



**POLISH NATIONAL PROGRAMME FOR THE
COLLECTION OF FISHERIES DATA
FOR 2009-2010**

by
SEA FISHERIES INSTITUTE IN GDYNIA



and
**DEPARTMENT OF FISHERIES
MINISTRY OF AGRICULTURE AND RURAL DEVELOPMENT**



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I. General framework

This document describes the Polish Programme for the collection of fishery data from the Polish fishery sector planned for 2009-2010.

The programme has been developed in accordance with Council Regulation (EC) No 199/2008 entitled the “New Data Directive”, Commission Regulation (EC) No 665/2008, and two technical commission documents: “Commission Decision (2008/XXX/EC)” and “Guidelines for the submission of National Programmes 2009-2010. Version 2008”.

The transition from single species biological sampling programmes performed in 2005-2008 to multispecies, multiyear, metier- and fleet-based programmes for biological and economic data that is planned for 2009-2010 creates new challenges. These are especially apparent when examining current logbook regulations, VMS data, and management regulations. Some of these issues include: a) information on mesh sizes and selectivity devices are absent from logbooks or are not recorded; b) information concerning certain types of passive gears are not mandatory in logbooks; c) soaking time is absent from logbooks; d) catch data are not recorded at haul levels; e) the fishing vessel register does not record additional data about the fishing gears a given vessel is permitted to use, e.g., mesh size, selectivity devices, etc.; f) DCR gear classifications are not compatible with FAO standard ISSCFG (July 29, 1980); g) the concurrent sampling method at sea and at market was not fully implemented in 2008.

II. Organisation of the National Programme

II.A National organisation and co-ordination

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2. Institutions that contribute to the NP

2.1. Sea Fisheries Institute in Gdynia (SFI)

The SFI was established in 1921 to conduct research in marine biology. The Sea Fisheries Institute is supervised by the Fisheries Department of the Ministry of Agriculture and Rural Development. Areas of research at the SFI include fisheries biology, fisheries oceanography and marine ecology, fish processing technology, and fisheries economics.

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3. Planned national co-ordination meetings

Meeting in April 2009, Gdynia

Agenda:

- Harmonization of Catch and Landing Information System of Fisheries Department of the Ministry (SFIS) and Biological and Economical System of the Sea Fisheries Institute (NPZDRpl)
- VMS system for use at the SFI
- Co-operation in field of implementation of the Electronic Catch Logbook
- Improvement of co-operation among partners for fisheries data collection
- Establish international co-operation for biological sampling of landings of foreign vessels in Polish ports, and sampling of Polish landings in foreign ports.

Meeting in April 2010, SFI Gdynia

Agenda: similar to 2009

II.B International co-ordination

As it has done traditionally, Poland will participate in the ICES groups PDCCDBS, WGBIFS, WGFAST, and WGBSFA. Poland will attend methodological workshops, including the Workshop on Methods to Evaluate and Estimate the Precision of Fisheries Data Used for Assessment (WKPRECISE), the Workshop on Sampling Methods for Recreational Fisheries (WKSMRF), the Workshop on Sexual Maturity Staging of Sole, Plaice, Dab and Flounder (WKMSSPDF), eel otolith exchange and other workshops as recommended by DG Mare.

II.C Regional co-ordination

In 2009 and 2010, Poland will participate in Regional Co-ordination Meetings for the Baltic Sea, North Sea and Arctic and North Atlantic (NAFO areas).

III. Module of evaluation of the fishing sector

III.A General description of the fishing sector

The mean catch size in 2006-2007 was 130,000 tons. Polish catches are concentrated on the Baltic Sea (82%), North Atlantic (8%), North Sea and Eastern Arctic (5%), and the Atlantic Antarctic (5%). In addition to the Baltic Sea fleet (950 fishing vessels), four distant trawlers fish demersal species (cod, pollock, rockcod), pelagic fish (herring), and crustaceans (shrimp in the NAFO region and krill in the Antarctic Atlantic). Catches of deep-sea fish were insignificant (0.6-1 ton, annually). Targeted industrial catches (sprats for reduction) are conducted exclusively in the Baltic Sea, and in 2006-2007 they were about 20-30 thousand tons.

III.B Economic variables

Baltic Sea, North Sea, Eastern Arctic, North Arctic.

III.B.1 Data acquisition

Economic data regarding the fishing fleet will come from administrative documents (fishing logs, landing declarations, first sale documents) and statistical questionnaires filled out by fishing vessel owners. These data are complete as they will include information from the whole population. If any fishing vessel owners fail in their obligation to return the statistical questionnaires, the values of the missing parameters for the missing population will be determined based on averaged data from the questionnaires received. All fishing vessel owners are required to submit statistical questionnaires by March 30 of a given year for the preceding year. The verification and confirmation of this data for the year analyzed will be completed by September 30 of the subsequent year.

The catches made by the Polish fishing fleet are conducted in one supra-region, which is why there is no issue of dividing costs among areas.

Fuel efficiency will be calculated based on the mean fuel consumption per fishing day for a given gear category (Level 3). Based on this information as well as the number of fishing days, the cost of fuel for various fishing methods will be calculated. The quarterly catches according to fishing method and mean quarterly averages will be calculated based on the magnitude of quarterly catches according to fishing method, and the average quarterly price of fish from various gear groups (Level 3).

Source of economic data and method for estimating data for the whole population

Variable group	Variable	Source	Estimation method/1
Income	Gross value of landings	Questionnaire RRW-19, first sale documents	Catch size
	Income from leasing out quota or other fishing rights	Not applicable	
	Direct subsidies	Questionnaire RRW-19, fisheries administration data	Number of vessels
	Other income	Questionnaire RRW-19	Number of vessels
Personnel costs	Wages and salaries of crew	Questionnaire RRW-19	Employment
	Imputed value of unpaid labour	Estimation	
Energy costs	Energy costs	Questionnaire RRW-19	Fishing days
Repair and maintenance costs	Repair and maintenance costs	Questionnaire RRW-19	Number of vessels
Other operational costs	Variable costs	Questionnaire RRW-19	Fishing days
	Non-variable costs	Questionnaire RRW-19	Number of vessels
	Lease/rental payments for quota or other fishing rights	Not applicable	
Capital costs	Annual depreciation	According to FISH/2005/03	Number of vessels
Capital value	Value of physical capital: depreciated replacement value ¹⁰	Questionnaire RRW-19; bonus for scrapping vessels	Number of vessels
	Value of physical capital: depreciated historical value ¹⁰	Questionnaire RRW-19	Number of vessels
	Value of quota and other fishing rights	Not applicable	
	Investments in physical capital	Questionnaire RRW-19	Number of vessels
Investments			
Financial position	Debt/asset ratio	Questionnaire RRW-19	Number of vessels
Employment	Engaged crew	Questionnaire RRW-19, fishing vessel register	Number of vessels
	FTE National	Questionnaire RRW-19,	Number of vessels
	FTE harmonised	Questionnaire RRW-19, fishing logs	Number of vessels
Fleet	Number	Fishing vessel register; fishing logs	Comprehensive data
	Mean LOA	Fishing vessel register	Comprehensive data
	Mean vessel's tonnage	Fishing vessel register	Comprehensive data
	Mean vessel's power	Fishing vessel register	Comprehensive data
	Mean age	Fishing vessel register	Comprehensive data
Effort	Days at sea	Fishing logs	Comprehensive data
	Energy consumption	Questionnaire RRW-19	Fishing days
Number of fishing enterprises/units	Number of fishing enterprises/units	Fishing vessel register	Comprehensive
Production value per species	Value of landings per species	First sale document	Catch size/value
	Average price per species	First sale document	Catch size/value

1/ if there is a lack of information from the whole population (100%), the data will be estimated based on the average values of the sample calculated with fishing vessels, number of fishing days, number of personnel, or catch size

III.B.2 Data quality

In accordance with national regulations, each vessel owner is legally bound to file a questionnaire regarding the economic results of the fishing vessel. This is why it is assumed that data will be gathered from the entire population. If questionnaires are not filed by a portion of vessel owners by the deadline, calculations will be made based on the questionnaires received. In order to ensure the maximum number of questionnaires is received, reminders of the obligation to file them will be sent by registered mail. Plans have also been made to contact vessel owners by telephone, and to meet with them in person in the fishing ports.

III.B.3 Regional coordination

Economic data collection will not require the co-operation of other Member States.

RCM Baltic Recommendations:

Recommendation:	Action that will be taken:
<p>The RCM Baltic recommends the description of the source of the information and when applying a sampling procedure a description of method and strategy has to be clearly described in the national programme to give useful information on quality of the obtained data. In the technical report there should then be a qualitative quality report containing a thorough description of the methods and strategies used and the characteristics of the gathered data.</p> <p>The RCM Baltic recommends to not use the precision level as an indicator of heterogeneity but to rather use the mean value and standard deviation.</p>	<p>The description of the method for data collection is presented in points III.B.1 and III.B.2.</p>
<p>RCM Baltic recommends a workshop on optimizing sampling strategy for economic data.</p>	<p>Participation in a meeting.</p>
<p>In compliance with the RCM NS-EA, the RCM Baltic recommends that the Commission arranges a workshop to clarify all issues concerning the fleet based approach.</p>	<p>Participation in a meeting.</p>

III.B.4 Derogations and non-conformities

Due to statistical confidentiality, it is not possible to publish data on the economic results of the deep-sea vessels (this segment of the fleet is comprised of 3-4 vessels). Due to the technical parameters of these vessels, it is not justified to combine them with other vessels in the fleet that are significantly different (e.g., PTS-24-40).

