Environmental knowledge discovery of human sensed data

Deliverable D1.4

Updated Engagement Strategy

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Versions and Contribution History

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v.01	06.03.2018	Kim Anema	Initial outline and set up of the document
v.02	16.04.2018	Kim Anema	Version ready for internal review
v.03	26.04.2018	Kim Anema	Processed comments from review and added case chapters
v.04	30.04.2018	Kim Anema	Final additions and edits

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List of abbreviations

CO	Citizen Observatory
EC	European Commission
EU	European Union
GEO	Group on Earth Observations
GT2.0	Ground Truth 2.0
I&B analysis	Incentives and Barriers Analysis
ICTs	Information and Communication Technologies
IT	Information Technology
MMCO	Maasai Mara Citizen Observatory
WP	Work Package

Executive Summary

Building on literature, other Deliverables and engagement experiences in the first two years of the project, this Deliverable presents an update of the strategy to sustainably engage active participants and influential supporters in each of the six citizen observatories. The aim of the GT2.0 Engagement strategy is to involve in a sustainable way the stakeholders that are needed to make the observatories successful (also see the GT2.0 Stakeholder Analysis) and to build relationships with the societies in which the observatories operate.

For the duration of the Ground Truth 2.0 project three different stages of engagement were foreseen: Initiation, Enlargement and Maintenance of the communities. Over the course of the first year it was established that all Demo Cases, before transitioning from the Initiation stage to the Enlargement stage, needed to 'find their footing' first. Therefore a Stabilization stage was added to the engagement trajectory in Ground Truth 2.0. Although the six Demo Cases started on different topics, with varying partner constellations and developed at different speeds; still there is some overlap in their experiences with the initiation of their CO community. Recruitment via existing contacts or liaising with pre-existing groups with similar objectives works well. After the co-design, a successful way of attracting citizens for the monitoring part proved to be the organization of (or participation in) public events. Overall, all six Demo Cases successfully recruited the first participants for the co-design groups and also five of the six cases entered the next stage. A group of people does not become a community overnight, certain 'ingredients' are needed, like group dynamics and members willing to do the legwork. In building mutual relations between the members of the co-design group, each of the cases reported on the importance of personal attention. To support the Demo Cases in the next stage 'Enlarging the community' this document presents a summarized overview of best practices and lessons learned on the engagement of citizen observers and volunteers more generally. Specific attention is given to finding and recruiting participants, welcoming them, planning the activity and managing to retain or replace them. A final paragraph elaborates on the final stage foreseen in Ground Truth 2.0: sustaining the CO communities.

Because not all stakeholders need to be engaged in the same way, different types and intensities of attention are appropriate for different stakeholders. Building on the stakeholder analysis in D1.1 and D1.2 and on three variations of the stakeholder matrix, an established way to prioritize stakeholders, chapter 5 elaborates on how to prioritize stakeholders and decide on the best suited approach in each instance.

Chapters 6 and further are descriptions per Demo Case, each chapter describes the objectives, current CO community members and undertaken activities for each Demo Case and ends with nine points of interest for the engagement specific under the local circumstances. In the annexes concrete handles are provided for specific steps in the engagement process; for example a checklist for organizing an event and a visual overview of the cyclic engagement process with the most important attention points listed.

1 Introduction

1.1 Background

The Ground Truth 2.0 project co-designs and validates six scaled-up Citizen Observatories (COs) in real, operational conditions in four European and two African Demonstration Cases. A citizen observatory is a community of citizens, policy-makers and scientists using an IT platform and tools to support stakeholder participation and the collection, exchange and use of information and knowledge on a particular issue. The project demonstrates the technological feasibility and societal and economic benefits of such citizen observatories. The ultimate objective is the global market uptake of the concept and enabling technologies. Ground Truth 2.0 conceptualized of citizen observatories to enable participatory monitoring, cooperative planning and environmental stewardship. Engaging CO community members in the co-design process and in the sustained use of the CO is a key requirement for successful demonstration and validation of the concept.

The approach to the engagement strategy builds on the GT 2.0 stakeholder framework (presented in D1.1 and D1.2) and on the ongoing analysis on incentives and barriers (T1.7). The initial engagement strategy (D1.3) provided the rationale for and logic of stakeholder engagement, and introduced the elements of the stakeholder engagement in the specific GT2.0 context. It provided tools and guidance on engagement activities specific for the initiation phase of the GT 2.0 Citizen Observatories. Building on literature, other WP1 Deliverables and reflecting on the experiences on engagement in the past year, this document presents an update of the strategy to sustainably engage active participants and influential supporters for each of the six citizen observatories.

1.2 Purpose and structure of this document

The aim of the GT2.0 Engagement strategy is to involve in a sustainable way the stakeholders that are needed to make the observatories successful (also see the GT2.0 Stakeholder Analysis) and to build relationships with the societies in which the observatories operate.

The following Chapter provides a short description of the approach used for the design of the engagement process in Ground Truth2.0. Chapter 3 summarizes and compares between the experiences of the different Demo Cases in the first to stages of GT2.0 engagement: Initiation and Stabilisation of the CO community. To support the Demo Cases in the next stage 'Enlarging the community' Chapter 4 presents a summarized overview of best practices and lessons learned on the engagement of citizen observers and volunteers more generally. Specific attention is given to finding and recruiting participants, welcoming them, planning the activity and managing to retain or replace them. A final paragraph elaborates on the final stage foreseen in Ground Truth 2.0: sustaining the CO communities.

Building on the stakeholder analysis in D1.1 and D1.2 and on three variations of the stakeholder matrix, an established way to prioritize stakeholders, Chapter 5 elaborates on how to prioritize stakeholders and decide on the best suited approach in each instance. Chapters 6 and further are descriptions per Demo Case, each chapter describes the objectives, current CO community members and undertaken activities for each Demo Case and ends with nine points of interest for the engagement specific under the local circumstances. In the annexes concrete handles are provided for specific steps in the engagement process; for example a checklist for organizing an event and a visual overview of the cyclic engagement process with the most important attention points listed.

2 Approach

For the duration of the Ground Truth 2.0 project three different stages of engagement were foreseen: Initiation, Enlargement and Maintenance of the communities. For the initiation stage a straightforward methodology was developed in order to help the Demo Cases with finding and recruiting their first participants. Over the course of the previous year it was established that all Demo Cases, before transitioning from the Initiation stage to the Enlargement stage, needed to 'find their footing' first. Therefore a Stabilization stage was added to the engagement trajectory in GT2.0 (see Figure 1). The main purpose of this Stabilization stage is the (implicit) development of shared group values and norms, which are important for the bonding within any community (Pfefferbaum, 2017). At the end of 2017 and the beginning of 2018, in three of the six Demo Cases a start was made with the Enlargement stage.

Figure 1 Four stages of engagement for the Ground Truth 2.0 Observatories

The initial engagement strategy (D1.3) provided the rationale for and logic of stakeholder engagement, and introduced the elements of the stakeholder engagement in the specific GT2.0 context. It provided tools and guidance on engagement activities specific for the initiation phase of the GT2.0 Citizen Observatories. Based on the AMO-theory from human resources (Alfes et al, 2017) elements to take into account when recruiting participants (ability, motivation, and opportunity) where made applicable for the context of Citizen Observatories and used to guide recruitment activities. Also a format for a convincing sales pitch was developed to help with the 'cold acquisition' and first acquaintance with relevant stakeholders.

The initial engagement strategy is updated in order to sustainably engage active participants and influential supporters for each of the six citizen observatories. This update is substantiated with findings and insights from:

- Other deliverables like the GT 2.0 stakeholder framework (presented in D1.1 and D1.2), the Market Analysis (D3.1) and the ongoing analysis on incentives and barriers (T1.7).
- Reflections on the experiences with engagement in each of the Demo Cases in the past year.
- Review of success factors and lessons learned in other Citizen Science and volunteer projects.

3 Experiences in the past year

3.1 Stage 1: Initiating the CO community

For the initiation stage, a straight-forward methodology was developed in order to help the Demo Cases with finding and recruiting their first participants. Based on the AMO-theory from human resources (Alfes et al, 2017), elements to take into account when recruiting participants (ability, motivation, and opportunity) were operationalised for the context of Citizen Observatories and used to guide recruitment activities. Also, a format for a convincing sales pitch was developed to help with the 'cold acquisition' and first acquaintance with relevant stakeholders – detailed in D1.3.

Although the six Demo Cases started on different topics, with varying partner constellations and developed at different speeds; still there is some overlap in their experiences with the initiation of a CO community as described in the GroundTruth2.0 Stakeholder Analysis. Recruitment via existing contacts (the "have-your-network-invite-their-network"-technique) works well. In the Netherlands, Kenya and Sweden, members of the co-design group were successfully recruited through the (personal) network of those already participating. Asking others to distribute the invitation has proven to be a good way to reach out to a large and diverse group of potential participants, but it has downsides as well. One of those downsides is the loss of control on how the Observatory is introduced or framed, in one of the cases this lead to confusion and an array of expectations at the first session. Depending on the context the GroundTruth2.0 strategy here is to predefine how the invitations are formulated – even or especially if these invitations are distributed by others.

Another way to start a community from scratch is to hook up with pre-existing groups with similar objectives. The communities in Kenya and Belgium, for example, are driven by pre-existing citizen groups that see the development of a technical platform as an opportunity. Also in Spain, the citizens that will do the monitoring are already organized in the volunteers' network of one of the co-design partners and in the Netherlands, the citizens in the co-design group were mainly members of previous working groups around pluvial flooding. The advantage of making use of existing groups is that there is also already an established way of dealing with each other; group norms and dynamics. These dynamics are important for transitioning from separate individuals into a group or community. A related disadvantage however is that the newly established community 'inherits' the group culture of the existing group; this can make it difficult for new, unrelated, members to fit in. In one of the Demo Cases, drawing on pre-organized groups meant that all initial members were very familiar with organizing and attending meetings; it became their modus operandi. New people intending to join the observatory have to participate in these meetings as well, even if this is not their preference. The GroundTruth2.0 strategy here is to be aware of this issue and explicitly guide the new members in their first encounters with the existing group. Depending on the context a good strategy here is to introduce new members for the first time as a group and on 'different' events that are less familiar for the existing groups. Still, the pre-existing groups that are being drawn on in the different Demo Cases are by no means static – in each of these demo cases the group of core members is now more than just an already existing group.

Recruiting people without an existing contact or group structure around them, aka cold acquisition, has proven difficult. In both Sweden and Spain, a lot of effort and a lot of phone calls were spent on reaching out and convincing further, unacquainted recruits. Considering the amount of effort that was spent on it, the results were disappointing. The GroundTruth2.0 sales pitch introduced in the Initial Engagement Strategy resolved this issue only to a limited extend. Cold acquisition can be difficult because the motives and ambitions of the approached 'target' are not known enough; that makes it hard to anticipate on them – even when considered beforehand as was the intention of the GT2.0 sales pitch.

What complicated the recruitment for the GT2.0 project to some extent was that the activities in the co-design process were of a very different nature than the more standardized monitoring activities that are part of the observatory after its launch. Finding people who are able and willing (and who have time) to participate in the co-design process requires a different approach and target group than finding people who will be participating in the observatory by, for example, monitoring and collecting data. This difference in target audiences made it difficult to formulate a straightforward recruitment message and all the GT2.0 Demo cases had to manage expectations in their initial core groups to some extent. From the Incentives and Barriers analysis we know that the nature of the co-design process caused certain participants to 'drop-out' because of its time-consuming nature. While it caused others to invest even more time, because it ignited valuable discussions. It meant that in several Demo Cases, the co-design process was carried by senior citizens. Whether their design preferences represent the interests and expectations of the majority of community members cannot be judged at this point, but might represent a generic challenge for scaling-up the observatories.

