







# Annex 1.1.

Comparison of legal requirements under the DCF and Statistical regulation concerning submission of data on aquaculture and fish processing









MS are obliged to provide data on fish processing and aquaculture to Eurostat under Regulations 295/2008 and 762/2008. They also provide data on these two sectors to JRC under the DCF regulation 10121/2009. The following two tables compare the legal obligations for the data provisions for these two sectors.









Fish processing	data	
Groups of	SBS regulation <sup>1</sup>	DCF regulation <sup>2</sup>
variables	Submission to Eurostat	Submission to JRC
Structure of	Number of enterprises (11 11 0)	Number of enterprises (by size)
the processing	Number of local units (11 21 0)	
sector	Number of kind of activity units (11 31 0)	
	Number of persons employed (16 11 0)	Number of persons employed (by gender)
Employment	Number of employees in FTE units (16 14 0)	FTE National
	Number of employees (16 13 0)	
	Number of hours worked by employees (16 15 0)	
Turnover / Income	Turnover (12 11 0) Turnover from principal activity (18 11 0)	Turnover (12 11 0) Other income Subsidies
	Personnel costs (13 31 0)	Wages and salaries of staff (13 31 0)
	Wages and salaries (13 32 0)	Imputed value of unpaid labour
	Purchases of energy products (in value) (20 11 0)	Energy costs (20 11 0)
Operational costs	Total purchases of goods and services (13 11 0)	Raw material costs Other operational costs Financial costs, net Extraordinary costs, net
	Purchase of goods and services purchased for	
	resale in the same condition as received (13 12 0)	
	Social security costs (13 33 0)	
	Payments for agency workers (13 13 1)	
Capital costs		Depreciation of capital
Capital value		Total value of assets (43 30 0) Debt
	Gross margin on goods for resale (12 13 0)	
	Value added at factor cost (12 15 0)	
Performance	Gross operating surplus (12 17 0)	
	Change in stocks of finished products and work in	
	progress manufactured by the unit (13 21 3)	
	Gross investments in tangible goods (15 11 0)	Net investments (15 11 0 / 15 21 0)
	Sales of tangible investment goods (15 21 0)	1100 1111 050 1100 (15 11 0 7 15 21 0)
	Payments for long-term rental and operational	
	leasing of goods (13 41 1)	
	Gross investment in land (15 12 0)	
Investments	Gross investment in existing buildings and	
	structures (15 13 0)	
	Gross investments in construction and alteration of buildings (15 14 0)	
	Gross investment in machinery and equipment (15	

<sup>&</sup>lt;sup>1</sup> REGULATION (EC) No 295/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 11 March 2008 concerning structural business statistics (recast); further details are set in Commission Regulations 250/2009 and 251/2009.

<sup>&</sup>lt;sup>2</sup> COMMISSION DECISION 10121/2009 of 18.12.2009 adopting a multiannual Community programme for the collection, management and use of data in the fisheries sector for the period 2011-2013









Environmental	Investment in equipment and plant for pollution control and special anti-pollution accessories (21 11 o)	
investments	Investment in equipment and plant linked to cleaner technology (21 12 0)	









	Aquaculture Data	
	Aquaculture <sup>3</sup>	DCF regulation
	Submission to Eurostat	Submission to JRC
Variables requested	3 variables on aquaculture sector production (not collected through SBS):  1. Production of aquaculture (by species and farming technique in unit and unit value) 2. Input to capture-based aquaculture (by species in volume and unit value) 3. Production of hatcheries and nurseries (by species in millions of eggs and juveniles)  1 variable on aquaculture sector structure: 4. Size of facilities (in thousand m³ and hectares)	22 economic variables on aquaculture sector (similar to SBS requirements):  1. Turnover  2. Subsidies  3. Other income  4. Wages and salaries  5. Imputed value of unpaid labour  6. Energy costs  7. Livestock costs  8. Feed costs  9. Repair and maintenance  10. Other operational costs  11. Depreciation of capital  12. Financial costs, net  13. Extraordinary costs, net  14. Total value of assets  15. Net investments  16. Debt  17. Livestock  18. Fish feed  19. Volume of sales  20. Number of persons employed  21. FTE National  22. Number of enterprises
Aquaculture sector segmentation	By species groups A. Fish B. Crustaceans C. Molluscs D. Seaweeds  By farming techniques 1. Ponds (A+B) 2. Tanks and raceways (A+B) 3. Enclosures and pens (A+B) 4. Cages (A) 5. Recirculation systems (A) 6. On bottom (C) 7. Off bottom (C) 8. Other methods (A+B+C+D)  By type of water Freshwater Saltwater Total	By species groups Salmon Trout Sea bass & Sea bream Carp Other fresh water fish Other marine fish Mussel Oyster Clam and other shellfish  By farming techniques 1. Fish farming techniques Hatcheries and nurseries On growing Combined Cages 2. Shellfish farming techniques Rafts Long line Bottom Other

