

7.2 DATA MANAGEMENT

7.2.2 Draft Concept for an Ocean Data and Information System (ODIS)

Document IOC-XXX/2 Annex 6

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IOC Ocean Data and Information System (IOC-ODIS)

IOC-ODIS will be a framework in which existing ocean data and information systems, products and services will be promoted and where connections between these systems will be promoted and possibly developed by relevant stakeholders

Target : Improve the discovery, access and interoperability of existing data and information, and to contribute to the development of a global ocean data and information system

ODIS can facilitate data discovery within the UN Ocean Decade across all partners

IOC Ocean Data and Information System (ODIS)

- **IODE will work with existing stakeholders**
- **Linked and not linked to IOC**
- **Leveraging established solutions where possible**

IOC Ocean Data and Information System (ODIS)

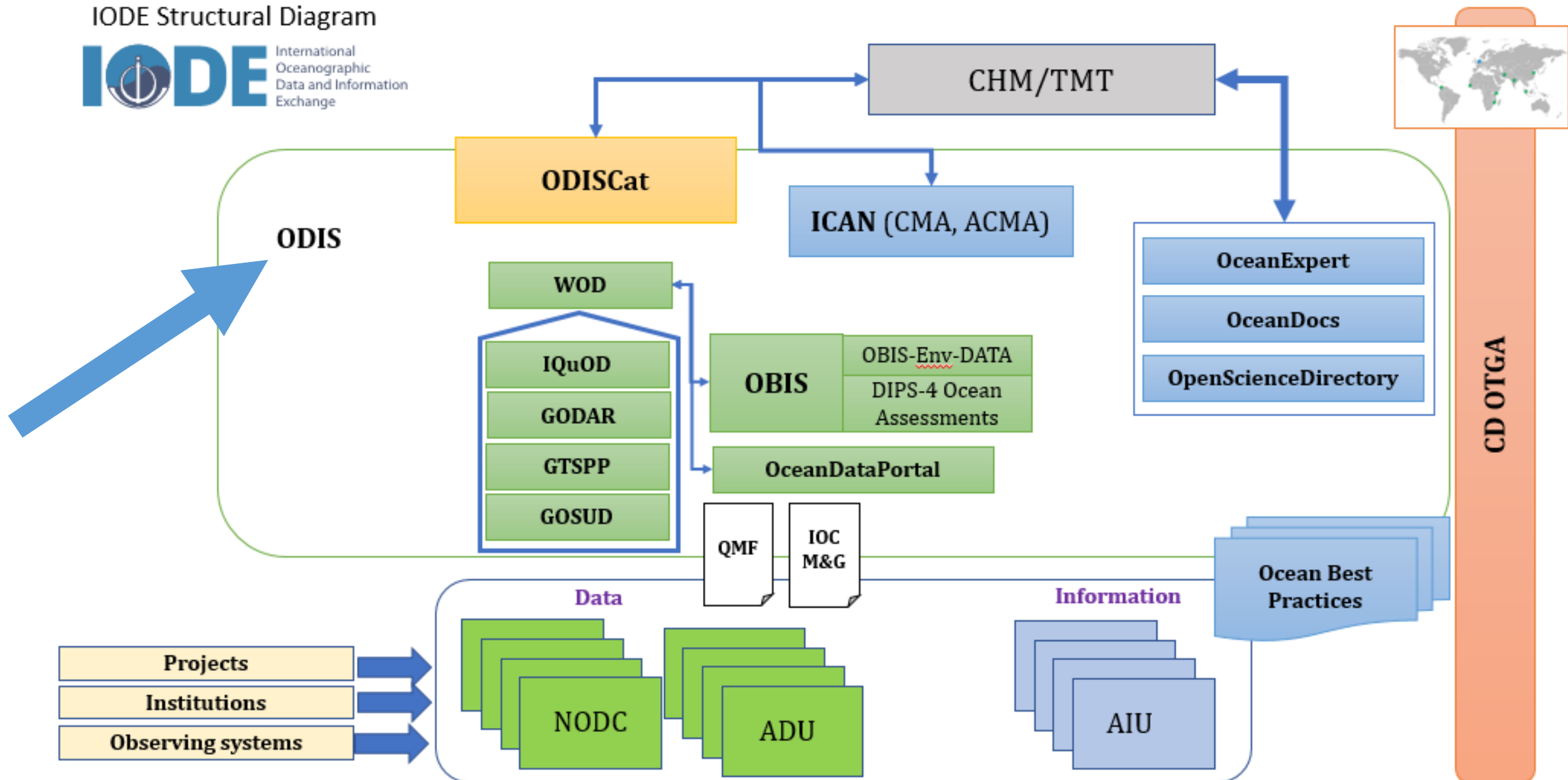


International
Oceanographic
Data and Information
Exchange



One Planet, One Ocean

IODE Structural Diagram



Target User Groups of IOC-ODIS:

- **Scientists (research, academic and private sector)**
- **Government agencies/ Policy-makers**
- **IOC global and regional programmes**
- **IODE National Oceanographic Data Centres (NODCs), IODE Associate Data Units (ADUs), IODE Associate Information Units (AIUs), IODE Global Data Assembly Centres (GDACS)**
- **International Governmental Organizations (IGOs)**
- **Non-governmental Organizations (NGOs)**
- **Industrial and commercial enterprises.**

Scenarios for implementing IOC-ODIS:

- 1) List of Links
- 2) Repository of Sources (ODISCat)
- 3) Central Data Portal
- 4) Stepwise development of ODIS,
leveraging existing infrastructures (ODISstep)

