

Towards a new GEOSS 10-Year Implementation Plan

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The purpose of the GEOSS 10-Year Implementation Plan (2005-2015) is to summarise the essential steps to be undertaken, over that decade, by a global community of nations and intergovernmental, international, and regional organizations, (the GEO), to put in place a Global Earth Observation System of Systems (GEOSS).

GEOSS Vision

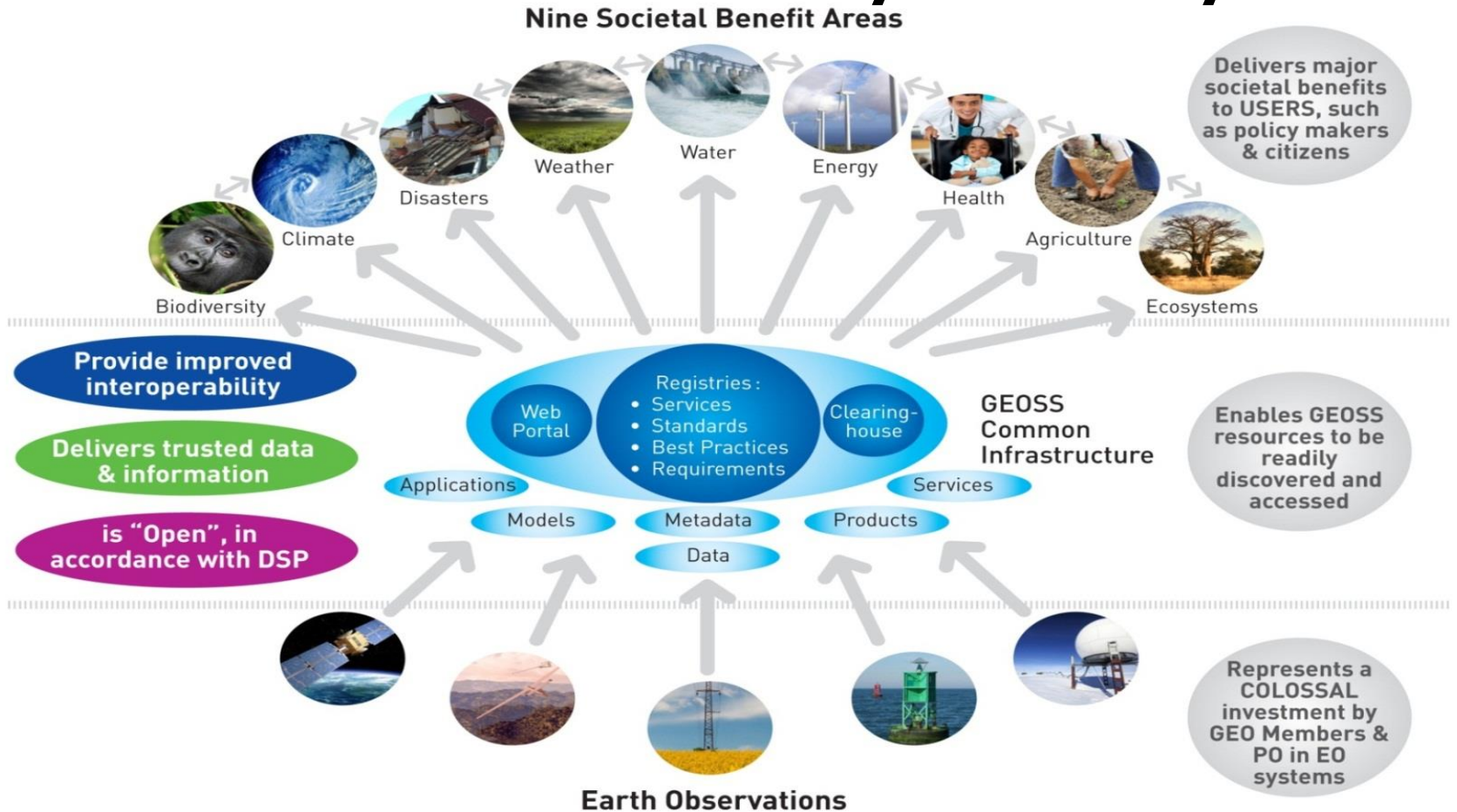
The **vision for GEOSS is to realize a future wherein decisions and actions for the benefit of humankind are informed by **coordinated, comprehensive and sustained** Earth observations and information.**