 $^3$  REGULATION (EC) No 762/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 9 July 2008 on the submission by Member States of statistics on aquaculture and repealing Council Regulation (EC) No 788/96









# Annex 1.2.

# Information on relevant fisheries related databases









Table 1. Overview of relevant fisheries related databases – contents and technologies

Insititu- tion	DB name	Contents <sup>4</sup>	Regional coverage	Trans- versal <sup>5</sup>	Biolo- gical <sup>6</sup>	Econo -mic <sup>7</sup>	Other <sup>8</sup>	DB type	Transmission/ Upload format	Transmi s-sion protocol
ICES	Datras	Trawl survey data	BS, NS, EA, NA		Х			MS	Txt or xml files	
	Interchatch	Stock and metier sampling data	BS, NS, EA, NA	X	Х			SQL	uploaded	https/AS P.NET
	RDB Fishframe	Stock and metier sampling data	BS, NS, EA, NA	Х	X			server	through a Web interface	
JRC	Economic	Fleet economic, effort and landings data	EU	х		х			Excel files	
	Processing	Fish processing economic data	EU			Х			uploaded	https
	Aqualture	Aquaculture economic data	EU			Х		Postgr		
	Effort regimes	Effort data	BS, NS, EA, NA	Х				esSQL	interface	
	MBS	Biological and effort data on MBS	EU-MBS	Х	Х			1		In LAN
	Saiku	Dissemination of above data, aggregated	EU	Х		Х			Manual upload	
DG Mare	Landings	Monthly landings to monitor quota up-take	EU	Х						
	Effort	Monthly effort to monitor effort regimes	EU	Х						
	EMODnet	Various data links, related to IMP	EU				Х			
DG Envi	MSFD	Data and reports	EU				Х			
GFCM	Vessel records	Characteristics of vessels above 15m	MBS	Х					CSV/XML	e-mail

<sup>&</sup>lt;sup>4</sup> Production databases, unless dissemination is specified

<sup>&</sup>lt;sup>5</sup> Data on catches, landings and effort by segment, metier or MS

<sup>&</sup>lt;sup>6</sup> Measurements of fish (size, age, seks, etc.)

<sup>&</sup>lt;sup>7</sup> Costs and earnings of production processes

<sup>&</sup>lt;sup>8</sup> All other data: bathymetry, water characteristics, etc.









Insititu- tion	DB name	Contents⁴	Regional coverage	Trans- versal <sup>5</sup>	Biolo- gical <sup>6</sup>	Econo -mic <sup>7</sup>	Other <sup>8</sup>	DB type	Transmission/ Upload format	Transmi s-sion protocol
	Task 1	Production, economic and biological data on MBS fisheries	MBS		Х	х			CSV/XML	e-mail
	Sipam – production	Aquaculture production in MBS	MBS	Х					CSV/XML	e-mail
	Sipam - units	Aquculture producers in MBS	MBS				Х			
Eurostat	MDT	Marine and aquaculture production, fleet under construction	EU	Х			х		SDMX-ML and semi automated upload	eDAMIS
	EBB/Eurocube	Fish processing (SBS)	EU			Х		Oracle	upload	
	Eurobase	Dissemination of above data	EU	х		х		oracic	Eurobase format file uploaded semi automatically	In LAN
RSCs	Helcom – BSPA	Location, status and management of MPAs	BS				Х		text	e-mail
	OSPAR – CEMP	Contaminants and nutrients in marine environment	NE Atlantic				Х			
	OSPAR - MAP	Information on MPAs	NE Atlantic				Х			
	Bucharest	No DB	Black Sea							
	Barcelona	No DB	Mediter. Sea							
RFMOs	CCAMLR		Own area		Х			n/a	Excel	e-mail
	CCSBT		Own area		Х			SQL Server	Excel/ACCESS	e-mail
	IATTC		Own area	Х	Х		X <sup>9</sup>	SQL Server	Excel/ Access/ Text	

