

# European Direction in GCI Enhancements

# **D5.4**

# Register of Dissemination and Training Material – v2.0

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#### Abstract:

This document is the register of dissemination and training material for the full duration of the EDGE project.



# **Document Log**

Date	Author	Changes	Version	Status
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## **Executive Summary**

This document (*D5.4* – *Register of dissemination and training material*) is the register of the *dissemination* and *training* material used during the *EDGE* (short *for European Direction in GEOSS Common Infrastructure Enhancements*) project.

A particular focus in this document is on the main events that were organised with contributions of the EDGE actors. In this respect the following events are covered more extensively in this report:

- GEO Plenaries;
- Data Providers Workshops;
- GEO Symposia;
- EuroGEO(SS) Workshops;
- Online User Community Workshops and GCI workshops.

It shall be noticed that the EDGE dissemination, training and exploitation activities have been organized and performed in collaboration with the GEOSS Platform Operations and with GEOSS Evolve teams.



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## 1. Introduction

#### 1.1 Purpose and Scope

This document, D5.4, register of *dissemination and training material v2* has been generated in the framework of WP5, *Dissemination and Exploitation* within the *EDGE* (short for European Direction in GEOSS Common Infrastructure Enhancements) project, Grant Agreement no. 776136 [RD-1].

This document provides an overview of the dissemination and training material produced during the whole life of the EDGE project. It does not necessarily include all material; it rather provides URLs via which the material is accessible. In other cases, it provides examples or templates only.

#### 1.2 Document Organisation

The document is organised as it follows:

- Section 1: Introduction describes the purpose and scope of the document and its organization.
- Section 2: Dissemination and training material;
- Annex A. References: List the references used in the document;
- Annex B. Figures and Tables: Provides links to figures and tables in the document;
- Annex C. Terminology: explains the meaning of the acronyms and definitions used in the document.

#### 1.3 Links with other project activities

EDGE identifies five work-packages as follows:

- WP1: Project management
- WP2: User requirements elicitation and functional analysis
- WP3: GEOSS Portal and GEO DAB Enhancements
- WP4: Deployment and user assessment
- WP5: Dissemination and exploitation

Figure 1 shows the relations between these work-packages. From this figure, it can be seen that work-package 5 (like work-package 1) links to the other work-packages (i.e. 2, 3 and 4), being responsible for planning and organising dissemination, training and exploitation activities related to the outcomes resulting from these work-packages.

The main outcomes of work-package 5 are:

- A Dissemination, training and exploitation strategy and plan, v1 issued at month 12 as D5.1 and v2 issued at month 32 as D5.3.
- A Register of dissemination and training material, v1 issued at month 12 as D5.2 and v2 issued at month 32 as D5.4.



#### European Direction in GCI Enhancements

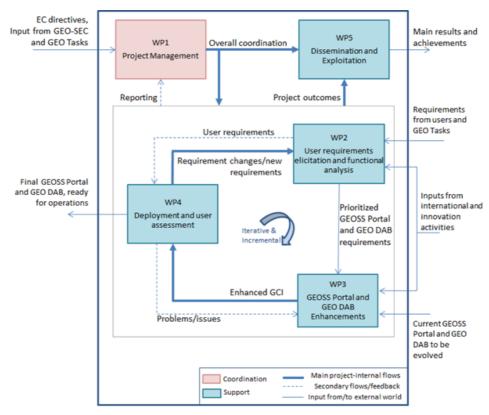


Figure 1: EDGE Work-packages and their relationships

# 2. EDGE Dissemination Material

#### 2.1 Introduction

This section provides an overview of the dissemination and training material used within or contributed to from within the EDGE project.

### 2.2 EDGE Logo

The EDGE logo is copied in Figure 2.



The logo is visualised in presentations and contributions to presentations that regard activities that are implemented (or partially implemented) via the EDGE project.

#### 2.3 The GEOSS Portal

The GEOSS Portal is accessible from <u>http://www.geoportal.org</u>. Latest changes are announced via the portal's *About* menu item in the Hamburger menu. The latest version of the GEOSS Portal user manual is accessible online and as well documented in the EDGE deliverable D3.5. A screenshot of the operational GEOSS Portal (15 May 2020) is provided in Figure 3.