The **purpose** of GEOSS is to achieve comprehensive, coordinated and sustained observations of the Earth system, in order to improve monitoring of the state of the Earth, increase understanding of Earth processes, and enhance prediction of the behaviour of the Earth system.

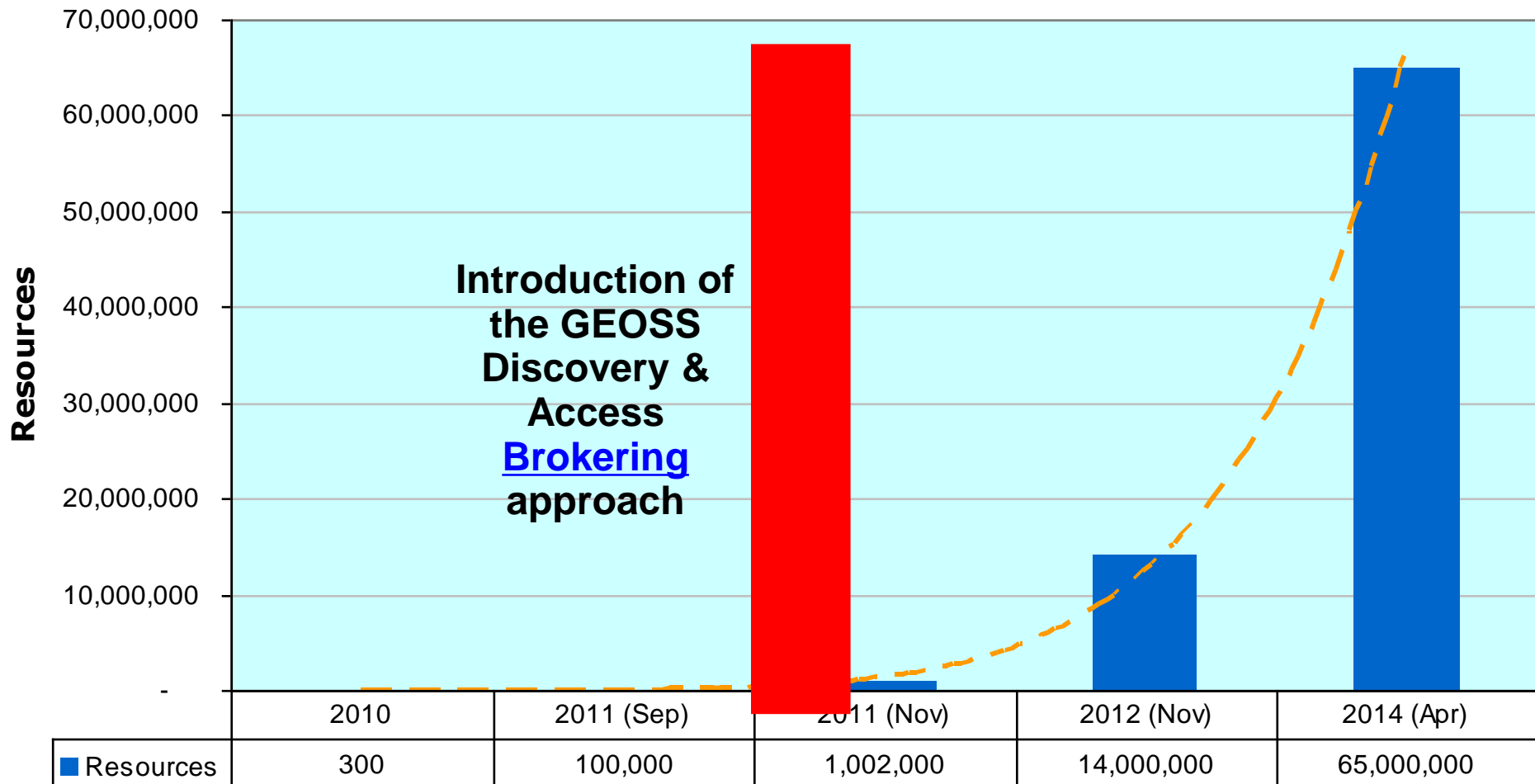
GEOSS will meet the need for timely, quality long-term global information as a basis for sound decision making, and will enhance delivery of benefits to society in the following initial areas:

- Reducing loss of life and property from natural and human-induced **disasters**;
- Understanding environmental factors affecting human **health** and well-being;
- Improving management of **energy** resources;
- Understanding, assessing, predicting, mitigating, and adapting to climate variability and change;
- Improving **water-resource management** through better understanding of the water cycle;
- Improving weather information, forecasting, and warning;
- Improving the management and protection of terrestrial, coastal, and marine **ecosystems**;
- Supporting sustainable **agriculture** and combating **desertification**;
- Understanding, monitoring, and conserving **biodiversity**.

Global Earth Observation System of Systems



GEOSS Resources



Current Assets

About **20** brokered data providers – capacities, systems, communities



Publish

More than **7 Million** (**1.2 Million** GEOSS Data Core) Discoverable and potentially accessible resources (mix of data collections, datasets and individual images)



Contain

More than **65 Million** (**50 Million** **GEOSS Data-Core**) Discoverable and potentially accessible granules (e.g. satellite scene, rain gauge record)



Research and Innovation

Resources

2014 GEO Ministerial Summit Declaration (selected statements)

Note that GEO has proven its capability to respond positively to calls for action from the international community of States and to address the challenges for which it was established;

(i.e., we have been able to develop and implement a System of Systems)

Resolve to continue the critical work to achieve the objectives of the Implementation Plan, in particular:

- to **expand the availability of consistent and complete datasets with full and open access**,
- to streamline the current GEOSS Common Infrastructure taking into account the latest technological developments and commit to its maintenance,
- to consolidate observing networks,
- to improve global coverage and availability of data,
- to **further develop GEO global initiatives**
- **and to continue to foster the engagement of GEO users, data providers and citizens** so that they can benefit from the high potential of GEO's achievements;

Renew the mandate of GEO through 2025, retaining the current nature of the partnership, the general governance structure and the resourcing mechanism based on voluntary contributions, while exploring modifications; **and agree to develop the work of GEO through 2025 in line with the recommendations put forward by the GEO-X Plenary (the Vision for GEO 2025) as the foundation for shaping GEO through 2025.**

2014 GEO Ministerial Summit Declaration (selected statements)

***Establish* a process to facilitate a seamless transition for GEO through 2025, and request that a new Implementation Plan through 2025 be prepared for endorsement at the next GEO Ministerial Summit, .., in accordance with the agreed-upon principles and strategic objectives, taking into account commitments to the United Nations Sustainable Development themes;**

***Resolve* to improve the effectiveness of GEO's actions, to broaden engagement and collaboration of stakeholders including decision-makers, and to sustain resources for GEOSS' continuous development and functioning;**

***Acknowledge* and value the contributions of GEO Members and invite all Member States of the United Nations to join GEO; encourage all Members to strengthen national GEO arrangements; highlight the unique contributions of Participating Organizations, and welcome additional participants, in particular UN Organizations and Programmes, to join GEO and seek to build stronger relations;**

***Resolve* to strengthen engagement with developing countries, as well as foster regional cooperation;**

***Resolve* to broaden and strengthen engagement with non-governmental organizations; non-profit organizations, such as multi-lateral development banks; foundations; and the private sector;**

Vision for GEO 2025

(selected statements from the GEO-X Recommendations)