<sup>9</sup> IATTC – Other data: Environmental variables (data on sea surface temperature, wind speed, visibility and cloud cover) collected by purse seine observers









Insititu- tion	DB name	Contents <sup>4</sup>	Regional coverage	Trans- versal <sup>5</sup>	Biolo- gical <sup>6</sup>	Econo -mic <sup>7</sup>	Other <sup>8</sup>	DB type	Transmission/ Upload format	Transmi s-sion protocol
	ICCAT	Nominal Catches, Catch and Effort, Size-Frequency and List of authorized vessel	Own area	Х	х				Excel	
	IOTC		Own area		Χ			n/a	Excel	e-mail
	NAFO		Own area		Х				Excel /ACCESS	e-mail
	NEAFC		Own area		Х					
	SEAFO		Own area		Х			SQL Server	Excel/ Access	e-mail
	SPRFMO		Own area	Х	х		X <sup>10</sup>	Extern al sever (SQL Server DB)	Excel/ Access	
	WCPFC		Own area	Х	Х		X <sup>11</sup>	SQL Server	Excel/ Access/ Text	

<sup>&</sup>lt;sup>10</sup> SPRFMO – Other data: Environmental variables (location and evidence of vulnerable marine ecosystems)

<sup>&</sup>lt;sup>11</sup> IATTC – Other data: Environmental variables (data on sea surface temperature, wind speed, visibility and cloud cover) collected by purse seine observers









## Table 2. Overview of dissemination of DCF and other fisheries related data

Instituti on	DB name	Contents <sup>12</sup>	Publicly available	Regis- tered user groups	link	formats	Dissemination policy
ICES	Datras	Trawl survey data	х		https://DATRAS.ICES.dk/Data_product s/Download/Download_Data_public.a spx	csv format stored in a zip file containing also a data product guide and metadata infos	Х
	InterCatch	Stock and metier sampling data	-	х	https://intercatch.ices.dk/Login.aspx	dynamic tables / filters in Excel/CSV/TXT formats	-
	RDB FishFrame	Stock and metier sampling data	-	х	https://www.rdb-fishframe.org	dynamic tables / filters in Excel/CSV/TXT formats and XML	-
JRC	Economic	Fleet economic, effort and landings data	Cailar DB				
	Processing	Fish processing economic data	Saiku DB and STECF		https://fishreg.jrc.ec.europa.eu/w		_14
	Aquaculture	Aquaculture economic data	SIECE		eb/datadissemination/tables	STECF website <sup>13</sup> , csv, Excel, graph	
	Effort regimes	Effort data			http://stecf.jrc.ec.europa.eu/data- reports		
	MBS	Biological and effort data on MBS					
STECF		Raw data used to compile STECF reports	х		http://stecf.jrc.ec.europa.eu/data- reports	Excel	Available with the report
DG	Landings	Monthly landings to	-		-	-	

<sup>&</sup>lt;sup>12</sup> Production databases, unless dissemination is specified

<sup>&</sup>lt;sup>13</sup> report and excel files "data" corresponding to variables collected in the fleet data calls and effort data calls, "economic indicators" category displaying indicators taken from or calculated on the basis of such DCF data on fishing fleet, aquaculture and fish processing industry data calls as verified by STECF.