III.C Biological - metier-related variables

III.C.1 Selection of metiers to sample

Baltic Sea

According to Appendix IV.1, the total number of potential metiers for Baltic fishing grounds is 58. Since these metiers are applied to two fishing grounds (SD 22-24 and SD 25-32), there is a total of 116 potential metiers as defined by Appendix IV.1. According to Polish fishery statistics, 69 of these potential metiers in both SD 22-24 and SD 25-32 were recorded in reference years 2006-2007. The ranking system used to select the metiers to be sampled was the one recommended for Baltic Sea fishing grounds, and included selection by effort and landing weights from 2006-2007. Landings and fishing effort were taken from Polish vessel registers. The final list of metiers that were selected by the ranking system for sampling, and those not selected but considered by Polish experts to be worthy of sampling, are presented in Table III.C.1. and Table III.C.3.

In accordance with the ranking system, five metiers were selected to sample the demersal fish assemblage (cod and flounder, and, to a lesser extent, plaice and turbot); two were chosen for fishing ground SD22-24 and three for fishing ground SD25-32. No additional metiers were selected for sampling, and no metier merging was applied. The distribution of the fishery indicates the length of the fishing season was ten months. Therefore, one sample for each of the five metiers was allocated per month, which means a total of 30 and 20 fishing cruises will be sampled in SD25-32 and SD22-24, respectively. For the OTB_DEF_105_1_110 and GNS_DEF_110_0_0 metiers, sea sampling is planned and will include landing and discard data collection. However, LLS DEF 0_0_0 landings and discards (self-sampling strategy) will be sampled in harbours. The self-sampling strategy is necessary for the last metier as this is mainly represented by artisanal fishery. Scheme 2 will be used for sampling, with 10% of samples collected concurrently and 90% of samples focused on for Group 1 species.

The following metiers were selected for the small pelagic fish assemblage. (Table III.C.1):

- OTM_SPF_>=32_0_0;
- OTB_SPF_>=32_0_0;
- PTB_SPF_>=32_0_0;
- SDN_SPF_>=32_0_0;
- FPO_SPF_>=32_0_0;
- GNS_SPF_44-56_0_0;
- OTM_SPF_16-22_0_0.

In addition to landing sizes, fishing effort, and landing values for 2006-2007, fish length distributions (which differ with gear type, catch techniques, and net mesh sizes) are the criteria for metier selection for small pelagic fish at the Polish national level. Based on this, gears used to catch large herring were also selected; for fishing grounds 25-32 these were GNS, PTB, and OTB. In addition, fyke-nets (FPO_SPF_>=32_0_0) used in the Vistula Lagoon were selected for sampling because of the specifics of the herring population that spawns there. Scheme 2 will be used for sampling small pelagic fish, with 10% of samples collected concurrently and 90% of samples focused on for Group 1 species.

In the metiers listed above, the mesh size ≥ 32 mm refers to direct Baltic herring catches, while the 16-22 mm mesh size refers to sprat catches. Sprat by-catch in directed herring fishery generally does not occur since mesh size is large enough to allow sprat to escape. However, sprat and herring do appear simultaneously in the same catch, and sometimes even in the same proportion, but only in industrial sprat fishery. In recent years, the by-catch of young herring in catches of sprat for human consumption has been relatively low (<7% on average). Many Polish cutters use size-sorting machines during cruises to sort out sprat and herring that exceed the

minimum commercial size, when mesh size of 16-22 mm in the trawl codend is used in the catches.

Due to the specific clupeid fishery scheme described above, the number of sampling trips was allocated proportionally to landings from selected metiers in particular exploited stocks (fishing grounds).

Only one sampling metier was chosen for marine eel sampling (freshwater FPO), because it comprises nearly all of the eel fishing effort (95% of total eel effort). The remaining 5% is the LLD metier, which is applied for only two to three months per year. There are no clear guidelines regarding inland eel sampling, and inland fleet metiers differ from marine metiers. This is why the sampling scheme will use different gears: fyke-nets and longlines for yellow eel and river traps for silver eel. The numbers of trips are similar to the marine sampling scheme as one five-day trip per month per River Basin District is planned.

Two metiers were selected for wild salmon and sea trout stocks: drifting longlines in open waters and gill-nets in coastal areas.

North Sea and Eastern Arctic

The ranking system used for Polish deep-sea fishery was based on total landings and effort days of the targeted assemblages (level 5). For reasons of confidentiality (just one or two vessels fishing per metier), the value of the catches is not shown. Information about total landings comes from administrative documents (logbooks and first sale documents), and effort was calculated from logbooks. The metiers that will be sampled were allocated according to the system described in Commission Decision 2008/XXX/EC. The final list of metiers that was selected for sampling by the ranking system and those not selected are presented in Table III.C.1. Scheme 2 will be used for sampling, with 10% of samples collected concurrently and 90% of samples focused on for Group 1 species.

North Atlantic

As with the **North Sea and the Eastern Arctic**, the ranking system used was based on total landings and effort days of the targeted assemblage (level 5). For reasons of confidentiality (just one or two vessels fishing per metier), the value of catches is not shown. Information about total landings comes from administrative documents (logbooks and first sale documents) and effort was calculated from logbooks. The selection of metiers from Appendix IV was done according to the system described in Commission Decision 2008/XXX/EC. The final list of metiers that was selected by the ranking system for sampling and those not selected are presented in Table III.C.1. Scheme 2 will be used for sampling with 10% of samples collected concurrently and 90% of samples focused on for Group 1 species.

Others

In the last quarter of 2008, the Polish fleet started fishing in the CECAF area, and will continue fishing operations in 2009-2010. If total landings in 2008 in this area are significant, sampling in 2009-2010 will be conducted and the metiers selected for sampling will be presented with the national programme evaluation in January 2009.

III.C.2 Data acquisition

Baltic Sea

Two of the metiers selected for the small pelagic assemblage in fishing grounds SD25-32 (OTB_SPF_ \geq 32_0_0 and PTB_SPF_ \geq 32_0_0) have been merged for sampling purposes. The bottom pair trawl is the distinct dominant in these metiers, and the name of the merged metier is taken from the gear type that was dominant in the total effort in 2006-2007.

The shore-based sampling strategy was adopted for metiers in which nets with mesh sizes \geq 32 mm are deployed in targeted herring catches. Sampling scheme 2 for SPF metiers was chosen. The material for species composition and length-age distribution samples from targeted herring fishery will be collected from landings in harbours directly from cutters. The planned number of trips to sample landings by metiers was determined proportionally to the landings and effort size by month in the 2006-2007 period. Discard sampling of target herring catches is not planned for 2009-2010 as this was conducted in 2007 and 2008.

Due to the low daily efficiency of freshwater fyke-nets during the eel fishing season, (1-20 specimens per fishing trip), the number of samples must be enhanced and fitted to the actual level of efficiency, which is why one five-day trip per month per fishing ground is planned. Only concurrent sampling in harbours will be implemented. Inland trip numbers are similar to marine sampling with one five-day trip per month per River Basin District planned. During these trips, every fishing operation will be monitored for both yellow and silver eel.

In the salmon fishery, two metiers have been merged for sampling purposes: LLD (drifting longlines) and GND (drift nets). Fishing with GND gear is now banned, so the fishing effort will probably be shifted to LLD and GNS gears. The number of sampling trips is related to the number of months of the fishing season. A total of six trips are planned for at-sea concurrent monitoring of the LLD metier, and nine trips for GNS concurrent/self-sampling monitoring on shore.

North Sea and Eastern Arctic

Because of the small Polish national quotas in the NS and EA areas, catches in 2009 and 2010 will be conducted by one or two vessels during one or two cruises. All samples will be taken at sea aboard the commercial vessels. Sampling scheme 2 will be applied. The sampling strategy is described in Table III.C.3. Table III.C.4 presents sampling intensity for the fish stock which will be sampled in 2009 and 2010.

North Atlantic

Similarly to the North Sea and Eastern Arctic, the Polish national quotas are small in the NA area, and catches in 2009 and 2010 will be conducted by one or two vessels.

In the NA area, the metier from ICES fishing grounds XII and XIV was merged with that of NAFO S.A. 1-2 area. The *Sebastes mentella* that is distributed in both areas belongs to one stock, and it is caught during single fishing cruises (Table III.C.2). All samples will be taken at sea aboard commercial fishing trawlers. Sampling scheme 2 will be applied. The sampling strategy is described in Table III.C.3. Table III.C.4 presents the sampling intensity for the fish stock that will be sampled in 2009 and 2010.

III.C.3 Data quality

The following tables present the description of national metier stratification by Regions.

