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Background

This document contains Annex 2 of the PLC-6 Guidelines which contains formats and instructions for Annual reporting requirements.

Action required

The Meeting is invited to review and finalize Annex 2 of PLC-6 guidelines related to formats and instructions on annual reporting.

Annex 2: Annual reporting formats

As agreed earlier the Contracting Parties will annually collect data on river inputs, inputs of unmonitored areas and direct point sources to the Baltic Sea.

The collected data will be used for

- develop and update core pressure indicators;
- assessment of the progress of Maximum allowable Inputs (MAI)
- Core pressure indicator on nutrient inputs;
- develop and update Country Allocation Reduction Targets (CART);
- other products used by Contracting Parties, scientific community, media, etc.

The modernization of the PLC database is going on and the structure of the database has already been modified. In order to make the data more available a Web Application will be established for the data base. This Application will serve for downloading, but also uploading the data in the future.

The annual data will be reported by using a reporting template and uploaded via the Web Application: The template can be down loaded as prefilled. After the data entry to the template, it should be saved and uploaded to the Application.

Due to the revision of the PLC database new country-wise templates have been created in order to test them with the 2013 data. These templates should be in line with the final upload templates for the PLC-6 (2014) data.

Annual data should be delivered to the data consultant before 31 October of the following year after the sampling, i.e. 2014 data should be delivered before 31 October 2015.

Instructions include reporting templates. They have been established separately for each Contracting Party as **CC_ANNUAL_REPORTING_2014.XLSX (CC standing for COUNTRY_CODE, e.g. DE = GERMANY, DK = DENMARK, EE = ESTONIA, FI = FINLAND, LV = LATVIA, LT = LITHUANIA, PL = POLAND, RU = RUSSIA and SE = SWEDEN).**

For example for Denmark the file is: **DK_ ANNUAL_REPORTING_ 2014.XLSX.**

REPORTING IN GENERAL

When entering the data general settings should be used:

- No additional rows or columns should be inserted or any prefilled rows, columns shouldn't be deleted in the prefilled spreadsheets
- Decimal separator to be used '.' (dot) not a ',' (comma)
- If the type of an attribute is **'NOT NULL'** , data should be reported.

Each reported attribute has a comment box (Table 1), which consists of a format of the data and a list of options or instructions for data entry. Any of the boxes can be made visible by moving the mouse to the attribute.

Many of the columns also include instructions for entering the data, but they also may include constraints when trying to enter data in an incorrect format. Instructions will be displayed as drop down menu (Table 2) and the constraints will block false data entry and error messages will give further advice.

The aim is to improve the quality of the entered data and to ease the final QA process. The constraints work only for the punched data. 'Copy – Paste' -commands in the templates will remove the defined constraints.

When entering any data the length and the type of format should be respected, e.g., (CHAR (9)) = 9 characters SCDK00001, (CHAR (7)) = 7 characters MDE0005, Date (10) dd.mm.yyyy, e.g., 01.01.2014.

Fixed length of characters has been noted as e.g., 'CHAR(9)', a variable length of characters either as 'STRING(1-255)', 'NVARCHAR(50)' or 'NVARCHAR(255)' and small numbers as '(INTERGER)'. Inc case of number with decimal the length and the number of decimals have been noted as (DECIMAL(8.2)) (=nnnnn.nn).

Reporting obligations will be indicated in each of the spreadsheet of the template as follows:

= 'Prefilled data' i.e. tentative definitions of existing in the database once established will be indicated in green color in the template

= Mandatory information - data will be indicated in yellow in the template, e.g. subcatchment and point source codes in load flow tables, parameters, parameter types, values, value units, etc.

= Voluntarily reported information - data will be indicated in blue in the template, e.g. national codes, links, sector codes, etc.

