

**LATVIAN NATIONAL PROGRAMME FOR  
COLLECTION OF FISHERIES DATA**

**2006**

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## Abbreviations

BIODATA	Biological Data System for Latvian Fisheries
BITS	Baltic International Trawl Survey
CECAF	Fishery Committee for the Eastern Central Atlantic
CPUE	Catch per Unit Effort
DIFRES	Danish Institute for Fisheries Research
EFDC	European Fisheries Data Collection System
EC	European Commission
EP	Extended Programme
GT	Gross tonnage
IBSFC	International Baltic Sea Fisheries Commission
IBSSP	International Baltic Sea Sampling Programme
ICES	International Council for the Exploration of the Sea
ICIS	Integrated Control and Information System for Latvian Fisheries
kW	Kilowatts
LFAD	Latvian Fisheries Analysis Data Base
LSR	Latvian Ships Register of the Latvian Maritime Administration
LPUE	Landing per Unit Effort
LATFRA	Latvian Fish Resources Agency
MIWA	Marine and Inland Waters Administration of the State Environmental Service
MP	Minimum Programme
NAFO	Northwest Atlantic Fisheries Organization
NBF	National Board of Fisheries, Ministry of Agriculture of the Republic of Latvia
NEAFC	North East Atlantic Fisheries Commission
RCM	Regional Coordination Meeting
SGRN	Subgroup on Research Needs
STECF	Scientific, Technical and Economic Committee for Fisheries
TAC	Total Allowable Catch

## 1. Introduction

The “Latvian National Programme for Collection of Fisheries Data, 2006” (hereinafter – the Programme) has been developed in accordance with the rules laid down in the:

- *Council Regulation (EC) No 1543/2000 of 29 June 2000 establishing a Community framework for the collection and management of the data needed to conduct the common fisheries policy;*
- *Commission Regulation (EC) No 1639/2001 of 25 July 2001 (hereinafter – the Regulation) 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) N<sup>o</sup> 1543/2000;*
- *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 (2000/439/EC).*
- *Commission Regulation (EC) No 1581/2004 of 27 August 2004 amending Regulation (EC) No 1639/2001 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*

Details of activities within the Programme are given item by item based on the Regulation scheme. The summarized input and resources expressly required to fulfil the items within the Minimum Programme (MP) and Extended Programme (EP) are set out in Section 7 of the Programme.

Though it is not requested by present Regulation, the elements of the ecosystem approach are introduced in the Programme, where applicable.

The detailed input and budget figures for 2006 programme are provided in the separate from this document file fiches (“Latvia-nat-progr2006-MP-EngEUR.xls” and “Latvia-nat-progr2006-EP-EngEUR.xls”), as requested by the Commission. All costs are expressed in EUR, at EU official exchange rate for LVL/EUR as for the May 2005.

The programme will be conducted in close cooperation among:

- **National Board of Fisheries of the Ministry of Agriculture of the Republic of Latvia (NBF)**  
NBF is responsible for the overall management of the fisheries sector, implementing state policy and sector development strategy, participating in the elaboration of legislation and managing fish resources in inland, territorial waters and economic zone of the Republic of Latvia.
- **Latvian Fish Resources Agency (LATFRA)**  
LATFRA is a governmental institution – State Agency, responsible for and carrying out fisheries research and provides the elaboration of the scientific advice concerning the sustainable exploitation and enhancement of live marine and fresh water resources.
- **Marine and Inland Waters Administration of the State Environmental Service (MIWA)**  
MEB is responsible for and performs fishery and environment monitoring and control at sea and inland waters

- **Latvian Ships Register of Maritime Administration of the Ministry of Transport of the Republic of Latvia**

Latvian Ships Register (LSR) is responsible for the registration of ships, including fishing vessels. Latvian Navigation Safety Inspection of the Latvian Maritime Administration is responsible for the re-measurement of fishing vessels.

The National Board of Fisheries is acting as a coordinator for the Programme.

Primary data collected or used under the Programme will be stored in the following databases:

- **Integrated Control and Information System for Latvian Fisheries (ICIS)**, located and administered by the NBF. MIWA, LATFRA and LSR enter information into the ICIS system. ICIS system includes the MINCIS subsystem to input of data on Logbooks, Landing Declarations and Notifications on the First Fish Sale. ICIS system incorporates, in particular, the following databases:
  - Fishing Vessel Register: data on the engine capacity of fishing vessels,
  - Logbook database: data on offshore and coastal catches, landings and on fishing effort,
  - Notifications on the First Fish Sale database: data on quantities landed and first sales prices.
- **Biological Data System for Latvian Fisheries (BIODATA)** located and administered by LATFRA. The System includes the data on biological parameters of catches, landings and discards, other biological data, scientific survey data of fish and economic data on groups of vessels.
- **Latvian Fisheries Analyses Database (LFAD)** within the framework of the Programme 2005 had been established, containing the aggregated data according to the requirements of the Regulation. **LFAD** will be connected both, to ICIS and BIODATA and the European Fisheries Data Collection System (EFDC) and during the Programme 2006 updated. LFAD database will be located and administered by LATFRA in cooperation with NBF.

All data collected under the Programme will be dealt with in confidence as established by Regulation. Accesses to the data will be limited to authorized staff member from the participating institutions.

### **1.1. Cooperation and task sharing between Latvia and other Member States**

Collection of information on fishing capacity, fishing effort, catch, landing and economic statistics as well as partially on biological parameters will be coordinated entirely on the national basis though biological information on catches, surveys on research vessels and information on discards in most cases will be coordinated internationally by the International Council for the Exploration of the Sea (ICES) and will be carried out in close cooperation with research institutes in EU Member States and third countries. The recommendations of RCMs on the Baltic and NAFO areas will be taken into account.

Biological data collection on foreign landings in the Baltic Sea will be coordinated between Latvia and Member States, where landings will take place, based on bilateral agreements. As in the NAFO area biological data are collected by observers on vessels, there is no need to collect data after the landing.

### **1.2. National Correspondent**

Latvia has assigned the National Board of Fisheries of the Ministry of Agriculture as the National Correspondent for the implementation of the Programme. The responsible Contact person is Aina Afanasjeva, the Deputy Director of the National Board of Fisheries.

### **1.3. Precision level**

The information on landings by species, by fleets, fishing effort and fishing capacity will be given on the level 3 of precision.

All information concerning landing figures (tonnes by species) will be given as census data, with 100% coverage, as all landings or all fish sold in Latvia are reported.

For the biological information the level of precision can not be estimated at this stage. In 2006 the methods and procedures to estimate the precision of the data will be developed based on 2005 Programme data in co-operation with other countries and this work will be coordinated by the ICES Planning Group on Commercial Catch, Discards and Biological Sampling. Also the recommendations of STECF on the achieving the precision required will be taken into account.

For the collection of biological data on discards and catches at sea LATFRA is partly obliged to rely on the voluntary willingness of the fishing companies to take the scientific observer on board and for collection of economic information - to respond to a questionnaires, therefore samples cannot be considered as truly random.

For the economic data in view of the size of the sample, which exceeds 25% of the total number of vessels in the segment, sufficient reliability can be expected. Technical characteristics of vessels obtained from questionnaires will be compared regularly with the technical characteristics of all vessels in segment in order to assess reliability of data.

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

### 2.1. Collection of data concerning fishing capacity (C module)

#### Minimum programme

##### Parameters

The data on licensed fishing vessels registered in the LSR are included into the ICIS System and contain among other parameters the following information:

- vessel type,
- age of the vessel and main engine,
- vessel length,
- gross tonnage,
- maximum main engine power.

##### Disaggregation levels

According to the data from the Latvian Ships Register, in the beginning of 2005 the Latvian marine fishing fleet included: 12 vessels to fish in the Atlantic, 173 vessels – in the offshore of the Baltic Sea, 21 vessels - both offshore and in coastal zone, and 751 vessels (small boats) for fishing in the coastal waters with stationary gears.

As requested in the Appendix III of the Regulation, the Latvian fleet, based on vessel length and gear used, at present can be disaggregated into five basic segments (table 1):

- 1) Pelagic trawlers of length equal to or over 40 m,
- 2) Pelagic trawlers of length from 24 to 40 m,
- 3) Gillnetters of length from 24 to 40 m,
- 4) Pelagic trawlers of length from 12 to 24 m,
- 5) Polyvalent passive gears coastal boats of length under 12 m.

It must be emphasized, that within the segments 2 and 4 both the pelagic and demersal trawlings are taking place. However according to criterion set in the Regulation, when a fishing gear is considered to be the main fishing gear if it has been used for more than 50% of fishing time, these segments could be defined as pelagic trawlers. In 2005 the number of “pure” demersal trawlers in the Baltic Sea within the size category 24 to 40 m was below 10. As to 2006, the gears used in fishery will depend on the quotas allocated to Latvia in regard to each fish species. It must also be taken into account that, using the opportunities provided by the EU structural funds, the number of fishing vessels has decreased since 2004. This has affected the fleet size and structure.

Table 1 Disaggregation of Latvian fishing fleet

Vessel length					
Type of fishing technique		<12m	12-<24m	24-<40m	>40m
Mobile gears	Pelagic trawlers		+	+	+
	Gears using hooks				
Passive gears	Drift and fixed nets			+	
	Pots and traps				
	Polyvalent	+			

**Precision level**

Information defined in Commission Regulation (EC) No 26/2004 December 2003 concerning the fishing vessel register of the Community will be collected based on ICIS system. As there is no size limit of fishing vessels for the registration in the Fishing Vessel Register and all vessels involved in fishery have to be registered, a near to 100% coverage of all Latvian fishing vessels will be given.

**Extended programme**

No data collection will be carried out within the framework of the EP in 2006.

