

*Proposal including detailed description of the budget
for 2005 (ANNEX 1)*

POLISH NATIONAL PROGRAMME FOR COLLECTION OF FISHERIES DATA FOR 2005

By

SEA FISHERIES INSTITUTE



and

**DEPARTMENT OF FISHERIES
MINISTRY OF AGRICULTURE AND RURAL DEVELOPEMNT**



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1. INTRODUCTION

This document describes Polish National Programme for the collection of data in the fisheries sector.

Through its accession to the European Union in 2004, Poland adopted the EU's Common Fisheries Policy (CFP). All Member States are covered by its provisions and are nationally responsible for its implementation. In Poland, the Fisheries Department of the Ministry of Agriculture and Rural Development is the administrative authority responsible for fish resources management and fisheries issues.

The Council has, in accordance with the CFP, decided to set up a community framework for the collection and management of data required for the evaluation of fishery resources and the fisheries sector, which is regulated in Council Regulation (EC) No. 1543/2000. According to mentioned regulation, national authorities are requested to establish programmes to collect relevant data of a biological and economic nature, to describe the procedures involved and to make the aggregated data accessible for scientific analysis. These national programmes must, in accordance with the Regulation, run for six-year periods and achieve a minimum standard. This standard, referred to as the minimum programme (MP), is specified in Commission Regulation (EC) No. 1639/2001. Member States that comply with the minimum programme are entitled to receive financial assistance. Advance application must be made for such assistance.

The programme will be implemented through close co-operation between **the Sea Fisheries Institute in Gdynia** which co-ordinates the Polish programme, and

- **the Department of Fisheries of the Ministry of Agriculture and Rural Development,**
- **representatives of fishing and processing sectors in Poland.**

A Working Group will be set up with members from all interested parties involved in the programme. The main objective of the Working Group is to co-ordinate the work within the framework of the programme.

Primary data collected within the Polish programme will be stored in the computerised databases.

Economic database – E-Database.

The MS SQL database managed by the Fisheries Economics Department of the Sea Fisheries Institute, comprising information from economic and fish processing questionnaires gathered under the 2004 pilot project. The database will have possibility of exporting data to Excel or Access software so it will be possible to link information from E-Database with that provided by SFIS database.

Biological database – B-Database

Biological data aggregated by the ICES sub-divisions and quarters have been presented every year since late 1970s on the forum of the Baltic stock assessment working groups within ICES to assess stock size, project biomass development and advise total allowable catches (TAC).

SFIS (Sea Fisheries Information System) database

It is centralised database created in 2003 and managed by the Fisheries Department of the Ministry of Agriculture and Rural Development, containing raw data about fishing vessels (Fishing Vessel Register) and fishing quotas, catches, fishing effort, landings and first sales.

At present Polish biological data are stored in several databases - usually data for one species (i.e. cod, herring, sprat etc.) are stored in a separate database. These databases were developed in ACCESS, dBaseIV, BASIC or simply as an Excel or ASCII files. They contain biological data for cod, herring, sprat, flounder, salmon, sea trout and main coastal fish species exploited by the Polish fishing fleet in the southern Baltic Sea. The data for major species exploited by Polish deep sea fishery are also stored in similar databases. There is a need to develop unified database. Such database (B-Database) will be developed in 2005.

Since 1990s some of the Polish data have also been stored in the international databases managed within ICES. These are

- **BALTCOM** - international database from commercial fishery of main Baltic species (exc. salmonids) containing biological parameters of fish (length, weight, age, sex, maturity) from landings and discards. Polish data cover 1997-2001; since 2002 only cod data have been updated every year in this database.
- **BITS database** - international database from bottom trawl surveys, Polish data cover 1991-2003 and have been updated regularly.
- **BALTDAT** - international database from acoustic surveys conducted in 1995-2001. Polish data cover whole period. Since 2002 data have been updated annually. The database contains acoustic measurements and biological data on Baltic herring and sprat.

Polish biological and economic databases will be fully developed in 2005.

1.1. Co-operation between Poland and other member states and reporting to the Commission

In the member countries of European Union as well as in the newly accessed states, the collection of primary fishery data to support responsible fishery policy has been a routine practice for a long time. Sampling programmes have mainly targeted parameters essential for fisheries management and advice. The information required for Community programme is defined within the framework of evaluation modules, covering on one hand fishing capacities and fishing effort, on the other hand surveys, catches and its biological characteristics, and finally, the economic situation of the fishery sector.

The collection of information on fishing capacity, fishing effort, economics and landing statistics is conducted at a national level. Biological information about fish catches, discards and information gathered during surveys are co-ordinated internationally in most cases and

carried out in close co-operation with research institutes in Member States as well as in the third countries.

In the economic field, the Fisheries Economics Department of SFI constitutes the Polish representative in the project Economic Assessment of European Fisheries organised under the Concerted Actions and Thematic Networks which is committed to developing a common method or standard for the evaluation of the economic situation in Community fisheries.

Each Member State shall submit its national programme to the Commission by electronic means, no later than 31 May every year, as stipulated in Article 6 of Council Regulation (EC) N° 1543/2000. A technical operational report must be submitted to the Commission annually by 31 May, in which an account is given of what progress has been made in the implementation of the objectives set out at the time of establishment of the minimum programme and the extended programme.

1.2. National correspondent

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1.3. Sampling intensities and precision levels

Information about landings reported by species, catch areas, fishing effort and fishing capacity will be submitted with the greatest possible level of precision.

In first year (2005) the biological sampling will be carried out with intensity indicated in EC Regulation No 1639/2000 (Annex, Appendixes XII and XV). At the beginning of 2006 precision of the biological information (length and age distribution of landings and discards) will be estimated nationally using re-sampling techniques (Efron, 1982).

For the collection of economic data on the fishing fleet the objective is to reach a precision level $\pm 25\%$ for a 95% confidence interval using a stratified simple random sampling method. The final level of precision will be calculated on the basis of the data provided by the sampled companies according to standard statistical methods. Concerning the processing industry, it is not yet possible to estimate possible levels of precision of all parameters. The results from the pilot study carried out in 2005 will determine the level of precision to be targeted.

2. MODULE OF EVALUATION OF INPUTS: FISHING CAPACITY AND FISHING EFFORT

2.1. C. Collection of data concerning fishing capacity

Minimum programme

Member States are required to collect data to permit segmentation of the fishing fleets in accordance with Commission Regulation (EC) No. 1639/2001, Appendix III and IV. This segmentation is used as the basis for determining how capacity, fishing effort and economic data for the fishing fleet will be reported. Poland will adhere to the minimum programme as defined in Appendix III.

The intention is to collect data on the number of vessels in defined segments and vessel length categories as well as on the average gross tonnage (GT), engine power (kW) and age of the vessels' hull.

The aggregated data meets the requirements in respect of accuracy stipulated in chapter 2. C.1.c of the implementation regulations.