Table 1. An example of a comment box

	STATION_CODE	SUBCATCHMENT_CODE	SUBCATCHMENT_NAME	PARAMETER_ID	PARAMETER_TYPE	PERIOD_NAME	PERIOD_TYPE	VALUE
2	HDK0129	SCDK00210	HERREDS Å		9	AVE	2013	A	
3	HDK0128	SCDK00209	HVIDBJERG Å		9	AVE	2013	A	
4	HDK0130	SCDK00211	TREND Å		9	AVE	2013	A	
5	HDK0115	SCDK00059	LINDENBORG Å		9	AVE	2013	A	
6	HDK0112	SCDK00047	KASTBJERG Å		9	AVE	2013	A	
7	HDK0024	SCDK00031	HASLEVGÅRDS Å		9	AVE	2013	A	
8	HDK0097	SCDK00114	VILLESTRUP Å		9	AVE	2013	A	
9	HDK0004	SCDK00006	BREDKÆR BÆK		9	AVE	2013	A	
10	HDK0106	SCDK00014	FALD Å		9	AVE	2013	A	
11	HDK0131	SCDK00212	LYBY-GRØNNING GRØFT		9	AVE	2013	A	
12	HDK0071	SCDK00085	SIMESTED Å		9	AVE	2013	A	
13	HDK0073	SCDK00087	SKALS Å		9	AVE	2013	A	
14	HDK0035	SCDK00043	JORDBRO Å		9	AVE	2013	A	
15	HDK0036	SCDK00046	KARUP Å		9	AVE	2013	A	
16	HDK0008	SCDK00010	ELLING Å		9	AVE	2013	A	
17	HDK0104	SCDK00001	ALLING Å		9	AVE	2013	A	
18	HDK0021	SCDK00026	GUDEN Å		9	AVE	2013	A	
19	HDK0127	SCDK00208	FELDBÆK		9	AVE	2013	A	
20	HDK0101	SCDK00118	ÅRHUS Å		9	AVE	2013	A	
21	HDK0023	SCDK00030	HANSTED Å		9	AVE	2013	A	
22	HDK0006	SCDK00008	BYGHOLM Å		9	AVE	2013	A	
23	HDK0093	SCDK00110	VEJLE Å		9	AVE	2013	A	
24	HDK0018	SCDK00024	GREJS Å		9	AVE	2013	A	
25	HDK0033	SCDK00041	HØJEN Å		9	AVE	2013	A	
26	HDK0076	SCDK00090	SPANG Å		9	AVE	2013	A	
27	HDK0039	SCDK00050	KOLDING Å		9	AVE	2013	A	
28	HDK0075	SCDK00089	SOLKÆR Å		9	AVE	2013	A	
29	HDK0022	SCDK00027	HADERSLEV MØLLESTRØM		9	AVE	2013	A	
30	HDK0041	SCDK00044	KÆR MØLLE Å		9	AVE	2013	A	
31	HDK0085	SCDK00099	TAPS Å		9	AVE	2013	A	
32	HDK0009	SCDK00011	ELSTED BÆK		9	AVE	2013	A	
33	HDK0012	SCDK00015	FISKBÆK		9	AVE	2013	A	
34	HDK0062	SCDK00076	PULVERBÆK		9	AVE	2013	A	
35	HDK0080	SCDK00094	STORÅ		9	AVE	2013	A	
36	HDK0098	SCDK00115	VINDINGE Å		9	AVE	2013	A	
37	HDK0060	SCDK00074	ODENSE Å		9	AVE	2013	A	
38	HDK0078	SCDK00092	STAVIS Å		9	AVE	2013	A	
39	HDK0049	SCDK00061	LINDVED Å		9	AVE	2013	A	
40	HDK0108	SCDK00020	GEELS Å		9	AVE	2013	A	

FORMAT: (SMALLINT); NOT NULL!
Code for measured/estimated flow

parameter; loads or flow of parameters which are indicated in red should be collected annually

2 = BOD5
3 = BOD7
4 = Cd
7 = Cr
8 = Cu
9 = FLOW
10 = Hg
11 = Ni
12 = NH4
13 = NO2
14 = NO23
15 = NO3
16 = Ntot
18 = Pb
19 = PPO4
20 = Ptot
23 = Zn

MON_RIVER_LOAD | UNMON_SUBCATCHMENT_FLOW_LOAD | TRANSBOUNDARY_FLOW_LOAD | STATION_FLOW_CONCENTRATION

Table 2. An example of a drop-down menu.