## **2.2. Collection of data related to fishing effort (D module)**

### **Minimum programme**

#### **2.2.1. Fuel consumption**

Information on the average annual consumption and expenses of fuel, expressed according to the required vessel disaggregation levels, will be collected at the end of the year by sampling method, using the questionnaire.

These data are closely related to Module J: "Collection of economic data by groups of vessels". However, there is difference in periods assessed: data on fuel consumption collected in relation to fishing effort will be collected for the running year, but the fuel data for economic evaluation – for the previous year. This will require in 2006 the additional man/power input for fuel data collection. All segments according to Appendix III will be covered.

#### **Precision level**

Data on average annual consumption of fuel and cost per vessel on an aggregated level by segments as described in Appendix III will be collected based on questionnaires.

#### **2.2.2. Fishing effort by type of technique**

The information on fishing effort is obtained from ICIS databases.

Logbook database is a separate sub-database of ICIS and includes among other parameters the following information:

- vessel name, register number and radio signal,
- departure and arrival dates and time,
- fishing operation date and time,
- fishing operation coordinates,
- gear type used,
- catch per species for each fishing operation,
- landing per species.

First, data from coastal logbooks are input by LATFRA into the MINCIS subsystem, and afterwards imported into the ICIS.

Data on fishing effort by type of technique will be aggregated according to Appendix VIII of the Regulation and presented on a quarterly basis at the level 3 of geographical disaggregation.

Fishing vessels below 10m are included in the Vessel Register of Latvia. They mainly are fishing in the coastal waters with passive gears and are obliged to fill the Coastal Fisheries Logbook, with exception of cod fishing by vessels above 8 m, which have to fill the vessel Logbook.

#### **Precision level**

According the Regulation the data sampling procedures should make it possible to reach the level of precision 2 for the estimated averages by segment.

#### **2.2.3. Specific fishing efforts**

Specific fishing effort is a fishing effort defined as a sum of weighted fishing days (according to Appendix V and Chapter D.1a of the Regulation) using particular fishing method (Appendix VIII of the Regulation) when fishing in certain division (according to Appendix I of the Regulation) for certain species (Chapter D.1a (iii) and Appendix VI of the Regulation).

Information on specific fishing efforts can be provided based on the logbook data, which cover all fishing vessels.

Specific fishing efforts will be associated with stocks of special interest. According to Appendix VI of the Regulation the following species should be included in Latvian MP:

Herring (all areas),

Sprat (all areas),

Cod (all areas),

Salmon (Baltic Sea),

Mackerel (all areas),

Horse mackerel (all areas).

Fishing efforts for these species will be defined as fishing days taking into account the mixed catch compositions according to criteria referred to in Appendix VI of the Regulation.

Within the section “Collection of data related to fishing effort” the following data will be collected:

DATA	SOURCE
Fuel consumption	Questionnaire and/or data of the Central Statistical Bureau
Fuel prices	Questionnaire and/or data of the Central Statistical Bureau
Number of fishing days with a particular type of gear (as defined in Appendix III and VIII)	Logbooks and Coastal Logbooks
Fishing area (as defined in Appendix I)	Logbooks and Coastal Logbooks
Period	Logbooks and Coastal Logbooks
Number of fishing days broken down by species (as defined in Appendix VI)	Logbooks and Coastal Logbooks, Notifications on the First Fish Sale and/or sampling
Vessel length (as defined in Appendix III)	Latvian Fishing Vessel Register

**Extended programme:**

No EP is proposed for this sector in 2006.

### 3. MODULE OF EVALUATION OF CATCHES AND LANDINGS

#### 3.1. Collection of data related to catches and landings (E module)

##### Minimum Programme

##### 3.1.1 Commercial landings of all stocks

##### Overview of Latvian fishery by areas and species

The Latvian fishery is taking place in the Baltic Sea (66% of landings) and in Atlantic NAFO 3M, 3KLMNO, NEAFC (ICES XII) and CECAF FAO 34 areas (37%).

##### **Baltic Sea: ICES area III b-d (excl. Skagerak)**

In 2004 173 Latvian fishing vessels (121 trawler and 52 gillnetters) were operating in the offshore waters in the Baltic Sea and the Gulf of Riga.

The gillnet fleet was targeting mainly cod with bottom set gillnets and only about 20 vessels used also driftnets for salmon fishery. Vessels operated in the ICES SD 24-28, but the majority of the landings were taken in SD 25 and SD 26. 75% of Latvian cod catch was taken by bottom gillnets.

The trawlers fleet was targeting mainly the sprat and herring for human consumption, and the pelagic fishery with single and pair trawls in SD 26 and SD 28 dominated (97% of landings). About 1% of catch was taken with the bottom trawls in the specialized cod and flounder fishery, mainly in SD 26 and SD 28.

The coastal inshore fishery operated mainly with passive gears (trapnets, poundnets, gillnets, hooks) for herring, salmon, pike-perch, flounder, vimba-bream and perch and with Danish seines for flatfishes. 716 boats of the coastal fleet were fishing in 2004. The 20 coastal boats were fishing outside the coastal zone with gillnets for cod and with Danish seines for flounder.

Table 2. Latvian landings (t) in the Baltic Sea in 2004. Appendix XII and XV species

Species	Gillnetters	Trawlers	Polivalent coastal gears
Cod	3747	1234	46
Herring		21251	2308
Sprat		52386	13
Salmon	21		10
Sea trout			7
Flounder	100	524	145
Turbot	1		7
Pike-perch			7
Perch			35
Other species		231	223

### Atlantic: NAFO 3M, 3KLMNO

In 2004 the Latvian fleet in the NAFO area operated with 4 vessels, targeting mainly the Pandalid shrimps in areas 3M and 3L, the redfish in area SA and Greenlans halibut in area 3KLMNO. No other species recorded for 2004.

Table 3. Latvian landings (t) in NAFO areas in 2001-2004. Appendix XII and XV species

Species	Area	2001	2002	2003	2004
Pandalid shrimps	3M	2961	1892	3533	2984
Greenland halibut	3KLMNO	291	11	-	68
Redfish	3M	11	-	-	3
Redfish	SA	-	780	898	704
Pandalid shrimps	3L	67	59	144	143

### Atlantic: NEAFC (ICES XII)

Latvian fishery in NEAFC area (ICES XII) has been restarted in 2002.

Table 4. Latvian landing (t) in NEAFC area (ICES XII) in 2002-2004

Species	Area	2002	2003	2004
Redfish	XII	1061	371	410

### Atlantic: CECAF FAO 34

During 2001-2004 only 2-5 Latvian vessels were operating in CECAF FAO 34 areas 1.31 and 1.32, mainly for sardinella, chub mackerel and horse mackerel. Also small landings (<150 t) of hake, bonito and others were reported as a by-catch.

Table 5. Latvian landings of main fish species (t) in CECAF FAO 34 areas of Appendix XII and XV species in 2001-2004

Species	2001	2002	2003	2004
Sardinella	7689	6132	8 714	8 714
Chub mackerel	9924	7079	10 537	8 999
Horse mackerel	18522	7768	8 674	13 837

### Mixed pelagic fishery

Herring and sprat in Latvian fishery in the Baltic Sea up to 2005 are taken for human consumption only, hence the special sampling of industrial mixed fishery is not planned. If such fishery will be developed in 2006, Latvia will perform sampling as required by Regulation.

### Commercial catch, landing and discard monitoring

Overall annual commercial landings will be provided by species according to the level 2 of geographical disaggregation (Appendix I of the Regulation).

For stocks mentioned in Appendix XII of the Regulation the data concerning catches and landings will be disaggregated as requested by the above mentioned Appendix. The preliminary list

of species based on fishing possibilities available to Latvia or quotas in 2005 is given in Table 5. The landing data will be presented as landing by weight for each segment according to Appendix III of the Regulation. It should be mentioned, that it is difficult to make prognosis about the species which Latvia will be fishing outside the Baltic Sea in 2006 as it will depend on quotas available to Latvia, economic profitability of fishing as well as on measures implemented under the new Common Fisheries Policy.

Table 5. Preliminary list of species represented in Latvian catches and included into the Latvian MP according to the Appendix XII, broken down by fishing areas and frequency of data collection

Species, fishing area		ICES Division	Sampling frequency and stratification	
			Total catch	Discards
<b>Baltic Sea: ICES area III b-d (excl. Skagerak) inc. Baltic</b>				
Yellow eel	<i>Anguilla anguilla</i>	All areas	Q/tech	No
Silver eel	<i>Anguilla anguilla</i>	All areas	Q/tech	No
Herring	<i>Clupea harengus</i>	IIIb-d	Q/tech	No
Sprat	<i>Sprattus sprattus</i>	IIIb-d	Q/tech	No
Cod	<i>Gadus morhua</i>	IIIb-d	Q/tech	Yearly
Flounder	<i>Platichthys flesus</i>	IIIa-d	Q/tech	Triennial
Salmon	<i>Salmo salar</i>	IIIb-d	Q/total	No
Sea trout	<i>Salmo trutta</i>	IIIb-d	Q/total	No
<b>Atlantic: NAFO 3M, 3KLMNO</b>				
Pandalid shrimp	<i>Pandalus spp.</i>	3M	Y/tech	Yearly
Redfish	<i>Sebastes spp.</i>	3M	Y/tech	Derogation
Redfish	<i>Sebastes spp.</i>	3L	Y/tech	Derogation
Greenland halibut	<i>Reihardtius hipoglossoides</i>	3KLMNO	Y/tech	Derogation
<b>Atlantic: NEAFC (ICES XII)</b>				
Redfish	<i>Sebastes spp.</i>	XII	Q/tech	Derogation

Abbreviations: Q/tech – quarterly by type of fishing technique; Q/total – quarterly total; Y/tech – yearly by type of fishing technique

### 3.1.2. Discard sampling

#### Introduction

According to the Regulation, chapter 3.E.1.b, Latvia must collect the discard data in order to be able to present the total estimates of discard rates for selected species (Regulation, Appendix XII). Collection of such data for cod in the Baltic in Latvia has been going on since 1993. Systematic onboard sampling of discards in cod, flounder, herring and sprat fishery took place in 1997-2001 under the EU research project “International Baltic Sea Sampling Programme for Commercial Fishing Fleets (IBSSP)” (study projects No.96/002 and No.98/024). Since 2001 the discard sampling has been performed only on the national base and directed only to cod trawl and gillnets fishery. However, after the expiration of the above mentioned EU project on board sampling of herring and sprat fishery was also continued. No discards in sprat and herring targeted fishery has been recorded during project in 1997-2001 and also afterwards, that could be also be caused by the prohibition of discarding the pelagic fish by IBSFC, as well as by the national fishing regulations. Discard sampling in salmon fishery has not been performed so far.