Vessels are segmented on the basis of the time for which a particular gear is used. The expression "time" is used to denote fishing days. If a vessel uses a type of gear for more than 50 % of the time, the vessel should be included in the segment that covers that type of gear. If gear is used for less than 50 % of the reported fishing time, the vessel is allocated to a segment for multi-species gear use.

If the specific vessel was not active throughout whole year it will be assigned to "unknown" segment.

Disaggregation Levels

The disaggregation level will comply with the segments defined in Appendix III of Commission Regulation (EC) No 1639/2001.

Mobile gears

- Beam Trawl
- Demersal Trawl and Demersal Seiner
- Pelagic Trawl and Seinners
- Dredges
- Polyvalent
- *Glass-eel trawler*

Passive Gears

- Hooks
- Drift and fixed nets
- Pots and traps

Polyvalent

- Polyvalent Gears Combined mobile and passive gears

These data will be provided for vessels:

- <12m
- 12 to <24m
- 24 to <40m
- >40m

Only these segments which can be found in Polish fisheries will be taken into account (there is no beam trawlers or dredge vessels in Poland for example)

These data will be updated annually.

The following data among others (required by Regulation (EC) 2930/86 and 26/2004) are registered for every vessel in Polish fishing vessel register:

- Vessel length (Length Over All)
- Gross tonnage
- Engine power (main engine)
- Age of hull

The fishing fleet is segmented at the end of each calendar year by mechanical processing of the data reported in the SFIS database (log books and vessel register). Data in respect of fishing capacity in accordance with the above is reported for each segment. The data must be updated once a year.

Extended Programme

No data collection will be carried out within the framework of the extended programme.

2.2. D. Collection of data relating to fishing effort

Member States are required to collect data for estimating the fishing effort and fuel consumption in accordance with Commission Regulation (EC) No. 1639/2001, Appendix V to X. Poland will adhere to the minimum programme.

The aggregated data meets the requirements in respect of accuracy stipulated in Chapter 2. D.1.c of the implementation regulation.

Fuel consumption

The average annual fuel cost will be dealt with in the collection of economic data on the fishing fleet (see Chapter 4.1 Collection of economic data by groups of vessels). The average annual fuel consumption expressed in volume units will be calculated as fuel costs/ fuel price for vessels in the respective segments (as defined in Appendix III). Price data will be gathered from fuel supplying company.

Fishing effort by type of fishing method

All fishing vessels carrying on fisheries activities are obliged to keep logbooks (as required by Regulation No 2847/93 and 2807/83). The exception is made for vessels with an overall length less than 10 m. These crafts are however obliged to submit monthly catch reports containing amount of catches, type and number of fishing gear used, fishing time (in hours) and fishing area.

Fishing effort defined as the sum of weighted (as defined in Appendix V) fishing days (as defined in D.1.a) with a particular fishing method (as defined in Appendix VIII) must be reported by specific area (Level 3 as defined in Appendix I).

In addition, the effort defined as the sum of weighted (as defined in Appendix V) fishing days (as defined in D.1.a) with a particular fishing method (as defined in Appendix III) must be reported by area (Level 3 as defined in Appendix I) and vessel length category (as defined in Appendix IV).

Specific fishing effort

Effort defined as the sum of weighted (as defined in Appendix V) fishing days (as defined in D.1a) with a particular fishing method (as defined in Appendix III) must be reported by area (as defined in Appendix I) and species (as defined in D.1a (iii) and as defined in Appendix VI).

The following data is collected:

DATA	SOURCE
Fuel consumption – cost of fuel	E-Database (fishing vessel economic statement questionnaire)
Fuel price	Fuel supplying company
Fuel consumption - volume	Cost/price
Number of fishing days with a particular type of gear (as defined in Appendix III+IV)	SFIS
Catching area (as defined in Appendix I)	SFIS
Departure and arrival time	SFIS
Quantity by species (as defined in Appendix VIII)	SFIS
Vessel length (as defined in Appendix III)	SFIS

The fishing effort is estimated for every quarter by mechanical processing of reported data in the SFIS (log books, monthly catch reports, sales notes, vessel register, etc.). The result will be reported annually.

Extended Programme

No data collection will be carried out within the framework of the extended programme.

3. MODULE OF EVALUATION OF CATCHES AND LANDINGS

3.1 E. Collection of data related to catches and landings

Member States are required to report commercial landings of all stocks. The data must relate to the total landed quantity and must be reported by species sub-divided by catching area and by year. For the fish stocks specified in appendix XII to Commission Regulation (EC) No. 1639/2001, discards and the total catch must also be reported. The catch of salmon in recreational and game fisheries in the Baltic Sea must also be reported.

The geographical origin of catches and landings will be reported at level 2, Appendix I, in Commission Regulation (EC) No. 1639/2001. For stocks included in appendix XII of the regulation, the aggregation level will meet the terms specified for the different areas.

The aggregated data meet the requirements in respect of accuracy stipulated in Chapter 3.E.1.c of the Commission Regulation.

Details of the landed quantity are collected from fishermen and first-hand buyers in accordance with Council Regulation (EC) No. 2847/93 on the introduction of an inspection system in the fisheries area. For smaller vessels (<10 metres) information will be collected from monthly catch reports, which in accordance with Polish national legislation are mandatory for these vessels. The monthly catch report contains, among others, the following data:

- Weight or number and species of fish caught
- Catch region (statistical rectangle)
- Number and type of fishing gears
- Vessel identification and reported month

Data will reflect Polish landings in Poland and abroad and transshipment to third country vessels. Other countries landings in Poland will be also considered.

Details in respect of the value of the landed quantities sub-divided by species are provided in the context of the economic data in accordance with Chapter 4.J.

The applicable conversion factors for landings in Poland are shown in Appendix I. When landing in other countries, their factors normally have effect when calculating live weight from product weight.

For all stocks, the quantities landed in Poland will be reported annually. The reported quantities will relate to the adjusted catch after having conducted a cross-checking of data from the log sheets, landing declarations and sales notes. Data relating to the species, quantity and catching area is taken from the database (SFIS) in which information from log sheets, sales notes and other documentation (monthly catch reports, landings declaration) are recorded and stored in accordance with Commission Regulation (EC) No. 2847/93.

Cross-checking

Control of data consistency between:

- logbook sheet and vessel register data;
- logbook sheet and sales note;
- logbook sheet and landing declaration

is ensured.

3.1.1 Game and recreational fisheries

Poland has no recreational fisheries for bluefin tuna and very negligible recreational fisheries for salmon and therefore requests derogation for this part of the Regulation.

Taking into account the growing importance of recreational cod catches a pilot study to investigate this fisheries will be conducted.

3.1.2. Polish discard sampling

According to Commission Regulation (EC) No. 1639/2001 chapter 3.E.1.b Poland must collect discard data to estimate discard rates for selected species. In 1995-2001 Poland sampled systematically discard data in Polish bottom and to lesser extent pelagic fisheries in the Baltic. The sampling in this period was supported by UE financed projects. Following this, the discard monitoring was continued with lower intensity (being limited to cod) as only limited national financial support was available.

