>
	Citizen Observatories can contribute to citizens' active empowerment in planning, decision making and governance (SO2.3)	<i>Prepare to live in a better place. Influence decision making in your areas of interest. Want to decide how things are planned? Participate in cooperative planning in your region. Want to have a role in cooperative planning? Improve the environmental quality of your region. Join and participate in a citizen community Join citizen science. Become a citizen scientist.</i>
	Land Use Mapper is a trusted and useful tool to know and manage the land use change (SO2.4)	<i>Land Use Mapper provides improved knowledge of your environment. Knowing the environment for a better management. Keep track of what's changing.</i>

	Land Use Mapper needs citizens to exist (SO5.3)	<i>Join the Land Use Mapper development community! Help to create the biggest global Land Use Map. Participate in mapping global Land Use.</i>
	The Land Use Mapper enables data-poor regions to have a cost-efficient land-use mapping tool (SO5.3).	<i>Contribute to universal access to land use mapping. The Land Use Mapper is an opportunity where there are no other options.</i>
Scientific group	Citizen Observatories can strengthen environmental monitoring capabilities (SO2.1)	<i>Get data for your research from citizen observatories. Improve your research. Need more data? Ask the public to help you!</i>
	Citizen data is scientifically validated and sound (SO2.2)	<i>Here's a good source of data for your research.</i>
Political group	Citizen Observatories can improve the response to monitoring requests (SO2.1)	<i>Get data immediately.</i>
	Citizen Observatories provide improved knowledge for evidence-based policies (SO2.2 – SO2.3)	<i>Get real ground data for decision making. Improve your knowledge base before taking decisions. Diversify your inputs for land management.</i>
	Citizen Observatories can reduce investment in and running costs of in-situ observations (SO3.1)	<i>Reduce your investment in monitoring. Reduce your in-situ running costs.</i>
	Early involvement of citizens through a Citizen Observatory can help avoid questioning/blocking the planning processes at a later stage.	<i>Take advantage of cooperative planning. Get the citizens on board. Citizen observatories can be an effective vehicle for implementing public participation.</i>
	Our Citizen Observatories are interoperable (SO3.1)	<i>Avoid vendor lock-in.</i>
Business group	Citizen Observatories can provide additional sources of data (SO4.1)	<i>Open data means business. Citizens can work for you.</i>
	Citizen Observatories can open new end user markets for value added services (SO4.1)	<i>Sales opportunities from citizen observatories. Build a community that needs your services or products.</i>
GEO community	Citizen Observatories can be the source of more data for the societal benefit areas (SO2.1)	<i>Complement remote sensing with in-situ observations and local knowledge to monitor the sustainable development goals.</i>
Financial group	Citizen Observatories are useful and need to be sustained (SO5.2)	<i>Value for money.</i>
	Citizen Observatories can be interoperable (SO5.2)	<i>Create opportunities for collaboration.</i>

5 Communication Channels & Dissemination Actions

Communication channels are understood as the means to reach various audiences, both internal and external to the project. They are, in principle, not designed for one specific target audience, but may be customised according to particular dissemination needs (e.g. in the citizen observatories) and comprise elements that are tailor-made to reach particular groups. The communication channels and actions are described here in relation to the identified communication objectives and target groups.

Table 5 Strategy for GT2.0 dissemination per target stakeholders

G1: To raise awareness of the Ground Truth 2.0 project in Europe and internationally	
SO1.1. To raise awareness of the existing activities and scope of the Ground Truth 2.0 project in Europe and internationally	
Target group	Actions (Channel/s)
All groups	<ul style="list-style-type: none"> ▪ Ground Truth 2.0 website (Website) ▪ Ground Truth 2.0 blog (Blog) ▪ Distribution of newsletters (Newsletters) ▪ Online presence in the social media (Social media) ▪ Final event (Event) ▪ GT2.0 media and online promotion (Social media/Article/Press release)
Political group	<ul style="list-style-type: none"> ▪ Use of the distribution channels of related organizations (Social media/Article/Press release) ▪ EC Green Week (Event/Leaflet/Poster/Banner) ▪ ICLEI Annual European Members Assembly (Event/Leaflet/Poster/Banner) ▪ Digital Government Congress (Event/Leaflet/Poster/Banner) ▪ Southern African Development Community (SADC) technical meetings (Event/Leaflet/Poster/Banner) ▪ Participation in other related events(Event/Leaflet/Poster/Banner)
Scientific group	<ul style="list-style-type: none"> ▪ Use of the distribution channels of related organizations (Social media/Article/Press release) ▪ International ECSA conferences (Event/Leaflet/Poster/Banner) ▪ OGC Technical Committee meetings (Event/Leaflet/Poster/Banner) ▪ GEO weeks (Event/Leaflet/Poster/Banner) ▪ GEOSS S&T Stakeholders workshops (Event/Leaflet/Poster/Banner) ▪ Participation in other related events (Event/Leaflet/Poster/Banner)
GEO community	<ul style="list-style-type: none"> ▪ OGC Technical Committee meetings (Event/Leaflet/Poster/Banner) ▪ GEO weeks (Event/Leaflet/Poster/Banner) ▪ GEOSS S&T Stakeholders workshops (Event/Leaflet/Poster/Banner) ▪ Participation in other related events (Event/Leaflet/Poster/Banner)
SO1.2. Create a recognized brand for GT2.0	
Target group	Actions (Channel/s)
All groups	<ul style="list-style-type: none"> ▪ Ground Truth 2.0 Communication toolkit (Toolkit)