In sum, the members of the co-design groups were recruited mainly through existing contacts and existing groups. After the co-design, a successful way of attracting citizens for the monitoring part proved to be the organization of (or participation in) public events. A blitz, campaign, or (launch)-event, where the Observatory was presented, was organized in almost all of the Demo Cases and yielded commendable results. In one of the Demo Cases, the first event helped to attract an entirely new community. Additionally, physical results and completion of a sampling campaign renewed the interest of existing and unacquainted stakeholders. In Sweden the Blitz, and sharing the results during workshops and meetings allowed to reconnect with various stakeholders. Depending on the context of the Demo Case this campaign monitoring would be the preferred strategy, for engagement purposes, in Ground Truth 2.0

Overall, all six Demo Cases successfully recruited the first participants for the co-design groups and also five of the six cases entered the next stage. After initiation, the new community formed around the observatory needs to settle and stabilize, before it can grow.

3.2 Stage 2: Stabilizing the community

A group of people does not become a community overnight, certain 'ingredients' are needed; that explains why a Stabilization stage is needed after Initiation and before Enlarging the community. First of all, it is important that the group has a critical mass of people willing to do 'leg work' – participants who can execute tasks and make things happen. A second aspect needed to turn separate individuals into a group is a shared interest; the common theme they identify with and feel passionate about. Communities often thrive when they are formed around (informal) leaders who spark ideas, energize the group, and keep efforts on track. Finally, communities also are guided by im- or explicit norms that people respect and 'enforce' between the members of the group. The main purpose of this Stabilization stage is the (implicit) development of shared group values and norms, which are important for the bonding within any community (Pfefferbaum, 2017). In order to help the Demo Cases steer their engagement efforts in the appropriate direction, the WP1 team developed a tool for reflection on the current and the desired community (see Annex 3).

Again, despite the different settings in the six GT2.0 Demo Cases, there is considerable overlap in their experience in the Stabilization stage. For example, in building mutual relations between the members of the co-design group, each of the cases reported on the importance of personal attention. For effective community building, close personal connections at the most local level seem to be most promising. Participants appreciate it when their names are remembered and they are welcomed and addressed with a personal touch; it has proven useful to invest some time in associating names with faces.

Also, considering their context and circumstances by, for example, planning meetings after working hours is valued and provides a good base to build robust personal relationships. The majority of citizens involved in the Demo Cases had a 'local' focus; for them organizing action starts at the level of neighbourhoods and villages. All cases also had some drop-outs from the co-design groups in the first year. For some of the participants, the co-design process was different from what they had expected when they joined initially. The main reasons for dropping out, mentioned to the GT2.0 team, were a lack of time (aka fight for attention), personal circumstances and lost interest. Different from the people who lost interest are those participants who somehow 'lost momentum': less active, but still on the mailing list and ready to join the activities again if something of their liking takes place. It is virtually impossible to distinguish these sleeping members from 'silent drop-outs', and it is easy to get disheartened in the communication with them. However, as was demonstrated in the Belgian Demo Case, word-of-mouth marketing is a very strong way to strengthen and enlarge the community; the previously engaged people on the mailing list can be a real asset for that; they might not come themselves but still tell people about it. Still, if too many members of the community become inactive or sleeping members – the observatory has a problem. As stated before, in order to stabilize the community, an inner group of committed members is needed to do the leg work, organize activities and make things happen. We have seen in three cases that community members are hesitant to take up that role of organizing and executing because they are not sure how the observatory will develop, whether it will be sustained and, for the institutional members, whether itfits with the responsibilities of their job.

Communicating with and between a growing group of (co-design) members can be a real challenge, especially because the groups are still 'young' and have no established way of working together yet. In several Demo Cases, the co-design group decided to set up a WhatsApp group for their mutual communication and they all reported it to be an asset to their community. This is because it is easy, accessible, but also dynamic and informal – communicating over WhatsApp provides a personal touch, more than email. This also helps to integrate new people in the group; they can become familiar with the group dynamics in a very accessible way.

Finally, the communities in most of the Demo Cases went through a transition after the co-design process. Via the official launch of the platform, they entered the process of 'sustained use' of the CO – aka monitoring and reporting. Not only more people are needed to populate the observatory beyond the initial core group; also, as stated before, 'other' people are needed for the more standardized use of and activities on the platform. Apart from recruiting people to participate, it also proved challenging to mix the old and new community members. If the Belgian Demo Case can serve as an example, it might become easier after this transition: *"Finding our first 15 CO members is easy, growing to a group of about 30 volunteers takes a bit of time. From then on, people start hearing about our activities, online presence etc. and start finding us (instead of us finding them)."*

4 Stage 3: 'Enlarging the community'

After Initiating and stabilizing the CO communities, the Ground Truth 2.0 project has now embarked on the phase to start enlarging the communities in each of the Demo Cases. Larger communities have more members, which means that recruitment is again central in this stage. The difference with the initiation stage, however, is that the new members will be joining an existing group and the (monitoring) activities for which they are recruited are more straightforward – and easier to communicate. The co-design processes have been finalized and the platforms are operational (at least in Beta-versions). This makes a difference for the recruiting methods.

In GT2.0, strategies draw on a review of state-of-the-art approaches that helped other citizen science communities or volunteer organisations to recruit participants. In this, GT2.0 follows the logic of the Theory of Change, which pays particular attention to identifying and creating the conditions for success. Below, a summarized overview is presented of best practices and lessons learned on the engagement of citizen observers and volunteers more generally. How these best translate to the practice of GroundTruth2.0 depends on the context of each DemoCase. Tangible actions to apply, derived from this review, are described in the Case specific chapters (Chapter 6 till 11)

4.1 Finding and Recruiting

As discovered during the initiation stage, different types of people have different motivations and are drawn to different types of jobs. Although several inventories to assess volunteering motivations have been developed (e.g. Clary et al., 1998; Omoto & Snyder, 1995; Reeder, Davison, Gipson, & HessonMcInnis, 2001), the most well-known framework for assessing volunteer motives is the Volunteer Functions Inventory, developed by Clary et al. (1998). They differentiated among six motives for volunteering: **Values**– need to act in an altruistic way and help others; **Understanding**– need to have new learning experiences and the opportunity to practice new knowledge, skills and abilities; **Social**– need to be with friends or engage in an activity that others consider important; **Career**– need to build careerrelated skills and abilities which may serve to enhance one's career; **Protective**– need to reduce feelings of guilt over being more fortunate than others; and **Enhancement**– need for personal growth and development.

Many studies find a strong sense of values-driving environmental volunteers. Explicitly highlighting the significance of an individual's contribution to the Observatory, and society more generally, is important to satisfy and enhance the personal values-based motivation (Wright et al, 2015). However, although research states that the value-based motivation tends to be most salient, not all volunteers are primarily motivated by it (e.g. Coyne & Coyne, 2001). Instead, it might be worthwhile for a Demo Case to develop a 'recruitment niche' (mapping the profile of 'ideal' participants) (Nichols & King, 1999; King & Lindsay, 1999) and tailor messages that resonate with that niche.

In the process of recruiting, a major pitfall can be the mismanagement of expectations. If expectations do not align with what actually happens, also during and after the activity, volunteers might get disappointed – even if the overall experience was not bad. Also, during recruitment, it is good to be aware of the incentives that can be offered and/or of the barriers can be broken down. The incentives and barriers analysis carried out under Task 1.5 provides useful insights into what might be important for the targeted audience. Table 1 below provides a summary.

The incentives and barriers analysis carried out under Task 1.5 provides useful insights in what might be important for the targeted audience. The table below provides a small summary, to guide initial thoughts.

Table 1 “Incentives and Barriers for recruitment” (derived from T1.5 Incentives and Barriers Analysis)

Incentives to offer	Barriers to break down
Access to the data	Time / resources
Access to the community (improving service delivery)	Validity of the data
Doing something for the greater good	Clarity of the objectives, method, etc.
Gain knowledge and skills	Need for a critical mass
Increase visibility of the organisation	Sustainability after the project
Political impact	

4.2 Welcome

The welcome to the observatory is important. It should be clear what activities should be undertaken when new members join the observatory; for example how to welcome them and how to integrate them in the group. ‘Word of mouth’ is powerful; if anything, the experience of joining should be fun – and new members need to feel heard and respected. Research on volunteer retention by Waikayi, (2012) showed that the more the volunteers felt they were able to share their experiences and opinions during their training, the greater their sense of community whilst volunteering .

4.3 Activity

When it comes to monitoring and observing activities, the most important condition is that instructions should be clear: there should be clear instructions (and timeline), the added value of what they are doing needs to be clear and feedback on their measurements needs to be clear. Also, while a citizen science project may not satisfy all motivations of volunteers, by integrating a variety of activities, it has a better chance of appealing to many people (Bruyere and Rappe, 2007; Jacobson et al., 2012). To keep the volunteers’ motivation and interest assigning appropriate tasks is another essential issue. In a study by Eisner et al (SSIR, 2009) only 53 percent of volunteers who did “general labor” activities continued volunteeringthe following year. By contrast, 74 percent of volunteers performing professional r management activities continued volunteering.

Studies show that intrinsic motivation does not necessarily enhance the quality of participation (Nov et al, 2014). This might encourage the development of more enjoyable, game-like, participation mechanisms. Similarly, mechanisms such as social network features create and emphasize social influences, linking them to the quality of one's contributions, so that norm-oriented motives become positively linked to contribution quality.

4.4 Retention

One might think recruitment is the main objective in this stage of the project; retention of current members, however, is at least as important. The current members of the core group, those who participated in the co-design, are the most valuable assets that the DC observatories have. These people are invested in the idea, are willing to work for it and make the Observatory come alive – and thereby much more attractive to join for others. Also an engagement strategy without a retention plan basically means a lot of work without fostering its results. There is no use in recruiting community members on one side if the already recruited members on the other side decide to leave at the same pace.

According to the defined and desired activities in each observatory retention will be based on different motives and incentives. However, from literature there are some generic lessons to be learned. Individuals may decide to volunteer for several motivation and these motivations may also change over time (Okun & Schultz, 2003; Omoto, Snyder, & Martino, 2000), therefore it is important to keep monitoring the satisfaction of volunteers. Studies show that the main reasons for volunteers to leave their volunteering job are that the organisation fails to (1) Recognize Volunteers' Contributions, to (2) Train and Invest in Volunteers and Staff and / or to (3) Provide Strong Leadership (Eisner et al (SSIR) 2009). Related to that two things have been proven to be paramount for the retention of volunteers: Training and Social Events.

4.4.1 Training

Research shows that training facilitates the commitment and/or retention of volunteers. Cuskelly et al. (2006) also examined the joint effect of training and motives; they found that intentions to remain volunteering for the non-profit organization are only moderately affected by the value motive; training and development play a far stronger role than the value motive in influencing volunteer retention. GroundTruth2.0 promotes both online and offline training – offline also provides the opportunity to socialize (see next paragraph) so would be recommended in terms of retention. Online training is however less time consuming, which is also an important consideration for many. A diverse approach might be most suitable.

4.4.2 Social events

According to several studies, volunteers are mostly motivated by their fellow volunteers. Social opportunities in different forms and varieties are often identified as a significant predictor of ongoing volunteer commitment - along with project organization (the opportunity to work for a well-run project that uses volunteers' time efficiently) (Domroese et al. 2017). One of the best ways that non-profits can engage volunteers is to create experiences that develop attachments between the volunteer and the organization. For example with field days, end-of-season celebrations and presentations. A sensible relation with the topic of the CO or the associated activities prevents these social events from becoming awkward or forced –incorporating a social dimension onto a CO related event can be a good idea, as long as the emphazis is placed on the sustained participation of the volunteers. Data collection campaigns are not the same; they can create a community feeling but are not ideal for retention, rather for recruitment of new members.

