

## **2023-2025 GEO Work Programme**

# **Recommendations on Flagships, Initiatives and Regional GEOs**

**PB Engagement Teams  
PB-24: 6-7 September 2022**

# Order of presentations

*12:00-12:30 CEST*

- Water Engagement Team (Justyna Nicinska)
- Regional Engagement Team (Lulu Makapela)

*12:30-13:30 CEST Lunch break*

*13:30-14:30 CEST*

- Hazard Engagement Team (Evangelos Gerasopoulos)
- Land-W Engagement Team (Karel Charvat)
- Human Engagement Team (Andrew Davidson)
- Land-E Engagement Team (Hiroyuki Muraoka)

# Water Engagement Team Recommendations

**Justyna Nicinska**

# Water Review Team

- **Members**

- Marie-Josée Bourassa, Canada
- Karl Benedict, ESIP
- Mark Dowell, European Commission
- Thierry Ranchin, France
- Justyna Nicinska, United States

- **Implementation Plans reviewed**

- Arctic GEOSS
- GEO Blue Planet
- Aquawatch
- GEOGloWS
- GEO-Wetlands

# Arctic GEOSS

## Status

- Currently a Community Activity that applied to become a GEO Initiative

## Purpose

- Advancing the operationalization of Pan-Arctic Observing System

## Summary review comments

- The revised IP provided more relevant details and was much improved, more context is available and structure for the activity. The activity shows promise for future development within GEO however, there are several areas that still need to be addressed
- At present, we recommend strengthening connections to GEO's goals/priorities, as well as linkages with other related GEO activities. At present this is aligned with Arctic PASSION goals, but does not have a clear alignment within GEO
- Further focus and clarity for goals in the Arctic is needed and what is meant by 'Arctic GEOSS'.
- It is hard to tell if the proposed activities are planned or ongoing- this is important because GEO Initiatives should have (even if not fully developed) existing products under development or available
- Recommend that the Arctic GEOSS team continues to refine these areas over the next year, at which time we can revisit the Initiative status.
- Final Recommendation: at this time, we propose that this becomes a Pilot Initiative in the 2023-25 GEO Work Programme

# GEO Blue Planet: Oceans and Society

## Status

- Current GEO Initiative reapplying as a GEO Initiative for 2023-25

## Purpose

- Bridging the gap between ocean and coastal observational data and societal needs to deliver actionable information for policy and decision making

## Summary review comments

- The Water Engagement Team appreciates the changes made and clarification added to the revised output table, intended outcomes, and target user communities.
- The section detailing future goals for nexus coordination across the GWP on Blue Carbon and other activities is very helpful in anticipating and planning for GEO's future vision and goals.
- No other recommended changes at this time to this version of the IP. The Engagement Team sees potential for Blue Planet to develop into a Flagship in the future.
- Final Recommendation: Approve GEO Blue Planet as an Initiative

# Aquawatch

## Status

- Current GEO Initiative reapplying as a GEO Initiative for 2023-25

## Purpose

- To develop and build the global capacity and utility of Earth Observation-derived water quality data, products and information to support effective monitoring, management and decision making.

## Summary review comments

- The revisions made to the IP were helpful, we encourage continuing the development of greater connections to existing policies and user communities;
- Adding progress achieved to date to the outputs table is also recommended
- The largest future concern is the loss of secretariat funding support and the need for longer term funding support.
- We recommend prioritizing development of a resource mobilization plan and strategy and working with the GEO Secretariat on this during this Work Programme early on.
- The Water Engagement Team encourages the Initiative leads to engage us and keep us posted on new developments and any concerns. We welcome the opportunity to meet and discuss a proposed resource mobilization plan in the course of the next year.
- Final Recommendation: Approve Aquawatch as an Initiative.