Baltic Sea

Metier LVL6	National metier	Target species	Space strata	Time strata	Comments
OTM_SPF_>=32_0_0	OTM_herring	Herring	SD22-24	Quarterly estimates	TAC regulated
PTB_SPF_>=32_0_0	OTB herring	Herring	SD22-24	1 and 4 quarter	TAC regulated
SDN_SPF_>=32_0_0	SDN herring	Herring	SD22-24	2 quarter	TAC regulated
GNS_SPF_44-56_0_0	GNS herring	Herring	SD22-24	1 and 2 quarter	TAC regulated
OTM_SPF_>=32_0_0	OTM_herring	Herring	SD25-32	Quarterly estimates	TAC regulated
PTB_SPF_>=32_0_0	PTB herring	Herring	SD25-32	2 and 4 quarters	TAC regulated
FPO_SPF_>=32_0_0	FPO herring	Herring	SD25-32	1 and 2 quarters	TAC regulated
GNS_SPF_44-56_0_0	GNS herring	Herring	SD25-32	1 and 2 quarter	TAC regulated
OTM_SPF_16-22_0_0	OTM_sprat	Sprat	SD22-24	Quarterly estimates	TAC regulated
OTB_DEF_105_1_110	OTB cod, flatfish	Cod, Flounder, Plaice, Turbot	SD22-24, SD25-32	Quarterly estimates	TAC regulated Quota restriction (only for cod and plaice)
GNS_DEF_110_0_0	GNS cod, flatfish	Cod, Flounder, Plaice, Turbot	SD22-24, SD25-32	Quarterly estimates	TAC regulated Quota restriction (only for cod and plaice)
LLS_DEF_0_0_0	LLS cod	Cod	SD25-32	Quarterly estimates	TAC regulated Quota restriction (only for cod)
FPO_FWS>=16_0_0	FPO Freshwater	Eel	SD22-24 SD25-32	Yearly	MS management plan
INLAND	INLAND catadromous	Eel	2 River Basin Districts	Yearly	MS management plan
LLD_ANA>=160_0_0	LLD Anadromous	Salmon, Sea trout	SD25-31	Yearly	TAC regulated Quota restriction (salmon)
GNS_ANA>=160_0_0	LLD Anadromous	Salmon, Sea trout	SD25-31	Yearly	TAC regulated Quota restriction (salmon)

North Sea & Eastern Arctic

Metier LVL6	National metier	Target species	Space strata	Time strata	Comments
OTB_DEF>=110_0_0	OTB_gadoids	Cod	I,II,IV	Yearly	TAC regulated
	OTB_saithe	Saithe	IV	Yearly	TAC regulated

North Atlantic

Metier LVL6	National metier	Target species	Space strata	Time strata	Comments
OTB_DEF>=110_0_0	OTB flatfishes	Greenland halibut	XII, XIV	Yearly	TAC regulated
OTM_DEF>=110_0_0	OTM Redfishes	Redfish	XII,XIV, NAFO SA1-2	Yearly	TAC regulated

Pelagic trawl catches (using OTM) are the most important in Polish herring target fishery in both space strata SD22-24 and SD25-32, as they produced 67% and 89% of the total landings, on average, in 2006 and 2007, respectively. These catches are conducted year round. Gill nets (GNS) are still important gear in space strata SD22-24 as they contribute 21% of the overall herring landings. The OTB, PTB, SND, and FPO are responsible for less than 10% of total landings, but more than 200 tons. OTB and PTB are used mostly in the second and fourth quarters; while SND and GNS are deployed in the spring season, but only in the spawning grounds. The catch effort is of similar proportions. This time and area distribution was taken into account when allocating samples to the particular metiers.

Precision levels

The intention of the Polish NP in sampling for length in landings and discards is to achieve the precision levels required by DC regulations. However, the DCR does not specify clearly which parameter (length or discard distribution) must achieve the required precision level (e.g., mean length in landings or frequency in specified length classes). Thus, the number of fish to be sampled per sample was determined according to the suggestion that it should be from three to five times the number of length classes in the sample (Commission Decision 2008/XXX/EC, point B/B1.3.(1) (h)). The intended sample size is presented in Table 1. This, coupled with relatively high number of intended length samples, should produce the highest possible precision level.

Table 1. Proposed sample size for length sampling of landings

Species	length class (cm)	no. of length classes	no per sample
Baltic			
cod	1	65	> 200
herring	0.5	30	>150
sprat	0.5	20	>100
flounder	1	35	>150
salmon	1	50	>150
trout	1	60	>180
eel	1	50	>150
North Sea & Arctic			
cod	1	100	>300
North Atlantic & NAFO			
redfish	1	20	>100

With discard sampling, the intention is to reach precision level 1, as required by DCR.

III.C.4 Regional co-ordination

To date, there has been no initiative to coordinate the national programme with other Member States in the same marine fishing ground.

III.C.5 Derogations and non-conformities

Baltic Sea

No freshwater level 5 metiers, except FPO, will be sampled, because Polish landings of Appendix VII freshwater species, including perch, pikeperch, pike, and whitefish are below 200 tons; thus, there is no obligation to sample them.

North Sea and Eastern Arctic

All of the metiers used in Polish catches in 2006 and 2007 are presented in Table III.C.1. Despite a 90% share of catches in the ranking, some of the listed metiers will not be sampled because of the changing distribution in the fishing effort of the Polish fleet (not all stocks/fishing grounds exploited in past years will be exploited in the coming years).

North Atlantic

All of the metiers used in Polish catches in 2006 and 2007 are presented in Table III.C.1. Despite a 90% share of catches in the ranking, some of the listed metiers will not be sampled because of the changing distribution in the fishing effort of the Polish fleet (not all stocks/fishing grounds exploited in past years will be exploited in the coming years).

Other

In the case of metiers for other regions (CCAMLR area), *Euphasia superba* is not included in Appendix VII, and the CCAMLR metier will not be sampled.

III.D Biological - Recreational fisheries

Baltic Sea

III.D.1 Data acquisition

The main target of marine angling in Poland is cod. The bycatch of other species (mainly flatfishes, herring, and others) is less than 0.5% in weight. Although the number of anglers is not precisely known, the number of anglers recorded by Maritime Offices in 2006 was approximately 80,000 (this figure might include single anglers who made several trips to sea). The importance of angling has been growing rapidly in recent years, and the estimated total weight of angled cod is approximately 300 tons (less than 5% of commercially landed cod).

Marine angling is conducted throughout the year, although peak activity is during the April to October period. A variety of vessels is involved in angling (tugs, former fishing cutters, pilot boats, yachts). No management regime is in force except for the maximum number of fish allowed to be angled per day.

A pilot study is planned for 2009-2010. Data on the number of anglers will be collected from Maritime Office registers, and the average weight of cod caught per angler will be estimated based on six sea-going sampling trips.

Recreational eel angling is only significant with regard to inland waters. The angling season opens in May and closes in October. Angling in Polish inland waters is licensed. Although angling terms depend on the party leasing the waters, the general angling guidelines are set forth in inland fishing regulations from 1985. The largest water leasing party in Poland is the Polish Angling Association, which has several hundred thousand members. Anglers are obliged to record catches in a special register; however, the requirement for eel is to record catch weight only. Since the recreational eel catches of approximately 100 tons annually are close to commercial catches, there are plans to conduct a pilot program in 2010 in several chosen angling districts.

Because of this, beginning in 2010 it will be obligatory for anglers to record additional information regarding eel, specifically - weight, length, catch location, date. These catch registers will be analyzed in 2011.

III.D.2 Data quality

Data on the number of anglers will be collected from Maritime Office registers. To this end, six trips to Maritime Offices are planned for 2009 and 2010 in order to computerize the hand-written Maritime Office registers. During six sea-going sampling trips, all cod and other species will be measured and weighed. The number of anglers on board will also be registered in order to determine the average catch per angler. The number of anglers registered by the Maritime Offices and the average weight of cod caught per angler will be multiplied to obtain a rough estimation of the total catch of angled cod. A part of the catch will also be sampled for age. Sampling will be considered separately for discarded and retained cod.

No objectives in terms of target precision is estimated as the sampling will be performed as part of a pilot study.

III.D.3 Regional co-ordination

III.D.4 Derogations and non-conformities

III.E Biological - stock-related variables

III.E.1 Selection of stocks to sample

Baltic Sea

The Polish fleet exploits two cod stocks in the Baltic Sea which inhabit areas SD 22-24 and SD 25-32. Although both stocks will be sampled, much higher sampling effort will be exerted on the stock in SD 25-32 as catches there are a few times higher than those of the stock in SD 22-24.

Flatfish stocks for biological variable sampling were selected according to the requirements of Appendix VII of Commission Decision 2008/XXX/EC.

The Polish fleet exploits two herring stocks in the Baltic Sea which inhabit areas (fishing grounds) SD 22-24 and SD 25-32, and these will be sampled in 2009 and 2010. The Polish share of total EU herring landings and EU TAC is over 10% in both areas. Sampling for biological parameters such as age, weight, sex-ratio, and maturity is planned in 2009 and 2010.

