



**REPUBLIC OF CYPRUS**

**MINISTRY OF AGRICULTURE  
NATURAL RESOURCES  
AND ENVIRONMENT**



**DEPARTMENT OF FISHERIES AND  
MARINE RESEARCH  
1416 NICOSIA**

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**CYPRUS NATIONAL FISHERIES DATA COLLECTION  
PROGRAMME  
2011-2013**

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**Prepared within the framework  
of Council Regulation (EC) No. 199/2008,  
Commission Regulation (EC) 665/2008  
and Commission Decision 2010/93/EU**

**Nicosia, May 2010**

## Table of Contents

<b>Section no.</b>	<b>Section title</b>	<b>Page</b>
<b>I.</b>	<b>General framework</b>	<b>1</b>
<b>II.</b>	<b>Organisation of the National Programme</b>	<b>2</b>
II.A	National organisation and coordination	2
II.B	International coordination	2
II.C	Regional coordination	2
<b>III.</b>	<b>Module of the evaluation of the fishing sector</b>	<b>3</b>
III.A	General description of the fishing sector	3
III.B	Economic variables	4
III.B.1	Data acquisition	4
III.B.1 (a)	Definition of variables	4
III.B.1 (b)	Type of data collection	9
III.B.1 (c)	Target and frame population	9
III.B.1 (d)	Data sources	10
III.B.1 (e)	Sampling stratification and allocation scheme	10
III.B.2	Estimation	11
III.B.3	Data quality evaluation	11
III.B.4	Data presentation	12
III.B.5	Regional coordination	12
III.B.6	Derogations and non conformities	12
III.C	Biological metier related variables	12
III.C.1	Data acquisition	12
III.C.1. (a)	Codification and naming convention	12
III.C.1. (b)	Selection of metiers to sample	14
III.C.1. (c)	Type of data collection	16
III.C.1. (d)	Target and frame population	18
III.C.1. (e)	Sampling stratification and allocation scheme	19
III.C.2	Estimation procedures	21
III.C.3	Data quality evaluation	21
III.C.4	Data presentation	23
III.C.5	Regional coordination	23
III.C.6	Derogations and non conformities	26
III.D	Biological recreational fisheries	28
III.D.1	Data acquisition	28
III.D.1 (a)	Type of data collection	28
III.D.1 (b)	Target and frame population	29
III.D.1 (c)	Data sources	29
III.D.1 (d)	Sampling stratification and allocation scheme	29
III.D.2	Estimation procedures	29
III.D.3	Data quality evaluation	29
III.D.4	Data presentation	30
III.D.5	Regional coordination	30

III.D.6	Derogations and non conformities	31
III.E	Biological stock-related variables	32
III.E.1	Data acquisition	32
III.E.1 (a)	Selection of stocks to sample	32
III.E.1 (b)	Type of data collection	32
III.E.1 (c)	Target and frame population	32
III.E.1 (d)	Sampling stratification and allocation scheme	33
III.E.2	Estimation procedures	33
III.E.3	Data quality evaluation	33
III.E.4	Data presentation	34
III.E.5	Regional coordination	34
III.E.6	Derogations and non conformities	35
III.F	Transversal variables	36
III.F.1	Capacity	36
III.F.1.1	Data acquisition	36
III.F.1.2	Data quality evaluation	36
III.F.2	Effort	37
III.F.2.1	Data acquisition	37
III.F.2.2	Data quality evaluation	37
III.F.2.3	Data presentation	38
III.F.2.4	Regional coordination	38
III.F.2.5	Derogations and non conformities	38
III.F.3	Landings	38
III.F.3.1	Data acquisition	38
III.F.3.2	Data quality evaluation	39
III.F.3.3	Data presentation	40
III.F.3.4	Regional coordination	40
III.F.3.5	Derogations and non conformities	40
III.G	Research surveys at sea	40
III.G.1	Planned surveys	40
III.G.2	Modifications in the surveys	42
III.G.3	Data presentation	42
III.G.4	Regional coordination	42
III.G.5	Derogations and non conformities	42
<b>IV.</b>	<b>Module of the evaluation of the economic situation of the aquaculture and the processing industry</b>	<b>43</b>
IV.A	Collection of economic data for the aquaculture	43
IV.A.1	General description of the aquaculture sector	43
IV.A.2	Data acquisition	43
IV.A.2 (a)	Definition of variables	43
IV.A.2 (b)	Type of data collection	45
IV.A.2 (c)	Target and frame population	45
IV.A.2 (d)	Data sources	45
IV.A.2 (e)	Sampling stratification and allocation scheme	46

IV.A.3	Estimation	46
IV.A.4	Data quality evaluation	46
IV.A.5	Data presentation	46
IV.A.6	Regional coordination	47
IV.A.7	Derogations and non conformities	47
IV.B	Collection of data concerning the processing industry	47
IV.B.1	Data acquisition	48
IV.B.1 (a)	Definition of variables	48
IV.B.1 (b)	Type of data collection	49
IV.B.1 (c)	Target and frame population	49
IV.B.1 (d)	Data sources	50
IV.B.1 (e)	Sampling stratification and allocation scheme	50
IV.B.2	Estimation	50
IV.B.3	Data quality evaluation	50
IV.B.4	Data presentation	51
IV.B.5	Regional coordination	51
IV.B.6	Derogations and non conformities	51
<b>V.</b>	<b>Module of the evaluation of effects of the fishing sector on the marine ecosystem</b>	<b>52</b>
<b>VI.</b>	<b>Module for management and use of the data</b>	<b>54</b>
VI.A	Management	54
VI.B	Use of the data	56
VII.	Follow-up of STECF recommendations	56
VIII.	List of derogations	61
IX.	List of acronyms and abbreviations	62
X.	Comments, suggestions and reflections	63
XI.	References	63
XII.	Annexes	65

## I. General framework

This report presents the general framework of the planned National Programme for the Collection of Fisheries Data which Cyprus proposes to undertake for the three-year period 2011-2013. The proposed activities are based on the requirements set by the new Data Collection Framework (DCF), comprised by:

- Commission Regulation No 199/2008 *establishing a Community framework for the collection, management and use of data in the fisheries sector and support for scientific advice regarding the Common Fisheries Policy*
- Commission Regulation No 665/2008 *laying down detailed rules for the application of Council Regulation (EC) No 199/2008 concerning the establishment of a Community framework for the collection, management and use of data in the fisheries sector and support for scientific advice regarding the Common Fisheries Policy.*
- Commission Decision 2010/93/EU adopting a multiannual Community programme for the collection, management and use of data in the fisheries sector for the period 2011-2013.

The NP will cover only the areas under the effective control of the Government of the Republic of Cyprus.

Cyprus plans to meet the DCF obligations by the collection and use of fisheries data as follows:

- a) Direct Reports (logbook reports)
- b) Legislative procedures (registration data)
- c) Interviews
- d) Sampling schemes (on board and at landing sites)
- e) Research Surveys
- f) New/improved IT systems (database)

For the implementation of the new DCF legislation, the following additions to the previous data collection scheme will be made:

- Estimation of biological parameters (length) by metier, through concurrent sampling
- Calculation of ecosystem indicators, with a slight modification on the sampling protocols followed in research surveys
- Inclusion of the collection of economic variables on aquaculture

## **II. Organisation of the National Programme**

### **II.A National organisation and co-ordination**

#### **National correspondent**

The Cyprus National correspondent has been appointed to supervise the data collection programme. There will be sub-co-ordinators, for separate aspects such as the collection of transversal, biological and economic variables and other data required by the DCR.

The Cyprus National Correspondent for the National Data Collection Programme is:

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#### **Participating Institutes**

The National Programme will be conducted by the Department of Fisheries and Marine Research (DFMR) of the Ministry of Agriculture, Natural Resources & Environment of Cyprus.

Some of the proposed activities of the NP will be assigned to other scientific bodies; a list of the participating institutes cannot be provided at present, as the assignment procedures have not been completed yet.

### **II.B International co-ordination and international scientific meetings**

**Table II.B.1** provides a preliminary list of the meetings that will likely be attended by Cyprus representatives.

### **II.C Regional co-ordination**

Cyprus acknowledges the significant role of the RCMs on the improvement of the quality of the NPs and the task and cost sharing of regional aspects in the data collection, especially under the new DCF. As indicated in Table II.B.1, Cyprus plans to participate in the RCM for Mediterranean and Black Sea, and the RCM for Other Regions.

The regional agreements / recommendations of the RCMs are provided under the relevant NP Proposal sections.

### **III. Module of the evaluation of the fishing sector**

#### **III.A General description of the fishing sector**

The Cyprus fishing fleet is relatively small. According to the Cyprus Fisheries Law<sup>1</sup>, fishing fleet is categorised into three fleet segments: the small scale inshore boats, the polyvalent vessels and the bottom otter trawlers.

The small scale inshore boats, with an overall length  $\leq 12$ m, operate with passive polyvalent gears, mainly with bottom set nets and bottom longlines, targeting demersal species. This is the largest segment of the fleet, as more than 90% of the licensed fishing vessels are small scale boats. National Fisheries Law provides for a limited number of licenses for this segment annually. A number of restriction measures on the use of fishing gears and minimum landing sizes are enforced, according to the national and community law. Until 2007 no more than 500 licenses were issued. A modification of the National Fisheries Law in 2007 has introduced a new category of professional small scale inshore fishermen, with a limited fishing effort (no more than 70 days each year).

The polyvalent vessels have an overall length between 12-24 m and operate with passive polyvalent gears. The term “polyvalent vessels” is used because these vessels are engaged in two fisheries; mainly in the large pelagic fishery using drifting longlines and operating around Cyprus waters and the eastern Mediterranean (targeting swordfish, bluefin tuna and albacore), but also in the inshore demersal fishery using mostly bottom set nets and bottom longlines. A limited number of licenses are provided for this segment annually (usually not more than 30 licenses). Furthermore, closed seasons, restriction measures on the use of gears and minimum landing sizes are employed, in accordance to national and community regulations.

The bottom otter trawlers have an overall length between 22-28 m and are categorised, based on their type of license, in those fishing in the territorial waters of Cyprus and those fishing in international waters (eastern and central Mediterranean). Until 2005 there were eight licensed vessels fishing in territorial waters (with eight being the maximum number of licenses to be provided, according to the National Fisheries Law); since 2006 the licenses are limited to 4. In 2009 there were 7 trawlers licensed to operate in international waters. A closed season, restriction measures on the use of trawl nets and minimum landing sizes are employed, in accordance with national and community law. In the territorial waters, the fishing grounds basically extend from 50-100m.

Recreational/sport fishery is widely practiced in Cyprus with approximately 3000 licensed individuals yearly, while a large number of people fish with rod and line from

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<sup>1</sup> Basic Fisheries Law Cap. 135 and subsequent amendments of 1961 to 2007, Fisheries Regulations of 1990 to 2007 based on Article 6 of the Basic Law

land without the need of licenses. The fishing techniques used by recreational fishermen in Cyprus are:

- Bottom set longlines, traps, trolling, handline, fishing rods
- Spear-guns (free divers)
- Fishing rods (without the use of boat)

In summarising, the Cyprus fishing fleet operates in the Mediterranean, exercising three main fishing activities:

- the passive polyvalent gears fishing demersal species (basically exercised by the inshore small scale fleet)
- the drifting longlines targeting large pelagic fish, and
- the bottom otter trawl targeting demersal species.

Standard table III.A.1 provides an overview of the geographical areas where the Cyprus fishing vessels operate, as well as the species assemblages exploited.

### **III.B Economic variables**

#### **III.B.1 Data acquisition**

##### **(a) Definition of variables**

The profitability and performance of the fleet is a vital micro-economic indicator of fishery performance which provides a measure of the economic sustainability of the fleet.

In order to calculate the profitability of the Cyprus Fishery fleet, an indication of capital investment is required.

Landing prices in connection with data on investment and operational costs can provide fleet performance indices. The use of CPUE and prices in the fisheries sector are often used in the evaluation of socio-economic studies, showing the trend of fisheries in an area. These indicators can subsequently lead to appropriate fishery management controls and infrastructure investment.

According to the Appendix I of the Commission Decision 2010/93/EU, Cyprus belongs to Mediterranean and Black Sea area and only to one geographical division.

It should be noted that economic variables are to be collected on an annual basis at the C3 level (Appendix V) with the exception of those identified as transversal variables and collected at more disaggregated levels ( as defined in the Appendix VIII) and periodicity.

The variables needed to be evaluated for analysing the economic situation of the fisheries sector are reported and defined in the Appendix VI of the above-mentioned Decision. Definitions of these parameters will be based on the recommendations of the Expert

Working Group on Economic Data Collection that took place in Paris, May 2004 and also on the Report of the STECF/SGECA 09-02.

The NP will take into consideration the following economic parameters:

1. The income is essential since it is defined as the total Gross Revenue of the fishing sector. The total income can be estimated from the logbooks and from the Sales Notes. It should be noted that the personal fish consumption is excluded from income. This indicator includes the gross value of landings, direct subsidies, income from leasing out quota or other fishing rights and other income from the use of the vessel like tourism.
2. The production cost is also very important, since it includes the total expenditure of the fishing activity. The DFMR does not keep records of costs because it is not subject to administrative control. Therefore, instead of keeping a register, is more cost efficient to get the data, and all the information needed, through the use of the questionnaire-interview method.

The production cost should be broken down as follows:

- a. Personnel costs including the wages and salaries, (all the expenditures paid by the employers, including social security, health insurance, retirements and other related taxes). The value of the unpaid labour (for example the vessel owner's own labour) is also included, because for some segments of the fleet like the Passive gears: Polyvalent "passive gears only" 0-<12 m is very important. For this segment the minimum wage set by national law will be used. As far as the other two segments is concerned (Vessels using Polyvalent "passive gears " 12-<18 m and demersal trawlers 18-24<m) the value of the unpaid labour will differ for different types of work performed (Sailor, mechanic etc). The imputed value of the unpaid labour for these segments will be estimated based on the average wage given to the entire segment for each specific job.
- b. Energy costs. It is noted that the lubrication oil is excluded. Provisionally, it seems that the energy costs cannot be broken down by type of the fuel used, but this is a question that can only be answered when the questionnaire method is used.
- c. Repair and maintenance – Gross costs to maintenance and repairs to vessel and gear.
- d. Other operational costs

The latter will be further subdivided in the following costs:

- a. Variable costs: Includes all purchased inputs related to fishing effort and/or catch/landings.

b. Non-variable costs: Includes all purchased inputs not related to fishing effort and/or catch/landings.

c. Lease/ rental payments for quota or other fishing rights.

Some of the items that are included in the other operational costs indicator are:

- Ice
- Fishing gears
- Baits
- Food
- Medicines
- Fish boxes (packaging costs)
- Expenses for safety measures
- Expenses for security reasons
- Services by third parties (outsourcing)
- Transportation by others

3. The capital costs variable is considered to be important, despite the fact that it is not directly connected with the fishing activity. Depreciation is one of the main costs and will be calculated according to the value of the fixed asset.

The Straight Line Method (SLM) will be used considering that the Useful Economic Life (UEL) of the vessels is as follows:

<u>Vessels</u>	<u>UEL</u>
• Up to 6.6 m	20 years
• Over 6.6m – 9m	25 years
• Over 9m – 12 m	30 years
• Over 12m	35 years

The SLM is calculated by the formula:

$$\frac{\text{Value of the vessel} - \text{Scrap value}}{\text{UEL}}$$

It is noted that the recommended by the Guidelines Templates for calculation of depreciation will be used.

4. Capital value. It is defined as the total value of the capital. The value of the vessel includes the hull, engine, all onboard equipment and the gear. The Capital value indicator consists of the following variables:

- a. Value of physical capital: depreciated replacement value

Methodology – summary

These data will be collected using the questionnaire method and the insurance scheme for vessels. The insurance scheme will be used as a cross-check. It should be noted that most of the vessels in the Cyprus Fishery are not insured because the insurance scheme is not compulsory in Cyprus and the fishermen are not willing to insure their vessels.

Any investments that increase the value of the vessel will be also taken into account such as *the fiber class of the vessel*.

A survey was conducted for estimating the prices of new constructed vessels.

In order to estimate the depreciated replacement value of vessels the following variables are needed:

- UEL of vessels – same methodology as the one specified in the Depreciation parameter.
- Value of new constructed vessels
- UEL of fishing gears
- UEL of the following fishing electronic equipment:
  - Engine up to 30 HP 20 years
  - Engine over 30 HP 25 years
  - Net Longline haulers 20 years
  - Radar 15 years
  - Ecosounder, radiotelephone, GPS 15 years

It is noted that the recommended by the Guidelines, templates for calculation of capital value will be used. Thus, the UEL may be modified to be in accordance with those templates.

- b. Value of physical capital: depreciated historical value.

- c. Value of quota and other fishing rights. It is noted that there is no market for selling the quotas or other fishing rights. As a result this variable cannot be estimated.

5. Investments. It is related to investments in physical capital. In this case any improvements to existing vessel/gear during the given year, such as *the fiber class of the vessel*, will be taken into account. It should be noted that any subsidies given within the framework of the European Fisheries Fund, for the modernization of the vessels will be used.

6. The financial position is the percentage of the debt in relation to the capital value, as described above and will be calculated with the ratio of the Debt (borrowed capital) to the asset ratio. The data regarding the debt variable will be collected with the questionnaire method, the reason being that they concern fishermen and small enterprises, which do not have audited financial statements. The validity of the data cannot be easily cross-checked.
7. Employment is defined as the number of jobs onboard, equal to the average number of persons working for and paid by the vessel. This includes temporary crew as well as rotation crew. These data are collected from the fishing licence applications and the face-to face interviews.
8. Information on the fleet segment characteristics are provided by GT, KW, age and gear used. These data are collected by the DFMR and are included in the FVR, which it is continually updated.
9. Effort is measured by the number of days of fishing activity multiplied by the size of the fleet parameter (the number, GT, KW, age and gear used). These data are collected by the DFMR and are included in the FVR.
10. Number of fishing enterprises/units according to the situation at 1<sup>st</sup> of January as defined in the fleet register. The information will be given by size category:
  - a. owned vessel
  - b. 2-5 owned vessels
  - c. >5 owned vessels
11. The prices are collected for each species and they are the live/weighted prices taken by the fishmongers.

Another important indicator that should be calculated is the Fuel efficiency of fish capture. It is an environmental indicator that measures the effects of fisheries on the marine ecosystem. It is calculated as the ratio between value of landings and cost of fuel, by quarter and by metier.

Two sources of data are needed for the calculation of this indicator:

- a. total value of landings which will be estimated as the product of quantities of landings and the average prices per species per metier
- b. cost of fuel for each metier according to level 6 for the metier classification.

Due to the fact that the sampling procedures used for the collection of the economic data is according to length classes, the estimation of the cost of fuel variable will be different than what it was described above in the Collection of economic variables based on

Appendix VI. Thus, during metier based sampling where information on landings, effort and length data will be collected; information on fuel consumption for the trips sampled will also be required.

Difficulties are expected to be encountered for the estimation of this indicator concerning fishing vessels engaged in polyvalent activities (i.e. in more than one metier during the same fishing trip); it is noted that polyvalent activity is a common case for the Cyprus fishing vessels, especially the small scale inshore ones.

### **(b) Type of data collection**

The type of the data collection that will be applied for each fleet segment and for each economic variable is described in III.B.3 Table: “Economic Data Collection Strategy”. The data collection scheme for the trawlers and the vessels using polyvalent passive gears is census. Effort will be made to collect data for the whole population. As for the polyvalent passive gears 0-12m length category, probability sample survey will be performed for most of the variables.

### **(c) Target and Frame Population**

The fishing vessels population consists of all commercial fishing vessels included in the Fleet Vessel Registry (FVR) that will have fishing licences for the years 2011, 2012 and 2013. Thus the target and the frame population are the same. The fishing vessels population is the active vessels of the FVR. It is noted that there are no deviations from the definition given in the DCF. The capacity indicators and capital value will also be estimated for the inactive vessels despite the fact that we may face difficulty in calculating them. Table III.B.1 – “Population segments for collection of economic data” provides an overview of the fleet segmentation.

During the workshop on Small Scales Fishery (Kavala 2005) a session was devoted on the “Fleet - Fishery Based Approach for the Mediterranean Fisheries”. In this session, which is part of the 2005 RCM for Mediterranean, it was agreed that if a length stratum is composed of less than 10 vessels, it can be regrouped within the lower stratum. Cyprus has distinguished between segments similar to other segments, as suggested by the Guidelines and it was used both for trawlers and polyvalent passive gears vessels. The segments that have been clustered are shown on the Table III.B.2 “Clustering of fleet segments”, where the clusters are named after the biggest segment in terms of number of vessels.

