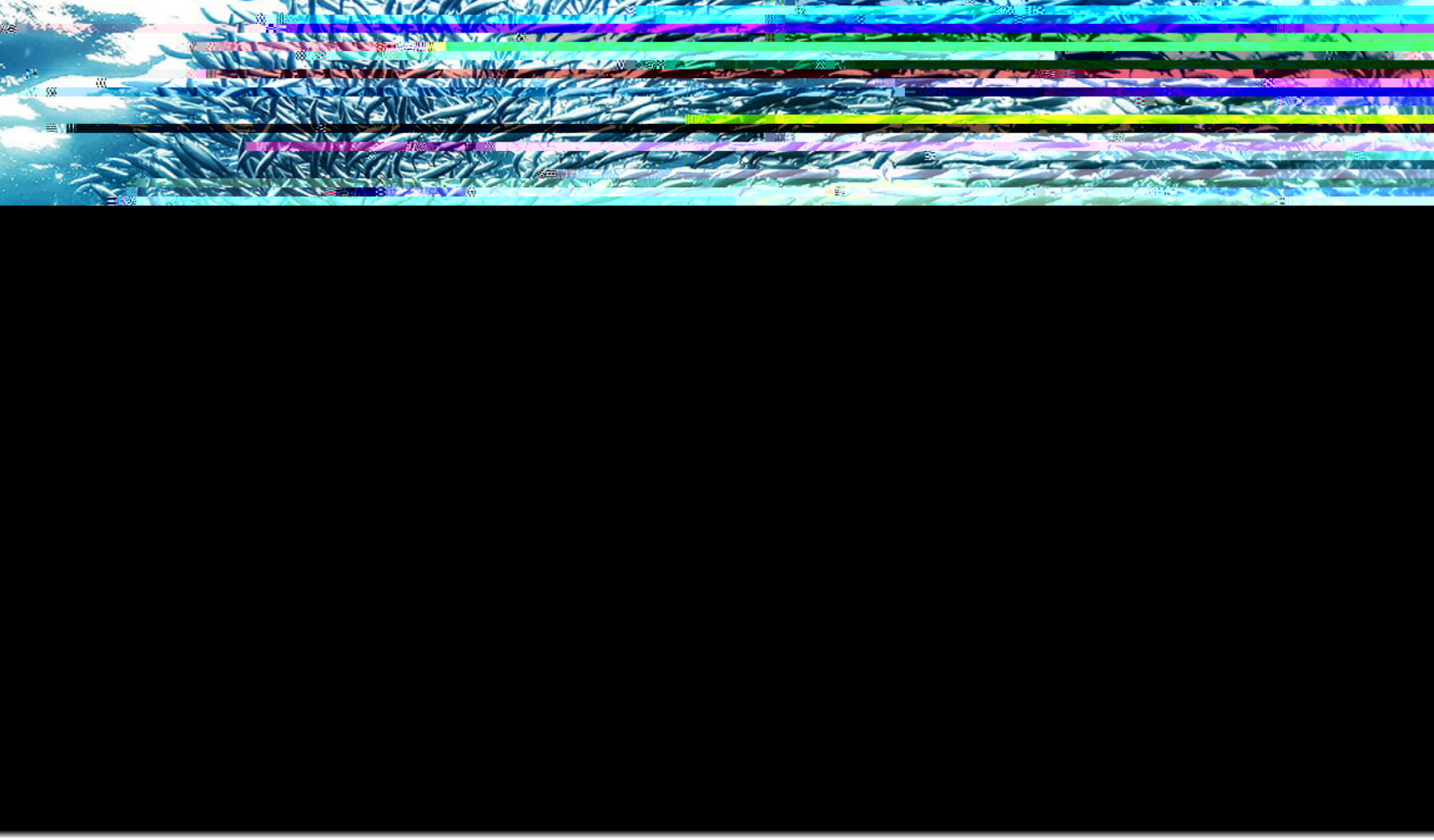


Marine geospatial information management

Annex III

2024

Disclaimer

geographical names, citations, maps and the bibliography, do not imply o f cial endorsement,

by States does not imply o f cial endorsement, acceptance, or recognition by the United Nations of