4.5 Final stage: 'Sustaining the community'

There will be a point in time when the CO community is large enough; when expansion and growth will not be needed for survival or credibility anymore. At this stage, the dynamics of recruitment and retention will not stop – these processes will never stop. Note that the different stages of engagement might appear sequential; this is only from the perspective of the volunteer observer – once operational, all stages will be happening simultaneously in the observatory. The main focus might shift from recruitment to retention and separate engagement activities will be captured in an iterative procedure for 'community member management' – in which motivations and incentives of the target groups need to be carefully monitored as they might change over time. This community management will be an intergral part of the functioning of the Citizen Observatories; stakeholder interaction mechanisms (T2.7) will build it and tools to keep the community and the enabling environment stable will be part of the communication package linked to each Observatory (developed under WP4).

A stable community is a valuable asset for any Citizen Observatory and would certainly improve market opportunities explored under T3.2. Similarly, sustaining this stable community is an ongoing task that brings responsibilities for any future owner or manager of the GroundTruth2.0 Observatories. The specifics of this responsibility will be considered per Demo Case in Work Package 3.

It is important for CO communities to know why members decide to leave; so that demotivating factors might be mitigated. Drawing on known motivations and incentives a strategy for the ‘sustaining’ stage should be developed. It makes sense to formalize and standardize the volunteer management process as much as possible, especially with large numbers of volunteers – however, day to day reality might change overnight and standardized procedures need to be able to change along. The focus of a sustaining strategy can be on retaining the already engaged participants, this makes the most sense when the CO is active in a continuous way. If the CO is formed around (measuring) campaigns is might make sense to recruit new participants for every campaign, aka replace old participants with new. If this is the prefered strategy it is important to make sure that old participants leave with with a positive image of the Observatory, as they will act as ambassadors for future members. Asking old members to suggest new members can be a sustainable strategy. Also ‘old‘ members should have the opportunity to remain engaged if they want to; if that happens more often special attention should be given to the distinction between old and new members: it is important for them to mingle and feel part of the same community, while at the same time old members will be more motivated if they are in some way rewarded for being a remaining member.

Both retention or replacement can be viable sustaining strategies; but mixing the two leads to ambiguous messages towards the community and should be avoided. Important for sustaining the CO community is to not only build a warm relationship with the current participants, but also with their ‘sources’ (clubs, employers, neighbourhoods) as these might be the source of future members as well.

5 Stakeholder categories, roles and approaches

The aim of the GT2.0 Engagement strategy is to involve in a sustainable way the stakeholders that are needed to make the observatories successful and to build relationships with the societies in which the observatories operate. The GT2.0 stakeholder analysis was carried and updated out to inform the Demo Cases which different types of engagement are needed for different Demo Cases in different circumstances (D1.1 and D1.2). It aims to provide insights useful to the CO community: ensuring its impact, and judging its contribution to good governance.

Stakeholders in the Ground Truth project are categorized into 'Core Stakeholders', 'Enabling Environment' and 'Market Forces'. Core Stakeholders are groups and persons who will be actively and personally involved in the Citizen Observatory and the effort to develop it. The relationship is chosen by the co-design group, who decides which citizen groups, policy makers and scientists to recruit. The Enabling Environment consists of stakeholders that influence how the activities of the CO are received, and enable or limit the impacts it can achieve. In contrast to CO Core Stakeholders, the Enabling Environment can be influenced but not chosen by the CO, as the related stakeholder groups either have a legal mandate, or live in the project area. Market forces are all stakeholder groups that engage in direct economic (financial) transactions with the Citizen observatory. This segment was included to facilitate integration of the planned commercialization strategy with the other project tasks and work packages in GT2.0 and will not be considered in this strategy. The engagement of Market Forces asks for a different strategy than for the CO community or the Enabling Environment, the strategy to engage Market Forces will be elaborated on in WP3.

5.1 Prioritizing Stakeholder Communication

Between the three of them, the GT2.0 stakeholder categories represent a large number of relevant organisations and individuals to keep track of per Demo Case. It would not make sense to engage all the stakeholders identified in the three categories with the same intensity. Instead, it is desirable to identify the most efficient and effective approach for each stakeholder. For that, the stakeholders should be prioritized based on two criteria: their influence on the Observatory and their interest in the Observatory.

For example, push communication is appropriate enough for low interest/low influence stakeholders. Attempts to establish a partnership would be a waste of resources and time. Collaboration and partnership are only appropriate for key players, stakeholders with high influence and high interest who could bring considerable benefits to the observatory, but conversely - if not managed - bring considerable risk.

Note that in the case of GT2.0, citizens are key players as well. One single citizen might not have much influence, but the participation of multiple citizens in the CO is essential. This means that citizens with a strong interest in the observatory topic are key players for the observatory.

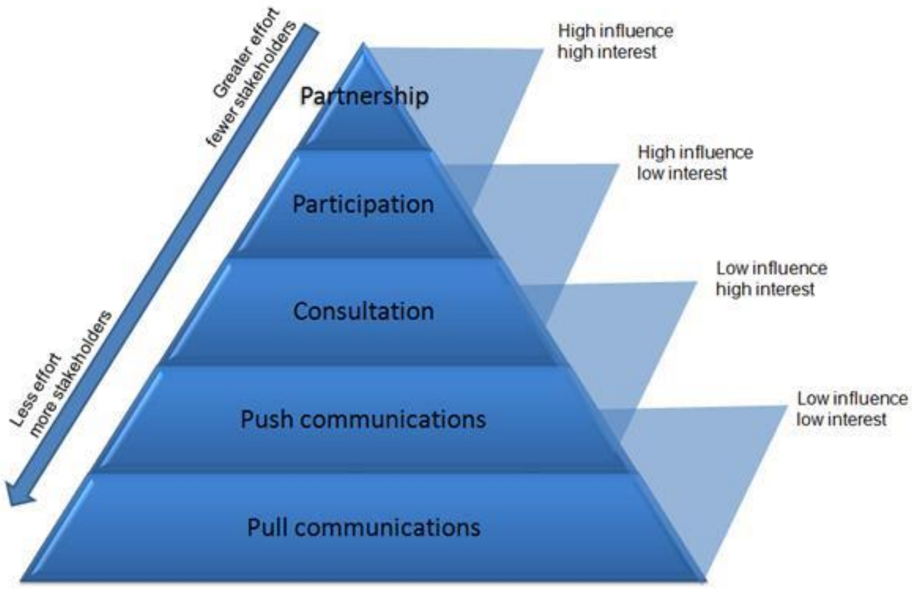

Figure 2 “Engagement approach pyramid” (source: stakeholdermap.com)

Based on the score (high or low) on influence and interest, the stakeholder engagement approach can be chosen. Figure 2Figure 1 illustrates the relationship between stakeholder influence/power and stakeholder engagement approaches. Each of these approaches is a valid way of engaging stakeholders, tailored to particular stakeholder types. Pull communications are one-way and depend on stakeholders to access provided information (on a website for example). At the other end of the pyramid, partnership engagement approaches generate shared accountability, decision making, joint learning and actions (co-design group). Table 2 below describes each approach.

Table 2 “Stakeholder engagement approaches” (adapted from stakeholdermap.com)

Engagement approach	Description
Partnership	Shared accountability and responsibility. Two-way engagement joint learning, decision making and actions.
Participation	Part of the team, engaged in delivering tasks or with responsibility for a particular area/activity. Two-way engagement within limits of responsibility.
Consultation	Involved, but not responsible and not necessarily able to influence outside of consultation boundaries. Limited two-way engagement: organisation asks questions, stakeholders answer.
Push communications	One-way engagement. Organisation may broadcast information to all stakeholders or target particular stakeholder groups using various channels e.g. email, letter, webcasts, podcasts, videos, leaflets.
Pull communications	One-way engagement. Information is made available, and stakeholders choose whether to engage with it e.g. web-pages, or construction hoardings.

5.2 Dealing with the Core Community

Influence and interest are important criteria for deciding on how to deal with stakeholders. In deciding how to communicate with a certain group (or individual) and considering how much attention they deserve, this engagement pyramid in Figure 2 can be very helpful. But influence and interest are not exclusively important; differentcircumstances and objectives require different approaches. Many variations of the stakeholder matrix exist, created by business strategists and project management experts from around the world. For dealing with the CO Core Community and the challenges identified in the previous year (see chapter 2), it might be helpful to map the current and envisioned CO members on the Stakeholder Influence Grid (Milosevic, 2003). This matrix maps the level of commitment of a stakeholder, or core community member in this case, against the importance of their support (Figure 3).

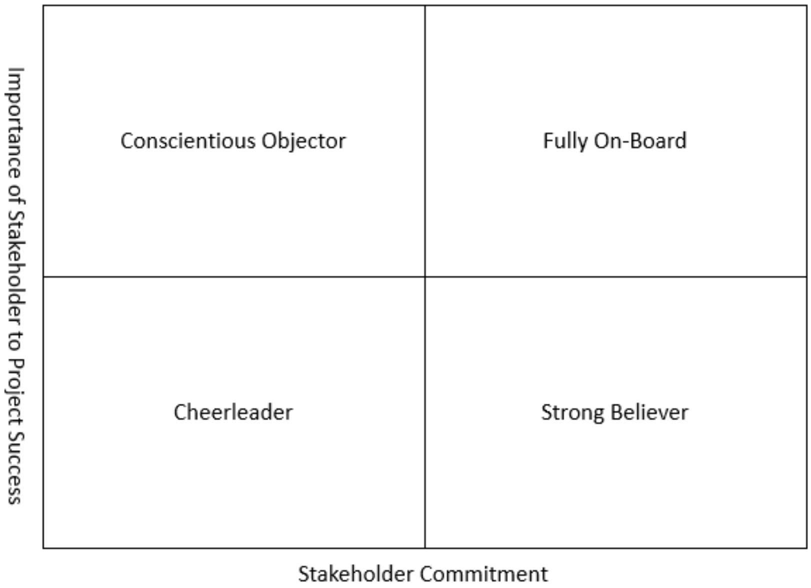

Figure 3 **"Stakeholder Influence Grid" suitable for prioritizing Core Community members**

High commitment and high importance CO members are 'fully on-board': these champions can be engaged to help drive change and take the Observatory to the 'next level'. CO members with high commitment, but low importance are 'strong believers' and essential for the before mentioned 'legwork'. Those CO members with high importance, but low commitment are 'conscientious objectors', the DC engagement strategy should focus on increasing this group's commitment to the Observatory. Low importance and low commitment CO members are known as 'cheerleaders'; these people are good for morale but cannot 'win the game' for you.

5.3 Dealing with the Enabling Environment

An entirely different, and potentially less visible, game is played in the Enabling Environment of the Demo Cases. These people and organizations can influence the Observatory but do not participate in it; to discover the priority they should get the Power and Support matrix (Roberts, 2007 – p. 47) can help (Figure 4).