The demersal trawlers below 24m are only 2 and thus, they could be regrouped in the >24m length group (up to 27m). Both groups are engaged in the same metier and they target the same group of species with the same gear despite their vessels length.. The same stands for the vessels using polyvalent passive gears where the vessels belonging in the length group 18-<24m is only one and the vessels above the 24m length group are only two. It is noted that there are 16 vessels with length less than 18m (length group 12-<18m). All the groups of vessels using polyvalent passive gears with length>12m are

engaged in the same metiers since these vessels target the same group of species with the same gears despite their vessels length. It is evident from the landings value and volume.

It is emphasized that the cost structure of the clustered segments does not change much. The clustering will not create any problems of bias. It is important to have in mind that for both segments a census will be performed.

#### **(d) Data sources**

Data required for the economic analysis of the sector can be derived from the FVR and the National Statistics database. The FVR being the main Register used in the collection of economic data for the fleet. Data are also collected from the Inshore Fishery Production Reports, Logbooks, the Fishing Licenses and the Sales Notes from the fishmongers for verifying the value and production (in tonnes) of the Inshore Fishery.

Moreover, an important tool that will be used for the economic analysis is the face-to face interviews. A copy of the questionnaire used is included in the Annex II.

“Table III.B.3- Economic Data Collection Strategy” provides an overview on data sources used to collect each variable per segment for the 2011-2013 Cyprus NP.

#### **(e) Sampling frame and allocation scheme**

The sampling strategy will be based on the population segments described in the Table III.B.1 – “Population segments for collection of economic data”. The collection of economic data by groups of vessels will be carried out at predetermined intervals with the use of questionnaires. Before drawing the sample that will be used, the population will be stratified based on this fleet segmentation. No further stratification within the fleet segment will take place. The sample is representative and covers all the fishing shelters in Cyprus.

It is of vital importance to bear in mind that based on a new national legislation, a new category of professional fishermen was introduced. Annual licences for this professional category were given for first time in the middle of 2008. These professional fishermen perform their fishing activity on a periodic basis since according to the new national legislation they are allowed to fish only during the weekends and the national holidays, a total of 70 days each year. Most of the fish produced by this category of fishermen is kept for self consumption. This is the reason why these fishermen are not obliged to submit invoices of their production to DFMR as the other professional fishermen. Consequently, their income from fisheries activities is too low. Thus, this new category, which represents the segments Passive gears: Polyvalent "passive gears only" 0-<6m and Passive gears: Polyvalent "passive gears only" 6-<12m, cannot be integrated with the existing segments of Passive gears: Polyvalent "passive gears only" 0-<6m and Passive gears: Polyvalent "passive gears only" 6-<12m since the data of previous years would not be comparative and we would face problems of bias.

There are only 4 licensed demersal trawlers fishing in territorial waters and they will all be covered exhaustively. Effort will also be made to interview all the 8 demersal trawlers fishing in the international waters. Some problems may be encountered due to the fact they may remain outside Cyprus for months for long periods before reaching Cyprus ports in order to carry out the face – to face interviews.

According to the Table III.B.1, as explained above, the polyvalent vessels using passive gears over 12 m are all included in a single category,  $12 \leq 18$ m. Both length groups (12- <18m and 18- <24m) are involved in inshore fishery activities and they also perform longer trips since they target swordfish, albacore and Bluefin tuna.

As far as the polyvalent vessels using passive gears (inshore fishery) are concerned, a stratified random sampling procedure will be carried out. The sample will cover the 33% of the whole population of the existing subcategory Passive gears: Polyvalent passive gears only" 0- <6m and 20% of the existing subcategory Passive gears: Polyvalent "passive gears only" 6- <12m. As far as the new subcategory Passive gears: Polyvalent passive gears only" 0- <6m the planned sample rate is 20% whereas for the new subcategory Passive gears: Polyvalent "passive gears only" 6- <12m the planned sample rate is 33%.

Table III.B.3 provides an overview of the planned sampling for the variables described in the Appendix VI of the Decision, for the 2011-2013 Cyprus NP.

## **II.B.2 Estimation**

In the case of trawlers and polyvalent passive gears vessels, where a census will be performed, non-responsive units may exist. The method used to raise the final estimates to total population is the adjustments of raising factors, where the factors is the total number of licensed active vessels. The same method will be used for the Polyvalent passive gears only 0-12m segment, where the probability sample survey will be performed. For example the Y estimate of a population is the y total value of the sample divided by the x total number multiplied by the X total population ( $Y = y/x * X$ ). In this case, if y is Total expenditure, x is the total number of boats in the sample, and X is the total number of boats (500), then Y is the estimated Total Expenditure for the population.

Regarding the Polyvalent passive gears 0-12m segment, rotation will be applied to substitute non-responsive units. Those substituted units will be randomly selected from the same fleet segmentation, so as the main characteristics of the substituted units to be the same with the original ones.

## **III.B.3 Data quality evaluation**

Table III.B.3 describes for each data collection scheme the methods to be used to assure the quality of the collected data.

### **III.B.4 Data Presentation**

Cyprus will comply with the provisions of Regulation 199/2008 concerning the process, the submission and the transmission of data to end-users (Articles 17-20). It will ensure the collection of all primary data required for the reliable estimation of the economic variables. It is intended that the processing of primary data is completed in the following year of each reference year, for producing updated datasets to be used for scientific advice.

### **III.B.5 Regional coordination**

There is no initiative taken to coordinate the national programme with other Member States in the same region, with regard to the collection of economic variables.

### **III.B.6 Derogations and non-conformities**

No derogation is requested.

## **III.C Biological – metier – related variables**

### **Mediterranean Sea and Black Sea**

#### **III.C.1 Data acquisition**

##### **(a) Codification and naming convention**

From the metiers of the Mediterranean Sea and Black Sea, which are provided in Appendix IV (4) of Commission Decision 2010/93/EU and have been agreed by the RCM Med & BS (2009 report), the ones exercised by the Cyprus fishing fleet at level 6 during the reference years (2007-2008) are the following:

OTB\_DEF\_>=40\_0\_0  
OTB\_MDD\_>=40\_0\_0  
LHP-LHM\_FIF\_0\_0\_0  
LHP-LHM\_CEP\_0\_0\_0  
LTL\_LPF\_0\_0\_0  
LLD\_LPF\_0\_0\_0  
LLS\_DEF\_0\_0\_0  
FPO\_DEF\_0\_0\_0  
GTR\_DEF\_>=16\_0\_0  
GNS\_DEF\_>=16\_0\_0  
PS\_LPF\_14\_0\_0

For most of the above métiers the target assemblages (Level 5) to be selected are clear, since for the Mediterranean the assemblages are general and refer mostly to demersal species, demersal fish, finfish, large pelagic fish and small pelagic fish.

As indicated by PGMed (2009 Report), “for the Mediterranean the basic métier for which a threshold is required for allocating the target assemblages is the bottom otter trawl, with three target assemblages (demersal species, deep water species, mixed demersal and deep water species)”, where deep water species refer only to red shrimps *Aristaeomorpha foliacea* and *Aristeus antennatus*. For the allocation of the three target assemblages of the bottom otter trawl, the 2009 PGMed Group suggested the following exercise: “When deep water species occur in the catch, the catch should be sorted to demersal and deep water species and be ranked by value. In the case the deep water species are ranked first, the target assemblage should be assigned to deepwater species; in the case the deep water species are ranked second, the target assemblage should be assigned to mixed demersal and deep water species.”

Concerning Cyprus bottom otter trawlers, the deep water species may only be caught by those fishing in international waters. Cross-checks of logbooks of the vessels fishing in central Mediterranean with market data provided by other MS revealed that the logbooks of these vessels may have records only of the international catches that are sent to Cyprus, and not of the ones landed and marketed in other MS. For this reason, and considering that the catches of the deep water species are not sent to Cyprus, it was decided that the target assemblage of “mixed demersal and deep water species” will be provisionally selected for all the catches from the bottom otter trawl in central Mediterranean.

**(b) Selection of metiers to sample**

In accordance with Commission Decision 2010/93/EU, in order to select the major metiers (level 6) exercised by the Cypriot fishermen for biological sampling, the metiers were ranked according to the following three parameters, obtained for the reference years 2007-2008:

1. Share in total commercial landings
2. Share in total value of commercial landings, and
3. Share in the total effort (expressed as days-at-sea)

The data on landings, value and effort used for ranking the metiers were obtained using various sources of information.

For vessels over 12m long, landings and effort data per metier were obtained from logbook records, cross-checked with sales notes. Values per metier were calculated by multiplying the mean value with the landings of each species, in each metier.

For vessels less than 12m long, landings, effort and value data per metier were estimated using the following information:

- The overall landings and effort estimates for all metiers combined, obtained by the production reports
- Information on the percentage of effort spent by inshore fishermen on each metier, obtained in 2006 by a census survey using the fishing calendar method.
- Assignment of each species' landings in the relevant metiers based on assumptions
- The mean value of each species, which is routinely collected

Information on the metiers exercised by the Cyprus fishing fleet and those selected through the ranking system are provided in standard **Table III.C.1**.

The following 5 metiers were selected for sampling, in GSA 25 (Cyprus waters):

- Bottom otter trawl targeting demersal species
- Drifting longlines targeting large pelagic fish
- Set longlines targeting demersal species
- Trammel nets targeting demersal species
- Set gillnets targeting demersal species

Furthermore, as indicated in Table III.C.1, the metier *Bottom otter trawl targeting demersal and deep water species*, exercised in GSA 15, was also selected through the ranking system (see also Section III.C.5- Regional coordination).

### *Description of métiers selected*

- Bottom otter trawl targeting demersal species (GSA 25): This métier is exercised by 4 vessels (ranging from 22-25m LOA), operating on the slope and basically from 50-100m depth. Currently the mesh size at cod-end used is 40mm, diamond shape (until June 2010 as required by Regulation (EC) 1967/2006). There is a closed season from 1<sup>st</sup> of June until the 7<sup>th</sup> of November. The main targeted species is *Spicara smaris*, followed by *Mullus barbatus*, *Boops boops*, *Pagellus erythrinus* and Cephalopods. All catches are landed in Cyprus.
- Drifting longlines targeting large pelagic fish: In 2010 16 vessels are licensed for exercising this métier, belonging to the length group 12-24m LOA. The vessels operate in the Eastern Mediterranean (37.3.2). The main targeted species are swordfish and albacore, with bluefin tuna caught as by-catch.
- Set longlines targeting demersal species (GSA 25): The métier is basically exercised by the small scale inshore fleet (with LOA < 12m), on the slope, all year round. The main targeted species are *Pagrus pagrus*, *Diplodus* spp., and *Pagellus erythrinus*.
- Trammel nets targeting demersal species (GSA 25): This is the most common métier exercised by the small scale inshore fleet, all year round. The main targeted species are *Mullus barbatus*, *Mullus surmuletus*, *Siganus* spp., *Sparisoma cretense*, *Pagellus erythrinus* and cephalopods.
- Set gillnets targeting demersal species (GSA 25): The métier is basically exercised by the small scale inshore fleet, all year round. The main targeted species are *Boops boops*, *Spicara smaris* (seasonally, February – April), and *Spicara maena* (seasonally, May).
- Bottom otter trawl targeting demersal species (GSA 15): Less than 10 vessels are involved in this métier (ranging from 23 to 28m LOA).

### *Discards sampling*

In accordance with the 2009 RCM Med & BS recommendation on discards sampling, discards from bottom otter trawls and drifting longlines are considered significant and therefore will be sampled every year.

Concerning set gillnets, trammel nets and longlines for demersal species, the 2009 RCM Med & BS recommends that references on the discards behaviour should be provided for requesting derogation. Cyprus proposes to perform a discards pilot study in 2011 on these three métiers, since their discard behaviour has always been considered negligible and has never been actually evaluated. The pilot study is expected to be used as reference for the following years, and depending on the results, Cyprus will either request for derogation or will implement discards sampling every year. The proposal for a pilot study is provisional, pending the recommendations of the forthcoming 2010 RCM Med& BS in May, during which scientific justification for not sampling certain métiers for discards will be provided.

Regarding the purse seine for large pelagics, which has not been selected through the ranking system, the 2009 RCM Med & BS recommends that reference should be provided for requesting derogation from sampling discards. Pending the

recommendations of the forthcoming 2010 RCM Med& BS in May on discard sampling, and taking into account that there is only one authorized Cyprus purse seiner, it is provisionally proposed to include the discard sampling of this métier in the observer programme required by Regulation (EC) 302/2009 *concerning a multiannual recovery plan for bluefin tuna in the eastern Atlantic and Mediterranean*.

As shown in **Table III.C.2**, there has been no merging of métiers. In the same table, drifting longlines are further disaggregated at level 7 based on the target species, in accordance with the recommendation of the 2009 PGMed, endorsed by the 2009 RCM Med & BS. Concerning the 2009 PGMed recommendation to further split the bottom otter trawl and the set longlines at level 7 based on depth, these métiers in Cyprus are basically not performed in depths over 200m depth, and therefore are not considered applicable. The new métiers defined at level 7 are shown in **Table III.C.3**.

### **(c) Type of data collection**

*Following the recommendation of the WKMERGE (ICES 2010b), the information provided in this section, as well as sections III.C.1 (d)-(e) and III.C.2, is in agreement with the WKMERGE proposed guidelines for description of national schemes for métier based biological sampling (included as Annex 10 in the WKMERGE report).*

In general, for the collection of biological métier-related variables two types of data collection schemes will be used: Probability Sample Survey and Non-Probability Sample Survey. A description of the proposed national schemes for each métier selected for sampling is provided below.

#### ***Sampling of bottom otter trawls targeting demersal species (GSA 25)***

The objectives of the sampling scheme to be carried out for the bottom otter trawls include the concurrent length sampling of retained catches, the length sampling of discarded species for which stock-related variables are collected, the evaluation of discard volumes (in terms of weight and numbers), the length sampling of discarded species of Group 1,2 and 3 species when the discards represent more than 10% of total catches by weight or more than 15% of the catches in numbers, and the sampling of the unsorted retained catches. These objectives will be met in every sampled trip.

Sampling will be performed only at sea (see **Table III.C.3**). As there are no auction markets in Cyprus, it is not possible to perform concurrent sampling at ports during landing, since the fish are usually landed by quality grade and not by species, and are sold to the fish mongers in a very short time. Sampling scheme 1 will be used for the concurrent sampling.

A non-probability sample survey will be performed. It is not possible to randomly select the vessels, due to the non-adequate space of some trawlers to sample and stay on-board

overnight, and/or the lack of communication between foreign skippers and crew with the observers. Further information is provided in Section III.C.1(e).

#### *Sampling of drifting longlines targeting swordfish*

The objectives of the sampling scheme to be carried out for the drifting longlines targeting swordfish include the concurrent length sampling of retained catches, the length sampling of discarded species for which stock-related variables are collected, the evaluation of discard volumes (in terms of weight and numbers) and the length sampling of discarded species of Group 1,2 and 3 species when the discards represent more than 10% of total catches by weight or more than 15% of the catches in numbers.

Sampling will be performed at sea and at shore (landing sites), based on a probability sample survey (see also Section III.C.1(e)). Sampling scheme 1 will be used for the concurrent sampling (see Table III.C.3).

#### *Sampling of drifting longlines targeting albacore*

The objectives of the sampling scheme to be carried out for the drifting longlines targeting albacore include the concurrent length sampling of retained catches, the length sampling of discarded species for which stock-related variables are collected, the evaluation of discard volumes (in terms of weight and numbers), and the length sampling of discarded species of Group 1,2 and 3 species when the discards represent more than 10% of total catches by weight or more than 15% of the catches in numbers.

Sampling will be performed at sea and at shore (landing sites), based on a probability sample survey (see also Section III.C.1(e)). Sampling scheme 1 will be used for the concurrent sampling (see Table III.C.3).

#### *Sampling of set longlines, trammel nets and set gillnets targeting demersal species*

The objectives of the sampling scheme to be carried out for the above three métiers, basically exercised by the small scale inshore fleet, are the concurrent length sampling of retained catches and the collection of data on total catch, effort (in terms of quantities, soaking time), catch composition, mesh/hook size of fishing gears and fishing depth. As already mentioned in Section III.C.1.(b), a pilot study for assessing the discards from these métiers is proposed for 2011; the proposal is provisional, pending the recommendations of the forthcoming 2010 RCM Med& BS on discards sampling.

Sampling will be performed at shore (landing sites), based on a probability sample survey (see also Section III.C.1(e)). Sampling scheme 1 will be used for the concurrent sampling. For the small scale inshore vessels the polyvalent activity is a common practice, i.e. they are involved in different metiers, and in their daily trips more than one metier may be exercised. As indicated in Standard **Table III.C.3.**, the main metier

exercised by the inshore vessels is the trammel net. The use of set gillnets and trammel nets in a trip is quite common, followed by the use of set longlines and trammel nets. Since for the inshore vessels it cannot be *a priori* known which trips will be assigned to each metier, a cluster of fishing trips will be sampled in each sampling event.

**(d) Target and frame population**

***Sampling of bottom otter trawls targeting demersal species (GSA 25)***

The target population is all catches made by the Cyprus licensed vessels operating with bottom otter trawls targeting demersal species in GSA 25. The sampling frame consists of the list of the licensed vessels for the reference years. Specifically, the fishery involves 4 licensed vessels, which operate all year with a closed season from 1<sup>st</sup> of June to 7<sup>th</sup> of November. The primary sampling unit (PSU) will be the vessel, and the secondary sampling units (SSU) will be the trips by each vessel in the stratum.

***Sampling of drifting longlines targeting swordfish***

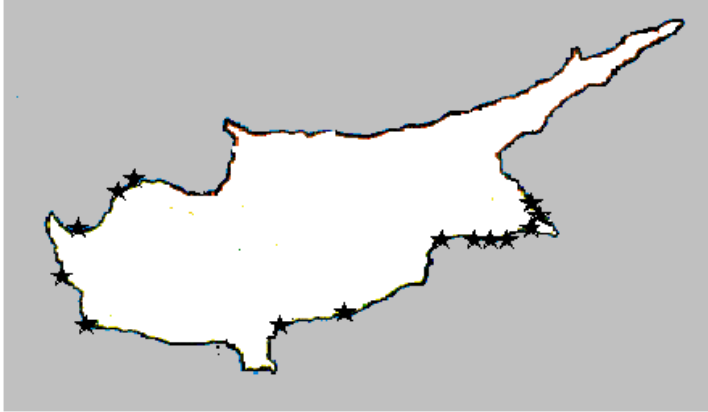
The target population is all catches made by the Cyprus licensed vessels operating with drifting longlines in the eastern Mediterranean targeting swordfish, basically from March to September. The sampling frame consists of the list of the licensed vessels for the reference years, with the vessel being the PSU and the SSU the trips by each vessel in the stratum.

***Sampling of drifting longlines targeting albacore***

The target population is all catches made by the Cyprus licensed vessels operating with drifting longlines targeting albacore in the eastern Mediterranean, basically from May to August. The sampling frame consists of the list of the licensed vessels for the reference years, with the vessel being the PSU, and the SSU the trips by each vessel in the stratum.

***Sampling of set longlines, trammel nets and set gillnets targeting demersal species***

The target population is all catches made by the Cyprus licensed vessels using trammel nets, gillnets and set longlines in GSA 25, which are basically artisanal and operate all year. The sampling frame is an area frame, comprising a list of all the landing sites of the artisanal fleet (see **Figure III.C.1**). The PSU will be the sampling site on a single day, with SSU the cluster of trips within the PSU.



**Figure III.C.1:** Geographical distribution of inshore fishery landing sites.

**(e) Sampling stratification and allocation scheme**

***Sampling of bottom otter trawls targeting demersal species (GSA 25)***

Temporal stratification will be employed for the collection of the data, in order to estimate the métier-related variables on a quarterly basis, as required by the DCF.

The proposed number of sampled trips at sea is indicated in **Tables III.C.3** and **III.C.4**. This number corresponds to the minimum requirements for sampling the landings (i.e. 1 fishing trip per month during the fishing season), considering the closed season from 1<sup>st</sup> of June until 7<sup>th</sup> of November. The selection of this sampling effort is based on the following rationales:

- There are only four trawlers operating in the Cyprus waters (GSA 25)
- The métier is not considered variable, as the trawlers are of similar size (22-28m), and operate in one depth zone (~ 50-100m), using the same mesh size at cod-end.

As mentioned in Section III.C.1.(c), a non- probability sample survey will be performed, in which the two from the 4 licensed trawlers will be included, thus covering 50% of the frame population. The trips (SSU) of these vessels will be selected randomly.

***Sampling of drifting longlines targeting swordfish***

Temporal stratification will be employed for the collection of the data, in order to estimate the métier-related variables on a quarterly basis, as required by the DCF.

The proposed number of sampled trips at sea and on shore is indicated in **Table III.C.3**. The number of trips at sea (6) corresponds to the minimum requirements of discard sampling (i.e. 2 fishing trips per quarter), taking into account the closed season for swordfish from 1<sup>st</sup> October to 30 of November (in accordance with ICCAT Recommendation 09-04) and the fact that the fishing season in Cyprus basically extends

from March to September. The overall number of sampled trips (10) fulfills the minimum requirements for sampling the landings. In general the minimum requirements for sampling have been selected, considering the relatively low average number of trips in the reference years (Table III.C.3) and the fact that during 2009 a number of vessels operating in this métier were scrapped.