# GEOGloWS: Global Water Sustainability

## Status

- Current GEO Initiative reapplying as a GEO Initiative for 2023-25

## Purpose

- To pioneer scientific and global collaboration to provide relevant, actionable water information and to promote the use of earth observations in the decision-making process

## Summary review comments:

- Mature Initiative in the GWP with multiple connections to other activities;
- This version of the IP has much more detailed information and shows the maturity of GEOGloWS as an Initiative including the broad scope of partnerships, the user community, and commercial sector engagement
- We would encourage the GEOGloWS team to pursue further development of a resource mobilization plan with the GEO Secretariat, as noted in the IP.
- In order to further strengthen this IP, we recommend cross referencing blank sections in the IP with sections or links where this additional information was provided, especially where there are gaps, such as for outputs available to users and current progress on proposed outputs.
- Final recommendation: Approve GEOGloWS as a GEO Initiative

# GEO-Wetlands

## Status

- Current GEO Initiative reapplying as a GEO Initiative for 2023-25

## Purpose

- GEO Wetlands aims to deliver sustained information from Earth Observation to support the conservation, management, restoration and wise use of wetlands worldwide, as a contribution to the Ramsar Convention on Wetlands and other Multilateral Environmental Agreements.

## Summary review comments:

- Overall this is a sound proposal aimed at revitalizing the Wetlands Initiative and has far-reaching goals. The connection to the Ramsar Convention is very positive.
- The governance structure is very comprehensive and an excellent model though may take time to fully develop.
- Additional details on how past staffing and funding challenges are being addressed, as well as more details on the proposed Nexus approach for 2023-2025 would be helpful.
- The ET recommends that a phased approach be added given the ambitious scale proposed that focuses on a resource mobilization strategy and securing funds for the proposed activities
- Final Recommendation: approve as a GEO Initiative

# General Comments on Review Process

## Responding to GWP 2023-2025 Objectives and GWP Review Process

- The Water ET encourages activity leads to revise their plans based on comments provided and fill in any gaps, understanding that the online tool will also be improved in the next version and ease of use will increase.
- We encourage further discussions among activities working on similar topics or possible nexus areas. We recommend that the Programme Board remains engaged in these future discussions given the impact on GEO Flagships, Initiatives, Pilot Initiatives, and Regional GEOs, especially through the established Engagement Teams.
- We found that there is a role for the PB engagement teams to continue interacting with activities in the near future as they develop their plans, and work on execution. This will be a role that all ETs can continue to play and better understand the evolving status of each activity and Work Programme as a whole.
- Recommend viewing this GWP as a living document that will be further refined as we look at how to identify nexus areas and leverage cross GEO activities through proposed workshops and pilots.

# **Regional engagement team Recommendations**

**Lulu Makapela**

# Engagement Team

## Members

- Lulu Makapela, South Africa
- Saku Anttila, Finland
- Allison Craddock, US
- Jean DUSART, EC
- Emma Luke , Australia
- Jesarela Lopez, Mexico

## Implementation Plans reviewed

1. Africa Group on Earth Observations (AfriGEO)
2. Asia Oceania Group on Earth Observations (AOGEO)
3. Europe Group on Earth Observations (EuroGEO)
4. America Group on Earth Observations (AmeriGEO), newly added

## Status and Purpose

- Current GEO Regional initiative , Proposed GEO Regional
- To improve and coordinate global EO systems and promote broad and open data sharing, policies and practices in Africa

## Comments

### **Most comments from first review are addressed in the revised IP**

- Collaboration with the GEO CD WG to ensure optimal alignment with WG-level efforts. The editors explain that they will be working with DE-AFRICA on data discoverability, through the GEO Knowledge Hub and are looking to replicate these efforts with other willing partners.