During 2014-2015 a new Implementation Plan for GEOSS through 2025 will be developed, fully endorsing and extending the concepts in the current GEOSS 10-Year Implementation Plan for 2005-2015, while drawing upon lessons learned. The new Plan will also take into account the GEOSS Strategic Targets agreed at GEO-VI in 2009, as well as update them, and will include the following elements:

4.1 GEO Core Functions:

... the resources and activities of GEO will be dedicated to the following Core Functions, in close cooperation with user communities:

- **Strengthening observation systems** (space-based, airborne and particularly *in situ*) and networks among observation systems;
- **Advancing interoperability and integration of Earth observation data;**
- **Promoting and implementing the GEOSS Data Sharing Principles;**
- **Building and sustaining an information system that provides access to the data and products of its Members and Participating Organizations;**
- **Developing capacity to collect and use Earth observations**, and promoting regional GEOSS implementation;
- **Supporting research and development of integrated applications of Earth observations;**
- **And Engaging with users and decision-makers**, to ensure a user-driven GEOSS.

Implementation Plan Working Group (IPWG)

Timescale / Phases

Phase 1: The Reflective and Fresh Perspectives phase

This runs through to July 2014

Phase 2: The Synthesis and Formulation phase

This has 2 stages:

2a) July – November 2014: during which period an OUTLINE of the initial draft of the 2016-2025 Implementation Plan will be prepared and then presented to the GEO-XI Plenary;

2b) December 2-14 – November 2015: formulation and finalisation of the draft 2016-2025 Implementation Plan for review, discussion and (hopefully) endorsement by GEO-XII.

Please note that consultation with all interested parties will continue through to late 2015.

Implementation Plan Working Group (IPWG)

Phase 1; The Reflective and Fresh Perspectives Phase

Learning from the past: What has worked, what hasn't?

Informative examples: "Successes" (not complete!)

- **High-visibility of issue: e.g., GEO-BON, GFOI, GEO-GLAM;**
- **Role of GEO clearly visible: e.g., GEONETCast, GEO-BON, GFOI;**
- **Resources committed: e.g., GEONETCast, GEO-BON, GFOI;**
- **Institutional players increasingly engaged: e.g., GFOI, GEO-GLAM;**
- **Data availability increasing, with more data sharing observed;**
- **Increased visibility of data sharing on political agenda;**
- **Functional architecture set up (importance of GEOSS Broker).**

Implementation Plan Working Group (IPWG)

Phase 1; The Reflective and Fresh Perspectives Phase

Learning from the past: What has worked, what hasn't?

Informative examples: "Outstanding issues" (not complete!)

- **Mismatch between ambition and resources;**
- **Longer-term resourcing not ensured;**
- **"Voluntary commitments" often not reliable enough to build on;**
- **Good-practice often missing at the implementation level;**
- **Implementation gap: prioritization and resourcing mechanism needed;**
- **GEO decisions have little weight for higher-level decision-makers;**
- **Initiatives need big-player stakeholders on board to succeed: carefully define GEO's role in different initiatives;**
- **Lack of user engagement, ambiguity about "who are the users?"**

Key messages from the discussion at the Geneva GEO Ministerial Summit: Guidance for the Future of GEO