For assessment purposes, ICES distinguishes one sprat stock in the Baltic, namely that in SD 22-32. This stock will be sampled in sub-divisions 24, 25, and 26 with most samples in SD 25-26 providing the vast majority of Polish catches.

The chosen stock of European eel (*Anguilla anguilla*) will be sampled mainly in Polish brackish waters. Mean catches of this species have been declining and are currently approximately 40 tons; however, because of the implementation of the eel stock management plan in accordance with EC regulation no. 1100/2007, it is obligatory to monitor commercial catches. In addition to sampling brackish waters, inland waters, where current catches are as high as 120 tons, must also be monitored.

The salmon and migratory sea trout stocks will be monitored in ICES sub-divisions 25 and 26. Current catches are 100 and 500 tons, respectively; however, following the ban on driftnets that came into force in 2008, these figures might change.

North Atlantic

Poland will sample two species, *Reinhardtius hippoglossoides* (Area XII and XIV) and *Sebastes mentella* (Area XII, XIV and NAFO SA1-2). The samples will be taken from aboard fishing vessels during two commercial cruises. In Table III.E.1 the samples of *Sebastes mentella* are separated by two areas (ICES and NAFO), but they will be collected during the same cruise.

III.E.2 Data acquisition

Cod and flatfish data will be collected in accordance with the guidelines in Appendix VII of Commission Decision 2008/XXX/EC. Sampling will be conducted both at sea and in harbours, and quarterly biological data (age distribution, size at age, maturity, sex ratio) will be collected. In addition, survey data for biological parameters will be recorded.

Landing sampling will be conducted to obtain herring age and weight data from SD 22-24 and SD 25-32 stocks from the whole year (at monthly intervals). Data for sex-ratio and maturity will be collected in the first half of the year from both landings and surveys in the 2009-2010 period in the SD 25-32 stock only. Data on fecundity will not be collected. This scheme for stock-based variable sampling is planned for the period up until 2013.

All of the biological parameters listed in Table III.E.2 will be collected for salmon and sea trout.

The eel sampling scheme for all waters is similar. With the exception of basic parameters such as age and growth, data pertaining to sex ratio and sexual maturity will be collected based on the silvering index (Durif 2004). This will permit classifying the metamorphosis stage (yellow or silver) of the fish precisely.

These data will be delivered annually to the ICES eel working group (WGEEL), and will be used to evaluate the model created to meet the requirements of EC regulation no. 1100/2007.

North Sea and Eastern Arctic

The catch samples from the North Sea and the Eastern Arctic will be collected on board fishing vessels by SFI personnel. Random samples for length distribution will be collected, and fish length measurements will be rounded down. Next, sub-samples for determining age and other biological parameters (sex, maturity, stomach fullness) will be collected. The number of fish to be sampled for age and other biological parameters conforms with the guidelines in Appendix VII of Commission Decision 2008/XXX/EC. This sub-sample is classified by length with random collection for each length category. Age will be determined by counting and interpreting the rings in otoliths.

The biological parameters that are estimated from the data collected will be reported annually to the ICES Working Group (AFWG).

North Atlantic

Similarly to the NS & EA sampling, catch samples from the North Atlantic will be collected on board fishing vessels by SFI personnel. Random samples for length distribution will be collected, and fish length measurements will be rounded down. Next, sub-samples for determining age and other biological parameters (sex, maturity, stomach fullness) will be collected. The number of fish sampled for age and other biological parameters conforms with the guidelines in Appendix VII of Commission Decision 2008/XXX/EC. This sub-sample is classified by length with random collection for each length category. Age will be determined by counting and interpreting the rings in otoliths.

The biological parameters that are estimated from the data collected will be reported annually to the ICES Working Group (NWWG).

III.E.3 Data quality

Baltic Sea

The coverage and precision levels of Baltic fish sampling will concur with the guidelines specified in Commission Decision no. 2008/XXX/EC, Chapter III, section B.B2.4. The sample size for most stocks will be selected in accordance with the regulations in Appendix VII. However, the number of flounder specimens used for determining age will be limited to 1000 fish (a much smaller sample than that of 2500 as stipulated by the rules Appendix VII) since analyses indicate that 880 specimens is sufficient to obtain a precision level of 2.5%.

Turbot and plaice have also been treated differently from the guidelines set forth in Appendix VII. Average landings over the past three years have been underestimated for these species. Consequently, the planned number of these fish to be sampled is 200 per species in contrast to 50 and 30, which is stipulated in Appendix VII.

North Sea and Eastern Arctic

The coverage and precision levels will concur with those specified in Commission Decision 2008/XXX/EC, Chapter III, section B.B2.4.

North Atlantic

The coverage and precision levels concur with those specified in Commission Decision 2008/XXX/EC, Chapter III, section B.B2.4.

Precision levels

When age is included in sampling, the precision level refers to mean size at age (Commission Decision 2008/XXX/EC, point B/B2.4.(1)). Poland analyzed its quarterly age-length keys (ALKs) from 2007, and it was concluded that, with the number sampled for age, the required precision level (level 1) was exceeded for all the stocks investigated. In addition, the minimum number of fish per quarter was calculated for the ALKs analyzed to obtain a precision level with a CV of 2.5%. The CV was calculated as the ratio of the standard error of mean length. For a few of the stocks, the required sample size for age can be smaller than that stipulated by Appendix VII (see Table III.E.3). However, the sample size for all stocks was that stipulated in Appendix VII in order to obtain a higher precision level.

III.E.4 Regional co-ordination

III.E.5 Derogations and non-conformities

III.F Transversal variables

III.F.1 Capacity

III.F.1.1 Data acquisition

Data will come from the national register of fishing vessels. Assigning a given vessel to a segment of the fleet will be based on information derived from fishing logbooks. The data will be collected from all active vessels (those which conducted catches on at least one day per year) as well as from inactive vessels (those which do not conduct catches, but which are registered). Due to the possibly high number of fishing vessels that are removed from fishing during the year through the vessel scrapping program, additional information will be obtained regarding the date the vessel was removed from the register. This will permit a more correct analysis of the mean economic indicators (based on the number of months the vessel remained on the register).

III.F.1.2 Data Quality

The data collected will refer to the entire population; there is no need for data sampling.

III.F.1.3 Regional co-ordination

Not applicable.

III.F.1.4 Derogations and non-conformities

None.

III.F.2 Effort

III.F.2.1 Data acquisition

The information regarding catch effort will originate from the fishing vessel register, catch logbooks, and first sale documents. All fishing vessels in excess of 8 meters are required to record data in fishing logbooks. All fishing vessels under 8 meters are required to submit monthly catch declarations that include information regarding daily catches and fishing effort (catch size, region fished, fishing time, number and type of gears deployed).

Variable	Data source
Number of vessels	Logbooks
Days at sea	Logbooks
Hours fished	Logbooks
Fishing days	Logbooks
kW * Fishing Days	Logbooks
GT * Fishing days	Logbooks
Number of trips	Logbooks
Number of rigs	Logbooks
Number of fishing operations	Logbooks
Number of nets / Length	Logbooks
Number of hooks, Number of lines	Logbooks
Numbers of pots, traps	Logbooks
Soaking time	Logbooks

III.F.2.2 Data quality

Most of the essential information is derived from fishing logs, which is why there is no basis for assuming they will be unreliable. The data from the fishing vessel register and the sale documents are verified when they are entered into the data base by the fisheries administration.

III.F.2.3 Regional co-ordination

Not applicable.

III.F.2.4 Derogations and non-conformities

None.

III.F.3 Landings

III.F.3.1 Data acquisition

Information regarding landings will come from fishing logbooks and first sale documents. All fishing vessels exceeding 8 meters are required to record data in fishing logbooks and submit declarations of first sale and landings. Fishing vessels under 8 meters are required to submit monthly fishing declarations including information regarding daily catches including details on regions fished and species caught.

Variable	Data source
Value of landings total and per commercial species	Fishing logbooks, first sale document
Live Weight of landings total and per species	Fishing logbooks
Prices by commercial species ⁵	First sale document
Conversion factor per species	Fisheries administration

Weighted averages will be used to determine the price of fish (value/quantity of fish sold).

III.F.3.2 Data quality

Data will be based on the whole population.

III.F.3.3 Regional co-ordination

Not applicable.

III.F.3.4 Derogations and non-conformities

None.

III.G Research surveys at sea

III.G.1 Planned surveys

Poland has participated for many years in the Baltic International Trawl Survey (BITS) in the first and fourth quarters and the in the Baltic International Acoustic Survey (BIAS). Since 1994, the Sea Fisheries Institute in Gdynia has used the r/v *Baltica* (a 41-m stern trawler) to conduct regular scientific surveys. The BITS and BIAS survey design, sampling procedure, and levels of precision are defined in the manual for the Baltic International Trawl Surveys and the manual for Baltic International Acoustic Surveys (ICES 2000, 2005, 2006). The fish surveys are planned internationally and coordinated within the ICES Baltic International Fish Survey Working Group. The bottom trawl and acoustic surveys both provide fishery-independent data for fish stock assessment and biomass and catch projections.

