



An Ecosystem of Citizen Observatories for Environmental Monitoring

CoP on UN Sustainable Development Goals and Citizen Observatories - SDGs CoP

Inception Report

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Final Report

WeObserve Partners





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List of abbreviations and acronyms

Abbreviation	Meaning
CoP	Community of Practice
COs	Citizen Observatories
CS	Citizen Science
SDGs	UN Sustainable Development Goals
NSOs	National Statistics Offices
IAEG-SDGs	Inter-agency and Expert Group on SDG Indicators
NGOs	Non-governmental Organizations

1 Introduction

1.1 Background of the WeObserve project

The WeObserve consortium aims to bring together the current set of European H2020 COs, to enable improved coordination between these COs and to promote related activities at the regional, European and international level. WeObserve will coordinate and deliver a crucially needed CO knowledge framework to avoid duplication, share best practices as well as identify barriers and synergies. This framework will also promote standards to ensure interoperability, maximize impact and facilitate uptake by environmental authorities to ensure the sustainability of CO initiatives. Raising awareness and sharing this knowledge framework will not only foster the development of a sustainable ecosystem of citizen observatories, but also extend the geographical coverage of citizen science to new communities. The anticipated knowledge framework will span across sectors, national boundaries and language barriers as well as the public and private sectors.

The aim of WeObserve is to create the conditions for a sustainable ecosystem of COs that can tackle the identified challenges of awareness, acceptability and sustainability. A coordinated and coherent approach is therefore needed among existing COs and relevant communities, with inclusion of past, present and future projects at national, regional, European and potentially international scales. This approach underpins the action-oriented mission of WeObserve, which is to: *Move citizen science into the mainstream by building a sustainable ecosystem of citizen observatories and related activities.*

1.2 Purpose of the WeObserve Communities of Practice

In order to consolidate practice-based knowledge on COs that is dispersed among various stakeholders, WeObserve Task T2.2 launches and coordinates dedicated Communities of Practice (CoPs) as a key mechanism for consolidating the knowledge inside as well as beyond the WeObserve consortium.

Initiating the CoPs will serve as the vehicle for sharing information and knowledge on selected key thematic topics related to COs, strengthening the knowledge base about COs in order to move citizen science into the mainstream of environmental management and decision making. The WeObserve Communities of Practice (CoPs) are therefore the (virtual) place where diverse stakeholders who share a joint (practice-oriented) interest in citizen science can work together towards concrete solutions by collating their experiences and lessons learned.

1.3 Purpose and structure of this document

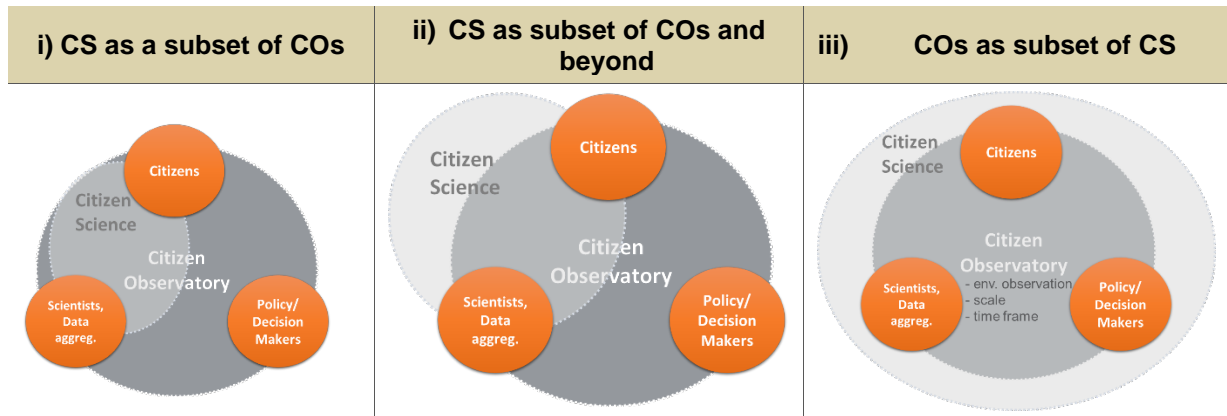
Before starting its activities, each CoP needs to define its objectives in a way that they are specific, measurable, achievable, relevant and timely (SMART), whilst taking into consideration best practices from relevant past and/or ongoing initiatives. The objectives for SDGs CoP (UN Sustainable Development Goals and Citizen Observatories) are captured in this inception report, as well as the planned activities, target audiences, ways of working and timeline for SDGs CoP.