G2: To create understanding of the Ground Truth 2.0 results among relevant target groups	
SO2.1. Increase awareness of the benefits of the GT2.0 CO based data collection	
Target group	Actions (Channel/s)
Political group	<ul style="list-style-type: none"> ▪ Citizen Observatories audio-visual material (Audio-visual material/Free online channels (YouTube, Vimeo, or Flickr) ▪ Use of the distribution channels of related organizations (Social media/Article/Press release) ▪ EC Green Week (Event/Leaflet/Poster/Banner) ▪ ICLEI Annual European Members Assembly (Event/Leaflet/Poster/Banner) ▪ Digital Government Congress (Event/Leaflet/Poster/Banner) ▪ Southern African Development Community (SADC) technical meetings (Event/Leaflet/Poster/Banner) ▪ Distribution of policy briefs (Policy brief) ▪ Participation in other related events (Event/Leaflet/Poster/Banner)
Social group	<ul style="list-style-type: none"> ▪ Citizen Observatories audio-visual material (Audio-visual material/Free online channels (YouTube, Vimeo, or Flickr)
Scientific group	<ul style="list-style-type: none"> ▪ Use of the distribution channels of related organizations (Social media/Article/Press release) ▪ 34th SIL Congress in Nanjing (August 2018) (Event/Leaflet/Poster/Banner) ▪ International ECSA conferences (Event/Leaflet/Poster/Banner) ▪ OGC Technical Committee meetings (Event/Leaflet/Poster/Banner) ▪ GEO weeks (Event/Leaflet/Poster/Banner) ▪ GEOSS S&T Stakeholders workshops (Event/Leaflet/Poster/Banner) ▪ Participation in other related events (Event/Leaflet/Poster/Banner)
All groups	GT2.0 media and online promotion (Social media/Article/Press release)
GEO community	<ul style="list-style-type: none"> ▪ OGC Technical Committee meetings (Event/Leaflet/Poster/Banner) ▪ GEO weeks (Event/Leaflet/Poster/Banner) ▪ GEOSS S&T Stakeholders workshops(Event/Leaflet/Poster/Banner) ▪ Participation in other related events (Event/Leaflet/Poster/Banner)
SO2.2. Generate trust in the citizen sensed data among target groups	
Target group	Actions (Channel/s)
Scientific group	<ul style="list-style-type: none"> ▪ OGC Technical Committee meetings (Event/Leaflet/Poster/Banner) ▪ GEO weeks (Event/Leaflet/Poster/Banner) ▪ GEOSS S&T Stakeholders workshops (Event/Leaflet/Poster/Banner) ▪ Participation in other related events (Event/Leaflet/Poster/Banner) ▪ Become a supporter or a member of the ECSA (Networking) ▪ Participation in scientific networks and associations (Networking)
GEO community	<ul style="list-style-type: none"> ▪ OGC Technical Committee meetings (Event/Leaflet/Poster/Banner) ▪ GEO weeks (Event/Leaflet/Poster/Banner) ▪ GEOSS S&T Stakeholders workshops (Event/Leaflet/Poster/Banner) ▪ Participation in other related events (Event/Leaflet/Poster/Banner)
Political group	<ul style="list-style-type: none"> ▪ Participation in political networks and associations (Networking)

SO2.3. Increase understanding of CO as a vehicle for cooperative planning and evidence-based policies based on the GT2.0 concept	
Target group	Actions (Channel/s)
Political group	<ul style="list-style-type: none"> ▪ Citizen Observatories audio-visual material (Audio-visual material/Free online channels (YouTube, Vimeo, or Flickr) ▪ Organization of MOOCs training (MOOC) ▪ Distribution of policy briefs (Policy briefs) ▪ Participation in political networks and associations (Networking) ▪ Dedicated conference workshops (Event/Leaflet/Poster/Banner)
Social group	<ul style="list-style-type: none"> ▪ Citizen Observatories audio-visual material (Audio-visual material/Free online channels (YouTube, Vimeo, or Flickr) ▪ Management Oriented Monitoring System (MOMS) ▪ Dedicated conference workshops (Event/Leaflet/Poster/Banner)
SO2.4. Increase the understanding of the GT2.0 Land Use Mapper and land use change	
Target group	Actions (Channel/s)
Social group	<ul style="list-style-type: none"> ▪ Ground Truth 2.0 Land Use Mapper Communication Toolkit (Brochure)
Political group	<ul style="list-style-type: none"> ▪ Use of the distribution channels of related organizations (Social media/Article/Press release) ▪ Participation in other related events (Event/Leaflet/Poster/Banner)
Scientific group	<ul style="list-style-type: none"> ▪ Ground Truth 2.0 Land Use Mapper Communication Toolkit (Brochure) ▪ Use of the distribution channels of related organizations (Social media/Article/Press release) ▪ 34th SIL Congress in Nanjing (August 2018) (Event/Leaflet/Poster/Banner) ▪ International ECSA conferences (Event/Leaflet/Poster/Banner) ▪ OGC Technical Committee meetings (Event/Leaflet/Poster/Banner) ▪ GEO weeks (Event/Leaflet/Poster/Banner) ▪ GEOSS S&T Stakeholders workshops (Event/Leaflet/Poster/Banner) ▪ Participation in other related events (Event/Leaflet/Poster/Banner)
GEO community	<ul style="list-style-type: none"> ▪ OGC Technical Committee meetings (Event/Leaflet/Poster/Banner) ▪ GEO weeks (Event/Leaflet/Poster/Banner) ▪ GEOSS S&T Stakeholders workshops (Event/Leaflet/Poster/Banner) ▪ Participation in other related events (Event/Leaflet/Poster/Banner)
All groups	Land Use Mapper media and online promotion (Social media/Article/Press release)
G3: To trigger action based on the Ground Truth 2.0 results	
SO3.1. Promote the use of the GT2.0 technologies and demonstration results among authorities	
Target group	Actions (Channel/s)
Political group	<ul style="list-style-type: none"> ▪ Citizen Observatories audio-visual material (Audio-visual material/Free online channels (YouTube, Vimeo, or Flickr) ▪ Distribution of policy briefs (Policy brief) ▪ Guidelines for Citizen Observatories and Future Recommendations (Website) ▪ Dedicated conference workshops (Event/Leaflet/Poster/Banner)
Social group	<ul style="list-style-type: none"> ▪ Management Oriented Monitoring System (MOMS) ▪ Dedicated conference workshops (Event/Leaflet/Poster/Banner)