3.1.2.1 Polish sampling effort of relevant species and areas

Appendix II contains information on Polish yearly discard estimates, requested according to Annex, Chapter III, Article H e). The only species to be included in **yearly** discard estimates in the Baltic is **cod**. In 2005 Polish discard sampling effort (appendix II) will be approximately proportional to catches by strata (quarters, sub-divisions, and fleets) and will achieve the minimum levels given in Appendix XII of Commission Regulation (EC) No. 1639/2001. The number of samples will be approximately equal to number of samples for biological monitoring of catches (see section 3.5 H) as the later monitoring will be conducted mainly at sea. Polish discard sampling will cover the area III d. Vessels to be monitored will be selected among a large number of vessels >12 m. At beginning of 2006 the discard by strata will be estimated and in the next years discard sampling will be proportional to discard levels in the strata, differently than planned for 2005 sampling proportional to the catches.

Manuals for discard sampling has been internationally agreed and established for the Kattegat and the Baltic Sea under EC study project 98/024. In this document aspects of “at sea sampling” are covered (including selection procedures for fishing trips, sub-sampling procedures, recording of data etc). A new forum for international co-operation in planning of discard sampling design, sampling- and calculation methods etc is operating internationally as ICES PGCCDBS. Poland is involved in this work to assure that the data will be available in quality for use in stock assessment. Polish discard sampling will be in accordance with the Baltic discard Manual.

The sampling will be stratified on:

- ICES Division/ Sub-division
- Quarter
- Discard pattern in relevant fleets

The fleets will be defined by gear type and target species.

Data will be collected by staff from SFI, primarily by sampling on board of commercial fishing vessels.

The information to be recorded is:

- Vessel and gear characteristics
- Place, date, time and duration of fishing operation
- Total weight of discard and landing by all species caught
- Separate length distributions of discard and landings by all relevant species caught. If the retained part of the catch is landed in commercial weight categories, separate length frequencies are obtained by category
- Otoliths per cm group of undersized fish (discard part of the catch) of selected species.

Weight measurements are generally recorded as un-gutted fish and the measurements are made on un-gutted fish. When gutted fish are used a weight conversion factor (Appendix I) will be applied.

All collected discard data will be recorded in national at SFI and inter-national database (see Introduction).

In addition, according to Commission Regulation (EC) No. 1639/2001 every three years **herring, sprat, flounder, salmon and sea trout** discard should be estimated within MP. The present amount of these discards in Polish fishery is not known but it is believed to be low in pelagic fishery. To estimate its levels Poland intends to conduct pilot study in 2006. Results of these studies will indicate which of the mentioned species should be routinely monitored for discard on the three year basis.

3.1.2.2 International discard data storage

All Polish catch data sampled during discard sampling in the Baltic Sea are included in the international database: BALTCOM/FISHFRAME. This database constitutes the backbone in the international discard calculations made for the area and is essential for the further development and international co-operation concerning discard.

All countries around the Baltic Sea submit data to the database and have full access to all data collected if the data are used for assessment/management purposes.

Extended programme

No data collection will be carried out within the framework of the extended programme.

3.2 F. COLLECTION OF DATA CONCERNING THE CATCHES PER UNIT EFFORT AND/OR EFFECTIVE EFFORT OF SPECIFIC COMMERCIAL FLEETS.

Minimum programme

Data concerning the catches per unit effort/ and or effective effort will be collected within a framework of the Minimum Programme on the basis of information gathered in the National Programme (section 2.2 and 3.1).

Extended Programme

No data collection will be carried out within the framework of the extended programme.

3.3 G. Eligibility of the scientific evaluation surveys of stocks

Sea Fisheries Institute in Gdynia has employed r.v. "Baltica" (41-m long stern trawler) for conducting the Baltic International Trawl Survey (BITS) and the Herring Acoustic Survey (HAS) since 1994. The BITS surveys primary objectives are Baltic cod and other demersal species. During the surveys bottom control hauls in the Polish EEZ are conducted at the depth ranging from 16 to 105 m. The HAS survey objective is assessment of Baltic herring and

sprat stocks. During the survey pelagic hauls are performed, usually in areas where depth to the bottom is higher than 30 m. These 3 surveys a year, systematically organized by the Sea Fisheries Institute in Gdynia, are of priority 1 and are included in the minimum programme as defined in Appendix XIV of Commission Regulation (EC) N° 1639/2001.

The fish surveys described in this programme are internationally co-ordinated and will remain so. The planning and co-ordination of the surveys are done within ICES Baltic International Fish Survey Working Group WG-BIFS). Acoustic survey as well as BITS surveys add extra information to stock assessments, as the stock estimates obtained during the surveys are fishery independent.

Member States are required to conduct scientific research at sea to enable them to evaluate the biomass and distribution of the main fish stocks, regardless of the data submitted by the commercial fisheries in relation to stocks for which such evaluations are possible and appropriate according to Commission Regulation (EC) N° 1639/2001.

The evaluations of Baltic cod, herring, sprat and flounder stocks in the southern Baltic are presently based also on the information from fisheries (fishing effort, CPUE and catch composition by various gears). The quality of some data for fish stock assessments increased substantially in years 1996-2001 due to the extended sampling programmes - International Baltic Sea Sampling Programme for Commercial Fishing Fleet (DGXIV 96-002) and International Baltic Sea Sampling Programme II (DGXIV 98-024). In the framework of both mentioned EU funded study projects the research materials were collected by national observers mainly during surveys, directly on board of fishing vessels. Since second half of 2001 the Baltic fish sampling effort in Poland was significantly reduced as no further support from the Commission was obtained.

Minimum programme

3.3.1. Baltic International Trawl Survey (BITS)

The survey is conducted regularly twice a year, in 1st quarter (in February 15 - 17 days at sea, at least 35 - 40 trawl stations) and in the 4th quarter (in November – 10 - 14 days at sea, usually 30 - 33 trawl stations) with the r.v. "Baltica". The surveys cover part of the southern Baltic, within the Polish EEZ. This type of surveys with a bottom trawl applied in control hauls is systematically conducted by the Sea Fisheries Institute in Gdynia since 1977.

The primary purpose of the survey is to produce indices of recruitment and stock abundance of Baltic cod and flounder. Sampling of these species includes records of individual fish length, age, weight, sex, stage of gonads and stomach fullness and is carried out on board the survey vessel. Data on sexual maturation and individual weight is obtained to establish sex specific maturity ogives and mean weight at age for cod and flounder. The otoliths are used for fish age determination. Ageing is made partly directly on board of vessel and partly at SFI in Gdynia. Age determination takes place in accordance with standardized methods (Anon. 2000, ICES 1997, 2001). In addition to cod and flounder, herring and sprat from the samples are also examined and their standard biological parameters (length, weight, age, sex, gonads development) are recorded.

The survey design, sampling procedure and the level of precision are defined in the Manual for the Baltic International Trawl Surveys (ICES 2000). Since 2000 the surveys has been

conducted using new standard procedure internationally. Polish bottom trawl surveys are conducted and samples collected in accordance with BITS Manual.