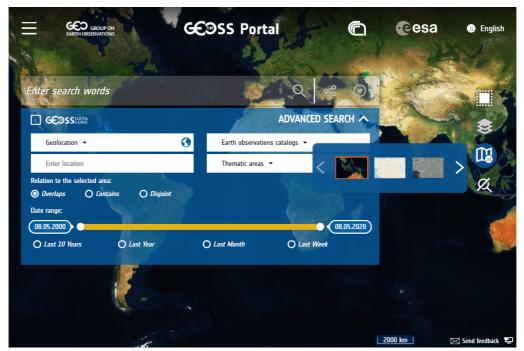


Figure 3. The Operational GEOSS Portal (15 May 2020)

The GEOSS Platform concept includes a generic portal accessible via the above referred URL, plus widgets that are integrated into community portals that connect to the GEOSS Platform for discovery, access and use of resources accessible via the GEOSS Platform.

The *About* page (accessible via the Hamburger menu) includes information regarding the contribution of the EDGE project.

As further elaborated in D3.4, a parallel proof of concept for the GEOSS Platform has been developed, experimenting new capabilities as input to discussions in the relevant GEO Bodies (nowadays the GEOSS Infrastructure Development Task Team – GIDTT) regarding the evolution of the GEOSS Ecosystem depicted in Figure 5 of the mentioned document moving from a data-centric to a usercentric implementation (and thus becoming more information and knowledge oriented). To implement these new capabilities, the EDGE project has either developed some internal prototypes or re-used relevant outcomes of European Research and Innovation projects. A screenshot of the developed extended GEOSS Portal versions "Data and Knowledge" is provided in the figure below.



Figure 4. A snapshot of the GEOSS Portal "Data and Knowledge" proof of concept (15 May 2020)

#### 2.3.1 GEOSS Platform Icons

Icons have been introduced for the GEOSS Platform, for the various components and for the GEOSS Platform tools as represented in Figure 5. It may be noted that all Platform components are considered.



#### Figure 5. The GEOSS Platform Icons.

The GEOSS Portal and the GEO Discovery and Access Broker are normally represented as presented in Figure 6.



Figure 6. The GEOSS Portal and GEO-DAB Graphical Representation.

#### 2.4 The GEO Web-site

The GEO Web-site is accessible from <u>http://earthobservations.org</u> and is maintained by the GEO Secretariat. The EDGE team provides regularly contributions, e.g. as input to the following:

- What we do? Implementing GEOSS (http://earthobservations.org/geoss.php),
- News & Blogs (http://earthobservations.org/articles.php) and
- Events (<u>http://earthobservations.org/meetings.php</u>).

The GEOSS Portal is accessible via the menu option Get Data Now.

#### 2.5 EDGE Presentation Template

Whenever EDGE is presented as such, the following presentation-layout is used:



• Title page:

Figure 7. EDGE Presentation Title Page.



	Click to add title		
	Click to add text		
		62000	
Other pages:			esa

Figure 8. EDGE Presentation Other Pages Template.

#### 2.6 The GEOSS Platform Manual n. 1

The GEOSS Platform Manual n. 1 – All You need to know to become a GEO Data Provider [RD-2] provides relevant information, an introduction to the GEOSS Platform, an inside to the GEOSS Platform, an overview of the components (GEOSS Yellow Pages, GEOSS Portal, GEO-DAB and GEOSS Status Checker), information about the reusable components (Views, APIs, Mirrors, Widgets) and information regarding the 2-steps registration process for data providers.

#### 2.7 GEO XIV Plenary and GEO Week – Washington, USA

The GEO XIV Plenary and GEO Week was hosted by the USA in Washington DC from 23 to 27 October 2017. The EDGE team contributed to this event with relevant contributions and inputs to the various demonstrations, side events and as well to the Plenary itself. It is referred to [RD-3] for information regarding the Plenary and GEO Week.