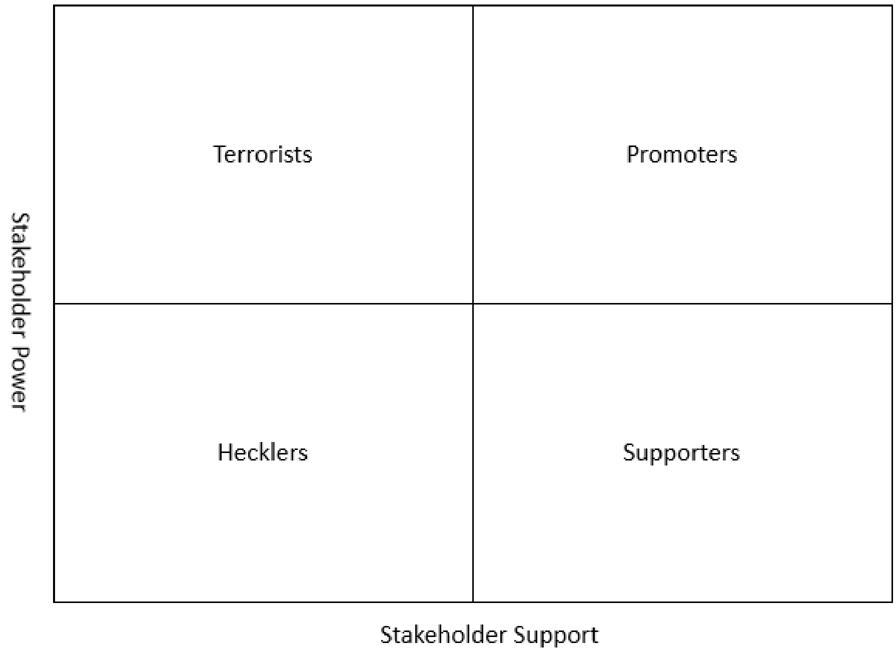

Figure 4 "Power and Support matrix' suitable for prioritizing actors in the Enabling Environment

Those in the Enabling Environment with authority and power are great candidates to engage as Experts; in any case it is wise to keep these people close. The advice on dealing with 'terrorists' is similar: inviting them to participate can ensure that their concerns and objectives are addressed and might win them around. Enabling stakeholders in the bottom half may be supportive, but are unlikely to have the authority to significantly influence the Observatory. If a completed Power and Support matrix has few people in the top half; this may indicate that the project is lacking sponsorship authority.

6 VattenFokus – the Demo Case in Sweden

6.1 Description of the Observatory

Water health in Flen, and in Sweden in general, is deteriorating due to current lifestyle choices and consumption patterns that lacks life-cycle perspective of what is going in and what is being taken out. The stakeholders in this Demo Case want to create a society where government, business, citizens, researchers and civil society organisations collaborate to be active stewards of a sustainable environment. The CO (VattenFokus) will contribute to this supporting all stakeholders to collaborate in the governance and management of aquatic ecosystems by collecting data, sharing knowledge, and make accessible data that complements established governmental initiatives. The Observatory will or does facilitate the following activities:

- upload or access existing data, information and services through a knowledge hub (CO repository)
- submit and process data; gain insights and share perceptions
- monitor and share the progress of activities or changes in order to support implementation of plans and policies

Citizens have started to do observations. There are two types of observations: periodic observations and Water Blitz campaigns. The idea of a WaterBlitz, is to collect as many water quality samples as possible in one region, and one point in time. The first WaterBlitz campaign was a success and a second one is currently being planned in the Södermanland County. The periodic observations will also continue.

6.2 Current Core group

The initial core group of VattenFokus consisted of 12 persons, representing Ericsson Sustainability Center, Håll Sverige Rent, Läntmäteriet, Stockholm Vatten och Avfall, Artdatabanken, SU Natgeo, Baltic Sea Centre and SLU (Swedish Agricultural University).

The participation of this group in the co-design workshops and activities organized by the CO varied from workshop to workshop, the majority however remained interested and kept returning. In addition to the 'loyal communities', some others stakeholders have been recruited. The group now consists of thirteen people, including:

- two representatives of the new recruited municipality of Flen.
- two community members, representing the Ecovillage and Dunkern, a recently recruited community.
- one recently recruited politician.
- one person representing Svensktvatten (Swedish Water Authority, recruited in late summer 2017).
- one person from Håll Sverige Rent.
- two persons from Stockholm Vatten och Avfall.
- two persons form Läntmäteriet.
- one person from SLU.
- two persons from Ericsson.

The two environment authorities form Flen Municipality have also committed to contribute to the CO with contacts, diffusion and visibility of the CO. Also, the recruited citizen observers, appear to be very loyal and have remained engaged.

6.3 Undertaken Engagement Activities

The CO community around Vatten Fokus, especially the co-design group, is built on or through the personal network of project partners. Cold-approaches have not worked well in this Demo Case.

Keeping the recruited CO members engaged has been challenging. The Demo Case team spend a lot of effort on bilateral meetings, calls, etc. with core group members that were losing interest. Despite this special attention, some members dropped out along the way. Most of them said that they left because of lack of time (co-design phase too long or too intense). Luckily the co-design group has been complemented with new members as well. These were recruited both through personal networks again and, in the case of the municipality of Flen, through a 'WaterBlitz'. The idea of a WaterBlitz is to collect as many water quality samples as possible in one region, and one point in time. Because of the focused attention and dynamics around a Blitz, these events have proven to work great in also attracting new members such as citizens and authorities.

At the first WaterBlitz campaign, called the Flen VattenBlitz, the number of recruited participants was 39, and the number of water samples uploaded was 51. In addition, periodic data collection at the Eco-Village and Dunkern accounted for 43 and 80 samples respectively. For this campaign, we were interviewed in the national Swedish radio, published a featured article in the local newspaper (online and paper), in the municipality magazine (online and paper) and official website. One online article was also featured in SU's website. In addition, information was sent to 30 civic stakeholders.

To recruit and spread the word about the observatory the strategy of Vatten Fokus consists of organizing activities, such as train the trainer events, WaterBlitz campaigns with respective feedback sessions, as well as assisting to local seminars, conferences and events related to water and environment issues.

6.4 Target groups and other ambitions

From the GT2.0 Updated Stakeholder Analysis the top ten of most important stakeholders for VattenFokus was derived (see Table 3).

Table 3 Most important stakeholders for VattenFokus

	Most important stakeholders for VattenFokus	On board	Not yet	Drop out
1.	Individual Citizens: Communities Flen and Dunkern	X		
2.	Local administration: Municipality Flen	X		
3.	Issue experts: SU (Demo Case Team)	X		
4.	Issue experts: SLU and ArtDatabanken			X
5.	National administration: Swedish Water Authority (Sventk Vatten)	X		
6.	National administration: Swedish Water and Waste (Utilities) (Stockholm Vatten och Avfall)	X		
7.	Organized citizens: Keep Sweden Clean (Håll Sverige Rent)	X		
8.	Issue experts: Lantmäteriet (land survey)	X		
9.	Technical experts: GT2.0 Tech Partners	X		

10.	Organized citizens/multiple: BioRegion Mälarden stakeholder group		X	

The Swedish DC is upscaling the communication from a municipality to the county level and aims at growing from 10 people taking periodically measurements in the Flen Municipality to 50 people distributed in the municipalities of Gnesta, Katrineholm, Nyköping, Vingåker. Through the second WaterBlitz campaign we have the ambition to recruit approximately 40 people in each of the 9 municipalities addressed (approximately 360 people). The county's population is 290.000 inhabitants.

6.5 Case specific strategies

The described characteristics of the Swedish Demo Case in the previous paragraphs are the starting point for the tailored strategy for Vatten Fokus.

6.5.1 Engaging target groups

In engaging the most important target groups as described in the Stakeholder Analysis (D1.2) VattenFokus has the following points to consider.

1. Within this top 10 there is still room to scale-up the observatory by recruiting citizen observers via the BioRegion Mälarden stakeholder groups or via counties. The WaterBlitzes seem to work well to engage stakeholders (individual citizens, as well as authorities at municipal or county level); there is no reason to change that approach – and a second Blitz is indeed being planned in a bigger region.
2. Swedish Water and Waste (Utilities) and Lantmäteriet (land survey) are important actors as core stakeholders and representing the Enabling Environment. It is important to keep their support, as they are powerful influencers in the environment of the CO. They have been 'consulting experts' and invested time in providing feedback about the platform. A small group of 'consulting experts' can be a formal part of the CO. This group will be asked for advice, updated via bi-lateral meetings and potentially a VIP arrangement during one of the WaterBlitzes.
3. During the co-design and other activities the participation of core-stakeholders was limited. They are still 'on board' in VattenFokus but not taking much initiative. To keep them VattenFokus will keep organizing activities in which the core stakeholders can keep joining. By planning activities for an entire county (Södermalmland County) these activities will not only reach a range of municipalities and hopefully recruit a large number of participants, but also create momentum in the direct environment of the core-stakeholders and attract their attention again.

6.5.2 Scaling up

In order to scale up the Vatten Fokus platform has the following points of interest to consider:

4. For this CO, the size of data (number of measurements) produced by citizens (and input to the system) was mentioned as an important factor for successfully deploying some of the technical tools (i.e. data processing and mashup tools). For this reason, there is a need to secure higher numbers of citizen participants to generate sufficient volume of data especially as the data collection period is limited to one season in the year. Campaign-like monitoring as in the WaterBlitzes will produce dense 'data-clouds' that can be used for this objective. Also, increasing the

number of periodic measurements and geographic expansion will help; VattenFokus will therefore establish contacts at the county level, as these authorities have access to multiple municipalities.

5. For sufficient volume of data Vatten Fokus will need to recruit a large community of citizen participants. For this the CO will make use of the already engaged stakeholders by making them ambassadors. Instead of focusing on finding many individual citizens, the CO will rather try to engage existing groups. By organizing activities, or participating in activities organised at a county level, VattenFokus will create access to municipalities.
6. The community has to be able to grow without problems - and should be managed also beyond the GroundTruth2.0 project. At first, invest time in communicating with stakeholders and organizing activities. This resulted into the ongoing collaboration with two communities that take measurements periodically since October 2017 and one municipality (Flen) that supports the VattenFokus efforts. Once the group is strong enough, the organization of activities can be delegated to stakeholders, as well as tasks such as writing Blogs, reports, etc. Finally, the administration of the CO will be delegated, and VattenFokus can remain without the GroundTruth2.0 project partners as community coordinator.

6.5.3 Sustaining

In order to sustain itself, the Vatten Fokus platform has the following points of interest to consider:

7. Retention of core group members has not been easy and recruitment of core stakeholders to co-design sessions and meetings has been extremely challenging. Careful consideration of what is needed from them (planning, providing guidance) and open discussions about how they would like to organize that can help. Their incentives for joining will be studied and tracked (they might change over time). Expectations from both sides will be made explicit and managed correctly.
8. Recruitment of participant is important, but a strategy to retain and/or replace participants once engaged is just as important. For this, a way to distinguish between very active or long term members and those less experienced (extra tasks of features on the hub) can be rewarding and help in stabilizing the community.
9. The community will only be able to monitor in one season and not continue monitoring the year round. Also for this reason the monitoring campaigns or Blitzes are the right approach. To keep the community engaged and alive, information sessions, training or social events will be organized ‘off season’.

7 Grip op Water Altena – the Demo Case in the Netherlands

7.1 Description of the Observatory

In the Dutch DC the stakeholders in Land van Heusden en Altena; Rivierland water board, municipalities (Aalburg and Woudrichem), citizens and farmers want to communicate better and understand each other's interests and ways of working. They also want to create awareness about how they share responsibility to limit the damage by pluvial flooding in urban and rural areas caused by weather extremes. The Dutch CO (Grip op Water) will contribute to this by providing a platform

1. Share and access various sources of information relevant to planning for and responding to pluvial flooding
2. Improve the communication between citizens, farmers, municipalities and water authority,

The citizen observatory 'Grip op water' is intended as a place (on- and offline) where collected observations, knowledge and warnings are shared, where bottlenecks and measures are constructively discussed along short communication lines and where it is clear which actions are taken by which party. The first version of the platform was tested by the co-design group and released in January 2018. Along with the platform website, the online presence on social media (Twitter, Facebook) was initiated.

Currently, the platform is being updated with additional technologies. Meanwhile the CO is brainstorming about activities on the platform and in the observatory to fill the platform with content, keep people engaged and engage new people.