The number of man-days planned for the survey is higher than the number of those at sea because additional time is required for survey preparation and processing basic survey results (e.g., survey programme and reports for ICES working groups, data computerization, age determinations).

Planned Priority 1 surveys

BITS1q

The BITS1q survey is organized annually and realized in February/March. During the survey, bottom control hauls in the Polish EEZ are selected at random by WGBIFS. These bottom control hauls are conducted at the depths ranging from 16 to 105 m in the Polish EEZ (Annex, Figure 1). The principal aims of the BITS1q survey are:

- to provide indices of recruitment and stock abundance for cod and flounder by age groups;
- to study the spatial distribution and estimate some biological parameters of cod, flounder, herring, and sprat.

Sampling these species includes records of individual fish length, weight, age, sex, gonad stage, and stomach fullness. Data on sexual maturation and individual weight is collected to estimate sex specific maturity ogives and mean weight at age.

The hydrological conditions are also recorded, the data are analysed, and final estimates of stock indices are produced in relation to these conditions. Hydrological data are collected with a CTD probe at every catch station position and at some standard hydrographical stations. Since 2000, the BITS surveys has been conducted using new standard procedures that were agreed upon internationally.

The basic survey data collected by the SFI are stored in a local fish sample database, and are regularly submitted to the international DATRAS database at the ICES Secretariat in Copenhagen. Relevant ICES Working Groups use data that are aggregated annually.

BITS4q

The BITS4q survey has been conducted regularly by the SFI since 2002. The survey time is November and usually at 30 - 33 trawl stations (Annex, Figure 2). The goals of the survey, methodology, and the data collected are similar to those outlined for the BITS1q survey.

BIAS

The Baltic herring and sprat acoustic surveys organized by the SFI began as early as 1983 in relatively close co-operation with Swedish and German research vessels. The BIAS survey is conducted in September/October. The Polish survey covers part of area IIIId, namely the southern part of ICES sub-divisions 24, 25, and 26. (Annex, Figure 3).

The main objectives of the survey are to estimate herring and sprat stock sizes in numbers by age, and to determine the distribution of them using acoustic methods. During the survey, pelagic control catches are performed on echo-integration transects to identify the species composition of the acoustic estimates. Fish control hauls are conducted in areas where depth to the bottom is higher than 30 m. The echo sounder acoustic system is calibrated every year in Norway or Sweden, with the assistance of a specialist from SIMRAD. Hydrological data are collected with a CTD probe at every catch station position and at some standard hydrographical stations.

The primary survey data collected by the SFI in Gdynia are stored in a local fish sample database and are regularly submitted to the international database BAD1 and BAD2, maintained within Baltic International Fish Survey Working Group. Relevant ICES Working Groups use the data annually.

Details of the three surveys are presented in Table III.G.1 and on the maps in Annex 2.

III.G.2 Modifications in the surveys

Possible modifications of the surveys will be planned and discussed internationally at the forum of ICES working group WGBIFS. At present, no modifications are planned.

IV. Module of the evaluation of the economic situation of the aquaculture and processing industry

IV.A Collection of data concerning the aquaculture

IV.A.1 General description of the aquaculture sector

The Polish aquaculture sector includes approximately 600 farms that breed and rear fish for commercial purposes. Approximately 400 of these specialize in carp production, while the remainder rear rainbow trout. More than half of these facilities breed and rear more than one species, for example brook and atlantic salmon, silver carp, grass carp, sturgeon, sea trout. In 2007, aquaculture production was 35 thousand tons. Of this, there were 17.5 thousand tons of trout, 15.5 thousand tons of carp, and 2 thousand tons of other species.

IV.A.2 Data acquisition

The study will include fish farms that breed and rear Atlantic salmon fry in accordance with art. 3, point 1c, Section 1, Chapter II of Council Regulation (EC) 199/2008. All of the fish farming facilities that cooperate with the Stocking Commission of the Ministry of Agriculture and Rural Development, which finances stocking programs of various stages of Atlantic salmon fry, including smolts, will be considered. In 2008, there were 5 such facilities.

IV.A.3 Data quality

The study will be conducted based on voluntary questionnaires, which will address all the economic parameters as set out in Appendix X:

- Comprehensive income, including:
 - income from sale of products, processed goods, services, commodities, and materials;
 - grants and subsidies obtained for business;
 - other income.
- Business expenses, including:
 - gross wages of employees and contract personnel, employer contributions to social security (paid in part by employees), work fund, guaranteed employee assistance fund, and other employee benefits such as transportation, accommodation, board, training, health and safety expenses;
 - energy;
 - purchase of livestock and fish feed;
 - repair and maintenance;
 - other operational expenses (packaging, taxes and liabilities, property insurance, replacing used work garments, financial expenses);
 - extraordinary expenses such as negative financial impact of random events that are difficult to predict.
- Capital cost: depreciation of fixed assets and intangible fixed assets
- Capital value: value of fixed and current assets
- Capital expenditures and value of fixed asset sales, which permits calculating net investment
- All business liabilities, including credits and loans
- Volume of purchased livestock and fish feed in tons
- Sales in tons categorized by species
- Average number of employees divided into full-time and part-time, and by gender at year's end. FTE will be calculated based on hours worked.

It is assumed that all rearing facilities and fish farms will return completed questionnaires.

IV.A.4 Regional coordination

The national data collection program does not entail any regional program coordination with other Member Countries regarding aquaculture.

IV.A.5 Derogations and non-conformities

Not applicable.

IV.B. Collection of data concerning the processing industry

IV.B.1 Data acquisition

The study will include all legal business entities, including legal personalities and organizational units without legal personality and individuals operating fish and other aquatic animal processing facilities that are listed as meeting the standards of Council Regulation (EC) no. 853/2004 of April 29, 2004, which sets forth detailed requirements regarding hygiene in foodstuffs of animal origin, Appendix III Section VIII Fisheries Products. Also included will be entities listed as qualified to make direct sales in accordance with the regulation of the Minister of Agriculture and Rural Development of December 29, 2006 regarding veterinarian requirements during the production of products of animal origin for direct sale (Journal of Laws of 2007. No. 5, pos. 38). As of October 2008, there is a total of 250 processing facilities on these two lists. Participation in the study is obligatory for all fish processing facilities according to the regulation of June 29, 1995 on public statistics (Journal of Laws. No. 88, pos. 439, with later amendments).

IV.B.2 Data quality

The study will be performed with questionnaires that include all economic parameters included in Appendix XII and will include:

- Supply of fish raw materials for own processing categorized by species (size and value) and size of raw fish materials supply categorized by species for value-added processing.
- Comprehensive income, including:
 - income from sales of products, goods, and value-added processing services;
 - income from sales of commodities and material;
 - grants and subsidies obtained for the operational business of the entity;
 - other operational income;
 - financial income, including interest on accounts, loans obtained, positive currency exchange rates;
 - extraordinary profit from the financial impact of random events that are difficult to predict.
- Business expenses, including:
 - gross wages of employees and contract personnel, employer contributions to social security (paid in part by employees), work fund, guaranteed employee assistance fund, and other employee benefits such as transportation, accommodation, board, training, health and safety expenses;
 - energy expenses for electricity, water, heating and other forms, fuel, and gases;
 - expenditures for purchase of fish and other raw materials for production;
 - other operational costs (contracted services such as cleaning fish, transportation, storage, waste removal, etc.), incurred costs such as property and vehicle taxes, property insurance, replacing used work garments, etc.;
 - financial expenses, including interest on loans and credits, negative currency exchange rates, interest for late payments, etc.;
 - extraordinary expenses such as negative financial impact of random events that are difficult to predict.
- Capital cost: depreciation of fixed assets and intangible fixed assets
- Capital value: value of fixed and current assets
- Capital expenditures and value of fixed asset sales, which permits calculating net investment
- All business liabilities, including credits and loans.
- Average number of employees divided into full-time and part-time, and by gender at year's end. FTE will be calculated based on hours worked.

It is assumed that all processing facilities obliged to return completed questionnaires will comply.

IV.B.3 Regional coordination

The national data collection program does not entail any regional program coordination with other Member Countries regarding fish processing.

IV.B.4 Derogations and non-conformities

Not applicable.

V. Module of evaluation of the effects of the fishing sector on the marine ecosystem

In Appendix XIII of Commission Decision 2008/XXX/EC, there are nine indicators referred to as ecosystem or environmental indicators. These are: 1. Conservation status of fish species; 2. Proportion of large fish; 3. Mean maximum length of fishes; 4. Size at maturation of exploited fish species; 5. Distribution of fishing activities; 6. Aggregation of fishing activities; 7. Areas not impacted by mobile bottom gears; 8. Discarding rates of commercially exploited species; 9. Fuel efficiency of fish capture.

The proposed aggregation levels for indicators were designated in consultation with Commission Staff Working Paper 2007 “Report of the Ad Hoc Meeting of independent experts on Indicators and associated data requirements to measure the impacts of fisheries on the marine ecosystem”, Brussels, June 25-27, 2007, and are presented in the table below.