#### 3.1.2.1 The Baltic ICES area III (excluding Skagerrak)

Table 2 gives an overview of the species and areas for which discard estimates has to be made according to criteria set in Appendix XII of the Regulation. Discard sampling in the Baltic Sea is

required for cod and flounder, as discards for other species are less than 10% of weight or 20% of catch by the number of fish. Systematic on board sampling was carried out in Baltic herring and sprat fishery during 1997-2001 (36 days a year on average) within the IBSSP project. Till recent years the discards in salmon fishery were estimated to be on a very low level. However, at present the situation has significantly changed due to the Baltic salmon market regulations as well as due to remarkable salmon damages in coastal fishery, caused by seals. Therefore the estimation of salmon discards has become important.

The discard sampling schemes for cod under the yearly sampling level and for flounder under the triennial sampling level as given in Table 2 will be organized in a way, that sampling effort is distributed proportionally to the fishing effort and catch in different strata – relatively larger landings imply higher sampling effort and relatively smaller landings imply less sampling effort. This will assure that the biological data are directly associated with the national landing statistics.

Latvian discard sampling will satisfy the methods laid down in internationally agreed sampling manuals within the framework of “International Baltic Sea Sampling Programme for Commercial Fishing Fleets (IBSSP)” (study projects No.96/002 and No.98/024). In these documents most relevant aspects of “at sea sampling” have been covered, including procedures for selecting fishing trips, sub-sampling procedures, recording of data, etc.

Fishing will be characterized according to the gear type, mesh size and target species in order to accurately reflect the discrete discard patterns in the Latvian fishery. The number of samples for 2006 has been planned based on discard information collected during 2001-2004.

Fishing performed in various ICES Subdivisions may differ considerably in respect to duration, number of hauls per trip and handling of the catch. On average, a trip usually lasts up to 7 days. All biological information from catch will be sampled from each haul:

- total weight of discard and landing by each species caught (including non target and non commercial fish species);
- separate length distributions of discard and landing by each species caught. If the retained catch is landed in commercial weight categories, a separate length frequencies will be obtained;
- otoliths to determine the age and mean weight per each length group of cod and other selected species;
- in addition, all relevant vessel, gear and geographical information will be recorded.

### ***Cod (Gadus morhua), ICES III b-d***

According to the Appendix XII of the Regulation the sampling of cod discards will be stratified by:

- ICES division/sub-divisions – 25, 26 and 28.
- quarters of the year - 4.
- 3 fishing techniques (demersal trawl, pelagic trawl, gill-nets).

Total expected number of discard samples of cod – 36.

### ***Flounder (Platichthys flesus), ICES IIIb-d***

Flounder discard sampling should take place on the triennial basis, but since the discard sampling is bound with the collection of biological data which are collected only on board of fishing vessels, discard sampling will be carried out in 2006 and will be stratified as follows:

- by ICES subdivisions – 26 and 28.

- by quarters of the year – 4.
- by fishing techniques – 3 (demersal trawl, Danish seine in coastal areas, gill-nets).

The total expected number of flounder discard and length/age samples from commercial catches in subdivisions 26 and 28 in 2005 – 20, 16 samples of which must be taken from trawl and gill-nets catches and 4 samples – from Danish seine catches.

### ***Salmon (*Salmo salar*) ICES III d***

In Latvia there are two types of fisheries for salmon: offshore fishery with drift-nets and coastal fishery with trap-nets and anchored gill-nets. The sampling of salmon discards in offshore fishery will be conducted in parallel with the biological sampling of the catches that will be carried out by observer on board of the vessel. The sampling of salmon discards in coastal fishery will be also conducted by the observer who is performing the biological sampling of the catches and who will record the total catch (in numbers and weight) and the number of seal damaged and discarded salmon.

### ***Eel (*Anguilla anguilla*) ICES III d***

The landings of yellow and silver eel in coastal fishery are about 2 tons annually. In catch statistics these two eel stages are not separated. Eel is being fished mainly by long-lines or as by-catch when fishing with trap-nets. Daily eel catch usually amounts only to several kilograms, therefore discard data had not been collected and its sampling is not planned for 2006.

### **Storage of discard data**

Discard figures collected will be raised to the relevant Latvian yearly catch broken down by species and fishing technique by applying the ratio between discards and landings observed. Data for cod will be made available also for the ICES Baltic Fisheries Assessment Working Group and salmon data for Baltic Salmon and Sea Trout Working Group.

All Latvian cod catch data sampled during the discard sampling will be entered in the BIODATA database.

Discard data from directed cod fishery are also being submitted to the international common IBSSP database FishFrame, maintained by the Danish Institute for Fisheries Research (DIFRES). This database is being used in ICES working groups to calculate discards in the Baltic Sea as well as to assess the stocks of the Baltic cod.

### **Costs of discard sampling**

No sampling of cod and flounder is taking place at harbours or during the first sales in Latvia, and biological sampling of landings is done in parallel with the discard sampling on board of commercial vessels. Therefore the costs of cod and flounder discard sampling are included in the costs of biological sampling of catch for these species (section H of the Programme).

Salmon discard sampling in offshore and coastal fishery will be carried out by two contracted observers who will be collecting also biological data from respective fisheries, therefore the salmon discard sampling will be included in the Module H “Biological sampling of catches composition by age and by length”.

### **3.1.2.2 Atlantic NEAFC ICES area XII, NAFO areas 3M and 3KLMNO**

In distant waters, according to the requirements of the Regulation, discard sampling is required yearly for Pandalid shrimps and redfish fishery in NAFO Area 3M and Greenland halibut in NAFO

Area 3KLMNO, and triennially - for redfish fishery in NEAFC ICES XII Area. Discards in these fisheries have not been sampled so far.

***Pandalid shrimps in NAFO 3M Area***

In compliance with the Effort Allocation Scheme for Shrimps Fishery in the NAFO Regulatory Area Div. 3M, Latvian catch quota for 2005 is 490 fishing days, or 8,9% of the EU share. Latvian average landings in 2002-2004 were 2803 tons. In 2006 the discards in Pandalid shrimps fishery will be sampled including all species mentioned in Appendix XII. The sampling will be performed by contracted observers who will perform also the length measurements of shrimps from catches.

***Redfish in NAFO 3M Area***

The redfish fishery in this region is rather small and irregular. In 2002-2003 no fishery took place, but in 2004 the landings were 3 t. The Latvian TAC for 2005 is 1571 tons. Discard data in redfish fishery had not been collected so far.

**Request for derogation:**

***Redfish in NAFO areas 3M***

Latvia requests not to collect discard data on redfish in NAFO area 3M in 2006 because practically no fishery takes place.

***Greenland halibut in NAFO 3KLMNO Area***

Latvian quota in 2005 is 54 tons that is less than 5% from the total EU quota. In 2002-2004 the average Latvian landing of Greenland halibut was 26.3 tons that was less than 1 % from the total EU landing. Discard data for Greenland halibut in NAFO 3KLMNO Area has not been collected until now.

**Request for derogation:**

Latvia requests not to collect discard data on Greenland halibut in 2006 because Latvian quota is less than 5% from the total EU quota and Latvian landing was less than 1% from the total EU landing.

***Redfish in NEAFC (ICES XII) Area***

Latvia has not got a separate TAC in this area. Latvian vessels can fish here under the co-operation quota (562 tons for 2005) for NEAFC non-contracting parties. Latvian average landings in 2002-2004 were 641.7 tons. Discard data had not been collected so far. Latvian quota is less than 5% of the total EU quota in this area.

**Request for derogation**

Latvia requests not to collect discard data on redfish in NEAFC area in 2006 because Latvian quota is less than 5% of the total EU quota in this area and due to high cost of discard sampling.

**Request for derogation:**

***Other species in NAFO areas 3M, 3KLMNO and NEAFC (XII) areas***

Other species in these areas, mentioned in Appendix XII of the Regulation, are negligible or not presented in Latvian catches, therefore Latvia requests the derogation not to collect discard data in 2006.

### **3.1.3. Data on recreational fishery for salmon in the Baltic Sea**

There is no Latvian recreational fishery for salmon in the Baltic Sea.

#### **Request for derogation:**

Due to the absence of Latvian recreational salmon fisheries in the Baltic Sea, Latvia requests not to implement the pilot survey for salmon recreational fishery in the Baltic Sea in 2006.

### **3.1.4. Data on recreational fishery for blue-fin tuna in the Baltic Sea**

There is no recreational fishery of blue-fin tuna in the Baltic Sea.

#### **Request for derogation:**

Due to the absence of Latvian recreational blue-fin tuna fishery in the Baltic Sea, Latvia requests not to implement the pilot survey for the blue-fin tuna recreational fishery in the Baltic Sea in 2006.

### **3.1.5. Data on recreational fishery for cod in the Baltic Sea**

There is no Latvian recreational fishery of cod in the Baltic Sea.