The survey is ICES co-ordinated and performed in collaboration with research vessels from Denmark, Germany, Latvia, Russia and Sweden. However, not all countries around the Baltic are involved in every survey. Since 2000 during the BITS survey a TV-3 cod bottom trawl is used at daytime. This gear is a rather newly developed gear and is used as a standard fishing gear by the countries involved. Hydrological data is collected with a CTD probe.

Primary survey data are stored in a fish sample database administered by SFI in Gdynia. Aggregated data are reported and used annually by relevant ICES Working Groups. Since 1997, data are also stored in an international co-ordinated database at ICES Secretariat in Copenhagen.

3.3.2 Herring Acoustic Survey (HAS)

The survey has been conducted in October (19 - 21 days at sea, about 40 trawl stations) every year since 1995 with the r.v. "Baltica". Polish survey covers part of the area IIIId, namely southern part of the ICES Sub-divisions 24, 25 and 26. Baltic herring and sprat acoustic surveys organized by SFI (Gdynia) started already in 1983 in relatively close co-operation with Swedish and German research vessels.

The purpose of survey is to provide fishery independent estimates of Baltic herring and sprat stocks size and distribution, using acoustic methods. The sampling procedure and the level of precision are defined in the Baltic International Acoustic Survey (BIAS) Manual (ICES 2001). Polish pelagic acoustic surveys are conducted and samples collected in accordance with BIAS Manual.

The evaluation of clupeoids stocks size is done by compilation and analysis of data obtained by Germany, Denmark, Poland, Russia, Latvia, Estonia and Sweden. Polish herring and sprat biological analyses are made on board of r.v. "Baltica". Age determination takes place in accordance with standardized methods (Anon. 2000, ICES 1997, 2001). Calibration of acoustic system of EY-500 echo sounder is made every year in Norway or Sweden, with assistance of specialist from SIMRAD Company. Hydrological data is collected with a CTD probe.

Primary survey data are stored in a fish sample database administered by SFI in Gdynia. Aggregated data are reported and used annually by relevant ICES Working Groups. Since 2000, data have also been stored in an internationally co-ordinated database (EC 99/06) DFU in Hirtshals, Denmark.

3.3.3. Sprat Acoustic Survey (SAS)

According to Commission Regulation (EC) N° 1639/2001, Appendix XIV, this survey is to be conducted in the 2nd quarter as it has priority 1. However, it is conducted sporadically in the Baltic and Poland performed it only in 1983 and 1985. For tuning the sprat assessment ICES uses results from Herring Acoustic Survey which provides acoustic estimates of both herring and sprat stocks. In addition, HAS provides good estimates of 0-age group of sprat in Sub-

divisions 26+28. Poland is of the opinion that Sprat Acoustic Survey is not necessary to conduct reliable sprat stock assessment and its priority could be changed to priority 2.

Poland asks for derogation from conducting that survey.

3.4 H. Biological sampling of catches: composition by age and by length

Member States are required to collect biological random samples in order to evaluate the composition in length and where appropriate in age of landings for all stocks specified in Appendix XV in Commission Regulation (EC) No. 1639/2001. For some species also other biological sampling is required.

Biological sampling must be performed if the Polish TAC or total landing of a certain species exceeds thresholds defined in 1639/2001 Chapter H.1(d). Appendix III shows the landings made in Poland by Polish flagged vessels. Information on Polish and total EU and accessed states TAC is given for each stock for 2004.

Poland asks for derogation for biological sampling of foreign landings landed in Polish ports in 2005. So far these landings were very limited and their magnitude after accession is unknown and probably still very small. New statistical system (SFIS) enables registration of foreign catches and in 2006 the size and distribution of these landings for 2005 will be known. Then it will be possible to develop appropriate sampling scheme for these landings if necessary.

The purpose of the biological sampling of catches is to estimate the number of fish and their mean weight at age of the landings made in Polish fishing ports. The data provide the basis, together with data from other fishing nations, for analysis of historical stock trends, intensity of exploitation, and for forecasting future catches. Number of fish and their mean weight at age of all stocks included in the Polish Programme will be estimated by a standardized method which also estimate variance of the parameters mentioned using boot-strap technique. This will assure that all calculations are made in comparable way for all stocks.

Biological sampling in Poland is performed by SFI in Gdynia. All data sampled by SFI will be stored in a fish sample database at SFI in Gdynia. Salmon and sea trout stocks in the Baltic are also sampled and recorded by the Sea Fisheries Institute. Inland Fisheries Institute in cooperation with SFI supervises tagging and stocking of salmonid fishes and carries out analysis of effectiveness of stocking.

3.4.1 Polish standard sampling procedure

The standard sampling procedure will be carried out on a quarterly basis by ICES sub-division in the main fishing ports where landings take place. Standard samples will be collected from catches and/or landings, which can be sorted in commercial weight categories. Random samples will be collected within each category. In addition, sampling at sea during fishing trips will be performed. It refers mainly to cod for which also discard data will be collected.

Usually proportional sampling will be applied. In cases when some sampled categories are small the sample size will be higher than the one resulting from proportional sampling or whole category will be sampled. This will mainly happen when landings are separated into size grids or the number of undersized fish is small in the sample.

The total number of samples collected during a year for a stock will follow the sampling rules based on annual landings which are outlined in Appendix XV in Commission Regulation (EC) No 1639/2001. With sampling rules outlined in Appendix XV, a precision level is set. The minimum Polish sampling level for each stock is given in Appendix III.

The samples are usually analyzed in the fishing ports or at SFI laboratories, while cod samples are mostly analyzed at sea. First the sample for length is collected, and the sub-sample for age is taken next. The size of the samples will be at least as specified in Appendix XV. The age sample is usually collected by length strata, taking approximately constant number of fish from a stratum. The fish sampled for age are weighed and their sex and maturity is recorded. As mostly stratified sampling for age is applied, the age composition of the catches is obtained using age-length key. Age determination of sampled fish species always takes place at SFI according to standardized methods (ICES 1997, 1999).

The intention of ‘Other biological sampling’ is to estimate for stock indicated in Annex to the Regulation (EC) No 1639/2001 (Appendix XVI)

- sex composition of the catches,
- maturity at age and length,
- length and weight at age i.e. growth curves.

These parameters will be sampled both during surveys and from the commercial landings. In cases where only gutted fish are landed or fish are in a condition that histological examination are impossible sampling for maturity will be limited to surveys.

Precision level

The precision level of Polish present sampling was not evaluated yet, although a lot of effort is put to collect representative and extensive biological data. After 1st year of National Programme the re-sampling techniques (Efron, 1982) will be applied and the precision levels in Polish biological sampling estimated.

A description of each stock that is included in the Polish sampling is presented below following the structure: Polish landings, Polish TAC of the EC shared TAC enlarged by TAC of newly accessed states (in %), and a short description of the fishery. The sampling procedure is described if it deviates from the standard sampling procedure described above following by a short description of how other biological sampling is performed. More information on Polish sampling on catches is given in Appendix III.

