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EUROPEAN DIRECTORY OF MARINE ENVIRONMENTAL DATA (EDMED)

(A key resource of the SEA-SEARCH network)

INSTRUCTIONS FOR COLLATING EDMED ENTRIES

Introduction

The purpose of EDMED is to provide a user searchable, Web-based directory of data sets relating to the marine environment. It is organised through a network of national centres, each responsible for seeking out, collating and maintaining directory entries for the data holding centres within their own country. These national directories are then assembled into a single centralised system managed by the British Oceanographic Data Centre (BODC) prior to being made available *via* the Web. In the longer term, consideration may be given to developing a distributed Web-based system interfacing with each of the national directories.

There are three stages in the compilation of EDMED:

a) the authoring of EDMED entries at the Data Holding Centres

b) the editing and collating of EDMED entries at the national Collating Centres

c) the assembly of the final directory at BODC

Instructions for the authoring of EDMED entries at the Data Holding Centres are given in EDMED Information Note 1 "How to prepare entries for EDMED". At this stage, the rules and structures of EDMED entries are deliberately kept simple so that entries can be prepared with minimal effort. Information is requested in a simple free-text format designed to enable data holders to describe their data sets in terms they find to be appropriate and relevant. EDMED entries comprise two parts, Part A describing each data holding centre followed by one or more occurrences of Part B, each of which contains the description of a single data set.

The formatting rules are simple involving the structuring of information against a pre-defined checklist of items and the provision of free-text information for each item, prefixed with a simple item label. Data Holding Centres will normally submit information to their national centres either in hard copy form or as simple flat ASCII text files.

Whereas the Data Holding Centres provide the basic 'discovery' metadata for their data sets, the free formatting approach that is used omits the necessary standard keywords and administrative fields that are essential for user-searching through EDMED entries. It is the role of the national Collating Centres to construct this information and to collate the EDMED entries.

The role of Collating Centres

The tasks of Collating Centres in handling incoming EDMED entries include:

a) checking the content and format of entries

b) assigning unique identifiers to individual data holding centres, data contacts and data sets

c) assigning search keywords to data sets

d) collating entries for submission to BODC

a) Checking the content and format of entries

Incoming EDMED entries should be checked for the following:

a) that data set descriptions are sufficiently comprehensive and meaningful so as to be understandable by users not necessarily familiar with the activities and subject areas addressed by the Data Holding Centre. In particular, the name/title of each data set should encapsulate the content and temporal/spatial coverage of the data set.

b) that any limitations on the availability of data sets are clearly documented. Although EDMED is targeted primarily at data sets that can be made accessible to users, encouragement is also given to holders of working data sets, or data of a confidential or restricted availability, to make their data known through EDMED. Such limitations need to be documented.

c) that, with the exception of CR and LF, only the following standard, printable ASCII characters are used in EDMED entries:

A-Z, a-z, 0-9, and % & ‘ ( ) * +, - . @
/ : ; < > = ? and the space character

Entries should not include tabs, backspacing or underlining, form feeds, Greek letters, currency symbols etc. Other characters to be avoided include the degree symbol (replace by text ‘deg’), accented letters and diphthong characters. Text lines should have ragged right margins, i.e. they should not be justified.

d) that items in EDMED entries are properly prefixed with the correct item labels

e) that any Web-site addresses included in data holding centre and data set entries are accessible and appropriate

b) Assigning unique identifiers for entries

In principle, the association of data sets with their respective data holding centre and data contact(s) can be maintained through the sequencing of Part A and Part B entries within a simple flat ASCII file. However, for EDMED purposes, a more robust approach (with a certain amount of inbuilt redundancy) is adopted which involves assigning unique numeric identifiers to each data set (DATASET-ID), data holding centre (CENTRE-ID) and data contact (CONTACT-ID), and including these identifiers in related entries.

EDMED requires each Collating Centre to maintain an Organisation Table containing a standard name (CENTRE-NAME) for each data holding centre and associating each with a unique numeric identifier CENTRE-ID in the range 1 to 999. The identifier may be a code that is already used by the Collating Centre for its wider-based data management activities or a simple sequence number assigned for EDMED purposes. Care should be taken in maintaining the Organisation Table when dealing with organisational changes in data holding centres (such as the merging, splitting or renaming of organisations) and in ensuring that data sets continue to be properly linked to the appropriate CENTRE-ID.