	A	B	C	D	E	F
1	SUBCATCHMENT_C	ATCHMENT_	PARAMETER_ID	PARAMETER_TYPE	PERIOD_NAME	PERIOD_TYPE
2	SCDK00259	BAPDKLAND	12	TOT	13	A
3	SCDK00259	BAPDKLAND	14	TOT		A
4	SCDK00259	BAPDKLAND	16	TOT		A
5	SCDK00259	BAPDKLAND	19	TOT		A
6	SCDK00259	BAPDKLAND	20	TOT		A
7	SCDK00260	KATDKLAND	12	TOT	2013	A
8	SCDK00260	KATDKLAND	14	TOT	2013	A
9	SCDK00260	KATDKLAND	16	TOT	2013	A
10	SCDK00260	KATDKLAND	19	TOT	2013	A
11	SCDK00260	KATDKLAND	20	TOT	2013	A
12	SCDK00261	SOUDKLAND	12	TOT	2013	A
13	SCDK00261	SOUDKLAND	14	TOT	2013	A
14	SCDK00261	SOUDKLAND	16	TOT	2013	A
15	SCDK00261	SOUDKLAND	19	TOT	2013	A
16	SCDK00261	SOUDKLAND	20	TOT	2013	A
17	SCDK00262	WEBDKLAND	12	TOT	2013	A
18	SCDK00262	WEBDKLAND	14	TOT	2013	A
19	SCDK00262	WEBDKLAND	16	TOT	2013	A
20	SCDK00262	WEBDKLAND	19	TOT	2013	A
21	SCDK00262	WEBDKLAND	20	TOT	2013	A

TOT = TOTAL LOAD
AVE = AVERAGE FLOW

At this stage the load / flow reporting will be carried out on an annual basis, but in the future also more frequent reporting might take place. Then also totals and averages could be reported monthly or even on a daily basis.

BACKGROUND INFORMATION

The annual data reporting includes collection of background information on different sources, i.e. areal definitions, stations and point sources.

The sources are: Monitored subcatchments, river catchments, unmonitored areas (by parameter), transboundary subcatchments (country-wise), hydrological and chemical stations and individual point sources of three different categories (MWWTP, Industry and Aquaculture).

In the MON RIVER_BACKGROUND sheet will be listed

- monitored subcatchments within one country (code example SC+cc+nnnnn)
- monitored transboundary rivers (code example RC+cc + nnnnn); and
- monitored border rivers (code example RC+cc + nnnnn)

Transboundary and border rivers will be listed in the template of the Contracting Party who has the reporting responsibility of the river, i.e. The CP which has the lowest monitoring station of the river has the reporting responsibility if not agreed differently. Both the transboundary and border rivers have a slightly different catchment code compared with the subcatchments (RCccnnnnn instead of SCccnnnnn).

For example, for the enitre river (RCLV00055) DAUGAVA the following subcatchments should be listed:

SCLV00055 (only the Latvian part) , SCBY00001, SCRU00049, SCLT00009 and SCEE00035, as listed in table 3. Further in the sheet the attribute 'IS_PRIMARY_STATION' indicates the catchment, which includes the lowest monitoring station.

Additional information to be collected from rivers and separate subcatchments are: river mouth coordinates, as latitude and longitude (in WGS-84), national subcatchment and river code, monitoring status (IS_MONITORED), and surface and lake areas (in km^2)

Transboundary catchments will be divided to subcatchments by country (TRANS_SUBCATCHMENT _BACKGROUND).