As mentioned in Section III.C.1.(c), a probability sample survey will be performed. Vessels and their trips will be selected quarterly by random sampling.

#### *Sampling of drifting longlines targeting albacore*

Temporal stratification will be employed for the collection of the data, in order to estimate the métier-related variables on a quarterly basis, as required by the DCF.

The proposed number of sampled trips at sea and on shore is indicated in **Tables III.C.3** and **III.C.4**. The number of trips at sea (4) corresponds to the minimum requirements of discard sampling, considering that the fishing season basically lasts from May to August. It is worth mentioning that based on the 2006 Cyprus pilot study on discards only 1 species (*Pteroplatytrygon violacea*) was discarded from this métier.

As mentioned in Section III.C.1.(c), a probability sample survey will be performed. Vessels and their trips will be selected quarterly by random sampling.

#### *Sampling of set longlines, trammel nets and set gillnets targeting demersal species*

Temporal stratification will be employed for the collection of the data, in order to estimate the métier-related variables on a quarterly basis, as required by the DCF.

The proposed number of sampling events on shore is indicated in **Tables III.C.3** and **III.C.4** and has been selected with the aim to perform about 2 sampling events per week, taking into account rough weather.

The planned sampling intensity for length measurements for all metiers combined is provided in **Table III.C.5**. It is noted that the table presents only the Group 1,2 and 3 species for which planned measurements have been set. It does not include the Group 1 and Group 2 species that have very low/negligible landings, and for which no sampling targets can be made, although they are included in the concurrent sampling.

As mentioned in Section III.C.1.(c), a probability sample survey will be performed, which will be proportional to the size of the landing sites. Landing sites will be stratified into “large”, “medium” and “small” size, according to the quantities landed and the number of active vessels, with a different probability of selecting PSUs in each stratum. Fishing trips will then be selected within each of these PSUs, aiming to sample all fishing trips or as many as possible, depending on the activity of the selected landing site during the selected day.

### **III.C.2 Estimation procedures**

The analysis and the estimation of the discard volumes will be based on the formulas used in the 2006 Cyprus Pilot Study on Discards. The formulas were proposed by the Workshop on Discard Sampling Methodology and Raising Procedures (ICES, 2004a), by Vigneau (2006); also the outcomes and the Discard Raising Procedure Key, suggested by the Workshop on Discard Raising Procedures (ICES 2007) were taken into account for the analysis. The data sources for the final raising of discards (total number of trips/fishing operations/days, auxiliary variables) will be the logbook records.

The estimation of the length structure of the catches will be made using the analytical methods described in the report of Workshop on Sampling and Calculation Methodology for Fisheries Data – WKSCMFD (ICES, 2004b) and the Working Document of Vigneau and Mahevas, 2004, included as an annex in the WKSCMFD report. The total landings that will be used for the final raising of the sampled length distribution will derive from official records.

Age distribution of landings will be calculated using the estimated quarterly length frequency distribution of landings and the quarterly proportion of landings of age  $i$  in the length class  $j$ , estimated from the age-length keys (ALKs). ALKs by quarter will derive from age sub-samples of the length samples, taken as fixed number per length class. For the estimation of the age distribution it is intended to use both analytical and bootstrap methods.

### **III.C.3 Data quality evaluation**

#### *Potential sources of bias*

For the identification of the potential sources of bias the report of the ICES WKACCU (ICES 2008) was consulted. The ones identified and are related to biological-métier-related variables are the following:

#### A – Species Identification

- Species subject to confusion & trained staff. This can be a problem during discard sampling on board bottom otter trawlers, where the number of species is high. The way to mitigate this potential bias is to always include well trained and experienced staff in the sampling teams.

- Species misreporting by the fishermen. This can be tackled by cross-checks of the landings by fisheries inspectors or sampling teams and the fishermen's records.
- Grouping of statistics: In many cases logbook records from bottom otter trawls may refer to group of species or to the weight of commercial categories (which may comprise a number of species). The mean to mitigate this problem is the sampling of the unsorted retained catches during on-board sampling (see Section III.C.1 (c) – *Sampling of bottom otter trawls targeting demersal species*).

#### B – Landings weight

- Quantity misreporting. This can be tackled by cross-checks of the landings by fisheries inspectors or sampling teams and the fishermen's records.
- Percentage of mixed in the landings. Mixed landings are a common situation in Cyprus, especially for the bottom otter trawls. The percentage can be estimated by the sampling of the unsorted retained catches during on-board sampling and port sampling.

#### C – Discards weight

- Working conditions: In the case of the bottom otter trawls, where discards consist of many species, the space for sampling is not adequate in some of the vessels. Furthermore, usually the time interval between the hauls is very short and the crew may have to help the observers or delay its work. In general it is not comfortable to stay on-board the Cyprus fishing vessels more than one night. As mentioned in sections III.C.1 (c) & (e) for the bottom otter trawls a non-probability sample survey will be performed, selecting the vessels with the best working conditions (which comprise half of the population of the licensed vessels). A mean to mitigate the problem with the working conditions is the good compensation that is provided to the staff.

#### D– Length structure

- Availability of all the landings/discards: Concerning the inshore fishery, sampling at landing sites will take place during the day, at office hours; in case some quantities are landed at night, they will not be available for sampling. However, it is known from experience that most of the landings are made during the day, therefore this small unavailability is not considered a problem. Furthermore, as already stated, sampling of bottom otter trawls will not cover all licensed trawlers but half of them. Considering that the trawlers have similar fishing behaviour (one fishing area, same depth zones and mesh size), it is considered that sampling from the two trawlers will be representative for the whole population (4 trawlers).

#### *Precision indications and lessons learnt*

Precision estimates of the length composition for the 2008 Cyprus NP (included as an Annex II in the 2008 Cyprus Technical Report) indicate that the required DCR precision

level was not achieved for all the species, even though the actual number of fish sampled was for almost all species much higher than the one proposed in the 2008 NP (see Table 10.1 of 2008 Cyprus TR). According to WKPRECISE report (ICES 2009), “*the variance of parameter estimates is largely influenced by the number of clusters, not the total number of fish in the sample. Therefore, precision will only be significantly improved if the number of clusters sampled is increased and not by increasing the number of fish sampled from each cluster*”. The WKPRECISE report will be followed for improving the precision.

*Procedures developed for validation and quality checks*

Continued upgrading of the Cyprus database is planned for the period 2010 and 2011-2013, in order to incorporate procedures for quality control of the raw data entered into the database. The sampling records with the raw data are always kept, in case there is a need to retrieve in the original records and cross-check the data entered into the database. Furthermore, Cyprus has made all the necessary steps for using the Common Open Source Tool (COST) project.

**III.C.4 Data presentation**

Cyprus will comply with the provisions of Regulation 199/2008 concerning the process, the submission and the transmission of data to end-users (Articles 17-20). It will ensure the collection of all primary data required for the reliable quarterly estimation of the biological-métier-related variables. It is intended that the processing of primary data is completed in the following year of each reference year, for producing updated datasets to be used for stock assessment and scientific advice.

**III.C.5 Regional coordination**

The relevant RCM Med&BS recommendations for the 2011-2013 NP concerning biological-métier-related variables, and the follow-up actions taken, are listed below:

<b>RCM Med&amp;BS recommendations</b>	<b>Follow-up actions</b>
<p><b>RCM-Med&amp;BS 2008 Recommendation - Métier variables: Accuracy on geographical origin of landings and effort data</b></p> <p>The RCM-Med&amp;BS recommends Member States to provide landings and effort data according to the fishing grounds at the GSA level instead of the landing places. The use of VMS data is recommended for analysing the fishing grounds by GSA and identifying all metiers exercised by</p>	<p>Cyprus analyses VMS data in order to provide the transversal variables by fishing areas.</p>

<p>the Member States.</p>	
<p><b>RCM-Med&amp;BS 2008 Recommendation - Métier variables: Bilateral agreements on sampling task sharing for bluefin tuna</b></p> <p>The RCM-Med&amp;BS recommends Member States involved in metier “Purse seine for large pelagics” (especially for bluefin tuna) to establish agreements concerning the biological sampling of caged fish and to provide them in their NP.</p>	<p>Cyprus is involved in the shared métier “Purse seine for large pelagics”. As recommended by the 2008 RCM Med&amp;BS, the provisions of the ICCAT recommendation [06-07] on Bluefin Tuna Farming, concerning the length sampling of caged bluefin tuna, have been included in the Cyprus NP (2009-2010 and 2011-2013). Sampling will involve all cages and therefore catches from all flag MS concerned.</p>
<p><b>RCM Med&amp;BS 2009 Recommendation - Métier variables: Standard description of ranked metiers</b></p> <p>For the purposes of understanding the heterogeneity of metiers and the consequences for task sharing and discard sampling, national descriptions of the regionally ranked metiers should be compiled using the metier description template Annex 7. To enable this, participants from the MS should strictly respect the agreed naming conventions of fishing ground and metiers as well as the deadline for submission of the information.</p>	<p>Cyprus will provide the métier national descriptions based on the agreed template.</p>
<p><b>RCM Med&amp;BS 2009 Recommendation - Métier variables: Tasks prior to the RCM Med&amp;BS 2010</b></p> <p>For the purposes of ranking metiers for sampling in case of task sharing, National data on effort, landings and value by metier and fishing ground should be compiled regionally in advance of the next meeting. To enable this, participants from MS should strictly respect the agreed naming conventions of fishing ground, métiers and units</p>	<p>Cyprus has provided at the 2010 PGMed the most recent available national data on effort, landings and value by métier and fishing ground.</p>

<p>of the variables as well as the deadline for submission of the national data. The Chair is responsible for compiling it on a regional level.</p>	
<p><b>RCM Med&amp;BS 2009 Recommendation on métier and stock variables – Bluefin tuna: Regional sampling protocols</b></p> <p>RCM Med&amp;BS recommends that Table 3.3.3.a (length) and Table 3.3.3.b (stock related) are used for length sampling and stock related samples respectively. The number of samples to be collected for length and stock related variables will be revised during the PGMed 2010 and RCM 2009 recommends MS to adjust their NP 2011-2013 accordingly.</p>	<p>Cyprus has prepared its 2011-2013 NP concerning bluefin tuna in accordance with the regional sampling protocol agreed by the PGMed 2010.</p> <p>Furthermore, Cyprus will adjust its 2011-2013 NP based on the review of the regional sampling protocol that will be made by RCM Med&amp;BS 2010.</p>
<p><b>RCM Med&amp;BS 2009 Recommendation on Discards sampling – Exemptions</b></p> <p>RCM Med&amp;BS agrees with the table 3.3.4 proposed for the métiers to sample for discards. RCM Med&amp;BS recommends the following:</p> <ul style="list-style-type: none"> <li>- every MS should refer to RCM Med&amp;BS 2009 table for the metiers to be sampled for discards when drafting proposal for NP 2011-2013. References can be various, e.g. study, pilot studies, papers, etc).</li> <li>- the contents of the methodological report should follow the guidelines proposed by SGECA</li> </ul>	<p>Cyprus has made reference to the RCM Med&amp;BS 2009 decisions on discard sampling for the preparation of its NP 2011-2013 (see section III.C.1(b) – <i>Discards sampling</i>)</p>

*Bilateral agreement for sampling a shared métier*

Furthermore, Cyprus is involved in the métier “Bottom otter trawl targeting mixed demersal and deep water species” in GSA 15, shared between Malta and Cyprus. This métier has been selected through the ranking system (see Section III.C.1 (c)). An agreement has been made by the two concerned Member States in 2009, for the inclusion of the Cyprus trawlers operating this métier in the sampling scheme of Malta, while Cyprus will not undertake any sampling of this métier. The RCM Med&BS has been informed on this bilateral agreement during its 2008 meeting. The relevant bilateral agreement (included also in the 2009-2010 NP) is provided in Annex I of the Cyprus NP 2011-2013 Proposal.

*List of Group 3 species*

During the 2008 RCM Med&BS a list of species of local interest for Cyprus – GSA 25 was suggested to be included in the Group 3 list of species; this was accepted by the

Group, for GSA 25. Furthermore, it was suggested that Member States should consider the possibility of including in the list of Group 3 species the reference species of the “MEDITS” survey not already included in the lists of Group 1 and 2. As accepted by the RCM Med&BS, Cyprus includes in its 2009-2010 and 2011-2013 NP the list of Group 3 species that has proposed to the RCM Med&BS. Cyprus in its 2011-2013 NP has also added in this list one of the reference species of the “MEDITS” survey not already included in the lists of Group 1 and 2.

### III.C.6 Derogations and non-conformities

#### *Derogations for discard sampling*

Cyprus requests derogation for not sampling discards from the bottom otter trawlers targeting demersal species and operating in GSAs 26 and 27. These metiers, as indicated in Table III.C.1, have not been selected through the ranking system and the relevant landings, effort and value are relatively very low. The trips of the relevant vessels have a long duration and it is not cost-efficient to perform on-board sampling on these vessels. It should also be noted that the activities of Cyprus trawlers in these GSAs are been continuously decreasing, since there is a preference to move their activities from the eastern to the central Mediterranean.

#### **G1 species that are not sampled**

<b>Species</b>	<b>Comment</b>
Alopias superciliosus	No occurrence in Cyprus waters
Alopias vulpinus	Very rare bycatch by drifting longlines
Anguilla anguilla	No occurrence in Cyprus waters
Aristeomorpha foliacea	Very rare bycatch by trawls in very small quantities
Aristeus antennatus	Very rare bycatch by trawls in very small quantities
Carharhinus plumbeus	No occurrence in Cyprus waters
Carcharias taurus	No occurrence in Cyprus waters
Centrophorus granulosus	No occurrence in Cyprus waters
Cetorhinus maximus	No occurrence in Cyprus waters
Dalatias licha	No occurrence in Cyprus waters
Dipturus batis	No occurrence in Cyprus waters
Dipturus oxyrinchus	Very rare bycatch by trawls
Engraulis encrasicolus	Very rare bycatch by trawls in very small quantities
Etmopterus spinax	Recorded only from MEDITS
Galeorhinus galeus	No occurrence in Cyprus waters
Galeus melastomus	Very rare bycatch by trawls
Gymnura altavela	No occurrence in Cyprus waters
Heptranchias perlo	Very rare bycatch by trawls
Hexanchus griseus	No occurrence in Cyprus waters

Istiophoridae	No occurrence in Cyprus waters
Isurus oxyrinchus	Very rare bycatch by drifting longlines
Lamna nasus	Very rare bycatch by drifting longlines
Leucoraja circularis	No occurrence in Cyprus waters
Leucoraja melitensis	No occurrence in Cyprus waters
Mustelus asterias	No occurrence in Cyprus waters
Mustelus mustelus	Very rare bycatch by trawls
Mustelus punctulatus	No occurrence in Cyprus waters
Myliobatis aquila	Very rare bycatch by trawls
Nephrops norvegicus	No occurrence in Cyprus waters
Odontaspis ferox	No occurrence in Cyprus waters
Oxynotus centrina	Recorded only from MEDITS
Parapenaeus longirostris	Rare bycatch by trawls
Prionace glauca	No occurrence in Cyprus waters
Pristis pectinata	No occurrence in Cyprus waters
Pristis pristis	No occurrence in Cyprus waters
Pteroplatytrygon violacea	Discard by drifting longlines
Raja asterias	Very rare bycatch by trawls
Raja clavata	Very rare bycatch by trawls
Raja miraletus	Very rare bycatch by trawls
Raja undulata	Very rare bycatch by trawls
Rhinobatos cemiculus	Very rare bycatch
Rhinobatos rhinibatos	Very rare bycatch
Rostroraja alba	No occurrence in Cyprus waters
Sardina pilchardus	Very small quantities in the annual catch
Scyliorhinus canicula	Rare discard by trawls
Scyliorhinus stellaris	Rare discard by trawls
Shark-like Selachii	No occurrence in Cyprus waters
Solea vulgaris	Very small quantities in the annual catch
Sphyrna lewini	Very small quantities in the annual catch
Sphyrna mokarran	Very small quantities in the annual catch
Sphyrna tudes	Very small quantities in the annual catch
Sphyrna zygaena	Very small quantities in the annual catch
Squalus acanthias	Very rare bycatch
Squalus blainvillei	Very rare bycatch
Squatina squatina	Very rare bycatch
Torbedo marmorata	Very rare bycatch
Trachurus mediterraneus	Very small quantities in the annual catch

*Derogation for not sampling the shared métier in GSA 15*

As stated in section III.C.5 - Regional coordination, a bilateral agreement has been made between Cyprus and Malta for the inclusion of the Cyprus trawlers operating the shared métier “Bottom otter trawl targeting mixed demersal and deep water species” in GSA 15

in the sampling scheme of Malta, while Cyprus will not undertake any sampling of this métier. The RCM Med&BS is informed of this bilateral agreement.

### **III.D Biological – Recreational fisheries**

#### **Mediterranean Sea and Black Sea**

##### **III.D.1 Data acquisition**

Commission Decision 2010/93/EU requires for the Mediterranean Sea region the sampling of the recreational fisheries targeting bluefin tuna and eel (see Appendix IV of relevant Decision).

As there is no eel fishery in Cyprus, either commercial or recreational, no sampling is proposed for eel.

Concerning bluefin tuna, in the previous Cyprus NPs no recreational sampling was conducted, as catches of this species from recreational fishermen had not been observed; a derogation was requested by Cyprus in the 2005 NP and SGRN suggested that such a derogation was justified (SEC(2005)255 STECF-SGRN Report ). However, during 2008 there have been some recreational catches of bluefin tuna, near the Cyprus bluefin tuna farming facilities, where a group of wild bluefin tunas seems to concentrate. Assuming that this recreational fishery targeting bluefin tuna will continue in the future years, a pilot study is proposed to be conducted during 2011, for evaluating the recreational quarterly weight of catches of bluefin tuna, and where possible the length structure. It is also proposed that this pilot study includes the evaluation of the albacore catches and length structure from the recreational fishery, since albacore is an ICCAT priority species as well, and there is no information available on recreational catches of this species.

Concerning the management regime of the recreational fisheries, in general any recreational fisheries technique with the use of boat, as well as speargun fishing, requires an annual fishing license. There are restrictions on the kind and number of fishing gear used, the maximum total allowable catch, the fishing time and period and areas for fishing. The fishing licenses are general, i.e. any kind of allowable gears can be used with the same license. Large pelagic species are targeted seasonally, during summer months. According to Community Regulation (Regulation (EC) 1559/2007), it is prohibited to catch more than one individual of bluefin tuna during one trip, while according to the national Fisheries Regulations it is prohibited to catch more than 3 individuals of albacore during one trip.

It should be noted that the recent ICCAT Recommendation [08-05] *Amending the Recommendation to Establish a Multiannual Recovery Plan for Bluefin Tuna in the Eastern Atlantic and Mediterranean* provides additional obligations concerning recreational and sport fishery, and will be taken into account in the management and the design of the pilot study

##### **(a) Type of data collection**

The type of data collection to be applied for bluefin tuna catches from the recreational fisheries is a census.

**(b) Target and frame population**

The target population will be or licensed boat recreational fishermen targeting large pelagic species. The frame population is estimated to be based on annual previous populations of approximately 2200 (recreational boat licenses 2009) of which only a small proportion are actively targeting large pelagic species.

The frame population will cover all the recreational boat licenses for 2010 actively targeting large pelagic species. The frame and target populations are the same.

**(c) Data sources**

The relevant information will be obtained by the following method:

The recreational boats license will be accompanied by a questionnaire that by National law the fishermen catching bluefin tuna will have to complete, sign and submit to the appropriate authorities (DFMR). The fishermen will also have to submit evidence of their catch (i.e photo, body parts, etc.). All fishermen will have to inform the DFMR of their catch at least half an hour before landing. Random inspections of catches at landing sites will be carried out where possible for validation purposes.

**(d) Sampling stratification and allocation scheme**

The sampling strategy that will be carried out for the recreational catch of bluefin tuna. The parameters which will be collected for stratification to be used for the catch weight are the following:

- Work is planned as a pilot study for the year 2011.
- Planned sampling on board during fishing operations will be carried out wherever possible
- The frequency of sampling both on board and at landing sites will correspond to the frequency of reported catches by area.

**III.D.2 Estimation procedures**

The annual applications for a recreational fishing license require, apart from personal information, data on the specific areas and types of gears to be used by the applicants. From previous applications it is estimated that about 600 recreational fishermen use trolling lines for catching large pelagics species.