CONVENTION FOR THE PROTECTION OF THE MARINE ENVIRONMENT OF THE NORTH-EAST ATLANTIC (OSPAR COMMISSION)

Authored by

fields, and international non-governmental organisations. The non-governmental

and/or dissemination activities. Specifically, Part I Section 5;

> *We will ensure that data collection and assessment programmes are kept under continuous review, so they are up to date and fit for purpose as both technology and our understanding of the marine environment develop. Monitoring and assessment of the marine environment require the effective use and management of data and information to support the production of robust assessments. This will be achieved through the OSPAR Data and Information Management System (ODIMS) and the OSPAR Assessment Portal (OAP), allowing links to be made with other providers and consumers of OSPAR data and information. We are committed to ensuring that the data we use are findable, accessible, interoperable, reusable and reproduceable.*

issues of importance;

the Contracting Parties commit to carry out;

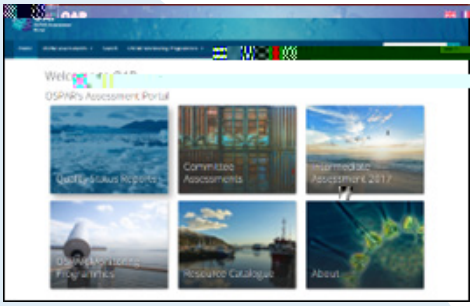
should be implemented;

Dumping and Placement of Wastes or Other Matter at Sea, Encounters with Dumped

through ongoing or specific national programmes coordinated within that country, national

are findable, accessible, interoperable and reusable.

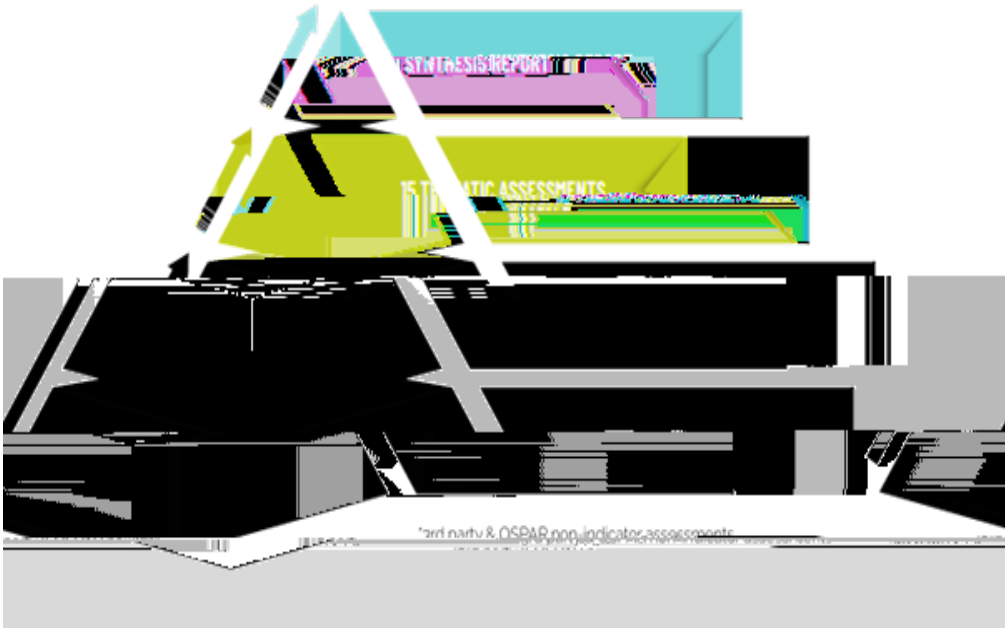
AWS is used to store the uploaded files in ODIMS.



