

LITHUANIAN DATA COLLECTION NATIONAL PROGRAMME ON FISHERIES

2006

By:

Council Regulation (EC) No. 1543/2001

Council Decision No. 2000/439/EC

Commission Regulation (EC) No. 1639/2001

Commission Regulation (EC) No. 1581/2004

VILNIUS, 2005

European Council Regulation (EC) No. 1543/2000 of 29 June 2000 established a data collection and management system. This regulation stipulates that in accordance with the Community programmes, the EU member states shall prepare their national fisheries data collection and management programmes.

The information necessary for the programme is grouped by the following modules:

- ✓ assessment of fishing capacities and fishing efforts
- ✓ assessment of catches and landings and sampling at the sea and on landing;
- ✓ assessment of economic situation of the sector.

Member states shall collect data, necessary for assessment of changes within fishing vessels activities and fishing capacities. The collected data shall reflect landings (including imported) by species and fishing areas, fish prices at the landing points, income of fishermen, fishing costs in total and by cost components. The fish processing industry activities are defined by the following indicators: number of enterprises, employees, volume of raw material by species of fish, product volume and value by species, production costs in total and components.

There are two data collection programmes: minimal and extended. Both programmes are of the same structure. In 2005 Lithuania will only perform data collection required by the minimum data collection programme.

The minimum data collection programme is compulsory for all member states. By Council Decision 2000/439/EC (“Council Decision of 29 June 2000 on a financial contribution from the Community towards the expenditure incurred by Member States in collecting data, and for financing studies and pilot projects for carrying out the common fisheries policy”) 50 per cent of its cost will be covered from EU budget.

In order to implement Council Regulation (EC) No. 1543/2000 of 29 June 2000, establishing a system of data collection and management, necessary for performance of common fisheries policy and Commission Regulation (EC) No. 1639/2001 of July 25 2001, establishing the minimum and extended Community programmes for the collection of data in the fisheries sector and laying down detailed rules for the application of Council Regulation (EC) No 1543/2000, Minister of Economy on 26 September, 2003 adopted, order No. 3D-391 “On collection of biological and economical data ”.

The data collection and management system is to be developed in accordance with legal acts of European Union, which Lithuania will have to follow from the first day of its EU membership through the existing and developed legal framework of the Republic of Lithuania

(laws of the Republic of Lithuania, Government decisions, orders of ministries and other state institutions).

The implementation of the data collection programme, established by EU Regulations No. 1543/2000 (EC) and No. 1639/2001 requires preparation to ensure that the primary data received from legal entities are detailed and reliable. To ensure that the quality and deadline requirements of the data collection are followed, seminars for their direct providers, i.e. specialists working in fisheries sector and fish processing enterprises will need to be organized. In order to make production and economic forecast, data from other partners of the programme will need to be collected covering fisheries vessels capacity change and fishing efforts, catches and value, results of biological analysis of fish stocks. The economic evaluation of the situation in the sector is a gradual use of data received from the first two modules. Therefore the partners working with all three data collection modules will need to build-up a close cooperation. During 2002 and 2003 Lithuanian Institute on Agricultural Economics (LIAE) gained experience collecting and managing data for economic evaluation of fishing vessels, under programme of European Commission “Quality of Life and Management of Living Resources”, Q5CA-2001-01502 “Economic Assessment of European Fisheries”.

First sale of fisheries products

The accounting and control of first sale of fish and other sea production will be controlled according Council Regulation No. 2847/93/EEC, establishing a control system, applicable to common fisheries policy and Council Regulation No. 2371/2002/EC on the conservation and sustainable exploitation of fisheries resources under the Common Fisheries Policy and Decision of the Government of the Republic of Lithuania “On first sale of fisheries products”.

According resolution of the Government of the Republic of Lithuania the responsible competent authority for control of first sale of fisheries products is the Fisheries Department under Ministry of the Agriculture of the Republic of Lithuania.

The Fisheries Department under Ministry of Agriculture of the Republic of Lithuania is checking:

- whether first buyers of fisheries products are registered;
- accuracy of information in the sales notes and take – over declarations. Additionally there could be checked production price and amount entered in sales notes and in invoices;

- whether fish placed for the marketing complies with the minimum size set by Council Regulation (EC) No 2406/96 of 26 November 1996 laying down common marketing standards for certain fishery products;
- grading of fisheries products placed for the first sale by size and freshness according to Council Regulation (EC) No 2406/96 of 26 November 1996;
- transportation of fisheries products until and after first sale, checking the consignment and (if fisheries products have been declared as sold) documents proving that a sales transaction has taken place.

Fisheries Department under Ministry of Agriculture is responsible for supplying data to European Commission.

The following institutions are responsible for data collection, processing and assessment:

1. statistics:

- ✓ Fisheries Department under Ministry of Agriculture, administering CFDB (Central Fisheries Data Base) and NFVR (National Fishing Vessels Register);
- ✓ Lithuanian Institute on Agricultural Economics – aggregates data and provides it to Fisheries Department (FD)

2. biological data:

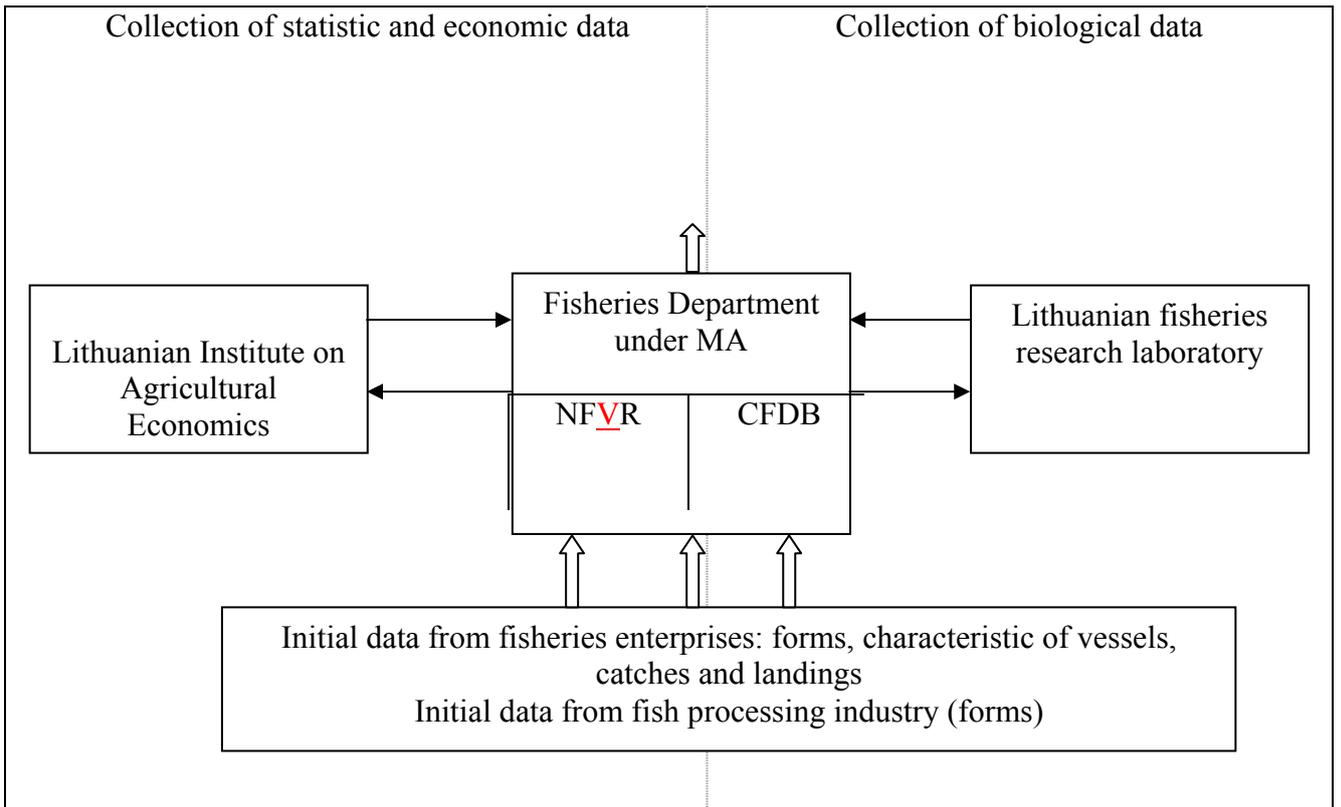
- ✓ Laboratory of Fisheries Research of Lithuanian State Fisheries Research Centre (FRL) – conducts research, aggregates data and provides it to Fisheries Department

3. collection of economic data:

- ✓ Lithuanian Institute on Agricultural Economics develops forms, which are sent on behalf of FD and processes information received from them, aggregates it and submits to Fisheries Department.

3 data collection and management bases will be created:

- 1) Main data base at Fisheries Department under Ministry of Agriculture;
- 2) Lithuanian Institute on Agricultural Economics will store the forms data and other initial data, necessary to carry out analysis;
- 3) Fisheries research laboratory.



1. Image. Data collection diagram.

STRUCTURE AND METHODOLOGY OF MINIMUM PROGRAMME

A. Structure of programme

1. Data collection programme is comprised of the following modules:

- a) assessment of fishing capacities and fishing efforts;
- b) assessment of catches and fish landings and samples taken at sea and on landing;
- c) assessment of economic situation.

B. Assessment of data reliability and representation

The Fisheries Department under Ministry of Agriculture has a Central Fisheries data base (CFDB) and National Fishing Vessels Register (NFVR). The data from these sources will be detailed.

Information on landings by species, fishing areas, fishing efforts and fishing capacity will be provided accurately with the maximum possible accurateness. All sampling will be performed in the manner that it will meet the definition of statistic term *random sampling* as better as possible.

The aim of economic data collection of fishing vessels is to reach +25 per cent accuracy within the reliability interval of 95 per cent by using a selection methodology. The final data reliability level will be calculated after collecting the forms in accordance with standard statistical methodology.

Co-operation between Lithuania and other member states and reporting to the Commission

The collection of information on fishing capacity, fishing effort, economics and landing statistics is conducted at a national level. Biological information about catches, information gathered by research vessels and information about discards are coordinated internationally in most cases and carried out in close cooperation with research institutes in Member states as well as third countries.

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) No. 153/2000

National Correspondent

Lithuania has assigned the Fisheries Department under Ministry of Agriculture as the National Correspondent.

Levels of precision

The information on landings by species, catch areas, fishing effort and fishing capacity will be given on the highest possible level of precision. For the biological and economical

information level of precision can not be estimated at this stage. Within the first year of the programme methods and procedures to estimate the strict precision of the data will be developed.

THE ASSESSMENT OF FISHING FLEET CAPACITIES AND FISHING EFFORTS

(Module 1)

C. Data collection on fleet fishing capacities.

The programme aims to assess fleet segments, vessel numbers in each of them, total and average gross tonnage (T), engine power (kW) and age of the hull with the consideration of fishing gears and length of vessels.

Data collection levels:

- the data is collected by fishing methods, used fishing gear and length of vessels (under Annex of regulation 1639/2001 III);
- data is collected annually.

Accuracy level:

The data defined in Regulation (EC) No. 2090/98 must be detailed and reliable. For other data the third accuracy level must be ensured.