Minimum Programme

3.4.2 The Baltic Sea, ICES AREA III d

Cod

The Polish landings in 2003 were 16 thousand tones and the Polish TAC share was 22,2% of the TAC for EC and newly accessed states, obliging Poland to sample this stock.

Cod in the Baltic Sea is regarded to be of two different stocks: the Western stock (sub-divisions 22-24), and the Eastern stock (sub-divisions 25-32). Biological sampling and results are reported by stock.

Polish cod fishery in the Baltic is conducted mainly with trawls and gill-nets, but also long-lines are used with increasing intensity. The bottom trawling is conducted during day-time on 30-100 meters depths all year round with exception of the summer ban (June - August). The gill-net fishery is conducted both by smaller vessels and by fishery cutters.

Sampling of cod in Poland is carried out mainly onboard of fishing vessels. The catch of cod is sorted by the fishermen for discard and landing. Both parts of the catch are biologically sampled by SFI scientists according to standard sampling procedure. Survey results are uploaded to BALTCOM/FISHFRAME database.

Sampling of cod is also carried out on board r/v BALTICA during BITS surveys conducted in 1st and 4th quarter. The sex and maturity is determined following the international 5 scale maturity key. Survey results are uploaded to BITS database maintained at ICES headquarter.

Collected data are stored in fish sample database at SFI. Results are reported annually to the ICES Working Group (WGBFAS).

Pilot study for biological sampling in recreational fishery for cod

In recent years the recreational fishery for cod has been developing in Poland. The scale of this fishery is not known but it is increasing. In 2004 the SFI started the preliminary investigations aimed at evaluation of recreational fishery and its impact on the state of stock. Within the programme some biological data from recreational fishery is collected. Poland intends to continue this programme in 2005 as a pilot study. Basing on the 2004-2005 results Poland will consider inclusion of sampling of recreational fishery to its National Programme in next years.

Flounder III d

Flounder fishery is regulated by the fishing rules of IBSFC and thus it is included into the programme in 2005 as proposed in Council Regulation. The Polish officially reported mean landings in 2001-2003 were 7090 tons.

Flounder is caught mainly by bottom trawls and in the coastal zones by gill-nets. The cutters using trawl provide the bulk of flounder catch from western flounder stock (Sub-divisions 24 and 25) whereas the main part of flounder catch from Sub-division 26 is taken by the boat

fishery employing gill-nets. The largest landings of flounder in Polish fishery are reported in October – February, and sampling intensity follows that seasonality.

Landings are composed of several flatfish species: flounder, plaice, and small specimens of turbot. Plaice contributes up to 5% of the total annual flatfish catch taken from ICES Sub-divisions 24 and 25, and up to 2% in Sub-division 26.

Flatfish sampling procedure is as follows: flatfish catch (at sea or in harbor) is sorted into species by the Institute staff member and the share in weight of each species is evaluated. This share (averaged over the year) is used for the calculation of total annual catch by flatfish species based on the official annual flatfish catch. From the flounder catch two cases (50 kg each) are taken at random for length measurement. Next the procedure follows the standard sampling procedure.

Collected data are stored in fish sample database at SFI. Results are reported annually to the ICES Working Group (WGBFAS).

Turbot III d

The average turbot catch is ca. 200 tons. It is taken mainly as by-catch in fishing for flounder or cod and in targeted gill-net fishery by specialized local boat fishery carried out in spring. In 2005 our intention is to collect 2 turbot samples from targeted commercial gill-net catches in May – one from Sub-division 25 and one from Sub-division 26. The sampling scheme is simple random sampling.

Herring III d

Polish officially reported landings in 2003 were 30.7 thousand tones and the Polish TAC was 21,4 % of the EC and newly accessed states TAC in the Baltic Sea, obliging Poland to sample this stock.

Herring is caught mainly in pelagic trawls, but also in bottom trawls and in the coastal zones during spawning season even in gill-nets and pound nets (including fyke nets in Vistula Lagoon). The herring fishery takes place in all seasons, but is more intensive during springtime and summer-autumn season. The majority of the catch is landed for human consumption.

Sampling of this catch is performed for two major fishing fleets:

- herring fisheries with pelagic and bottom trawl with ≥ 32 mm mesh size, conducted by cutters,

- static gear fishery with > 32 mm mesh size, conducted by boats.

The by-catch of herring from sprat fishery is estimated (last years at about 8% level) and included to the total herring catch.

Standard sampling procedure as described in 3.4.1 is performed on both fishing fleets. In herring cutter fishery catches are usually separated into 2 size assortments and consequently sampling is conducted within the assortments. Samples are purchased, and are transported to SFI in Gdynia or its department in Swinoujście for further analysis.

Collected data are stored in the fish sample database at SFI. The results are reported annually to the ICES Working Group (WGBFAS).

Sprat III d

Polish officially reported landings in 2003 were 84 thousand tones and the share of the Polish TAC was 29,4% of the EC and newly accessed states TAC in the Baltic Sea, obliging Poland to sample this stock.

Polish sprat fishery in the Baltic Sea is conducted mostly by cutters 25-27-m length using mid-water trawl with >16 mm mesh size. Sprat is landed for both industrial purposes and for human consumption (63% and 37% in 2002, respectively). The fishery is most intensive in February-May and - to a lesser degree - in late autumn.

Samples of sprat catches/landings are collected for two major fishing fleets:

- stern cutters 25-m length, landing fish for human consumption in almost all main Polish ports,
- stern cutters 25-27 m length, catching fish for industrial purposes - two fishing trips a year are surveyed by the SFI technicians on board of fishing vessel,

The by-catch of young herring in sprat fishery is estimated and included to the total herring catch. In addition, during surveyed trips the by-catch of other species is also investigated.

Fish samples are analyzed in ports of landings, on board of cutters or are transported to SFI laboratory in Gdynia. The samples are analyzed and the results recorded using standard procedure (see Ch. 3.5.1) updated under EU study project 98/024 IBSSP II, and recommended by ICES BIFSWG. Biological data on sprat (age, length and weight) is also collected during the HAS and BITS surveys. Sampling of other biological parameters such as sex, gonadal maturity, stomach fullness, externally visible diseases are regularly performed on both fishing fleets. Data are stored in simple database at SFI.

Salmon and sea trout III b-d

Polish quota was on average 27 000 salmon during the years 2001-2003, which represented 8% of the present EC and newly accessed states TAC for the Baltic Sea (excl. the Gulf of Finland). These landings oblige Poland to sample this stock. There is no quota for sea trout in the Baltic.

Sampling in Sub-divisions 25-26 takes place in major landing ports both for salmon and sea trout. The sampling of salmon and sea trout is following the standard sampling procedure described in 3.4.1. Scale samples are taken for age determination.

Sampling is planned according to the previous year's fishing pattern and it covers salmon and sea trout caught by drift-nets (70% of the catch) and by long-lines.