SO3.2. Promote the use of the Ground Truth 2.0 concept among relevant target groups	
Target group	Actions (Channel/s)
Political group	<ul style="list-style-type: none"> ▪ Citizen Observatories audio-visual material (Audio-visual material/Free online channels (YouTube, Vimeo, or Flickr) ▪ Organization of MOOCs training (MOOC) ▪ Distribution of policy briefs (Policy brief) ▪ Guidelines for Citizen Observatories and Future Recommendations (Website) ▪ Participation in other related events (Event/Leaflet/Poster/Banner) ▪ Dedicated conference workshops (Event/Leaflet/Poster/Banner)
Scientific group	<ul style="list-style-type: none"> ▪ 34th SIL Congress in Nanjing (August 2018) (Event/Leaflet/Poster/Banner) ▪ International ECSA conferences (Event/Leaflet/Poster/Banner) ▪ Participation in other related events (Event/Leaflet/Poster/Banner)
Social group	<ul style="list-style-type: none"> ▪ Citizen Observatories audio-visual material (Audio-visual material/Free online channels (YouTube, Vimeo, or Flickr) ▪ Management Oriented Monitoring System (MOMS) ▪ School2school programme (School2School website) ▪ Dedicated conference workshops (Event/Leaflet/Poster/Banner)
SO3.3. Promote the data management standards applied in the GT2.0 among the Citizen Science community	
Target group	Actions (Channel/s)
Scientific group	<ul style="list-style-type: none"> ▪ OGC Technical Committee meetings (Event/Leaflet/Poster/Banner) ▪ GEO weeks (Event/Leaflet/Poster/Banner) ▪ GEOSS S&T Stakeholders workshops (Event/Leaflet/Poster/Banner) ▪ Participation in other related events (Event/Leaflet/Poster/Banner)
GEO community	<ul style="list-style-type: none"> ▪ OGC Technical Committee meetings (Event/Leaflet/Poster/Banner) ▪ GEO weeks (Event/Leaflet/Poster/Banner) ▪ GEOSS S&T Stakeholders workshops (Event/Leaflet/Poster/Banner) ▪ Generate an Interoperability Engineering Report (Website) ▪ Participation in other related events (Event/Leaflet/Poster/Banner)
SO4.1. Promote European market uptake and exploitation of the Ground Truth 2.0 technologies, services and standards	
Target group	Actions (Channel/s)
Business group	<ul style="list-style-type: none"> ▪ Geospatial World Forum (Event/Leaflet/Poster/Banner) ▪ Smart City Expo World Congress (Event/Leaflet/Poster/Banner) ▪ UNESCO-IHE yearly water sector market (Event/Leaflet/Poster/Banner) ▪ Contacts with EARSC (European Association of Remote Sensing Companies) ▪ Participation in other related events / exhibitions (Event/Leaflet/Poster/Banner)
Political group	<ul style="list-style-type: none"> ▪ Citizen Observatories audio-visual material (Audio-visual material/Free online channels (YouTube, Vimeo, or Flickr) ▪ Guidelines for Citizen Observatories and Future Recommendations (Website) ▪ Participation in other related events (Event/Leaflet/Poster/Banner) ▪ Dedicated conference workshops (Event/Leaflet/Poster/Banner)

G5: To support the sustainability of the six Citizen Observatories (CO) and the Land Use Mapper beyond the lifetime of the project	
SO5.1. Provide the GT2.0 COs with common communication and promotional tools	
Target group	Actions (Channel/s)
Ground Truth 2.0 Observatories	<ul style="list-style-type: none"> ▪ Citizen Observatory's Communication Toolkit (Toolkit) ▪ Citizen Observatories audio-visual material (Audio-visual material/Free online channels (YouTube, Vimeo, or Flickr))
SO5.2. Demonstrate the results of the GT2.0 citizen observatories among local and international funding institutions	
Target group	Actions (Channel/s)
Financial group	<ul style="list-style-type: none"> ▪ Get in touch with international research funding agencies (Networking) ▪ Guarantee involvement in the recent ERA-Planet GEO (Networking)
SO5.3. Promote the continuity of the Land Use Mapper	
Target group	Actions (Channel/s)
Social group	<ul style="list-style-type: none"> ▪ Organization of 3 micro mapping parties (Event/Social media)

All these communication actions are ways of disseminating the outputs and contributions of the Ground Truth 2.0 project to each specific target group. As said above, they are not clearly confined to specific target audiences but most of them can reach different audiences at the same time. It is also possible that in some cases the dissemination coverage of one specific action will be wide enough to reach the dissemination goals for a target group and in other cases some additional actions are needed. For this reason, this set of channels and tools will be used and adapted during the project implementation in order to use in each moment the best opportunities for the dissemination.

Regardless of this, some procedures and responsible partners are identified in this section for each type of activity in order to have initial generic rules in the development of such activities. The next table shows the main types in which all of the activities can be clustered and offers guidance on the procedure to follow. Other kind of responsibilities are detailed in section 6 'Planning & implementation'.

Table 6 Steps and responsible GT2.0 partners per main types of activities

Multimedia and online activities		
Type of activities included	Procedure	Responsible partners
Website Blog Newsletters Social media Audio-visual material MOOCs	<ul style="list-style-type: none"> ▪ The responsible partner will create and distribute the content in the appropriate platform. ▪ Except for the social media updates, the responsible partner will inform the other partners and Demo Case leaders by e-mail about newly published material. ▪ The remaining partners and Demo Case leaders will contribute to disseminate the content through their own social media, websites, newsletters or platforms (see Section 8). ▪ CREAM will monitor and evaluate these activities. 	<ul style="list-style-type: none"> ▪ UNESCO-IHE (website, blog, social media, MOOCs) ▪ CREAM (newsletters, audio-visual) ▪ CREAM (monitoring)