Additionally, the report evaluates the status of different marine species, from fsh

and ocean acidi fcation on the marine environment. It examines the changes in ocean

These data are the result of years of work from a huge number of people, to de f ne,



“OSPAR is committed to making as much information as possible publicly available, consistent with achieving other similarly important goals of public policy. The framework for this is set out in Article 9 of the OSPAR Convention.”

With an increasing level of detail on the actions and process, underneath the JAMP

Maritime Area, which can be used in assessments to address the specific products

data to align with the monitoring and fulfil the assessment methods, detailed reporting

thematic areas; including, data on environmental pressures, environmental status, area-

CONVENTION

“refne and develop a consolidated set of scientifc criteria for identifying ecologically or biologically signifcant marine areas in need of protection, in

used nationally, regionally and globally” (para 44b, decision VIII/24).

The Expert Workshop on Ecological Criteria and Biogeographic Classifcation Systems

non-migratory blue whales, seabirds, sea turtles, sea snakes, fsh, dugongs, whale sharks, manta rays, gastropods, sea cucumbers, sponges, sea fans and corals);

North-West Indian Ocean and Adjacent Gulf Areas:
low-water coral beds; large population of dugongs; endemic subspecies of av ifauna; hawksbill nesting sites; resident population of Indo-pacifc humpback dolphin; highly biodiverse mangrove communities; seagrass and algal beds; high seabird and fsh diversity; signifcant feeding, breeding and nursery grounds for sea turtles, waterbirds, dolphins, reef fshes, sharks, rays and skates; feeding

sunfsh); unique ecology of the Arabian Sea Oxygen Minimum Zone; highly pro ductive areas, including an upwelling region resulting from “the Great Whirl” and associated eddies and gyres;

East Asian Seas: Network of 20 sites in a fyway of 100+ migratory waterbird species; ext v γ ƙ ز lÂ " e

and deep-water vulnerable fsh; upwellings with high pelagic productivity; pelagic-feeding bird species; “bubbling reefs”; areas of complex hydrol ogy; persistent presence of cetacean populations; seasonal migratory pathway for large migratory pelagic species; Mid-North-Atlantic Frontal System;

The COP emphasized that the application of the EBSA criteria is a scienti fc and technical exercise and that it should use the best available scienti fc and technical information, integrating the traditional, scienti fc, technical

- **A technical team**
  supported by a technical team from either the Commonwealth Scienti fc

considered formal CBD EBSAs and their descriptions and shapefiles, are included

such as EBSA booklets, brochures, video, training materials or other publications;

ecosystems, IMO's work on Particularly Sensitive Sea Areas); and the schedule of

of the ecological and biological significance of various components of the ocean,

DIVISION FOR OCEAN AFFAIRS AND THE LAW OF THE SEA OFFICE OF LEGAL AFFAIRS UNITED NATIONS

Division for Ocean Affairs and the Law of the Sea, O f ce of Legal Affairs, United Nations

[2]

Secretary-General to frst establish, and subsequently develop and update, the infrastructure and

The Division for Ocean Affairs and the Law of the Sea (DOALOS) of the O f ce of Legal Affairs

2 GA resolutions 49/28 of 1994, 52/26 of 1997, 59/24 of 2004, 60/30 of 2005, 67/78 of 2012, 74/19 of 2019, 75/239 of 2021; 76/72 of 2022; 77/248 of 2023 and Secretary-General's bulletin ST/SGB/2021/1 paragraphs 9.2 (b) and (e)

FOOD AND AGRICULTURE ORGANIZATION (FAO)

Authors:

- Emmanuel Blondel – Geographic Information Systems & R Expert (FAO – NFI)
- Marc Taconet – Senior Fishery Officer, Information Team leader (FAO – NFI)

Date:

Food and Agriculture Organization of the United Nations (UN-FAO) – Fisheries &

With 195 members - 194 countries and the European Union, FAO works in over 130

https://www.fao.org/fshery-aquaculture/en

Corporate FAO data standards

Coordinating Working Party (CWP) on fshery statistics

CWP provides a mechanism to coordinate the statistical programmes conducted by regional fshery bodies and other intergovernmental organizations with a remit for fshery statistics; The CWP is composed of experts nominated by intergovernmental organizations with an expertise in fshery statistics. There are currently 19 participating IGOs in the CWP. UN-FAO, by means of its Fisheries & Aquaculture division, acts as CWP Secretariat.