EDGE contributions to presentations during the GEO Week include the following:

- Monday 23 October GEO in Action GCI Operations Foundational Task Café, in particular:
  - GEOSS Portal State of the Art [RD-4].
  - The GEO Discovery and Access Broker (DAB) [RD-5]
- Tuesday 24 October GEO in Action GCI and its Way Forward Café, in particular:
  - o GEOSS Evolution: the GEOSS Evolve Initiative [RD-6]
  - GEOSS Platform: The Mind Revolution around U [RD-7]

The EDGE team provided as well inputs to presentations and demonstrations done by others, e.g.:

- ECOPotential VLab for Land Cover Change Detection;
- How to leverage GCI Content: GCI for SDG 6.6.1;
- Reusing the GEOSS Portal: the GOS4M example;
- Reusable GEOSS Platform Widgets within the GEO Wetlands Community Portal.

GEO in Action focus was on showcasing all the various applications built using GEOSS Platform tools such GEO DAB APIs, GEOSS Widgets, GEOSS Mirror Sites and GCI EO Open data and thus emphasizing the value of the GCI for Decision Making.



During the GEO Week in Washington a brochure of the GEOSS Portal (see Figure 9) printed early 2017, was made available.



Figure 9. GEOSS Portal Brochure as available during GEO-XIV in Washington (previously used at GEO-XIII in St. Petersburg, Russia).

ESA had as well a boot where demonstrations were done and posters (see Figure 10 and Figure 11) displayed.

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Figure 10. One of the Posters during GEO XIV.

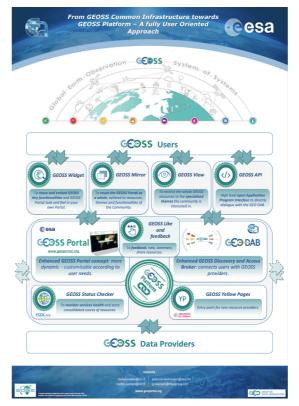


Figure 11. One of the Posters during GEO-XIV.

## 2.8 GEO XV Plenary and GEO Week - Kyoto, Japan

The GEO-XV Plenary and GEO Week 2018 took place in Japan from 27 October to 2 November 2018, at the International Conference Center in Takaragaike, Sakyo-ku, Kyoto.

Signed at this same location on 11 December 1997, the Kyoto Protocol was an international treaty that extended the 1992 United Nations Framework Convention on Climate Change, which commits state parties to reduce greenhouse gas emissions.

As such, it provided the perfect setting to discuss the progress made by the Group on Earth Observations (GEO) in improving the availability, access and use of Earth observation for a sustainable planet, with a focus on the three GEO engagement priorities:

- the United Nations 2030 Agenda for Sustainable Development
- the Paris Agreement
- the Sendai Framework for Disaster Risk Reduction

During the meeting, recent and upcoming enhancements and features of the GEOSS Platform were demonstrated. Managed by the European Space Agency as part of the EDGE project and co-funded by the European Commission and ESA, the platform offers improved discovery, access and use of over 430 million registered Earth observation resources from all over the world and from more than 5000 resource providers via the GEOSS Portal and developed Community Portals.



The use of workflows for learning more about climate themes was demonstrated for ecosystem modelling in the context of the European Commission co-funded project ECOPotential. Attendees were shown the whole process, beginning from protected areas, ecosystems, workflows, selection of data, activation of the process and visualisation of results via the GEOSS Platform portal.

EARTH OBSERVATIONS			C cesa
Storylines	Earth Observati	on Data for Ecosystem Monitoring (EODESM) ×	
Protected Areas  Cosystems	Thematic Layers (Changes) ~	Select resources  RUN	
Warkflow 🖌	Input Name	Chosen resources Clumps of Protected Area Camarque	
Ecosystems List <sup>9</sup> CoastaltMarine <sup>9</sup> Camargue Earth Observation Data for Ecosystem Monitoring (EODESM) The EODESM system (assifies land covers according to the Food and Agricultural Organisation's (FAO's) Land Cover (Dassification System (LCS2) taxonomy. The EODESM system can use, as input, any remote sensing or other spatial datasets (including modelled output) and at any scale of choosing. The system is designed for use by a wide range of users and is entirely open source and freely available. This document provides a simple summary allowing users to access and easily use the EDDESM system.	Thematic Layers (Changes)	Comps of Protected Area Camargue Thematic Layers Onages of Protected Area Camargue Protected A	
			۵ ۵ ۵

Figure 12 - The ECOPotential project benefits from workflow management implemented as part of the GEOSS Platform

The use of datacubes was addressed in collaboration with the European Commission co-funded project GEOEssential, which benefits from the GEOSS Platform instruments in combination with the Swiss Datacube to support Sustainable Development Goals with a focus on indicator 15.3.1 proportion of land that is degraded over total land area.