For the pilot study, modifications on the formal applications for a recreational license are considered to be made, for obtaining information on the usual effort exercised by the recreational fishermen using trolling line and handline (which target large pelagics) and the occurrence of the species of interest in their catch. Having in mind that there is a

limited allowable number of individuals to be caught for both species of interest, the evaluation of catches will be made during on-site surveys. Interviews are also considered to be made during the on-site surveys. Data on length distribution will be collected from on-site sampling and from the reported information from the fishermen.

On-site surveys will be planned and focusing on the following summer months May – September, in the areas with the main recreational fishing activity with trolling lines and handlines targeting large pelagics.

The pilot study will not use raising procedures for estimating the parameters of the population since the study is taking will be taking into account all the catches of bluefin tuna by the recreational fishermen.

Before finalizing the methodology for collecting and raising the data, the available pilot studies implemented by other MS, as well as STECF-SGRN's comments and recommendations on recreational fisheries will be reviewed and taken into account.

### **III.D.3 Data quality evaluation**

It is envisaged that the quality of the data in terms of sampling coverage and precision achieved for the quarterly catches of bluefin tuna by the recreational fisheries is within the target set for the recreational fisheries annual estimates of catches in volumes leading to precision level 1.

It is noted that this is the first time that data are collected in relation to the catches of bluefin tuna by the recreational fishermen. It is not expected that the pilot study will impact on the overall continuity and consistency of the series collected.

### **III.D.4 Data presentation**

Cyprus will comply with the provisions of Regulation 199/2008 concerning the process, the submission and the transmission of data to end-users (Articles 17-20). It will ensure the collection of all primary data required for the reliable quarterly estimation of the weight of catches. It is intended that the processing of primary data is completed in the following year of each reference year, for producing updated datasets to be used for stock assessment and scientific advice.

### **III.D.5 Regional coordination**

At the moment there is no regional coordination in sampling recreational fisheries in the Mediterranean. In 2007 the RCM Med proposed a pilot study with the title “Recreational fishery: current status of knowledge and future common approach for data collection”. The objective of the proposed study was the review of existing methodologies and the suggestion of the best approaches for homogenous data collection of recreational fisheries; this study however basically referred to recreational fisheries for species other than bluefin tuna.

Furthermore, it is recalled that during the 2008 ICES PGCCDBS/PGMed meeting a Workshop on Sampling Methods for Recreational Fisheries was proposed; one of the aims of this workshop was to recommend appropriate sampling schemes and data analysis for evaluating recreational catches and their length/age compositions. The workshop was held in April 2009 (Nantes, France) and the resulting “Report of the Workshop on Sampling Methods for Recreational Fisheries (WKSMRF)” and its recommendations will be taken into account.

#### **III.D.6 Derogations and non-conformities**

As in the 2009-2010 NP Cyprus Proposal, derogation is requested for not performing sampling for eel recreational fishery, as there is no such fishery in Cyprus.

### **III.E Biological – stock-related variables**

#### **Mediterranean Sea and Black Sea**

##### **III.E.1 Data acquisition**

###### **(a) Selection of stocks to sample**

Biological sampling for the collection of age, weight, sex and maturity data will be performed for the following 7 stocks, included in Appendix VII of Commission Decision 2010/93/EU:

- (i.) *Boops boops* (Group 2)
- (ii.) *Mullus barbatus* (Group 1)
- (iii.) *Mullus surmuletus* (Group 1)
- (iv.) *Pagellus erythrinus* (Group 2)
- (v.) *Spicara smaris* (Group 2)
- (vi.) *Thunnus alalunga*
- (vii.) *Thunnus thynnus*

Table III.E.1 provides information concerning landings and percentage in EU landings for all species included in Appendix VII of Commission Decision 2010/93/EU.

For all demersal species the levels of Cyprus landings do not exceed both thresholds above which sampling is required. However, they are included in the sampling programme due to their commercial importance for Cyprus. Concerning the two large pelagic species, they are included in the Cyprus NP Proposal in accordance with the regional agreements (PGMed, RCM Med&BS) on the coordination of sampling of large pelagics.

###### **(b) Type of data collection**

The biological stock-related variables will be collected through a probability sample survey, in which data will be collected from randomly selected units of the population.

###### **(c) Target and frame population**

The target population of the demersal species is the stock defined by GSA 25, and it is the same with the frame population.

For albacore the target population is the stock defined by all GSAs ; the frame population is defined by the GSAs of the eastern Mediterranean (37.3.2), in which the Cyprus drifting longlines operate.

For bluefin tuna the target population is the stock defined by all GSAs. The frame population will be defined by the eastern Mediterranean area in which the Cyprus fishing

vessels operate for fishing BFT, as well as the areas of the Mediterranean from which quantities of BFT will be transferred to the Cyprus BFT fattening farms for caging.

#### **(d) Sampling stratification and allocation scheme**

Table III. E.2 provides an overview of the long-term sampling strategy regarding age, weight, sex ratio and maturity in the NP years, while Table III.E.3 provides an overview of the planned sampling for these variables for the 2011-2013 Cyprus NP.

The data sources for the collection of the stock-related variables are the commercial data (both landings and discards). For the demersal species, additional data from the Medits survey will be used for the estimation of the growth parameters, the average weight, the sex ratio and the maturity (if the Medits season coincides with the spawning season of the species).

As required by Appendix VII of Commission Decision 2010/93/EU, for the two demersal Group 1 species (*M. barbatus* and *M. surmuletus*) the stock-related variables will be collected every year. For the Group 2 demersal species the collection of age data will be annual, while the collection of weight, sex ratio and maturity will be done triennially (in 2013 – see Table III.E.2).

Concerning large pelagics, in accordance with the 2010 PGMed decision on regional coordination of large pelagic sampling (pending approval by the 2010 RCM Med&BS), the collection of the stock-related variables will be made in 2013. It is reminded that Decision 2010/93/EU requires that the periodicity for age sampling of large pelagics is every three years.

#### **III.E.2 Estimation procedures**

As already mentioned in Section III.C.2, the age composition of the catches will be estimated using an Age Length Key, using analytical and bootstrap methods.

The collection of weight, sex and maturity data will derive from a two-stage length-stratified sampling and the estimation of the biological parameters will be made using analytical methods.

#### **III.E.3 Data quality evaluation**

In accordance with the Commission Decision 2010/93/EU, Chapter III, section B2.4, the stock-related variables should be estimated with a precision level 3 (for the stocks that can be aged).

The sample sizes proposed for the estimation of the stock-related variables of demersal species were based on some minimum requirements considered necessary for obtaining an adequate sample. Specifically, it was considered that estimates should be provided for a minimum of 10 individuals per cm length intervals, taking into account that in certain length classes this minimum would have to increase.

Concerning the large pelagics, the samples proposed are based on the 2010 PGMed decision on regional coordination of large pelagic sampling (pending approval by the 2010 RCM Med&BS).

According to the 2008 precision estimates of the age composition of the catches the required precision level was not achieved, while at the moment of preparation of the NP Proposal no precision estimates of the other biological parameters (maturity, sex and weight) were available from previous years.

For improving the data collection system and the quality of the data the following recommendations of the WKPRECISE will be followed:

“When ALKs are used, it is imperative that age-length data are stored in a manner that links the data to the primary sampling units. This will allow bootstrap estimates of precision for probability-based sampling programs.”

“The pooling of data from multiple métiers should be done with caution. Estimation of catch statistics and biological parameters for métiers generally requires some form of sample-weight adjustments because the primary units within a métier may come from multiple strata with different sampling intensities. Pooling of métiers without proper weighting likely causes bias and may preclude estimates of precision.

#### **III.E.4 Data Presentation**

Cyprus will comply with the provisions of Regulation 199/2008 concerning the process, the submission and the transmission of data to end-users (Articles 17-20). It will ensure the collection of all primary data required for the reliable quarterly estimation of the weight of catches. It is intended that the processing of primary data is completed in the following year of each reference year, for producing updated datasets to be used for stock assessment and scientific advice.

#### **III.E.5 Regional co-ordination**

Regional coordination is only foreseen for the sampling of large pelagics, as the demersal stocks proposed to be sampled are not shared with other MS.

The relevant RCM Med&BS recommendations for the 2011-2013 NP concerning biological-stock-related variables, and the follow-up actions taken, are listed below:

<p><b>RCM Med&amp;BS 2009 Recommendation on Stock variables: Regional sampling protocols for bluefin tuna, swordfish, albacore, dolphinfish and Atlantic bonito</b></p> <p>RCM Med&amp;BS recommends MS to follow the sampling intensities as detailed in table 3.3.3.c for bluefin tuna and in tables 3.4.2.a-d for other main large pelagics, and to achieve the required minimum number of samples as stated by the Decision EC 949/08. RCM recommends also that the data gathered in 2009 should be provided to the PGMed meeting of 2010, to allow PGMed to calculate the precision level and the minimum number of samples required to achieve the required precision, MS to adjust their NP 2011-2013 accordingly.</p>	<p>Cyprus has complied with this recommendation and has applied the 2010 PGMed recommendations in its 2011-2013 NP.</p>
<p><b>RCM Med&amp;BS 2009 Recommendation on Stock variables: Reference landings data for sampling requirements</b></p> <p>RCM Med&amp;BS recommends that all MS follow strictly the SGRN guidelines and give the landing data by species and not by genus. For that, MS should find adequate solutions for providing this information in the next NP proposals and to PGMed.</p>	<p>Cyprus attempts to deal with the problem of mixed landings with the use of observer data.</p>

### III.E.6 Derogations and non-conformities

Derogations requested concerning sampling for stock-related variables are included in Table III.E.1 (see stocks highlighted in grey). As indicated by the relevant table, for all stocks for which derogation is requested, the landings do not exceed the thresholds set by the DCF.

No further derogations are requested.

## **III.F Transversal variables**

### **III.F.1 Capacity**

#### **III.F.1.1 Data acquisition**

Fishing capacity data will be obtained in order to assess the number of vessels and the values of the parameters set below within each fishing fleet segment.

Data will be obtained through the Cyprus Fishing Fleet Vessel Register (FVR) as well as the fishing license applications register, both being the responsibility of the DFMR. Data obtained are the following:

- Identification of the owners and crew.
- Vessel type (e.g. trawler, boat)
- Vessel age (calculated on the basis of the age of the hull).
- Vessel characteristics (length, width, depth, type of construction material).
- Engine data (type, construction, power expressed in KW as defined in Regulation 2930/86).
- Tonnage (GT-gross tonnage)
- Fishing equipment (nets, traps, long-lines)
- Mechanical and electronic equipment.

The data are stored in the National database, as required by EU Regulations 2371/2002, 2930/86 and 2090/98. The FVR is updated on a regular basis and fishing licenses applications are submitted annually. All fishing vessels (including vessels less than 10 m) are registered in the FVR and applications for licenses are issued annually.

The fishing capacities data are collected for all the fishing fleet vessels providing 100% coverage of the fishing vessels segments. These data will be used to meet the requirements of this section.

#### **III.F.1.2 Data Quality evaluation**

The quality of the data collected regarding the capacity of the fishing fleet is based on the following official documentations:

- Vessel registration documents (by the Cyprus Department of Merchant Shipping).
- Vessels over 15 meters are obligated to have their vessels inspected by the inspectors of the Department of Merchant Shipping.

No surveys regarding capacity of the fishing fleet are carried out since the data are collected for all the vessels of the fishing fleet providing 100% coverage.

## III.F.2 Effort

### III.F.2.1 Data acquisition

Data on the effort variables listed in Commission Decision 2010/93/EU Appendix VIII in accordance with the criteria defined in Appendix V will be collected.

The type of data collection will be of sampling for vessels less than 10 meters and census (logbook) for vessels over 10 meters.

Data sources that will be used include the following:

- Logbook for vessels larger than 10 m
- Inspection Report (vessels less than 10m).  
Inspection reports are carried out by the DFMR inspectors which record fishing effort data and landings. Inshore fishery Category C license vessels, (approximately 350 vessels) “occasional employment license to operate for only 70 days a year ” are provided with landing declarations.
- Sale notes (all licensed professional fishing vessels, first time sale of catch)
- Surveys of fishmonger’s
- Vessel monitoring system (VMS) for all fishing vessels excluding the inshore vessels fishery Category C license (occasional employment)

More detailed information on Sampling frame, allocation scheme, estimation and methodology used are provided in the attached methodological report (see **Annex III**).

*Description of fields in table III.F1: Transversal Variables Data collection strategy*

Fields	Description/definition of the fields
MS	<b>CYP</b>
Region	Mediterranean Sea and the Black Sea,
Variable group	
Variables	
Data sources	
Type of data collection scheme	
Variability indicator (a)	
Target population (b)	

### III.F.2.2 Data quality evaluation

Effort data are primarily collected through the logbook Inspection reports. Surveys are carried out as a validation of the data submitted. Data from the VMS may also be used as a validation tool among the different effort variables collected.

The methodology to assure the quality of the effort data will include validation of the effort through:

- Logbooks data
- Inspection reports
- VMS data
- Surveys

It is noted that effort variables collected through survey carried out (for vessels less than 10 meters). Quality (accuracy and precision) of the data will be addressed and included in the annual report information and comply with the provisions Council Decision 2010/93/EU.

### **III.F.2.3 Data presentation**

Cyprus will comply with the provisions of Regulation 199/2008 concerning the process, the submission and the transmission of data to end-users (Articles 17-20). It will ensure the collection of all primary data required for the reliable quarterly estimation of the weight of catches. It is intended that the processing of primary data is completed in the following year of each reference year, for producing updated datasets to be used for stock assessment and scientific advice.

Data are expected to be available to the end users by the 3<sup>rd</sup> quarter 2012.

### **III.F.2.3 Regional co-ordination**

At present community fishing vessels or third country vessels operating in the region, do not land their catches in Cyprus and thus do not submit their logbooks to the Cyprus authorities. Exceptions to the above are the catches by MS fishing vessels of bluefin tuna (*Thunnus thynnus*) that are landed in cages for farming in Cyprus territorial waters. The effort and catches (logbook) of these vessels are reported by the DFMR to the European Commission as well as to the Member States vessels flag in accordance to Council regulation 302/2009.

### **III.F.2.4 Derogations and non-conformities**

No derogations or non-conformity are requested regarding the collection of effort data under the requirements of the DCR.

As already mentioned, any possible adjustment of the effort variables on a regional level will be taken into account.

## **III.F.3 Landings**

### **III.F.3.1 Data acquisition**

Data will be collected concerning the evaluation of commercial catches and landings.

The type of data collection will be of sampling for vessels less than 10 meters and census (logbook) for vessels over 10 meters. Data on the landing variables listed in Commission Decision 2010/93/EU Appendix VIII will be obtained using the following sources:

- Logbook for vessels larger than 10 m
- Inspection Report (vessels less than 10m).  
Inspection reports are carried out by the DFMR inspectors which record fishing effort data and landings. Inshore fishery Category C license vessels, (approximately 350 vessels) “occasional employment license to operate for only 70 days a year ” are provided with landing declarations.
- Sale notes (all licensed professional fishing vessels, first time sale of catch)
- Surveys of fishmonger’s

The landings recorded from the Inspection Report for vessels less than 10 meters will be raised to the whole population. More detailed information on the methodology and the method used for evaluating landings are provided in the attached methodological report (see Annex III).

Conversion factors are used for bluefin tuna (*Thunnus thynnus*), swordfish (*Xiphias gladius*) and sharks nei to derive final estimates from catches that are landed processed. The ICCAT conversion factors are used for large pelagic species.

The landings and effort data from the inshore fishery will be collected together with concurrent length sampling during sampling events at landing sites (fishing shelters).

The information collected from the inshore fishery from different sources will be used for crosschecking, and for further improving the methodologies used.

### **III.F.3.2 Data quality evaluation**

Landing data are primarily collected through the logbook and Inspection reports. Surveys are carried out as a validation of the data submitted. Data from the VMS may also be used as a validation tool.

The methodology to assure the quality of the landing data will include validation through:

- Logbooks data
- Inspection reports
- VMS data
- Surveys

It is noted that landing variables collected through survey carried out (for vessels less than 10 meters).Quality (accuracy and precision) of the data will be addressed and included in the annual report information and comply with the provisions Council Decision 949/2008.

The precision levels of the sampling methodology for the vessels less than 10 meters are under assessment and it is estimated that the analysis will be finalised by the beginning of

2011. According to the results from the precision analysis, there will be a review of the sampling procedure for these vessels and if required, a modification.

### **III.F.3.3 Data presentation**

Cyprus will comply with the provisions of Regulation 199/2008 concerning the process, the submission and the transmission of data to end-users (Articles 17-20). It will ensure the collection of all primary data required for the reliable quarterly estimation of the weight of catches. It is intended that the processing of primary data is completed in the following year of each reference year, for producing updated datasets to be used for stock assessment and scientific advice.

Data are expected to be available to the end users by the 3<sup>rd</sup> quarter 2012 Use this section to indicate when data will be available for end users.

### **III.F.3.4 Regional coordination**

At present community fishing vessels or third country vessels operating in the region do not land their catches in Cyprus and thus do not submit their logbooks to the Cyprus authorities. Exceptions to the above rule are the catches of Bluefin tuna (*Thunnus thynnus*) that are landed in cages for farming in Cyprus territorial waters. The catches (logbook) of these vessels are reported by the DFMR to the Commission as well as to the Member states flag in accordance to Council regulation 302/2009.

### **III.F.3.5 Derogations and non-conformities**

No fishing vessel population is excluded from the data collection on landings. The precision level of the catches and landings of vessels less than 10 m are currently under evaluation, in order to achieve conformity with the required precision levels.

## **III.G Research surveys at sea**

### **III.G.1 Planned surveys**

#### **Mediterranean International Bottom Trawl Survey (Medit)**

The aim of the survey is to collect biological data from the demersal species around the Cyprus seas, for creating time series of abundance and biomass indices, and length frequency distributions. The trends of these data series will provide information on the status of the Cyprus resources, which may contribute to their management.

Sampling procedure will be carried out based on the common methodology defined in the instruction manual of Medits (International bottom trawl surveys in the Mediterranean (Medit), Instruction manual version 5, April 2007). The fishing gear that will be used is

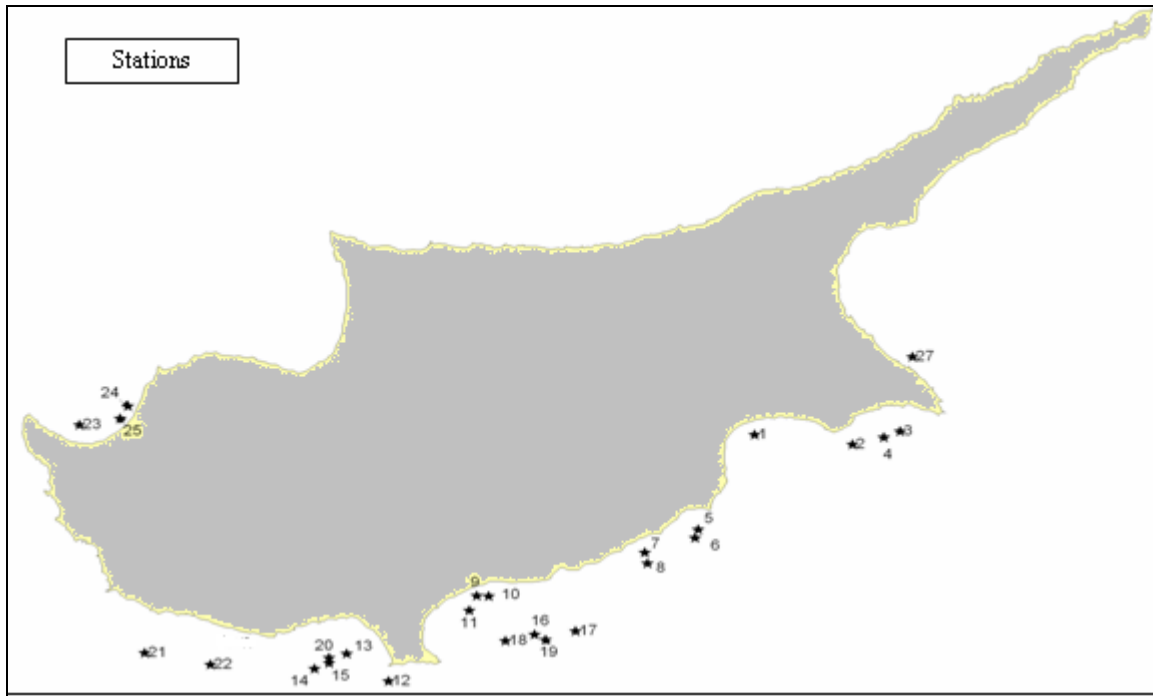
the bottom trawl (IFREMER reference GOC 73). Sampling includes the collection of biological parameters (i.e. total weight, total number, sex, stage of sexual maturity, length of individuals for the 38 reference species, and the total weight and total number of the remaining species). Any modifications required for the estimation of the ecosystem indicators 1-4 listed in Appendix XIII will be incorporated in the sampling procedure, i.e. increasing the sampling size for avoiding sub-sampling, and systematically collecting age samples.. Basic environmental data will also be collected on a systematic basis to assist in the interpretation of the biological data.