Sources of collected data and responsible institutions

Data are collected from National fishing vessels register and logbooks.

Indicators	Source	Responsible institution
Length of vessel (LOA), m	National fishing vessels register	Fisheries Department under MA
Gross tonnage (GT)	National fishing vessels register	Fisheries Department under MA
Main engine power (kW)	National fishing vessels register	Fisheries Department under MA
Age of vessel (hull), years	National fishing vessels register	Fisheries Department under MA
Fishing efforts by fishing method (number of days)	Logbook	Fisheries Department under MA

The data from National fishing vessels register, which is managed and administered by Fisheries Department under Ministry of Agriculture by EC Regulation 2090/98 (from 1 September 2004 replaced by Regulation of EC 26/2004), will be detailed.

The vessels will be segmented in accordance with EC Regulation 1639/2001, Annex III by fishing time using certain fishing gear, i.e. if the vessel uses a certain fishing gear for more than 50% of the time it will be attributed to a corresponding segment. If no fishing gear are used for more than 50% of the fishing time, the vessel is attributed to the segment of vessels using mixed types of fishing gear.

By order of Director of Fisheries Department under Ministry of Agriculture on fishing vessels classification No. VI-20 the following segments have been established:

- vessels up to 12 m length (Baltic Sea coastal area);
- trawlers (Baltic Sea (except for coastal area));
- netters (Baltic Sea (except for coastal area));
- pelagic trawlers (Baltic Sea (except for coastal area));
- trawlers (international waters)

By requirements of regulation 1639/2001, Annex III, if the segment is comprised of less than 10 vessels it should be merged with the nearby segment. The final number of segments will be established upon the expiration of an accounting year and assessment of the fishing data.

The fishing vessels will be divided into segments at the beginning of each year and upon processing of last year's data from National fishing vessels register and logbook. The data listed above will be issued to the Commission in aggregated form by each segment and updated on yearly basis.

D. Collection of data on fishing efforts

In order to meet requirements set forth in the Commission Regulation (EC) No. 1639/2001, Annexes V-X, EU member states must collect and evaluate data on fishing efforts of the vessels and fuel consumption. The efforts are assessed taking into account to fishing methods (Annexes V and VIII of the said regulation), with the indication of vessel size and fishing areas.

Since 2005 Lithuania collects effort data on the vessels less than 10 meters long, therefore separate pilot study is not needed. In 2005 all fishing vessels effort data will be detailed.

Parameters:

- fuel consumption;
- the fishing efforts by fishing method (Regulation No. 1639/2001, Annex V)
- specific fishing efforts (by trawls, bottom set or drift nets, or other mixed-type fishing gear used in vessel) related with resources of important fish species (Regulation 1639/2001, Annex VI).

Data collection levels:

- the quantity and value of consumed fuel selected once a year by vessels of each segment;
- data on fishing efforts are collected each quarter by segments, fishing methods and geographic fishing areas;
- data on specific fishing efforts are collected each quarter by fishing methods and used fishing gears and by geographic fishing areas.

Accuracy levels:

Data, related with Commission Regulation No. 2807/83 (establishes detailed rules on data collection of catches in member states), must be detailed, they are collected by Fisheries Department under Ministry of Agriculture, Central Fisheries Data Base (CFDB). Meanwhile, in other data, collected in accordance with selection procedure, each segment on average will be assigned: 2nd reliability level to fuel consumption data and fishing efforts in accordance with fishing methods and 1st reliability level will be assigned to specific fishing efforts.

Collected data sources and responsible institutions

Indicators	Source	Responsible Institution
Consumed fuel volume	Survey	Fisheries Department under MA (forms)
Consumed fuel price	Data from Department of Statistics	Fisheries Department under MA
Consumed fuel value	Data from enterprise (vessels) accounting (survey)	Fisheries Department under MA, LIAE
Fishing area	Logbook (CFDB)	Fisheries Department under MA
Fishing efforts by fishing method (number of days)	Logbook (CFDB)	Fisheries Department under MA
Fish quantity by species (as stipulated in Annex VIII)	Logbook (CFDB)	Fisheries Department under MA
Length of vessel (LOA), m	National fishing vessels register	Fisheries Department under MA

Fishing efforts by fishing method

Fishing effort established as weighted (by Annex V) fishing days (as specified in D.1.a) by certain fishing method (Annex VIII) will be accounted by fishing areas (Annex I, aggregation level 3).

Specific fishing efforts

Fishing effort, established as weighted (by Annex V) fishing days (as specified in D.1.a) by certain fishing method (Annex VIII) will be accounted by fishing areas (Annex I, accuracy level 3) and by fish species (as specified in D.1.a (iii) and Annex VI).