The unique identifier, CONTACT-ID, assigned to each data contact by the Collating Centre is normally a simple sequence number assigned within the data holding centre (e.g. 1, 2, 3 etc) i.e. it is only unique when used in association with CENTRE-ID.

Identifiers for data sets (DATASET-ID) can either be assigned sequentially irrespective of data holding centre or, alternatively, assigned sequentially within data holding centre. It is strongly recommended that the latter option is adopted with sequence numbers in the range 1 to 999 and in association with CENTRE-ID to ensure uniqueness.

The Collating Centre has a certain amount of flexibility in how it chooses to assign identifiers, e.g. it may take the identifiers from a pre-existing Directory system. However, when EDMED entries are submitted to BODC, they should be accompanied by a clear statement as to how the identifiers were assigned, together with an up-to-date copy of the Organisation Table.

As described above, the identifiers assigned to data holding centres, data contacts and data sets are unique to the Collating Centre that assigned them. To ensure uniqueness of identifiers across Collating Centres, EDMED makes use of a further identifier, COLLATE-ID, which uniquely identifies the Collating Centre itself. This is assigned according to EDMED Table 1.

c) Assigning search keywords

The EDMED system allows Data Holding Centres to describe their data sets in an open free-text format unencumbered by rigid rules and a pre-defined vocabulary. Not only does this simplify the task of authoring entries but it also ensures that data sets are described in terms that are considered as appropriate and relevant by the data holding centre. However, for the end user of EDMED some level of indexing/keywording is required to enable the user to search for data sets relevant to his/her needs. It is envisaged that most users will wish to search for data by geographic area, date range, data theme, project, country of origin and/or data holding centre.

The following tables have been created in EDMED to support searches by country of origin, data theme and geographic area:

Table 2: Host Country
Table 3: Data Theme
Table 4: Coastal Zone
Table 5: Ocean/Sea Area

Searches by data holding centre will be supported by the Organisation Tables created by each Collating Centre.

One of the tasks of the Collating Centres is to review the information provided in the EDMED entries (Part B) and create additional items to support user searches as follows:

a) from the information in item TIME-PERIOD, create items BEGIN-YEAR, END-YEAR and ONGOING as appropriate.

b) from the information in GEOGRAPHIC-AREA, create items SOUTH, NORTH, WEST, EAST, defining the bounding limits of the data set; item SEA-AREAS listing the sea-areas (in Table 5) covered by the data set (or oceans if the data set has ocean-wide coverage); and, where data coverage encroaches with 5 miles (10km) of the coast, item COASTAL-ZONE listing the countries/continents (Table 4) with coastal coverage.

c) from the information in PROJECT, create item PROJECT-ACRONYM listing the standard acronyms of the projects with which the data set is associated. This is particularly relevant for identifying data collected within the framework of the EC-MAST programme.

d) from the information in PARAMETERS, INSTRUMENTS and SUMMARY, create item DATA-THEMES listing the data themes (in Table 3) represented within the data set.

d) Collating EDMED entries

Detailed instructions for editing and for incorporating identifiers and keywords into EDMED entries are given on the following pages, which also serve to provide a full specification of the items that are included in EDMED entries.

Entries in items requiring references to Tables 2, 3, 4 and 5 can either by expressed by a comma-separated list of the standard textual elements contained within the Tables and/or by a comma-separated list of the relevant codes – in the latter case each code should be encapsulated within the symbols < and >. Note that the codes and identifiers used within EDMED are solely for internal use – they will be transparent to the end-user.

Instructions on the following pages assume that the EDMED entries are being constructed and submitted to BODC in the form of simple flat ASCII textual files. However, in general, it is anticipated that many Collating Centres will not choose this mode of operation and will prefer to collate material using some form of relational database with keyword selection from Tables 2, 3, 4 and 5 being carried out using on-screen point and click menus. In such circumstances the instructions are nevertheless relevant in specifying the manner in which the various items in each entry should be addressed.