Apart length and weight measurements also data on sex ratio and presence of adipose fin (salmon) are collected. This is done in conjunction with the age determination of the sampled salmon. Salmon and sea trout data are stored in a database at Sea Fisheries Institute.

Intensive programme for tagging salmon and sea trout smolts and collecting tags is conducted every year by Inland Fisheries Institute with co-operation of Sea Fisheries Institute. Tagging data are kept in a database at the Inland Fisheries Institute.

Sampling results are reported annually to the ICES Baltic Salmon and Sea Trout Assessment Working Group (WGBAST).

3.4.3 Other areas

Polish catches outside Baltic in 2003 were 17 575 tonnes, of which 3 426 were taken in North-East Atlantic Area (NEAFC), 776 tonnes in North-West Atlantic Area (NAFO), 8 905 tonnes in CCAMLR Area and 4 468 tonnes in South-East Atlantic (area 47 FAO). Polish catches outside Baltic in 2003 and requirements for sampling according EC Regulation 1639/2001 (Appendix XV) are presented in Appendix IV.

North Atlantic (NEAFC and NAFO Areas)

Polish catches of roundnose grenadier, blue whiting, haddock, Greenland halibut and blue ling in the North Atlantic are below the threshold level identified in the Regulation for sampling. For krill in CCAMLR area there is no requirements for sampling, as well as for horse mackerel in Namibia and Angola waters (Area 47 FAO) therefore derogation for data collection for these species is requested. The stocks required for sampling are cod, saithe and redfish. Catches of cod and saithe are taken according to the Norway-Poland Agreement. Cod is caught in Norway EEZ (VIa), and saithe in Svalbard area (IIb). The catches are small and getting samples is very expensive, therefore considering excessive cost Poland request derogation from sampling these species.

At present the only species for which sampling is required in ICES area V, VI, XII, XIV and NAFO area 1F,2J is redfish.

Redfish

The Polish landings in 2003 were 924 tonnes. Substantial catches of pelagic redfish were taken in NAFO Convention Area (1F and 2J). The Polish quota for 2004 is 6,1% of the EC share TAC in the areas V, XII and XIV, obliging Poland to sample this stock.

The stock structure of pelagic redfish in ICES areas V, XII, XIV and in the NAFO areas 1F and 2J remains generally uncertain. NEAFC Commission requests information on stock identity of redfish, horizontal and vertical distribution of pelagic stock components in the Irminger Sea and adjacent waters.

Polish redfish fishery in the Irminger Sea is conducted by factory trawlers with pelagic trawl. The optimum temperature range for adult redfish is at 4-6 °C. By using temperature sensors on the trawl most of the fishing is done at depth within the optimum temperature range.

Sampling of redfish is taken on board of fishing vessels by the Sea Fisheries Institute staff following the standard sampling procedure. Usually, for the length composition of catches samples of redfish consisting of 500 individuals separated to sex are taken from hauls.

Collected data are stored in fish sample database at SFI. Results will be reported to the ICES Northwestern Working Group.

3.5 I. Other biological sampling

Extended programme

3.5.1. Sampling for sex composition and maturity

The Baltic Sea, ICES AREA IIIId

Sampling of other biological parameters such as sex and sexual maturity are performed routinely when samples for age are collected from both commercial landings/catches and survey catches. This refers to most sampled Baltic fish i.e. cod, herring, sprat, flounder, and plaice. In addition, sex of sampled salmon and sea trout is routinely recorded. The maturity is determined following the Maier's 8 stage scale maturity key, next transformed into 5 stages scale agreed within ICES (ICES 2001).

Sampling for salmon maturity will be performed within minimum programme i.e. every three years.

Sampling of other biological parameters for redfish (including age, weight, sex and gonad maturity) is carried out also on board of fishing vessel. The sex and maturity is determined following the international 5 scale maturity key. In addition, meristic features will be determined on the basis of distances among different points of fish using image analysis.

4. MODULE OF EVALUATION OF THE ECONOMIC SITUATION OF THE SECTOR

4.1 J. Collection of economic data by groups of vessels

The national programme covering economic data on the fleet will be based mainly on two sources:

- Sea Fisheries Information System (SFIS) managed by the Fisheries Department (information about vessels, catches, effort, landings and prices).
- E-Database managed by the Sea Fisheries Institute and containing information from questionnaires covering all active vessels bigger than 12 meters and a sample consisting of selected vessels under 12 meters.

A new questionnaire was elaborated in 2004 to investigate an economic performance of fishing vessels (see an example of the questionnaire in the Annex V to this document). This questionnaire contains all data required in the minimum and partly in the extended programme. All owners of vessels are legally obliged to deliver their economic statement for the first 6th months of 2004 until 30th of October 2004. Questionnaires concerning the second half of 2004 should be submitted to the Sea Fisheries Institute in Gdynia until 20th of March 2005. Since 2005 onwards these data will be collected on annual basis.

Minimum programme

The following data will be collected:

Description	Parameter	Source
Income	Total and by species	- Sales notes (SFIS) - Log-books (SFIS) - Fishing vessel economic statement questionnaire (E-Database)
Production costs	Crew Fuel Repair and maintenance Other operational costs	- Fishing vessel economic statement questionnaire (E-Database)
Fixed costs	Average cost	- Fishing vessel economic statement questionnaire (E-Database)
Financial position	Share of own / foreign capital	- Fishing vessel economic statement questionnaire (E-Database)
Investment	Value	- Fishing vessel economic statement questionnaire (E-Database)
Prices/species	Value/quantities	- Log-books (SFIS) - Sales notes (SFIS)
Employment	Number	- Fishing vessel economic statement questionnaire (E-Database)
Fleet	Number GT KW Age Gear used	- Vessel register (SFIS) - Log-books (SFIS)
Effort		- Vessel register (SFIS) - Log-books (SFIS)

The fishing fleet will be divided according to segmentation provided in Appendix III of 1639/2001 regulation, only these groups of fishing vessels which exist in Polish fisheries will be distinguished. Eight segments can be identified in 2003.

Fleet segmentation under MP.

Type of fishing technique	Vessel length	Approx. number of vessels
1. Passive gear vessels	<12m	800
2. Demersal trawlers	12<24m	140
3. Gill-netters	12<24m	118
4. Longliners	12<24m	21
5. Demersal trawlers	24<40m	94
6. Pelagic trawlers	24<40m	56
7. Gill-netters	24<40m	20
8. Deep-sea fishing trawlers	>40m	6

The final segments for the survey in 2005 will not be decided until log book data for 2004 has been compiled and processed.

For all segments economic data will be collected exhaustively through questionnaires and using SFIS database.

Data will be stored and primarily processed in SQL E-Database. More sophisticated calculation will be made using Access and Excel software. Sea Fisheries Institute will be responsible for database management and data processing.

Data will be presented as averages per vessel as well as aggregated for each segment. Price information will be aggregated on a quarterly basis.

