

# ENVRI Terminology / Glossary

## ENVRI Reference Model Glossary

Full ENVRI RM terminology and glossary can be found [here](#)

### Project acronyms

AC: Active Collab (ENVRIplus Project Management System)

BEERI: Board of European Environmental Research Infrastructures - is an internal advisory board representing the needs of environmental Research Infrastructures

CA: Consortium Agreement - Legal contract between the ENVRIplus beneficiaries

DL: Deliverable / Deadline

DoW: Description of Work

DoA: Description of Action

GA:

1) Grant Agreement - Contract between Coordinator and Commission

2) General Assembly - GA is the ultimate decision-making body of the consortium

EB: Executive Board - supervisory body for the execution of the Project

EC: European Commission - is the executive body of the European Union responsible for proposing legislation, implementing decisions, upholding the EU treaties and managing the day-to-day business of the EU

ENV SWG ESFRI: the European Strategy Forum on Research Infrastructures - Strategic Working Group on Environment

ESFRI: the European Strategy Forum on Research Infrastructures

PM: Person Month

RI: Research Infrastructure

WP: Work Package

### Organisational Acronyms

ACTRIS: Aerosols, Clouds, and Trace gases Research InfraStructure network

AQUACOSM : EU network of mesocosms facilities for research on marine and freshwater ecosystems open for global collaboration

BEERI: Board of European Environmental Infrastructures

CEA: Commissariat à l'Energie Atomique et aux Energies Alternatives

CINECA: Consorzio Interuniversitario CNR: Consiglio Nazionale Delle Ricerche

CNRS: Centre National de la Recherche Scientifique

CODATA: Committee on data for Science and Technology

ConnectinGEO: Coordinating an Observation Network of Networks EnCompassing saTellite and IN-situ to fill the Gaps in European Observations

COOPEUS: Strengthening the cooperation between the US and the EU in the field of environmental research infrastructures

COPERNICUS: previously known as GMES (Global Monitoring for Environment and Security), is the European Programme for the establishment of a European capacity for Earth Observation

CSC: CSC - IT Center for Science

CU: Cardiff University

D4Science: is an organisation offering a Hybrid Data Infrastructure service and a number of Virtual Research Environments

DANUBIUS: The international center for Advanced studies on river-sea systems

DASSH: Data archive for seabed species (a UK marine biology resource centre)

DIRAC : Distributed Infrastructure with Remote Agent Control

DiSSCo: Distributed Systems of Scientific Collections

DKRZ: Deutsches Klimarechenzentrum GmbH

EAA : Umweltbundesamt GmbH - Environment Agency Austria

EduGAIN: is an international interfederation service interconnecting research and education identity federations

EEA: European Environment Agency

EGI : European Grid Infrastructure

EGLEU:

EINFRA-1-2014:H2020 Call for e-infrastructures (Managing, preserving and computing with big research data)

EISCAT: EISCAT Scientific Association

EMBL: European Molecular Biology Laboratory

EMBRIC: European Marine Biological Resource Centre a consortium of research organisations interested in marine biology

EMODNET: The European Marine Observation and Data Network

EMRP: European Metrology Research Programme

EMSC: Euro-Mediterranean Seismological Centre

EMSO: European Multidisciplinary Seafloor and Water Column Observatory

ENVRI : FP7 project on Implementation of common solutions for a cluster of ESFRI infrastructures in the field of environmental Sciences

EPOS: The European Plate Observing System

EUDAT : H2020 project on Research Data Services, Expertise & Technology Solutions (previously funded by FP7)

EUFAR : European Facility for Airborne Research

EUROCHAMP2020 : European atmospheric simulation chambers

EURO-ARGO: European ARGO programme (ARGO are a type of marine survey device)

EUROFLEETS: New operational steps towards an alliance of European research fleets