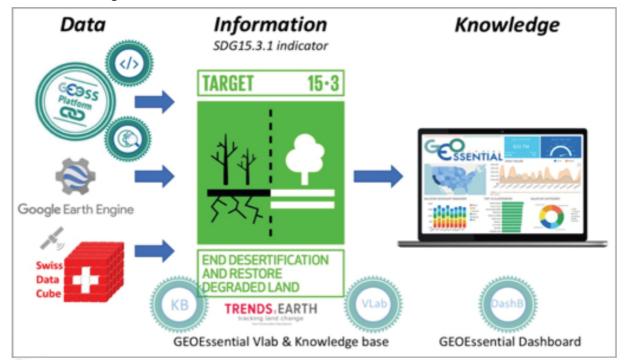


Figure 13 - The GEOEssential project supports the Sustainable Development Goal indicator generation 15.3.1 proportion of land that is degraded over total land area

A third demonstration regarded on-demand generation of Analysis Ready Data from Copernicus Sentinel-2 and Landsat-8 data for selected land applications. Such Analysis Ready Data is easier to use for those who are not experts in the use of satellite data.



Figure 14 - The Analysis Ready Data On Demand Demonstrator showed how Analysis Ready Data can be prepared ondemand as input to selected land applications

The European Space Agency is working together with the GEO Secretariat, the Italian Research Council – the Institute of Atmospheric Pollution (CNR-IIA), the University of Geneva (UNIGE), the United States Geological Survey (USGS), the European Commission DG JRC and DG RTD, MINES ParisTech and many other stakeholders, to further improve the implementation of GEOSS, thus supporting decision-makers to take better-informed decisions and actions for the benefit of society.

## 2.9 GEO XVI Plenary and GEO Week – Canberra, Australia

The GEO XVI Plenary and GEO Week was hosted by the Australian capital of Canberra, that translates to "meeting place" in the indigenous language, with its Plenary and Ministerial Summit, from 4 to 9 November 2019. The EDGE team contributed to this event with relevant contributions and inputs to the various demonstrations, side events and as well to the Plenary itself. It is referred to [RD-18] for information regarding the Plenary and GEO Week. The 2019 edition added specific focus to industry involvement and how Earth Observations can boost sustained and inclusive economic growth. In particular in frontier digital technologies such as Big Data and cloud computing.

Combatting Climate Change, realizing the 2030 Agenda on Sustainable Development, and reducing Disaster Risk can benefit largely from the ever-growing quantities of EO data. Their size, diversity and scattering require, however, sophisticated tools that enable easy access and handling of data, derived products and background information like data origin, reliability, models and algorithms used for processing.

The GEOSS Platform considers this, and is testing evolved capabilities implementing a series of scenarios that illustrate its potential to support access and use of Data and Knowledge as a possible contribution to the implementation of a results-oriented GEOSS. These scenarios were demonstrated

during the GEO Week 2019 in Canberra and are shown in this <u>presentation</u> (https://prezi.com/view/v8qMNgM9ixdvumjEE6gW/). Several entry points of presentation offered to drive the end user to real life scenarios, demo and videos to show the potential of the GEOSS Platform.

In addition to this, the GEO Secretariat, in collaboration with the GEOSS Platform team, has shown facilitated access to the Sentinel-2 for Agriculture (Sen2Agri) products, developed within the GEOGLAM Flagship, which integrates data from Sentinel-2 and Landsat 8 satellites to operationally produce indices of crop development, from local to global extents.

ESA had as well a booth shared with the European Commission where demonstrations were displayed.

#### 2.10 3<sup>rd</sup> Data Providers Workshop – ESRIN, Frascati, Italy

The 3<sup>rd</sup> GEO Data Providers Workshop (see [RD-8]) was held at the ESRIN, the Italian establishment of the European Space Agency (ESA) in Frascati, from the 2<sup>nd</sup> to the 4<sup>th</sup> of May 2018. The main objective of the workshop was to have Earth observation data providers and users come together to share knowledge and best practices in the management and use of Earth observation data, and work together to enhance the Global Earth Observation System of Systems.

