



Baltic Marine Environment Protection Commission

Working Group on the State of the Environment and Nature
Conservation

STATE & CONSERVATION
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Document title	Comparison of COMBINE data fields to EIONET data fields
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Background

In HELCOM State and Conservation 2-2015, as part of the review of data flows and arrangements, the Meeting emphasized that Contracting Parties should report monitoring data directly to ICES instead of reporting via EIONET since metadata requirements for HELCOM core indicators may be missing in EIONET. It was however noted that use of EIONET data may solve data needs in the short-term e.g. for the ongoing 2nd HELCOM holistic assessment (para 3MA-11). To investigate the option to use EIONET data, ICES has produced a summary table of the EIONET data fields in comparison to what is currently required for HELCOM COMBINE reporting. The purpose is to understand whether the criteria/fields required in EIONET are sufficient for the data to be harvested by ICES for inclusion in the COMBINE database and further use in HELCOM assessment.

The table included in this document gives an overview of the ICES Reporting Format (ERF 3.2) and indicates which fields are covered by the EIONET reporting format. The ICES reporting format reflects the needs of both OSPAR and HELCOM.

As it stands now, the EIONET reported data are lacking key information that is considered mandatory for reporting in ICES as recommended by the COMBINE programme. This issue needs to be tackled at both ends – to review the existing reporting under ICES to see if all of the required/recommended fields are necessary, and to provide feedback to the EEA on which fields should be considered mandatory for data reported under EIONET to be eligible for entry into the HELCOM COMBINE database.

It should be noted that the EIONET data structure and format is under revision, however this does not affect the outcome of this analysis. The new draft EIONET reporting format will be sent out to the EEA member countries later this year for comments under a public consultation.

Action required

The Meeting is invited to:

- take note of the information,
- consider the appropriateness of using data harvested from EIONET in HELCOM assessments,
- consider a tentative revision of the ICES formats for COMBINE monitoring data.

Comparison of fields

The overview below is based on the [ICES reporting format for environmental data](#). The last column indicates if the relevant field is covered by the draft EIONET reporting format. It is important to emphasize that the EIONET data flow is focused on contaminants in seawater, sediment and biota as well as Oceanographic data. This implies that some of the ICES records are not relevant for comparison with the EIONET format. These records have therefore been omitted from this overview.

There are no **sampling and analytical methods**¹ information in the EIONET data (except for Chlorophyll data). Furthermore information on analytical quality assurance and intercomparison, as well as uncertainty values are also missing in the EIONET reporting format. Therefore these record are not included in this overview.

RECID 00 File Information Record

File Information Record – mandatory record –				Covered by the EIONET reporting format?
Field Code	Field Name	Valid Value	Mandatory/ Recommended/ Optional	
RECID	Record identifier	'00'	M	Not relevant
RLABO	Reporting institute code	cf. RLABO	M	NO
CNTRY	Country code	cf. CNTRY	M	YES
MYEAR	Monitoring year	YYYY	M	YES
RFVER	Reporting format version number	'3.2.5'	M	Not relevant
DCFLG	Data centre flag - Reserved			Not relevant

Sampling Location Records

RECID 90 Sampling Platform Record

Sampling Platform Record – mandatory record –				Covered by the EIONET reporting format?
Field Code <i>Foreign key in bold, primary key in italics</i>	Field Name	Valid Value	Mandatory/ Recommended/ Optional	
RECID	Record identifier	'90'	M	Not relevant

¹ records 20, 21 in the ICES format

SHIPC	Platform / Ship code	cf. SHIPC	M	(YES) Only nutrients data
CRUIS	Cruise identifier (series of sampling occasions) (must be unique for file)	Any character 0–9, A–Z etc.	M	NO
Owner	Data owner	Any character 0–9, A–Z etc.	R	NO
PRDAT	Public release date	Date YYYYMMDD	R	NO
DCFLG	Data centre flag - Reserved			Not relevant