Cost-benefit analysis for 4 IOC-ODIS scenarios:

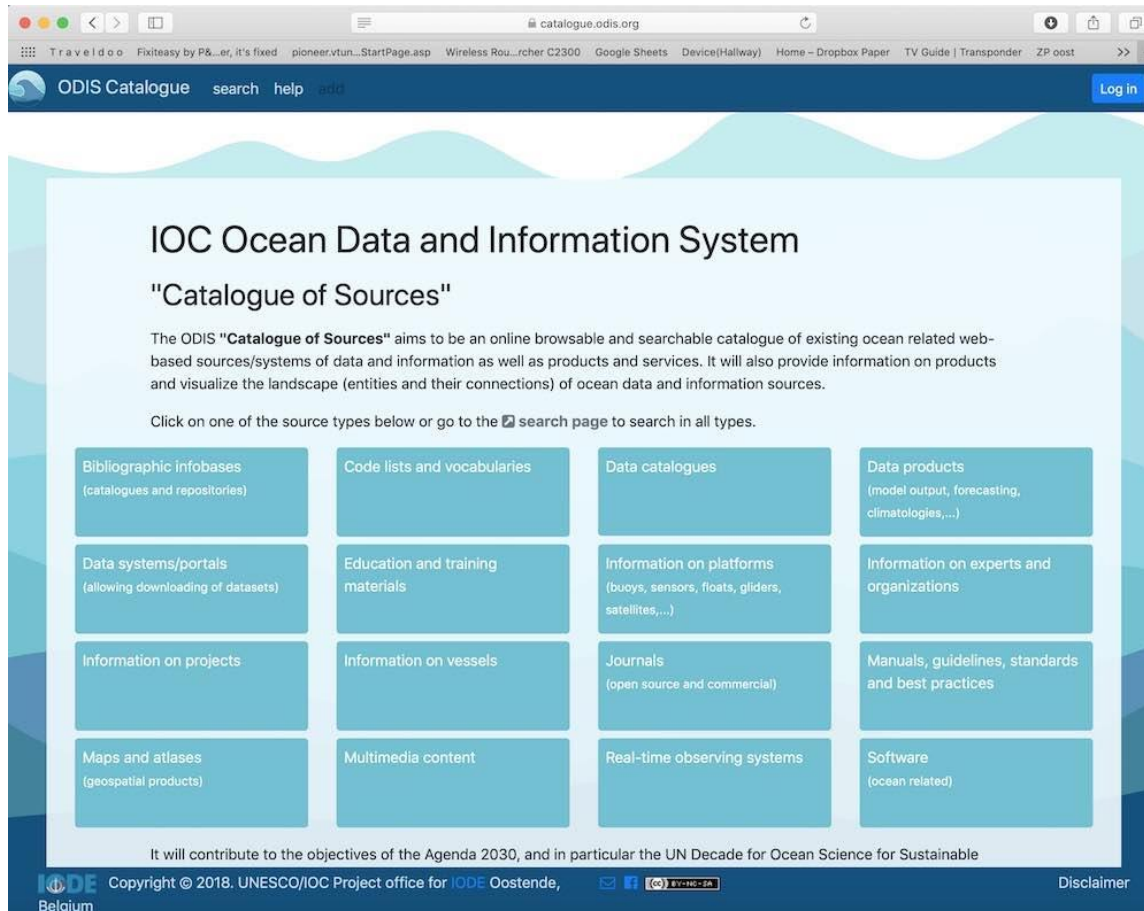
Scenario	Costs	Benefits	Weaknesses
1. List of links	No costs	No costs	No benefits
2. Repository of Sources (ODIScat)	Low: 108 k\$	Structured, queryable overview Integrated and extensible metadata solution	User must visit multiple providers to obtain data. Does not fulfil Rec. 15 from IOC audit.
3. Central Data Portal	High: 900 k\$ Absolute minimum. Costs may rise to many millions	Data are harvested, so quick discovery of data and ability to download from portal	Greater risk of failure Costly and difficult. Difficult to gain buy-in from established organizations
4. Stepwise development (ODISstep)	Medium: 528 k\$	Maximum use of existing infrastructure	Slower process

Conclusion for IOC-ODIS implementation:

**Stepwise development of IOC-ODIS,
leveraging existing infrastructures (ODISstep)**

Build on the proposed Repository of Sources (ODISCat)

ODIScat: Catalogue of Resources :



Prototype launched 1 Feb 2019

<https://catalogue.odis.org>

16 major content types

> 650 entries

**IODE Project Office &
Government of Flanders,
Kingdom of Belgium**

IOC-ODIS implementation:

- **NO duplication of effort, no re-inventing existing systems and infrastructures**
- **Needs to be user driven!!**
 - **Guidance from UN Decade through science and implementation plans**
- **Requires collaboration with**
 - **all stakeholders, in- and outside IOC**
 - **IT industry (commercial search engines)**
- **ODIS needs to deal with multiple content types**
 - **16 content types from ODIScat**
 - **Engage with existing stakeholder communities behind those content types**
 - **Aim at leveraging development of new products and services by multiple stakeholder communities**

IOC-ODIS implementation:

Efficient design

Modular design

Leveraging existing resources

Envisaged full functionality of IOC ODIS cannot be achieved without adequate resources both in manpower as well as in additional funding.

IODE invites the IOC Assembly:

To consider the next steps in the development of the IOC-ODIS

**To consider IOC-XXX Decision 7.2.2 on the
IOC Ocean Data and Information System (ODIS)**



International Oceanographic Data and Information Exchange (IODE)

<http://www.iode.org>