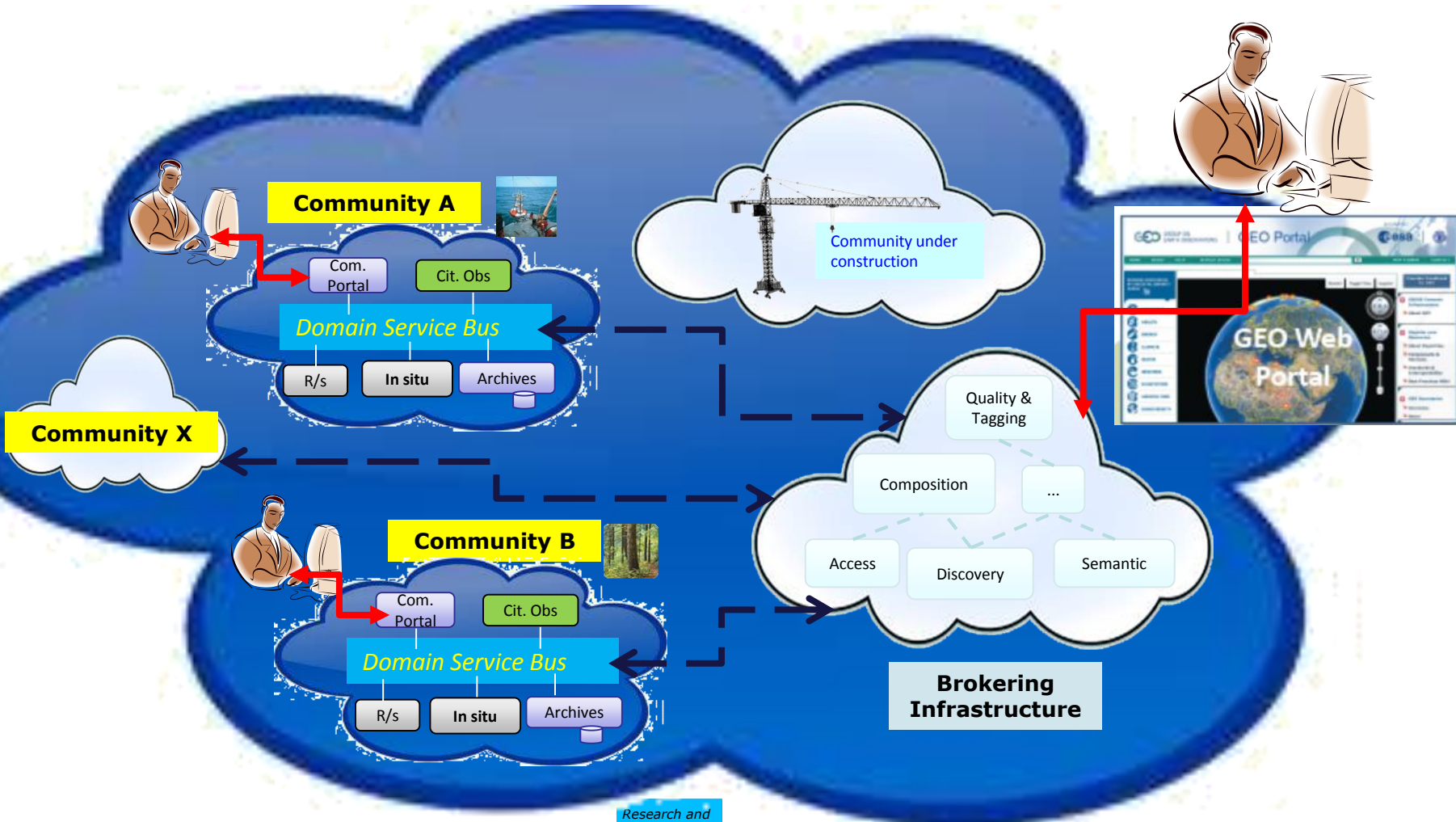
Keep the unique aspects of GEO:

- **System of systems;**
- **Agility and flexibility (key in quickly address challenges, i.e. for quickly prototyping services);**
- **Community of Communities, (giving extreme flexibility to working with a different number of stakeholders (e.g, Countries, POs, companies);**