#### **Request for derogation:**

Due to the absence of Latvian recreational cod fishery in the Baltic Sea, Latvia requests not to implement the pilot survey for cod recreational fishery in the Baltic Sea in 2006.

### **3.1.6. Conversion factors applied**

Latvian conversion factors from processed to live weight of fish are the same given in Table 6 of the *Latvian National Programme for Collection of Fisheries Data, 2005*.

### **Extended Programme**

No data collection will be carried out in 2005 within the framework of the EP.

## **3.2. Collection of data concerning the catches per unit effort and/or effective effort of the specific commercial fleets (F module)**

### **Minimum programme**

CPUE or LPUE data in the Baltic Sea could be obtained from vessel logbooks and coastal fishery logbooks in ICIS System.

For stock assessment in ICES working groups, CPUE is usually calculated according to effective fishing time of the gear. The weighting of effort by engine power as proposed in Appendices V and VIII of the Regulation, is normally not used in the Baltic Sea area.

The Latvian commercial fishing effort and catch per unit of effort (CPUE) data are used in the assessment of the Gulf of Riga herring stock in the eastern part of sub-division 28 since 1993 and for Salmon stock in the Sub-division 22-31 (excluding the Gulf of Finland).

The Latvian CPUE data are also available for cod stock in Sub-division 25-32. These data have not been used till now.

Latvia had not performed sampling of the CPUE data for other species and other fishing areas.

### ***Herring, ICES III d***

The VPA for the Gulf of Riga herring is tuned in XSA in the ICES working group by using the data on effort (number of trap-nets) directed at the Gulf herring in the Latvian and Estonian trap-net fishery and the corresponding abundance of the Gulf of Riga herring in the trap-net catches (number of individuals in each age group of the catch). Data on herring CPUE from trap-net fishery in the Gulf of Riga is included in the MP.

### ***Salmon, ICES III b-d (excluding the Gulf of Finland)***

For the assessment of salmon in the Sub-divisions 22-31 of the ICES III b-d area of the Baltic Sea (except the Gulf of Finland) information on catch in commercial fishery, total effort by gears and CPUE is collected annually from logbooks.

However, until now the CPUE information had only been used for short-term prediction of stock and to describe the fishing conditions in the economic zone of Latvia.

Latvian catch and effort data is to be incorporated into the Baltic Salmon Stock Assessment Model, developed in the ICES Baltic Salmon and Trout Assessment Working Group. The work on this model has started in 2004. Time series on catch and effort data cover the years 1987-2004, both for coastal and offshore fishery. Data on salmon CPUE is included in the MP.

### ***Cod, ICES III b-d***

In 2005 ICES Baltic Fisheries Assessment Working Group used CPUE data of two countries for the assessment of cod in Sub-divisions 25-32. In the next years Latvian data could be used together with data of other countries. The Latvian CPUE data exist separately for gillnet and trawl fisheries for years 1995-2004 and are annually prepared for the use of ICES Working Group. Data on cod CPUE is included in the MP.

### **Extended programme**

No catch and effort data collection will be carried out within the framework of the EP in 2006.

### **3.3. Eligibility of the scientific evaluation surveys of stocks (G module)**

#### **Minimum programme**

Latvia, according to the requirements of the Regulation, Appendix XIV, is performing and during the 2006 will undertake four priority 1 surveys in the Baltic Sea. All these surveys are internationally coordinated. The planning and co-ordination of the surveys are done in the ICES Baltic International Fish Surveys Working Group. The previous surveys designs by Latvia will be continued. Besides target species of the specific surveys all other caught fish species, birds and mammals will be recorded.

Latvia has no fisheries research vessel. Therefore the surveys will be performed on the rented foreign research or Latvian fishing vessels.

#### **3.3.1. Baltic International Trawl Survey (BITS), first/fourth quarter, ICES IIIaS, IIIb-d**

##### **3.3.1.1. BITS survey, I quarter**

According to the Regulation, this survey is classified as a Priority 1 survey.

The survey is and will be conducted in March in the Baltic Sea (10 days at sea) on the rented research or fishing vessel. The survey is covering the ICES sub-divisions 26 and 28 of the area IIIId. During the survey 25-30 hauls will be performed, 3000-4000 specimens of cod measured and for 300-400 specimens biological analysis including age determination will be performed.

The primary purpose of the survey is to develop indices for recruitment and abundance of the Eastern cod in the Baltic Sea, necessary for stock assessment. The abundance estimate is obtained in collaboration with Denmark, Germany, Poland, Russia and Sweden within the framework of ICES.

The cod length, weight, sex and maturity are determined on board and age determination performed at LATFRA laboratory.

The primary data of Latvian survey are stored in the BIODATA database, as well as in ICES BITS database.

##### **3.3.1.2. BITS survey, IV quarter**

The survey is and will be conducted in November in the Baltic Sea (10 days at sea) on the rented research or fishing vessel. The survey is covering the ICES sub-divisions 26 and 28 of the area IIIId. During the survey 25-30 hauls will be performed, 3000-4000 specimens of cod measured and for 300-400 specimens biological analysis including age determination will be performed.

The primary purpose of the survey is to develop indices for recruitment and abundance of the Eastern cod in the Baltic Sea, necessary for stock assessment. The abundance estimate is obtained in collaboration with Denmark, Germany, Poland, Russia and Sweden within the framework of ICES.

The cod length, weight, sex and maturity are determined on board and age determination performed at LATFRA laboratory.

The primary data of the Latvian survey are stored in the BIODATA database, as well as in the ICES BITS database.

#### **3.3.2. Sprat acoustic survey, II quarter, ICES IIIc-d**

The survey is and will be conducted on a rented foreign research vessel in May (10 days at sea) in the Baltic Sea in the ICES sub-divisions 26 and 28 of the area IIIId. During the survey at least 25

hauls will be performed, 5000 specimens of sprat and 3000 specimens of herring measured and for 2000 specimens of sprat and 1300 specimens of herring biological analysis including age determination will be performed.

The purpose of the survey is to provide the data for abundance and distribution estimates of sprat in the Baltic Sea.

The sampling procedure is carried out according to the method defined in the “Manual for the Baltic International Acoustic Surveys” (ICES CM 1994/H:3).

The acoustic abundance estimate is obtained within the framework of ICES in collaboration with Denmark, Estonia, Germany, Poland, Russia and Sweden. The length, weight, sex and maturity of sprat and herring are determined on board and age determination performed at LATFRA laboratory.

The primary data of Latvian survey are stored in BIODATA System. Aggregated data are reported to and used annually by relevant ICES Working Groups.

### **3.3.3. Herring acoustic survey, III - IV quarter, ICES IIIa, IIIb-d**

The purpose of the survey is to provide data for abundance and distribution estimates of herring and sprat in the Baltic Sea performed by ICES working groups.

To have the complete herring and sprat distribution area coverage, the survey is built up of 3 parts:

- 1) survey in the Latvian Economic Zone;
- 2) survey in the Territorial Waters;
- 3) survey in the Gulf of Riga.

The 1<sup>st</sup> part of the survey in the Latvian Economic Zone is and will be conducted on rented foreign research vessel during the October-November (10 days at sea) in the ICES sub-divisions 26 and 28 of the division IIIId of the Baltic Sea. During the survey at least 25 hauls will be performed, 5000 specimens of both sprat and herring measured and for 2000 specimens of sprat and 2500 specimens of herring biological analysis including age determination will be performed.

The 2<sup>nd</sup> part extends the herring acoustic survey to the 12 miles Latvian Territorial waters in the sub-divisions 26 and 28 of the area IIIId of the Baltic Sea (5 days at sea), where it will be carried out during October-November on the rented Latvian fishing vessel. During the survey at least 7 hauls will be performed, 1000 specimens of sprat and 400 of herring measured and for 500 specimens of sprat and 150 specimens of herring biological analysis including age determination will be done.

The 3<sup>rd</sup> part is covering the Gulf of Riga (sub-division 28-1 of the area IIIId) and will be conducted on the rented fishing vessel during July-August (10 days at sea). During the survey 20 hauls will be performed, 3000 specimens of herring measured and for 1500 specimens of herring biological analysis including age determination will be done.

The sampling procedure is carried out according to the methods defined in the “Manual for the Baltic International Acoustic Surveys” (ICES CM 1994/H:3).

The acoustic herring and sprat abundance estimate is obtained within the framework of ICES in collaboration with Denmark, Estonia, Germany, Poland, Russia and Sweden. The herring and sprat length, weight, sex and maturity are determined on board and age determination performed at

LATFRA laboratory. The primary data of survey are stored in BIODATA System. Aggregated data are reported to and used annually by relevant ICES Working Groups. Since 2000, data have also been stored in the internationally coordinated database (EC 99/06) DFU in Hirtshals, Denmark.

The purpose of the herring acoustic survey in III quarter in the Gulf of Riga is to provide the acoustic abundance and distribution estimates of the Gulf of Riga herring stock. Since 1993 this stock is assessed and advised by ICES as a separate stock. Since 2003 IBSFC performs a management regime for the Gulf of Riga herring stock which is different from herring in the other parts of area IIIId IBSFC. Since 2004 the European Commission has established the separate TAC for the Gulf of Riga herring stock.

The acoustic abundance estimate for the Gulf of Riga stock is obtained in collaboration between Latvia and Estonia and used for the assessment of Gulf of Riga herring in the ICES Baltic Fisheries Assessment Working Group since 2004.

### **3.3.4. Coordination and quality assurance**

The BITS and the herring and sprat acoustic surveys are internationally coordinated surveys, what ensures a high level of consistency in sampling procedures among participants. As a part of this, exchange of staff on board research vessels between countries will be conducted. It is believed that this is an important contribution which will ensure the harmonization of methods and quality of survey data.

#### **Extended Programme:**

No data collection will be carried out within the framework of the EP in 2006.