The event was co-organized by the GEO Secretariat, ESA, CNR-IIA (Italy), United States Geological Survey (USGS) and the University of Geneva (Switzerland). The Joint Research Centre of the European Commission contributed to the event report (see [RD-11]). The agenda is available from [RD-9].

The workshop brought together more than 200 data providers and users from more than 130 organizations from 33 countries and 5 continents and provided a space to share experiences and knowledge that can improve the ways in which Earth observations are managed, communicated, disseminated and used to enhance the Global Earth Observation System of Systems.

The Workshop agenda included 97 presentations (see [RD-10]) and was organized according to: 26 scientific sessions, 11 training sessions (full material is available on request from the EDGE team), one Hackathon and one arduino sensors do-it-yourself session for citizen science. See as well Figure 15 for some numbers regarding the 3<sup>rd</sup> GEO Data Providers Workshop.



At the workshop, several organizations contacted the GEO Secretariat and decided to be engaged in GEOSS.

Figure 15. Some numbers regarding the 3rd GEO Data Providers Workshop.

Main outcomes of the workshop, which are taken as input to on-going and newly planned GEOSS Platform developments, can be summarised as:

• GEOSS Ecosystem growth related:



- The 3<sup>rd</sup> GEO Data Providers Workshop demonstrated the strengthening of the GEOSS (community and technological) Ecosystem.
- GEOSS Community Ecosystem related:
  - There is the need for the GEO Community to get together around a technical workshop.
  - GEOSS Community has evolved including stakeholders from non-EO domains and new user categories.
  - User needs have become a priority for the present GEOSS Platform and are an essential driver for the GEOSS evolvement.
  - The Workshop highlighted the importance of knowledge generation, management, and sharing for evidence-based science and policy-making.
- GEOSS Technological Ecosystem related:
  - The Workshop demonstrated the GEOSS transition from adopting a Common Infrastructure approach to a more mature Web-based Platform one –i.e. the GEOSS Platform.
  - The GEOSS Platform Ecosystem must continue its evolution in response to evolving user requirements and include the most recent innovative technologies for data analytics to generate knowledge from data.
- The Regional Hubs related:
  - The raising of the Regional Hubs initiatives poses significant opportunities (e.g. engagement) and challenges (e.g. effort replication) for GEOSS in the next years
- New breed of interoperability tool/science to leverage GEOSS related
  - The increase of shared resources volume and variety raises significant challenges to GEOSS that is asked to connect diverse online platforms, handling their services. There exists the need of supporting new interoperability approaches and tools see for example APIs and standards.
- A focus on the GEO Global priorities: Climate, Disasters and SDGs related:
  - The workshop highlighted the need for GEOSS to focus on the GEO Global Priorities and consider them as drivers of the specification and prioritization of the GEOSS Platform evolutions.
- An increasing demand for easily usable EO data related:
  - Attendees recognized the need to reduce time spent on data preparation, so to better focus on the study itself.
- User and Data Metrics related:
  - The GEOSS Platform needs to consider enhanced mechanisms to monitor user interests linked to resources discovered and accessed.

A web-story was published, as the result of a collaboration of the organisers of the event at the ESA Earth Online web-site (see [RD-12]). It was cited in various other (company and institutional) web-sites.

The GEOSS Hack 2018 event was announced via various posters (see Figure 16).





Figure 16. The GEOSS Hack 2018 Poster.

A dedicated 3<sup>rd</sup> GEO Data Providers Workshop banner was prepared as well (see Figure 17).



Figure 17. The 3rd GEO Workshop Providers Table Banner.

## 2.11 GEO Data Technology Workshop – Vienna, Austria

The international data community joined the Group on Earth Observations in Vienna, Austria from 23-25 April 2019 for the GEO Data Technology Workshop.

The workshop focused on exploring how to best make available Earth observations-based knowledge for international policy frameworks, including the United Nations 2030 Agenda for Sustainable Development, the Sendai Framework on Disaster Risk Reduction and the Paris Climate Agreement.