This document will be approved by the 'foundation members' of the CoP and will be made public as reference for other people who may express interest in the future. Future members should adhere to the principles outlined in this document to join the SDGs CoP.

2 Scope of SDGs CoP – UN Sustainable Development Goals (SDGs) and Citizen Observatories (COs)

2.1 Citizen Science and Citizen Observatories

In the context of the WeObserve project, the core focus is on citizen observatories rather than citizen science at large. During the Engage CoP (another CoP under the WeObserve project) Launch Workshop in Geneva in June 2018, the following delineations between Citizen Science and Citizen Observatories were discussed (see table).



Consensus among the Engage CoP launch workshop participants emerged on version iii), namely that COs present a specific form of Citizen Science, characterized by their focus on observing the environment (rather than other phenomena), the scale of their activities (typically local) and their time line (typically long term). SDGs CoP adopts this definition and scope as the other CoPs launched within the WeObserve project.

2.2 Problem statement and relevant themes

SDGs are a set of 17 goals with 169 targets adopted by 193 UN member states in 2015 to mobilize international action in areas of critical importance for humanity and the planet over a 15-year period. Monitoring progress towards achieving the SDGs requires constant scientific input, and partnership between governments, private sector, civil society and citizens. COs/CS has a potential to leverage SDG implementation in two ways: monitoring progress and driving change. However, knowledge and awareness on this issue within the COs/CS community and among the custodian agencies, relevant UN bodies and other policymakers is rather minimal. Hence, a knowledge base should be created, and a more general methodology and better COs design procedures should be developed.

The specific themes that were deemed relevant for this CoP by the participants of the CoP SDGs launch workshop (held in Venice on 29 November 2018) are the following:

Related to scale (Local vs. Global)

- How can local COs could contribute to global SDGs
- Local observations for policy making
- Upscaling from local COs to national and global level projects
- Integration between COs
- Tracking and mapping on how local actions lead to global impact
- Connecting global SDGs to local levels

Related to SDG monitoring

- Measuring, monitoring and evaluation of data towards the SDGs (identifying what works and disseminating good models)
- Support of COs for reporting (e.g. Aichi targets)
- COs to address data gaps (especially Tier 3, but also Tiers 1 & 2 indicators)
- Integration of COs data into Tier 2 & 3 indicators
- Open data for SDG monitoring
- Integration of COs data with open science agenda
- Feasibility of implementation (using COs data for SDG monitoring)
- Monitoring Progress
- Ensuring COs data quality
- Validity, and validation of observations
- Value of observations
- National level SDG monitoring and proxy indicators
- Expanding the base of data available
- Looking at best practices
- Mapping of COs towards the SDGs
- COs for ground truthing and official monitoring of the SDGs
- How to use COs data to achieve the SDGs
- Quality management
- Finding examples where COs are/can be part of SDG monitoring
- Working together with NSOs to understand what their protocols and requirements are
- See where the COs fit in outside the environment domain

Related to Specific SDGs:

- COs for SDG 6 (Clean Water and Sanitation)
- SDG 6.3.2 (Proportion of bodies of water with good ambient water quality)
- SDG 15 (Life on Land) and CS for biodiversity
- SDG 13 (Climate Action)
- SDG 11 (Sustainable Cities and Communities)
- SDG 11.5 Urban risk reduction
- SDG 1 (No Poverty)
- SDG 2 (No Hunger)
- Flood/Drought/Snow and prevention and assessment of such natural hazards
- Food system and indicators
- Identifying key SDG targets and indicators for linking SDGs and identifying potential
- Awareness on energy consumption
- Awareness on pollution