RECID 91 Station / Sampling Event Record

Station Record – mandatory record –				Covered by the EIONET reporting format?
Field Code <i>Foreign key in bold, primary key in italics</i>	Field Name	Valid Value	Mandatory/ Recommended/ Optional	
RECID	Record identifier	'91'	M	Not relevant
CRUIS	Cruise identifier (series of sampling occasions) (must be unique for file)	Any character 0–9, A–Z etc.	M	NO
<i>STNNO</i>	Station identification /Sampling event ID	Any character 0–9, A–Z etc.	M	YES
LATIT	Latitude (degrees/minutes/decimal minutes or as decimal degrees) Report as WGS84	–90 00.000 to +90 00.000 or –90.0000 to +90.0000 cf. Field Code Descriptions	M	YES
LONGI	Longitude (degrees/minutes/decimal minutes or as decimal minutes) Report as WGS84	–180 00.000 to +180 00.000 or –180.0000 to +180.0000 cf. Field Code Descriptions	M	YES

Station Record – mandatory record –				Covered by the EIONET reporting format?
Field Code <i>Foreign key in bold, primary key in italics</i>	Field Name	Valid Value	Mandatory/Recommended/Optional	
POSYS	Positioning system	cf. POSYS multiple options possible (separate multiple entries with “~” (ascii 126))	R	NO
SDATE	Sampling date	YYYYMMDD	M	YES
STIME	Sampling time/start (UTC)	0000–2359 (hhmm)	R Fish disease	Not relevant
ETIME	Sampling end time (UTC)	0000–2359 (hhmm) See field description for handling time when sampling continues to the next day.	R Fish disease	Not relevant
WADEP	Water depth (sounding in meters)	0–9	rCW, rZB	YES
STATN	Station name	Any character 0–9, A–Z etc. (max. 50)	R	YES
MPROG	Monitoring programme	cf. MPROG multiple programmes possible (separate multiple entries with “~” (ascii 126))	M	(YES) Not mandatory and some MPROG’s are not part of the code list

Station Record – mandatory record –				Covered by the EIONET reporting format?
Field Code <i>Foreign key in bold, primary key in italics</i>	Field Name	Valid Value	Mandatory/Recommended/Optional	
WLTYP	Water/land types (river basin/eurotypes)	cf. WLTYP	R	YES
MSTAT	Type of monitoring station cf. Eurowaternet Technical report number 97	cf. MSTAT (replaces point source) (separate multiple entries with “~” (ascii 126))	R	(YES) All the MSTAT’s are not part of the code list
PURPM	Purpose of monitoring	cf. PURPM (separate multiple entries with “~” (ascii 126))	R	(YES) Purpose of monitoring have slightly different meanings in EIONET’s and ICES’s terminology
EDATE	Sampling end date	YYYYMMDD	mPassive samplers	NO
DCFLG	Data centre flag - Reserved			Not relevant

RECID 03 Contaminant, Biological Effects AND LITTER Sample Record

Field Code <i>Foreign key in bold, primary key in italics</i>	Field name	Valid value	Mandatory/Recommended/Optional	Covered by the EIONET reporting format?
RECID	Record identifier	‘03’	M	Not relevant
CRUIS	Cruise identifier (series of sampling occasions) (must be unique for file)	Any character 0–9, A–Z etc.	M	NO

STNNO	Station identification /Sampling event ID	Any character 0–9, A–Z etc.	M	YES
DTYPE	Data type	cf. DTYPE	M	YES
SMPNO	Sample identification (for each species in haul, each sediment core, each sediment grab, each water bottle)	Any character 0–9, A–Z etc.	M	YES
SMLNK	Sampling method link	1–999	R	NO
ATIME	Actual time of sampling (UTC)	0000–2359 (hhmm)	r Tidal waters	YES
NOAGG	Number of aggregated samples (hauls, sediment cores or grabs) taken to comprise sample	2–99		NO
SPECI	Species of specimen	cf. ITIS , cf. WoRMS	mCF	YES
RLIST	Reference code list used for species ID	cf. RLIST	mCF	NO
FINFL	Factors potentially influencing guideline compliance and interpretation of data	cf. FINFL multiple options possible (separate multiple entries with “~” (ascii 126))	r Fish disease r CF	(NO) although these things can be reported in the [Remarks] field
DCFLG	Data centre flag - Reserved			Not relevant