As of today, the CWP has recommended several geographic information standards as

Main Water Areas

Most of the core GIS standards recommended by the CWP are inherited from the

harmonization and standardization, particularly for fsheries geo-referenced data

of reference harmonization digital resources (fsheries and geospatial domain reference datasets) and the design of data exchange format specifcations for geo-referenced

data infrastructures (including national SDI) that need to access FAO fsheries

INTERGOVERNMENTAL OCEANOGRAPHIC COMMISSION OF UNESCO (IOC)

INTERGOVERNMENTAL OCEANOGRAPHIC COMMISSION OF UNESCO (IOC)

Author: Peter Pissierssens, Head IOC Project O f ce for IODE

information technology;

become partners in the IODE network;

bene f t of a wide range of users.

The IOC Assembly

The Executive Council

scienti f c understanding that makes this possible. Innovation of specialised products

IOC/IODE Manuals and Guides

Objectives

Provide world’s largest scientifc knowledge base on the diversity, distribution

AquaDocs

Within the value chain published knowledge and reporting is the next step after data

In some cases users may be signi f cantly involved in atlas development itself. In order

International Hydrographic Organization

activities of national hydrographic o f ces and promotes uniformity in nautical

policing, Marine science, Tsunami f ood and inundation modelling, and Marine

The Convention on the International Hydrographic Organization de f nes the

safety and e f ciency and which supports the protection and sustainable use of

Global Automatic Identification System (AIS) indicated ships traffic

UNITED NATIONS DEVELOPMENT PROGRAMME (UNDP)

INTERNATIONAL SEABED AUTHORITY

International Seabed Authority (ISA)

Authors (contributors):

and environmental data and associated digital f les. (

2.3 Con f dentiality and Non-Con f dentiality

is con f dential. No such data and information shall be released until the contractor has

3. INSTITUTIONAL ARRANGEMENT – GOVERNANCE MODEL – LEADERSHIP INSTITUTIONAL STRUCTURE – INSTITUTIONAL STRUCTURE

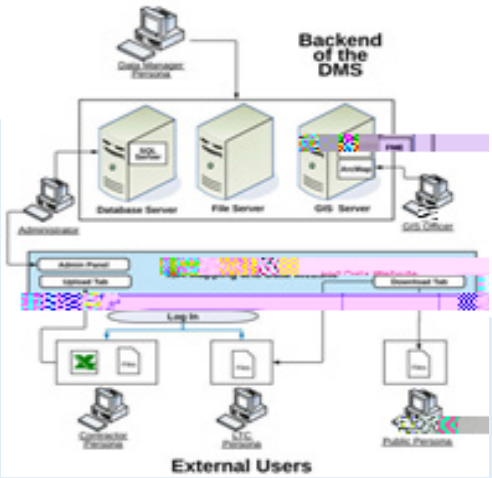
the Finance Committee (15 members); the Assembly; the Council (36 members); the Secretariat (i.e. Executive O f ce of the Secretary-General, O f ce of Legal Affairs, O f ce of Environmental Management and Mineral Resources, O f ce of Administrative Services)

Legal and Technical Commission: TechnietarRem ӟ ҏ ӌ Me (Meo

4. MARINE GEOSPATIAL DATA – DATA THEMES

5 ISBA/21/LTC/15/CORR.1: Reporting Template: https://www.isa.org.jm/reporting-templates

Figure. *Generalized workflow diagram showing interaction between personas and ISA DeepData database.*



parameters of the marine ecosystems from the seafloor to the ocean surface as well

several partnerships and collaborations with other UN (e.g. OBIS, WoRMS) and national [6]) and members of the scientific community to expand the