Table 3. An example for transboundary subcatchments

SUBCATCHMENT	RIVER_CATC	RIVER_TYPE	NATIONA	NATION	NR_CAT	IS_MONITORED	PERIOD_NAME	IS_PRIMARY_STATION	CREATION_DAT	END_DATE	TOTAL_DRA	COUNTRY_L	TRANSBOU	LAKE_AR	REMARK
SCLV00001	BARTA	BAP07001	T			1	1	2013	1	01.01.1994		1968.00	1227.00	741.00		
SCLT00010	BARTA	BAP07001	T			1	0	2013	0	01.01.1994		1968.00	741.00	1227.00		
SCLV00005	GAUJA	GUR07002	T			1	1	2013	1	01.01.1994		8890.00	7790.00	1100.00		
SCEE00033	GAUJA	GUR07002	T			1	0	2013	0	01.01.1994		8890.00	1100.00	7790.00		
SCLV00009	LIELUPE	GUR07004	T			1	1	2013	1	01.01.1994		17600.00	7670.00	8870.00		
SCLT00003	LIELUPE	GUR07004	T			1	0	2013	0	01.01.1994		17600.00	9390.00	8730.00		
SCLV00013	SALACA	GUR07005	T			1	1	2013	1	01.01.1994		3471.00	3190.00	281.00		
SCEE00034	SALACA	GUR07005	T			1	0	2013	0	01.01.1994		3471.00	281.00	3190.00		
SCLV00015	VENTA	BAP07003	T			1	1	2013	1	01.01.1994		11795.00	5875.00	5191.00		
SCLT00008	VENTA	BAP07003	T			1	0	2013	0	01.01.1994		11795.00	5191.00	6604.00		
SCBY00001	DAUGAVA	GUR07001	T			1	1	2013	0	01.01.1994		87045.00	33100.00	53945.00		
SCEE00035	DAUGAVA	GUR07001	T			1	1	2013	0	01.01.1994		87045.00	1335.00	85710.00		
SCLT00009	DAUGAVA	GUR07001	T			1	1	2013	0	01.01.1994		87045.00	1874.00	85171.00		
SCRU00049	DAUGAVA	GUR07001	T			2	1	2013	0	01.01.1994		87045.00	27000.00	60045.00		
SCLV00055	DAUGAVA	GUR07001	T			1	1	2013	1	01.01.1994		87045.00	21268.00	63310.00		
SCLV00018	NEMUNAS	BAP06002	T			1	1	2013	0	01.01.1994		98179.00	88.00	98091.00		
SCLV00017	NARVA	GUF04005	T			1	1	2013	0	01.01.1994		56225.00	3570.00	52665.00		
SCLV00020	SVENTOJI	BAP06003	T			1	1	2013	0	01.01.1994		554.00	82.00	472.00		

All unmonitored subcatchment information of a country will be listed in the UNMONITORED SUBCATCHMENT BACKGROUND sheet. In case an unmonitored area varies by parameter, each unmonitored area (in km^2) and parameter should be listed individually as in table 4.

Table 4. An example of unmonitored subcatchments

SUBCATCHMENT_CODE	SUBCATCHMENT_NAME	SUBCATCHMENT_TYPE	PARAMETER_ID	PERIOD_NAME	UNMONITORED_AREA	LAKE_AREA	NR_CATCHMENTS	REMARKS
SCDK00259	BAPDKLAND	L	4	2013	1000			
SCDK00259	BAPDKLAND	L	8	2013	980			
SCDK00259	BAPDKLAND	L	12	2013	901			
SCDK00259	BAPDKLAND	L	16	2013	901			
SCDK00260	KATDKLAND	L	16	2013	4867			
SCDK00261	SOUDKLAND	L	16	2013	510			
SCDK00262	WEBDKLAND	L	20	2013	5167			

The ‘station’ and ‘point source’ information in STATION_BACKGROUND and in POINT_SOURCE_BACKGROUND –sheets to be collected are:

-code of a station or a point source and their activity status (‘IS_ACTIVE’ and ‘REPORTING_END_DATE’);

-location, i.e., coordinates of each monitoring station or an outlet of an individual point source (in decimal degrees, (WGS-84) latitude and longitude),

-related subcatchment (for each station)

-recipient sea area (for a discharging point source) and

-size (in km^2) of the monitored area of each station

In addition, information on national station code, EU national point source code and E- PRTR sector type can be reported.

Reference sheet for each set of background information has been indicated in table 6 and the type and the format of all the reported background information are listed by attribute and by spreadsheet in table 7 and 8.

Once the definitions and background information have been updated in the database, a tentative list of information will be prefilled by the application when annual reporting templates are downloaded.

In case the prefilled information doesn’t include all areal definitions, stations or point sources to be reported, data manager should be contacted.

Table 6. Background information to be reported.