Events		
Type of activities included	Procedure	Responsible partners
Attended events	<ul style="list-style-type: none"> ▪ Any GT2.0 partner planning to attend a GT2.0 related event, will inform the consortium about this via entry in the common shared calendars on the GDrive. ▪ The partner attending an event will take with it the communication materials that seem relevant for the event's audience: leaflet, banner, poster. ▪ UNESCO-IHE will broadcast the attendance via social media and the project website. The attending partner will facilitate this dissemination effort by means of providing photos, info, etc. ▪ The partner attending will inform CREAM about the impact of the dissemination action: number of leaflets distributed, number of contacts made (see Section 7). 	<ul style="list-style-type: none"> ▪ Attending partner ▪ UNESCO-IHE (dissemination) ▪ CREAM (evaluation)
Organised events	<ul style="list-style-type: none"> ▪ The partner or Demo Case leader organising an event will inform about it via the internal reporting mechanisms of the project and also through the common shared calendars on the GDrive. ▪ The organisers will make sure that they have all the necessary communication materials for appropriate dissemination and will contact CREAM to stock up if needed. ▪ UNESCO-IHE will broadcast the attendance via social media and the project website. The organising partner will facilitate this dissemination effort by means of providing photos, info, etc. ▪ The partner organising will inform CREAM about the impact of the dissemination action: number of leaflets distributed, number of contacts made, feedback collected through questionnaires or online surveys (see Section 7) 	<ul style="list-style-type: none"> ▪ Organising partner ▪ UNESCO-IHE (dissemination) ▪ CREAM (evaluation)
Media promotion		
Type of activities included	Procedure	Responsible partners
Articles Press releases	<ul style="list-style-type: none"> ▪ CREAM is the responsible partner for generating and distributing GT2.0-related press releases. The content of the press releases will be previously agreed with UNESCO-IHE. ▪ Short articles about GT2.0 and its activities can be written by any partner or Demo Case leader and published on any interested media channel (online and offline). In case the publication is not initiated by CREAM, the responsible partner will inform CREAM and UNESCO-IHE of the publication. ▪ As stated in the EC requirements, UNESCO-IHE will inform the EC before the distribution of articles or press releases about communication activities that are expected to have major media impact. ▪ UNESCO-IHE will keep track and link to the online media appearances from the project website. ▪ CREAM will monitor and evaluate these activities 	<ul style="list-style-type: none"> ▪ CREAM (press releases, evaluation, press kit) ▪ UNESCO-IHE (online press kit)

Networking		
Type of activities included	Procedure	Responsible partners
Events Social media	<ul style="list-style-type: none"> ▪ The networking will be done mainly by the coordinator (UNESCO-IHE) but also by the Demo Case leaders. ▪ In case of attending events, the procedure will be the same for the Events category. ▪ For the social media or online networking, the Social media strategy (see Annex I) provides useful guidance. ▪ CREAM will monitor and evaluate these activities 	<ul style="list-style-type: none"> ▪ UNESCO-IHE ▪ Demo Case leaders
Toolkits		
Type of activities included	Procedure	Responsible partners
Communication Toolkits	<ul style="list-style-type: none"> ▪ The communication toolkits will be developed by CREAM and agreed with UNESCO-IHE and with the Demo Case leaders. ▪ The communication toolkits, as well as all the project communication materials, will be available for all partners from the GT2.0 GDrive. 	<ul style="list-style-type: none"> ▪ CREAM (monitoring)
Policy briefs	<ul style="list-style-type: none"> ▪ Policy briefs will be elaborated by the Demo Case leaders and agreed with UNESCO-IHE. ▪ Policy briefs will be sent to the authorities preferably by email (obtained with consent), but will also be distributed via social media and the project website. ▪ In case it is considered appropriate, a press release can be generated to disseminate the policy brief. ▪ CREAM needs to be informed on the distribution of the policy briefs to monitor and evaluate their impact. 	<ul style="list-style-type: none"> ▪ Demo Case leaders, UNESCO-IHE (policy briefs) ▪ CREAM (monitoring)

In addition to these responsibilities for the specified activities, section 8 'Roles and responsibilities' offers a general overview of the different partners' main roles in the project communication strategy.

6 Planning & implementation

Both the project coordinator (UNESCO-IHE) and the communication leader (CREAM) are the main responsible partners in the Ground Truth 2.0 communication but all other partners will collaborate on this. Communication will be done mainly in English, but other local languages will also use facilities from the rest of the consortium. All the communication materials will include the European Commission logo and will follow the recommendations of the EU (http://ec.europa.eu/europeaid/work/visibility/index_en.htm_en).

The communication strategy and its specific activities will be implemented according to the following planning:

Table 7 Planning of the GT2.0 communication activities

Communication activities	2016 Q4	2017 Q1	2017 Q2	2017 Q3	2017 Q4	2018 Q1	2018 Q2	2018 Q3	2018 Q4	2019 Q1	2019 Q2	2019 Q3
Multimedia and online activities												
Ground Truth 2.0 website												
Ground Truth 2.0 blog												
Distribution of newsletter												
Online presence via social media												
Audio-visual material about the GT2.0 COs												
Organization of MOOCs												
School2school programme												
Generate an Interoperability Engineering Report												
Media promotion												
GT2.0 media and online promotion												
Land Use Mapper media and online promotion												
Use of the distribution channels of related organizations												
Networking												
Become a supporter or a member of the ECSA												
Participation in scientific networks and associations												

	[Greyed out]											
Get in touch with international research funding agencies	[Greyed out]											
Guarantee involvement in the recent ERA-Planet GEO		[Greyed out]										
Toolkits												
Ground Truth 2.0 Communication toolkit												
GT2.0 Citizen Observatories' Communication Toolkit												
Ground Truth 2.0 Land Use Mapper Communication Toolkit												
Production & distribution of policy briefs												
Distribution of guidelines for Citizen Observatories and Future Recommendations												
Events												
34th SIL Congress in Nanjing (August 2018)												
International ECSA conferences												
OGC Technical Committee meetings												
GEO weeks												
GEOSS S&T Stakeholders workshops												
EC Green Week												
ICLEI Annual European Members Assembly												
Digital Government Congress												
Southern African Development Community (SADC) technical meetings (TBA)												
Organization of 3 micro mapping parties												
Geospatial World Forum												
Smart City Expo World Congress												
Participation in other related events	[Greyed out]											
Final event												

The main criteria for the implementation of the core elements of the communication strategy are outlined below.