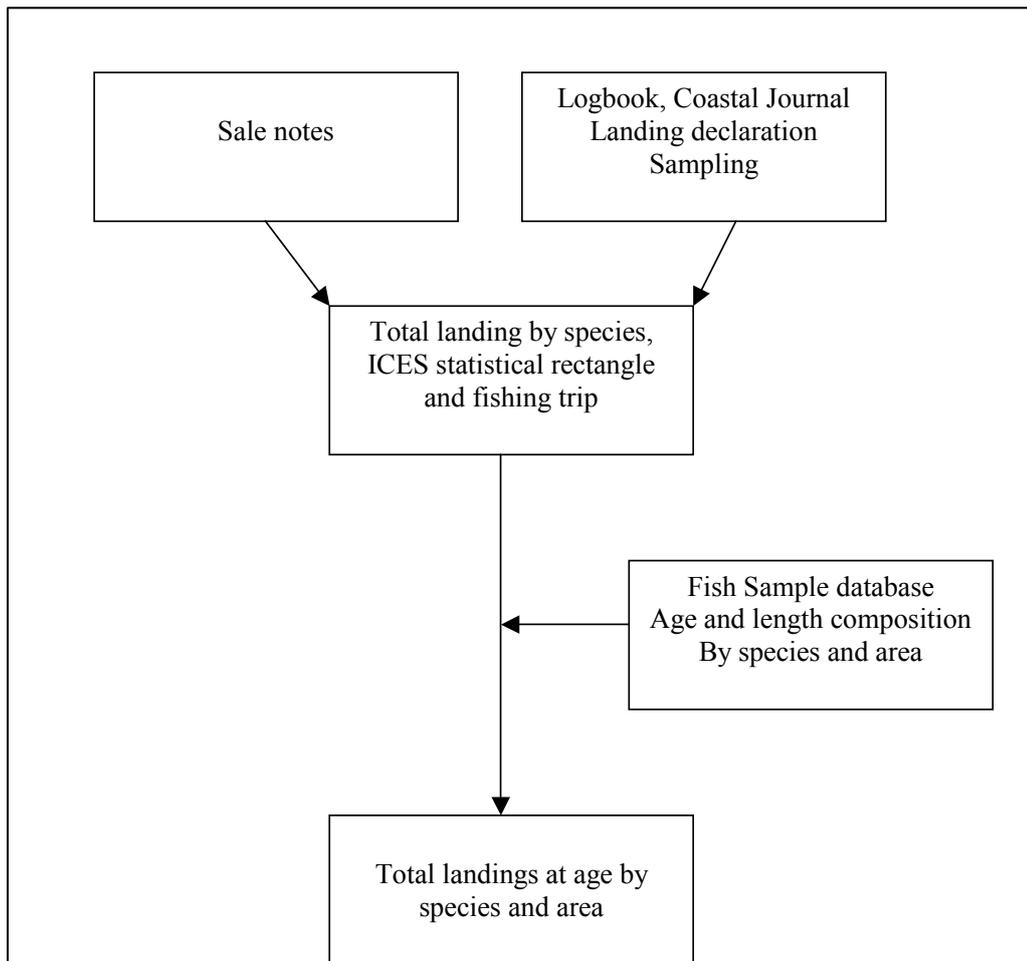
Fishing efforts are assessed each quarter by processing the data collected from logbook, National fishing vessels register, sales notes, etc. The initial data are provided for processing to Lithuanian Institute on Agricultural Economics from CFDB on the last day of each quarter.

EVALUATION OF CATCHES AND LANDINGS IN THE SEA OR COASTAL AREA (Module 2)

E. Collection of data on catches and landings in the sea or coastal area

Member States must report on commercial quantities of all fish and other living resource landings on coast. The data will be related with the total quantity of fish landings and

2 Image. Diagram of landings assessment by age and species



provided by species, divided into fishing areas. The data on discards and total catches will be attributed to those fish resources, which are described in Commission Regulation (EC) No 1639/2001, Annex XII.

Geographic origin of catches and landings will be reported at the 2nd accuracy level, (in accordance with Commission Regulation No. 1639/2001, Annex XII).

By official data (order of Lithuanian Republic minister of agriculture in 2001 September 13, Nr. 319) conversion factors are:

	Head removed	gutted
Cod	1,661	1,11
Salmon	1,122	-----
Herring	1,389	-----
Baltic sprat	1,389	-----
Turbot	1,266	1,064
Flounder	1,504	1,136
Other species	1,49	1,126

Data on landings quantity are collected from fishermen and first buyers in accordance with Council Regulation No. 2847/93, which has aimed to introduce inspection system at fishing points.

The landings quantities in Lithuania will be reported to European Commission on a yearly basis. The reported values will be related to catches only after cross-checking of data from record sheets, landing declarations, sale notes and biologic sampling (Image 2). The data on species, quantities, catch point are collected from data base, which is comprised of records sheets, sale notes and other documents listed and protected in accordance with Commission Regulation No. 2847/93.

Recreational fisheries

Last 3 year recreational cod fishery begins to develop with full power. Specialized recreational salmon and trout fishery are not developed in rivers and in the Baltic Sea coast.

Therefore Lithuania will analyse and will give data about recreational cod catches.

Discard sampling

Collection of samples for evaluation of length range composition within discards. Annex 2 provides the sheet identifying species, for which discard estimations shall be performed pursuant to the provisions of Regulation No. 1639/2001 article 3.1 H 1 section e). Annex 2 also provides minimal number of samplings and individuals, required for identification of length and age ranges, estimated pursuant to the provisions of Commission Regulation No. 1639/2001 Annex XV.

Monitoring of discards will be dealt with in plans for module H as this will be done simultaneously with sampling of commercial catches at sea. Information on discards will be combined with landings to an estimation of catches. There is no authority in Lithuanian law, which give the possibility to enforce the fishermen to have observers onboard. Therefore, only vessels where the skipper has agreed in having observers onboard will be sampled.

New rules on international cooperation concerning planning of discard sampling shaping, sampling performance and calculation methods are proposed by ICES PGCCDBS. According to this methodology Lithuania will analyse fish discards.

Samples to identify discard length range structure shall be taken:

- From III d ICES area, 26 sub-area, Lithuanian Exclusive Economic Zone (LEEZ)
- Quarterly.

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

Data will be collected by staff from FRL, primarily by sampling on board commercial fishing boats, but also in ports during landing. In such cases, the part of the catch, which normally will be discarded, will be landed separately from the normal landing part of the catch and worked up and recorded. In this case the same information are collected and recorded as if an observer has been on board.

The information to be sampled is:

- Vessel size and fishing gear type, mesh size 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.