GENERAL VIEW OF THE ANNUAL BACKGROUND INFORMATION TO BE PROVIDED							
BACKGROUND DEFINITIONS	**REPORTING**	**REFERENCE TABLE**	**SURFACE AREAS**				**ADDITIONAL INFORMATION**
			TOTAL_ DRAINAGE (in km²)	**COUNTRY_ DRAINAGE (in km²)**	**CONTROL AREA by STATION (in km²)**	**TRANSBOUNDARY DRAINAGE (in km²)**	
RIVER/MONITORED CATCHMENT annually	INDIVIDUAL	MON_RIVER_BACKGROUND	X	X		X	River mouth coordinates; IS_MONITORED /IS_ UNMONITORED during the period; end date of the catchment validity: lake area of the catchment
UNMONITORED SUBCATCHMENT and PARAMETER annually	BY SUBBASIN and PARAMETER	UNMON_SUBCATCHMENT_BACKGROUND	X				Lake area of the catchment
TRANSBOUNDARY SUBCATCHMENT annually	INDIVIDUAL	TRANSB_SUBCATCHMENT_BACKGROUND	X	X		X	Lake area of the catchment
MONITORED STATION annually	INDIVIDUAL	STATION_BACKGROUND			X		activity/station coordinates
POINT SOURCES of 3 CATEGORIES annually	INDIVIDUAL	POINT SOURCE_BACKGROUND					outlet coordinates; PRTR_sector code; end date of a PS (date of closing)

Table 7. Data type and format of catchment background information

ATTRIBUTE/SHEET	MON_RIVER_BACKGROUND	UNMON_SUBCATCHMENT_BACKGROUND_	TRANS_SUBCATCHMENT_BACKGROUND
SUBCATCHMENT_CODE	CHAR (9)	CHAR (9)	CHAR (9)
SUBCATCHMENT_NAME	STRING (1-255)	STRING (1-255)	STRING (1-255)
SUBCATCHMENT_TYPE	CHAR(1)	CHAR(1)	
RIVER_CATCHMENT_CODE	CHAR(8)	-	CHAR(8)
PARAMETER_ID	-	INTEGER	-
RIVER_MOUTH_LATITUDE	DECIMAL (dd.dddd)	-	-
RIVER_MOUTH_LONGITUDE	DECIMAL (dd.dddd)	-	-
RIVER_TYPE	CHAR(1)	-	CHAR(1)
NATIONAL_SUBCATCHMENT_CODE	STRING (1-255)	-	STRING(1-255)
NATIONAL_RIVER_CODE	STRING (1-255)	-	STRING(1-255)
NR_CATCHMENTS	INTEGER	INTEGER	INTEGER
MONITORING_TYPE	INTEGER	-	INTEGER
PERIOD_NAME	STRING (4-10)	STRING (4-10)	STRING (4-10)
IS_PRIMARY	-	-	BIT 0/1
CREATION_DATE	DATE(10) dd.mm.yyyy	DATE(10) dd.mm.yyyy	DATE(10) dd.mm.yyyy
END_DATE	DATE(10) dd.mm.yyyy	DATE(10) dd.mm.yyyy	DATE(10) dd.mm.yyyy
TOTAL_DRAINAGE_AREA	DECIMAL (8.2)		DECIMAL (8.2)
UNMONITORED_AREA	-	DECIMAL (8.2)	-
COUNTRY_DRAINAGE_AREA	DECIMAL (8.2)	-	DECIMAL (8.2)
TRANSBOUNDARY_AREA	-	-	DECIMAL (8.2)
LAKE_AREA	DECIMAL (8.2)	DECIMAL (8.2)	DECIMAL (8.2)
REMARKS	STRING(1-255)	STRING(1-255)	STRING(1-255)

Table 8. Data type and format of station and point source background information

ATTRIBUTE/SHEET	STATION_BACKGROUND	POINT_SOURCE_BACKGROUND
STATION_CODE	CHAR (7)	-
SUBCATCHMENT_CODE	CHAR (9)	CHAR (9)
SUBCATCHMENT_NAME	STRING (1-255)	STRING (1-255)
STATION_NAME	STRING (1-25)	-
PLANT_CODE	-	STRING (7)
PLANT_NAME	-	STRING (1-255)
PERIOD_NAME	STRING (4-10)	STRING (4-10)
IS_ACTIVE	BIT 0/1	-
RIVER_CATCHMENT_CODE	CHAR(8)	-
NATIONAL_STATION_CODE	STRING (1-25)	-
EU/ NATIONAL_CODE	-	CHAR(255)
PRTR_SECTOR_CODE *)	-	CHAR(1)
STATION/PLANT_CODE_LAT	DECIMAL (dd.dddd)	DECIMAL (dd.dddd)
STATION/PLANT_CODE_LON	DECIMAL (dd.dddd)	DECIMAL (dd.dddd)
WFD_CODE	STRING (1-50)	-
REPORTING_START_DATE	-	DATE(10)
REPORTING_END_DATE	-	DATE(10)
TOTAL_NR_OF_PLANTS	-	INTEGER
TOTAL_NR_OF_TREATED_PLANTS	-	INTEGER
MONITORED_AREA	DECIMAL (8.2)	-
REMARKS	STRING(1-255)	STRING(1-255)