6.1 Ground Truth 2.0 website/blog

The project website is responsibility of UNESCO-IHE which is committed to keep the website online 5 years beyond the duration of the project's funding period. A preliminary web presence has been established at <http://www.gt20.eu/>. The setup of the definitive Project Website is to be completed by 31 January 2017. This website will have the following main functionalities:

- general information about the project and the partners
- information and access to the 6 CO websites
- information and access to the Land Use Mapper
- a news section in blog format, including an RSS feed
- access to project results (e.g. guidelines, presentations, Citizen Observatories demonstration cases information)
- access to deliverables and publications
- a news & events section offering up- to-date information about project ongoing activities and demonstration activities, and a calendar of forthcoming events
- twitter display, encouraging users to follow
- newsletter archive and subscription

The website will act as the main project mirror of the work progress and general information to all targeted audiences and will be the single entry point to all other forms of communication, including the Demo Cases. It will be the key platform to explain and communicate the project objectives and results to the general public, provide specific news, information and links to the partners and provide access to all public deliverables. It will also present not only project-related news, but also blogs/opinion posts from the partners on their area of expertise and stories from the demonstration cases.

The developed website will incorporate a blogging platform which allows multiple authors to write their own blog posts after logging in. As part of maintaining an enduring web presence and awareness of the project, the project partners are encouraged to collaborate with blog posts. UNESCO-IHE will prepare a blog schedule on the Google Drive that will be updated on a rolling basis to provide at least one blog post per month. The Ground Truth 2.0 blog will highlight a variety of topics relevant to the project and the website home page should draw attention to new blog publication.

Website analytics (e.g. Google Analytics) will be used to monitor the visitors activity in the portal and thus to let evaluate the impact of the dissemination tool.

6.2 Communication toolkits

Different communication toolkits are being produced to guarantee the Ground Truth 2.0 corporate image and leitmotiv. A corporate design (logo, templates) has been developed, incorporating the project values and its European dimension.

Three different communication toolkits will be developed to be used by all partners to communicate the Ground Truth 2.0 project progress, the activities of the Ground Truth 2.0 Citizen Observatories and the benefits and use of the Ground Truth 2.0 Land Use Mapper. All the resources and information produced about the project will be available online free of charge in the Ground Truth 2.0 project website.

Ground Truth 2.0 Communication Toolkit – This communication strategy defines the messages to be transmitted to the different target groups to focus on positive achievements and the benefits they could

bring. Ground Truth 2.0 communication requires clear agreement and careful coordination among all parties who may act as spokespersons or information sources. Based on an agreed Ground Truth 2.0 visual identity, a communication kit composed of: logo, brochures and leaflets, messages, posters, retractable banners, project reusable photos, PowerPoint and Word templates, guide-lines, policy briefs and press releases is being developed and agreed with the partners. The kit will be updated periodically according to project progress.

Citizen Observatory's Communication Toolkit - A toolkit with the basic promotional materials for the six Citizen Observatories will be produced to ensure the corporate image and the coherence of the observatories. This toolkit will offer all Ground Truth 2.0 Citizen Observatory templates to create their own brochure, a WordPress layout to create their own webpage, the guidelines to follow a standard visual identity, guidelines to engage local journalists and guidelines to create their own social media. The resulting material will be available from the Ground Truth 2.0 shared GDrive.

Ground Truth 2.0 Land Use Mapper Communication Toolkit - A brochure and a user's guide with FAQ's will provide flash presentations for end-users in meetings, workshops, science fairs or events. This will describe the functionality of the Land Use Mapper, advantages of using the tool (with examples and practical cases) and general information about how to access or use the Land Use Mapper. This will be produced in English and two other languages and will be available from the Ground Truth 2.0 project website.

6.3 Multimedia communications material

Appealing multimedia material produced to be used by the Consortium and the EC in various events (incl. periodical newsletter and a few short stand-alone videos) will be downloadable from the project website and from widely visited media portals. The package is aimed at showcasing how the results of Ground Truth 2.0 can be used for environmental monitoring, reduction of in-situ observations, and citizens' active empowerment in planning, decision making and governance.

A newsletter will be edited periodically in MailChimp and a link to each newsletter will be available on the Ground Truth 2.0 website (with the possibility to register to receive it automatically). Press releases and articles will be prepared throughout the whole project, announcing project objectives, initiatives, events and services and relevant achievements.

Ground Truth 2.0 will produce inspiring audio-visual material about the six Citizen Observatories to raise awareness and present the impacts of Citizen Observatories for land-use/cover management. They will showcase success stories via "story telling" techniques. A number of short interviews will be recorded in order to better illustrate the impact of Citizen Observatories on daily life. The project will spread all audio-visual materials via online free channels and at events.

Free online channels such as YouTube, Vimeo, or Flickr will also be used to distribute Ground Truth 2.0 results as video content (e.g. with success stories from the demonstration cases). Using attractive video material will allow to showcase how the results of Ground Truth 2.0 can be used for environmental monitoring, reduction of in-situ observations, and citizens' active empowerment in planning, decision making and governance.

6.4 Social Media activities

Social media tools will be used to create a critical mass of "followers" of Ground Truth 2.0 activities and enable the promotion of Ground Truth 2.0. The objective is to promote the Ground Truth 2.0 activities and inform about its outcomes, establish contact with other key groups and networks, keep online

connection and keep the project “alive” and proactive in promotion. These activities will be leveraged by the project partners' existing strong online presence.

This activity will complement the website, and will provide a forum for discussing the developments within the Ground Truth 2.0 project, allowing anyone to comment and discuss the project developments. Social media accounts in Twitter and Facebook have been activated that will be properly managed by UNESCO-IHE generating materials to keep them alive, as well as a LinkedIn account. Dynamic gadgets will be used to embed the social media in the project website. The activity on the social media channels will be tracked with each channel's own statistic services (e.g. Twitter Analytics) as well as Hootsuite tools.