7.2 Current Core group

An established co-design group with representatives of the core CO stakeholder groups (citizens, policy/decision makers and scientists/data aggregators)

Five co-design workshops were held in the Altena region, with the number of participants ranging between 8 and 22 (GT2.0 partners excluded). The stakeholder groups represented in the co-design group are the water board, the three municipalities in the region, a housing association, a nature conservation organisation, weather professionals, farmers and citizens affected by pluvial flooding.

7.3 Undertaken Engagement Activities

The co-design group organised the first outdoor activity, widely announced in local newspapers and social media channels: an excursion to recently created water storage area in Andelsch Broek attracting 18 external participants.

Six bilateral meetings were held with the water board, involved municipalities and weather professionals (KNMI) and amateurs (HWA) to discuss their roles in the DC.

7.4 Target groups

From the GT2.0 Updated Stakeholder Analysis the top ten of most important stakeholders for Grip op Water was derived (see Table 4).

Table 4 Most important stakeholders for Grip op Water

Most important stakeholders for Grip op Water	On board	Not yet	Drop out
1. Subnational Administration: Waterboard Rivierenland	X		
2. Local Administration: Municipality (soon administration of three towns to merge)	X		
3. Individual citizens: Local residents	X		X
4. Business groups dependent on natural resources: Local farmers		X	
5. Organized citizens: Local Nature Conservation NGO	X		
6. Technical and issue expert: Hydrologic	X		

7.5 Case specific strategies

The described characteristics of the Dutch Demo Case in the previous paragraphs are the starting point for the tailored strategy for Grip op Water Altena.

7.5.1 Engaging target groups

In engaging the most important target groups as described in the Stakeholder Analysis (D1.2) Grip op Water has the following points to consider.

1. Local residents. From the start of the co-design process a decent group of local residents participated; individuals who had experienced pluvial floods in the past and were interested to collaborate with the water board and the municipality to prevent damage in the future. Not all residents from this group kept participating in the co-design. Following the stakeholder-matrix these went from ‘Fully on board’ to ‘Conscientious objectors’. Now the co-design process has finished, there is an opportunity to win this first group of drop-outs back with the new, different, activities taking place on the platform.
2. The GT2.0 stakeholder analysis already recognized that the interests of the farmers at Altena, with their farms and land situated just outside the urban areas on the island, are different from those of the village residents. Temporary inundation of farm land, for example, is often suggested as an obvious measure to prevent floods in urban areas. To balance the discussion it is important that farmers are also heard and represented in Grip op Water. One way to engage these farmers can be to create demand in the CO for their expertise and knowledge about the local water system, and provide information that has significant added value for them
3. 3. Currently the issue expert in the CO is Hydrologic; experts in Information Technology and Water. In the co-design process part of the focus of the CO became ‘Communication’ – between organisations and between organisations and residents. Engaging a communication expert in Grip op Water would enable the CO to create real added value on that area. The incentives ‘Increase visibility of the organisation’ and/or ‘Access to the community (improving service delivery)’ might convince (one of) the municipality or the water board to deploy someone from their Communication Department for that.

7.5.2 Scaling up

In order to scale up the Grip op Water platform has the following points of interest to consider:

4. Engaging individual residents is laborious, as they all need to be convinced individually. Especially if the ambition is to engage large numbers and 'scale up', it can be sensible to target existing groups and platforms: organized citizens. In the case of Grip op Water, liaising with residents' associations, gardening clubs and groups formed around the sustainability theme will be the quickest way to increase the number of participating residents.
5. As many Citizen Observatories Grip op Water needs critical mass to become 'alive', valuable and attractive for new users. In order to create traffic, fill the platform, create 'brand-awareness' and also possibly engage new participants organizing activities is a good strategy. Potential activities for Grip op Water to organize are:
   - Mapping party to populate the platform with questions, answers and experiences with flooding measures
   - Information market about how to climate proof your garden (e.g. at a garden centre)
   - Online and/or offline presentation about natural/climate proof gardens
   - Online and/or offline session where different stakeholder groups can ask each other all they want to know (e.g. citizens, municipalities, water board)
6. The scaling up potential on the Island of Altena is limited. Although a local and tailored approach is recommendable, Grip op Water can be rolled out in different communities as well: more municipalities within the same water board or even in other water boards. For that, it is important to remain aware of the approach that is being followed, why certain decisions are made and how the processes can be standardized or repeated in a different context.

7.5.3 Sustaining

In order to sustain itself, the Grip op Water platform has the following points of interest to consider:

7. Institutional buy in. Before organisations and institutional partners want to share responsibility in Grip op Water, they need to have trust in the sustainability of the platform. Although the CO and its leadership can grow organically, too much ambiguity about its future can be off-putting for the institutional partners. Formalizing agreements on the future ownership of the CO can help. In those agreements it should be noted that the research objectives and community management in the CO should remain representative for all involved parties.
8. Recruitment of participant is important, but a strategy to retain and/or replace participants once engaged is just as important. For this, a way to distinguish between very active or long term members and those less experienced can be rewarding and help in stabilizing the community.
9. The CO core group that has been working on the co-design of the platform has to reinvent itself and find another role or purpose within the CO. In the Belgian Demo Case, the co-design group found a new role for itself as the 'planning committee' of the Observatory. This could work for Grip op Water as well.

8 Ritme Natura – the Demo Case in Spain

8.1 Description of the Observatory

This Demo Case is focused on creating collective knowledge about the local impact of climate change on nature and its rhythms in Catalonia in order to contribute to better adaptation policies. The stakeholders want to create an open Citizen Science platform for understanding the impacts of Climate Change on nature and to influence decision-making processes related to the effects of Climate Change on nature.

To contribute to this objective the CO (Ritme Nature.cat) will:

- facilitate a way to store, comment, share and disseminate facts and information
- facilitate a way to share opinions and proposals
- provide a central community portal for the existing different citizen science initiatives
- create synergies with existing platforms.

In other words, the CO will become an umbrella of information and organizations related to the effect of Climate Change on nature. The Observatory will store (existing) phenological data and make it accessible in real time, with the aim to influence decision making regarding adaptation to climate change. The discussion how scientific facts become decision-relevant information is located mostly outside the observatory.

The new Ritme Natura platform is ready and currently being launched with a press release, train the trainer workshops and presentations with a Citizen Science and Climate Change Association in Barcelona. The Ritme Natura observations are made by observers of existing platforms ICO (birds) and CBMS (butterflies).

8.2 Current Core group

The CO is being built from existing initiatives from the Catalan meteorological institute (FENOCAT) and CREAF (FENODATO). In addition, other observers communities representatives of citizens communities joined the group (ICO, ICHN), and policy makers (Generalitat de Catalunya and Diputació de Barcelona). The initial core group of Ritme Natura consisted of 12 members, representing existing citizen observatory platforms, local and regional politicians, schools and an organisation for children games. At the start of the project these group members did not yet know what was expected from them and some just joined the first session(s) out of curiosity but stopped coming after that.

The core group now exists of 8 members, including:

- FeneoDato (from CREAF)
- MeteoCat
- ICO
- CBMS
- Natusfera
- Barcelona sub-region politician
- Catalan Politian; climate change team.

Now the co-design process has ended, Ritme Natura is looking for ways to regroup around new activities. The core group has not yet taken ownership of the observatory, the GT2.0 Demo Case team is still initiating the interactions. Transfer of responsibilities (like community management) to other members if the group is difficult, because they do not have a mandate from their employers. Currently conversations are being held with the management of ICO to take over the community management for Ritme Natura.

8.3 Undertaken Engagement Activities

At the start of the project, the members of the co-design group were recruited bilaterally. The intended core group members were contacted to join separately and individually, by phone and over email.

The CCCB, association attached to the Contemporary museum of Barcelona (MACBA), is building a Citizen Science office in Barcelona, and is pushing it during two periods: November 2017, and spring 2018. It has been decided to launch the RitmeNatura.cat CO during those periods. For those events, a phenology workshop was designed for citizens to perform activities and collect phenological observations. During the first period, the workshop was presented and tested with participants at the CCCB Citizen Science offices. Currently, teachers and other speakers are trained to perform the workshop with children in schools and adults during weekends.

A local exhibition was organized in February by CREAF in their associated University (UAB) in Barcelona. During one month, description, tools, observations, and items were presented in the library of the UAB about RitmeNatura.cat. That exhibition was a long term exhibition around the topic of Citizen Science, were month by month one specific project were allowed to present itself.

8.4 Target groups and other ambitions

From the GT2.0 Updated Stakeholder Analysis the top ten of most important stakeholders for Ritme Natura was derived (see Table 5).

Table 5 Most important stakeholders for Ritme Natura

Most important stakeholders for Ritme Natura	On board	Not yet	Drop out
1. Organized citizens: Meteocat Observers	X		
2. Organized citizens: Natusfera Observers	X		
3. Investors and technical expert: Creaf	X		
4. Subnational administration: Barcelona Province Council (Via Natural Protected Areas)	X		
5. Subnational administration: Autonomous Government	X		
6. Organized citizens/NGO: Institut Català d'Ornitologia (ICO)	X		
7. Organized citizens/NGO: Butterfly Monitoring Scheme a Catalunya (CBMS)	X		
8. Organized citizens: Schools			X
9. Business target groups: Farmers		X	
10. Issue experts: Scientific Expertise		X	

The current core group is a good group, representing the most important stakeholders. It is however a very institutional group, as the citizens are only engaged ‘by proxy’, via the existing platforms of Meteocat and Natusfera. In this institutional environment the members are all people representing organisations, who need to fit participation in the CO in their current job descriptions. This creates a group dynamic that is quite passive and cautious until the formal roles and ownership are clear.

8.5 Case specific strategies

The described characteristics of the Spanish Demo Case in the previous paragraphs are the starting point for the tailored strategy for Ritme Natura.

8.5.1 Engaging target groups

In engaging the most important target groups as described in the Stakeholder Analysis (D1.2) Ritme Natura has the following points to consider.

1. In the Ritme Natura CO, citizens have only been engaged 'by proxy' – represented by Natusfera and Meteocat. To prevent the CO to become too institutional, it would be good to involve citizens directly. Citizens are key partners for a Citizen Observatory. Stakeholders with high influence and high interest who could bring considerable benefits to the observatory, but conversely - if not managed well- bring considerable risk. It makes sense for Ritme Nature not to leave the management of this stakeholder solely to others. Instead a strategy could be to invest in the retention of those citizens that, via the other platforms, already found Ritme Nature and shared observations. Retention is best done with targeted training and social events – organizing those can also benefit the 'original platforms'.
2. In the current group, many members have a stake in the issue of climate change and phenology, either as an existing monitoring-platform or government authority. However, there is no actor involved with a pure, unpolitical interest in the collected data. The involvement of an objective issue expert can make it easier to decide on the direction of the CO. Without a clear research strategy, the data collection for Ritme Nature runs the risk of being politicized. Introducing a neutral scientific objective and rigour can separate the data collection form these politics. Try to engage a researcher on climate change who is interested in the dataset that is being collected - and in nothing else regarding the CO.
3. Over the course of the co-design process the school representative dropped out. This should be followed up to prevent 'loose ends'. It is important to know why the schools dropped out – do they still believe in the project but lack time to invest, or are they sceptical and not supporting the project-idea anymore? The project can be run without the schools, so if they like the CO but simply lack time – they went from 'strong believers' to 'cheerleaders' of the project. Push communication or modest consultation would be a good strategy then. If they lost faith in the CO ideas, they went from 'supporters' to 'hecklers', which can be frustrating. Hecklers do not go away when they are ignored. Instead convince them of the positive aspects of the CO or otherwise isolate them from other stakeholders.

