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 a l Energie Atomique et aux Energies Alternatives
CINECA: Consorzio Interuniversitario CNR: Consiglio Nazionale Delle Richerche
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

EGLUE: 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

EMBRC: 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

EMS: 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: Eidgenoessische 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 Meeresforschung Kiel

GEOS: 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: Institute Francais de Recherche Pour l'Exploitation de la Mer
INGV: Instituto 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 Luftforsking (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 Oceania 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 Tromsoe (University of Tromso)
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.


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.


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).


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: 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.