Extended programme

Additionally to minimum programme the following data will be collected:

Description	Parameter	Source
Landings by species	- Monthly - Stock (by ICES area) - Market category	- sales notes (SFIS) - log-books (SFIS)
Income	- subsidies	- fishing vessel economic statement questionnaire (E-Database)
Prices/species	Value/quantities - monthly - market category	- Log-books (SFIS) - Sales notes (SFIS)
Employment	Skill/education	- fishing vessel economic statement questionnaire (E-Database)

The objective is to differentiate these data regionally according to level 3 (ICES division). These calculations will be based on compiled data in the minimum programme. The above mentioned data will be collected for all segments of the minimum programme. The vessel will be assigned to the specific region on the basis of distribution of its annual income between fishing areas.

More precise segmentation than that considered in minimum programme will be taken into account.

Fleet segmentation under EP.

Type of fishing technique	Vessel length	Approx. number of vessels
1. Passive gear vessels	<10m	725
2. Gill-netters	10<12m	52
3. Longliners	10<12m	23
4. Demersal trawlers	12<18m	94
5. Gill-netters	12<18m	87
6. Driftnetters	12<18m	17
7. Longliners	12<18m	20
8. Demersal trawlers	18<24m	46
9. Gill-netters	18<24m	14
10. Demersal trawlers	24<40m	95
11. Gill-netters	24<40m	20
12. Pelagic trawlers	24<40m	56
13. Deep-sea fishing trawlers	>40m	6

4.2 K. Collection of data concerning the processing industry

Minimum programme

A new questionnaire was elaborated in 2004 to investigate an economic performance of fish processing enterprises (Annex VI). This questionnaire contains all data required in the minimum and partly in the extended programme. All fish processing plants regardless of size (number of workers) length will be obliged to deliver their economic statement for the first 6th months of 2004 until 30th of October 2004. Questionnaires concerning the second half of 2004 should be submitted to the Sea Fisheries Institute in Gdynia until 20th of March 2005. Since 2005 onwards these data will be collected on annual basis.

The study will focus on collecting the following data:

Description	Parameter	Source
Raw material	Total and by species	Economic statement of fish processing plant (E-Database).
Income	Turnover	
Production cost	Labour Energy Raw material Packaging Other running costs	
Financial position		
Fixed costs	Average costs	
Investment	Replacement/insurance	
Prices/product	Value/tonne	
Employment	Numbers/FTE	
Capacity utilisation	Estimated % of production capacity usage level	

Data will be stored and processed in database programmes. Sea Fisheries Institute will be responsible for data handling.

Extended programme

In the extended programme data will be additionally differentiate to enable making analyses of sensitivity of the processing sector located in the coastal area with respect to the catches that are subject to TAC. Various conservation measures and other circumstances which may result in shortage in raw material supplies to fish processing plants will be analyzed.

Special emphasis will be given to investigation of the impact of new trade regime (free trade between Poland and other EU countries) and other aspects (i.e. tighter hygienic and veterinary conditions imposed by EU regulation) on social and economic changes in fish processing sector. Impact of available structural aid on economic development of the sector will be estimated.

The analyses of the sector will be carried out at regional level NUTS 3, or even more precisely.

APPENDIXES

Appendix I Conversion factors

Cod	-	gutted with head	1,17
Cod	-	gutted headless	1,71
Salmon	-	gutted with head	1,15
Redfish	-	gutted headless	1,9

Appendix II. Polish discard sampling effort by species and area

Species	Area	Landings in 2001-2003 (tons) Ave	Beforehand estimates		Yearly discard sampling required (Y/N)	Sampling frequency rules ¹⁾			Estimated sampling frequency		
			Discard rates (weight)	Discard rates (numbers)		Number of samples	Number of individuals measured pr.sample	Number of fish aged pr.sample	Minimum No samples	Minimum Number of individuals measured	Minimum Number of fish aged
Cod	III d	17971	>10%	>20%	Y	1/200	50	25	90	4500	2250

1) As specified in Commission Regulation (EC) No 1639/2001

Appendix III. Polish sampling effort by species and area based on Polish landings. Minimum Program

Species	Area	Total EU TAC ¹⁾	Polish TAC ¹⁾	Polish TAC in % ¹⁾	PL landings in 2001-2003 (tones) Ave.	PL landings in 2003 (tones)	Other member states landings in 2003	Sampling required (Y/N) PL 01-03	Sampling frequency rates ²⁾			Estimated sampling 2005		
									No samples	Number of fish measured per sample	Number of fish aged per sample	No. of samples	No. individuals measured	No. of fish aged
Cod	III d	71250	15825	22.2	17971	15891	0	Y	1/200	50	25	90	4500	2250
Herring	III d	135080	28870	21.4	34609	30703	0	Y	1/1000	100	100	35	3500	3500
Sprat	III d	377665	110880	29.4	83664	83991	0	Y	1/2000	100	50	42	4200	2100
Flounder	III d	-	-	-	7090	7327	0	Y	1/200	50	50	36	1800	1800
Turbot	III d	-	-	-	197	197 ⁷⁾	0	Y	1/100	50	50	2	100	100
Salmon ³⁾	III d	451260	28368	6,3	184	176	0	Y	1/100	50	50	2	100	100
Sea trout	III d	-	-	-	786	780	0	Y	1/100	50	50	8	400	400
Redfishes ⁴⁾	V, VI, XII, XIV, 1F, 2J	16563	1007	6.1	924	924	0	Y	1/100 ⁵⁾ and 1/500 ⁶⁾	100	50	10 ⁵⁾ and 2 ⁶⁾	1000	100

- 1) TAC for 2004, present and accessed states
- 2) As specified in Commission Regulation (EC) No 1639/2001.
- 3) TAC by numbers of fish.
- 4) Data concern 2003.
- 5) Sampling frequency for length measurements.
- 6) Sampling frequency age reading.

Appendix IV. Polish catches outside the Baltic and Polish sampling obligations resulting from catch size and Regulation (EC) 1639/2001

Area/Species	Subarea	Catches 2003 (t)	Sampling required in 2005 No. of samples/no. of individ)	
			Length	Age
NEAFC				
Cod*	I,IIb (Svalbard)	1262	6/300	2/50
Atlantic redfish**	V,VI,XII,XIV,1F,2J	924	10/1000	2/100
Saithe*	IVa (Norway EEZ)	734	7/350	7/350
Roundnose grenadier	VIb,XII	483	***	***
Blue whiting	IIa	297	***	***
Haddock	IIb,VIb	155	***	***
Baird's slickhead	VIb,XII	118	none	none
Greenland halibut	VIb,XII	97	***	***
Blue ling	VIb,XII	85	***	***
Others		47		
CCAMLR				
Krill	48.1	8905	none	none
S.E. ATLANTIC				
Horse mackerel	Namibia EEZ	2747	none	none
Horse mackerel	Angola EEZ	1350	none	none
Others		371		

*/ Norway-Poland Agreement

**/ including catches in NAFO area 2F and 3J

***/ too small catches for sampling

Appendix V Economic questionnaire of fishing vessel

Ministry of Agriculture and Rural Development, ul. Wspólna 30, 00-930 Warsaw		
Receiver: Sea Fisheries Institute ul. Kollataja 1 81-332 Gdynia	RRW-19 Economic Statement of Fishing Vessels in	Deadline: March 20 th
A. Full Name, address or name and seat of ship owner		C. External number or name of the vessel
B. Identification number In Fishing Vessels Register		D. REGON (tax number)

1. Basic characteristic of vessel

1.1. GT		or GRT	
1.2. Engine power (kW)			
1.3. Length			
1.4. Age (year of construction)			

2. Used fishing gear

No	Name of fishing gear
2.1.	
2.2.	
2.3.	
2.4.	
2.5.	