INSTRUCTIONS FOR COLLATING EDMED ENTRIES (PART A)

Text in italic font duplicates the instructions given to authors in EDMED Information Note 1 – non-italic text (highlighted by a bar in the margin) covers those items that are to be addressed by the Collating Centre

Part A1: Data Holding Centre Entry

***CENTRE-ID:** unique identifier assigned to the Data Holding Centre by the Collating Centre

***COLLATE-ID:** unique identifier for the Collating Centre responsible for managing the Entry as allocated in EDMED Table 1

**CENTRE-NAME: (up to 160 characters) English version of the name and acronym of the centre/institution holding the data sets – where the centre is part of a larger organisation, prefix with the name or acronym of the larger organisation*

**CENTRE-HOST: (up to 160 characters) host country language version of CENTRE-NAME (optional)*

**VISIT-ADDRESS: physical address of data holding centre including centre name, building name or number, street name, city/town, region as appropriate for locating centre. If necessary, multiple addresses may be given if the centre is spread over more than one physical site or campus.*

**COUNTRY: host country of data holding centre*

Note: The Collating Centre should check that the name entered in COUNTRY conforms with the standard name given in EDMED Table 2

**CENTRE-WEBSITE: URL address for further information about the data holding centre and its data services*

Note: The Collating Centre should check that the Website can be accessed using the URL address provided

**DESCRIPTION: A brief description of the status, role and activities of the data holding centre, and the data services it can provide. If the centre only releases or exchanges data by special arrangement this should be mentioned, as should any other special conditions, charges and procedures for the supply of data. Mention should also be made of any 'Users Guides' or publications available from the 'contact point' further describing the services and data holdings of the centre.*

**CURRENCY-DATE: (format yyyy-mm-dd) the date this entry was last checked for accuracy by the author – initially set to the date it was first completed*

**REVISION-DATE: (format yyyy-mm-dd) the date this entry was last revised by the author*

***MODIFY-DATE:** (format yyyy-mm-dd) the date this entry was last modified at the Collating Centre – initially set to the date it was first collated

Part A2: Data Contact Entry

***CONTACT-ID:** unique identifier of Data Contact within the Data Holding Centre as assigned by the Collating Centre

***CENTRE-ID:** unique identifier (as assigned by the Collating Centre) of the Data Holding Centre with which the Data Contact is associated

***COLLATE-ID:** unique identifier for the Collating Centre responsible for managing the Entry as allocated in EDMED Table 1

**CONTACT-NAME: name of contact person who can provide users with further information about the data sets and their availability – preferred option is to identify the post (under CONTACT-TITLE) rather than the individual*

**CONTACT-TITLE: position (title of post) of contact person who can provide users with further information about the data sets and their availability, e.g. "BODC Enquiries Officer"*

**POST-ADDRESS: full postal address of data contact built up from an appropriate combination of the following items: organisation name; building name or number; street name; city/town; county/state/region; postal district; post code; postbox; and country – should be expressed as a sequence of short/medium length lines so as to aid automatic computer address generation*

**PHONE: (international format) phone no. of data contact*

**FAX: (international format) fax no. of data contact*

**EMAIL: email address of data contact*

**CURRENCY-DATE: (format yyyy-mm-dd) the date this entry was last checked for accuracy by the author – initially set to the date it was first completed*

**REVISION-DATE: (format yyyy-mm-dd) the date this entry was last revised by the author*

***MODIFY-DATE:** (format yyyy-mm-dd) the date this entry was last modified at the Collating Centre – initially set to the date it was first collated

INSTRUCTIONS FOR COLLATING EDMED ENTRIES (PART B)

Text in italic font duplicates the instructions given to authors in EDMED Information Note 1 – non-italic text (highlighted by a bar in the margin) covers those items that are to be addressed by the Collating Centre

Part B: Data Set Entry

***DATASET-ID:** unique identifier of the Data Set as assigned by the Collating Centre

***CENTRE-ID:** identifier of the Data Holding Centre (as assigned by the Collating Centre) where Data Set resides

***COLLATE-ID:** unique identifier for the Collating Centre responsible for managing the Entry as allocated in EDMED Table 1

**DATASET-NAME: (up to 160 characters) name of the data set. It should be similar to a journal article title and enable the reader to anticipate the content of the data set and its temporal and spatial coverage. If the data set is a data catalogue/inventory this should be reflected in the title.*

Note: Check that the DATASET-NAME is less than 160 characters and that it provides a meaningful and concise description of the content and coverage of the data set.