8.5.2 Scaling up

The ambition of RitmeNatura is to be an umbrella-platform with the input of existing platforms. This has advantages like not having to compete for attention with similar platforms, but it can also cause challenges that other platforms do not have. From this the following points of interest arise:

4. As an umbrella for other platforms, the link with citizen observers also comes via those platforms. This makes it difficult to build a 'living' community around Ritme Nature. In a sense Ritme Nature is a community of communities. Instead of competing for the same citizens, it makes sense to collaborate with the communities that they are already part of. However the Ritme Nature community management should address the individual members of those communities as well. It is important to make clear agreements about who reaches out, with what message and when. As

stated under point 1 training and social events organized under the name of Ritme Nature can benefit the others as well.

5. The platforms under the umbrella also have considerable power in their role as gatekeeper towards the observers. Because they are existing groups, they have existing group identities that Ritme Nature has to respect in order to get their buy-in. In the Incentives and Barrier Analysis, they expressed concerns about the amount of effort and resources that they have to put in order to adjust their internal processes, protocols and methodologies to adapt to Ritme Nature. Live and let live can be a good strategy here, as long as the benefits of the collaboration between Ritme Natura and the existing groups are mutual. It is key to know the motivations of the existing platforms to join Ritme Nature. Based on mutual interest, agreements can be made about community interactions and identity.
6. Establishing research related leadership in the CO. There is no clear answer to who will be using the collected data and for what; that creates flexibility in the requirements for data collection, but also less urgency is being felt. Ambiguity about the usefulness of monitoring can be fatal for a CO. This links back to point 2; ambiguity about the usefulness of monitoring can be fatal for a CO. Before scaling up, a clear research strategy should be known – preferably with tangible results planned that can be referred to in the feedback towards the citizen observers. Without a research strategy it is difficult to provide feedback on the observations. Feedback is important; it is an important way of expressing gratitude.

8.5.3 Sustaining

In order to sustain itself, the Ritme Natura platform has the following points of interest to consider:

7. Presence of political will to act upon the collected datasets. Respondents in the Incentives and Barriers Analysis mentioned the lack of political will to affect change and the lack of feedback from politicians as a factor that would negatively influence their willingness to participate. If the collected data has no impact, the usefulness of the CO might be questioned. If the impact of the collected data is not visible, the usefulness of the CO might be questioned and participation will drop. A research objective with tangible results as mentioned under points 2 and 6 mitigates this risk, but the objective of Ritme Nature on the long run is to influence policy making and affect change. For that it is important that powerful stakeholders realize what the problem is and what their action perspectives are.
8. For a sustainable future of the Observatory ownership is needed: an organisation or community that will continue to manage the CO community and will continue to work with the collected data. However, this organisation or community has to have trust in the sustainability of the platform before it makes sense for them to invest in it. For collaboration with organisations and institutional partners, agreements need to be institutionalized as well. Although the CO and its leadership can grow organically, too much ambiguity about its future can be off-putting for the partners. It can help to formalize agreements on the future ownership of the CO, however make sure that the research objectives and community management will remain representative for all involved parties.
9. The CO core group that has been working on the co-design of the platform has to reinvent itself and find another role or purpose within the CO. In the Belgian Demo Case, the co-design group found a new role for itself as the ‘planning committee’ of the Observatory. This could work for Ritme Nature as well.

9 Maasai Mara Citizen Observatory– the Demo Case in Kenya

9.1 Description of the Observatory

This Demo Case focus is supporting the balancing of sustainable livelihoods with sustainable biodiversity management in the Mara ecosystem. It aims to improve the quality of policies and their implementation through facilitated collaboration. The MMCO (Maasai Mara Citizen Observatory) will contribute to this by sharing and discussing information with a common purpose; providing a multi-stakeholder platform for:

- generating data, information and knowledge
- sharing data, information and knowledge
- accessing shared inventories and databases.

It aims to use the more structured interactions of collaborative planning processes as a stepping stone to empower the involved stakeholders over time. The main aim of this new citizen observatory is to involve local and international citizens in the collection and dissemination of relevant information that would be useful for balancing biodiversity and livelihood management in the Mara ecosystem.

The data collection method has been designed and demonstrated to the community; how the data is processed and stored – and who will have access is currently being discussed. This is a crucial stage as some of the collected data is sensitive information that should not be shared too widely. At the same time, the collected information is important and should reach enough stakeholders. The CO consciously aims to remain neutral in this political consideration.

9.2 Current Core group

Co-design sessions in the Kenya Demo Case were well attended; the workshops involved representatives from eleven stakeholders with attendance ranging from eighteen to thirty persons. As a consequence many stakeholders were involved, including:

- the Maasai Mara Wildlife Conservancies Association (MMWCA),
- Friends of the Mara,
- Kenya Meteorological Department,
- National Kenya Wildlife Services,
- Narok County,
- African Conservation Center,
- National Museums of Kenya,
- MaMaSe project,
- Maasai Mara University
- Individuals from civil society

The core group for the MMCO includes several members (usually around 2 or 3) for each stakeholder. In terms of resources, lack of skilled staff, time pressure, budget constraints and lack of logistical sup-port (mainly referring to attending the co-design workshops) were mentioned as challenges for participating in the CO.

9.3 Undertaken Engagement Activities

Recruitment for the co-design sessions was done bilaterally, inviting the desired stakeholders by phone or over email. After that the invitation was distributed in the relevant networks through word of mouth. The CO had valuable members join because they heard from the initiative through a friend or who hap-pened to be in town when a co-design workshop was taking place.

Currently the CO is finalising tool development with the co-design community, embedding the tools within their organisations, ensuring data validation and discussing how to share the data.

There were no activities organized specifically to engage citizen observers yet; the platform needs one more round of feedback/consultation for that. The first version of the platform (the data collection part) was launched however on two events: once during a public event of the MaMaSe project and once during the March for Elephants, Rhinos, and Lions organised by the Friends of the Mara

9.4 Target groups and other ambitions

From the GT2.0 Updated Stakeholder Analysis the top ten of most important stakeholders for the MMCO was derived (see Table 6).

Table 6 Most important stakeholders for the Maasai Mara Citizen Observatory

Most important stakeholders for MMCO	On board	Not yet	Drop out
1. Organized citizens: Friends of the Mara	X		
2. Subnational administration: County Executive	X		
3. Business /NGOs: Wildlife Conservancies Association (MMWCA)	X		
4. Business target group: Pastoralists (nomadic shepherds)		X	
5. Organized citizens: Tourists		X	
6. Subnational admin.: Water Resources Management Authority (WARMA)		X	
7. National Administration: National Kenya Wildlife Service	X		
8. National Administration: Kenya Meteorologial Department	X		
9. Technical expert: Upande	X		
10. Scientific target group: Universities (Egerton IWRM Knowledge/Maasai Mara University)	X		

9.5 Case specific strategies

The described characteristics of the Kenyan Demo Case in the previous paragraphs are the starting point for the tailored strategy for MMCO.

9.5.1 Engaging target groups

In engaging the most important target groups as described in the Stakeholder Analysis (D1.2) the MMCO has the following points to consider.

1. Tourists are a special kind of stakeholder group because individual tourists will never be engaged for a longer period of time. Still the continuous input of tourist wild life observations is important for the CO. Gamification fits very well in the fun and adventure- agenda of tourists. Visibility in the offline environment (screens) is great to raise people's curiosity. Also, if the relations with individuals in the target audience are short term by definition, it makes sense to build warm relations with their 'sources'. In this case: travel agents, guides and lodges.

2. The pastoralists are important for the CO both as observers and end-users of the information. They live a nomadic life and cannot leave their herd and are therefore not engaged in the community yet. For this group participating in the CO should be as easy as possible. The technical tools should be easy to use and through on-site training individual observers can be helped to upload their first observations. Of course it is also important to make it very clear how they can benefit from the collected data – sharing observations should be in their own interest.
3. The WARMA has been invited but not been present at the co-design sessions, their (potential) role and impact needs reconsideration based on that. This can have two reasons: lack of time or scepticism about the CO activities. In case of the first, it makes sense to take a step back on the engagement pyramid: from participation to consultation. This way they still feel engaged and will still support the initiative. If they are not joining because they are sceptical, the best strategy can also be to give them a consulting role. That way they get better insight in the project, feel heard and might become more positive. In any case, do not ignore their scepticism, it might spread to other stakeholders.

9.5.2 Scaling up

The ambitions within MMCO are to 'gamify' data collection, share results on screens (in lodges and government buildings) and to build an app. In order to scale up the MMCO platform has the following points of interest to consider:

4. Both for the pastoralist and for the tourists the CO will be fighting for attention with other activities. Given the general level of public literacy (described as low) it's important to design technical tools are easy to use and easy to interpret. The current weak internet connectivity calls for providing offline functionalities in the design. Gamification and offline visibility of the results are useful for this, but need to be accompanied by face to face training events where people (travel guides, pastoralists) can experience exactly how easy to use the tools are.
5. Community support and awareness. Perhaps due to general lack of public awareness on the related environmental issues, the I&B analysis reported lack of community support to the initiative as a whole (resistance from the community) and to data collection activities as potential obstacles for the CO. The importance of providing public outreach activities and platforms (i.e. social media) to sensitize the public about the topic and gain their support was also stressed by respondents in the Incentives & Barriers Analysis.
6. Some of the data collected is sensitive information that might be misused. Finding a balanced way to store the data in a secure place while simultaneously sharing the results to make an impact is important. Failing to do so might politicize the platform. The platform getting political is a risk, which might be avoided by a clear (unpolitical) objective for the data collection. Maybe the University can take the lead in defining the frameworks for the data that should be collected and how they can be interpreted.

9.5.3 Sustaining

In order to sustain itself, the MMCO platform has the following points of interest to consider:

7. As mentioned before; Tourists are a special group to engage in a continuous way. Their turn-over needs to be addressed appropriately for the CO to be sustainable. For sustained participation of tourists the CO should build warm relations with their 'sources'. In this case: travel agents, guides and lodges. It would be worthwhile to invest in social events and training about the relevance and

fun of the CO for these groups – so that they can and will continuously recruit new badges individual tourists for the CO.

8. For a sustainable future of the Observatory participating organisations and communities have to have trust in the sustainability of the platform before it makes sense for them to invest in it. "Formalization of working channels with relevant institutions" was suggested in the I&B analysis to facilitate their involvement in the CO. For collaboration with organisations and institutional partners, agreements need to be institutionalized as well. Although the CO and its leadership can grow organically, too much ambiguity about its future can be off-putting for the partners. It can help to formalize agreements on the future ownership of the CO, however make sure that the research objectives and community management will remain representative for all involved parties.
9. Keeping pastoralists and citizen observers engaged for a longer period of time can be challenging; these observers are assets of the platform that need proper maintenance. Once a nice group of observers is active on the platform it is important not to grow comfortable. Instead their motivation should be tracked, their uploads rewarded and their progress or growth as an observer should be visible somewhere.

10 Niti Luli Silowana Complex – the Demo Case in Zambia

10.1 Description of the Observatory

Natural resource management in the Silowana Complex suffers from continuous natural resource degradation and poverty. Conservation efforts until now have limited positive impact on the local scale. This is partially because of insufficient attention for the needs of the Village Action Groups (VAGs) from the side of the Community Resources Board (CRB) and partially because of inadequate information and lack of coordination: communication and transparency between different governance levels in the planning and implementation of programmes is troublesome.

The Zambia Demo Case aims to design a platform supporting the regular work of Village Action Groups (VAG) and Community Resource Boards (CRB), a structure mandated under the Wildlife Law to realize a community-based natural resource management (CBNRM) approach. Ultimately, the CO aims to increase the influence communities have on decisions affecting their lives and livelihoods; by

- improving the practice of community consultations in the planning and design of policies,
- giving community members more opportunities to contribute feedback
- controlling how this is recorded
- expanding to the evaluation of projects and plans, reflecting on outcomes (later).