### **Some comments from the first review not addressed in the revised IP**

- No funding resources identified to support the implementation of the GWP
- No measures/plans identified to strengthen engagement efforts with countries and organisations (incl. commercial) that have a low engagement and to Implement GEO data knowledge sharing practices and adoption of examples of other Regions

# AOGEO

## Status and Purpose

- Current GEO Regional initiative, Proposed GEO Regional
- To coordinate implementation of GEO activities within the AO region

## Comments

### **Most comments from first review are addressed in the revised IP**

- Regional Priorities revised and closely aligned to the GWP
- Plans to explore opportunities to increase engagement and collaboration with countries in Region by increasing outreach and awareness to address barrier and improve visibility clearly identified
- Measures to track and monitor participation and regularly review of priorities to address any potential for skewed data or information ( "quite active/strong") identified

### **Some comments from the first review note addressed in the revised IP**

- Alignment of capacity building actions to the GEO Data WG and sharing of lessons
- The governance structure for a better understanding of working structures of engagements still not shared.
- Explore ways to extend the GEO Data Sharing Principles and Data Management Principles to the In Situ data and therefore, support a possible GEO In Situ, not identified.

# AOGEO (continuation)

## **Some of the comments , partly addressed**

- Some of the listed objectives are rather activities that objectives, which the Region aims to achieve. but there is always an overlap on theses which is expected. Bullet 6 to be revised , for consistency
- **The editors have partly addressed the Engagement Team's comment as they have only reformulated the content in bullet 6.**

## Status and Purpose

- Current GEO Regional initiative, Proposed GEO Regional
- Provides a regional framework to promote coordination and cooperation among the members of the European GEO Caucus

## Comments

**Most comments from first review are addressed in the revised IP as follows;**

- Regional Priorities revised and aligned to the GWP and opportunities to increase engagement, through UN GGIM Europe regional group
- Efforts to make the GEO Data Management Principles more concrete via examples or tools like the e-shape DMP tool will also be pursued

**Some comments from the first review not addressed as follows;**

- Recommendation to provide workshops and seminars on "lessons learned" and "good practices", for those GWP activities wishing to navigate the path to engage both public and private sector stakeholders has not been addressed by the editors.

# AmeriGEO

## Status and Purpose

- Current GEO Regional initiative, Proposed GEO Regional
- To promote collaboration and coordination among GEO members in the American continent

## Summary review comments

### New submission after the first review

- Priorities are aligned with GWP and activities focus on 5 Societal Priority Areas
- Engagements extended to other countries that are Geo Members i.e., SA and Israel and Non-Geo Members i.e., Venezuela Porte Rico etc. and initiatives of GEO
- Most barriers to engagement In the region is lack of personnel to cover the vast number of international engagements , reduced funding for programmes and travel , language barriers and active contribution etc.

# **Hazards Engagement Team Recommendations**

**Evangelos Gerasopoulos**

# Review Team

## Members

- Stuart Marsh, United Kingdom - Lead
- Evangelos Gerasopoulos, Greece
- Osamu Ochiai, Japan
- Xingfa Gu, China

## Implementation Plans to be reviewed

- Global Wildfire Information System (GWIS)
- Geohazard Supersites and Natural Laboratories (GSNL)
- Global Drought Information System (GDIS)
- Earth Observations for Disaster Risk Management (EO4DRM)
- Data Integration and Analysis System (DIAS)
- Digital Earth Africa (DE-AFRICA)
- GEO Capacity Building in North Africa, Middle East, Balkans, Black Sea (GEO-CRADLE)

# Overview

- **DE-AFRICA, GEO-CRADLE, GWIS and GSNL**

These four proposals addressed the majority of our points and are good to go.

- **DIAS still requires further work**

Their revised IP didn't resolve our major comments – it looks like it is a closed infrastructure operated by one country, it does not seem to have a governance body with diversified stakeholders and it seems that there is no plan for transition.

- **GDIS is another activity of concern**

In the current Work Programme cycle, it struggles with delivery of its key output (the portal). The unidentified funding and lack of diversified governance structure are also hurdles that we wish to draw to the PBs attention.