**TIME-PERIOD: range of dates reflecting the earliest and most recent data contained within the data set. If the data set continues to be updated with recent data then enter the date of most recent data followed by the text "ongoing" in (parenthesis). Major gaps in time coverage should be noted.*

Note: TIME-PERIOD is a mandatory item – if information is not given then enter 'not provided' or 'not applicable' as appropriate and omit (or leave blank) items BEGIN-YEAR and END-YEAR. Otherwise, complete items BEGIN-YEAR, END-YEAR and ONGOING from information provided in TIME-PERIOD.

***BEGIN-YEAR:** (format yyyy) enter the year of the earliest data contained within the data set as given in TIME-PERIOD

***END-YEAR:** (format yyyy) enter the year of the most recent data contained within the data set as given in TIME-PERIOD. If TIME-PERIOD indicates that data set collection is ongoing but no date of most recent data is provided then enter the year that the Metadata was last reviewed as given in CURRENCY-DATE.

***ONGOING:** enter 'YES' if data collection is ongoing as of END-YEAR – otherwise the item should be omitted or left blank

**GEOGRAPHIC-COVERAGE: general description of the geographic distribution and coverage of the data set using geographic names and/or latitude & longitude coordinates as appropriate. For offshore data, the ocean/sea areas should be clearly identified, while for coastal and estuarine data the description should include the name of the region/country. (Also include the southern, northern, western and eastern limits of the data set in geographic coordinates to the nearest degree – these values will be used to assist automated directory searching.)*

Note: GEOGRAPHIC-COVERAGE is a mandatory item – if information is not given then enter 'not provided' or 'not applicable' as appropriate and omit (or leave blank) items SOUTH, NORTH, WEST, EAST, SEA-AREAS, AREA-TYPE and COASTAL-ZONE. Otherwise, complete these items from information provided in GEOGRAPHIC-AREA. Except for COASTAL-ZONE (which is conditional on an entry of 'C' or 'B' in AREA-TYPE), entries in these items are mandatory if geographic information is provided in GEOGRAPHIC-COVERAGE. Note that these items are only used for computer searching and do not form part of the formal Metadata of the data set.

***SOUTH:** (format ±dd) southernmost limit of data set in degrees latitude (range +90 to –90, north positive)

***NORTH:** (format ±dd) northernmost limit of data set in degrees latitude (range +90 to –90, north positive)

***WEST:** (format ±ddd) westernmost limit of data set in degrees longitude (range +180 to –180, east positive)

***EAST:** (format ±ddd) easternmost limit of data set in degrees longitude (range +180 to–180, east positive)

***SEA-AREAS:** comma-separated list of the names (or <codes>) of the sea areas covered by the data set using the standard terms (or codes) given in EDMED Table 5 and the area definitions given in 'Limits of Oceans and Seas', 3rd Edition 1953, IHB Special Publication No. 23. Note that an ocean is only named if the data set has ocean-wide coverage, in which case the individual sea areas within the ocean need not be named.

***AREA-TYPE:** if the data set covers offshore areas, enter 'offshore' (or code <S>); if it covers coastal, riverine or estuarine areas, enter 'coastal' (or code <C>); if both enter 'offshore and coastal' (or code <B>). For this purpose, offshore is classed as being more than about 5 miles (10 km) from the coast.

***COASTAL-ZONE:** comma-separated list of the names (or <codes>) of the countries where the data set encroaches within about 5 miles (10 km) of the coast using the standard terms (or codes) given in EDMED Table 4. Outside Europe and North America, continents are named rather than countries – a special entry is included for oceanic islands.

**PROJECT: if the data set is associated with a specific national or international project involving data from many sources, enter the full name (and acronym) of the project and its associated organising body. If appropriate, more than one project may be included.*

***PROJECT-ACRONYM:** (comma-separated list if more than one project) enter the commonly-accepted acronyms (if appropriate) of the projects identified in PROJECT

Note: To aid computer searching, the acronyms should be standardised as much as possible, at least to the extent that each project has only one acronym. Thus, each Collating Centre should seek to standardise on the acronyms used for national projects in their own country, possibly prefixing them with the acronym of the sponsoring organisation or programme (e.g. NERC-LOIS). In the context of EDMED, there is a special need to identify data resulting from projects within the framework of MAST – for these projects it is recommended that the acronym should take the form EC-MAST3-69 (OMEX) or EC-MAST3-69 if the project has no acronym.