Data on commercial catch landing shall be collected pursuant to procedures of statistics in such as to ensure the third level of precision; while data on discards for cod, sprat, Baltic herring and plaice shall be collected so as to ensure the first level of precision.

All biological data shall be stored in databases of Fisheries Research Laboratory and Fisheries Department under the Ministry of Agriculture. Data security shall be promoted in accordance with accepted standards.

F. Collection of data concerning the catches per unit effort and/or effective effort of specific commercial fleets

Lithuania not collected CPUE data for stock assessment but from 2006 starts data collection like pilot study for further background.

G. Scientific evaluation of the surveys of stocks

Pursuant to the provisions of Commission Regulation (EC) No. 1639/2001 3.G.1.i, all surveys, listed in Annex XIV, provided with the priority index 1, shall be performed. Member States have made a commitment to ensure continuation of previously initiated projects and perform surveys of stocks amount and distribution, disregarding the data collected on commercial fishing catch.

Lithuania will ensure the continuation of previous surveys of stocks with its national programmes, using research-vessel “Darius”, which will execute all necessary surveys at open sea. Twice per year (in spring and autumn), it will perform acoustic surveys of sprat and Baltic herring stocks within Lithuanian economic area. Not less that once per quarter, 8 trawls covering whole Lithuanian economic area will be executed. During these expeditions, data on cod, sprat, Baltic herring and flounder distribution, length and age range, as well as variety of species within catches and discards will be collected.

Baltic International Trawl Survey (BITS)

The survey will be conducted twice during a year, in the first quarter (2 days at sea, 5 trawl stations) and in the fourth quarter (2 days at sea, 5 trawl stations) with research vessel “Darius”. The surveys cover LEEZ area.

The primary purpose is to produce indices for recruitment and stock abundance of the Baltic cod stock. Sampling of individual cod includes fish length, age, weight, sex and gonad maturity. The otoliths will be analyzed at FRL in Klaipeda.

During the survey a TV3 bottom trawl will be used at day-time.

Herring Acoustic Survey

The survey will be conducted twice during a year, in the second quarter (2 days at sea, 5 trawl stations) and in the fourth quarter (2 days at sea, 5 trawl stations) with research vessel “Darius”. The surveys cover LEEZ area.

The purpose is to provide acoustic abundance estimates of herring and sprat in the LEEZ. The herring and sprat are length measured onboard and sent to FRL in Klaipeda for further examinations such as age, weight, sex and gonadal maturity. Age determination takes place in accordance with standardized methods.

H. Catch biological sampling: length and age range

Member States shall make incidental biological sampling to define length range composition and, if necessary, typical age ranges for all landed resources, listed in Annex XV to Commission Regulation No.1639/2001 and for discards of species, listed in Annex XII.

Pursuant to Council Regulation No. 2847/93, Lithuania shall take all necessary means to promote collection of required data from the vessels under foreign flag.

Biological sampling shall be performed, if Lithuanian TAC (total allowable catches) or total landing of major fish species obviously exceeds the limits, set under provisions of Commission Regulation (EC) No. 1639/2001 Chapter H.1.d). Annex 1 provides EC and Lithuanian TAC and landings. Information on Lithuanian and other European Union Member States TAC and landings are provided for every fish resource as an average of three years (2002-2004).

Biological sampling is aimed to identify fish quantities and average weight at particular age for catch landed in Lithuanian port (Klaipėda). These records shall constitute the major data pool for fish resource exploitation analysis and later they will provide the basis for resource estimations and forecasts.

All weight measuring data shall be fixed as if for unprocessed fish and the measurements will be performed on unprocessed fish, as usual. For processed fish, weight conversion factors shall be applied.

Standard sampling for biological analysis of landings

The standard sampling procedure will be performed quarterly in III d of ICES, in the only Lithuanian port Klaipėda, where fish is being landed. Standard sampling will be made from catches, segmented by certain commercial weight categories. Incidental sampling will be made from every category. Sampling will be based on annual sampling rules, indicated in

Commission Regulation No. 1639/2001 and provided in its Annex XV. Accuracy level is indicated alongside with the sampling rules, provided in Annex XV. Minimum number of Lithuanian samplings for each of fish species and number of individuals with defined age and length is provided in Annex 1.

The samples will be analyzed in the fishing port and Fisheries Research Laboratory. All individuals within a sample will be analyzed applying standard measurements:

- Length
- Weight
- Age

In laboratories, age identification will always be performed using standard methods (ANON. 2000 a).

Description of every stock included into Lithuanian data collection programme is provided below in the following sequence: Lithuanian landings, Lithuanian TAC portion in EU TAC (%) and short description of fishing.

The Baltic Cod. ICES area III d.

In 2004, in Lithuania landed 3032,27 tons of cods; Lithuanian TAC constitute 4,68 % of the Community share of TAC.

Cod fishing in the Baltic is performed using bottom trawls and gillnets. Bottom trawling is performed in daytime at the depth of 30 to 100 meters almost all year round with an exclusion of summer months when fishing is forbidden. Cod fishing by means of gillnets usually involves gillnets, having length of 4 to 6 km. In recent years, recreational cod fishing has also been gaining popularity, so it would be reasonable to collect data on such fishing catch, as well.

Sampling will be performed in accordance with standard procedures. Acquired data will be stored at Fisheries Research Laboratory and Fisheries Department.

The Baltic Herring. ICES area III d.

In 2004, in Lithuania landed 1685,58 tons of Baltic herring. Lithuanian TAC constitute 1,9% of the of the Community share of TAC.