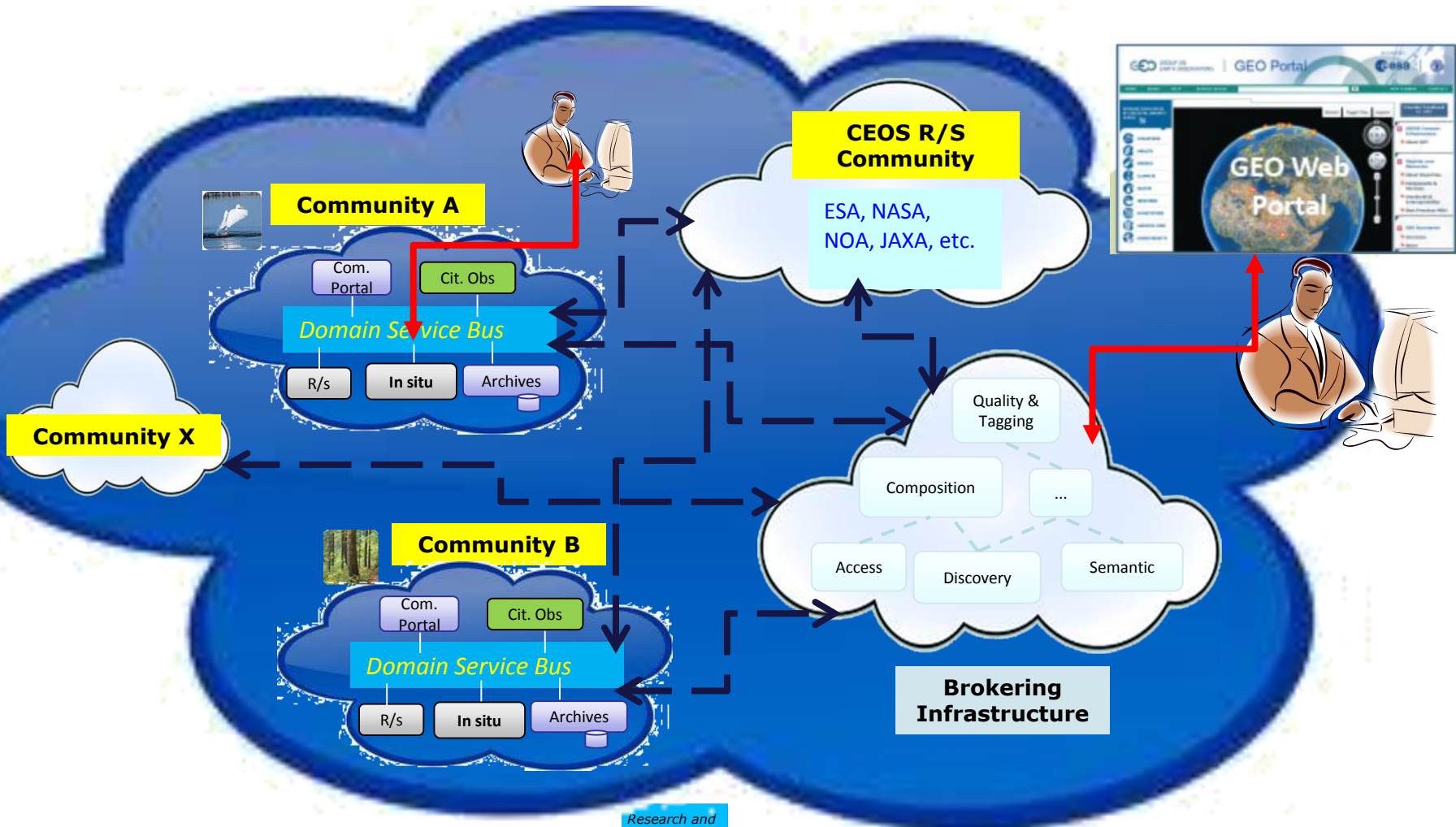
**So, could GEO use a
"Community of Communities"
Approach**

**To further develop and implement the
Global Earth Observation System of Systems
during the period 2016-2025)?**

A "Community of Communities" GEOSS



A "Community of Communities" GEOSS



A "Community of Communities" framework for the implementation of the GEOSS Post-2015

- **Builds on existing capacities, enhancing communities, whilst respecting their mandates and not supplanting them;**
- **Offers a high level of flexibility;**
- **Is an avenue for innovation as technology evolves;**
- **Provides the capability for interoperability between the various communities and with sources of cultural, social and economic information, which will play a critical role in decision making.**

Thank you for listening

And with my grateful acknowledgement to all of those who have contribute to this presentation.

They are far too many to mention by name, but their input and efforts are invaluable.