6 Africa Deep Seabed Resources (ADSR) project funded through Norwegian Agency for Development Cooperation (NORAD)

5.1 Regional Environmental Management Plans (REMPs)

conservation;

system structures and functions within the relevant management area;
provide those areas with appropriate levels of protection; and

5.2 Area 2030

high-resolution bathymetric data provided by contractors is con f dential information as it concerns resource-related data; however, ISA facilitated the submission by

inferring possible mineral occurrences based on arti f cial intelligence techniques, and increase the scienti f c knowledge of the global oceans and support glthe ansHu]

World Register of Marine Species (WoRMS) as an additional quality control mechanism will enable scientists to create maps of life on the sea f oor and help to understand and

PACIFIC COMMUNITY

1. MISSION

“To progress all Paci f c peoples’ rights and well-being through science and knowledge, guided

6. MARINE GEOSPATIAL DATA

SPC manages data relating to fsheries, the marine environment, oceanography, marine

6.1 Paci fc Community Center for Ocean Science (PCCOS)

The Paci fc Community (SPC), as the region's hub for science, technology and innovation for sustainable development, is also home to the Paci fc Community Centre for Ocean

PCCOS aims to help Paci fc Island governments and communities easily access the ocean

Whilst accurate ocean science, data, and information are critical tools, SPC recognises

their needs. PCCOS delivers integrated scienti fc services supporting Ocean management, Ocean governance, Ocean observations; and facilitating, and coordinating and transforming

The Paci fc Community Centre for Ocean Science website is

6.2 SPC – Climate and Oceans Support Program in the Paci fc (COSPPac)

Paci fc Island countries are some of the most vulnerable to climate change in the world.

affected communities and marginalised groups, such that Paci fc Island stakeholders are using climate and Ocean information to enable all Paci fc peoples to remain resilient

and prosperous lives. The primary stakeholders in COSPPac are the Paci fc Island

In relation to the marine geospatial information, SPC works with Paci fc Island counterparts

SPC – COSPPac -

6.3 SPC - Digital Earth Pacifc

in drought, forest fres, sea level rise, and fooding. Given the vulnerability of Pacifc Island countries and territories (PICTs) in this respect, the Pacifc region faces unique

livelihoods and ensuring sustainable food systems. Digital Earth Pacifc (DEP) delivers

Pacifc. This includes changes to landcover and land use to better target humanitarian

DEP will allow Pacifc Community (SPC) SPC member states to make more informed

Digital Earth Pacifc helps the Pacifc to achieve our 2050 Leaders vision for our Blue Pacifc Continent and underpins the progress being made towards the Paris Agreement

SPC – Digital Earth Pacifc website - https://digitalearthpacifc.org/

6.4 SPC – Pacifc Maritime Boundaries Interactive Dashboard

For Pacifc Island countries and territories (PICTs), as with all coastal States, maritime

codifes all coastal State's rights to a marine jurisdiction. Where countries' entitlements

The Pacifc Regional Maritime Boundaries project with the Pacifc Community (SPC) works with Pacifc countries to deliver certainty and publcity on the limits of their

coordination has been led by the Pacifc Community (SPC) since 2001.

This project has developed the Pacifc Maritime Boundaries Dashboard, which is hosted on the Pacifc Data Hub (PDH, pacifcdata.org). The dashboard is an interactive visual presentation of the progress by Pacifc countries on Maritime Boundaries tasks. The

6.5 Pacific Geospatial and Surveying Council (PGSC)

Established by the Pacific Region, for the Pacific Region

in the world today. The services provided by Pacific Island geospatial scientists and surveyors

tions and the pelagic ecosystem of the Pacifc Ocean

Pacifc Marine Specimen Bank: Collecting samples of Pacifc pelagic species

pacifcmarinespecimenbank

Web Tagging Data System: The Web Tagging Data System is a portal that gives

in oceanic tuna and billfsh fsheries