RECID 04 Biota Specimen Data Record

Biota Specimen Data Record – mandatory record for CF –				Covered by the EIONET reporting format?
Field Code <i>Foreign key in bold, primary key in italics</i>	Field Name	Valid Value	Mandatory/ Recommended/ Optional	
RECID	Record identifier	'04'	M	Not relevant
CRUIS	Cruise identifier (series of sampling occasions) (must be unique for file)	Any character 0–9, A–Z etc.	M	NO
STNNO	Station identification /Sampling event ID	Any character 0–9, A–Z etc.	M	YES
SMPNO	Sample identification (for each species in haul, each sediment core, each sediment grab, each water bottle)	Any character 0–9, A–Z etc.	M	YES
<i>SUBNO</i>	Sub-sample identification (each fish, egg, bird or aggregate pool of same species. New species – new sample record and SMPNO)	Any character 0–9, A–Z etc.	M	NO
NOINP	Number of individuals in sub-sample (i.e. 1 individual or number in pool)	01–99999	M	NO
ORGSP	Origin of specimen	cf. ORGSP	r Imposex	NO
SEXCO	Sex code	cf. SEXCO	R	NO
STAGE	Stage of development	cf. STAGE	R	NO
CONES	Condition of specimen	cf. CONES	R	NO
ASTSA	Animal state at time of sampling	cf. ASTSA	O	NO
NODIS	Number of diseases looked for during a fish disease survey	0–99	r Fish disease	Not relevant

Biota Specimen Data Record – mandatory record for CF –				Covered by the EIONET reporting format?
Field Code <i>Foreign key in bold, primary key in italics</i>	Field Name	Valid Value	Mandatory/ Recommended/ Optional	
BULKID	Bulk identification (for individuals only)	If an individual (or parts thereof) has been analysed in one or more bulks, insert the SUBNO identification(s) of the bulk(s). Note that BULKID can only refer to a SUBNO within the same sample. See field descriptions for an example. (separate multiple entries with “~” (ascii 126))	r Fish disease r Biological effects data	NO
DCFLG	Data centre flag - Reserved			Not relevant

measurement records

RECID 10 Parameter Measurement Record

Field Code <i>Foreign key in bold, primary key in italics</i>	Field name	Value	Mandatory/ Recommended/ Optional	Covered by the EIONET reporting format?
RECID	Record identifier	'10'	M	Not relevant

Field Code <i>Foreign key in bold, primary key in italics</i>	Field name	Value	Mandatory/Recommended/Optional	Covered by the EIONET reporting format?
CRUIS	Cruise identifier (series of sampling occasions) (must be unique for file)	Any character 0–9, A–Z etc.	M	NO
STNNO	Station identification /Sampling event ID	Any character 0–9, A–Z etc.	M	YES
SMPNO	Sample identification (for each species in haul, each sediment core, each sediment grab, each water bottle)	Any character 0–9, A–Z etc.	M	YES
SUBNO	Sub-sample identification (each fish, egg, bird, aggregate, grab portion or core slice)	Any character 0–9, A–Z etc.	mCF mCS	NO
MATRX	Matrix analysed	cf. MATRX	M	YES
DEPHU	Upper depth/pressure (m) For pressure, see PRFLG in parameter record Upper depth of core slice for sediment.	0–9	R	YES
DEPHL	Lower depth/pressure (m) See PRFLG in parameter record	0–9	R	(YES) For sediment
PARAM	Parameter code	cf. PARAM	M	YES
MUNIT	Measurement	cf. MUNIT	M	YES
BASIS	Basis of determination	cf. BASIS	R for chemicals	YES
AMLNK	Analytical methods link	1–999	Depends on parameter	NO

Field Code <i>Foreign key in bold, primary key in italics</i>	Field name	Value	Mandatory/Recommended/Optional	Covered by the EIONET reporting format?
VFLAG	Validity flag	cf. VFLAG multiple flags possible (separate multiple entries with "~" (ascii 126))		NO
QFLAG	Qualifier flag	cf. QFLAG multiple flags possible (separate multiple entries with "~" (ascii 126))		YES
VALUE	Value	Any format	M	YES
PERCR	Percentage recovery - to be applied (if thought necessary by data submitter) to the reported value (in VALUE field) at an assessment to give a better approximation of the real value	1–100	O	NO
SIGND	Significant digits reported in VALUE	0–9		NO
UNCRT	Uncertainty value	0–9	M (chemicals)	NO
METCU	Method of calculating uncertainty	cf. METCU	M	NO
DETLI	Limit of detection value	0–9		YES
LMQNT	Limit of quantification	0–9	R	YES
PRFLG	Pressure flag	'Y' for Yes or blank		NO

Field Code <i>Foreign key in bold, primary key in italics</i>	Field name	Value	Mandatory/ Recommend ed/ Optional	Covered by the EIONET reporting format?
DCFLG	Data centre flag - Reserved			Not relevant