### **3.4. Biological sampling of catches: composition by age and by length (H module)**

#### **Minimum programme**

Till 2004 LATFRA had performed the research only in the Baltic Sea to meet the requirements of ICES Working Groups for the assessment of the Baltic herring, sprat, cod, salmon and sea trout stocks, as well as to collect the necessary biological information for national fisheries regulation of local fish stocks.

In 2006 in the Baltic Sea the standard sampling procedure will be carried out on a monthly basis by ICES stock assessment units and in general will not differ from sampling planned in *Latvian National Programme for Collection of Fisheries Data, 2005*. For herring, sprat, salmon and sea trout sampling will take place in fishing harbours, collecting the random samples from unsorted catches. For herring and sprat also some sampling will take place on board the commercial fishing vessels. Cod will be sampled only on the commercial fishing vessels at sea. The age determination will take place in the laboratories of LATFRA according to the standardized methods.

At present the LATFRA sampling frequency of catch composition by age and by length for all relevant fish species in the Baltic Sea is exceeding the requirements of the Regulation. In 2006 LATFRA is planning to keep the sampling frequency of 2005, since it is not known how a decrease of the number of collected samples could influence the assessment quality.

The active fishing in NAFO and NEAFC areas is performed by 4-5 fishing vessels flying the Latvian flag. In 2002-2004 these vessels reported landings of redfish, Greenland halibut and Pandalid shrimps and by-catches of some other fish species, landed in harbours of other countries, and for the above mentioned species the biological sampling should be performed.

Till 2004 the biological sampling of catches taken outside the Baltic Sea was not performed. In 2005 the biological sampling of Pandalid shrimps catches has been commenced and in 2006 it is planned to extend the biological sampling to discards in this fishery. Latvia is planning to cooperate with other EU countries in biological sampling of catches and discards in NEAFC and NAFO areas ensuring cost effective and corresponding sampling intensity for total catches of Latvia and cooperating country.

#### **Landings by foreign vessels in Latvian harbours**

The landings of foreign vessels in Latvian harbours are irregular and relatively small. In 2004 Estonian vessels landed 59 tons of sprat and 11 tons of herring, Lithuanian vessel landed 13 tons of sprat and Swedish vessels landed 503 tons of sprat. Since the landed amounts are negligible in comparison with national quotas of respective countries (less than 5%) no biological sampling must be carried out. In 2006 the collection of biological data on foreign landings will follow the amounts of landed fishes in Latvian harbours and will be coordinated between Latvia and Denmark, Sweden, Germany and possibly other Member States, based on the bilateral agreements between the institutes.

#### **Precision level**

The precision levels for the length and age composition of the catches will be determined according to the guidelines recommended by the Workshop on Sampling and Calculation Methodology for Fisheries Data (ICES 2004) and Workshop on Sampling Design for Fisheries Data (ICES 2005) and

further elaboration of these issues by ICES and STECF. The results of this analysis will be used for the improvement of the Programme in the future.

### **3.4.1 The Baltic ICES area III (excluding Skagerrak)**

#### ***Herring (Clupea harengus membras), ICES III d***

For 2005 EC defined four separate herring TACs in the Baltic Sea. Latvian fishery is conducted only on two herring management units: in ICES sub-divisions 25-29 +32 (excluding the Gulf of Riga) of the area III d and in the Gulf of Riga, Sub-division 28-1 of the area III d.

In 2005 the Latvian quota in the Sub-divisions 25-29+32 (excluding Gulf of Riga) is 3 262 tons or 2.7% of the total Community share, and in the Gulf of Riga - 20 452 tons or 53.82% of the total Community share of the TAC, obliging Latvia to sample these stocks.

Main Latvian herring catch is taken in the ICES Sub-divisions 26, 28, 28-1, and in 2002-2004 the average total Latvian landing of herring was 24 021 tons.

In 2006 the assessment and management of the herring in the sub-divisions 25-29 + 32 (excluding the Gulf of Riga) and in the Gulf of Riga will be carried out separately, therefore each of these stocks has to be covered by separate sampling of biological data of landings.

#### ***Herring in Sub-divisions 25-29+32 (excluding the Gulf of Riga)***

In 2002-2004 the average Latvian catch of herring in the sub-divisions 26 and 28 (excluding Gulf of Riga) was 2 585 tons. During 1990s the herring catches in sub-divisions 26 and 28 were absolutely (on average - 8 700 tons) and relatively (35%) higher, but afterwards had strongly decreased due to low stock level of herring in sub-divisions 25-29 +32 excluding the Gulf of Riga and correspondingly - low Latvian quota. Since 2002 according to national regulations the directed herring fishery in sub-divisions 26 and 28 was prohibited, and herring was allowed to be caught only as a by-catch in sprat pelagic fishery. It is forecasted that in 2006 Latvian catches of herring in sub-divisions 25-29 +32 excluding the Gulf of Riga will remain on a low level of about 4 000 tons. According to MP in the Regulation, only one sample per quarter should be taken, that will hardly give some scientifically reliable information.

#### **Request for derogation:**

Latvia requests to increase in its 2006 MP the total number of herring length/age samples from landings to 12 as compared to 4 samples when the Regulation criteria applied (Table 6).

Taking into account the quality of stock assessment and deep concern on the species composition in the mixed pelagic fishery in the sub-divisions 25-32 (excluding the Gulf of Riga), Latvia proposes that it is necessary to follow the former sampling frequency, collecting at least 1 sample per month, in total – 12 samples, including 6 on board samplings during the year, and to accept this sampling scheme in the Latvian MP.

#### ***Gulf of Riga herring (Clupea harengus membras)***

In 2004 88.7% (20 903 tons) of the total Latvian herring landings were taken in the Gulf of Riga (sub-division 28-1). As the state of the stock is relatively stable, the Latvian TAC for 2006 could be about 21 000 - 22 000 tons. The Gulf of Riga is inhabited by herring population, assessed by ICES as a separate stock since 1993. Herring in the Gulf of Riga is caught offshore by pelagic and demersal trawls as well as by herring trap-nets in the coastal waters. The trawl fishery takes place all year around except the 30 days of the herring fishery ban during May-June, aiming the protection of the herring mass spawning. In cold winters the fishery could be stopped because of ice cover, usually from February till mid-April. The trap-net fishery is taking place from the mid-April

till mid-July during the herring spawning period. Trap-net fishery constitutes about 15% of the total herring catch in the Gulf of Riga. As the trawl and trap-net fisheries have different exploitation patterns, they need to be sampled separately.

Historically Latvia had collected monthly random samples from landings taken in different parts of the Gulf of Riga, to estimate the biological parameters and age composition of herring in trawl catches. Herring samples were collected mainly in fishing harbours and in smaller amounts - also on board the commercial fishing vessels. The total number of samples per year was about 36. Following the Regulation sampling scheme for MP, the Latvian sampling frequency should be lower (Table 6).

From trap-net catches historically 4 random herring samples had been collected in different fishing harbours every 10 days, resulting in total of 30-36 samples per spawning season. As the CPUE data series from herring trap-net fishery are used in ICES to tune the analytical assessment of this stock, the trap-net fishery needs to be sampled more frequently, than requested by the Regulation. High sampling frequency is also necessary due to the substantial fluctuations of the herring landings age and size composition during the spawning season. The character of the catches could differ significantly between the different parts of the Gulf and between the different years due to the specific hydro-meteorological conditions.

#### **Request for derogation:**

Latvia requests to increase in its 2006 MP the total number of herring length/age samples from herring landings in the Gulf of Riga to 49 as compared to 22 samples, requested by the Regulation criteria (Table 6).

It is necessary to safeguard the quality of data for the separate assessment of the Gulf of Riga herring stock. Latvia proposes to keep in its MP the previous sampling scheme of herring landings from the trap-net fishery, collecting random samples from four parts of the Gulf of Riga every 10 days. This in total results in 30 samples per year. Besides at least 19 samples must be collected from trawl landings.

#### ***Sprat (Sprattus sprattus), ICES IIIb-d***

There is one sprat management unit in the Baltic Sea in Sub-divisions 22-32. In 2005 the Latvian quota is 13.8% from the total Community share of the TAC, obliging Latvia to sample this stock.

In 2002-2004 the average total Latvian landing of sprat by pelagic trawlers was 47 227 tons. More than 95% of the catches were taken in the Latvian Economic zone in the sub-divisions 26 and 28 of the area ICES III d. In the recent years the national quota for sprat was utilized by 100% or close to it. In 2005 the Latvian sprat quota is 68 420 tons. At present the sprat stock remains on a high level, although the high TAC of 2005 will be certainly decreased in 2006, and the national quota could be at the level of 2004. Therefore the possible sprat landings in 2006 are forecasted to be at the level of national quota in 2004.

To estimate the age composition of sprat in trawl catches, historically LATFRA had collected at least 3 random samples monthly from the subdivisions 26 and 28 of the area III d. The total number of samples per year was approximately 40-45. Samples mostly are collected in fishing harbours and less – on board commercial fishing vessels.

In the Programme the Regulation sampling scheme of MP will be followed resulting in at least 24 samples, 2400 measured and 1200 aged sprat specimens (Table 6).

#### ***Cod (Gadus morhua ), ICES III b-d***

The Latvian landings of cod in the Baltic Sea in 2004 were 5 027 tons. During years 2002-2004 the average Latvian landings were 4 843. For 2005 European Commission established separate TACs

for cod in ICES Sub-division 22-24 and Sub-divisions 25-32 which correspond to two cod assessment units in ICES. Latvian cod quota in Sub-divisions 22-24 is 892 t or 3.61% of the total EC TAC, thus not obliging to sample cod catches in this area. Latvian cod quota in Sub-divisions 25-32 is 3 331 tons or 8.54% of the total EC TAC, thus obliging Latvia to sample this stock.