# GWIS

## Status and Purpose

- Current GEO Initiative, proposed GEO Initiative
- Aims to monitor and assess the effects of wildfires at different scales, from national to global

## Comments

- The IP is solid. The ET raised expectation on operationalizing the services (for example in Argentina) and gaining visibility at COPs, Convention meetings, G20 etc.
- Comments not responded on product accuracy and resolution at national level, and availability/connection with loss and damage data at national level

## Recommendation

- Retain INITIATIVE status

# GSNL

## Status and Purpose

- Current GEO Initiative, proposed GEO Initiative
- A voluntary international partnership aiming to improve, through an Open Science approach, geophysical scientific research and geohazard assessment in support of Disaster Risk Reduction.

## Comments

- All comments are addressed or clarified in the revised IP
- Biennial reports on GSNL supporting local geohazard monitoring and emergency response actions are available on GSNL website; earthquake and volcano Early Warning systems are already active at the Supersites, as part of the national risk management systems; it's required in the first place to have open access to in situ data from the local monitoring networks.

## Recommendation

- Retain INITIATIVE status

# GDIS

## Status and Purpose

- Current GEO Initiative, proposed GEO Initiative
- An information system ingesting global space-based and land-based Earth Observations for the purpose of early detection (through monitoring and prediction) of drought, combined with the data processing capability to identify increases of drought occurrence with increases in global warming.

## Comments

- The revised IP only addressed partially the comments.
- GDIS struggles with delivery of the key output (the portal) of the current Work Programme cycle. The unidentified funding and the lack of a diversified governance structure are also hurdles.

## Recommendation

- Retain INITIATIVE status, while close monitoring of progress is needed

# EO4DRM

## Status and Purpose

- Current Community Activity, proposed GEO Initiative
- EO4DRM coordinates a series of risk related activities involving the use of satellite data and its integration in standard risk management practices, including work relating to hazards, vulnerability and exposure, across the full cycle of DRM.

## Comments

- There are well defined pilots with carefully described outputs that are ready to scale.
- Securing of some initial staff and budget (from CNES) shows strong intention to progress. The consortium looks big and strong and there is adequate evidence of impact.
- Such a coordinated activity is useful as it consolidates data and methodologies from different domain to be used for Disaster Risk Management.
- The lack of an engagement plan and a capacity development strategy is a drawback which is however probably found in most initiatives.

## Recommendation

- Accepted as INITIATIVE

# DIAS

## Status and Purpose

- Current GEO Initiative, Proposed GEO Initiative
- DIAS aims to contribute to national/local climate adaptation and disaster risk reduction policies through a system system which integrates and disseminates Earth observation data, models and manages the scientific knowledge. This activity emphasizes on capacity development of DIAS users who can facilitate dialogue between the science community and the society to support the decision-making, policy-making, public investment, and local practices.

## Comments

- The revised IP partially addressed comments but didn't resolve the ET's major comments - it looks like a closed infrastructure operated by one country, and it does not seem to have a governance body with diversified stakeholders. It seems that there is no plan for transition.

## Recommendation

- Retain INITIATIVE status, while dialogues needed to resolve ET's concern

# DE-AFRICA

## Status and Purpose

- Current GEO Initiative, Proposed GEO Initiative
- To improve the lives of Africans by providing planners and policy makers with tailored EO information to support better decision making and enhance sustainable development outcomes

## Comments

- Most comments are addressed in the revised IP.
- Openness to participation is confirmed; 25 use cases are provided to prove it is an operational platform; Two examples are given on 'impact': agriBORA to develop more robust insights for greater food security in East Africa, and the Big Data Ghana that works towards more sustainable agriculture with the help of DE-Africa
- The questions on coordination or collection of in situ data is not answered

## Recommendation

- Retain INITIATIVE status

# GEO-CRADLE

## Status and Purpose

- Current GEO Initiative, Proposed GEO Initiative
- Aims to sustain the key outputs of the relevant H2020 GEO-CRADLE project and scale their reach in terms of geographic coverage (Black Sea), addition thematic areas (disaster management and water resources management) and operational maturity.