<sup>&</sup>lt;sup>14</sup> Legally JRC cannot disseminate directly DCF data, that's why the dissemination is based on the data validated by the STECF, and then made publicly available









Instituti on	DB name	Contents <sup>12</sup>	Publicly available	Regis- tered user groups	link	formats	Dissemination policy
Mare		monitor quota up-take					
	Effort	Monthly effort to monitor effort regimes	-				
	EMODnet	Various data links, related to IMP					
DG Envi	MSFD	Data and reports	х		http://ec.europa.eu/environment/ pubs/studies.htm		
GFCM	Vessel records	Characteristics of vessels above 15m	x	x	http://www.gfcm.org/gfcm/topics/17103/en	Statistical summaries in printable tables or graphs; The AVL tool <sup>15</sup> is developed in VB.NET and allows to export results in rtf, xls, pdf	-
	Task 1	Production, economic and biological data on MBS fisheries	Some	х	http://www.gfcm.org/gfcm/topic/ 17106/en	Statistical Bulletin –pdf	No active
	Sipam – production	Aquaculture production in MBS		х	http://www.faosipam.org/index.a spx?pag=_start&dbkey=2	An on-line query tool is available for registered users (developed in C#.NET)	Active through newsletter
	Sipam – units	Aquculture producers in MBS		х		An on-line query tool is available for registered users (developed in C#.NET)	Active through newsletter
Eurostat	MDT	Marine and aquaculture production, fleet under construction	-	-			
	EBB/Eurocub e	Fish processing (SBS)	-	-			

 $<sup>^{15}\,</sup>ftp://ftp.fao.org/F1/DOCUMENT/gfcm/vessel\_list/GFCM\_AVL\_Features.pdf$ 







Instituti on	DB name	Contents <sup>12</sup>	Publicly available	Regis- tered user groups	link	formats	Dissemination policy
	Eurobase	Dissemination of above data	х		http://epp.eurostat.ec.europa.eu/ portal/page/portal/fisheries/introd uction	export results in xls, csv, html, PC-AXIS, SPSS, tsv, PDF, map, graph	
RSCs	Helcom – BSPA	Location, status and management of MPAs	х	-	http://maps.helcom.fi/website/fle xviewers/BSPA/index.html http://bspa.helcom.fi/	customized GIS- mapping applications, downloadable shape files and exportable CSV datasets	Active for the public
	OSPAR – CEMP	Contaminants and nutrients in marine environment	х	-	http://dome.ices.dk/osparmime/m ain.html	Visualization of selected parameters, Access to data possible- Contact email address provided	n/a
	OSPAR – MAP	Information on MPAs	х	-	http://www.ospar.org/content/content.asp?menu=01511400000000 _000000_000000	Access Database, shapefiles and geodatabase	
	Bucharest	No DB	-	-	-	-	-
	Barcelona	No DB	-	-	-	-	-
CCAML R	-Catches and fishing effort (by fishing seaso n)				http://www.ccamlr.org/en/data/st atistical-bulletin	PDF or Excel files	n/a
	Catch histories for selected species				http://www.ccamlr.org/en/data/st atistical-bulletin	PDF or Excel files	n/a
	Global landings and trades				http://www.ccamlr.org/en/data/st atistical-bulletin	PDF or Excel files	n/a









Instituti on	DB name	Contents <sup>12</sup>	Publicly available	Regis- tered user groups	link	formats	Dissemination policy
	of toothfish						
CCSBT	Estimated Total Global Catch of Southern Bluefin Tuna				http://www.ccsbt.org/site/sbt_data.php	Excel files	n/a
	Catch and Effort Data				http://www.ccsbt.org/site/sbt_data.php	Excel files	n/a
	Catch at Size Data				http://www.ccsbt.org/site/sbt_data.php	Excel files	n/a
IATTC	n/a		n/a	х		Excel/CSV/TXT - Access, - dbf	
ICCAT							
ЮТС	Nominal Catches	by each FAO statistical area, by species and fishing gear made by vessels flying the flag of the reporting country in live weight equivalent	х		http://www.iotc.org/English/data/databases.php	Excel file	no
	Catch and Effort	catch in weight (purse seine) and/or numbers of fish (longline) of tuna and tuna-like species	х		http://www.iotc.org/English/data/databases.php	Excel file	no
	Size- Frequency	Length-frequency sample or raised data by species and gear	х	х	http://www.iotc.org/English/data/databases.php	Excel file	no
	List of	List of authorized vessel	Х		http://www.iotc.org/English/data/	Excel file	no