Aggregation level	1	2	3	4	5	6	7	8	9	Remarks
Year	*	*	*	*	*	*	*	*	*	
Quarter	*	*					*	*	*	
Month				*	*	*				
Country	*	*	*	*	*	*	*	*	*	
Survey	*	*								
Monitoring program										
Area				*						
Subarea			*							
Division										
Subdivision	*	*								
Rectangle										
Fishing technique Metier 6 level	*	*	*	*	*	*	*	*	*	OTB DEF_10_0_0 for surveys: BITS1q, BIRS4q OTM_SPF_18_1_6 for BIAS survey
VMS: 3km*3km or 2nm * 2nm					*	*	for OTB			
Fishing					*	*	*			
Non fishing					*	*	*			
Species								*	*	

For the set of indicators from 1-4, the only data used will be that collected during research surveys conducted in Baltic Sea in 2009 and 2010: BITS1q, BIAS, and BITS4q are presented in Table II.G.1. Poland is not planning to perform surveys in other areas or to participate in foreign surveys.

Indicators 5-7 will summarise VMS data. Discard indicators will use the biological sampling data from the segmented commercial fleet. Although the SFI does not currently have access to VMS data, it probably will by the end of 2008.

Indicator 9. Fuel efficiency of fish capture (see chapter III.B.1 Data acquisition)

VI. Module for management and use of the data

VI.A Management of the data

Database

Raw and detailed economic and biological data required by DCR regulations are stored in one national database called the NPZDRpl. This database was established in 2005, and since it has been under continuous development. Today it contains the following main sections: Biological analysis (primary data); Fishery Economics (fishing vessels and processing industry, primary data); Sales and Catches (primary data); Research Cruises (reports, datasets (aggregated data)); CTD (primary); DGF - economic datasets and biological datasets (aggregated data); FishFrame (aggregated); DATRAS (primary survey data and aggregated). Some detailed data are stored in international databases: FISHFRAME; DATRAS; BAD1; BAD2; JRC fishery DCR database. NPZDRpl contains all lists of standard international and national classifications, but it does not contain metadata.

According to Art. 8(2), the SFI is currently working to establish a central website for Polish fisheries data collection. The preliminary contents of the website were consulted with DG Mare and were accepted.

Technical measures to protect the data validation / data transformation process include:

Symantec Backup Exec System Recovery Starter Kit Standard - License 1

Symantec Backup Exec System Recovery Server Standard - License 5

Symantec Backup Exec 12.0 + Agents

F-Secure Anti-Virus

Library type IBM , Model3581-L3H, LTO Ultrium 3 * 8

Windows Server 2003 Standard

SERVER NPZDR #1 IBM Model X346,

SERVER NPZDR #2, HP Model, PROLIANT DL360G5

Windows Server 2003 Standard, connected to server MIR_NAS

SQL Server 2000 + 20 licenses CAL

VI.B Use of the data

Collection fisheries data for scientific and management data

As in previous years, Poland will prepare data sets for ICES assessment working groups for Baltic and Atlantic stocks. Poland will deliver the requested data to the SGRN/STECF expert group and UE projects. Poland will update international databases like DATRAS, FISHFRAME, BAD1, and BAD2. Data will be delivered in a spectrum that includes: effort; quantities landed; quantities discarded; some CPUE data; survey data; length composition of landings; age composition of landings; length composition of discards; age composition of discards; growth; sexual maturity; sex ratios; economic data for the fleets; economic data for the fish processing industry.

VII. Follow-up of STECF recommendations

Appendix III.

VIII. List of derogations

Short title of derogation	NP Proposal section	Derogation approved or rejected ¹	Year of approval or rejection of past requests for derogations
<p>Baltic Sea All freshwater level 5 metiers, except FPO, will not be sampled, because Polish landings of Appendix VII freshwater species, like perch, pike-perch, pike, and whitefish are below 200 tons, thus, there is no obligation to sample them.</p>	III.C.5		
<p>North Sea and Eastern Arctic, Table III.C.1 presents all the metiers used in Polish catches in 2006 and 2007. Despite the 90% share of catches in the ranking, some of the metiers will not be sampled because of the changing distribution of fishing effort in the Polish fleet (not all stocks or fishing grounds exploited previously will be exploited in the future).</p>	III.C.5		
<p>North Atlantic Table III.C.1 presents all the metiers used in Polish catches in 2006 and 2007. Despite the 90% share of catches in the ranking, some of the metiers will not be sampled because of the changing distribution of fishing effort in the Polish fleet (not all stocks or fishing grounds exploited previously will be exploited in the future).</p>	III.C.5		
<p>Other In the case of metiers for other regions (CCAMLR), <i>Euphasia superba</i> is not included in Appendix VII and this CCAMLR metier will not be sampled.</p> <p>Distant fleet data confidentiality Due to statistical confidentiality, it is not possible to publish data on the economic results of the deep-sea vessels (this segment of the fleet is comprised of 3-4 vessels). Due to the technical parameters of these vessels, it is not justified to combine them with other vessels in the fleet that are significantly different (e.g., PTS-24-40).</p>	III.C.5 III.B.4		

IX. List of acronyms and abbreviations

DCR	Commission Regulation (EC) No 1639/2001 (Data Collection Regulation) Commission Regulation (EC) No 1581/2004(amending Reg. No 1639/2001 Commission Regulation (EC) No 199/2008 Commission Decision (2008/xxx/EC) Draft
ICES HAWG	ICES
ICES NWWG	ICES North Western Group
ICES WGBFAS	ICES Baltic Fisheries Assessment Working Group
ICES WGBAST	ICES Baltic Salmon and Trout Working Group
MARD	Ministry of Agriculture and Rural Development in Warsaw
SFI	Sea Fisheries Institute in Gdynia
DATRAS	Database Trawl Survey
FISHFRAME	Fisheries & Stock Assessment Data Framework
BAD1	Baltic Acoustic Database 1
BAD2	Baltic Acoustic Database 2
LM	Liaison of RCMs
RCM	Regional Co-ordination Meeting

X. Comments, suggestions and reflections

XI. References

- Anon. 2000. Method handbook for the National Board of Fisheries' Age Analysis Laboratories: the Marine Fisheries Laboratory, Coastal Laboratory, by the Freshwater Fisheries Laboratory; Edition No. 3.
- Efron, B. 1982. The jackknife, the bootstrap and other resampling plans. Society for industrial and applied mathematics, Philadelphia, Pennsylvania. 92p.
- ICES 1997. Report by correspondence of the Baltic Herring Age Reading Study Group. ICES CM 1997/J:5.
- ICES 1999. Report of the Study Group on Baltic Cod Age Reading. ICES CM 1999/H:4
- ICES 2000. Report of the Baltic International Fish Survey Working Group. Manual for the Baltic International Trawl Surveys. ICES CM 2000/H:02.
- ICES 2001. Report of the Baltic International Fish Survey Working Group. The Baltic International Trawl Survey (BITS) Manual. The Baltic International Acoustic Survey (BIAS) Manual. ICES CM 2001/H:02, ref. D.

Commission Staff Working Paper 2007. Report of the Ad Hoc Meeting of independent experts on Indicators and associated data requirements to measure the impacts of fisheries on the marine ecosystem. Brussels 25-27 June 2007.

XII. Annexes

ANNEX 1. Recommendation RCMs relevant to MS (Poland) and responses

RCM Baltic Sea

No	BALTIC RCM recommendations 2007	Follow-up actions	Responsible persons for follow-up	Time frame Responsive actions	Responsive action
1	RCM Baltic recommends that MS and the Commission consider possibilities for optimizing timing in the entire DCR process.	Discussion at the LM	LM / EU-Commission / Member States	2009	
2	The RCM Baltic recommends that all MS submit data in the agreed format when requested. The compiled regional data should be distributed to the members of RCM Baltic well before the meeting.	Data request, Compilation of regional data	Chair of the RCM Baltic Participant MS; Chair of the RCM Baltic	July 2008	SFI uses the agreed formats.
3	The RCM Baltic recommends that all MS upload data (effort, landings-all species, sea-sampling, sampling of landings) for the trawl fisheries targeting cod in the Baltic in order to allow analysis of the fisheries facilitating future task sharing of discard sampling	Compilation of national data; Uploading to FishFrame Analysis of catch composition, exploitation patterns	Participant MS; Henrik Degel, DIFRES	Mid-February 2008 Results to be presented at RCM Baltic 2008	Polish data were uploaded to the FishFrame database.
4	The RCM is aware of FISH/2007/03 Lot 5: Development of tools for logbook data analysis, but will draw the attention to that some temporary solutions are needed until more permanent solutions are established based on the results of the outcome of this study. Until robust international	MS to comply with interim allocation rules	Participant MS;	Until outcome of FISH/2007/03 Lot 5: Development of tools for logbook data	Poland follows these recommendations.