EUROGOOS: European Global Ocean Survey System

EuroSITES: European Ocean Observatory Network

ERIS: Environmental Research Infrastructure Strategy 2030

ESONET Vi: European Seafloor Observatory NETWORK

ETHZ: Eidgenössische Technische Hochschule Zurich

ESFRI: European Strategy Forum on Research Infrastructures

FIM4R: Federated Identity Management for Research collaborations

FMI: Ilmatieteen Laitos (Finnish Meteorological Institute)

FZJ: Forschungszentrum Juelich GmbH

FixO3: Fix point open ocean observatories (survey programme)

GBIF: Global Biodiversity Information Facility

gCube: is an open-source software toolkit used for building and operating Hybrid Data Infrastructures enabling the dynamic deployment of Virtual Research Environments by favouring the realisation of reuse oriented policies

GEO : The Group on Earth Observations coordinates international efforts to build a Global Earth Observation System of Systems (GEOSS)

GEOMAR: Helmholtz Zentrum Für Ozeanforschung Kiel

GEOSS : Global Earth Observation System of Systems coordinated by GEO (The Group on Earth Observations)

GROOM: Gliders for research ocean observation and management

H2020: Horizon 2020, European level research funding scheme

HELIX Nebula: partnership between big science and big business in Europe that is charting the course towards the sustainable provision of cloud computing - the Science Cloud

IAGOS - In-service Aircraft for a Global Observing System

ICOS : Integrated Carbon Observation System

ICSU: The International Council for Science

INFREMER : Institut Français de Recherche Pour l'Exploitation de la Mer

INGV: Istituto Nazionale di Geofisica e Vulcanologia

INSPIRE : Integrated Sustainable Pan-European Infrastructure for Researchers in Europe

INRA: Institut National de la Recherche Agronomique

IS-ENES: RI for the European Network for Earth System Modelling

INTERACT: International Network for Terrestrial Research and Monitoring in the Arctic

IPBES: Intergovernmental Platform on Biodiversity & Ecosystem Services

I3: Integrated Infrastructures Initiative (I3) combines several activities essential to reinforce research infrastructures and to provide an integrated service at the European level

JERICO: Towards a joint European research infrastructure network for coastal observatories

LifeWatch: European e-Science infrastructure for biodiversity and ecosystem research

LU: Lund University

LTER: The Long-term Ecological Research Network

LTER-EUROPE : European Long-term Ecosystem Research network of 21 national LTER networks

MBA: Marine Biological Association of the United Kingdom

NERC: Natural Environment Research Council

NILU: Norsk Institutt for Luftforskning (Norwegian Institute of Air Research)

NMI: National Metrological Institutes

PANGAEA: Data Publisher for Earth & Environmental Science (Open Access library aimed at archiving, publishing and distributing georeferenced data from earth system research)

PLOCAN : Consorcio Para el Diseno, Construccion, Equipamiento y Explotacion de la Plataforma Oceanica de Canarias

RCN: Norges Forskningsrad (Research Council of Norway)

RDA: Research Data Alliance

RI: Research Infrastructures – facilities, resources and related services used by the scientific community to conduct top-level research in their respective fields, ranging from social sciences to astronomy, genomics to nanotechnologies.

SCAPE: SCAlable Preservation Environments (FP7 project)

SeaDataNet: Pan-European infrastructure for ocean & marine data management

SIOS: Svalbard Integrated Arctic Earth Observing System

SME: small and medium-sized enterprises

UCPH: Kobenhavns Universitet (Copenhagen University)

UEDIN: University of Edinburgh

UGOT: Goeteborgs Universitet (University of Gothenburg)

UHEL: Helsingin Yliopisto (University of Helsinki)

UiT: Universitetet i Tromsø (University of Tromsø)

UniHB: Universitaet Bremen (University of Bremen)

UNILE: Universita del Salento (University of Salento)

UNITUS: Universita Degli Studi della Tuscia

USTAN : The University Court of the University of St. Andrews (University of St Andrews)

UvA : Universiteit van Amsterdam (University of Amsterdam)

## **Important Technical Terms/Acronyms**

API: Application Program Interface, is a set of routines, protocols, and tools for building software applications

Biodiversity: is the variety of different types of life found on earth

Biodiversity metrics: measurements of the number of species and how they are distributed

CERIF: Common European Research Information Format

CIARD RING: A global directory of information services and datasets in agriculture

Data stream: is a sequence of digitally encoded coherent signals used to transmit or receive information that is in the process of being transmitted

Data pipeline: In computing, a pipeline is a set of data processing elements connected in series, where the output of one element is the input of the next one.