The EDGE project contributed via a presentation highlighting state of the art and perspectives of the GEOSS Platform.

#### 2.12 EuroGEOSS Workshop 2018

The EuroGEOSS Workshop (formerly known as the European GEO Projects' Workshop) took place on 12-14 September 2018 at the University of Geneva and the Museum of Ethnography (see [RD-13]).

The event was co-organised by the Swiss Federal Office for the Environment, the European Commission with the support of the University of Geneva. It brought together European players interested in and actively contributing to the Global Earth Observations System of Systems (GEOSS).

The main aim was to look for synergies among the participants and to discuss how Europe can contribute to this international effort. The EuroGEOSS Workshop programme was a combination of Plenary sessions, thematic sessions, hands-on demonstrations and numerous networking opportunities.

EDGE actors coordinated a presentation with the GEO Secretariat that was given on the 12<sup>th</sup> of September and available from [RD-14]. The main objective of this presentation was to show the capabilities of the Platform as input to EuroGEOSS activities.

#### 2.13 EuroGEO(SS) Workshop 2019

The EuroGEO(SS) Workshop took place from 3 to 5 July 2019 at the Pavilhão do Conhecimento in Lisbon (Portugal). The event was co-organised by the Portuguese Foundation for Science and Technology (FCT) and the European Commission.

The workshop brought together European players interested in and actively contributing to the GEOSS. The aim was to look for synergies across projects, initiatives, to offer networking opportunities to the participants and to discuss how Europe can contribute to the international effort.

This year's event was dedicated to information with particular emphasis on Ocean observations and focus on user requirements for EuroGEOSS

#### 2.14 2018 GEO Symposium and 2018 Climate Workshop

The 2018 GEO Symposium and the 2018 GEO Climate Workshop were hosted by the World Meteorological Organization in Geneva, Switzerland from 11 until 13 June 2018. A detailed agenda and all presentations provided during the GEO Symposium are available from [RD-15].

The GEO Symposium identified the following eight sessions:

- Session 1 Sustainable Development Goals, Climate Change Adaptation, and Disaster Resilience: Opportunities for Integration in the Application of Earth Observations
- Session 2 Challenges and Opportunities for Data Sharing and Data Management
- Session 3 Addressing Gaps in Coordination of In-situ Terrestrial Observations
- Session 4 Transformative Digital Technologies
- Session 5 Regional Coordination
- Session 6 Engaging the Commercial Sector in the GEO Work Programme
- Session 7 The Role of Earth Observations in Supporting the Paris Climate Agreement
- Session 8 Programme Board Round Table

The EDGE team contributed to the presentation "*Importance of Data Management Principles for the GEOSS Platform and for data providers and users*" that was given during Session 2 by the GEO Secretariat staff Paola De Salvo [RD-16].

#### 2.15 2019 GEO Symposium

The GEO community met in Geneva this May for the 2019 GEO Symposium. Representatives from GEO's 70+ Work Programme activities and initiatives – including EDGE Partners - shared their progress, knowledge and made plans to maximise the impact of Earth observations for sustainable development.

The 2019 GEO Symposium took place at a critical moment in the development of the 2020-2022 GEO Work Programme. Participants had the opportunity to take part in discussions that will shape GEO's direction over the next three years.

#### 2.16 2020 GEO Symposium

In response to the COVID-19 pandemic, the Group on Earth Observations has announced the firstever GEO Virtual Symposium 2020 - which will take place entirely online from 15-19 June 2020.

The global GEO community will benefit from a series of interactive webinars over the course of one week that will provide in-depth discussions from experts on a range of relevant issues to the GEO Work Programme Flagships, Initiatives and Activities. At this first year of the 2020-2022 GEO Work Programme, the Symposium will focus on strengthening the capability of GEO Work Programme activities to implement their plans effectively. It will cover topics such as:

- Leveraging Advanced Technologies
- Engaging UN Agencies and Intergovernmental Organizations
- Contributing to Reproducible Knowledge
- Resource Mobilization and Sustainable Funding
- Co-designing Capacity Development
- Focusing on Impact: Regional GEOs
- Monitoring Essential Variables
- Water and Coastal Observations

The EDGE Project is expected to give a contribution to the session "Focusing on Impact: Regional GEO". In particular, the EuroGEO will present the "Evolution of the GEOSS Platform to make regional capabilities globally available showing the current state, the operational and prototyped platforms and the contribution to the GEOSS Infrastructure Development Task Team architecture evolution.