Almost all types and sizes of vessels are engaged in the cod fishery, and the gears used are bottom trawls and gillnets. The fishery is exclusively directed towards the cod, and only by-catch of flounder may occur. In pelagic trawl fishery cod could be as a by-catch in sprat and herring fishery.

The sampling of cod landings will follow the standard sampling scheme, and as previously will be performed at sea on board of trawlers and gill-netters. Length and age sampling is associated with cod discard sampling and cover same sub-divisions of the Baltic Sea, fishing gears and quarters (see chapter 3.1.2). The cod biological sampling will be performed in parallel to discard sampling and the number of samples in relation to Section E (36 samples, 1800 fishes measured and 900 fishes aged) exceeds the number of samples which should be collected according to the scheme specified in the Regulation (24 samples, 1200 fishes measured and 600 fishes aged). Therefore sampling of cod length/age at harbours is not planned.

### ***Salmon (*Salmo salar*), ICES III b-d***

All Latvian commercial catch of salmon in the Baltic Sea is taken from the IBSFC salmon management unit of Main Basin and the Gulf of Bothnia in the area IIIb-d (sub-divisions 22-31).

In previous years the fishery was performed in the sub-divisions 26 and 28, including the Gulf of Riga. However, due to access to EU waters the importance of Southern Baltic for driftnet fishery could increase. In Latvian salmon fishery two principal types of fishery could be distinguished, with totally different age and length composition of the catches. In the offshore fishery, the drift-nets are used to capture feeding salmon in autumn - spring (September-May), while in the coastal fishery the trap-nets and anchored gill-nets are used to capture mature salmon, returning to home rivers in summer and autumn (June-November). Specific technical measures according to the national fishery rules are taken to manage both these fisheries.

In 2002-2004 the Latvian commercial landings of salmon averaged 74 tons. For the evaluation of the length and age composition of landings, a sampling scheme of C3 according to Appendix XV of the Regulation will be required (1 sample of 50 fish/ 100 tons). The salmon catches in the sea as well as in coastal waters actually consist of wild and hatchery reared components. Taking into account the migratory and distribution pattern, the MP must cover all the main seasons and areas of the offshore and coastal fisheries.

The sampling of the salmon offshore fishery in the Baltic Sea area III d (excluding Gulf of Finland) will be carried out from commercial landings in Latvian fishing harbours Ventspils and Liepaja or on board the fishing vessels.

In the Gulf of Riga there is ban for offshore salmon fishery, but the effort of coastal trap-net and anchored gillnet fishery is high. The sampling of salmon migrating to spawning is based on the coastal commercial catches in the Gulf of Riga in two sites: the Terminal Fishery Area for hatcheries origin salmon (in the outfall zone of river Daugava) and the River Salaca outfall area - for wild salmon. During summer the pre-migratory salmon will be sampled, but in the autumn - the pre-spawning one. The stock composition analysis and the identification of wild and reared salmon are based on the scale reading method, requiring an appropriate sample size.

The biological sampling of salmon discards in offshore fishery will be conducted in parallel with the biological sampling of the catches that will be carried out by observer on board of the vessel. The sampling of salmon discards in coastal fishery will be also conducted by the observer who is performing the biological sampling of the catches. The biological sampling of salmon discards in coastal fishery could be troublesome because the discarded fishes are usually those which are strongly damaged and eaten by the seals.

**Request for derogation:**

Latvia requests to increase the number of salmon samples in 2006 MP up to 6 as compared with 1 sample required under the Regulation scheme. The minimum number of 100 fish/sample is required for length measurements, as well as to determine age and origin of wild/reared populations.

Taking into account that the MP must cover both types of fishery (offshore and coastal), that are necessary for the assessment of salmon stock a more intensive sampling is needed.

Therefore at least 3 samples per fishing season (September-May) are needed from offshore fishery and 3 samples (2 from Gulf of Riga and 1 from the Baltic Sea coastal fishery) – from coastal fishery (Table 6). Each sample must contain 100 individuals in order to ensure the necessary level of reliability.

***Sea trout (Salmo trutta), ICES III b-d***

Sea trout is traditional target species of Latvian coastal fishery in ICES sub-division 28. There is no catch quota for sea trout.

In spring the young feeding sea trout is caught by gill-nets, but in autumn the pre-spawning fish - by trap-nets. The most of local sea trout populations are small. The reported annual landing of sea trout in Latvian coastal waters was on average 9 tons in 2002- 2004.

**Request for derogation:**

Latvia requests to include 3 sea trout samples in 2006 MP. The proposed sample size is 100 fish individually measured, to determine the age and origin of wild/reared populations (Table 6).

According to Appendix XV of the Regulation the MP sampling scheme should contain 1 sample on 100 tons of sea trout what is insufficient for the sea trout stocks assessment and stocks management. The proposed Latvian sampling within the MP will include 1 sample in spring and 1 in autumn from the Gulf of Riga coastal fishery and 1 sample from coastal area of sub-divisions 26 and 28. Each sample must contain 100 individuals in order to ensure the necessary level of reliability.

***Flounder (Platichthys flesus), ICES IIIb-d***

The Latvian commercial landings of flounder are taking place in ICES sub-divisions 26 and 28 of the area IIIId. In 2002-2004 the average landing was about 682 tons annually. The flounder mainly is fished by demersal trawls, gillnets and Danish seines.

The sampling of flounder landings follows the standard sampling scheme, and is performed on board of commercial trawlers and gill-netters. Length and age sampling is associated with flounder discard sampling, following the same disaggregation level (see Section 3.1.2).

The flounder biological sampling is performed parallel to discard sampling, and the number of samples in relation to Section E (20 samples, 1000 fish measured and 1000 fishes aged) is exceeding the number of samples according to Section H (7 samples, 350 fish measured and 350 fish aged). Therefore the market and harbor length/age sampling of flounder is not planned.

### **3.4.2 Atlantic NEAFC ICES area XII, NAFO areas 3M and 3KLMNO**

### ***Redfish (Sebastes spp.), NEAFC XII Area***

Latvia has not TAC in this area. The Latvian vessels can fish there within the framework of co-operation quota (562 tons in 2005) for NEAFC non-contracting parties. In 2002-2004 the average Latvian landings were 641.7 tons. Latvia has not collected biological data in this area till now. According the MP sampling scheme of Regulation Latvia must collect 6 length samples (1 sample - 100 fish) and 1 age samples (1 sample - 50 fish).

#### **Request for derogation:**

As Latvian fishery in this area has a trend of reduction of catches, and because the share of Latvian landings in total EU landings is less than 5%, Latvia requests not to collect length – age data and other biological data in 2006.

### ***Redfish (Sebastes spp.), NAFO 3M Area***

The Latvian TAC for 2005 is 1571 tons. In 2002-2003 no fishing was performed, in 2004 the catch was only 3 tons. It is difficult to forecast the development of this fishery in 2006. Biological data were not collected so far.

#### **Request for derogation:**

Since Latvia is practically not fishing redfish in this area Latvia requests not to collect length – age data and other biological data in 2006.

### ***Pandalid shrimps (Pandalus spp.), NAFO 3M Area***

In compliance with the Effort Allocation Scheme for Shrimps Fishery in the NAFO Regulatory Area Div. 3M, Latvian fishing quota for 2005 is 490 days, or 8,9% of the EU share. The Latvian landings in 2004 were 2984 tons and Latvian average landings in 2002-2004 were 2 803 tons. Latvia has started to collect biological data for Pandalid shrimps from NAFO Area 3M in 2005. According to the Regulation MP sampling scheme and recent average landings Latvia must collect 14 length samples (1 sample - 100 specimens). Therefore in 2006 the sampling of Pandalid shrimps catches will be performed on two vessels operating in this area. Sampling will be done by observers and it is planned to collect 20 samples (2 000 specimens measured) in total.

### ***Greenland halibut (Reinhardtius hipoglossoides), NAFO 3KLMNO Area***

By 2004 Latvia has not got TAC in this area, but Latvian vessels can fish within the framework of quota for “others”.

In 2002– 2004 only one Latvian vessel was fishing for that species and on average landed 26.3 tons a year. There was no fishery in 2003. In 2004 the catch was 68 tons. In 2005 the TAC is 54 tons. Latvia had not collected biological data so far. According to the MP sampling scheme set in the Regulation Latvia must collect 1 length sample (1 sample - 100 fish) and 1 age sample (1 sample - 50 fish).

#### **Request for derogation:**

As Latvian fishing in this area is irregular and because the share of Latvian landings in total EU landings is less than 1%, as well as Latvian quota is less than 5% from the total EU quota Latvia requests not to collect length – age data and other biological data in 2006.

### **Biological sampling of discards**

#### ***Pandalid shrimps (Pandalus spp.), NAFO 3M Area***

The sampling of Pandalid shrimps fishery in the first half of 2005 showed that discards are very low in shrimp fishery. The discarded shrimps are compressed and deformed specimens which are not

possible to measure. The biological sampling of discarded fishes listed in Appendix XV will be performed in accordance with requirements of the Regulation..

**Request for derogation:**

Since it is not possible to make biological sampling of discarded shrimps in Pandalid shrimps fishery Latvia requests not to collect length data in 2006.

*Redfish (Sebastes spp.), NEAFC XII Area*

Redfish fishery in this area is performed by one vessel flying the Latvian flag. In 2006 LATFRA is planning to estimate the share of discards in the total catches from this fishery and the species composition in the discards.

**Request for derogation:**

Latvia requests not to collect length – age data and other biological data in 2006 from discards in redfish fishery because Latvian quota is less than 5% from the total EU quota.

*Redfish (Sebastes spp.), NAFO 3M Area*

Latvia has practically no redfish fishery in this area. There was no fishery in 2002-2003 and in 2004 the catch was only 3 tons..