Currently, the CO has changed technology partners, and the co-design will go into another round of adjustments taking into account the new technologies. Over the next months, the Niti Luli CO will be testing some of the technology (electronic version of a known data collection) and engage in the initial mapping of the area. A second roadshow will be organized to validate the co-design, technology exposure and to begin the initial activities, including creation of local level logos and pilot volunteers

10.2 Current Core group

In its set-up Niti Luli encountered many and diverse challenges. Despite a lot of enthusiasm at the start, the context of the Zambian Demo Case turned out to be much more complex for initiating a Citizen Observatory than anticipated. The approach towards potential partners was adapted with more time invested in ensuring adequate engagement and discussing the suitability of the CO at the start. Since each VAG has ten sub groups, this approach led to the inclusion of one instead of two Village Action Groups (VAG).

Zambia Demo case now has a co-design group under the hospices of the VAG (citizens), with district level representatives of the core CO stakeholder groups (policy/decision makers and scientists/data aggregators). The complete Zambian Core Group currently consists of roughly 30 people, including:

- representatives of all 10 (sub) Village Action Groups - representing the citizens,
- the community facilitators officers of the CRB Sesheke West,
    - some of the neighbouring CRB (1st upscaling target),
- district officials (District administration and agricultural office),
- local representatives of national departments (Parks&Wildlife, meteorology)
    - the representative of the Dept of Forestry will join in the next round
- the Chair of the local Council,
- the executive officer of the local representative in the National Assembly,
- GroundTruth2.0 project partners: WWF staff, IHE, TAHMO and Upande, who will join in the future

10.3 Undertaken Engagement Activities

The demo case is being implemented with the Sesheke West community Resource board which has 10 communities. Three co-design sessions, two preparatory workshops with VAGS and CRB and nine village meetings where held with a combined total of 28 stakeholders and 342 community members participants in village roadshow.

In order to engage core group members The Niti Luli CO organized introductory one on one meetings in Sesheke and in the capital Lusaka. As well as community meetings and consultative workshops with CRB and high-level political and CSO stakeholders. The engagement with the communities during the co-design process at district, sub-district and community level was challenging. The roadshow from village to village to engage as many potential members as possible was an innovation intended to overcome some of the communication barriers that were encountered.

Overall, the Observatory is received with enthusiasm in the villages, but people will need guidance to get used to the technologies. Not every member will be registered: the observatory might have many members, but only a few access points. Key challenge for the engagement for this CO will be to manage attitudes, both communities and policy-makers are stronger at identifying problems than considering what role they might play in improving situation

10.4 Target groups and other ambitions

From the GT2.0 Updated Stakeholder Analysis the top ten of most important stakeholders for the Niti Luli was derived (see Table 7).

Table 7 Most important stakeholders for Niti Luli

Most important stakeholders for Niti Luli	On board	Not yet	Drop out
1. Organized Citizens: VAGs	X		
2. Local decision makers: CRBs	X		
3. Local administration: Council and Ward Councillors	X		
4. National decision-maker: Departmt. of National Parks & Wildlife (DNPW)	X		
5. Technical and issue expert/'business' target: WWF	X		
6. Subnational administration: District officials	X		
7. Issue experts: Donors operating in the area	X	X	
8. Local legislation/administration: The Barotse Royal Establishment (BRE) - including representatives of the Indunas		X	

10.5 Case specific strategies

The described characteristics of the Zambian Demo Case in the previous paragraphs are the starting point for the tailored strategy for Niti Luli.

10.5.1 Engaging target groups

In engaging the most important target groups as described in the Stakeholder Analysis (D1.2) Niti Luli has the following points to consider.

1. Engaging more donors operating in the Silowana complex as partners can add powerful 'promotors' (see chapter 5) to the Niti Luli CO: both as issue experts and as gateway to the local communities. For example inclusion of the Niti Luli platform in ongoing capacity development agendas of donors and stakeholders such as WWF, Nat Association CRBs and CBNRM Forum, Action Aid and others is a promising way to provide guidance in using the CO in a sustainable way.
2. Although the Council and Ward councillors already do represent local administration, the BRE and representatives of the Indunas are not specifically linked to the CO yet. It is important to keep an open eye for this special subgroup. Targeted briefings are planned to this end.
3. The weak internet connectivity and other barriers for communication make the part of reaching out to potential stakeholders already challenging. A second roadshow to begin the initial activities, including pilot volunteers is therefore planned. Consultative (offline) workshops with local rangers, technical experts of DNPW and maybe a small think shop with forestry department are planned to overcome the communication barriers. As well as targeted briefings of schools and religious leaders who can then support membership and spread the word.

10.5.2 Scaling up

In order to scale up the Niti Luli platform has the following points of interest to consider:

4. Currently communication is difficult and mainly done face to face. This is resource intense and the same method can hardly be applied when the CO needs to scale up and reach a multitude of the current partners. Enough attention should be given to exploring other ways and forms of communication that are dependable and manageable.
5. In the future the observatory might have many members, but only a few access points because of the internet connectivity and literacy. The Niti Luli Observatory will therefore find an alternative way of keeping track of the (activities of the) CO observers.
6. Community support and awareness. According to the Incentives and Barriers analysis public ignorance on environmental issues could hinder the growth of this CO. Although there is agreement on the issue, both communities and policy-makers have trouble recognizing their own role in improving the situation. The planned (soft) launch events, with the direct involvement of stakeholders, should be very effective to help partners recognize and demonstrate their role.

10.5.3 Sustaining

In order to sustain itself, the Niti Luli platform has the following points of interest to consider:

7. Members of the Village Action Groups are elected every five years – this means that every five years the CO has to start over with unexperienced citizen representatives that might have different interests and priorities than their predecessors. A rough outline of the actions every five year to lobby and train the new VAG members can already be developed.
8. For a sustainable future of the Observatory participating organisations and communities have to have trust in the sustainability of the platform before it makes sense for them to invest in it and share responsibilities. The discussions held at the very beginning of the co-design process were helpful for this trust, for institutional partners formalizing agreements on the future ownership of the CO can also help.
9. Remaining a neutral role between the VAG, district officials, donors and other stakeholders can be as challenging as important for a Citizen Observatory that means to address accountability and transparency issues. Firm inclusion of a neutral partner, an issue expert, can provide credibility and weight to the CO so it can easier set its own course.

11 MeetMeeMechelen– the Demo Case in Belgium

11.1 Description of the Observatory

In the Belgian DC the stakeholders want to address the air pollution and noise disturbance in the city of Mechelen which have an impact on health, quality of life and social cohesion in the city neighbourhoods and villages. MeetMeeMechelen will help address this by providing an online and offline meeting place where information and knowledge about air quality and ambient noise is made accessible for everyone. The CO will be a place to launch civilian campaign to measure noise and air quality in city neighbourhoods, citizens data will be integrated them with existing information on the CO platform where they can be easily accessed, shared, analysed and discussed thus stimulate a local debate how to address the issue, and taking up a role in policy preparation specifically regarding local mobility (planning of cycling infrastructure and circulation plans).

In October and November 2017, a first joint measurement campaign for air quality has been organized. 24 volunteers measured black carbon concentrations along 40 kilometres of cycling paths for two weeks. A second measurement campaign on air quality started in February 2018, enabling the CO to map both spatial and temporal changes in urban air quality. The CO is preparing as next steps a sound monitoring campaign, further air quality campaigns and a workshop ‘How to improve our air quality’.

11.2 Current Core group

A trajectory including five co-design workshops was organized in Mechelen with a varying number of participants (7 to 17). During this process the initial stakeholders, being the city councillor for environment, the city administration, the Flemish administration for environment and the local environmental advisory board (organized citizens), were joined by a local environmental action group, a nature conservation agency, neighbourhood committees, a technological activity centre and several citizens concerned about air quality and noise. In total 26 participants joined the co-design and planning meetings. For the monitoring activities (air quality campaigns) 35 participants joined the CO.

Currently MeetMeeMechelen has a flexible and balanced core group of around twenty people; five members that are always present plus 10 to 15 members that visit frequently. Apart from those, the Citizen Observatory has a list of 130 contacts that expressed interest in MeetMeeMechelen activities and might join future campaigns.

11.3 Undertaken Engagement Activities

Two stakeholder meetings with the initial stakeholders addressed the selection of topics and possible other partners. Dedicated engagement activities have been limited to emails and phone calls at the start of the project and for the launch event. The citizen observatory ‘Meet Mee Mechelen’ was launched in September 2017 with a stand at Car-Free Sunday in Mechelen, reaching a broad audience of about 200 people and 40 new registrations for the observatory.

The most successful activities in terms of engagement for the Belgian Demo Case have been the monitoring itself, organised as a campaign, and the public event organised to present the results. The first measurement campaign attracted press interest, leading to two newspaper articles and a boost in interest in the CO, with new participants joining the initiative. At the end of December 2017, the results were presented by the co-design group (volunteers as well as representatives of the City of Mechelen) and GT2.0 staff to an audience of about 45 interested citizens at a dedicated public discussion evening.

11.4 Target groups and other ambitions

From the GT2.0 Updated Stakeholder Analysis the top ten of most important stakeholders for Meet-MeeMechelen was derived (see Table 8).

Table 8 Most important stakeholders for MeetMeeMechelen

Most important stakeholders for MeetMeeMechelen	On board	Not yet	Drop out
1. Organized citizens: Cycling federation	X		
2. Organized citizens: Members of neighbourhood initiative on air quality	X		
3. Local legislator: Council member (chair of council’s environmental group)	X		
4. Local administration: Environmental department, City of Mechelen	X		
5. Local Administration: Mayor’s office, Smart City Group	X		
6. Technology expert and data aggregator: VITO	X		
7. Individual Citizens: ‚unorganized but environmentally interested‘	X		
8. Investor and issue expert: LNE	X		
9. Organized citizens: „the other side“ – e.g. automobile federation		X	
10. Organized citizens: Youth organizations and school or student groups		X	

MeetMeeMechelen now has a stable group of participants, it has the ambition to have 500 individuals registered interested in joining future monitoring campaigns at the end of the GT2.0 project.

11.5 Case specific strategies

The described characteristics of the Dutch Demo Case in the previous paragraphs are the starting point for the tailored strategy for MeetMeeMechelen.

11.5.1 Engaging target groups

In engaging the most important target groups as described in the Stakeholder Analysis (D1.2) MeetMeeMechelen has the following points to consider.

1. Although the uptake of the CO amongst the citizens of Mechelen is good, MeetMeeMechelen now engages mainly the "environmentally interested" citizens. To have a balanced discussion on improving air quality and noise levels, the 'other side', aka the inveterate motorists and the noise makers, should participate in the discussion as well. It is unlikely that these target groups will participate in the monitoring, but they will be invited to upcoming workshops about ‘dealing’ with the monitoring results.
2. Another target group mentioned in the stakeholder top 10 are the youth organizations, school or student groups. With the current uptake of MeetMeeMechelen even without them, these groups are less of a priority. Still engaging these groups via guest lectures of members of the current core group could be relatively easy and quickly increase participation numbers.
3. The current core group is very balanced, with representatives of (local) authorities and citizens discussing at an equal level. In communicating the results of the monitoring campaigns the divers interests become evident; the results of MeetMeeMechelen might be sensitive for policy makers

and the municipality can only communicate information that is 'approved' within its organization. This requires careful framing of the public messages of MeetMeeMechelen, until now the municipal approval has been given to all communication. If in the future, this approval will not come, the message will be communicated without the logo of the municipality.