A special session on Earth observations for COVID-19 Response and Recovery will start off the week to mark the contributions of the GEO community to this significant challenge.

#### 2.17 User Community, GEOSS Portal and other Workshops

Various User Community, GEOSS Portal and other Workshops have been organised by the EDGE team in coordination with the GEO Secretariat during which presentations, demonstrations and/or training were provided with the main objective to inform the attendees regarding the GEOSS Platform potential, functionality, capabilities, tools and accessible data and to collect *community* needs for discovery, access and use of Earth Observations. The general agenda for these workshops included:

- A presentation of Key Partners, Flagships and Initiatives under the thematic domain;
- An overview of the thematic datasets available from the GEOSS Platform including a demo focused on the specific theme;
- A customisation proposal of the GEOSS Portal;
- Open discussion with the Community looking for data, functionality and knowledge gaps to be addressed.

Some of these were virtual workshops organised by the GEO Secretariat, either as part of a series of workshops or as ad-hoc organised workshops. Quite some of these workshops took place before the Kick-Off of the EDGE project, others were in overlap. Table 1 shows all User Community Workshops, all GEOSS Portal Workshops and other workshops that were in overlap with the EDGE project.

Dedicated presentations (including mock-ups) and training material were prepared depending on the community/ies of interest. Full material is available on request from the EDGE team.

Workshop Name	Start	Finish	Dissemination and training activities
User Community Workshops			
GCI for Disasters	22/02/17	22/02/17	Presentations, demonstrations, training
GCI or Water	29/03/17	29/03/17	Presentations, demonstrations, training
GCI for Climate	28/06/17	28/06/17	Presentations, demonstrations, training
GCI for SDG	27/09/17	27/09/17	Presentations, demonstrations, training
GCI for Health		Not orga	nised
GCI for Food Security and Sustainable Agriculture	13/12/2017	13/12/2017	Presentations, demonstrations, training
GCI for Sustainable Urban Development	Not organised		
GCI for Energy	Not organised		
GCI for Infrastructure & Transport Management	Not organised		
GEO-GNOME Community Workshop, Bern, Switzerland	23/05/2018	23/05/2018	Presentations, demonstrations, training
WHO Community Workshop	15/06/2018	15/06/2018	Presentations, demonstrations
EcoPotential: GEOSS Portal "Data and Knowledge" Demo	05/07/2019	05/07/2019	Presentations, demonstrations, training
BluePlanet: GEOSS Portal "Data and Knowledge" Virtual Workshop	11/07/2019	11/07/2019	Presentations, demonstrations, training
GEOSS Portal Workshops			
1 <sup>st</sup> GEOSS Portal Virtual Workshop	26/01/17	26/01/17	Demonstrations, training
2 <sup>nd</sup> GEOSS Portal Virtual Workshop	22/03/17	22/03/17	Demonstrations, training
3 <sup>rd</sup> GEOSS Portal Virtual Workshop	07/06/17	07/06/17	Demonstrations, training
4st GEOSS Portal Virtual Workshop	29/11/17	29/11/17	Demonstrations, training
GEOSS Portal "Data and Knowledge" Virtual Workshop	11/06/19	11/06/19	GEOSS Platform demo; Interactive training