**Request for derogation:**

Latvia requests not to collect length – age data and other biological data in 2006 from discards in redfish fishery because Latvia has practically no fishery in this area.

*Greenland halibut (Reinhardtius hipoglossoides), NAFO 3KLMNO Area*

Irregular Greenland halibut fishery is performed by one vessel Latvian flagged. Latvian landing in total EU landing is less than 1%, as well as Latvian quota is less than 5% from the total EU quota.

**Request for derogation:**

Latvia requests not to collect length – age data and other biological data in 2006 from discards in Greenland halibut fishery because Latvian landing in total EU landing is less than 1%, as well as Latvian quota is less than 5% from the total EU quota

**Extended programme**

*Turbot (Psetta maxima), ICES III d*

The Latvian commercial turbot landings are low. In 2002-2004 the average catch was 10 tons. Taking into account the critical stock's state, the turbot fishery is banned in the territorial waters of Latvia by national regulation. Therefore the state of turbot stock will be studied in scientific surveys in May-July period.

**Request for derogation:**

Taking into account the critical state of the turbot stock, the high market value of this species, and assuming that the EP sampling scheme according to the Regulation criterion C3 (Appendix XV; 1 sample of 50 fish/100 tons) would be insufficient for turbot stocks assessment and fisheries regulation, Latvia proposes to keep in EP the existing sampling frequency - 4 turbot samples (200 fish individually measured and aged, Table 7). The samples will be obtained during the scientific trawling.

*Perch (Perca fluviatilis), ICES III d*

Most of the commercial perch catches are taken in the Gulf of Riga in April - September with trap-nets (60%) and gill-nets (30%). Average landing for 2002-2004 was 45 tons. There is no catch quota for perch, but the fishery is regulated by the limitation of the number of the fishing gears.

**Request for derogation:**

Assuming that the EP sampling scheme according to the Regulation criterion C3 (Appendix XV; 1 sample of 50 fish/100 tons) would be insufficient for perch stocks assessment and fisheries regulation, Latvia proposes in its EP include 6 samples (300 fish measured and aged, Table 7).

***Pike-perch (*Stizostedion lucioperca*), ICES III d***

The total reported catch of pike-perch in Latvian marine waters averaged 17 tons in 2002-2004, landed from coastal trap-net (55%) and gill-net (45%) fishery in the coastal zone of the Gulf of Riga. There is no catch quota for pike-perch, but the fishery is regulated by the limitation of the number of the fishing gears.

**Request for derogation:**

Assuming that the EP sampling scheme according to the Regulation criterion C3 (Appendix XV; 1 sample of 50 fish/ 100 tons) would be insufficient for pike-perch stocks assessment and fisheries regulation, Latvia proposes in its EP to include 6 samples/year (300 fish measured and aged, Table 7).

**Table 6. Sampling effort by species and area based on Latvian landings, MP**

Species, type of fishing	Baltic Sea ICES Area	Total EU TAC in 2005, tons	Latvian TAC in 2005, tons	Latvian TAC, % of EU TAC	Average Latvian landings 2002-2004, tons	Sampling frequency rules <sup>1</sup>			Latvian Programme 2006		
						No of samples per tons	No of fish measured per sample	No of fish aged per sample	As required by Regulation / as requested by derogation <sup>2</sup>		
									Minimum No of samples	Minimum No of fish measured	Minimum No of fish aged
Herring, trawl fishery	IIIId, Gulf of Riga, 28.1	38000	20452	53.82	18 557	1/1000	100	100	19/-	1900/-	1900/-
Herring, trap-net fishery	IIIId, Gulf of Riga, 28.1				2 879	1/1000	100	100	3/30	300/3000	300/3000
Herring, trawl fishery	IIIId, 25.-29.+32	117 652	3 262	2.77	2 585	1/1000	100	100	3/12	300/1200	300/1200
Sprat, trawl fishery	IIIId, 26-28	494 560	68 420	13.83	47 227	1/2000	100	50	24/-	2400/-	1200/-
Cod, trawl & net fishery	IIIId, 22-24	24 700	892	3.61	139	1/200	50	25	-	-	-
Cod, trawl & net fishery	IIIId, 25-32	39 000	3 331	8.54	4 704	1/200	50	25	24/36 <sup>4</sup>	1200/1800	600/900
Salmon, offshore net fishery	IIIId,	451 260 <sup>3</sup>	59 478 <sup>3</sup>	13.18	36	1/100	50	50	1/3	50/300	50/300
Salmon, coastal fishery	IIIId, 28				38	1/100	50	50	1/3	50/300	50/300
Sea trout, coastal fishery	IIIId, 26, 28	-	-	-	9	1/100	50	50	1/3	50/300	50/300
Flounder, offshore trawl and net fishery, coastal fishery	IIIId, 26, 28	-	-	-	682	1/100	50	50	7/20	350/1000	350/1000

**Table 7. Sampling effort by species and area based on Latvian landings, EP**

Species, type of fishing	Baltic Sea ICES Area	Average Latvian landings 2002- 2004, tons	Sampling frequency rules <sup>1</sup>			Latvian Programme 2006			
			No of samples per tons	No of fish measured per sample	No of fish aged per sample	Minimum No of samples <sup>1</sup>	Requested derogation, No of samples <sup>2</sup>	No of fish measured <sup>2</sup>	No of fish aged <sup>2</sup>
Pikeperch, coastal fishery	IIIId, Gulf of Riga	17	1/100	50	50	1	6	300	300
Turbot, offshore net fishery	IIIId, 26, 28	10	1/100	50	50	1	4	200	200
Perch, coastal fishery	IIIId, 26, 28	45	1/100	50	50	1	6	300	300

1) As specified in the Regulation, 2) Justification – see in the text

## **3.5. Other biological samplings (I module)**

### **Minimum programme**

#### **3.5.1. Baltic ICES area III (excluding Skagerrak)**

Data concerning the growth and maturity (herring, sprat, cod, salmon and sea trout) are collected regularly during biological sampling of the catches and could be compiled and forwarded to the Commission by its request.

#### **Growth curves and the relations between age/length and maturity**

##### ***Herring and sprat***

Data concerning weight, length, sex and maturity of the sprat are recorded when performing the biological analysis of catch or landing samples. Sex and maturity are not recorded only in case of on board sampling, when only the total weight by length class is recorded. For herring in the Gulf of Riga the sex and maturity are recorded in samples from the trap-net catches on average for 3000 fishes annually.

##### ***Cod***

The growth curves, age/length relationship as well as maturity are available from on board biological sampling of the catches per different fishing gears in the Baltic Sea ICES area IIIId. During the on board sampling on fishing vessels, the biological analysis of cod by 5 cm length classes is performed. In each length class ca. 30 fishes are weighed, the sex and maturity stage determined, and otoliths for age determination taken. In total this results in biological analysis of about 300 fishes per commercial trip.

##### ***Flounder***

The growth curves, age/length relationship as well as maturity are available from on board biological sampling of the catches per different fishing gears in the Baltic Sea area IIIId. During the on board sampling on fishing vessels, the biological analysis of flounder by 1 cm length classes is performed. In each length class ca. 10 fishes are weighed, the sex and maturity stage determined, and otoliths for age determination taken. In total this results in biological analysis of about 100 fishes per commercial trip.

##### ***Salmon and sea trout***

Data to derivate growth curves and relations between age/length for salmon and sea trout are accumulated from the basic landings sampling programme and tag recaptures data.

#### **Sex-ratio in landings**

Data concerning the sex-ratio of herring, sprat, cod, salmon and sea trout landings will be compiled every third year, as requested by the Regulation (Appendix XVI).

##### ***Herring and sprat***

The sex of herring from the trapnet catches and sprat in all harbor samples is recorded for all the individuals together with other biological information.

##### ***Cod***

The sex-ratio of cod is available from on board biological sampling of the catches by fishing gear for Baltic Sea area IIIId.

### *Salmon*

During the sampling of salmon landings in the coastal fishery, sex of fish is determined and recorded routinely. In samples from offshore fishery the sex is not determined because sampling is performed in fishing harbours on gutted fish.

### **Precision estimation**

The precision levels for the biological parameters will be determined according to the guidelines recommended by Workshop on Sampling and Calculation Methodology for Fisheries Data (ICES 2004) and Workshop on Sampling Design for Fisheries Data (ICES 2005) and further elaboration of these issues by ICES. The results of this analysis will be used for the improvement of national sampling programme in the future.

### **3.5.2. Atlantic NEAFC ICES area XII, NAFO areas 3M and 3KLMNO**

The sampling of other biological parameters in NEAFC and NAFO areas is not planned in 2006.

### **Extended programme**

Extended Programme is not planned in 2006.

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

### **4.1. Collection of economic data by groups of vessels (J module)**

#### **Minimum Programme**

This section covers the information as defined in Appendix XVII of the Regulation, and will be completed from two sources of data. The first source will be the Logbooks and Fishing Vessels Register (FVR) data bases in the ICIS System and the second - the sample surveys performed by LATFRA.

The extract from ICIS, containing the information on all vessels, fishing in the previous year will form the basis for analysis and stratification of the fleet before the sample survey is performed. The collected data will form the basis for reporting on the economic situation for the groups of vessels.

#### **Data for basic economic evaluation**

##### *1) Statistics based on FVR and Logbooks data:*

- Vessel data. The physical data of vessels are recorded according to the ICIS FVR, including the number of vessels, length, gross tonnage (GT), main engine power (kW) and age of vessel and of main engine.
- Effort. Vessel activity measured as days at sea according to the ICIS Logbooks database.