The survey is planned to be conducted during June and will cover the continental shelf and slope of Cyprus at depths ranging from 10 to 800 m, in five standardized depth strata: 10-50m, 50-100m, 100-200m and 500-800m. The distribution of the number of hauls related to depth is illustrated in Table III.G.1.a. It is noted that only the areas under the effective control of the Cyprus Republic Government will be surveyed.

Table III.G.1.a. Depth zones, surface area and distribution of the CY Medits hauls.

Depth (m)	Surface (Km <sup>2</sup> )		No of hauls
	Total of Cyprus	Under Government Control	
10 – 50	796	450	5
50 – 100	717	470	9
100 – 200	918	857	5
200 – 500	2245	1055	3
500 – 800	6430	2156	4
<b>Total</b>	11106	4988	26

The distribution of the sampling hauls is given in Figure III.G.1. An overview of the planned numbers of hauls and days at sea is provided in **Table III.G.1**.



**Figure III.G.1.** Distribution of sampling hauls of the Medits survey

Following any corrections required, data from the Medits programme will be stored in ATrIS (AdriaMed Trawl Information System), from which calculations of the abundance and biomass indices will be made.

### **III.G.2 Modifications in the surveys**

No changes in the design of the survey are requested.

### **III.G.3 Data presentation**

Data can be available for end users at the beginning of the following year of each reference year.

### **III.G.4 Regional coordination**

Any relevant recommendation on the coordination of the Medits survey by the RCM Med&BS and the Medits working group will be followed.

### **III.G.5 Derogations and non conformities**

No derogation is requested.

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

### **IV.A Collection of data concerning the aquaculture**

#### **IV.A.1 General Description of the aquaculture sector**

In 2008, the total aquaculture production (marine and fresh water) of market size fish reached approximately 3,775 tons and 13.5 million marine fish fry valued at €35 million. It is noted that, for the same period, the volume of production of the fishery sector was 2,45 million and the value of production was €14,81 million.

Aquaculture production of market size fish, cultured in open sea cages, reached 2,650 tons of sea bass and sea bream and 1000 tons of blue fin tuna. The total production of market size trout from the private sector reached 60 tons valued at €380.000. Additionally, 30,000 ornamental fish were produced by the private sector valued at €55,000. The total production of marine hatcheries reached 13 million fry, mainly sea bass and sea bream valued at €1.6 million.

In 2008, there were in operation three marine fish hatcheries and one shrimp hatchery/farm on land, as well as six private offshore cage farms culturing mainly sea bass and sea bream and three offshore cage farms culturing/ fattening blue fin tuna. Additionally, there were in operation six small trout farms, culturing mainly rainbow trout and two farms culturing ornamental fish. It is important to have in mind that some of the firms involved in the production of sea bass and sea bream are also engaged or have acquired broodstock with the intention of engaging in the production of other marine fish, namely, *Pagrus pagrus*, *Pagrus major*, *Puntazzo puntazzo*, *Salpa salpa*, *Siganus rivulatus*, *Argyrosomus regius*, *Dentex dentex* and *Pagellus erythrinus*. However, the production of these species is on a very low scale. Furthermore, some of the firms involved in the production of trout are also dealing with the production of *Acipenser baeri* but again on a very low scale. It is noted that no collection of data for fresh water species will take place.

Table IV.A.1 gives an overview of the aquaculture sector in Cyprus.

#### **IV.A.2 Data acquisition**

##### **(a) Definition of variables**

The statistical unit for the collection of data shall be the “enterprise” as defined as the lowest legal entity for accounting purposes. The reference years of the data that will be collected are the 2011, 2012 and 2013, whereas the validated data will be available at the end of each subsequent year.

The Department of Fisheries and Marine Research is responsible for issuing all aquaculture operation permits and maintains a national register of all the aquaculture companies. Also, for aquaculture companies that are operating within the territorial waters of Cyprus, a permit for the use of the sea area is issued by the Cypriot Council of Ministers and these companies are obliged by law to pay for the use of the sea area on an annual basis.

The following parameters of the Appendix XI of Commission Decision 2010/93/EU need to be estimated:

1. Income is the total revenue of the sector and three variables should be taken into account:
  - a. Turnover - (sales) per species
  - b. Subsidies – includes only the direct payments.
  - c. Other income – the enterprise may deal with other economic activities.
2. Personnel costs consist of the gross wages and salaries of staff. All the expenditures paid by the employers, including social security. Also the imputed value of unpaid labour is taken into account and it will be estimated by the DFMR as the minimum wage set by national law.
3. Energy costs, such as the electricity.
4. Raw material costs: It is defined as the purchase of livestock and other feed costs. These two items will be collected separately.
5. Repair and Maintenance costs.
6. Other operational costs including packaging costs.

Regarding the Production costs described above it is important to bear in mind that the DFMR does not keep records of income and production costs, so the data and all the information need to be collected using a questionnaire/interview method.

7. Capital Costs are considered to be major data despite the fact that they are not directly connected with the processing activity. The depreciation of capital and financial costs net is the main capital costs and they will be both collected. The current Decision recommends that for the interest costs of capital the interest on the national 5 years Government bonds could be used. However, it needs to undertake an analysis in depth to assess the risk and return of investing in the fisheries processing sector, since it is a much riskier business.

It is well-known that the interest cost of capital is higher than that of the government bonds (risk-free rate) since it entails much higher risk.

8. Extraordinary costs, net: It is defined as an unexpected cost incurred outside the normal business of the enterprise.
9. Capital value: It is the accumulated value of all net investments in the enterprise at the end of the year.
10. Net Investments includes the purchase and sale of assets during the year.
11. Debt at the end of the year.
12. Raw material volume regarding the livestock and the fish feed.
13. Volume of sales per species.
14. Employment is defined as the total persons employed in the aquaculture sector either full time or part time. It will be estimated in numbers and full-time equivalent (FTE) based on the national reference level. It is noted that the methodology for calculation of FTE will be in accordance with the Study FISH/2005/14.
15. Number of enterprises by size category of persons employed.

#### **(b) Type of Data Collection**

Census will be performed for all the economic variables listed in Appendix XI of Commission Decision 2010/93/EU. Table IV.A.3 gives an overview of the type of data collection scheme for each variable. It is noted that most of the data needed will be collected with the use of a questionnaire and interviews method. Some variables like the «Imputed value of unpaid labor» will be estimated.

#### **(c) Target and frame population**

The statistical unit for the collection of data shall be the “enterprise” and it is defined as the lowest legal entity for accounting purposes. The Department of Fisheries and Marine Research is responsible for issuing all aquaculture operation permits and maintains a national register of all the aquaculture companies.

The companies are segmented according to their main farming technique and information on the population segments is provided in the table: “IV.A.2. Population segments for collection of aquaculture data”. It is noted that there are no deviations from the definition given in the DCF and the target population is the same as the frame population.

#### **(d) Data sources**

Questionnaires sent by post and/or face – to – face interviews will be conducted in order to assess the annual value of the sector of the parameters of the Appendix XI of Commission Decision 2010/93/EU. Financial accounts are the most important data

source for the companies to fill in the questionnaire. In the case where the information cannot be derived from the financial accounts, such as in the case of the variable «Imputed value of unpaid labor» the DFMR will apply some calculations in order to estimate it.

It is noted that a copy of the questionnaire is included in the Annex IV of the NP.

#### **(e) Sampling stratification and allocation scheme**

All the enterprises will be covered exhaustively and no sampling will take place due to the small size of the population. In the case of any non-responsive units, no rotation will be applied.

#### **IV.A.3 Estimation**

A census will be performed for assessing the value of the aquaculture sector. In the case of non-responsive units the method used to raise the final estimates to total population is the adjustments of raising factors, where the factors are the total number of enterprises in the aquaculture sector.

The additional information that will be used is the minimum wage set by national law and the national reference level of full time hours for calculating the FTE.

#### **IV.A.4 Data quality evaluation**

The data needed will be collected with the use of a questionnaire and interviews method.

The sampling strategy proposed to be carried out is a census survey due to the small size of the population.

Table IV.A.3 describes for each data collection scheme the methods to be used to assure the quality of the collected data. As mentioned above, the data collection type will be census and thus information will be given on the targeted response rates.

#### **IV.A.5 Data Presentation**

Cyprus will comply with the provisions of Regulation 199/2008 concerning the process, the submission and the transmission of data to end-users (Articles 17-20). It will ensure the collection of all primary data required for the reliable estimation of the variables. It is intended that the processing of primary data is completed in the following year of each reference year, for producing updated datasets to be used for scientific advice.

#### **IV.A.6 Regional coordination**

There is no initiative taken to coordinate the national programme with other Member States in the same region, with regard to the collection of economic variables from the aquaculture sector.

#### **IV.A.7 Derogations and non-conformities**

No derogation is requested for estimating the parameters. However, taken into account that this module has been introduced in the DCF the last two years, some problems may arise in estimating all the parameters required by the current Decision

It is important to have in mind that some of the firms involved in the production of sea bass and sea bream are also engaged or have acquired broodstock with the intention of engaging in the production of other marine fish, namely, *Pagrus pagrus*, *Pagrus major*, *Diplodus puntazzo*, *Salpa salpa*, *Siganus rivulatus*, *Argyrosomus regius*, *Dentex dentex* and *Pagellus erythrinus*. However, the production of these species is on a very low scale. Furthermore, some of the firms involved in the production of trout are also dealing with the production of *Acipenser baeri* but again on a very low scale.

The quantities produced for the species described above are so small that they will be included in the main segments: sea bass and sea bream and trout respectively.

### **IV.B Collection of data concerning the processing industry**

#### **General Description of the processing industry**

Fisheries product exploitation includes the activities related to fisheries production, such as preservation, processing and trade. In Cyprus the level of knowledge related to processing activities is limited, because the sector is relatively new. The objective of this part is to record the current situation of the fisheries processing industry from a social and economic point of view.

In Cyprus there are 25 firms that are involved in the fisheries processing industry. The processing activity that dominates the sector is the repackaging. Other important processing activities are smoking, salting and filleting. Only a very few firms are engaged in the ready-made food business, due to the fact that that is a capital intensive business. It is worth mentioning, that a significant number of companies are also dealing with the processing of products other than the fisheries ones, such as meat and vegetables.

Most of the products used in the processing industry are imported, due to the small production and the high quality of the fresh local fish, where all the quantities produced are consumed as fresh. Thus, as the companies are greatly depended on the imported raw

materials, any price change affects them to a great extent. Some products coming from the local aquaculture sector, like trout, are also used for processing but it concerns small quantities.

#### **IV.B.1 Data acquisition**

##### **(a) Definition of variables**

As the processing of fish products is a relatively new sector in Cyprus the majority of the economic information is not available. It is aimed to assess the annual value of the sector and its parameters, set in Appendix XII of the current Decision.

The reference years of the data that will be collected are the 2011, 2012 and 2013, whereas the validated data will be available at the end of each subsequent year.

It is noted that for the enterprises that carry out fish processing but not as a main activity, the following data for these specific enterprises will only be collected for the year 2011:

- a. Number of enterprises
- b. The turnover attributed to fish processing

Thus, a census will be carried out in 2011 to identify these enterprises and to collect the information described above.

Face – to - face interviews/questionnaires will be conducted in order to assess the annual value of the sector of the following parameters:

- 1 Income is the total revenue of the processing sector and three variables should be taken into account:
  - a. Turnover - (sales)
  - b. Subsidies – includes only the direct payments.
  - c. Other income – the enterprise may deal with the processing of meat and vegetables.
- 2 Personnel costs consist of the gross wages and salaries of staff. All the expenditures paid by the employers, including social security, health insurance, retirements and other related taxes will be considered. Also the imputed value of unpaid labour is taken into account and will be estimated as the minimum wage set by national law.
- 3 Energy costs such as electricity.
- 4 Raw material costs: It is defined as the purchase of fish and other raw materials for production.
- 5 Other operational costs including packaging costs.

Regarding the Production costs described above it is important to bear in mind that the DFMR does not keep records of income and production costs, so the data and all the information need to be collected using a questionnaire-interview method.

- 6 Capital Costs are considered to be major data despite the fact that they are not directly connected with the processing activity. The depreciation of capital and financial costs net are the main capital costs. The current decision recommends that for the interest costs of capital the interest on the national 5 years Government bonds could be used. However, it needs to undertake an analysis in depth to assess the risk and return of investing in the fisheries processing sector, since it is a much riskier business.

It is well-known that the interest cost of capital is higher than that of the government bonds (risk-free rate) since it entails much higher risk.

- 7 Extraordinary costs, net: It is defined as the cost incurred outside the normal business of the enterprise.
- 8 Capital value: It is the accumulated value of all net investments in the enterprise at the end of the year.
- 9 Net Investments includes the purchase and sale of assets during the year.
- 10 Debt at the end of the year.
- 11 Employment is defined as the total persons employed in the processing sector either full time or part time. It will be estimated in numbers and full-time equivalent (FTE) based on the national reference level. The methodology for calculation of FTE will be in accordance with the Study FISH/2005/14.
- 12 Number of enterprises by size category of persons employed.

### **(b) Type of Data Collection**

Census will be performed for all the economic variables listed in Appendix XII of Commission Decision 2010/93/EU. Table IV.B.2 «Sampling Strategy» gives an overview of the type of data collection scheme for each variable. It is noted that most of the data needed will be collected with the use of a questionnaire and interviews method. Some variables like the «Imputed value of unpaid labor» will be calculated by the DFMR.

### **(c) Target and frame population**

The statistical unit for the collection of data shall be the “enterprise” and it is defined as the lowest legal entity for accounting purposes. A census will be carried out for all the years but no stratification of the population will take place because the population is small, around 25 companies and confidentiality problems may arise.

It is noted that there are no deviations from the definition given in the DCF and the target population is the same as the frame population. Table IV.B1 provides an overview of the target population of the processing industry sector.

#### **(d) Data sources**

Questionnaires sent by post and/or face – to – face interviews will be conducted in order to assess the annual value of the sector of the parameters of the Appendix XII of Commission Decision 2010/93/EU. Financial accounts are the most important data source for the companies to fill in the questionnaire. In the case where the information cannot be derived from the financial accounts, such as in the case of the variable «Imputed value of unpaid labor» the DFMR will apply some calculations in order to estimate it.

It is noted that a copy of the questionnaire is included in the Annex V of the NP.

#### **(e) Sampling stratification and allocation scheme**

All the enterprises will be covered exhaustively and no sampling will take place due to the small size of the population. In the case of any non-responsive units, no rotation will be applied.

Details on the sampling methods to be used are presented on the relevant standard table IV.B.2.

### **IV.B.2 Estimation**

A census will be performed for assessing the value of the processing sector. In the case of non-responsive units the method used to raise the final estimates to total population is the adjustments of raising factors, where the factors are the total number of enterprises in the processing sector.

The additional information that will be used is the minimum wage set by national law and the national reference level of full time hours for calculating the FTE.

### **IV.B.3 Data quality evaluation**

The data needed will be collected with the use of a questionnaire and interviews. This survey will be conducted taking into account that the sector is in an early-growing stage and only a few firms are involved.

The general outline of population numbers, the planned sampling levels and sampling methods used for the processing industry are provided in Table IV.B.1. The sampling

strategy proposed to be carried out is a census survey due to the small size of the population. In 2012 and 2013 the survey will be concentrated to those firms that carry out fish processing as their main activity, whereas in 2011 the survey will deal with all the firms no matter if they have the fish processing as their main activity or not. It should be noted that some firms are very small in size and they do not have audited financial accounts. Thus, only through questionnaires the information needed can be collected. As a result, the quality of the data cannot be verified.

#### **IV.B. 4 Data Presentation**

Cyprus will comply with the provisions of Regulation 199/2008 concerning the process, the submission and the transmission of data to end-users (Articles 17-20). It will ensure the collection of all primary data required for the reliable estimation of the variables. It is intended that the processing of primary data is completed in the following year of each reference year, for producing updated datasets to be used for scientific advice.

#### **IV.B.5 Regional coordination**

There is no initiative taken to coordinate the national programme with other Member States in the same region, with regard to the collection of economic variables.

#### **IV.B.6 Derogations and non-conformities**

No derogation is requested.

##### Problems that can encountered

Some problems may be encountered due to the fact that the definition of the processing industry/activities it is not explicitly defined in the Decision. For example glazing and re-packaging is not cleared whether they are defined as processing activities? The Cyprus National Statistical Service does not consider them as processing activities. This inconsistency creates some problems. The Working Group on Processing Industry and Aquaculture: Review of economic issues (Ispra 2006) did not clarify this issue. There was a recommendation from the 2006 RCM for the Mediterranean area for further guidelines on the definition of processing industry activities.

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

The calculation of the ecosystem indicators specified in Appendix XIII of Commission Decision 2010/93/EU will be based on survey (Meditis) data (see also Table III.G.1, and VMS data with reporting requirements as set in the Decision.

The Medits data that will be used cover the geographic sub-area GSA 25 (Cyprus waters) and the years from 2005 onwards.

### **Indicator 1: Conservation status of fish species**

For the calculation of this indicator, the data collected during the Medits survey will be used. The sampling design of the Medits survey serves the data requirements for estimating this indicator, i.e. the survey is conducted annually in the same area, with a standard gear. The sampling scheme used provides for the length sampling of all species recorded. For the purpose of estimating this indicator, an effort will be made to fully sample the species selected to be used for its calculation.

### **Indicator 2: Proportion of large fish**

The Medits data will be used for the calculation of this indicator. The sampling design of the Medits survey serves the data requirements for estimating this indicator.

### **Indicator 3: Mean maximum length of fishes**

The Medits data will be used for the calculation of this indicator. The sampling design of the Medits survey serves the data requirements for estimating the indicator, therefore no major modifications are needed.

### **Indicator 4: Maturation of exploited fish species**

The Medits data will be used for the calculation of this indicator; in addition, data from the commercial fishery, either from market or discard samples can contribute to the calculation. The Medits sampling protocol does not include the collection of age samples, although survey samples are collected occasionally to be used for the estimation of growth parameters, in addition to commercial samples. For the calculation of this indicator, a systematic collection of survey age samples will be collected as required, aiming for 100 individuals per age class.

### **Indicator 5: Distribution of fishing activity**

For the calculation of this indicator VMS data will be used. The requirements set in the Decision will be followed; maximum reporting interval for VMS positions will be 2 h, while geographic resolution of each position record is expected to be sufficient to assign the record to a 3km grid cell.

No access problems to the VMS data are foreseen, especially since these data are collected by the Monitoring Unit of DFMR. Software would be needed to be developed for the calculation of the indicator; coordination among MS on the development of this software could ensure the quality of the indicator.

### **Indicator 6: Aggregation of fishing activity**

This indicator will be used in conjunction with the ‘Distribution of fishing activity’ indicator, and will be calculated with the use of VMS data.

The requirements set in the Decision will be followed; maximum reporting interval for VMS positions will be 2 h, while geographic resolution of each position record is expected to be sufficient to assign the record to a 3km grid cell. The vessel identifiers will be linked to métiers at level 6. The indicator will state the sum of areas of 3km grid cells where 90% of fishing activity was recorded for each métier per month and per year.

No access problems to the VMS data are foreseen. Software would be needed to be developed for the calculation of the indicator; coordination among MS on the development of this software could ensure the quality of the indicator.

### **Indicator 7: Areas not impacted by mobile bottom gears**

VMS data from bottom trawlers will be used for calculating this indicator.

The requirements on VMS reporting data are the same as for the previous indicators based on VMS data. No problems are foreseen for obtaining the required VMS data. Software would be needed to be developed for the calculation of the indicator; coordination among MS on the development of this software could ensure the quality of the indicator.

### **Indicator 8: Discarding rates of commercially exploited species**

Discarding rates of commercially exploited species will be collected during on-board concurrent sampling trips, which are planned on an annual basis for bottom trawlers and on a triennial basis for surface longliners. The discarding ratio will be calculated for all commercial species, with discards and landings data collected on the same trips.

It is worth mentioning that discard sampling will also involve all non-commercial species; therefore an overall discarding ratio from the whole catch could also be provided. In case any seabird, reptile or marine mammal is caught as bycatch, it will be recorded.

### **Indicator 9: Fuel efficiency of fish capture**

This is an indicator of the relationship between fuel consumption and the value of landings. Two sources of data are needed for the calculation of this indicator:

- c. total value of landings which will be estimated as the product of quantities of landings and the average prices per species per metier
- d. cost of fuel for each metier according to level 6 for the metier classification.

Due to the fact that the sampling procedures used for the collection of the economic data is according to length classes, the estimation of the cost of fuel variable will be different than what it was described in the Collection of economic variables based on Appendix VI. Thus, during metier based sampling where information on landings, effort and length data will be collected, information on fuel consumption for the trips sampled will also be required.