**PARAMETERS: (comma-separated list of key words) checklist of the measured-variables/samples represented within the data set, using free language key words that the holding centre finds appropriate*

**INSTRUMENTS: (comma-separated list of key words) checklist of the types of instrument/gear or methodology used to collect the data represented within the data set, using generic names that the holding centre finds appropriate*

***DATA-THEMES:** from the information provided in PARAMETERS, INSTRUMENTS and SUMMARY enter a comma-separated list of the data themes (include both main themes and sub-themes) represented within the data set using the standard terms (or <codes>) given in EDMED Table 3

**SUMMARY: (entries should not exceed about 500 words). Summary information aimed at providing the reader with a good overview of the nature of the data set and its potential usefulness to his studies. Written in the style of a concise abstract as might be used in a journal article, it should contain brief statements that the holding centre finds appropriate for describing the data set. The information covered will vary according to the data set but, where relevant, should at least include the following:*

a) a description of the measurements/samples, the purpose for which they were collected, and the platforms, instrumentation and methods of sampling used in their collection

b) a statement on the level to which the data are processed and quality controlled, and any known limitations on their reliability

c) arrangement of data e.g. time series/depth series per station, underway tracks arranged by cruise, synoptically arranged data, gridded data, contoured maps etc.

d) the spatial and temporal resolution of data within the data set

e) information on the length of time series within the data set and whether they might be useful to climate change studies

f) estimate of the amount of data expressed in terms of the number of stations, sites, observations, cores, months of recording, miles of track, net hauls, or other units as appropriate

g) a statement of data sources i.e. which organisations contributed data to the data set. Are they all national or were foreign sources used to compile the data set?

**REFERENCE: include references to any information sheets or published literature that are available further describing the data set*

**DATA-WEBSITE: URL address providing a link to further information about the data set or to the data set itself*

Note: The Collating Centre should check that the Website can be accessed using the URL address provided.

**ORIGINATOR: enter the name of the organisation(s) or person(s) having primary responsibility for the intellectual content of the data set. This is particularly relevant if the data set was not created at the data holding centre.*

**CENTRE: title and acronym of the centre or group holding the data set (as entered in Part A)*

Note: Although the information in CENTRE is essentially redundant given that CENTRE-ID (and by inference CENTRE-NAME) is already referenced, it is recommended that it is left in as a check that the data set has been correctly referenced.

**STORAGE-MEDIUM: enter the quantity and type of medium on which the data set is currently stored, expressing the quantity as the number of units of the medium (e.g. 10 magnetic tapes, 5 floppy disks, 6 optical disks, 16 printed volumes, 25 hard-copy maps, 70 microfiche reels, 600 boxes of analogue records, etc.). If the data set is in digital form, this should be followed by an estimate of the volume of data, preferably in megabytes. If the data set is spread over different media, entries should be made for each medium.*

**AVAILABILITY: information on the availability of the data set to other users e.g. is it freely available on request, is it only available by special arrangement, or is it restricted?*

**SUPPLY-DETAILS: if appropriate, describe the form, format and media in which the data set could be supplied, indicating whether standard products or subsets are available and whether on-line access can be provided. Also mention any special factors of which users should be aware, e.g. non-standard storage formats, special equipment or software needed to read the data.*

**CONTACT: the name/position and contact details (e.g. email, URL, telephone or fax numbers) of contact point able to deal with enquiries/requests concerning the data set. (This item is included to accommodate multiple contact points for data within the same organisation, as described in Part A).*

Note: In order to link the data set with the appropriate data contact point, the information given in CONTACT should be matched with the CENTRE-ID and CONTACT-ID assigned for the Data Contact by the Collating Centre and the two Ids should be entered in CONTACT-ID1. In cases where an alternative or secondary contact point is given for the data set, the requisite Ids should be entered in CONTACT-ID2.