Instituti on	DB name	Contents <sup>12</sup>	Publicly available	Regis- tered user groups	link	formats	Dissemination policy
	authorized vessel	over 24m LOA to operate in ITOC area			databases.php		
NAFO	21 A STATLANT 21B	Annual catches Monthly catch and effort	х	х	http://www.nafo.int/data/frames/data.html STATLANT 21A and 21B	csv file or pdf	no
NEAFC							
SEAFO	n/a	VMS & Vessel registry	n/a	Х		Excel/CSV/TXT	n/a
SPRFM O	SPRFMO Database GeoDatabase Monthly catch reports	Vessel details, fishing observer data, landings, ArcGIS data repository Fisheries descriptions, annual catch totals, aggregated catch, effort	Partly - X	x	https://www.sprfmo.org/	Excel/CSV/TXT –XML  Excel/CSV/TXT - Shapefiles  monthly catch reports in pdf Excel/CSV/TXT	newsletter and email
WCPFC						LACCICSVITAT	Citiali









# Table 3. Aggregation levels of selected data calls / databases in relation to transversal variables

	RDBs — métier related (call 2013)	Economic data – JRC call	Effort regimes – JRC call (2013)*** Atlantic areas	MBS call - JRC (effort and landings)	Eurostat	Control regulation** (submission to DG MARE – D4)	Control regulation (national data – eRS) Reg. 404/2011
Catch area	ICES rectangle	FAO Level 4 (Baltic) FAO level 3 (other areas)	FAO and ICES rectangle	GSA	FAO Level 4 (Baltic) FAO level 3 (other areas)	FAO Level 4 (Baltic) FAO level 3 (other areas)	Geographic position
Harbour of landing	Harbour of landing*	Not applicable	Not applicable	Not applicable	Not applicable	Harbour of landing	Harbour of landing
Time	Month	Year	Quarter	Quarter	Year	Month (quota sp.) Quarter (non-quotasp.)	Day / hour
Vessel size	6 length classes (m) 0-10 10-12 12-18 18-24 24-40 40+ (App. III)	6 length classes (m) 0-10 (0-6) 10-12 (6-12) 12-18 18-24 24-40 40+ (App. III) Italics/brackets=MBS	length classes (m) according to area: Atlantic areas: -10m 10-15 15+ Baltic Sea: -8 8-10 10-12 12-18 18-24 24-40 40+	8 length classes (m) 0-6 0-12 6-12 12-18 12-24 18-24 24-40 40+	Not applicable	Not applicable	Individual vessel
Gear (see details in table	58 gears (CRR 296, p.35-36) More detailed than	12 gears (App. III)	9 gears	26 gears	Not applicable	Not applicable	Annex XI of 1224/2009







	RDBs — métier related (call 2013)	Economic data – JRC call	Effort regimes – JRC call (2013)*** Atlantic areas	MBS call - JRC (effort and landings)	Eurostat	Control regulation** (submission to DG MARE – D4)	Control regulation (national data – eRS) Reg. 404/2011
below)	the required DCF level 4.						
Target species	DCF level 5 (App. IV)	Not applicable	Description of fishery – 40 characters	17 fisheries	Not applicable	Not applicable	
Mesh size	DCF level 6 (App. IV) – mesh sizes according to mgt regime	Not applicable	21 mesh sizes, according to mgt regime	10 mesh sizes	Not applicable	Not applicable	In mm
Landings variables	Unallocated catch weight Area misreported catch weight Official landings weight	Live weight in kg Value in euro	Landings at age Discards at age	Landings at age Discards at age			
Effort variables	Number of trips Number of sets / hauls Fishing time / soaking time kW-days GT-days Days at sea	Days at sea Energy consumption Fishing days GT fishing days kW fishing days Length of nets Maximum Days at Sea Number of fishing operations Number of fishing trips Number of hooks Number of nets	Days at sea Fishing days GT per fishing days kW per fishing days	Nominal effort (kW- day-at-sea GT-days-at-sea Number of vessels			







	RDBs – métier related (call 2013)	Economic data – JRC call	Effort regimes – JRC call (2013)*** Atlantic areas	MBS call - JRC (effort and landings)	Eurostat	Control regulation** (submission to DG MARE – D4)	Control regulation (national data – eRS) Reg. 404/2011
		Number of traps, pots Soaking time					
Data source	Census (due to ranking system)	Census in most MS, except FR, ES, IT and MT Energy cons. based on sample	Effort and total landings by Census (due to ranking system) Landings / discards at age by sampling	Effort and total landings by Census (due to ranking system) Landings / discards at age by sampling			