Difficulties are expected to be encountered for the estimation of this indicator concerning fishing vessels engaged in polyvalent activities (i.e. in more than one metier during the same fishing trip); it is noted that polyvalent activity is a common case for the Cyprus fishing vessels, especially the small scale inshore ones.

## **VI. Module for management and use of the data**

### **VI.A Management of the data**

The Cyprus National Database for the collection and storage of data in the fisheries sector is comprised of the following databases:

- The Data Collection Network System (Data Transmission)
- The Central Database
- The Fishing Vessel Fleet register (FVR)

The database is structured to fulfil National Policy needs, as well as the implementation of EU Regulations in the framework of the Common Fisheries Policy (CFP) and the requirements of the Data Collection Regulation. Updates are made whenever necessary, for incorporating new requirements.

In the previous years the Database has been upgraded into a web based database to fulfil requirements that were not addressed in the previous database, namely:

- The establishment of a multiannual aggregated and science-based datasets which incorporate biological and economic information
- The creation of an administrative mechanism providing permanent observation and collection of fisheries sector data in real time which will be supported by a registration and analysis system.
- Web based data transmission of the fisheries data to the competent international organisations as well as to the European Commission

All the data collected by the National database are dealt with confidence and the web based interface is secure and operates with password login. Data access is limited to authorised personnel of the Department of Fisheries and Marine Research and in general the participants involved in the national data collection programme, in accordance with the requirements of Commission Regulation 665/2008 Art. 8(2).

The Fishery management System is comprised of a series of data bases which include all data relating to the fishery sector activities as required by the Data Collection Regulation namely:

- Fishing Capacity
- Fishing effort
- Catches, landings and discards
- Catch per Unit Effort data series
- Biological Parameters
- Economic data on the fishing fleet and processing industry

For the moment, the newly developed system covers the data input of primary data, as well as their basic aggregation.

During 2009-2010 several adjustments of the database were made for incorporating new requirements set by the new DCR:

- input of effort and landings data per métier (until LVL 7)
- exporting data in the Data Exchange Format used by COST
- aggregation of economic data in additional fleet segments
- development of a data analysis system, comprised of subsystems containing algorithms for the estimation/calculation of the following parameters: fishing effort and landings per métier, economic indicators of the fisheries sector

Further upgrading of the database was initiated during 2010, and will be completed in the 2011-2013 programme, for the development of data quality control procedures for detecting errors in input data, as well as procedures for transforming primary socio-economic data into metadata.

In addition, under the 2011-2013 programme the following actions are planned:

- input of aquaculture data,
- input data on fuel cost and calculation of fuel cost per metier,
- economic indicators of the processing and aquaculture sector,
- Calculation of value of landings per metier

- Storing of requests and transmission of data, as required by article 9 of Commission regulation 665/2008
- New input software for incorporation of data

## VI.B Use of the data

The detailed and aggregated data stored in the National database will be used to support scientific analysis.

Such data include:

- Biological parameter estimates (age, weight, sex, maturity),
- Sets of data to be used for stock assessments, and
- Estimates on the total volume of catches by regional fishing types and fleet segment, geographical area and time period.

Table VI.B.1 presents a preliminary list of meetings to be organised in support of the scientific advice, and that will be likely attended by national scientists.

## VII. Follow-up of STECF recommendations

<b>SGRN Meeting, July 2008 – Evaluation of 2007 TRs</b>	
<b>RECOMMENDATION</b>	<b>ACTION TAKEN</b>
<p><b>General Comment 1.7 – On Precision Levels:</b></p> <p><i>“SGRN reiterates the comments made in July 2007... and further invites MS to become acquainted with the Data Exchange Format used by the COST project”</i></p>	<p>Database updates were initiated in 2008 and completed in 2010 for exporting data in the Data Exchange Format used by COST (see also section VI.A of NP)</p>
<p><b>General Comment 1.9 – On Otolith Reading</b></p>	<p>Calcified structures are collected for all stocks sampled for stock-related variables. All age samples are read every year.</p>
<p><b>General Comment 1.10 - On Cycles for Module I Sampling</b></p>	<p>Until 2007, the strategy followed by Cyprus in its NPs was the summing up of 3 years of data for estimating one set of “other biological parameters”. Following the recommendation by SGRN, this strategy has not been followed in the consecutive years (NPs from 2008 – 2013) and the estimation of the relevant biological parameters is based on a one year’s data.</p>

<b>General comment 1.11 – On Parameter Definition for Module J</b>	The SGRN’s recommendation concerning the definition of “fixed costs” is followed.
<b>SGRN Meeting, December 2007 – Evaluation of 2008 NPs</b>	
<b>RECOMMENDATION</b>	<b>ACTION TAKEN</b>
<p><b>General comment 2.5 – On Getting Information on Fishing Techniques for vessels &lt; 10 meters</b></p> <p><i>“SGRN strongly recommends MS to develop appropriate ways of collecting landings and effort by métier for all vessels belonging to their national fleet register”</i></p>	<p>As already mentioned in previous NPs and TRs, effort and landings data per métier are collected for inshore vessels (&lt;12m) since 2007.</p>
<p><b>General comment 2.6 – On sampling intensity and coordination for non-economic data</b></p> <p>- <i>“SGRN considers that reaching the precision targets should be the criterion to define sampling effort.</i></p> <p>- <i>“SGRN also recommends that the MS seeks international cooperation within the RCM to integrate its sampling programme at the regional level”</i></p>	<p>- Sampling effort will be reviewed and modified accordingly, if required, following the completion of the precision analysis of the previous year, as required.</p> <p>- International cooperation is achieved within the RCM Med&amp;BS and PGMed for sampling large pelagics.</p>
<p><b>General Comment 2.9 – On Length and Age Sampling for Highly Migratory Species in the Mediterranean</b></p> <p>- <i>On age: “...Given the fact that these species belong to only one stock in Mediterranean, SGRN urges MS to organize sampling activity and subsequent common data elaboration in order to obtain the triennial estimates for growth, maturity and sex ratio...”</i></p>	<p>- International cooperation is achieved within the RCM Med&amp;BS and PGMed for sampling large pelagics.</p>
<b>SGECA/SGRN Meeting 09-02, June 2009 – Evaluation of 2008 TRs</b>	
<p><b>General comment 3 – On precision levels</b></p> <p><i>SGRN reiterates the comment made in July 2007 (SGRN, Evaluation of 2006 and 2007 TR)</i></p>	<p>Database updates were initiated in 2008</p>

<p><i>All MS are invited to become acquainted with the COST Data Exchange Format and to anticipate the exportation of their data since the Data Exchange Format is now fully operational and available on the project website.</i></p> <p><i>However SGRN would like to note that precision levels can also be calculated using available statistical methodologies (e.g. WKSCMFD, ICES, 2004).</i></p> <p><i>Member states are encouraged to find solutions to meet the required targets for example, by increasing the sampling intensity or adopting a regional approach to the estimation of precision levels</i></p>	<p>and completed in 2010 for exporting data in the Data Exchange Format used by COST (see also section VI.A of NP)</p> <p>Until Cyprus starts using COST for the calculation of the required precision levels, it uses available statistical methodologies based on WKSCMFD (ICES, 2004b)</p> <p>A regional approach is adopted for the shared stocks (i.e. large pelagics) within the RCM Med&amp;BS and PGMed (see Section III.C.5). Concerning the non-shared stocks, Cyprus intends to improve its sampling scheme, in accordance with the relevant recommendations of the WKPRECISE (see Section III.E.3)</p>
<p><b>General comment 4 - ON DCR DATA AND OFFICIAL STATISTICS</b></p> <p><i>SGRN would like to suggest that Member states should consider using data collected under the framework of the DCR for landing statistics since at present data from the DCR represents the best available data set.</i></p>	<p>Official landing statistics of the Cyprus Fisheries are collected for all vessels over 10 meters by logbook submissions according to EC Regulation 2807/83. For vessels between 10-12 m that catch less than 15 kg of weight per species and all vessels less than 10m the landing statistics are collected under the framework of the DCR.</p>
<p><b>General comment 5 - ON SPECIES LANDED AS MIXED CATEGORIES</b></p> <p><i>SGRN notes that data collected for some species is aggregated at genus level. SGRN recommends that species recorded under mixed categories should be reported at species level and this requirement should be enforced. MS should find solutions for the next NP with respect to this problem either by rectifying the reporting of landings in ports and markets or by estimating the percentage contribution of the relative species in the genera (see ICES</i></p>	<p>As stated in Section III.C.3, mixed landings are a common situation in Cyprus, especially for the bottom otter trawls. The percentage of each species in the landings is intended to be estimated by the sampling of the unsorted retained catches during on-board and port sampling.</p>

<i>PGCCDBS report 2009).</i>	
<b>SGECA/SGRN Meeting 09-01, February 2009 - Evaluation of 2009-2010 NPs</b>	
<p><b>General comment 7 – On Derogations for Discards and Landing Sampling</b></p> <p><i>Derogations can be granted if reaching for target precision level implies excessive costs or if they are fully documented and scientifically proven.</i></p>	Cyprus follows this comment.
<p><b>General comment 9 – On Use of Survey Length and Age Data</b></p> <p><i>SGRN interpretation of the DCF (Section B2-3.1) is that length composition or age composition from surveys cannot be applied to derive length and age composition of landings. SGRN recognize that the DCF does not forbid the use of age reading (i.e. age at length information) from surveys to support/complement age reading from landings for the construction of age length keys.</i></p>	In agreement with the SGRN comment, survey ageing data will be used as complementary data for the estimation of the growth parameters and not for estimating the age composition of landings.
<p><b>General comment 18: On the Estimation of Capital Value and Capital Costs</b></p> <p><i>SGRN would point out that the capital value and capital costs should be estimated according to the PIM methodology proposed in the capital valuation report of study No FISH/2005/03 (2006. Evaluation of the capital value, investments and capital costs in the fisheries sector, 203 p.). The data and estimation procedures should be explained in the national programme. In case this methodology cannot be applied, appropriate justifications should be given in the NP.</i></p>	Cyprus follows this comment
<p><b>General comment 19: On the Estimation of Employment</b></p> <p><i>SGRN would point out that the methodology for the estimation of employment (engaged crew and FTE) should be in accordance with the Study FISH/2005/14 (2006, Calculation of labour including full-time equivalent</i></p>	Cyprus follows this comment

<p><i>(FTE) in fisheries, 142 p.) and amended by the SGECA 07-01 report and should be explained in the national programmes.</i></p>	
<p><b>General comment 20: On the consistency of Different Economic Data Sources</b></p> <p><i>SGRN recognizes the necessity to use different data sources to collect economic variables. However, SGRN reminds MS that in this case the DCF requires Member States to ensure consistency and comparability of all economic variables when derived from different sources (e.g. surveys, fleet register, logbooks, sales notes). SGRN asks MS to explain in the national program how the consistency of information derived from different data sources has been checked.</i></p>	<p>It is very difficult to check the consistency of information derived from different data sources but Cyprus will try to follow this comment.</p>
<p><b>General comment 22: On the Coverage of Population</b></p> <p><i>MS has to cover all the fleet and collect the required data also for inactive vessels. Most of the MS do not provide any information about inactive vessels in the relevant tables of the national programs.</i></p>	<p>Cyprus follows this comment</p>
<p><b>General comment 24: On the Estimation of Ecosystem indicator – Fuel efficiency</b></p> <p><i>SGRN reminds MSs that according to the guidelines, they have to provide the method of estimation of fuel efficiency of fish capture in the Section III.B of the NP. Not all the MS provided this information in the section mentioned. SGRN reiterates that MS should follow the guidelines.</i></p>	<p>Cyprus follows this comment</p>
<p><b>General comment 25: On the Calculation of imputed value of unpaid labour</b></p> <p><i>SGRN reminds MS that methods of calculation of imputed value of unpaid labour have to be explained in the national programs. This request refers to fishery, as well to aquaculture and processing industry. SGRN recognizes that there is no common methodology of calculation of imputed value of unpaid labour and suggests that this</i></p>	<p>Cyprus follows this comment</p>

<i>methodology be proposed by SGECA.</i>	
<p><b>General comment 28: On Tuna Caging Activity (Tuna Farming and Tuna Fattening) – Collection Of Economic Data</b></p> <p><i>SGRN recommends that all MS having tuna farms shall include them among the aquaculture plants and carry out the data collection activities required.</i></p>	Cyprus always includes the Cypriot tuna farms in its NPs.
<p><b>General comment 29: On Tuna Caging Activity (Tuna Farming and Tuna Fattening) – Collection of Biological Data</b></p> <p><i>SGRN supports the opinion that MS where cages are located shall ensure the data collection at the harvesting and that bilateral agreements are to be established with the Country of the flag fishing vessel(s) concerned.</i></p>	As already stated in section III.C.5, Cyprus ensures that sampling of caged BFT during harvesting will involve all cages and therefore catches from all flag MS concerned.

## VIII. List of derogations

A list of requests for derogations made either in the present NP or in the past, is presented below. Information on the outcome of these derogations is provided as well.

<b>Short title of derogation</b>	<b>NP Proposal section</b>	<b>Derogation approved or rejected</b>	<b>Year of approval or rejection of past requests for derogations</b>
No discard sampling of the métier OTB_DEF_>=40_0_0 in GSAs 26, 27.	III.C.6		
Sampling of eel recreational fishery (requested also in 2009-2010 NP)	III.D.6 of 2011-2013 NP, III.D.4 of 2009-2010		

## IX. List of acronyms and abbreviations

ALB	Albacore
BFT	Bluefin tuna
CFP	Common Fisheries Policy
COST	Common Open Source Tool
CPUE	Catch Per Unit Effort
CYP	Cyprus
DCR	Data Collection Regulation
DFMR	Department of Fisheries and Marine Research
EC	European Community
EU	European Union
FVR	Fleet Vessel Register
GPS	Geographic Position
GSA	Geographical Sub-Area
GT	Gross Tonnage
HP	Horse Power (engine power)
ICCAT	International Commission for the Conservation of Atlantic Tunas
ICES	International Council for the Exploration of the Sea
Km	Kilometers
KW	Kilowatts
LOA	Length Over All
LVL	Level
MDMS	Medit's Data Management System
Medit's	Mediterranean International Bottom Trawl Survey
MS	Member States
NP	National Programme
PGCCDBS	Planning Group on Commercial Catch, Discards and Biological Sampling
PGMed	Mediterranean Planning Group for Methodological Development
RCM Med	Regional Coordination Meeting for the Mediterranean Sea
SGRN	Sub-Group on Research Needs
STECF	Scientific, Technical and Economic Committee for Fisheries
SWO	Swordfish
TR	Technical Report
VMS	Vessel Monitoring System

## **X. Comments, suggestions and reflections**

No comments are provided.

## **XI. References**

Commission Decision 2010/93/EU of 18 December 2009 adopting a multiannual Community programme for the collection, management and use of data in the fisheries sector for the period 2011-2013– OJ L41, 16.2.2010, p.8.

Commission Regulation (EC) No 199/2008 of 25 February 2008 *establishing a Community framework for the collection, management and use of data in the fisheries sector and support for scientific advice regarding the Common Fisheries Policy* – OJ L60, 5.3.2008, p.1.

Commission Regulation No 665/2008 of 14 July 2008 *laying down detailed rules for the application of Council Regulation (EC) No 199/2008 concerning the establishment of a Community framework for the collection, management and use of data in the fisheries sector and support for scientific advice regarding the Common Fisheries Policy* – OJ L186, 15.7.2008, p.3.

Commission Staff Working Document SEC (2008) 449: *Accompanying the document Communication from the Commission to the Council and the European Parliament - The role of the CFP in implementing an ecosystem approach to marine management* [COM (2008) 187].

Council Regulation (EC) No 1967/2006 of 21 December 2006 concerning management measures for the sustainable exploitation of fishery resources in the Mediterranean Sea, amending Regulation (EEC) No. 2847/93 and repealing Regulation (EC) No. 1626/94 – OJ L 409, 30.12.2006 p. 75.

ICES 2004a. Workshop on discard sampling methodology and raising procedures. Report of the planning group on commercial catch, discards and biological sampling, 2-5 March 2004, Mallorca, Spain. ICES CM 2004/ACFM:13.

ICES 2004b. WKSCMFD. Workshop on Sampling Calculation and Methodology for Fisheries Data, 26-30 February 2004, Nantes, France, ICES CM 2004/ACFM:12.

ICES. 2007. Report of the Workshop on Discard Raising Procedures (WKDRP), 6-9 February 2007, San Sebastian, Spain. ICES CM 2007/ACFM:06.

ICES. 2008. Report of the Workshop on Methods to Evaluate and Estimate the Accuracy of Fisheries Data used for Assessment (WKACCU), 27–30 October 2008, Bergen, Norway. ICES CM 2008\ACOM:32.

ICES. 2009. Report of the Workshop on methods to evaluate and estimate the precision of fisheries data used for assessment (WKPRECISE), 8-11 September 2009, Copenhagen, Denmark. ICES CM 2009/ACOM:40.

ICES.2010. Report of the Joint ICES – STECF Workshop on methods for merging metiers for fishery based sampling (WKMERGE), 19-22 January 2010, Copenhagen, Denmark. ICES CM 2010/ACOM:40.

Pilot Study Report on the Evaluation of Discards of the Cyprus Fishery, *as part of Cyprus's National Fisheries Data Collection Programme 2006*. Department of Fisheries and Marine Research, Ministry of Agriculture, Natural Resources and Environment.

Report of the 5<sup>th</sup> Regional Coordination Meeting for the Mediterranean and Black seas (RCM Med&BS), 24-28 November 2008, Sète, France.

Report of the 6<sup>th</sup> Regional Coordination Meeting for the Mediterranean and Black seas (RCM Med&BS), 13-16 October 2009, Venice, Italy.

Report of the 3<sup>rd</sup> Meeting of the Mediterranean Planning Group for Methodological Development (PGMed). 2-6 March 2009, Montpellier.

Report of the Workshop on Small-Scale Fisheries, 12-16 September 2005, Kavala, Greece.

Vigneau, J., 2006. Raising procedures for discards: sampling theory. ICES ASC CM 2006/K:16.

## **XII. ANNEXES**

## ANNEX I



Department of Fisheries  
and Marine Research



MALTA CENTRE FOR  
FISHERIES SCIENCES

**Bilateral Agreement between Cyprus and Malta  
for the sampling of a shared metier in GSA 15 within their National Programmes  
under the Data Collection Framework  
(EC Regulations 199/2008, 665/2008 and Decision 2008/949/EC)**

The following agreement has been made between Cyprus and Malta concerning the sampling of their shared metier *Bottom otter trawl targeting mixed demersal and deep sea species* in GSA 15, selected by both countries to be sampled as part of their National Data Collection Programmes:

The Cyprus trawlers involved in the shared métier and landing their catch in Maltese ports will be included in the sampling scheme organized by Malta for the collection of biological-métier-related variables. This agreement will apply until further notice.

Signed for Cyprus:

Date: January 27<sup>th</sup>, 2009

Myrto Ioannou  
National Correspondent of Cyprus

Signed for Malta:

Date: January 27<sup>th</sup> 2009

Mark Dimech  
National Correspondent of Malta

**ANNEX II**

**ΑΚΡΩΣ ΕΜΠΙΣΤΕΥΤΙΚΟ**

**Η ΕΡΕΥΝΑ ΔΙΕΞΑΓΕΤΑΙ ΑΠΟ  
ΤΟ ΤΜΗΜΑ ΑΛΙΕΙΑΣ ΚΑΙ ΘΑΛΑΣΣΙΩΝ ΕΡΕΥΝΩΝ**

Αρ. Φακ.  
Αρ. Τηλ.