## Comments

- Most comments are addressed in the revised IP.
- The description of methodology is expanded.
- The governance structure and identification of task leads is added.
- Contributors from user side are added.

## Recommendation

- Retain INITIATIVE status

# Land-W Engagement Team Recommendations

**Karel Charvat**

# Review Team

- **Members**

- Karel Charvat (Lead)
- Stefano Salvi
- Carolina Adler
- Nathalie Pettorelli
- Kathy Fontaine

- **Implementation Plans reviewed**

- CROP-PEST-MONITORING
- GEO-VENER
- EO4SDG
- EO4EA
- GEOARC
- GEO BON

# CROP-PEST-MONITORING

## Status and Purpose

- Community Activity, applying to become an Initiative
- to achieve timely and accurate remote-sensed monitoring and early forecasting for major vegetation pest and disease
- Technical progress from previous version

## Summary review comments

- New partners were added. Great engagement from across the WP membership, and participation from other regions, may be required to justify an upgrade to WP Initiative
- Financing contribution is only from China
- Overall, it seems that the activity still needs to build a geographically spread, really cooperative community, so I suggest it should remain a Pilot activity for the next GWP.
- Be good to update name on "remotely-sensed monitoring and...":

## Recommendation

- Stay as Pilot Initiative

# GEO-VENER

## Status and purpose

- GEO Initiative
- Aims at developing and promoting the use of EO to serve the development, the operation and the maintenance of RE systems.

## Comments

- While the scope of the initiative is well defined and certainly useful, some critical comments are not fully addressed in the revised IP
  - The lack of governance: the activity leads indicates there is a need to rebuild the governance and make it running and efficient. A strong governance structure should be established, with commitments from the participants and a clear description of their respective contributions.
  - Funding statement is not clear in document. Funding is through independent projects for which it's not clear they align well with GEO-VENER's objectives

## Recommendation

- Retain as Initiative, while monitoring how the ET concerns are addressed

# EO4SDG

## Status

- Initiative

## Purpose

- The Earth Observations for Sustainable Development Goals (EO4SDG) initiative organizes and realizes the potential of Earth observations and geospatial information to advance the 2030 Agenda and enable societal
- 1/25 benefits through achievement of the SDGs. EO4SDG involves technical, organizational and programmatic components. Collectively, these items meld in the projects, data, outreach and engagement, and capacity development related to how Earth science information sources can support the 2030 Agenda.

## Summary review comments

- Well elaborated work program

## Recommendation

- Retain as Initiative

# EO4EA

## Status

- Initiative

## Purpose

- The purpose of the initiative is to further the development and use of Earth Observations for natural capital accounting (NCA) consistent with the set of standards and guidelines put forth by the UN System of Environmental-Economic Accounting (SEEA) and specifically the Ecosystem Accounts (EA)

## Summary review comments

- There were some small progress in this new version, but as is stated in the session other information, there is planed that final version will be available in October 2022. Now some small issues was solved, but most of comments from previous is till now valid

## Recommendation

- Retain as Initiative

# GEOARC

## Status

- Community Activity

## Purpose

- The purpose of this IC I is to constantly provide technological information and product services to support the GEO priorities, such as Sustainable Development Goals (SDGs), Climate Action, Disaster Risk Reduction ,Urban Resilience and Human Settlements etc.

## Summary review comments

- This activity is important in its scope and it is producing potentially important and useful results. However, there is a clear lack of engagement of the international community. The most of financial contribution is coming from China. Breaded international contribution is missing. For the is recommendation to stay CA, until there is a solid and engaged international community. I see that they have understood that this is the main challenge, so I am confident that GEOARC can complete this step during the next GWP.

## Recommendation

- Recommendation is to stay Pilot Initiative

# GEO BON

## Status

- Geo FLAGSHIP

## Purpose

- GEO BON is a large international network of experts and a community of practice using biodiversity observations and technologies to monitor biodiversity change. This knowledge is used for decision-making in many sectors, including the conservation and sustainable use of biodiversity and ecosystem services.