This activity will take advantage of the many well-established social media accounts of the Ground Truth 2.0 partners that have substantial followers to help to achieve the biggest outreach possible via these channels. All partners will contribute to communicate Ground Truth 2.0 results via their accounts as far as possible. Similarly, all partners will use their website to distribute Ground Truth 2.0 results and to link to relevant Ground Truth 2.0 social media accounts, channels and of course the Ground Truth 2.0 website.

6.5 Networking

Most of the foreseen activities consider knowledge sharing with specific target audiences through the participation in technical groups, conferences, networking events and meetings, incl. GEO and Citizen Science activities. The Ground Truth 2.0 consortium bears several memberships of umbrella organisations (e.g. ECSA, GEOSS, EGU, ASLO, CSA, DRAGON, etc.) which encompass wide networks. To guarantee a structured and coherent dissemination, the consortium partners will plan a harmonized calendar of networking activities integrating the main events (congresses, meetings, fairs, etc.), at national, regional or sectorial levels, in the coming four years (2016-2019).

The primary objective of this task is helping to disseminate the concept and the results of the project within the scientific, political, business, GEO and financial groups. With this objective, it is important to coordinate with other relevant initiatives, such as GEOSS, INSPIRE and other citizen science initiatives to create mutual synergies.

Ground Truth 2.0 will be in the GEOSS interim 2016 work program in the task GD-06 GEOSS In Situ Earth Observation Resources (that includes citizen observatories). GT2.0 will also contribute to the new 2017-2020 GEOSS work program ensuring that citizen observatories are considered in the new GEOSS architecture and in the foreseen European Data Hub. To help in this direction, CREAM is the Spanish representative in the GEOSS Program Board. We will also participate in the GEOSS S&T Stakeholder workshops. Ground Truth 2.0 will participate in the Architecture and Interoperability Pilot (AIP) lead by OGC. The integration of the citizen-sensed data in the GEOSS Discovery and Access broker will be considered a priority. The project has also appointed CREAM as the GT2.0 representative for the GEO Standards and Interoperability Forum (SIF). To stimulate the participation in the citizen observatories at national levels, and ensure GEO visibility in them, Ground Truth 2.0 will collaborate with the GEO national initiatives such as GEO Spain, GEO Sweden, etc.

To get in touch and promote the project results among the decision makers, collaboration with political networks and initiatives such as ICLEI (Local Governments for Sustainability) will be of great importance. We plan to attend the annual ICLEI General Assembly but also to contribute ideas with the initiative through the distribution of articles and press releases.

Get in touch with international research funding agencies will contribute to ensure the sustainability of the GT2.0 CO beyond the lifetime of the project. The aim is to maintain close relations with international research funding agencies, to inform them of our results such as Belmont Forum, Earthcube, Future Earth,

H2020, World Bank, Development Banks, including the African DB, EuropeAid, etc. Networking will be done by attending specialised events and by distributing articles, press releases or newsflash.

Progress in standards is achieved in regular meetings and teleconferences that contribute to the advance of the different work items. The geospatial community is particularly active and OGC has already shown interest in Citizens Observatories standards. The project will present the consortium approach and results in OGC TC regular and ad hoc meetings. In particular, Ground Truth 2.0 will participate in the progress of profiling OGC standards of the Sensor Web Enablement (SWE) suite such as O&M, SOS, etc. for the Citizens Science in collaboration with other active projects in the EU and in the rest of the world. We will engage the creation of a stable working group on Citizens Observatories in OGC to push for a white paper on standards for citizen observatories. The project will also look for synergies with the Internet of Things community in OGC, IEEE and W3C. Ground Truth 2.0 will support progress via CREAM's leadership of the Geospatial User Feedback standards working group.

Coordination with other EU projects involves regular information exchange on the progress of each project (e.g. participation in meetings, participation in the respective Advisory Boards); joint participation in meetings upon request of the European Commission to promote the outputs of the projects; and potential alignment of activities (especially dissemination and communication activities i.e. joint policy recommendations) and meetings. This will also be assured by the participation in ECSA activities.

In addition to the scheduled events in the communication strategy, during the project other conferences and events can be identified which may provide fora, not only to disseminate outcomes of the project, but also to attract relevant stakeholders and organize side events (meetings and workshops). Coordination of and attendance at events is the responsibility of UNESCO-IHE, supported by corresponding partners. The proposed schedule of conferences and events may be found on the Google Drive.

7 Evaluation of the communication activities

A set of key indicators will be used to measure the success of the dissemination and communication activities and to check whether the Ground Truth 2.0 project is achieving its expected impact by means of the communication and dissemination activities; progress against these indicators will be reported as part of the regular WP5 reporting process. Progress will be measured regularly using these indicators and the communication strategy will be updated accordingly once a year, if needed. Additionally, a contingency plan will be devised to envisage possible alternatives in case distinct activities are not delivering the expected results.

The indicators used in the monitoring are tailored to the type of communication activity or channel, and evaluate the effectiveness of achieving each communication objective:

Table 8 Indicators and targets for the evaluation of the Ground Truth 2.0 communication objectives