**ΕΡΕΥΝΑ ΘΑΛΑΣΣΙΑΣ ΑΛΙΕΙΑΣ ΚΑΙ ΥΔΑΤΟΚΑΛΛΙΕΡΓΕΙΑΣ ΓΙΑ ΤΟ ΕΤΟΣ.....**

**ΑΛΙΕΙΑ ΜΕ ΤΡΑΤΕΣ**

Αρ. Ερωτηματολογίου:

**ΑΛΙΕΥΤΙΚΟΣ ΣΤΑΘΜΟΣ:** \_\_\_\_\_

**1. ΧΑΡΑΚΤΗΡΙΣΤΙΚΑ ΙΔΙΟΚΤΗΤΗ ΕΤΑΙΡΕΙΑΣ**

1. Ονοματεπώνυμο Ιδιοκτήτη ή Επωνυμία Εταιρείας:

---

---

2. Ηλικία Ιδιοκτήτη: \_\_\_\_\_

3. Αρ. Ταυτότητας Ιδιοκτήτη: \_\_\_\_\_

4. Διεύθυνση Διαμονής

Οδός και Αριθμός:

---

Πόλη/Προάστιο/Χωριό:

---

Τηλέφωνο: \_\_\_\_\_

5. Πόσες αλιευτικές εξορμήσεις είχατε το 2008; \_\_\_\_\_

6. Εκτός από την αλιεία, το σκάφος δραστηριοποιήθηκε και σε άλλη κερδοσκοπική δραστηριότητα;

ΝΑΙ  ΟΧΙ

6.α Αν ΝΑΙ η άλλη δραστηριότητα ήταν ΚΥΡΙΑ ή ΔΕΥΤΕΡΕΥΟΥΣΑ σε σύγκριση με την απασχόληση στην αλιεία;

ΚΥΡΙΑ  ΔΕΥΤΕΡΕΥΟΥΣΑ

6.β Αναφέρετε τον αριθμό των εργάσιμων ημερών στην άλλη δραστηριότητα: \_\_\_\_\_

## 2. ΧΑΡΑΚΤΗΡΙΣΤΙΚΑ ΣΚΑΦΟΥΣ

ΑΡΙΘΜΟΣ ΣΚΑΦΟΥΣ : \_\_\_\_\_

ΕΤΟΣ ΑΓΟΡΑΣ: \_\_\_\_\_

ΤΙΜΗ ΑΓΟΡΑΣ: \_\_\_\_\_

ΕΠΕΝΔΥΣΗ ΥΑΛΟΒΑΜΒΑΚΑ:    ΝΑΙ     ΟΧΙ     \_\_\_\_\_    Αν ναι, αξία (€):

ΑΣΦΑΛΕΙΑ ΣΚΑΦΟΥΣ: \_\_\_\_\_ ΝΑΙ     ΟΧΙ     Αν ναι, ασφαλιζόμενο ποσό (€):

ΨΥΓΕΙΟ: \_\_\_\_\_ ΝΑΙ     ΟΧΙ     Χωρητικότητα Ψυγείου (κυβ. μέτρα)

ΓΕΝΝΗΤΡΙΑ: \_\_\_\_\_ Έτος κατασκευής: \_\_\_\_\_    Ισχύς (KVA):

ΜΗΧΑΝΗ: \_\_\_\_\_ Ιπποδύναμη: \_\_\_\_\_ Έτος κατασκευής: \_\_\_\_\_ Έτος αγοράς: \_\_\_\_\_  
Τιμή: \_\_\_\_\_

## 3. ΑΛΙΕΥΤΙΚΑ ΕΡΓΑΛΕΙΑ

αγοράς (€)	Μάρκα	Ηλικία	Κόστος
<b><u>ΕΡΓΑΛΕΙΑ</u></b>			
1. Βυθόμετρο:    ΝΑΙ/ΟΧΙ <u>Αν ναι</u> , δηλώστε αριθμό _____	<input type="text"/>	<input type="text"/>	<input type="text"/>
2. Ρ/Τηλέφωνο:    ΝΑΙ/ΟΧΙ <u>Αν ναι</u> , δηλώστε αριθμό _____	<input type="text"/>	<input type="text"/>	<input type="text"/>
3. Ραντάρ: <u>Αν ναι</u> , καθορίστε Εμβέλεια: 24/48/72 μίλια	<input type="text"/>	<input type="text"/>	<input type="text"/>
4. Δορυφ. Ναυσιπλοΐας (GPS) :			
α. Απλό    ΝΑΙ/ΟΧΙ    Αν ναι δηλώστε αριθμό _____	<input type="text"/>	<input type="text"/>	<input type="text"/>
β. Πλόττερ    ΝΑΙ/ΟΧΙ    Αν ναι, δηλώστε αριθμό _____	<input type="text"/>	<input type="text"/>	<input type="text"/>
5. Άλλα (πυξίδα, Sonar κ.λ.π.) ΝΑΙ/ΟΧΙ <u>Αν ναι</u> , καθορίστε αριθμό _____	<input type="text"/>	<input type="text"/>	<input type="text"/>

## **ΔΙΚΤΥΑ**

Ποσότητα που έχετε: (αριθμός)	Συνολική Αξία

#### **4. ΑΠΑΣΧΟΛΗΣΗ**

A/A	Όνομα	Θέση	Ηλικία	Εθνικότητα	Αμοιβή (€)*	Μήνες εργασίας
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						

#### **Σημειώσεις:**

\* Περιλαμβάνει κοινωνικές ασφαλίσεις, ιατροφαρμακευτική περίθαλψη και άλλες παροχές

#### **ΘΕΣΗ**

1. Ιδιοκτήτης
2. Καπετάνιος
3. Βοηθός Καπετάνιος
4. Μηχανικός
5. Βοηθός Μηχανικός
6. Ναύτης

#### **ΕΘΝΙΚΟΤΗΤΑ**

1. Κύπριος/Έλληνας
2. Ευρωπαίος (Κοινοτικός)
3. Άλλος Ευρωπαίος
4. Άραβας
5. Αφρικανός
6. Νοτιοαμερικανός

**5. ΣΥΝΟΛΙΚΗ ΠΑΡΑΓΩΓΗ ΚΑΙ ΑΞΙΑ ΑΝΑ ΠΟΙΟΤΗΤΑ**

ΠΟΙΟΤΗΤΑ	ΠΩΛΗΣΕΙΣ	
	ΠΟΣΟΤΗΤΑ (κιλά)	ΑΞΙΑ (€)
A		
B		
Γ		
Δ		
Σκάρτα		
<b>ΣΥΝΟΛΟ</b>		

ΦΠΑ : \_\_\_\_\_

ΕΠΙΣΤΡΟΦΗ : \_\_\_\_\_

ΑΜΕΣΕΣ ΕΠΙΔΟΤΗΣΕΙΣ : \_\_\_\_\_

ΑΛΛΟ ΕΙΣΟΔΗΜΑ (π.χ. ΕΝΟΙΚΙΑΣΗ ΣΚΑΦΟΥΣ) : \_\_\_\_\_

ΣΥΝΟΛΟ ΕΙΣΟΔΗΜΑΤΟΣ : : \_\_\_\_\_

**6. ΚΕΦΑΛΑΙΟΥΧΙΚΕΣ ΕΠΕΝΔΥΣΕΙΣ**

	ΑΞΙΑ (€)
1. Άλλος εξοπλισμός & μηχανήματα παραγωγής, εξαλίευσης, συσκευασίας κλπ. (π.χ. Μηχανές, Ψυγεία) (καθορίστε) .....	
.....	
.....	
2. Αυτοκίνητα	
3. Έπιπλα, σκεύη γραφείου και εξοπλισμός γραφείου	
4. Άλλα (καθορίστε) .....	
.....	
.....	
<b>ΣΥΝΟΛΟ</b>	

Για τις πιο πάνω κεφαλαιουχικές επενδύσεις που έγιναν αναφέρετε το ποσό που χρησιμοποίησατε από:

1. Δικά σας Κεφάλαια

2. Ξένα Κεφάλαια (Δάνεια)





Όνομα και ιδιότητα προσώπου που έδωσε τα στοιχεία

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

.....

Υπογραφή

Ιδιοκτήτη:

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**ΓΙΑ ΕΠΙΣΗΜΗ ΧΡΗΣΗ**

Ελέγχθηκε από : .....

Ημερομηνία: .....

Εξετάστηκε από : .....

Ημερομηνία: .....

**ΑΚΡΩΣ ΕΜΠΙΣΤΕΥΤΙΚΟ**

**Η ΕΡΕΥΝΑ ΔΙΕΞΑΓΕΤΑΙ ΑΠΟ  
ΤΟ ΤΜΗΜΑ ΑΛΙΕΙΑΣ ΚΑΙ ΘΑΛΑΣΣΙΩΝ ΕΡΕΥΝΩΝ**

Αρ. Φακ.  
Αρ. Τηλ. 22807822

**ΕΡΕΥΝΑ ΘΑΛΑΣΣΙΑΣ ΑΛΙΕΙΑΣ ΚΑΙ ΥΔΑΤΟΚΑΛΛΙΕΡΓΕΙΑΣ ΓΙΑ ΤΟ ΕΤΟΣ.....**

**ΑΔΕΙΑ ΠΟΛΥΔΥΝΑΜΩΝ ΣΚΑΦΩΝ**

Αρ. Ερωτηματολογίου:

**ΑΛΙΕΥΤΙΚΟΣ ΣΤΑΘΜΟΣ:** \_\_\_\_\_

**1. ΧΑΡΑΚΤΗΡΙΣΤΙΚΑ ΙΔΙΟΚΤΗΤΗ ΕΤΑΙΡΕΙΑΣ**

1. Ονοματεπώνυμο Ιδιοκτήτη ή Επωνυμία Εταιρείας:

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---

2. Ηλικία Ιδιοκτήτη: \_\_\_\_\_

3. Αρ. Ταυτότητας Ιδιοκτήτη: \_\_\_\_\_

4. Διεύθυνση Διαμονής

Οδός και Αριθμός:

---

Πόλη/Προάστιο/Χωριό:

---

Τηλέφωνο: \_\_\_\_\_

5. Πόσες αλιευτικές εξορμήσεις είχατε ; \_\_\_\_\_

5α. Κατανομή χρόνου (μέρες) στην πελαγική αλιεία: \_\_\_\_\_

στην παράκτια αλιεία: \_\_\_\_\_

6. Εκτός από την αλιεία, το σκάφος δραστηριοποιήθηκε και σε άλλη κερδοσκοπική δραστηριότητα;

ΝΑΙ  ΟΧΙ

6.α Αν ΝΑΙ η άλλη δραστηριότητα ήταν ΚΥΡΙΑ ή ΔΕΥΤΕΡΕΥΟΥΣΑ σε σύγκριση με την απασχόληση στην αλιεία;

ΚΥΡΙΑ  ΔΕΥΤΕΡΕΥΟΥΣΑ

6.β Αναφέρετε τον αριθμό των εργασιμων ημερών στην άλλη δραστηριότητα: \_\_\_\_\_

## 2. ΧΑΡΑΚΤΗΡΙΣΤΙΚΑ ΣΚΑΦΟΥΣ

ΑΡΙΘΜΟΣ ΣΚΑΦΟΥΣ : \_\_\_\_\_

ΕΤΟΣ ΑΓΟΡΑΣ: \_\_\_\_\_

ΤΙΜΗ ΑΓΟΡΑΣ: \_\_\_\_\_

ΕΠΕΝΔΥΣΗ ΥΑΛΟΒΑΜΒΑΚΑ:    ΝΑΙ     ΟΧΙ     \_\_\_\_\_    Αν ναι, αξία (€):

ΑΣΦΑΛΕΙΑ ΣΚΑΦΟΥΣ: \_\_\_\_\_ ΝΑΙ     ΟΧΙ     Αν ναι, ασφαλιζόμενο ποσό (€):

ΨΥΓΕΙΟ: \_\_\_\_\_ ΝΑΙ     ΟΧΙ     Χωρητικότητα Ψυγείου (κυβ. μέτρα)

ΓΕΝΝΗΤΡΙΑ: \_\_\_\_\_ Έτος κατασκευής: \_\_\_\_\_    Ισχύς (KVA):

## 3. ΑΛΙΕΥΤΙΚΑ ΕΡΓΑΛΕΙΑ

	Μάρκα	Ηλικία	Κόστος
Αγοράς <b>ΕΡΓΑΛΕΙΑ</b>			€
1. Βίντζι      ΝΑΙ/ΟΧΙ    Αν ναι, καθορίστε 1. Υδραυλικό / 2. Με καρούλι	<input style="width: 100%; height: 20px;" type="text"/>	<input style="width: 100%; height: 20px;" type="text"/>	<input style="width: 100%; height: 20px;" type="text"/>
2. Ραντάρ:    ΝΑΙ/ΟΧΙ    Αν ναι, καθορίστε Εμβέλεια 24/48/72 μίλια	<input style="width: 100%; height: 20px;" type="text"/>	<input style="width: 100%; height: 20px;" type="text"/>	<input style="width: 100%; height: 20px;" type="text"/>
3. Βυθόμετρο:    ΝΑΙ/ΟΧΙ    Αν ναι, καθορίστε αριθμό _____	<input style="width: 100%; height: 20px;" type="text"/>	<input style="width: 100%; height: 20px;" type="text"/>	<input style="width: 100%; height: 20px;" type="text"/>
4. Ρ/Τηλέφωνο:    ΝΑΙ/ΟΧΙ <u>Αν ναι</u> , δηλώστε αριθμό _____	<input style="width: 100%; height: 20px;" type="text"/>	<input style="width: 100%; height: 20px;" type="text"/>	<input style="width: 100%; height: 20px;" type="text"/>
5. Δορυφορικό Ναυσιπλοΐας (GPS) :	<input style="width: 100%; height: 20px;" type="text"/>	<input style="width: 100%; height: 20px;" type="text"/>	<input style="width: 100%; height: 20px;" type="text"/>
α. Απλό      ΝΑΙ/ΟΧΙ    Αν ναι δηλώστε αριθμό _____	<input style="width: 100%; height: 20px;" type="text"/>	<input style="width: 100%; height: 20px;" type="text"/>	<input style="width: 100%; height: 20px;" type="text"/>
β. Πλόττερ    ΝΑΙ/ΟΧΙ    Αν ναι, δηλώστε αριθμό _____	<input style="width: 100%; height: 20px;" type="text"/>	<input style="width: 100%; height: 20px;" type="text"/>	<input style="width: 100%; height: 20px;" type="text"/>
6. Άλλα (πυξίδα, Sonar κ.λ.π.) ΝΑΙ/ΟΧΙ <u>Αν ναι</u> , καθορίστε αριθμό _____	<input style="width: 100%; height: 20px;" type="text"/>	<input style="width: 100%; height: 20px;" type="text"/>	<input style="width: 100%; height: 20px;" type="text"/>

## **ΔΙΚΤΥΑ**

ΕΙΔΟΣ ΔΙΚΤΥΩΝ	Κομμάτια που έχετε:	Αξία (€)	Κομμάτια που χρησιμοποιείτε
Παρπουνόδικτα/ Βοππόδικτα (16-23μμ)			
Μισινένια (17-25μμ)			
Πλάτια (άνω των 23μμ)			
Πλάτια με πανί μονό (άνω των 23μμ)			

## **ΠΑΡΑΓΑΔΙΑ**

ΕΙΔΟΣ ΠΑΡΑΓΑΔΙΩΝ	Αρ. Αγκιστρίων που έχετε:	Αξία (€)	Αριθμός Αγκιστρίων που Χρησιμοποιείτε:
(α) Αφροπαράγαδα ξιφία-τόνου			
(β) Αφροπαράγαδα για τουνάκια			
(γ) Παραγάδια βυθού			

## **ΨΑΡΟΠΑΓΙΔΕΣ**

ΕΙΔΟΣ ΨΑΡΟΠΑΓΙΔΩΝ	Αρ. ψαροπαγίδων που έχετε	Αξία (€)	Αρ. Ψαροπαγίδων που χρησιμοποιείτε
(α) Για γαρίδες			
(β) Άλλες (Σκαρκιές)			

## **ΣΗΜΑΔΟΥΡΕΣ**

Αριθμός:

Αξία:

(€)

## **ΦΩΤΑΚΙΑ**

Αριθμός:

Αξία:

(€)

#### **ΔΟΛΩΜΑΤΑ**

Είδος δολώματος	Ποσότητα* (kg)	Τιμή ανά kg (€)

\* για ολόκληρη την αλιευτική περίοδο

#### **4. ΑΠΑΣΧΟΛΗΣΗ**

A/A	Όνομα	Θέση	Ηλικία	Εθνικότητα	Αμοιβή (€)*	Μήνες εργασίας
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						

#### **Σημειώσεις:**

\* Περιλαμβάνει κοινωνικές ασφαλίσεις, ιατροφαρμακευτική περίθαλψη και άλλες παροχές

##### ΘΕΣΗ

1. Ιδιοκτήτης
2. Καπετάνιος
3. Βοηθός Καπετάνιος
4. Μηχανικός
5. Βοηθός Μηχανικός
6. Ναύτης

##### ΕΘΝΙΚΟΤΗΤΑ

1. Κύπριος/Έλληνας
2. Ευρωπαίος (Κοινοτικός)
3. Άλλος Ευρωπαίος
4. Άραβας
5. Αφρικανός
6. Νοτιοαμερικανός

**5. ΣΥΝΟΛΙΚΗ ΠΑΡΑΓΩΓΗ ΚΑΙ ΑΞΙΑ ΑΝΑ ΠΟΙΟΤΗΤΑ**

ΠΟΙΟΤΗΤΑ	ΠΩΛΗΣΕΙΣ	
	ΠΟΣΟΤΗΤΑ (κιλά)	ΑΞΙΑ (€)
A		
B		
Γ		
Δ		
Σκάρτα		
<b>ΣΥΝΟΛΟ</b>		

ΦΠΑ : \_\_\_\_\_

ΕΠΙΣΤΡΟΦΗ : \_\_\_\_\_

ΑΜΕΣΕΣ ΕΠΙΔΟΤΗΣΕΙΣ : \_\_\_\_\_

ΑΛΛΟ ΕΙΣΟΔΗΜΑ (π.χ. ΕΝΟΙΚΙΑΣΗ ΣΚΑΦΟΥΣ) : \_\_\_\_\_

ΣΥΝΟΛΟ ΕΙΣΟΔΗΜΑΤΟΣ : : \_\_\_\_\_

## 7. ΕΞΟΔΑ

### Α. ΕΞΟΔΑ ΠΑΡΑΓΩΓΗΣ

(€)

1. Αλιευτικά Εργαλεία (Δίκτυα, Παραγάδια, Σχοινιά κλπ )	
2. Δολώματα	
3. Έξοδα Τροφοδοσίας Πλοίου	
4. Φάρμακα	
5. Υπηρεσίες από άλλους (Δεν περιλαμβάνονται μισθοί και ημερομίσθια)	
6. Συσκευασία	
7. Καύσιμα/λιπαντικά σκάφους και άλλων μηχανημάτων για σκοπούς παραγωγής	
8. Συντήρηση και επιδιορθώσεις σκαφών, υποστατικών και μηχανημάτων (ανταλλακτικά και εργατικά)	
9. Έξοδα οχημάτων για σκοπούς αλιείας (καύσιμα και επιδιορθώσεις)	
10. Μεταφορικά από άλλους	
11. Έξοδα για σωστικά μέσα	
12. Έξοδα ασφάλειας (φωτοβολίδες κ.λ.π.)	
13. Άλλα έξοδα (καθορίστε) .....	
.....	
.....	
<b>ΣΥΝΟΛΟ Α</b>	

**B. ΔΙΟΙΚΗΤΙΚΑ ΕΞΟΔΑ**

1. Ηλεκτρισμός (γιο κτιριακές εγκαταστάσεις)	
2. Τηλεφωνικά, ταχυδρομικά, διαφημίσεις)	
3. Λογιστικά	
4. Δικηγορικά	
5. Ασφάλειες (ατόμων, προϊόντων, κτιρίων, εγκαταστάσεων, οχημάτων κλπ.)	
6. Ενοίκια χώρων και κτιρίων	
7. Έμμεσοι φόροι (επαγγελματικοί, άδειες λειτουργίας, άδειες ασυρμάτων, άλλα τέλη)	
8. Τόκοι και Έξοδα Τραπεζών	
9. Άλλα Έξοδα	
<b>ΣΥΝΟΛΟ Β</b>	

<b>ΣΥΝΟΛΟ ΕΞΟΔΩΝ (Α+Β)</b>	
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Για τα πιο πάνω έξοδα (παραγωγής και διοικητικά) που έγιναν αναφέρετε το ποσό που χρησιμοποιήσατε από:

1. Δικά σας Κεφάλαια

2. Ξένα Κεφάλαια (Δάνεια)

**ΠΑΡΑΤΗΡΗΣΕΙΣ**

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Ημερομηνία: ..... Υπογραφή Απογραφέα:.....

Όνομα και ιδιότητα προσώπου που έδωσε τα στοιχεία

\_\_\_\_\_

\_\_\_\_\_

Υπογραφή

Ιδιοκτήτη:

.....

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**ΓΙΑ ΕΠΙΣΗΜΗ ΧΡΗΣΗ**

Ελέγχθηκε από : .....

Ημερομηνία: .....

Εξετάστηκε από : .....

Ημερομηνία: .....

## **ANNEX III**

### **METHODOLOGICAL REPORT ON CATCH FISHERIES LANDINGS WITHIN THE NATIONAL TERRITORY OF CYPRUS**

#### **1. Introduction**

This document represents a detailed description on the data collection methodology used to estimate the catches and landing of the Cyprus Fishery and the compilation of fishery statistics according to the obligations set by Council Regulation 1921/2006 article 6 on the “*submission of statistical data on landings of fishery products in Member States*”. The report also includes details on the modification of the sampling techniques and the evaluation of the quality of the resulting estimates:

- Methodology used for collecting the data for all vessels segments
- Data sources for the effort variables.
- Methods used for evaluating landings.

#### **Methodology used for collecting data for all vessels segments:**

The authority responsible for collecting and assessing fisheries data in Cyprus is the Department of Fisheries and Marine Research (DFMR) of the Ministry of Agriculture, Natural Resources and Environment.