Related to Behavior Change

- Build awareness and increase participation
- Training and education
- Transformations
- COs for community-based monitoring of the SDGs
- How COs can contribute to achieving the SDGs
- What is the impact potential of COs at the SDGs level
- Science-society relations & literacy as an enabler towards the SDGs
- Making socio-technical platforms adapted to people and not people adapt to socio-technical platforms
- CS as a facilitator of change
- CS for implementing SDGs behavioral change
- Mainstreaming & raising awareness on the SDGs
- Implementing an action plan
- Can CS be a factor for cultural revolution
- Change being in line with the SDGs
- Promote values and behavior change

Conclusion on CoP SDGs thematic focus:

Conclusion on CoP SDGs thematic focus: In order to keep the scope of the CoP SDGs manageable and ensure that tangible results can be achieved till the WeObserve end date, following themes that were relevant to most participants of the launch event are prioritized:

- ***SDG Monitoring:*** *The opportunities and challenges COs/CS offers for SDG monitoring and implementation*
- ***Transformations:*** *Learning outcomes of COs/CS and behavior change*

2.3 Objectives

Synthesizing the discussions held during the SDGs CoP launch workshop in Venice on 29 November 2018, the main objective of this CoP is to create a knowledge base within the COs/CS community and among custodian agencies, relevant UN bodies and policymakers on the opportunities and challenges COs/CS present in achieving the SDGs.

Following specific objectives are determined for this CoP:

1. Understand the opportunities for COs/CS in SDG monitoring and implementation, integrate these into the WeObserve knowledgebase/community and learn from existing partnerships (i.e. projects and custodian agencies, national statistical offices)
2. Advance our knowledge of how COs/CS can contribute to behavior change towards achieving SDGs.

3 Business case

3.1 What are the needs for this CoP?

As mentioned in the problem statement section above, monitoring progress towards achieving the SDGs requires constant scientific input, and a collective effort from all levels of society including governments, private sector, civil society and citizens. COs/CS has a potential to leverage SDG implementation through monitoring progress and driving change. However, knowledge and awareness on the SDGs within the COs/CS community and among the custodian agencies, relevant UN bodies and other policymakers is rather minimal and/or quite dispersed. Hence, a knowledge base within the community should be created, and a more general methodology and design procedures should be developed.

3.2 What are the benefits of the work done by the CoP?

CoP SDGs serves as a platform for COs/CS practitioners to engage in an open debate on the SDGs and the contribution COs/CS can make in achieving them, and ultimately increase understanding and knowledge around the topic within the COs/CS community, custodian agencies, relevant UN bodies, National Statistics Offices (NSOs) and other policymakers.

The methods captured in the WeObserve Cookbook can be used by many different types of organizations when they are designing and developing their own COs. This will help strengthen existing as well as emerging CO initiatives and projects. With the Cookbook they will be better able to co-design the citizen observatories in a meaningful way, and to engage citizens throughout the process.

4 Target audiences for SDGs CoP

The different target audiences mentioned during the SDGs CoP launch workshop:

- Citizens
- Local communities
- Local authorities
- Scientists
- NGOs
- UN
- EU
- NSOs
- Policymakers
- Governments
- Custodian Agencies
- Citizen Science Global Partnership (CSGP)
- ECSA SDGs and CS Maximization Task and Finish Group
- Citizen Science COST Action Policy WGs (WG3 & WG4)
- Citizen Science Association (CSA) Data and Metadata WG
- Other WeObserve CoPs (Engage CoP, Impact CoP, Interoperability CoP)

These can be narrowed down to the following stakeholders/groups:

- **Citizens and local communities** (those that are already engaged or are interested in setting up a CO)
- **NGOs** (civil society)
- **Policy makers** – at the local, national and international level (Local Authorities, Governments, EU, UN, Custodian Agencies, etc.)
- **Research/academia**
- **Networks** (e.g. CSGP, ECSA and CS COST Action)