##### *2) Sampling by questionnaires:*

- Prices: quarterly data on prices from the ICIS Notifications on the First Fish Sale database. Data on prices will be verified using questionnaires data.
- Income / turnover: calculated value of production by species.
- Production costs: labour costs, fuel, vessel repairing and maintenance, other operational costs.
- Fixed costs: depreciation calculated individually by a fixed percentage based on expected lifetime.
- Financial position: own capital / borrowed capital.
- Invested capital: insured value preferred. For the fleet segment below 12m the replacement value is used, as most of small boats are not insured.
- Employment: calculated number of employed on vessels (part time / full time).

#### **Compiling sample statistics**

LATFRA compiles economic data based on questionnaires, drawn up by LATFRA, to owners of the fishing firms. The participation of the responders is on voluntary basis, established by a previously given promise not to discover the commercial confidence of an individual firm or vessel.

Data on each company will be tested by LATFRA, and all errors and ambiguities will be addressed and verified in cooperation with the responding person, before data is approved for statistical use.

The Questionnaire Form includes all specifications needed for the MP, as well as some additional, more detailed information. In cases, when the fishing firm owns few operating vessels, samples will include the calculation of costs of the each individual vessel.

The fleet segmentation takes place as defined in Appendix III of the Regulation. The following Latvian fishing fleet segments are to be analyzed (segmentation – according to the situation in the 2002-2003):

- 1) Pelagic trawlers of length equal to or over 40 m;
- 2) Pelagic trawlers of length from 24 m to 40 m;
- 3) Pelagic trawlers of length from 12 to 24 m,
- 4) Gillnetters of length from 24 to 40 m,
- 5) Polyvalent passive gears coastal boats of length under 12 m.

Analysis of the economic performance of Latvian fishing fleet, carried out from 2001 to 2004, covered only active vessels fishing in the Baltic Sea outside coastal waters. In 2005 the segments of vessels under 12 m and over 40 m also will be investigated. The Programme 2006 will develop further the coverage of the coastal small boats segment as well the vessels fishing in Atlantic.

It must also be taken into account that, using the opportunities provided by the Financial Instrument for Fisheries Guidance (FIFG), the decrease in the number of fishing vessels is taking place since 2004. It will significantly influence the size and structure of the fishing fleet in 2006. This could lead to face the economic data confidentiality issues, as at small number of vessels in the segment, the vessels could belong to one company.

### **Data reliability**

For the results calculated from a sample instead of data for all vessels in a segment, the reliability of the results will be tested on the basis of the relative standard error and the t-test.

The total population (number of vessels in a given fleet segment) is compared to the number of vessels in the sample.

The precision level or the uncertainty of the results cannot be calculated by approximation to a distribution function, because it is not possible to carry out a random sampling. The element of voluntary participation has the result, that only a part of each stratum is available for selection.

Through the contacts to the fishing firms, and acceptance by owners to participate in the statistics, LATFRA has recently succeeded in gaining about the 20% coverage in the number of vessels in each segment. This strategy will be followed up by selective enquiries to recruit fishermen in the strata where the participation needs an improvement.

### **Submission of data**

All information will be aggregated to the harmonized variables as specified in the Appendix XVIII of the Regulation. Data will be prepared for each fleet segment, fleet as total and as average per vessel.

### **Extended programme**

No Extended Programme proposed for 2005.

## **4.2. Collection of data concerning the processing industry (K module)**

### **Minimum Programme**

This section covers the information as defined in Appendix XIX of the Regulation. The pilot survey will be conducted and data will be acquired from two sources.

The data of the Central Statistical Bureau will form the basis for analysis of the processing industry. As alternative the questionnaire could be used for acquisition of requested economic data.

### **Economic information per primary and secondary sectors**

Annual economic data will be summarised by primary and secondary sectors as follows:

- raw material: total and per species;
- turnover: total and per product;
- production costs (total and per category cost): labour, energy, raw material value, packaging, other running costs;
- fixed costs: average costs, calculated from investment;
- financial costs; share of own/borrowed capital;
- investment asset: historical, replacement, insurance;
- prices/product: value, tonne;
- employment: numbers: FTE;
- capacity utilisation: annual average.

### **Disaggregating level**

The distribution of these companies in various regions will be taken into account for analysis of fish processing companies.

### **Precision level**

The economic data sampling procedures should make it possible to reach the level of precision 2.

### **Extended programme**

No data collection will be carried out in 2006 within the framework of the ESP.

## **5. COORDINATION OF THE DATA COLLECTION**

### **5.1. National coordination**

The overall coordination of the implementation of Programme will be carried out by the National Board of Fisheries of the Ministry of Agriculture of the Republic of Latvia.

The main Programme implementing institutions are located in Riga, therefore the special coordination arrangements for the national coordination of the Programme will not be needed.

### **5.2. International coordination**

International co-ordination and co-operation will be achieved at different levels through:

- Regional coordination meetings.
- ICES Working, Study and Planning Groups on data gathering and sea surveys.
- ICES Assessment Working Groups, since these activities cover issues that are directly related to data gathering, biological sampling or sea surveys. Following the Commission's guidelines on the eligibility of costs for meetings, however, the costs for attending these Assessment Working Groups are not included in the Programme coordination budget.
- Direct contacts with institutes in the Member Countries, who are responsible for sea surveys and biological sampling programmes directly linked to the Latvian Programme.
- Participation of experts in STECF and STECF Sub-Groups on data gathering, precision levels, databases, etc.

Though the exact list of the of the 2006 international coordination meetings will be issued by the Commission at the end of 2005 – beginning of 2006, the participation of Latvian experts in the respective all levels international coordination meetings relevant to Latvian fisheries and National Data Collection Programme in 2006 is planned (7-8 meetings per year).

## **6. LATVIAN FISHERIES ANALYSIS DATABASE**

As it was mentioned in the Introduction part of this Programme, the primary data used for or collected under the Programme will be stored in the following databases:

- Integrated Control and Information System for Latvian Fisheries (ICIS) – capacity, fishing effort, catch and landing data and data on the first sales prices;
- Biological Data System for Latvian Fisheries (BIODATA) – biological data on catches, landings and discards, other biological data and economic data on fishing vessels.

**Latvian Fisheries Analyses Database (LFAD)** with linkages to ICIS and BIODATA systems will be further developed within the framework of Programme for the aggregated data required by the Commission Regulation. LFAD will be connected to European Fisheries Data Collection System (EFDC) and will be accessible to the Commission or national correspondents of the other Member States on the request.

To develop and update the LFAD, a detailed proposal of the Commission on data collection and data transportation formats is still needed.

## 7. TOTAL INPUT, MP and EP

Chapter	Type of data	Number of men/months
C	Fishing capacities, MP	2.4
D	Fishing effort, MP	7
E	Catches and landings, MP	3.1
E	Discards, MP	27.8
E	Recreational fishery, MP	0
F	CPUE, MP	4.5
G	BITS survey, I quarter ,MP	8.0
G	BITS survey, IV quarter, MP	8.0
G	Sprat acoustic survey, II quarter, MP	8.0
G	Herring acoustic survey, III-IV quart., part 1,MP	8.0
G	Herring acoustic survey, III-IV quart., part 2, MP	2.88
G	Herring acoustic survey, III-IV quart., part 3, MP	3.27
H	Age and length of landings, MP	10.28
H	Age and length of landings, EP	8.5
H	Age and length of discards, MP	0
I	Other biological parameters, MP	11.1
J	Economic data by group of vessels, MP	11
K	Economic data for processing industry, MP	3
	Data base	7
	Coordination	0
	<b>Grand total</b>	<b>133.83</b>

## 8. CONTACT PERSONS AND ADDRESSES

National Correspondent – the National Board of fisheries of the Ministry of Agriculture  
of the Republic of Latvia

### Aina Afanasjeva – responsible contact person of the Programme

Deputy Director  
National Board of Fisheries  
2 Republikas Laukums  
Riga, LV-1010  
Latvia  
Phone: +371 7332018  
Fax: +371 7334892  
E-m: [aina.vzp@latnet.lv](mailto:aina.vzp@latnet.lv)

Additional technical information on the Programme proposal and on its budgeting can be obtained  
from the Latvian Fish Resources Agency (LATFRA):

### Maris Vitins – responsible contact person from LATFRA

Director  
LATFRA  
Daugavgrivas 8  
Riga, LV-1048  
Latvia  
Phone: +371 7612409  
Fax: +371 7616946  
E-m: [maris.vitins@latzra.lv](mailto:maris.vitins@latzra.lv)

### Georgs Kornilovs

Head of the Research Department  
LATFRA  
Daugavgrivas 8  
Riga, LV-1048  
Latvia  
Phone: +371 7613775  
Fax: +371 7616946  
E-m: [georgs.kornilovs@latzra.lv](mailto:georgs.kornilovs@latzra.lv)

### Maris Pliksh

Head of Marine Laboratory  
LATFRA  
Daugavgrivas 8  
Riga, LV-1048  
Latvia  
Phone: +371 7610766  
Fax: +371 7616946  
E-m: [maris.plikss@latzra.lv](mailto:maris.plikss@latzra.lv)

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**10. Appendix Latvian form of questionnaire on economic data of individual vessel**

Expenses	Value (LVL)
<b>Fuel and oil costs</b>	
<b>Vessel costs</b>	
Materials	
Inventory	
Radio and phone	
Radio inspection	
Documentation	
Repair of fishing gears	
Food	
Rent of fishing rights	
Halt expenses	
Port services	
Port duties	
Administrative costs	
Veterinary and sanitary services	
Control of life-saving tools	
Vessel register, technical inspection, port supervisory	
Ship repair and maintenance	
Other	
<b>Other running costs</b>	
Transport	
Ice	
Other	
<b>Crew share, social costs included</b>	
<b>Invested capital</b>	
<b>Own capital/borrowed capital</b>	
<b>Depreciation</b>	
<b>Interest</b>	
<b>Employment on board</b>	
<b>GT</b>	
<b>Age</b>	
<b>kW</b>	