*) The document listing the proposed new PRTR_SECTOR_CODEs can be downloaded:
http://prtr.ec.europa.eu/docs/Summary_activities.pdf

DATA COLLECTION

Loads of monitored subcatchments and transboundary rivers should be reported individually and for unmonitored areas as aggregated by basin and country. The loads of unmonitored subcatchments can specifically and optionally be reported for each parameter separately. Then also the respective surface areas should be reported for each unmonitored area and parameter.

Loads and flows of MONITORED RIVERs

The loads of monitored rivers should be reported in the MON_RIVER_LOAD sheet. The following loads should be reported:

-loads of monitored rivers within one country

-loads of transboundary rivers

-loads of border rivers

The collected mandatory and voluntary parameters have been listed in the PLC-6 Guidelines (Table 1.1)

In some cases the conducted measurements are below the LOQ / LOD (Limit of quantification / detection). LOQ/LOD information should be reported in the MON_RIVER_LOAD sheet. Related to LOQ/LOD information, also the number of measurements should be reported.

Total flow of a monitored river should be reported in the STATION_FLOW_CONCENTRATION sheet by monitoring station.

The collected mandatory and voluntary parameters have been listed in the PLC-6 Guidelines (Table 1.1)

Flow will be reported as m^3/s and the other parameters as t/a or kg/a (heavy metals),.

As for the background information, the reporting responsibility of a transboundary/border river is for the country which has the lowest monitoring station of the catchment

- to report the total inputs
- to report transboundary input at the border

Reporting of loads can also be arranged and agreed between the countries sharing the transboundary river.

The loads and flows of separate catchments (by country, i.e. country allocations) of transboundary and border rivers should be reported in the TRANSBOUNDARY_FLOW_LOAD sheet. Related to the transboundary loads their retention can be reported on a voluntary basis in the TRANB_SUBCATCHMENT_RETENTION

Reported parameters are: average flow, N_{tot} and P_{tot} and they will be reported as m^3/s and in t/a or kg/a.

Additional information on uncertainty and basic calculation information can be reported.

Loads and flows of UNMONITORED AREAs

The data of unmonitored area should be reported by country and by basin. Each unmonitored area consists of the areas between the monitored catchments, unmonitored parts of the monitored rivers, coastal areas and islands. Both the loads and flow of unmonitored areas should be reported in the UNMON_SUBCATCHMENT_FLOW_LOAD sheet.

The loads and flow of each unmonitored area should also include all loads and flow of the point sources in the area.

The reported parameters of unmonitored areas have been listed in table 1.1 of the PLC-6 Guidelines. Flow will be reported as m^3/s and the other parameters as tn/a or kg/a.

The type and format of loads, flow and metadata by attribute and for each spreadsheet have been compiled in table 10. Calculation methodlogy and information on uncertainty can also be reported.

Table 9. An overview of the data for the annual reporting

GENERAL VIEW OF THE ANNUAL DATA REPORTING ON SUBCATCHMENTS AND STATIONS						
SOURCE	**REPORTING**	**REFERENCE TABLE**	**FLOW**	**LOAD**	**ADDITIONAL INFORMATION**	**CALC. ESTIMATION METHODS**
MONITORED RIVERs annually	INDIVIDUALLY	MON_RIVER_LOAD		as listed in Table 1.1	LOQ/LOD information	X
TRANDBOUNDARY/BORDER RIVERs annually	ENTIRE RIVER	MON_RIVER_LOAD		as listed in Table 1.1	LOQ/LOD information	
UNMONITORED SUBCATCHMENT annually(*	BY COUNTRY AND BASIN, (OPTIONALLY BY PARAMETER)	UNMON_SUBCATCHMENT_FLOW_LOAD	average flow (in m^3/s)	as listed in Table 1.1		X
TRANSBOUNDARY SUBCATCHMENT annually(**	INDIVIDUALLY for each SUBCATCHMENT	TRANSBOUNDARY_FLOW_LOAD	average flow (in m^3/s)	as listed in Table 1.1		X
TRANSBOUNDARY SUBCATCHMENT annually(***	INDIVIDUALLY for each TRANSBOUNDARY SUBCATCHMENT	TRANSBOUNDARY_:RETENTION		as listed in Table 1.1??		
MONITORED STATION annually	INDIVIDUALLY	STATION_FLOW_CONCENTRATION	average flow (in m^3/s) (****		Annual min, max and long-term flows (1981-2010) and oncentrations voluntarily (m^3/s, µg/l or mg/l)	X