Usually, Baltic herring are fished with pelagic trawls, sometimes with bottom trawls. Next to that, before and during spawning period in inshore areas, Baltic herring is fished with gillnets. Baltic herring fishing is performed in all seasons, but in winter and spring it becomes much more intensive. Every spring and autumn, Baltic herring stocks in Lithuanian economical zone are researched using hydro-acoustic method at different depths starting from 5 m by research-vessel “Darius”.

Sampling is performed in accordance with standard procedures. Acquired data is stored at Fisheries Department and Fisheries Research Laboratory.

The Baltic sprat. ICES area III d.

In 2004, in Lithuania landed 5036,26 tons of Baltic sprat. Lithuanian TAC constitute 5,00% of the Community share of TAC. Baltic sprats are fished all year round with an exception of the warm period from June to September.

Baltic sprats are fished using pelagic trawls. Every spring and autumn, Baltic sprat stocks are surveyed using hydro-acoustic method by research-vessel “Darius”, able to access shallows in depth of up to 5 m.

Sampling is performed in accordance with standard procedures. Acquired data is stored at Fisheries Department and Fisheries Research Laboratory.

The Flounder. ICES area III d.

Lithuania is interested in performing research of flounder within the framework of this program, as well, because they have been making a considerable share of marine catch recently. Flounder are fished with flatfish trawls and also fall-in as by catch, when fishing cod. As cod resources and catch quotas are diminishing, many fishermen start to specialize on flounder fishing with increasing intensity.

Sampling is performed in accordance with standard procedures. Acquired data is stored at Fisheries Department and Fisheries Research Laboratory.

Data collection in NAFO, NEAFC, Salvador zones

According Commission staffs working paper (STECF) (Brussels 14.2.2005; SEC (2005) 255) Lithuania will do pilot discard studies in NAFO, NEAFC, Salvador zones in 2006.

In all zones Lithuania landings are less than 5 percents of EU landings and biological data collection haven't necessity.

I. Other biological sampling

Every third years, Lithuania will submit data on cod, Baltic herring and Baltic sprats: growth trends according to length and weight, relations between length/age and maturity, relation between length/age and fecundity and cross-rate of male and female pursuant to the provisions of Commission Regulation No. 1639/2001 Annex XVI.

Lithuania will estimate male/female cross-rate for commercial catch of provided fish species on board or after landing. But usually, landed fish comes disemboweled, making the above mentioned research impossible. So, if that fails, the cross-rate will be estimated, using information, collected during scientific research. Sampling will be done during expeditions of research-vessel "Darius".

Required parameters will be estimated on the third level of data precision.

Amendments of biological data collection programme, desirable by Lithuania

As one could see from this chapter, as well as from Annexes 1 and 2, Lithuania would not have to perform sampling of Baltic herring and cod under minimum programme, because its TAC of these species is below 5 %. Nevertheless, Lithuania is interested to cooperate with other EU countries in this field and perform research programme alongside with them. Due to these reasons, Lithuania would like to perform research according to amended programme, provided in Annex 3, as biological data collected pursuant to Annexes 1 and 2, as required under Commission Regulation No.1639/2001, would often be statistically unreliable and irrelevant.

EVALUATION OF ECONOMICAL SITUATION (the 3rd module)

J. Collecting economical data by groups of vessels

National fleet economical data collection programme will be based on 3 major data sources:

- National Fishing Fleet Register of Fisheries Department under the Ministry of Agriculture;
- Central Fishery Database administered by Fisheries Department under the Ministry of Agriculture;
- Questionnaire-based information.

Lithuania Institute of Agrarian Economics under the Ministry of Agriculture will prepare questionnaires, evaluate and process acquired data, define data reliability and aggregate that.

Parameters:

- Collected economical data (number of vessels; tonnage, capacity, age; number of crew members; expenditures, including that on fuel, crew, vessel upkeep and maintenance and other; depreciation and interest; vessel value; own and foreign capital shares; fish prices by species; fishing tackle; fishing efforts per vessel segment etc. (Regulation No. 1639/2001, Annex III and XVII);
- Regulation No. 1639/2001 requires estimating vessel value as insurance value, but as Lithuanian fleet has not been insured until 2004 and there is no possibility to identify insurance value, vessels will be evaluated on the basis of replacement value. Vessels insurance in Lithuania is not mandatory, therefore if vessels were not insured it doesn't mean they will be insured in future. But when vessels will be insured investment will be estimated using insured value.
- Expenditures on crew shall cover all the expenditures incurred by employer (social insurance, health insurance etc.)

Data collection levels:

- Data shall be collected per vessel segments.
- Pricing data shall be collected annually pursuant to the requirements of EC Regulation No. 1543/2000 Annex IV.

Level of precision:

- It shall be attempted to ensure the first level of data precision for all parameters of every segment.

Fleet segmentation is the same as used in module C as follows:

- Vessels up to 12 m length (Baltic sea coastal area);
- Baltic sea trawlers 12<m<24 length;
- Baltic sea netters 12<m<24 length;
- Trawlers > 40 m (Atlantic ocean)

Lithuania open sea fleet contains of 65-67 vessels. From year 2005 number of vessels will decrease by 20 vessels because they will be scrapped. Other vessels will be divided into trawlers and netters – vessels using passive and mobile fishing gears.

Sources of collected data and responsible institutions

Economical data is collected, using data of National Fishing Vessel Register of Fisheries Department under the Ministry of Agriculture and CFDB, as well as questionnaire-based data, acquired and summarized by Lithuania Institute of Agrarian Economics, provided by fishing and fish processing companies on the basis of their financial accounting documentation.