3. Landings

No	Species	Volume or quantity ¹	Value (in PLN)
3.1.			
3.2.			
3.3.			
3.4.			
3.5.			
3.6.			
3.7.			
3.8.	Total		

¹ for salmon

4. Other income (for example: subventions)

No	Item	Income (in PLN)
4.1.		
4.2.		
4.3.		
4.4.		
4.5.	Total	

5. Costs

No	Type of costs	Costs (in PLN)
5.1.	Fuel and lubricants	
5.2.	Fishing gears	
5.3.	Ice	
5.4.	Boxes	
5.5.	Protective clothing	
5.6.	Other materials	
5.7.	Food for the crew	
5.8.	Gross reimbursement including overheads	
5.9.	Depreciation	
5.10.	Repairs and maintenance	
5.11.	Harbour and unloading fees	
5.12.	Insurance	
5.13.	Other fees (for services, licences, fishing permits)	
5.14.	Other costs	
5.15.	<input type="checkbox"/> Incl.: financial costs	
5.16.	Total	

Appendix V cont.

3. Value of fixed assets

No	Item	Value of fixed assets (in PLN)
6.1.	Gross book value	
6.2.	Depreciation value	
6.3.	Insurance value	
6.4.	Replacement value	
6.5.	Incl.	Hull
6.6.		Engine (motor)
6.7.		Cranes
6.8.		Refrigeration systems

4. Investments expenses

No	Item	Value of investments expenses (in PLN)
7.1.	Total investments expenses	
7.2.	Incl.: used fixed assets purchase	

5. Ownership structure

No	Item	% of participation
8.1.	Domestic capital	
8.2.	Incl.	Single private owner
8.3.		Shared private capital
8.4.		Public sector
8.5.	Foreign capital	
8.6.	Renting, leasing	

6. Average number of employees

No	Item	Full time		Incl. seasonal		Part time		Incl. seasonal	
		M	W	M	W	M	W	M	W
9.1.	On board	owners							
9.2.		hired employees							
9.3.		others							
9.4.		total							
9.5.	On-land staff								

M – men, W - women

7. Average number of employees by age category

No	Age category	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65+
10.1.	Men											
10.2.	Women											

8. Average number of employees according to education level

No	Item	Fisheries targeted	Other
11.1.	Higher		
11.2.	Bachelor		
11.3.	Secondary		
11.4.	Vocational school		
11.5.	Grammar school		
11.6.	Primary		

Appendix VI Economic questionnaire of fish processing plant

Ministry of Agriculture and Rural Development, Wspólna 30 st. 00-930 Warsaw		
Receiver: Sea Fisheries Institute ul. Kollataja 1 81-332 Gdynia	RRW-20 Economic statement of fish processing plant in	Deadline: March 20 th
A. Full name, seat and address of the fish processing plant		D. Statute (mark [x] correct form) <input type="checkbox"/> joint-stock company <input type="checkbox"/> civil partnership <input type="checkbox"/> partnership <input type="checkbox"/> limited partnership <input type="checkbox"/> limited (liability) company <input type="checkbox"/> own business <input type="checkbox"/> other
B. REGON	C. Founded in	

1. Raw material supplies

No	Species	Presentation	Domestic		Import		Main country of origin	
			Tons	'000 PLN	Tons	'000 PLN	Tons	'000 PLN
1.1.								
1.2.								
1.3.								
1.4.								
1.5.								
1.6.								
1.7.								
1.8.								
1.9.	Total							

2. Fish processing income

No	Species	Type of product	Tons	Income (in PLN)			
				Total	Export	Main destination country	Value
2.1.	Products selling income						
2.2.							
2.3.							
2.4.							
2.5.							
2.6.							
2.7.							
2.8.							
2.9.		Total					
2.10.	Goods selling income						
2.11.							
2.12.							
2.13.							
2.14.							
2.15.							
2.16.		Total					

3. Other income

No	Item	Income ('000 PLN)
3.1.	Product quantity variation	
3.2.	Cost of services for own purpose	
3.3.	Fixed assets selling income	
3.4.	Subsidies and subventions	
3.5.	Other operational income	
3.6.	Financial income	
3.7.	Total	

Appendix VI cont.

4. Fish processing costs

No	Type of costs	Costs (in '000 PLN)
4.1.	Value of sold products and materials	
4.2.	Materials and energy consumption	Energy
4.3.		Raw materials
4.4.		Packaging
4.5.		Protective clothes
4.6.		Other materials
4.7.	Outside services	
4.8.	Taxes and payments	
4.9.	Remuneration	
4.10.	Other employees benefits	
4.11.	Depreciation	
4.12.	Other costs	Insurance
4.13.		Financial costs
4.14.		Other costs
4.15.	Total costs	

5. Fixed assets

No	Item	Value of fixed assets (in '000 PLN)	
		Gross	Net
5.1.	Total		
5.2.	Incl.	Own land	
5.3.		Buildings and structures	
5.4.		Machines and technical equipment	
5.5.		Transport	
5.6.		Other technical equipment	

6. Investment expenditure on fixed assets

No	Item	Total (in '000 PLN)	Financial sources			
			Own capital	Credits and domestic loans	Foreign capital	Other sources
6.1.	Total investment expenditure					
6.2.	Incl.: started investments					

7. Ownership structure

No	Item	% participation
7.1.	Domestic capital	
7.2.	Incl.	Private owner
7.3.		Several owners
7.4.		Public sector
7.5.	Foreign capital	
7.6.	Renting	

8. Estimated capacity production utilisation

No	Item	%
8.1.	Total	
8.2.	Incl.: in fish processing sector	

9. Average number of employees according to education level

No	Item	Full time				Part time			
		Incl. Seseonal		Incl. Seseonal		Incl. Seseonal		Incl. Seseonal	
		M	W	M	W	M	W	M	W
9.1.	Total employment								
9.2.	Incl.: education level	Higher							
9.3.		Bachelor							
9.4.		Secondary							
9.5.		Vocational school							
9.6.		Grammar-school							
9.7.		Primary							

M – men, W – women

10. Average number of employees by age categories

No	Age category	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65+
10.1.	Men											
10.2.	Women											

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ANNEX 1 COST CALCULATIONS

Calculations are made in euro based on exchange rate of April 14, 2004.
1 PLZ = 4,7333 EUR