DCAT: is a resource description format vocabulary designed to facilitate interoperability between data catalogues

DOI: Digital Object Identifier

E-infrastructure: can be defined as networked tools, data and resources that support a community of researchers, broadly including all those who participate in and benefit from research

HPC: High Performance Computing

HTC: High Throughput Computing

IoT: The Internet of Things - is a scenario in which objects, animals or people are provided with unique identifiers and the ability to transfer data over a network without requiring human-to-human or human-to-computer interaction.

ICT: Information and Communications technology

INFRADEV-4: Subcall of H2020 INFRADEV call for Implementation and operation of cross-cutting services and solutions for clusters of ESFRI and other relevant research infrastructure initiatives

IPR: Intellectual Property Rights

KOS: Knowledge Organization Systems - is a generic term used in Knowledge organization about authority lists, classification systems, thesauri, topic maps, ontologies etc.

LOD: Linked open data is linked data that is open content

LOV: Linked Open Vocabularies

Metadata : is data that describes other data. Metadata summarizes basic information about data, which can make finding and working with particular instances of data easier

NGI: National Grid Initiative

NREN: National Research and Education Network

NRT: Near Real Time - refers to the time delay introduced, by automated data processing or network transmission, between the occurrence of an event and the use of the processed data (For example, a near-real-time display depicts an event or situation as it existed at the current time minus the processing time, as nearly the time of the live event)

OASIS: Advancing Open Standards for the Information Society (non-profit consortium)

ODP: Open Distributed Processing

OIL-E: The Open Information Linking model for Environmental science - is a semantic linking framework

Ontology: (In computer science and information science) an ontology is a formal naming and definition of the types, properties, and interrelationships of the entities that really or fundamentally exist for a particular domain of discourse

QoE: Quality of user experience

over dispersion : a statistical characteristic of data such that the data have more clusters than compared to what might be expected if the data were distributed randomly in proportion to the time/space available.

NetCDF: a file format.

OceanSITES: s a worldwide system of long-term, open-ocean reference stations measuring dozens of variables and monitoring the full depth of the ocean from air-sea interactions down to the seafloor

OOI: Ocean Observatories Initiative

RDA: Resource Description and Access, a standard for descriptive cataloguing

RM: Reference Model - is an abstract framework or domain-specific ontology consisting of an interlinked set of clearly defined concepts produced by an expert or body of experts in order to encourage clear communication

SensorML - The primary focus of the Sensor Model Language is to provide a robust and semantically-tied means of defining processes and processing components associated with the measurement and post-measurement transformation of observations

Semantics : is the study of meaning

Syntax: In computer science, the syntax of a computer language is the set of rules that defines the combinations of symbols that are considered to be a correctly structured document or fragment in that language

SLA: Service Level Agreement

UV: unmanned vehicles

VCP: (ENVRI) Virtual Community Platform

VL: Virtual Laboratory

VLDATA: this was the name of the failed project proposal so I think it can be deleted

VRE: Virtual Research Environments, web based package tailored to a specific community

## Definitions

Intradisciplinary: working within a single discipline.

Crossdisciplinary: viewing one discipline from the perspective of another.

Multidisciplinary: people from different disciplines working together, each drawing on their disciplinary knowledge.

Interdisciplinary: integrating knowledge and methods from different disciplines, using a real synthesis of approaches.

Transdisciplinary: creating a unity of intellectual frameworks beyond the disciplinary perspectives.