Indicators	Source	Responsible institution
Revenues (total and per fish species)	Sales warrants and invoices (questionnaire)	State Tax Inspectorate under the Ministry of Finance, Fisheries Department under the Ministry of Agriculture, LIAE
Production expenditures (total and per fish species): including: - on fuel - on crew (including social insurance) - on vessel upkeep and technical servicing - other maintenance expenditures	Company (boat) accounting data (questionnaire)	Fisheries Department under the Ministry of Agriculture, LIAE
Depreciation	Company (boat) accounting data (questionnaire)	Fisheries Department under the Ministry of Agriculture, LIAE
Financial situation: own and foreign capital shares	Company (boat) accounting data (questionnaire)	Fisheries Department under the Ministry of Agriculture, LIAE
Vessel value (including value of leased equipment): - insurance value (desirable) or replacement value, or acquirement (book) value	Company (boat) accounting data (questionnaire)	Fisheries Department under the Ministry of Agriculture, LIAE
Landed fish amounts per species, t	Fishing registers, debarkation declarations (CFDB)	Fisheries Department under the Ministry of Agriculture
Prices per fish species (quarterly and annual averages)	Sales warrants and invoices (questionnaire)	State Tax Inspectorate under the Ministry of Finance, Fisheries Department under the Ministry of Agriculture
Landed fish value per species	Sales warrants and invoices (questionnaire)	Fisheries Department under the Ministry of Agriculture
Employment: Average annual FTE	Company (vessel) accounting data	Fisheries Department under the Ministry of Agriculture, LIAE

Indicators	Source	Responsible institution
	(questionnaire)	
Information on vessels within particular segment: - number of vessels - tonnage (BT) - engine power (kW) - age (in years) - fishing gear used	National Fishing Vessel Registry, Fishing registry	Fisheries Department under the Ministry of Agriculture
Fishing efforts	National Fishing Vessel Registry	Fisheries Department under the Ministry of Agriculture

LIAE has prepared questionnaires for collection of required data on vessels, fishing in the open Baltic, inshore and in the Atlantic (Annexes 4-6).

First of all, fishing fleet will be segmented by categories, as required under Regulation No. 1639/2001 Annex III. Fisheries Department will supply Lithuanian Institute of Agrarian Economics with fishing fleet data, required for economical evaluation. The Institute will process, evaluate and aggregate the data pursuant to the requirements of Regulation No. 1639/2001. Fishing fleet segments and vessel attribution to them will be defined (aggregation of information on fishing efforts and fleet segmentation is a part of the 1st module – fishing capacity and efforts evaluation module and this task will be performed by LIAE, as well).

Some part of information will be acquired by means of questionnaire. On behalf of Fisheries Department, questionnaires will be sent to all companies, engaged in commercial fishing. We expect to receive filled questionnaires from about 50-60% of the companies. Questionnaires and information, acquired from those, will be accumulated, processed and aggregated by LIAE, promoting data confidentiality.

Besides that, conferences and seminars will be organized in order to explain the purposes of questionnaires for fishers.

Possible difficulties:

- Some indicators, such as capital investment scope or company's financial situation may be considered to be confidential;
- It may be complicated to evaluate employment, as fishermen's work on board has its own specifics, and it is difficult to separate full-time employment from part-time employment;
- Questionnaire data may appear to be partial; filled questionnaires may be submitted for processing after expiration of the deadline.

K. Collection of data concerning the processing industry

Member States shall collect selective data for probationary research pursuant to the requirements of Regulation No.1639/2001: production amounts, costs, product prices, revenues, production expenditures per expenditure items, wages, fuel and power, raw stock per species, packing materials, other maintenance costs, immanent costs, financial situations, investments, number of employees and productive capacity utilisation rate (Regulation No. 1639/2001 Annex XIX).

d) Sources of collected data and responsible institutions

Data collected from fish processing companies by means of questionnaire by Fisheries Department under the Ministry of Agriculture and summarized by LIAE will be used.

Indicator	Source	Responsible institution
Life weight (total and per fish species), t	Company accounting data (questionnaire)	Fisheries Department under the Ministry of Agriculture, LIAE
Revenues (total and per product)	Company accounting data (questionnaire)	Fisheries Department under the Ministry of Agriculture, LIAE
Production expenditures (total and per product): including: - labour remuneration (including social insurance) - engine power - raw stock - packing - other maintenance expenditures	Company accounting data (questionnaire)	Fisheries Department under the Ministry of Agriculture, LIAE
Depreciation	Company accounting data (questionnaire)	Fisheries Department under the Ministry of Agriculture, LIAE
Financial situation: own and foreign capital shares	Company accounting data (questionnaire)	Fisheries Department under the Ministry of Agriculture, LIAE
Asset value: - acquirement (book) value or - replacement value or - insurance value	Company accounting data (questionnaire)	Fisheries Department under the Ministry of Agriculture, LIAE
Produced production amount (total and per product), t	Company accounting data (questionnaire)	Fisheries Department under the Ministry of Agriculture, LIAE
Sales prices per product	Company accounting data (questionnaire)	Fisheries Department under the Ministry of Agriculture, LIAE
Produced production value (total and per product)	Company accounting data (questionnaire)	Fisheries Department under the Ministry of Agriculture, LIAE
Employment: Average annual number of employees	Company accounting	Fisheries Department under the

Indicator	Source	Responsible institution
converted into full time equivalents (FTE)	data (questionnaire)	Ministry of Agriculture, LIAE
Productive capacity utilisation (annual average), %	Company accounting data (questionnaire)	Fisheries Department under the Ministry of Agriculture, LIAE

Questionnaire prepared by LIAE to collect required data on fish processing industry is provided in Annex 7.

Economical information on fish processing industry will be collected by means of questionnaires. On behalf of Fisheries Department, questionnaires will be sent to all fish processing companies. In the most optimal case, we can expect answers from 50% of the respondents.