***CONTACT-ID1:** enter comma-separated pair of values for CENTRE-ID and CONTACT-ID for primary data contact point

***CONTACT-ID2:** enter comma-separated pair of values for CENTRE-ID and CONTACT-ID for alternative or secondary data contact point if appropriate

**COMPLETED-BY: the name and telephone number (or electronic mail or fax no.) of the person preparing this description and who may be contacted by the collating centre responsible for handling your entries should any queries arise*

**CURRENCY-DATE: (format yyyy-mm-dd) - the date this entry was last checked for accuracy by the author in the data holding centre – initially set to the date it was first created*

**REVISION-DATE: (format yyyy-mm-dd) – the date this entry was last revised by the author at the data holding centre*

***COLLATED-BY:** the name of person and centre responsible for checking and collating the information contained within this data set entry, together with the date undertaken – where responsibility for managing the entry is subsequently transferred to another Collating Centre, the name of that Centre and the date of transfer should be appended

***MODIFY-DATE:** (format yyyy-mm-dd) – the date that this data set entry was last modified at the Collating Centre – initially set to date the entry was first collated

EDMED TABLE 1

Collating Centre
(numeric code)

Code	Centre
1	BODC, Bidston
2	DOD, Hamburg (Germany)
3	ENEA, La Spezia
4	Forbairt, Dublin
5	Guia Marine Lab., Cascais
6	HNODC, Athens
7	ICES, Copenhagen
8	IEO, Tenerife
9	ISMARE, Dublin
10	MARIS, Netherlands
11	MUMM, Brussels
12	OGS, Trieste
13	RDANH, Denmark
14	SISMER, Brest
15	IH, Lisbon
16	MRI, Reykvjavik
17	IMR, Bergen
18	SMHI, Gothenburg
19	FIMR, Helsinki
20	NODC, Netherlands
21	DOD, Hamburg (Poland)
22	JRC, Ispra

EDMED TABLE 2

Host Country
(alphabetic code)

Selected extract from ISO3166

Code	Country
BE	Belgium
DK	Denmark
FI	Finland
FR	France
DE	Germany
GR	Greece
IS	Iceland
IE	Ireland
IT	Italy
NL	Netherlands
NO	Norway
PL	Poland
PT	Portugal
ES	Spain
SE	Sweden
GB	United Kingdom

EDMED TABLE 3

Data Theme
(alphanumeric code)

Code	Theme
CS	COASTAL STUDIES (e.g. shores, estuaries)
MT	METEOROLOGY
M1	(Near) surface based meteorology
M2	Upper air observations
M3	Atmospheric composition
M4	Sea ice
PH	PHYSICAL OCEANOGRAPHY
P1	Hydrography (e.g. T,S) – near surface only
P2	Hydrography (e.g. T,S)
P3	Currents – drift – dispersion - tracers
P4	Waves – swell
P5	Sea level (& bottom pressure, IES)
P6	Underwater acoustics
P7	Optical measurements
CH	OCEAN COMPOSITION
C1	Suspended matter – turbidity
C2	Bulk chemistry (e.g. pH, TCO2)
C3	Dissolved gases
C4	Nutrients
C5	Other inorganic chemistry
BL	MARINE BIOLOGY
B1	Pigments (e.g. chlorophyll)
B2	Organic (& bio-) chemistry
B3	Productivity – biomass
B4	Plankton
B5	Benthos
B6	Birds – mammals – reptiles
B7	Fish
B8	Invertebrates
B9	Ecology – biodiversity
B10	Flora (e.g. algae, bacteria)
EN	ENVIRONMENT AL QUALITY/POLLUTION
E1	Site assessments/surveys
E2	Pollution levels & monitoring
FS	FISHERIES
F1	Aquaculture
F2	Fish stocks/catches/taggings
F3	Exploratory fishing – gear research
GG	GEOLOGY – GEOPHYSICS – SEDIMENTATION
G1	Bathymetry – sonar im ages
G2	Magnetics – gravity
G3	Seismic profiles
G4	Sediments – rocks – pore waters
G5	In-situ (near) seafloor data
G6	Tectonics – seismology – thermal vents
SF	SEAFLOOR SAMPLES (e.g. core, dredge, grab)
UP	UNDERWATER PHOTOGRAPHY
HS	HYDROGRAPHIC SURVEYS (navigation/engineering)
RS	REMOTE-SENSING (e.g. satellites, aircraft)
CM	COMPUTER MODELS
AM	ATLASES & MAPS
CD	CATALOGUES – DIRECTORIES ETC.