	<p>guidelines for analysis of logbook data is available RCM Baltic recommends that:</p> <p>at a trip level, or at a fishing operation level when possible, the retained part of the catch should be classified by target assemblage (demersal, freshwater, anadromous) and sorted by weight. The target assemblage that comes up at the first position should be considered as the target assemblage to report in the matrix.</p> <p>when logbook data is incomplete regarding the number of rigs for demersal trawls the fishing trips/fishing operations should be allocated to OTB. the selectivity devices Bacoma and T90 should be treated as one strata until it is possible to distinguish between them in the logbooks.</p> <p>midwater otter trawls (OTM) are allocated to the OTM fishing activity even if they sometimes are operated very close to the bottom.</p>			analysis	
5	<p>The RCM recommends that a call for a project in support of the CFP should be issued with the task to further investigate the use and required resolution of VMS data for the estimation of fishing activity and distribution. Small scale project should include tools for scientific analysis of VMS data</p> <p>The RCM reiterates the 2006 recommendation that the competent national authorities shall be approached by national scientists in order to ensure an open access of VMS data for scientific purposes. RCM recall access to VMS data is</p>	<p>Commission to launch a Call for Tender on the use and required resolution of VMS data for the estimation of fishing activity and distribution.</p> <p>MS to ensure an open access of VMS data for scientific purposes</p>	Commission MS	as soon as possible	The SFI will have access to VMS display and data in early 2009. We are preparing procedures for ecosystem records based on VMS data.

	included in proposed framework regulation to support the ecosystem approach.				
6	<p>The RCM Baltic recommends the description of the source of the information and when applying a sampling procedure a description of method and strategy has to be clearly described in the national programme to give useful information on quality of the obtained data. In the technical report there should then be a qualitative quality report containing a thorough description of the methods and strategies used and the characteristics of the gathered data.</p> <p>The RCM Baltic recommends to not use the precision level as an indicator of heterogeneity but to rather use the mean value and standard deviation.</p>	<p>MS to clearly describe sampling method and strategy in NP. MS to include quality report in TR.</p> <p>In new DCR use of mean value and standard deviation as indicator of heterogeneity</p>	MS EU- Commission	2009	SFI uses CV values to characterise precision levels.

RCM North Sea and Eastern Arctic

No	RCM NS&EA 2007 Recommendations	Follow-up actions	Responsible persons for follow up	Time frame Responsive actions	Responsive action
<u>1</u>	<p>Fleet based sampling</p> <p>The RCM NS&EA recommends that, at a trip level, or at a fishing operation level when possible, the retained part of the catch should be classified by target assemblage (crustaceans, cephalopods, demersal,...) and sorted by weight (by total value in the</p>	<p>Allocation of fishing activities to target assemblage groups (level 5) by weight (by value in the case of valuable crustacean species, e.g. Nephrops) on the basis of the first-position species.</p>	All MS reporting fishing activity data in the fleet-fishery matrix.	From October 2007 onwards.	Poland will conduct fleet-based sampling from 2009.

	<p>case of valuable crustacean species, e.g. Nephrops). The target assemblage that comes up at the first position should be considered as the target assemblage to report in the matrix. The RCM NS&EA understands that this way of doing does not allocate any information to the métiers targeting mixed target assemblages.</p>				
2	<p>Discard sampling The RCM NS&EA recommends that in general if an area is covered by one Dedicated trip per year only, the effort put into this single trip could better be Allocated to other fleet segments ensuring better coverage of these segments. The RCM further recommends updating the list of onboard observer trips by Fishing activity on level 6 before the next meeting.</p>	<p>Preparation of the observer trip list (planning 2009) on level 6 of the fleet-fishery matrix.</p>	<p>All MS reporting fishing activity data in the fleet-fishery matrix. Chair of RCM NS&EA</p>	<p>July 2008</p>	<p>Poland will update observers trip during the 2008 RCM meeting.</p>

RCM North Atlantic (NAFO area)