5 SDGs CoP Activities

5.1 List of activities

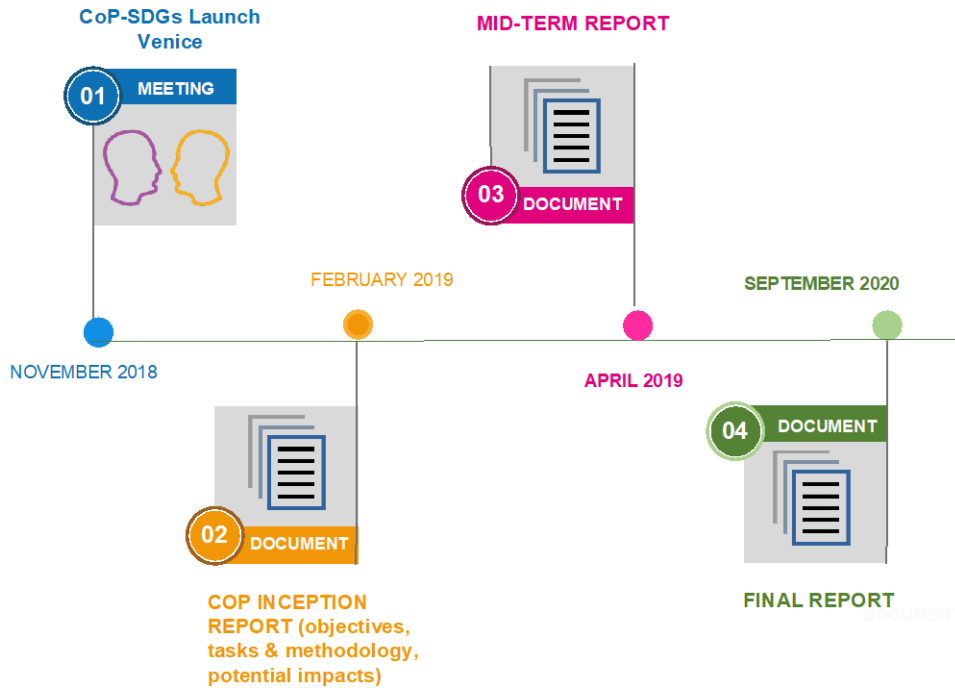
In order to achieve its objectives, SDGs CoP aims to undertake the following activities:

Objectives	Activities/Tasks
<p>1. <i>Understand the opportunities for COs/CS in SDG monitoring and implementation, integrate these into the WeObserve knowledgebase/community and learn from existing partnerships (i.e. projects and custodian agencies, NSOs)</i></p>	<p>1.1. Undertake a mapping exercise of CO/CS projects and their potential contributions to Tiers 1 to 3 indicators based on the Tier Classification for SDG Indicators by IAEG-SDGs</p> <p>1.2. Bring the identified CO/CS projects and relevant custodian agencies together through the SDGs CoP forums and/or workshops</p> <p>1.3. Moving to the national level, compile a list minimum data requirements/standard that would need to be met if data from CO/CS were to be considered usable for SDG reporting (by contacting NSOs)</p>
<p>2. <i>Advance our knowledge of how COs/CS can contribute to behavior change towards achieving SDGs.</i></p>	<p>2.1. Set up a glossary to create a common base of understanding on behavior change and transformations</p> <p>2.2. Review and analyze behavioral theories and models that could help guide the research on the theme</p> <p>2.3. Collate existing practices on how COs/CS have contributed/are contributing to behavior change (learning outcomes of CS) from the literature and study their potential link to the SDGs</p> <p>2.4. Discuss how COs/CS project design could be improved to achieve impact on behavior to address the SDGs</p>

5.2 Overview of timeline

In principle, the WeObserve CoPs will continue to exist only as long as they deliver value for their members in terms of achieving the jointly set objectives. After the end of the project, the CoP management could be transferred to GEOSS in the form of GEO activities or to ECSA in the form of a sub-working group.

The general SDGs CoP timeline during 2018-2020 consists of the following:



6 Communication agenda

It is vital that SDGs CoP not only communicates effectively amongst its members but also outside of the group. Therefore, the communication strategy of SDGs CoP is based on the communication strategy of the WeObserve project, to ensure that the communication from the CoP is in harmony with the overall communication of WeObserve.

6.1 Internal communication

SDGs CoP already has an email list and subscribing to the email list is mandatory to be part of the group. In addition, progress of the discussions and minutes of meetings will be recorded and organized in a GDrive that will be provided and managed by WeObserve ensuring harmonization and preservation. Following SDGs CoP internal discussions, a task force of each CoP will draft a solution proposal in the form of best practice, a profile or a standard. The resulting documents will be presented to a broader audience, comments will be incorporated and the final solutions will be agreed.