Workshop Name	Start	Finish	Dissemination and training activities
			exercises on the GEOSS Platform.
Other Workshops and Meetings			
European Geosciences Union (EGU) General Assembly 2017	24/04/17	28/04/17	Videos available from GEOSS Portal YouTube Channel [RD-17]
ESAW – European Ground System Architecture Workshop – 2017, ESA/ESOC   Darmstadt, Germany (see: http://www.esa.int/Our_Activities/Operations/gse/ESAW_2017)	20/06/17	21/06/17	GEOSS Portal Poster / Presentation
ENERGIC-OD Final Review	15/11/17	15/11/17	Presentation and demo
GEOSS workshop for data providers in the AtlantOS and COOP+, Gran Canaria	24/11/17	24/11/17	Presentations and training
INSPIRE conference 2018, Belgium (see: https://inspire.ec.europa.eu/events/inspire-conference-2018)	18/09/18	21/09/18	Presentation
EnergicOD Project meeting	03/09/17	04/09/2017	Presentation
2 <sup>nd</sup> Conference of Digital Bar and Road (DBAR 2017), Hong Kong (see: http://www.dbeltroad.org)	06/12/2017	08/12/2018	Presentation
3 <sup>rd</sup> Conference of Digital Bar and Road (DBAR 2017), Tengchong, China (see: http://www.dbeltroad.org)	05/12/2018	07/12/2018	Presentation
ERA-PLANET IGOSP Meeting	06/02/18	07/02/18	Presentation and demo
European Geosciences Union (EGU) General Assembly 2018, Vienna, Austria (see: https://egu2018.eu)	08/04/18	13/04/18	Videos available from GEOSS Portal YouTube Channel [RD-17]
ISDE Summit	17/04/18	19/04/18	Presentation
ERA-PLANET GEOEssential Workshop	23/04/18	23/04/18	Remote presentation and demo
CNR IIA conference	09/05/18	10/05/18	Presentation
OGC TC Meeting	04/06/18	05/06/18	Presentation
ECOPOTENTIAL General Assembly	18/06/18	22/06/18	Presentation and demo
ERA-PLANET IGOSP Meeting	25/07/18	26/07(18	Presentation
OGC TC Meeting	10/09/18	11/09/18	Presentation
The ESA Earth Observation <u><b>D</b>-week EO Open</u> <u>Science and FutureEO</u> (see: http://phiweek.esa.int)	12/11/18	16/11/18	Presentation
2017 Conference on Big Data for Space (BiDS), Toulouse, France (see: http://bigdatafromspace2017.org)	28/11/17	30/11/17	Presentation
2019 Conference on Big Data for Space (BiDS), Munich, Germany (see: http://bigdatafromspace2019.org)	19/02/19	21/02/2019	Presentation
European Geosciences Union (EGU) General Assembly 2019, April 2019 (see https://www.egu2019.eu)	07/04/19	12/04/19	Videos/Presentation
ESA Living Planet Symposium, Milan, Italy (see: https://lps19.esa.int)	13/05/2019	17/05/2019	Presentation
CEOS-WGISS-46	22/10/2018	25/10/2018	Presentation



Workshop Name	Start	Finish	Dissemination and training activities
CEOS-WGISS-48, Oberpfaffenhofen, Germany	08/10/2019	08/10/2019	Presentation
SMURBS and the GEOSS Platform, remote call	13/01/2020	13/01/2020	Presentation and Demo
Marine Litter and the GEOSS Platform, remote call	23/01/2020	23/01/2020	Presentation and Demo
Caribbean Multi-Hazard Information and the GEOSS Platform	24/01/2020	24/01/2020	Presentation and Demo
The Sentinel Vision and the GEOSS Platform, remote call	02/04/2020	03/04/2020	Presentation and Demo
The Earth Starts Beating and the GEOSS Platform, remote call	09/04/2020	09/04/2020	Presentation and Demo
MUNDI DIAS and the GEOSS Platform, remote call	06/03/2020	06/03/2020	Presentation and Demo
All Atlantic Community and the GEOSS Platform, remote call	27/02/2020	06/02/2020	Presentation and Demo

Table 1 All User Community and GEOSS Portal Workshops and other Workshops in overlap with EDGE project.

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# Annex C. Terminology

#### **C.1** Acronyms and Abbreviations

EDGE	European Direction in GCI Enhancements		
CNR-IIA	Consiglio Nazionale delle Ricerche – Istituto per l'Inquinamento Atmosferico		
EC	European Commission		
EGU	European Geosciences Union		
EMS	Emergency Management Service		
EO	Earth Observation		
ESA	European Space Agency		
GCI	GEOSS Common Infrastructure		
GEO	Group on Earth Observation		
GEO DAB	GEO Discovery and Access Broker		
GEOSS	Global Earth Observation System of Systems		
JRC	Joint Research Centre		
SDG	Sustainable Development Goal		
SUS	System Usability Scale		
USGS	United States Geological Survey		
WP	Work Package		