(* Unmonitored parts of monitored rivers should be reported together with unmonitored areas

(** Transboundary loads/flow of monitored rivers only Flow, Ntot and Ptot should be reported on a mandatory basis

(*** Retention of the nutrient load of transboundary subcatchments can be reported on a voluntary basis

(**** Voluntarily minimum, maximum and long-term flows can be reported

Table 10. Type and format of subcatchment (load and flow) and station (flow and concentration) data

ATTRIBUTE/SHEET	MON_RIVER_LOAD	UNMON_SUBCATCHMENT_FLOW_LOAD	TRANSBOUNDARY_FLOW_LOAD	TRANSBOUNDARY_RETENTION	STATION_FLOW_CONCENTRATION
STATION_CODE	-	-	-		CHAR (7)
SUBCATCHMENT_CODE	CHAR (9)	CHAR (9)	CHAR (9)	CHAR (9)	CHAR (9)
SUBCATCHMENT_NAME	STRING (1-255)	STRING (1-255)	STRING (1-255)	STRING (1-255)	STRING (1-255)
PARAMETER_ID	INTEGER	INTEGER	INTEGER	INTEGER	INTEGER
PARAMETER_TYPE	CHAR (3)	CHAR (3)	CHAR (3)	CHAR (3)	CHAR (3)
PERIOD_NAME	STRING(4-10)	STRING(4-10)	STRING(4-10)	STRING(4-10)	STRING(4-10)
PERIOD_TYPE	CHAR (1)	CHAR (1)	-		CHAR (1)
IS_LOQ/LOD	BIT (0/1)	-	BIT (0/1)		-
LIMIT_VALUE	DECIMAL (8(.6))	-	DECIMAL (8(.6))		-
LIMIT_UNIT	CHAR(4)	-	CHAR(4)		-
NUMBER_BELOW_LIMIT	INTEGER	-	INTEGER		-
NR_MEASUREMENTS	INTEGER	-	INTEGER		INTEGER
VALUE	DECIMAL (10(.3))	DECIMAL (10(.3))	DECIMAL (10(.3))	DECIMAL (10(.3))	DECIMAL (10(.3))
VALUE_UNIT	STRING(3-6)	STRING(3-6)	STRING(3-6)	STRING(3-6)	STRING(3-6)
TOT_UNCERTAINTY	INTEGER	INTEGER	INTEGER	INTEGER	INTEGER
DATA_SOURCE_FLAG	CHAR(2)	CHAR(2)	CHAR(2)	CHAR(2)	CHAR(2)
METHOD_ID	INTEGER	INTEGER	INTEGER	INTEGER	INTEGER
REMARKS	STRING(1-255)	STRING(1-255)	STRING(1-255)	STRING(1-255)	STRING(1-255)

Loads and flows of DIRECT POINT SOURCEs

Annual loads and flows of direct point sources will be reported individually and for three different categories, municipal wastewater treatment plants (MWWTP), industries and aquaculture. Direct point source has been defined in chapter 2.5 and in Annex 1 as: "Direct point sources: Point sources discharging (defined by location of the outlet) directly to the sea". Further, this implies, that the loads and flow data of such point sources, which are located down stream the monitoring station, but not discharging directly to the sea, should be included in the loads of unmonitored areas.

The data to be reported by different category have been listed below (table 11).

MWWTPs

The collected mandatory parameters on municipal wastewater treatment plants have been listed in the table 1.1

Flow will be reported as total flow in m^3/a and the other parameters as t/a or kg/a.

In addition, information on LOQ or LOD, number of measurements (NR_MEASUREMENTS), treatment method (TREATMENT_METHOD), number of population equivalent (NR of PE), as well as the information on sampling methodology, uncertainty and used methods can be reported voluntarily.

