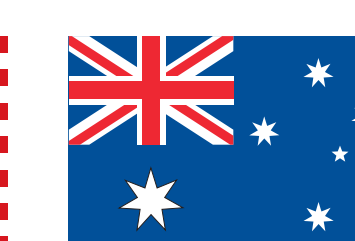




OCEAN DATA INTEROPERABILITY PLATFORM

EU SEVENTH FRAMEWORK PROGRAMME (FP7) - CONTRACT N° 312492 - EU HORIZON 2020 FRAMEWORK PROGRAMME CONTRACT N° 654310



Activity: International co-operation with the USA and Australia on common e-infrastructure for marine data

SCENARIO

Heterogeneous ocean and marine data has been acquired using a vast array of instruments and collected in various different data and metadata formats. Many data producers and partners archive ocean and marine data in existing e-infrastructures that are not integrated and operate independently. Marine data is very expensive to collect and is

a valuable resource for the whole ocean community: physical, chemical, biological, geological and geophysical. The collaboration between different institutions is crucial to reduce differences in data management practices and to build an international consensus on key elements that facilitate data exchange and standardise data and metadata services. The added

value of common procedures to check quality and the production of interoperable ocean data and metadata enables trust and overcomes the lack of available raw data. It triggers a cycle that improves the quality of the research and the data that relies upon it. It provides researchers with new opportunities and benefits everyone through improved global knowledge.

OBJECTIVES

EFFECTIVE DATA SHARING

DATA RE-USE

CREATION OF A COLLABORATIVE COMMUNITY

INTEROPERABILITY AMONG EXISTING E-INFRASTRUCTURE

HARMONISATION OF OCEAN AND DATA MANAGEMENT

TO FOSTER INCENTIVES FOR RESEARCHERS TO SHARE DATA



Topics addressed during the 5 workshops organised

DATA AND METADATA FORMATS

SENSOR WEB ENABLEMENT

VOCABULARIES

PORTAL SERVICES

DATA PUBLISHING

BEST PRACTICES

TECHNOLOGIES AND PROTOCOLS

INTEROPERABILITY SOLUTIONS

PROTOTYPES

ODIP 1

Single points of access for data and metadata services

Developing interoperability between the SeaDataNet (Europe), Integrated Marine Observing System (Australia) and National Oceanographic Data Centre (USA) data discovery and access services using the (Euro) GEOSS GEO-DAB brokering service.

Facilitate access to data from the regional data services by the GEOSS portal and IODE Ocean Data Portal (ODP).

ODIP 2

A unified information system for vessels and ships of opportunity acquiring marine data

Establishing interoperability across cruise summary reporting (CSR) systems in Europe, the USA and Australia, and improving the delivery and exchange of cruise summary information across these and other global services, such as the Partnership for Observation of Global Oceans (POGO) catalogue, by implementing the use of common formats and vocabularies.

ODIP 3

A standardised system to improve descriptions of marine observation instruments

Establishment of a prototype Sensor Observation Service (SOS) for selected sensors installed on vessels and in real-time monitoring systems using sensor web enablement (SWE). Progress the regional initiatives towards the adoption of SWE allowing direct standardised access to the data from operational sensor systems.

ODIP PARTNERS

EUROPE

NERC (Coordinator) (United Kingdom)
MARIS (Technical Coordinator) (Netherlands)
OGS (Italy)
IFREMER (France)

HCMR (Greece)
ENEA (Italy)
ULg (Belgium)
CNR (Italy)

RBINS-MUMM (Belgium)
TNO (Netherlands)
52°NORTH GmbH (Germany)
AWI (Germany)

RHIMI-WDC (Russian Federation)
SOCIB (Spain)
VLIZ (Belgium)
BSH (Germany)

IEEE (France)
CSIC (Spain)
PANGAEA (Germany)

USA

LDEO
NOAA-NCEI
SDSC
SIO

US-IOOS
WHOI
UNIDATA
FSU-COAPS

AUSTRALIA

IMOS
AIMS
CSIRO
GA

AADC
RAN
NCI

INTERNATIONAL

UNESCO IOC-IODE
(Intergovernmental Oceanographic Commission)