6.2 Communication with the WeObserve Consortium

Activities of the SDGs CoP need to be communicated to the WeObserve consortium for two main reasons:

1. The WeObserve consortium needs to be aware of the activities of each CoP.
2. The WeObserve consortium can assist in getting the message of the activities of the CoPs out to a wider audience.

The knowledge platform of the WeObserve project will have a dedicated space where CoP members can report on their activities to the other WeObserve partners. Regular updates, at least once a month, are expected.

6.3 External communication

In terms of communication to the wider public, the SDGs CoP results can be communicated and disseminated via demonstration, video, the WeObserve cookbook.

Also, WeObserve will be an important platform. Here the highlights of SDGs CoP activities (for example news releases or upcoming events) will be shared. These will also be communicated through the social media, i.e. Twitter and Facebook.

7 Foundation members

The foundation members are those who have been involved in SDGs CoP from the beginning by attending the launch workshop in Venice on 29 November 2018 or by having signed up following the first call for registrations. Foundation members can either take the role of participant or observer. Active participants are expected to take part in the CoP telcos, F2F meetings, etc. as much as possible, and actively contribute to CoP activities. Observers are included in the email communication and have access to the CoP online workspace (google drive).

A list of the foundation members for SDGs CoP can be found in Table 1 below.

TABLE 1: FOUNDATION MEMBERS OF SDGs CoP

Last name	First name	Organization	Role
Abrate	Tommaso	WMO	Active Participant
Ajates Gonzalez	Raquel	University of Dundee	Active Participant
Anonymous member	Anonymous member	CSIRO	Observer
Anonymous member	Anonymous member	JRC	Observer
Anonymous member	Anonymous member	UNEP	Observer
Anonymous member	Anonymous member		Observer
Campbell	Jillian	UN Environment	Active Participant
Ceccaroni	Luigi	Eartwatch	Observer
Anonymous member	Anonymous member		Observer
Cerrato Pargman	Teresa	Stockholm University	Active Participant
Costa	Nina	NDCConsult	Observer
Cotton	Catherine	IHE Delft	Active Participant
Anonymous member	Anonymous member	Team SRL	Observer
Anonymous member	Anonymous member	Pulsaqua	Active Participant
Domian	Dahlia	IIASA	Observer
Farrer	Linden	European Commission DG RTD	Observer
Fraisl	Dilek	IIASA	Chair
Fritz	Steffen	IIASA	Active Participant
Gharesifard	Mohammad	IHE Delft	Observer
Giller	Onno	UN-IHE	Active Participant
Gold	Margaret	ECSA	Active Participant
Gumiero	Bruna	University of Bologna	Active Participant
Anonymous member	Anonymous member	Budapest Citizen Observatory	Observer

Last name	First name	Organization	Role
Hager	Gerid	IIASA	Active Participant
Hansson	Lon	Stockholm University	Active Participant
Hepburn	Libby	ACSA	Active Participant
Hong	Andy	University of Oxford	Observer
Ikhlef	Khalissa	UNESCO	Active Participant
Anonymous member	Anonymous member		Observer
Krennert	Thomas	ZAMG	Observer
Anonymous member	Anonymous member	Open Knowledge International	Observer
Anonymous member	Anonymous member	University of Dundee	Observer
Maso	Joan	CREAF	Active Participant
Moorthy	Inian	IIASA	Active Participant
Olayinka Illori	Christopher	Simon Fraser University	Active Participant
Oliver	Jessie	Queensland University of Technology	Active Participant
Ortac	Geetha	Project Checkpoint	Observer
Anonymous member	Anonymous member		
Anonymous member	Anonymous member	Wilson Center	
Philip	Davie	Cultivate (Sustainable Ireland Cooperative) GROW Observatory	Active Participant
Prat	Ester	CREAF	Observer
See	Linda	IIASA	Active Participant
Seibert	Jan	University of Zurich	Active Participant
Anonymous member	Anonymous member	UAB	
Anonymous member	Anonymous member		
Anonymous member	Anonymous member		
Strobl	Barbara	University of Zurich	Observer
Anonymous member	Anonymous member	ICCS	Observer
Anonymous member	Anonymous member	Anonymous member	Observer
Wardlaw	Jessica	University of Nottingham	Active Participant
Wehn	Uta	IHE Delft	Active Participant
Anonymous member	Anonymous member	ECSA, MfN	Observer