Annex II. Survey maps for the BITS1q, BITS4q, and BIAS surveys

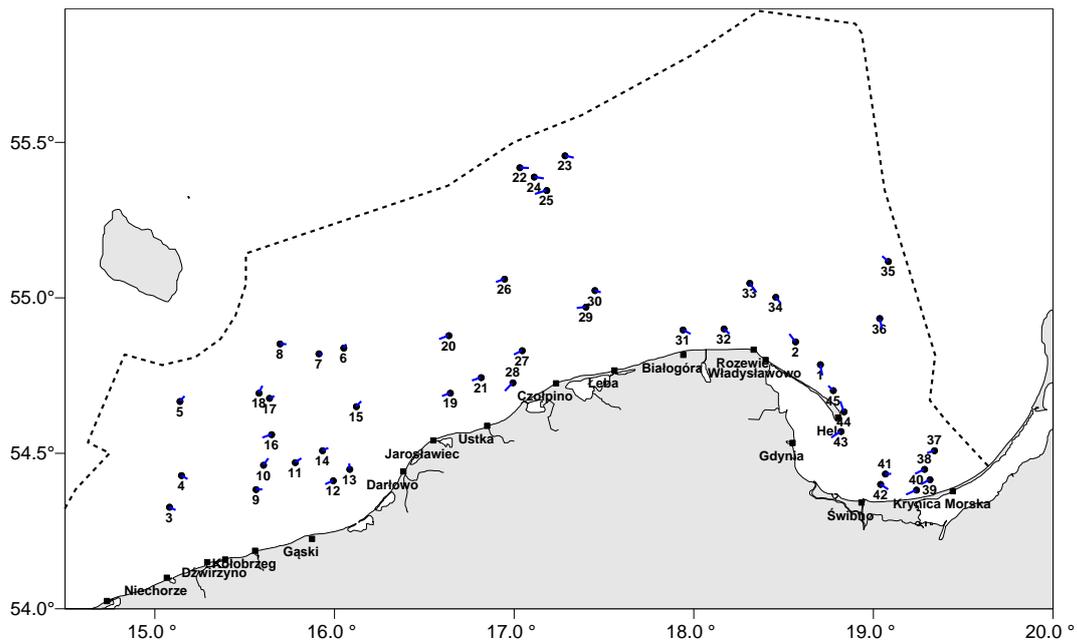


Figure 1. BITS1q survey in winter/spring

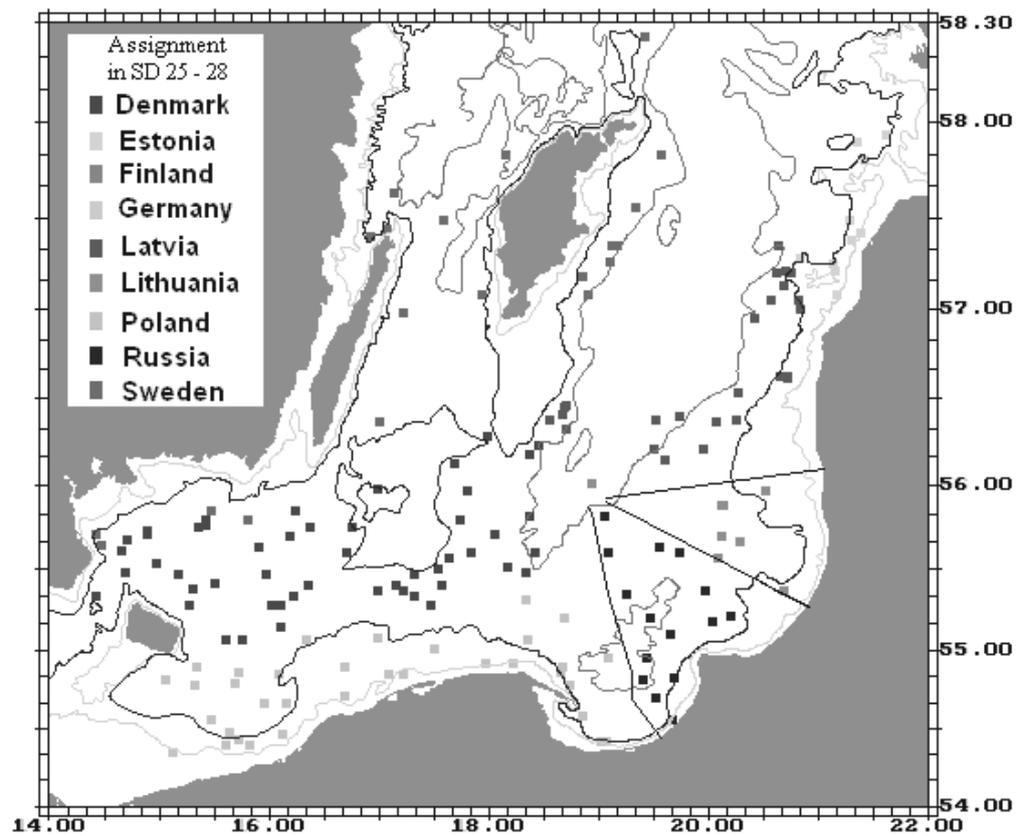


Figure 2 . BITS4q survey in autumn

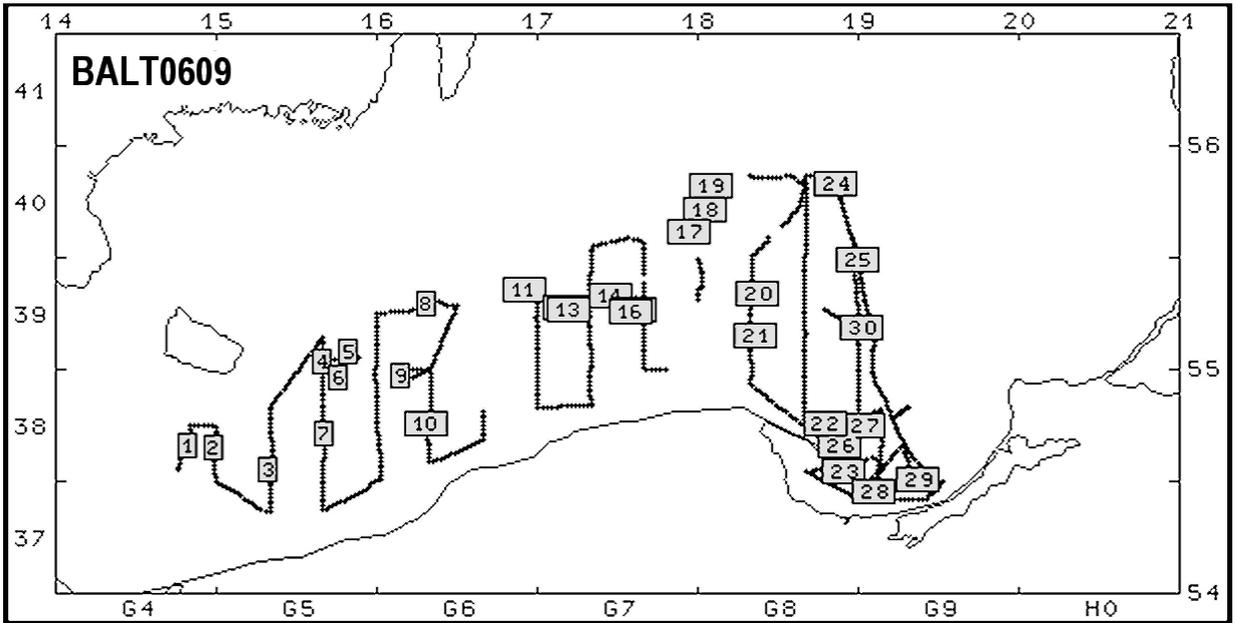


Figure 3. BIAS survey in September-October

Annex III. STECF recommendations and responses

SGRN Comment	Response
It is not clear from the text whether MS can provide information at the required level of segmentation. To be clarified by MS.	Fishing effort data for all vessels (regardless of technique type) are collected from logbooks and monthly catch reports (vessels less than 10 m).
The revised version of table 5.2 contains errors and is not fully completed and thus SGRN is unable to evaluate this section. MS is requested to resubmit this table.	Table 5.2 was resubmitted to the Commission.
There is no mention of discard sampling of the <10m fleet. To be clarified by MS.	<p>Mainly hooks, and to lesser extent gill-nets, are used by the < 10m fleet for cod fishing. Due to the small vessel size, it is impractical to use on-board observers; therefore, it is proposed to attain permission from the Fishery Inspectors to take discards to the laboratory and/or implement self-sampling.</p> <p>Experience of the SFI from 2007 and previous years with Baltic fish during sea sampling indicated that discards practically do not occur in Polish boats and small cutters conducting sprat and herring fishery. These fleets contributed only a few percent to annual Polish catches, and in some years they were indeed marginal. Sprat and herring are fished mainly by 24-m and longer cutters, and discards are monitored systematically during at sea sampling of industrial catches or catches for human consumption.</p>
SGRN agrees with the rationale but would prefer the sampling plan to be discussed in the RCM Baltic. See also general comment On coordinating discards sampling.	The sampling plans will be discussed.
SGRN appreciates the initiatives taken by MS, although there is no specific request for monitoring recreational fisheries in 2008 following SGRN recommendations (SGRN report, July 2007) and STECF recommendations (November 2007).	Polish recreational cod fisheries are fast growing and thus of considerable importance. Data on the number of anglers and the number of trips are stored in hand written Maritime Office harbour documents, which are later transferred to a computerized database by SFI personnel. In order to avoid the accumulation of data from several years, it is justified to record the data on an annual basis. Rapidly expanding recreational fisheries sometimes induce conflicts between commercial fishers and anglers over the exploitation of cod resources. Therefore, knowledge of recreational fisheries permits formulating opinions (responding to the media, fisher organizations, and administration) regarding the current status of cod angling. In addition, the Baltic RCM recommended collecting data on recreational fisheries as it found this to be an important issue in the Baltic Sea.

<p>The argument given by MS to request for a derogation for the Spring Sprat Acoustic survey is not relevant. However, the non participation of MS to this international survey is not in contradiction with the opinion of RCM (Baltic) and the appropriate Planning Group (BIFS).</p>	<p>We agree with the Commission that our conclusion that the survey is probably not necessary to conduct reliable sprat assessment is not a relevant argument for derogation in the context of DCR. However, Poland has not yet participated in this survey, so Polish time series do not exist. For several years, Polish waters were covered by other vessels in this survey.</p>
<p>The MS did not follow the guidelines for completing Table 8.2. To be revised by MS.</p>	<p>A revised version of Table 8.2 was submitted to the Commission.</p>
<p>SGRN notes that drift net fishing will be banned in the Baltic from 1st January 2008 thus the MS will have to amend their sampling for salmon and sea trout</p>	<p>During the preparation of the sampling programme, the MS was in the process of applying for a derogation on the driftnet ban, but under the present situation all sampling in 2008 will be collected from longline (hook) catches. Tables 5.2 and 8.4 have been corrected accordingly. See attachments 1 and 4.</p>
<p>The use of scrapping premium rates for estimating vessel capital values is Not in accordance with the DCR</p>	<p>This unconventional method of calculating invested capital was developed to address the problem of the sudden increase in the market value of fishing vessels when the Polish scrapping program was implemented (Poland paid the maximum rates allowed by the EU). Thus, insurance or book values were far below the actual market value of vessels or invested capital. The method was discussed and used in the 2005 AER and explained in a previous TR.</p>
<p>Segments containing small numbers of vessels must still be covered by Module J.</p>	<p>The only exception made was for deep-sea trawlers. Economic data for these vessels have been collected, but due to reasons of confidentiality (too few vessels), they were excluded from TR and not presented in reports sent to the Commission previously. It was also excluded from AER. Moreover, due to the completely different technical characteristics and fishing methods of these vessels, it is unjustified to merge them with neighbouring length categories.</p>
<p>More detailed information is required about economic parameter definitions and data collection in the 2007 TR</p>	<p>All fish processing plants, regardless of size (number of workers, volume of production etc.), have a legal obligation to fill out and submit the questionnaires. All questionnaires were verified since some included incomplete data. Only information received from the completed questionnaires was used in the analysis of the economic impact of fish processing.</p> <ol style="list-style-type: none"> 1. Raw material include fish and fish products used as input per species and product category in volume (product weight) and value. 2. Income included: <ul style="list-style-type: none"> • revenues from sale of products (goods and services) per species and product category • revenues from sale of goods and materials by species and product category 3. Production costs include:

	<ul style="list-style-type: none"> • raw material • labour costs, defined as the sum of gross wages and salaries including contributions to compulsory social security as well as non-wage related expenditures • Consumption of electric and thermal energy, • Packaging • Other running costs, e.g., consumption of the other materials, <p>4. Fixed costs include depreciation of fixed assets</p> <p>Investment (assets)/ historical include the gross value of fixed assets in current book-keeping process. It is the value equal to the outlays incurred on purchasing or manufacturing them, without deducting depreciation.</p> <p>Employment are given as the average number of employed persons hired on the basis of employment contract after converting part-time paid employees (including seasonal and temporary employees) to full-time paid employees.</p> <p>Capacity utilisation rate – indicator provided by respondents. For the whole population it is the relation of fixed assets gross value used in the operation of particular plants, to the sum of fixed assets gross value in total.</p>
<p>SGRN was informed that the Non reference to RCM (Atlantic North West) and RCM (North Sea) in text is an omission.</p> <p>Reference is only made to RCM (Baltic) 2006; MS is a member of three more RCMs and there are no references to these or any recommendations for years prior to 2006. See also general comment on the follow-up of RCM and SGRN recommendations.</p>	<p>Polish catches in the NAFO area are too small and sampling is not included in the National Data Collection Programme. Poland requests to withdraw from Atlantic North West (NAFO area) RCM.</p> <p>In 2006 and 2007, two fishing surveys on Greenland halibut in ICES area IIb were conducted by Polish vessels. The results were sent to the Norwegian Fisheries Directorate in Bergen (see: http://www.fiskeridir.no/fiskeridir/english/marine_scientific_research/soekere_2006/0706/cruise_information_polonus_060707, http://www.fiskeridir.no/fiskeridir/english/marine_scientific_research/s_kere_2007/0207/cruise_information_polonus_070209b) and were presented to the AFWG (Vigo, 2007).</p> <p>In 2008, Poland will try to participate in the North East Atlantic Area RCM (RCM-NEA) and North Sea and East Arctic RCM (RCM-NS&EA) meetings.</p> <p style="text-align: center;">Attachment 6. Co-ordination meetings for 2008.</p>