EDMED TABLE 4

Coastal Zone
(alphabetic code)

Code	Coastal Zone
XI	Islands
XN	Antarctica
XU	Australasia
XS	Asia
XF	Africa
XM	South America
XC	Central America
US	USA
CA	Canada
GL	Greenland
IS	Iceland
IE	Ireland
GB	United Kingdom
XZ	Spitzbergen
RU	Russia
NO	Norway
SE	Sweden
FI	Finland
EE	Estonia
LV	Latvia
LT	Lithuania
PL	Poland
DE	Germany
DK	Denmark
NL	Netherlands
BE	Belgium
FR	France
ES	Spain
PT	Portugal
IT	Italy
HR	Croatia
YU	Yugoslavia
AL	Albania
GR	Greece
BG	Bulgaria
RO	Romania
UA	Ukraine
GE	Georgia
TR	Turkey
CY	Cyprus
SY	Syria
LB	Lebanon
IL	Israel

EDMED TABLE 5

Ocean/Sea Area
(alphanumeric code)

Modified version of IHB SP.23 (3rd Edition)

Code	Ocean/Sea Area
R1	NORTH ATLANTIC REGION
3	Skagerrak
4	North Sea
18	Inner Seas W. Scotland
19	Irish Sea
20	Bristol Channel
21	English Channel
21A	Celtic Sea
22	Bay of Biscay
15A	Labrador Sea
24	Gulf of St. Lawrence
25	Bay of Fundy
26	Gulf of Mexico
27	Caribbean Sea
34	Gulf of Guinea
23	'remaining' N. Atlantic Ocean
R2	BALTIC REGION
2	Kattegat, Sound & Belts
1	Baltic Sea
1a	Gulf of Bothnia
1b	Gulf of Finland
1c	Gulf of Riga
1d	'remaining' Baltic Sea
R3	MEDITERRANEAN REGION
28	Mediterranean Sea
28a	Strait of Gibraltar
28b	Alboran Sea
28c	Balearic Sea
28d	Ligurian Sea
28e	Tyrrhenian Sea
28X	'remaining' Western Mediterranean
28f	Ionian Sea
28g	Adriatic Sea
28h	Aegean Sea
28Y	'remaining' Eastern Mediterranean
29	Sea of Marmara
30	Black Sea
31	Sea of Azov
R4	SOUTH ATLANTIC REGION
33	Rio de La Plata
32	'remaining' S. Atlantic Ocean
R5	INDIAN OCEAN REGION
35	Gulf of Suez
36	Gulf of Aqaba
37	Red Sea
38	Gulf of Aden
39	Arabian Sea

40	Gulf of Oman
41	Gulf of Iran
42	Laccadive Sea
43	Bay of Bengal
44	Andaman Sea
45A	Mozambique Channel
46	Malacca & Singapore Straits
62	Great Australian Bight
45	'remaining' Indian Ocean
R6	SE ASIA SEAS REGION
47	Gulf of Thailand
48	East Indian Archipelago
49	South China Sea

Code	Ocean/Sea Area
R7	NORTH PACIFIC REGION
56	Philippine Sea
50	Eastern China Sea
51	Yellow Sea
52	Japan Sea
53	Inland Sea
54	Sea of Okhotsk
55	Bering Sea
58	Gulf of Alaska
59	Coastal Waters SE Alaska & British Columbia
60	Gulf of California
57	'remaining' N. Pacific Ocean
R8	SOUTH PACIFIC REGION
62A	Bass Strait
63	Tasman Sea
64	Coral Sea
65	Solomon Sea
66	Bismarck Sea
61	remaining S. Pacific Ocean
R9	ARCTIC REGION
5	Greenland Sea
6	Norwegian Sea
7	Barentsz Sea
8	White Sea
9	Kara Sea
10	Laptev Sea
11	East Siberian Sea
12	Chuckchi Sea
13	Beaufort Sea
14	Northwestern Passages
14A	Baffin Bay
15	Davis Strait
16	Hudson Bay
16A	Hudson Strait
17A	Lincoln Sea
17	'remaining' Arctic Ocean
R10	SOUTHERN OCEAN REGION
AN	Southern Ocean (localised)
WW	WORLD WIDE COVERAGE

Note: EDMED modifications to IHB SP.23 3rd Edition 'Limits of Oceans and Seas'

Ocean Regions R1 to R10, AN and WW have been added

In the Baltic, sea area 1d has been added to cover the area of the Baltic excluding 1a, 1b and 1c

Sea area 28X covers the Western Mediterranean excluding sea areas 28a, 28b, 28c, 28d and 28e

Sea area 28Y covers the Eastern Mediterranean excluding sea areas 28f, 28g and 28h