Last name	First name	Organization	Role
Zabala Torres	Alaitz	Universitat Autònoma de Barcelona	Observer

8 Ways of working

8.1 Periodic activities

The CoP will meet regularly by teleconference and will take advantage of existing opportunities (e.g. conferences, workshops, meetings, etc.) to meet in person for longer discussions. These meetings will be driven and facilitated by WeObserve but will be composed by a much broader audience in an open and transparent manner.

8.2 Timing of meetings

The planning of the next meetings is summarized in the table below.

Date	Type (online/F2F)	Where
28 January 2019	Online	Telco
25 February 2019	Online	Telco
25 March 2019	Online	Telco
16 April 2019	Online	Telco
May 2019 (Day: TBD)	F2F	TBD

8.3 Linked initiatives

- ECSA SDGs and CS Maximization Task and Finish Group (<http://citizenscienceglobal.org/sponsor-a-smart-citizen-program/citizen-science-for-the-sdgs/>)
- Citizen Science Global Partnership (CSGP) (<http://citizenscienceglobal.org/>)
- Environment Live UNEP – Citizen Science Portal (<https://environmentlive.unep.org/citizen>)
- “Earth Observation and Citizen Science” Community Activity of the Group on Earth Observation (GEO) Work Program (<http://earthobservations.org/activity.php?id=142>).
- GEO (https://www.earthobservations.org/geo_sdgs.php)
- UN Committee of Experts on Global Geospatial Information Management (UN-GGIM) (<http://ggim.un.org/>)
- Global Partnership for Sustainable Development Data (GPSDD) (<http://www.data4sdgs.org/>)
- Citizen Science Association Data & Metadata Working Group (<http://www.citizenscience.org/association/about/working-groups/data-and-metadata-working-group/>)
- Datashift (<http://civicus.org/thedatashift/>)
- Other WeObserve CoPs: Engage CoP, Impact CoP, Interoperability CoP (<https://www.weobserve.eu/cops/>)



- Citizen Science COST Action - CA15212: to promote creativity, scientific literacy, and innovation throughout Europe (<https://www.cs-eu.net/about/CA15212>): Improve society-science-policy interface; Enhance the role of CS for civil society.

9 Policies and procedures

9.1 Opting in

Based on the recently introduced General Data Protection Regulation (GDPR), SDGs CoP members were asked to sign an informed consent form during their registration process, indicating the following items:

- SDGs CoP members can stop their participation in the CoP at any time and can ask WeObserve to remove all the personal data it has stored related to them;
- SDGs CoP members give explicit consent to be contacted by WeObserve and give permission to WeObserve to store their personal contact details;
- SDGs CoP members indicate they are aware that WeObserve is collecting data on citizen observatories for a Cookbook, and information provided by the participants can be used for this output (information provided will be acknowledged, as desired).

9.2 Principles of Conduct

SDGs CoP has adopted the principles of conduct developed by other CoPs, namely Engage CoP and Impact CoP, during the launch workshops of these two CoPs. These principles are as follows:

- Extend respect and courtesy to colleagues at all times
- Develop and test ideas and insights impartially
- Think internationally, devising insights and solutions that meet the needs of diverse cultural contexts and operational environments
- Individuals who attend the WeObserve CoP-facilitated meetings are prepared to contribute to the ongoing work of the CoP
- Adhere to the agreed rules that protect the IPR of the members and the privacy of their discussions (see section 9.3)
- Adhere to the consensus process for deciding CoP-internally what content will be made public and when (see section 9.3)

9.3 Voting for publicly released results

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

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

9.4 Including or deprecating activities

Similar to the process described above publicly released results, the inclusion or deprecation of activities will also be decided by a voting process. Any CoP member can propose activities to include or deprecate, after which a voting process (online if necessary) will be used. A 2/3 majority will be sufficient to pass a given decision.



An Ecosystem of Citizen Observatories for Environmental Monitoring

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