11.5.2 Scaling up

In order to scale up the MeetMeeMechelen platform has the following points of interest to consider:

4. Citizen Science is rather popular in Belgium; MeetMeeMechelen has received a lot of attention and a lot of people want to participate or 'do something'. There is a risk that the platform gets overwhelmed with too much attention. MeetMeeMechelen therefore has no specific to organise activities focused on recruitment. Instead the publicity around the CO, launching new monitoring campaigns etc., is expected to generate enough traffic towards the MeetMeeMechelen website, on which two forms to register with the CO and to contact it are featured.
5. The Belgian Demo Case aims to scale up not only in numbers of participants, also by including different topics and different municipalities. It will be interesting to discover if the monitoring campaigns on other topics (sound, heat stress) and in other municipalities (Antwerp) attract the same attention. The same strategy as used for air quality will be followed: for noise a monitoring weekend is currently being planned and in Antwerp 4 co-design meetings have been announced. The co-design process will be accelerated in Antwerp, because the GroundTruth2.0 project partners are now experienced with the methodology.
6. Similarly the continued success of monitoring campaigns on the same topic is is not yet given. The third round of monitoring Air Quality is planned in May-June. For this the Co will reach out to participants of the previous two campaigns as well as to the new registrations that came in through the website. Each of them will also be asked to activate their network (snowball method) and media attention will be sought.

11.5.3 Sustaining

In order to sustain itself, the MeetMeeMechelen platform has the following points of interest to consider:

7. Because of the chosen strategy of campaign monitoring for MeetMeeMechelen retention of participants in between campaigns, or replacing them before each new campaign, is a relevant issue. Currently the participants are updated about the CO in between campaigns via a mailing list. Also events are organized around the results of the monitoring campaigns and the follow-up (how to improve air quality) - not only are these events crucial for the dissemination of the results, the events also help to spread the word about the Observatory (recruit new members) and, very important, provide participants with the very relevant feedback on their actions. In a way these result-oriented events also have a function for thanking the participants and demonstrating how valuable their work was. If done right, not much more is needed to retain them until the next measuring campaign.
8. In MeetMeeMechelen the participation of local authorities (specifically the city councillor) has been paramount for the success of the CO. The open discussion between the municipality and citizens during the co-design created a platform that is now valuable for both. Although established now, it remains a balancing game to serve the interest of both citizens and institutional partners. Retention of institutional partners will probably keep requiring bilateral discussions beyond the planning meetings.

9. The importance of an issue expert to depolitize the discussion should not be underestimated. On the topic of air quality the GT2.0 Demo Case leader had the expert knowledge to propose measuring methods, interpret results (in a undisputed neutral way) and to shortcut in-depth discussions that threatened to become political. For different topics an expert that is as knowledgeable would be required.

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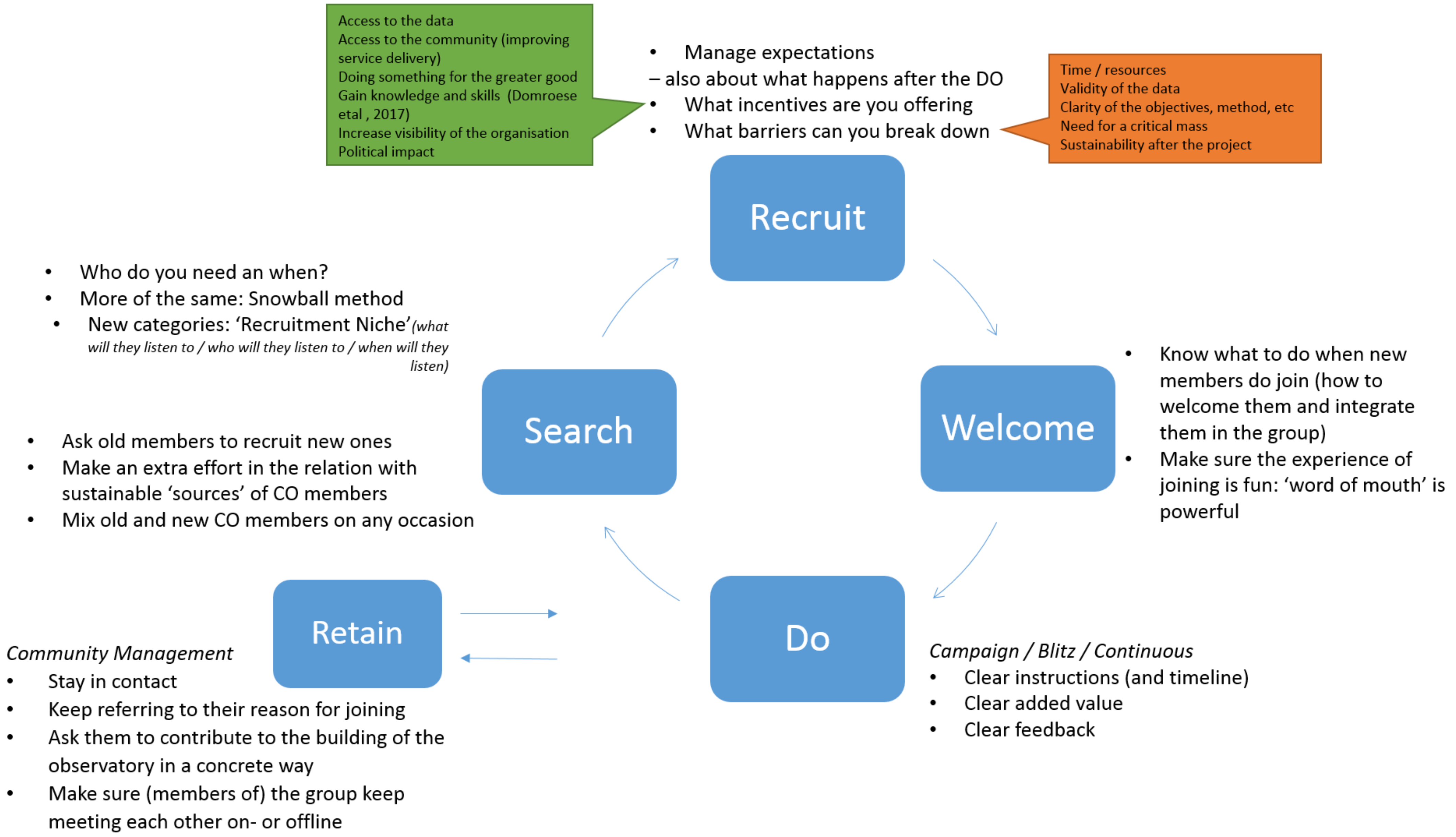
Annex 1 Overview Engagement cycle



Annex 2 Before – During – After an Event (Launch/Campaign/Blitz)

Before

Organisation

- Arrange for a specific time and location to start (makes it easier to invite people)
- Appoint someone to be 'Point of Contact' for incoming questions (media and public)
- Specify the purpose of the event / activity in a bite-size 'easy-to-communicate' form
- Make sure people can find information online about the Observatory (access to the platform?) before the event – so that they can 'triangulate' the information on the invitation when they receive it.

Invitations and Outreach

- Article in the local news
- Facebook event
- Personal invitations to all people that have shown interest in the Observatory in the past
- Targeted invitations to relevant stakeholder groups
- Snowball method: all co-design members bring one invitee
- Poster / Flyer in local libraries and other relevant locations

Materials

- News item
- Overview of the Observatory (Flyer or something the like), featuring:
  - Our challenge
  - Our plans
  - Our approach
  - Your role
  - What is GT2.0
- Large print-out map of the Observatory area
- Stickers or Post-its (for people to place on the map and comment on the issue)
- Sign-up form for people to join the observatory
- Short descriptions of the tasks people can sign up for
  - + manage expectations: how long / how much time will it take, when will they be contacted about their sign-up, address case-specific incentives and barriers if you can
- If applicable: 'welcome / you are part of it now' tangible take-aways (promotional gifts)
- Postcards *("I was at the … event – you might be interested too")*
- If applicable: short description of how to download the app or access the platform
- Informed consent

During

- Make it fun!
- Put co-design members in the spotlight
- Make sure the team is recognizable (Tshirts, hats, etc) so they can be approached for questions

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- Photos (don't forget informed consent)
- Interview movies with participants (why is this relevant etc.) to share as promotion afterwards (don't forget informed consent)

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- Collect contact details from anybody who's interested (write down the first follow-up action for each new contact)

After

- Follow-up with collected contact details
- Follow-up with volunteers that signed up for different tasks
- Follow-up with co-design group: "Well done!"
- Share pictures and movies on website, Facebook page and with regional media
- Send collected postcards
- Digitalize the map with stickers / post its and share it with the pictures movies
- Update member / participants lists

Annex 3 Stabilizing the Demo Case Community

Self-Assessment Characteristics of the Demo Case CO community – so far

To turn a group of people into a community, certain ingredients are needed:

- A group with a critical mass of people willing to do 'leg work'
- with a shared interest they identify with/feel passionate about
- guided by agreed norms people respect and 'enforce'
- Formed around (informal) leaders that spark ideas, energize the group, and keep efforts on track

Based on your observations in the different co-design workshops – assess, in keywords, the current status of your community according to those four criteria

Critical mass of people willing to volunteer/actively contribute
Passion for and emotional identification with the issue
(un)written rules about how to behave within the group
(Informal) Leaders and followers

Strengths and Weaknesses of the CO Community

What is the group dynamic in your workshops in the wider project context? Is it helpful or harmful for the development of the community, i.e. to achieve critical mass of volunteers, sufficient emotional connection, evolving community norms, and a supportive leader-follower dynamic

	Helpful (strength) *to establish a flourishing community*	**Harmful (weaknesses)** *to establish a flourishing community*
Internal *attributes of the CO community*		

Resulting Engagement actions

How are you planning to counter community weaknesses?

How are you planning to capitalize on the community strengths?

Support needed *(please specify, if possible, from the WP1 team, from other Demo Cases or from a specific GT2.0 partner)*:

Potential community leaders and community organizers

Do you have people in your co-design group that might be able and willing to

[note your potential candidates]

- Provide engaging text, image and video content for platform and newsletters?
- Respond to comments and queries of core community members?
- Organize and participate in events to build community and boost awareness of the observatory?
- Build relationships with core community members, potential community members, interested professionals and journalists?
- Stay up-to-date with trends and developments on the observatory topic?

Do you have people in your co-design group that have a personality suited to

- Inspire and energize people?
- Act as credible representatives of the CO 'cause'?
- function as a 'point of truth' (in discussions) because of his/her expertise on the topic
- make sure the community doesn't lose connection with 'the rest of the world'
- come up with new ideas?

What kind of personalities are you still missing? Where can you find these?

What role do you see for yourself as Demo Case leader?

Now

In a year

At the end of the project

Resulting engagement actions

What could you do to foster people as community leaders/organizers in their roles?

Support needed *(please specify, if possible, from the WP1 team, from other Demo Cases or from a specific GT2.0 partner)*:

Annex 4 What should be in a welcome package?

When the stakeholders are convinced and enthusiastic, make sure to guide their first steps in the observatory. The first priority for the new observer is to provide a full induction as soon as - or even before - s/he commences work. The purpose of induction is simply to enable the volunteer to get off to the best possible start in his/her role and within the organisation. There are five main types of information they need to do so:

1. Organisational information - e.g. background of the project, objective of the observatory, key players, size and structure.
2. Procedural information - e.g. health and safety, code of practice, communication procedures.
3. Role-related - e.g. tasks, responsibilities, training, equipment and materials, supervision.
4. Personal - e.g. travel expenses, etc.
5. Team-related - e.g. who they will work with, availability, possibly meetings.

As well as deciding what new observers need to know, you will need to plan:

- Who will tell them - While you, as demo case leader, will probably take the major responsibility, there may be other staff or stakeholders who should be involved in explaining the role.
- When and where will they be told - It is not a good idea to try to get all this information into one meeting. You don't want to overwhelm the observer before s/he has even started. Prioritise the information and spread it out over a few days or weeks. Think about the information observers need to be aware of straight away.
- How will you convey all this information - Try to vary the ways in which the information is presented as well as spreading it over a period of time. Some details may need to be agreed with each individual, but most of it can probably be covered with a group. What resources and written materials will you need?