G1: To raise awareness of the Ground Truth 2.0 project in Europe and internationally
SO1.1. To raise awareness of the existing activities and scope of the Ground Truth 2.0 project in Europe and internationally
<p>Quantitative indicators:</p> <p>Number of news items / blogs posted on the GT2.0 website (>3 per month)</p> <p>Number of website visits (>250 per month)</p> <p>Number of unique website visitors >100 per month)</p> <p>Number of subscriptions to the newsletters (>120 per year)</p> <p>Number of opens of the distributed newsletters (30%)</p> <p>Number of messages distributed via social media accounts (>250 per year)</p> <p>Number of followers in the social media accounts (>250 end of year 1; >500 end of year 2; >600 end of year 3)</p> <p>Number of replies, likes, and retweets (>70% of the messages)</p> <p>Number of participants in the final event (>150)</p> <p>Qualitative indicators:</p> <p>Geographic distribution of GT2.0 website visitors</p> <p>Overview of reactions/comments in response to social media communication efforts classified into positive and negative reactions</p> <p>Overview of emails received at GT20@unesco-ihe.org classified into positive and negative reactions</p>
SO1.2. Create a recognized brand for GT2.0
<p>Quantitative indicators:</p> <p>Number of brochures and leaflets distributed (>2500 per year)</p> <p>Number of GT2.0 Powerpoint presentations given (>10 per year)</p>
G2: To create understanding of the Ground Truth 2.0 results among relevant target groups
SO2.1. Increase awareness of the benefits of the GT2.0 CO based data collection
<p>Quantitative indicators:</p> <p>Impact of the press releases (>5 press appearances per press release, and in percentage of the total recipients)</p> <p>Qualitative indicators:</p> <p>Evidence of interest in the project (media contacts received to get more info)</p>
SO2.2. Generate trust in the citizen sensed data among target groups
<p>Quantitative indicators:</p> <p>Number of external events that GT2.0 was represented in (>5 per year)</p> <p>Number of contacts made in the dissemination events (2 per event)</p> <p>Qualitative indicators:</p> <p>Collect <i>informal</i> feedback during events by chatting to attendees</p>
SO2.3. Increase understanding of CO as a vehicle for cooperative planning and evidence-based policies based on the GT2.0 concept
<p>Quantitative indicators:</p> <p>Number of CO brochures and leaflets distributed (>500 per year and per CO)</p> <p>Number of views of the videos produced (>500 views)</p> <p>Number of participants in dedicated events about the GT2.0 concept for local authorities, spatial planners etc. (>10 per event)</p> <p>Qualitative indicators:</p> <p>Evaluation of the dedicated events - feedback provided by means of questionnaires or surveys</p> <p>Evaluation of the final event - feedback provided by means of questionnaires or surveys.</p>

SO2.4. Increase the understanding of the GT2.0 Land Use Mapper and land use change

Quantitative indicators:

Number of Land Use Mapper brochures distributed (>2500 per year)

Number of impacts of the Land Use Mapper press release (>5 press appearances per press release)

Number of visitors of the Land Use Mapper (>1000 per month)

Qualitative indicators:

Evidence of interest in the tool (e.g. number of e-mails received in the GT2.0@unesco-ihe.org email address requesting for more information)

G3: To trigger action based on the Ground Truth 2.0 results

SO3.1. Promote the use of the GT2.0 technologies and demonstration results among authorities

Quantitative indicators:

Number and type of participants in the MOOCs (>50 per MOOC)

Number of Policy Briefs disseminated (1 per CO)

Qualitative indicators:

Evaluation of the MOOCs - feedback provided by means of questionnaires or surveys

Evaluation of the policy briefs - feedback provided by means of surveys or focus groups

SO3.2. Promote the use of the GT2.0 concept among relevant target groups

Quantitative indicators:

Number of times GT2.0 is invited to attend or speak at an event / meeting

Number of views and downloads of the Guidelines for Citizen Observatories and Future Recommendations (>100 views and >50 downloads)

Number and type of participants in the MOOCs organised (>50 per MOOC)

Qualitative indicators:

32. Evaluation of the guidelines - feedback provided by means of questionnaires or surveys

33. Evaluation of the MOOCs - feedback provided by means of questionnaires or surveys

SO3.3. Promote the data management standards applied in GT2.0 among the Citizen Science community

Quantitative indicators:

Interoperability Engineering Report developed.

Number of relevant events attended (>2 per year)

Number of contacts made in the dissemination events attended (2 per event)

Qualitative indicators:

Evaluation of the Interoperability Engineering Report - feedback by means of questionnaires or surveys

G4: To communicate business opportunities and promote market uptake

SO4.1. Promote European market uptake and exploitation of the Ground Truth 2.0 technologies, services and standards

Quantitative indicators:

Number of contacts made at EARSC (European Association of Remote Sensing Companies) (>2)

Number of private sector exhibitions attended (>1 per year)

Number of contacts made in the private sector exhibitions attended (2 per event)

Number of new contacts to the SMES partners derived from the project (>2 per year)

Qualitative indicators:

Evaluation of the EARSC contacts - feedback provided by means of questionnaires or surveys

Evaluation of the new contacts - feedback provided by means of questionnaires or surveys

G5: To support the sustainability of the six Citizen Observatories (CO) and the Land Use Mapper beyond the lifetime of the project

SO5.1. Provide the GT2.0 COs with common communication and promotional tools

Quantitative indicators:

CO Communication Toolkit developed.

Qualitative indicators:

Evaluation of the CO Communication Toolkit - feedback provided by means of questionnaires or surveys

SO5.2. Demonstrate the results of the GT2.0 citizen observatories among local and international funding institutions

Quantitative indicators:

Three contacts made with financial organizations (one per year, with or without commitment)

Qualitative indicators:

Evaluation of the nature of the contacts (duration, intensity, impact, etc)

SO5.3. Promote the continuity of the Land Use Mapper

Quantitative indicators:

Number of participants in the micro mapping parties (>25 per party)

Qualitative indicators:

Evaluation of the micro mapping parties - feedback provided by means of questionnaires or surveys

CREAF will be the partner in charge of the monitoring and evaluation of the communication strategy. With this objective, all the dissemination activities will be assessed using the following methods:

Table 9 Methods to monitor the impact of the Ground Truth 2.0 communication activities

Type of action/tool	Methods to monitor the impact
Organized events	Keep track of the participants' lists and contacts (including journalists)
	Prepare a questionnaire for feedback or conduct a brief online survey after the events and analyse the resulting feedback
Attended events	Keep track of contacts made, opportunities identified or ideas generated at attended events by designing a template for the partners
Online tools	Using web statistics, monitor the Ground Truth 2.0 and the GT2.0 Citizen Observatories' websites visits after having organised / participated in events, after having sent out a press release etc.
	Using web statistics, monitor the social media activities. Classify comments on GT2.0 posts into positive and negative, understanding and lack of understanding, etc.
Publications	Keep track of the number of publications disseminated and who received the publications (distribution lists).
	Get their feedback through surveys or focus groups.