## Summary review comments

- GEO BON is flagship initiative with clear focus and realistic plan

## Recommendation

- Recommendation is to stay Geo FLAGSHIP

# **GEO Human Engagement Team Recommendations**

**Andrews Davidson**

# Engagement Team

## Members

- Krystal Azelton, SWF
- Andrew Davidson, Canada
- Susan Shingle Decker, ESIP
- Richard Gross, IAG
- Ivan Petiteville, CEOS

## Implementation Plans reviewed

1. Global Observation System for Mercury (GOS4M)
2. Earth Observations for Health (EO4HEALTH)
3. Global Observation System for Persistent Organic Pollutants (GOS4POPS)
4. Global Urban Observation and Information (GUOI)
5. Night-Time Light Remote Sensing for SDGs (GEO-Night-Light)

# 1. GOS4M

## Status and Purpose

- Current GEO Flagship, Proposed GEO Flagship
- To support nations, UNEP and all interested parties to support the evaluation of the impacts and effect of mercury contamination of Earth system on human health and provide EO data sets and validated interoperable tools.

## Comments

- Most comments from first review are addressed in second submission.
- Ongoing collaboration with other GEO Work Programme areas and opportunities for new collaborations here are missing and could be made more clear.
- Disappointing that IP does not address capacity building, especially since IP includes engaging with African countries (AfriGEO) and South American countries (AmeriGEO).

## Recommendation

- Retain FLAGSHIP status.

## 2. EO4HEALTH

### Status and Purpose

- Current GEO Initiative, Proposed GEO Initiative
- To support the collection, analysis, and application of information about areas of impending risk that inform the development of strategic responses to anticipate risks and opportunities and their evolution and communicate options to actors for the purposes of decision-making and response.

### Comments

- Most comments from first review are addressed in second submission.
- The monetary resources to implement the proposed GWP in 2022-25 are still not identified. A number of proposed tasks and their funding relate to a pending NASA ROSES decision, the status of which is not indicated.

### Recommendation

- Retain INITIATIVE status.

# 3. GOS4POPS

## Status and Purpose

- Current GEO Initiative, Proposed GEO Initiative
- To further enhance functionalities of Global Observation System for Persistent Organic Pollutants.

## Comments

- Most comments from first review are addressed in second submission.
- IP now includes discussions of key new outputs, resources, engagement, plans for capacity development, and opportunities for commercial sector uptake.
- The resources to implement the proposed GWP in 2022-25 have now been identified, although a gap in financial resources is identified

## Recommendation

- Retain INITIATIVE status.

# 4. GUOI

## Status and Purpose

- Current GEO Initiative, Proposed GEO Initiative
- To generate data products of global urban areas using EO data, provide EO-based urban data services through various systems and tools, develop new models and algorithms to assess and monitor urban environments, create a better knowledge of cities and to develop essential urban variables and indicators for sustainable cities for SDG Goal 11.

## Comments

- Most comments from first review are addressed in second submission.
- Resources to implement the proposed GWP in 2022-25 still have some uncertainty. Commercial sector organizations participating have been added to the IP along with the opportunities for commercial sector uptake of the outputs of the initiative.
- Questions regarding how the different activities of this umbrella organization are coordinated have not been addressed.

## Recommendation

- Retain INITIATIVE status.

# 5. GEO-NIGHT-LIGHT

## Status and Purpose

- Current GEO Pilot Initiative (Community Activity), Proposed GEO Initiative
- To use night light remote sensing to evaluate socioeconomic condition in developing countries where statistics is insufficient.

## Comments

- Most comments from first review are addressed in second submission.
- A greater gender balance within the 18 defined participants is desirable.
- While the proposed approach is broadly applicable the proposed work will focus on Uzbekistan during the period 2023-25. Given this narrow focus, we recommend that it remain a Pilot Initiative.