Species:	Cod	Baltic herring	Baltic sprat
Lithuanian TAC (t)	2742	2568	18901
Lithuanian TAC (%) from EC share	4,68	1,9	5,00
Lithuanian landings in Lithuania in 2002-2004 (t)	2722	1771	3554
Lithuanian landings in Lithuania in 2004(t)	3032	1685	5036
Requirement for sampling (Y/N)	N	N	N
Index for sampling number calculation	1/200	1/1000	1/2000
Number of individuals, measured per sample	50	100	100
Number of individuals per sample with identified age	25	100	50
Minimal number of samples	12	2	1
Minimal number of measured individuals	600	200	100
Minimal number of fishes with identified age	300	200	50

Annex 2

Species:	Cod	Baltic herring	Baltic sprat
Lithuanian TAC (t)	2742	2568	18901
Lithuanian TAC (%)	4,68	1,9	5,00
Lithuanian landings in Lithuania in 2002-2004 (t)	2722	1771	3554
Lithuanian landings in Lithuania in 2004 (t)	3032	1685	5036
Discard evaluation by weight	>10%	>10%	>10%
Discard evaluation by quantity of individuals	>20%	>20%	>20%
Requirement for discard evaluation (Y/N)	Y	Y	Y
Index for sampling number calculation	1/200	1/1000	1/2000
Number of individuals, measured per sample	50	100	100
Number of individuals per sample with identified age	25	100	50
Minimal number of samples	12	2	1
Minimal number of measured individuals	600	200	100
Minimal number of fishes with identified age	300	200	50

Annex 3

Sampling of landings		
Species	Number of measured individuals	Number of individuals with identified age
Cod	1000	500
Baltic herring	1500	1000
Baltic sprat	1000	500
Flounder	500	200
Sampling of discards		
Cod	1000	400
Baltic herring	1500	600
Baltic sprat	1000	200
Flounder	500	200

Fishing company operation indicators for year (in the open Baltic)

Vessel name:

Vessel registration number:

Indicator	Cod	Sprat	Baltic sprat	Salmon	Plaice	Other	Total
Fish catch total in tons							
Fish value (sales revenue) total in thousands LTL							
Fish price per ton, LTL/t							
Expenditures total in LTL							
Including:							
Fuel and lubricants							
Crew wages and salaries							
Social insurance payments							
Allowances for food							
Vessel upkeep							
Income tax (PPIT)							
Road tax							
Resource taxes (4%+1%)							
Depreciation							
Interest							
Other costs							
Fish cost per ton, LTL/t							
Other operating income							
Other operating costs							
Gross profit in LTL							
Profit tax							
Net profit in LTL							
Number of employees							
Number of employees, working on board							
Number of days fished							
Number of days afloat							
Fishing gear:							
.....							
.....							
.....							
Capital:							
Own, %							
Borrowed, %							
Foreign, %							
Vessel value in thousands LTL:							
Insurance							
or replacement							
or book value							
Investments per year							

Fishing company operation indicators for year (coastal area)

Company:

Vessel types, number of vessels:

Indicator	Cod	Sprat	Baltic sprat	Salmon	Plaice	Other	Total
Fish catch total in tons							
Fish value (sales revenue) total in thousand LTL							
Fish price per ton, LTL/t							
Expenditures total in LTL							
Including:							
Fuel and lubricants							
Crew wages and salaries							
Social insurance payments							
Allowances for food							
Vessel upkeep							
Income tax (FPIT)							
Road tax							
Resource taxes (4%+1%)							
Depreciation							
Interest							
Other costs							
Fish cost per ton, LTL/t							
Other operating income							
Other operating costs							
Gross profit in LTL							
Profit tax							
Net profit in LTL							
Number of employees							
Number of employees, working on board							
Average annual number of employees (in FTE)							
Number of days fished							
Number of days afloat							
Fishing gear:							
.....							
.....							
.....							
Vessel value in thousands LTL:							
Insurance							
or replacement							
or book value							
Investments per year							

Fishing company operation indicators for year (in the Atlantic)

Company: Vessel No. (name)

Fishing area: sub-area

Indicators	Perch	Mackerel	Other fish	Shrimp	Total
Fish catch total in tons					
Fishing revenue in thousands LTL					
Fish (shrimp) sales price per ton, LTL/t					
Expenditures total in LTL					
Including:					
Fuel and lubricants					
Fishing gear					
Materials					
Vessel and fishing gear upkeep					
Production storage on shore					
Crew wages and salaries					
Social insurance payments					
Crew allowances for food					
Income tax					
Resource taxes					
Port charges					
Profit tax					
Depreciation (wear)					
Interest					
Other costs					
Fish cost per ton, LTL/t					
Gross profit in LTL					
Net profit in LTL					
Number of employees on board					
Number of days fished					
Number of days afloat					
Fishing gear type					
Capital:					
own, %					
borrowed, %					
foreign, %					
Vessel value in thousands LTL:					
Insurance					
or replacement					
or book value					
Investments per year					

Fishing company operation indicators for year

Company:

Indicators	Total	Product types			
	
Processed stock total in tones					
Produced products total in tones					
Revenue total in thousand LTL					
Sales price per ton, LTL/t					
Expenditures total in LTL					
Including:					
Raw stock value					
Fuel and power					
Wages					
Social insurance payments					
Packing					
Maintenance costs					
Depreciation (wear)					
Interest					
Other expenditures					
Production costs per ton, LTL/t					
Gross profit in LTL					
Net profit in LTL					
Average annual number of employees (in FTE)					
Average annual productive capacity utilisation, %					
Asset value:					
book value					
or replacement					
or insurance					
Investments per year					
Capital:					
own in %					
borrowed in %					
foreign in %					