Media monitoring	Compile an archive including press clippings and screenshots of websites that mention the project (including the date). Keep also a media archive of radio and TV programmes that mention the project.
	Set up a library/archive with the projects' publications

The evaluation of the communication strategy will be done annually from the point of view of the Ground Truth 2.0 project and its objectives and also taking into account the type of communication actions and the achieved impacts. The main aspects to evaluate are:

- To what extent does the communication strategy respond to the information needs of the target audience(s)?
- How coherent are the tools and messages with the objectives of the strategy and with each other?
- How effective is the communication strategy in improving awareness and knowledge about the project?
- To what extent does the communication strategy contribute to a better understanding/perception of the GT2.0 concept?

The progress of the communication strategy will be evaluated using a 3-level classification table, where the different aspects of the different channels/tools will be classified as satisfactory (1), room for improvement (2) or unsatisfactory (3):

Table 10 Progress evaluation of the Ground Truth 2.0 communication activities

Type of activity	Compliance with communication objective	Efficiency of management	Efficiency of budget	Effectiveness of distribution	Effectiveness of targeting
Multimedia and online activities					
Events			(3): increase budget		
Media promotion					(2): create a database of contacts
Networking					
Toolkits					(1): unified visual identity

8 Roles and responsibilities

This section defines the roles and responsibilities related to communications activities within the GT2.0 project and includes and expands upon the roles and responsibilities defined with the Description of Action (DoA).

8.1 All partners

All partners will:

- be responsible for the communication activities initiated by them;

- assist in the implementation of the GT2.0 project communication strategy as defined in this document by carrying-out communications tasks as directed by the project coordinator or Demo Case leaders;
- include the GT2.0 logo and website address on at least one page of their organisational website;
- ensure communications reflect the GT 2.0 project messages as described in section 4 'Key messages';
- use the GT2.0 project mailing list, or specific mailing lists, for general communication and to notify other partners of the availability of new dissemination materials, results and papers uploaded to the GDrive. Documents should not be attached to emails but a link to the appropriate location must be included;
- participate in scheduled project meetings to communicate progress to partners;
- keep their contact details on the GT2.0 project GDrive up to date;
- include the GT2.0 project web address and contact details in external communications related to the project;
- use GT2.0 appropriate templates for relevant project-related communications;
- use their own organisations' contacts and established communication channels in support of the GT2.0 project as appropriate and as outlined in this document;
- include the #GT2.0 hashtag when mentioning the project on Twitter;
- prepare a GT2.0 blog post entry when scheduled in the blog post calendar
- acknowledge EU funding in all communications regarding the project, as specified in the Grant Agreement.

8.2 Demo Case leaders

The Demo Case leaders will:

- manage the undertaking of all external communication activities regarding their respective CO;
- act as the central point of contact for all external communication activities of their respective CO;
- delegate particular communication tasks to Demo Case partners as required;
- monitor, report and help to update the Communication Strategy annually.

8.3 Work Package leaders

To aid in the communication of information about their work package, Work Package leaders will:

- provide regular updates on work package progress at the scheduled project team meetings;
- contact UNESCO-IHE and CREAM at least two weeks before important milestones or the dissemination of results or deliverables to allow the discussion and planning of required communication activities;
- ensure that all deliverables include an accessible summary section that can be used for communication purposes and similar GT2.0 activities; and
- provide information and content about the work carried out within their work package as required by UNESCO-IHE or CREAM producing communications outputs.

9 References

EU - Communicating EU research and innovation http://ec.europa.eu/research/participants/data/ref/h2020/other/gm/h2020-guide-comm_en.pdf [28.11.2016]

Annex 1 Social media Communication strategy

User profile

Name: @GroundTruth20 (Twitter and Facebook) and Ground Truth 2.0 (LinkedIn)

Biography: Environmental knowledge discovery of human sensed data. Funded by European Union's Horizon 2020

Avatar: GroundTruth avatar

Image profile: to be determined among the Ground Truth 2.0 set of photos

Objectives and actions in the initial phase

- 1) Raise awareness of the project among target audiences (social, scientific, political, business, GEO, financial)
 - Initial tweets and posts describing what Ground Truth 2.0 is and providing the website link.
 - Further Tweets and posts describing the objectives and benefits of the project.
 - Indicator: Increase in the number of followers at a rate of 50 followers/month

- 2) Establish communication networks with project related organizations and initiatives
 - Identify and follow citizen science organizations, associations, (online) groups, communities, journalists, and initiatives that provide content.
 - Retweet or share and like organizations or individuals willing to work with us.
 - In case of organizations with little activity on social media, consider to send them an email.
 - Follow influencers (journalists, newspapers, users with good impact) and share their posts.
 - Create thematic lists for each of the CO.
 - Indicator: Get the citizen science associations to follow us.

Objectives and actions during the project

- 3) Generate trust from the CO users
 - Answer questions from users, by "Reply" or "Cite" in case the question is useful for other participants.
 - Promote the hashtag #GT2.0. It will create a space for sharing experiences, disseminating information about the GT2.0 project and finding content for own use. A highly used hashtag can bring users to the CO.
 - Indicator: use of the #GT2.0 20 times/month

- 4) Become a content source related to the Ground Truth 2.0 interests
 - Publish content with information of related organizations and initiatives (and potential collaborators). The major terms to use are:
 - Citizen science
 - Land Use
 - Biodiversity

Natural resources

Urban planning

Water management

- Publish media news related to the Ground Truth 2.0 terms, which may act as *influencers*.
- Create own content describing the achievements and benefits of the COs
- Use the hashtag #observe4earth to relate the GT2.0 content to the EC and the sister projects
- Indicator: get 50 retweets/week.

Objectives and actions to promote the Land Use Mapper

- 5) Promote the launch of the Land Use Mapper
 - Prepare a fixed 'Coming soon' post and mention the Land Use Mapper launch every 2 weeks.
 - Promote the date of the launch and the events related.
 - Once the Mapper launched: posts disseminating the benefits of the Mapper and promoting the participation.
 - Indicator: get 800 visits to the Land Use Mapper during the first week.