INDUSTRIES

The collected mandatory parameters on municipal wastewater treatment plants have been listed in the table 1.1

Flow will be reported as total in m^3/a and the other parameters as t/a or kg/a. In addtion, treatment methods, (TREATMENT_METHOD), number of population equivalent (NR of PE), sampling methodology, total uncertainty and used methods also can be reported.

AQUACULTURAL PLANTS

The collected mandatory parameters on municipal wastewater treatment plants have been listed in the table 1.1

Flow will be reported as total in m^3/a and N_{tot}, P_{tot} or $BOD_{5/7}$ as t/a. Total uncertainty of the obtained loads and used methods also can be reported.

Apart from the load reporting, amount of feed, feed type and fish production can be reported on a voluntary basis in the AQUACULTURE_PRODUCTION -sheet

Table 11. An overview of the point source data for annual reporting

GENERAL VIEW OF THE ANNUAL DATA REPORTING ON POINT SOURCES						
SOURCE	**REPORTING**	**REFERENCE TABLE**	**FLOW**	**LOAD**	**ADDITIONAL INFORMATION**	**CALC. ESTIMATION METHODS OF INPUTS**
MWWTP annually	MWWTPs AS AGGREGATED by SUBBASIN or voluntarily INDIVIDUALLY	MUNICIPAL_LOAD_FLOW	m^3/a	as listed in Table 1.1	Treatment method (individual reporting)	X
INDUSTRY annually	INDUSTRIES AS AGGREGATED by SUBBASIN or voluntarily INDIVIDUALLY	INDUSTRIAL_LOAD_FLOW	m^3/a	as listed in Table 1.1	(PRTR sector/ individual reporting)	X
AQUACULTURE annually	AQUACULTURE AS AGGREGATED by SUBBASIN or voluntarily INDIVIDUALLY	AQUACULTURE_LOAD	m^3/a (*	as listed in Table 1.1	Voluntarily feed type, amount of feed used and total production	X

(* Flow of an individual aquaculture can be reported on a voluntary basis when it is relevant, i.e. outlet of discharges exists.

Table 12. Type and format by attribute and spreadsheet of the point source data

ATTRIBUTE/SHEET	MUNICIPAL_ LOAD_FLOW	INDUSTRIAL_ LOAD_FLOW	AQUACULTURE _LOAD	AQUACULTURE _PRODUCTION
PLANT_CODE	CHAR (7)	CHAR (7)	CHAR (7)	CHAR (7)
SUBCATCHMENT_CODE	CHAR (9)	CHAR (9)	CHAR (9)	-
SUBCATCHMENT_NAME	STRING (1-255)	STRING (1-255)	STRING (1-255)	-
PARAMETER_ID	INTEGER	INTEGER	INTEGER	
PARAMETER_TYPE	CHAR (3)	CHAR (3)	CHAR (3)	
PERIOD_NAME	STRING (4-10)	STRING (4-10)	STRING (4-10)	STRING (4-10)
PERIOD_TYPE	CHAR (1)	CHAR (1)	CHAR (1)	-
IS_LOQ/LOD	BIT 1/0	BIT 1/0	-	-
LIMIT_VALUE	DECIMAL (8(.6))	DECIMAL (8(.6))	-	-
LIMIT_UNIT	CHAR(4)	CHAR(4)	-	-
NUMBER_BELOW_LIMIT	INTEGER	INTEGER	-	-
NR_MEASUREMENTS	INTEGER	INTEGER	-	-
VALUE	DECIMAL (10(.3))	DECIMAL (10(.3))	DECIMAL (10(.3))	-
VALUE_UNIT	STRING(3-6)	STRING(3-6)	STRING(3-6)	-
TOT_UNCERTAINTY	INTEGER	INTEGER	INTEGER	-
NR_PE	INTEGER	-	-	-
TREATMENT_METHOD	INTEGER	INTEGER	-	-
SAMPLING_METHODOLOGY	CHAR(1)	CHAR(1)	-	-
DATA_SOURCE_FLAG	CHAR(2)	CHAR(2)	CHAR(2)	-
METHOD_ID	INTEGER	INTEGER	INTEGER	-
FEED_TYPE	-	-	-	CHAR(1)
AMOUNT_OF_FEED	-	-	-	DECIMAL (10(.3))
AQUACULTURE_PRODUCTION	-	-	-	DECIMAL (10(.3))
REMARKS	STRING(1-255)	STRING(1-255)	STRING(1-255)	-