## Recommendation

- Retain PILOT INITIATIVE status.

# Land-E Engagement Team Recommendations

**Hiroyuki Muraoka**

# Engagement Team

- **Members**

- Andrus Meiner (EEA)
- Carsten Dettmann (Germany)
- Anthony Milne (GRSS)
- Hiroyuki Muraoka (Japan)
- Charles Mwangi (Kenya)

- **Implementation Plans reviewed**

- GFOI
- GEO-LDN
- GEO-MOUNTAINS
- GEOGLAM
- HUMAN-PLANET

# GFOI

## Status and purpose

- Having been a Flagship in GWP since 2017
- Supporting developing countries to operationalize national forest monitoring systems and associated greenhouse gas accounting procedures

## Comments

- GFOI did not address comments in the revised IP, although the lead intends to provide a written feedback to the ET
  - GFOI is asked to specify collaboration plans with GEO BON and GEO-LDN in response to the relevant agenda such as Post-2020 Global Biodiversity Framework and UN Decade on Ecosystem Restoration.
  - GFOI is encouraged to explore measures to mitigate the risks on country engagement, availability of in-country capacity and securing partners and funding outside GFOI

## Recommendation

- Retain FLAGSHIP status, while seek collaborations with GEO BON and GEO-LDN through coordination workshops and post-2025 incubators.

# GEO-LDN

## Status and purpose

- Currently an Initiative, applying to become a Flagship
- To supports UNCCD Parties in monitoring land degradation for reporting and implementing measures to achieve or exceed LDN

## Recommendation

- Become a FLAGSHIP for the following reasons:
  - GEO-LDN has a clear policy mandate from UNCCD
  - During the course of GWP2020-2022, GEO-LDN developed key products which have been tested and ready to scale. ‘Minimum data quality standards and decision trees for SDG Indicator 15.3.1’; ‘LUP4LDN tool’
  - There is continuous participation from regions coordinated by the core leadership group.
  - The funding is secured until 2026.

# GEO-MOUNTAINS

## Status

- Having been a GEO Initiative since 2017

## Purpose

- To increase the discoverability, accessibility, and usability of a wide range of data and information pertaining to mountains globally, and to apply these data to have positive impacts across key areas of science, policy, and practice.

## Summary review comments

- GEO-MOUNTAINS is recommended to continue as an Initiative
- Areas for improvement:
  - Better definition of outputs
  - Clearer articulation of the method (platform) with data dissemination and analytics capability
  - Wider engagement of participants beyond Europe and North America
  - Concrete use cases and impact

# GEOGLAM

## Status and purpose

- Having been a GEO Flagship since 2016
- GEOGLAM is to increase market transparency and improve food security by producing and disseminating relevant, timely, and actionable information on agricultural conditions and outlooks of production at national, regional, and global scales.

## Comments (1st review)

- There is little doubt in relevance and international support to GEOGLAM. It has a strong policy mandate that has been repeatedly reconfirmed. Attempts to develop integrated crop monitoring by linking crop monitoring and an early warning system is very welcome, as well as advancement of Essential Agriculture Variables.
- The key issue is related to mobilization of resources for GEOGLAM coordination after 2023. Associated risk is rightly evaluated as severe.

## Recommendation

- Retain FLAGSHIP status

# HUMAN-PLANET

## Status and purpose

- Having been a GEO Initiative since 2017
- Aims to measure, monitor and assess human presence on planet Earth and in doing so help to address hazard impact on society, societal demand for resources and societal impact on the environment

## Comments (1st review)

- The IP provides fundamental information but needs revision on unclear points or incomplete text: resource section is empty; participants are mainly from global north; description of user uptake is uncertain and there is no clear plan for that; dissemination of the main product is simply offered by download from the websites.

## Recommendation

- Retain INITIATIVE status while revision of IP is needed