The Cyprus capture fishery consists of the following fleet segments (see Annex I):

- Inshore fleet,
- Bottom otter trawl fleet (territorial waters),
- Bottom otter trawl fleet (International waters),
- Multipurpose fleet,
- Recreational fleet.

It is noted that there are no inland waters fisheries in Cyprus.

#### **2. Fishing area monitored:**

The fishery fleet of Cyprus operates within the territorial waters of Cyprus which are under Government control and in international waters of the Mediterranean. No catch/landing data are available from fishing activities carried out in the territorial waters of Cyprus which are not accessible to the Government of Cyprus (occupied area). Catches from trawlers operating in international waters of the eastern Levantine area (FAO 37.3.2) land their catch in Cyprus ports while trawlers operating in international waters of the central Mediterranean (FAO Area 37.2.2) land their catch mainly in Malta.

#### **3. Fishing fleet:**

- The Inshore fishery (small scale fleet) is practised with wooden boats of 4 to 12m OAL, which mainly operate using bottom set nets, long lines and traps (see image I).

- The Multipurpose fishery fleet is practised with boats of 12 – 24 m OAL using surface long lines and operates in international waters in the east Mediterranean targeting large pelagic species. The fleet also operates in territorial waters using bottom set nets and bottom long lines (*see image II*).
- The bottom otter trawl fishery fleet consists of trawlers of 21,4 to 26,8m (OAL). Four trawlers are licensed to operate in the territorial waters of Cyprus. Trawlers licensed to operate in international waters are active exclusively in international waters of the Mediterranean.
- The catch of the recreational fishery in Cyprus is not yet reflected on the Fishery Statistics as the attention of the DFMR has only recently focused on this fishery. The recreational fishery is practised by vessels that operate using various gears such as hook and line, bottom set longlines and traps.

#### **4. Fisheries Data collection system**

The methodology used for collecting data on catches and landings is based on the following Data Collection Practices:

- a) Direct Reports given by the various segments of the Fishery
- b) Legislative procedures
- c) Interviews

##### **a) Direct Reports**

###### **i) Logbooks:**

Logbooks are issued to all fishing vessels with an overall length exceeding 10 metres according to Council Regulation 2807/83. All vessels exceeding 10 m overall length (OAL), are required by National law to keep log-books (**Annex II**). Collection of landing data is carried out by returns of log-book sheets, which the vessels owners are required to hand in within 48 hours of landing their catch. The log-book sheets are handed to the Fisheries Inspectors of the DFMR, while random sampling and inspections are carried out on the landed catches to ensure that they are weighed and recorded accurately.

###### **ii) Inshore Fishery Production Reports:**

Production data from the inshore fishery fleet (vessels less than 10m OAL) are collected from a sample of this category of fleet. The methodology used for collecting data from this fishery requires that a random sample of 15-20% (*75-100 boats, maximum licenses 500*) of the licensed boat owners are provided with daily catch landing reports (see annex I) and are required to record the following data on their fishing operations:

- Vessel and owner
- date of fishing activity
- landings (weight) by species
- gear type/quantity used
- fishing port

It is noted that the fishing equipment of every fisherman (i.e nets, type of nets and length, longlines etc) are known from their fishing licence application form. The representative

samples cover the geographical distribution of the fishermen (*see map I*) and are selected according to the following criteria:

- License category (full time/part time)
- Vessel size and gear used (quantity)
- Fishing port (geographical distribution)

The sample covers each fishing shelter and the data collected are raised to the total population of vessels to estimate the total production of the inshore fishery fleet. The DFMR issued a tender for the estimation of the precision level of the data collected on the catch estimation of the inshore fishery fleet based on the requirements **set by:**

- ***Council Regulation (EC) No. 1543/2000 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 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.***

The results indicate that the precision level of the landing data of the inshore fishery fleet according to the number of sample boats that are used with the current methodology is within the precision level required by Commission Regulation 1639/2001 - Chapter 1 (*see annex II*).

## ***b) Legislative Procedures***

### ***i) Boat Registration Forms:***

All fishing boats with tonnage of less than 15 tons are registered in the Fishing Register, kept by the Fisheries Department. Registration forms include the following information: Boat characteristics (length, width, depth, type and construction material), engine data (type, construction, power), the fishing equipment (nets, traps, longlines), the mechanical and electronic equipment, as well as identification of the owners and the crew.

Similar as well as additional data are given upon registration of the trawlers, which are larger than 15 tons, and they are registered in the Cyprus Register, administered by the Merchant Shipping Department.

### ***ii) Fishing Licences:***

All fishermen apply for fishing licences every year. Fishing licence applications include the following information: Identification of the fisherman and crew (ages, addresses, I.D., insurances, etc.) boat and engine characteristics, fishing equipment, mechanical and electronic equipment (as above).

Thus, the information on the fishing fleet is obtained by processing the data provided by the application forms for boat/trawler registration and for fishing licences, which are verified by the Fisheries Inspectorate Service.

### c. Interviews

Interviews are employed for calculation of the average prices of landings. According to the fish trade system, the prices and grades of the various species of fish are mostly fixed in Cyprus. Interviews with the first hand buyers and the skippers/fishermen give the prices of the landings of trawlers and of the inshore fishery.

### 5. Changes to the methodology for the collection of landing data:

According to Council Regulation 1921/2006 (article 6, paragraph 3), Member States have to inform the Commission of any changes in the information provided for under paragraph 1 (methodological report) within three months of the introduction of such change. Member states must also forward to the Commission details of any substantial changes in the collection methods used.

The amendments to the data collection methodology on catches and landings involve the estimation of effort and landings of the artisanal fleet vessels less than 10 meters (including vessels less than 12 meters with landings per species less than 15 kg). The needs for modifying the existing data collection methodology are the following:

1. A significant proportion of Fishermen selected in the sample (random sample of 15-20%, 75-100 boats, maximum licenses 500) did not accurately complete the Direct reports “*Inshore Fishery Production Reports*”.
2. The Production reports were not submitted in a timely manner and the data provided were often incomplete (i.e gear used were not defined).
3. Cross checking of data submitted from Production reports and Sale notes were inconsistent.
4. Species composition of the catch was often not to the standards required.

For the above reasons the DFMR decided to modify the data collection methodology for the artisanal fleet vessels less than 10 meters. The new methodology is based on Inspection reports completed by the DFMR inspectorate services during routine surveys of the ports of landings. The inspection reports (ANNEX III) record the following data:

- Vessel and owner
- Date of fishing activity
- Geographical fishing area (ANNEX IV)
- Fishing port
- Landings (weight) by species
- Gear type/quantity used

Landings and effort data are collected from the inshore fishery vessels less than 10 meters at landing sites (fishing shelters), by the DFMR personnel using the Inspection Report. The data is collected every week, and fishing shelters are chosen randomly (taking also into account the number of boats per shelter). The form used for collecting information on the fishing activities of the inshore fishermen is provided in Annex III.

The DFMR reevaluated the methodology used to estimate catches from the inshore fishery (small scale fleet). The reevaluation is due to amendments made to the National fisheries legislation of Cyprus and the subsequent increase in the number of licensed vessels operating in territorial waters. The evaluation leads to a change in the methodology of data collection of effort and catches of vessels less than 10 meters so as to improve the precision level of these data. The main changes in the sampling methodology are:

- Data on fishing effort and catches recorded by fisheries inspectors and not the fishermen.
- The method of selecting a random sample of 15-20% (*75-100 boats, maximum licenses 500*) of the licensed boat owners to provide the required data has been abolished.
- Data on effort and landings will be recorded for all vessels active on random days in the ports by the fisheries inspectorate service.

The estimation of catches and effort are:

- Performed within the context of a stratum, a reference period and a boat/gear category.
- The estimates of total catch are derived from the sample overall CPUE and the estimated total effort.
- Species catch composition is estimated on the basis of the sample species proportions.
- The average weight per species caught and landed is estimated on the basis of quantity of fish found in each species sample.

## **ANNEXES**

**Annex I** - Cyprus Fleet segments

**Annex II** - Logbooks

**Annex III** - Inspection Reports

**Annex IV** - Geographical fishing area

**Annex V** – Fishing ports/shelters

**ANNEX I:**

**Image I: The Inshore fishery (small scale fleet)**



**Image II: Multipurpose fishery fleet**



**Image III: Bottom otter trawl**





# ANNEX III

[ΕΝΤΥΠΟ ΤΕ1.1]

ΕΚΘΕΣΗ ΕΠΙΘΕΩΡΗΣΗΣ

Αρ. - 000

1.1. Ωρα Αφίξης: ..... 1.2. Ωρα Αναχώρησης: ..... 2.1. Ημερομηνία: .....

3. Ονοματεπώνυμο Επιθεωρητών: 3.1. .... 3.2. ....

4.1. Τύπος Επιθεώρησης:

- Σκάφος εν πλω  Κατά την εκφόρτωση (Σε λιμάνι): .....
- Εκτροφείο: εγκλωβισμός / εξαλίευση / άλλη  Εμπορία: Ψαραγορές κλπ.
- Όχημα μεταφοράς: .....  Άλλη (προσδιορίστε) .....

5.1. Περιτολικό Μέσο στο οποίο επιβαίνει ο επιθεωρητής (κατά περίπτωση) : .....

6. Επιθεωρηθέν σκάφος / μονάδα εκτροφής / ψαραγορά / όχημα μεταφοράς:

6.1. Όνομα: ..... 6.2. Αριθμός νηολόγησης / εγγραφής εταιρείας: .....

6.3. Αρ. Κοινοτικού Μητρώου ..... 6.4. Αρ. Μητρώου ICCAT ..... 6.5. Σημεία: .....

6.6. Πλοίαρχος / Υπεύθυνος (όνομα): .....

6.7. Ιδιοκτήτης / Εταιρεία (όνομα και διεύθυνση) .....

6.8. Αριθμός Ταυτότητας: ..... 6.9. Αριθμός Τηλεφώνου: ..... 6.10. Κινητού: .....

7. Στίγμα: 7.1. Γεωγραφικό πλάτος ..... 7.2. Γεωγραφικό μήκος: .....

7.3. Χρονική στιγμή καταγραφής του στίγματος: ..... 7.4. Βάθος: ..... μέτρα

8. Αλιευτικά εργαλεία επί του σκάφους:

	Δίχτυα Βυθού			Κυκλωπικά Δίχτυα (Γρι-Γρι) [PS]	Τράτα Βυθού (Δίχτυ) [OTB]	Παρασυρόμενα Παραγάδια (επιφανείας) [LLD]	Στάσιμα Παραγάδια (βυθού) [LLS]	Παγίδες [FPO]	Σαγκατζιά (οχατποδιέρα) [LHP]
	Με Τράμεζο [GTR]	Απλάδια (Πανι) [GNS]	από Μισίνα [GNS-M]						
Μέσο άνοιγμα ματιού (χιλιστόμετρα)									
Πάχος νήματος (χιλιστόμετρα)									
Μήκος Διχτύων (μέτρα)									
Αριθμός ζεμπύλων Διχτύων									
Κατακόρυφο ύψος Διχτύων (μέτρα)									
Αριθμός Αγκιστριών									
Μήκος Παραγαδιών (μέτρα)									
Αριθμός Παγίδων									
Επιτρεπόμενη ημέρα/ώρα (ΝΑΙ / ΟΧΙ)									

9. Είδη που παρατηρήθηκαν επί του σκάφους/ κατά την εκφόρτωση/ σε όχημα μεταφοράς/ ψαραγορές κλπ. :

Είδος αλιεύματος	Τύπος* Εργαλείου	Διάκριση* Βύθους εργαλείων (ύρες)	Ποσότητα* που χρησιμοποιήθηκε	Βάθος* αλιείας	Συνολική Ποσότητα αλιεύματος		Ελάχιστο Μέγεθος Νόμιμο /Ελέγχθ	Αναγραφή Εμπορικής Ονομασίας [Ναι / Όχι]	Μέθοδος Παραγωγής: αλιεία/ υδατοκαλ/ εισαγωγή	Περιοχή / Ζώνη Αλιείας	Απαγορευμένη Ποσότητα	
					Κιλά	Αρ. Ιχθύων					Κιλά	Αρ. Ιχθύων
1.							/					
2.							/					
3.							/					
4.							/					
5.							/					
6.							/					
7.							/					
8.							/					
9.							/					
10.							/					

10. Κατάλογος των εγγράφων που επιθεωρήθηκαν, άλλες επιθεωρήσεις και σχόλια :

Εγγραφα	✓	Παρατηρήσεις - Σχόλια
Έλεγχος αν υπάρχει Άδεια Αλιείας / Λειτουργίας		
Έλεγχος δεδομένων με το Πιστοποιητικό εγγραφής σκάφους		
Διασάφρωση δεδομένων με το Ημερολόγιο αλιευτικού σκάφους (αν υπάρχει)		
Έλεγχος Δήλωσης πώλησης / έγγραφα μεταφοράς / ημερολόγιο (αν υπάρχει)		
Έλεγχος για επιπρόσθετους χώρους αποθήκευσης αλιευμάτων στο σκάφος		
Έλεγχος εάν συνάδουν τα αλιευτικά εργαλεία με τη σύνθεση των αλιευμάτων		ΝΑΙ / ΟΧΙ
Έλεγχος της σήμανσης των αδρανών αλιευτικών εργαλείων (παραγάδια επιφανείας)		ΝΑΙ / ΟΧΙ
Έλεγχος αν υπάρχει λειτουργήσιμο σύστημα δορυφορικού εντοπισμού στο σκάφος (VMS)		ΝΑΙ / ΟΧΙ

11.1. Δήλωση και φωτογραφίες που έχουν ληφθεί και περιγραφή του περιεχομένου τους: .....

Παρατηρήσεις Επιθεωρητών : .....

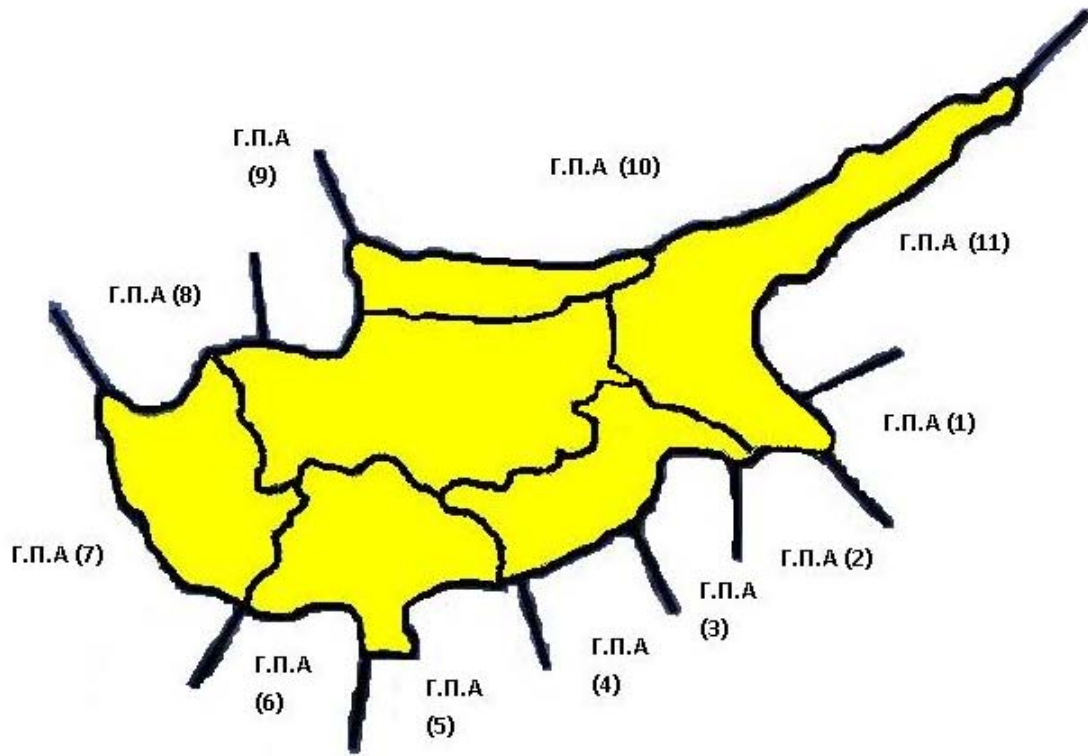
Υπογραφή Επιθεωρητή 1 : ..... Υπογραφή Επιθεωρητή 2 : .....

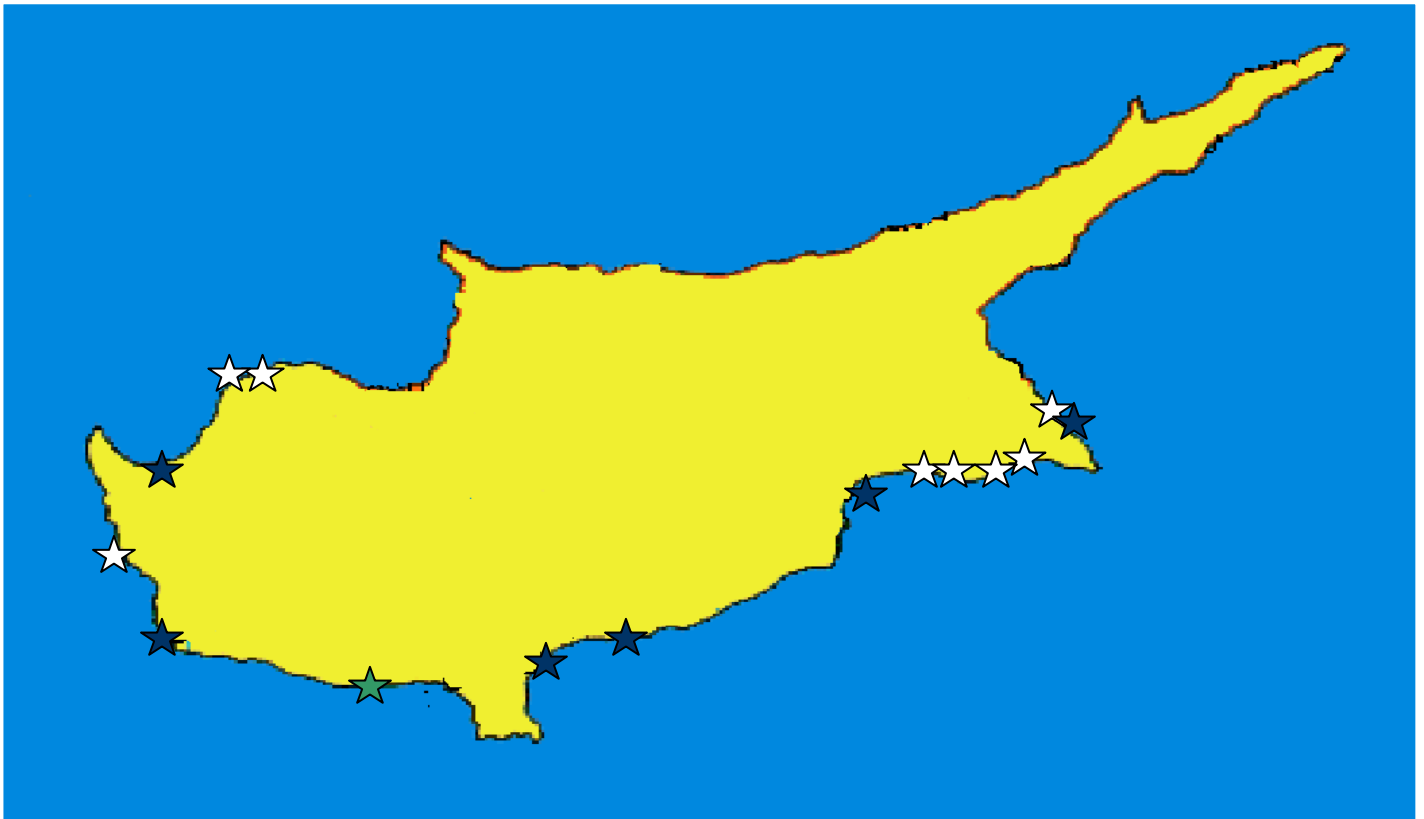
Σχόλια Επιθεωρούμενου : .....

Υπογραφή Επιθεωρούμενου : .....

ANNEX IV

**GEOGRAPHICAL FISHING AREAS**





Fishing shelters: 15 ☆  
Fishing shelter/DFMR District Office: 6 ★  
Shelter to be constructed: 1 ☆

## ANNEX IV

COMPANY:.....

YEAR:.....

### Economic Variables for the Aquaculture Sector

Variable Group	Variable	Value	Specifi cation	Unit	Definition Structural Business Statistics (SBS) Commission Regulation (EC) No. 2700/98	C
Income	Turnover		.....	€	12 11 0	
	Subsidies <sup>(1)</sup>		.....	€		
	Other Income		.....	€		
Personnel Costs	Wages and Salaries <sup>(2)</sup>		.....	€	13 31 0	
	Imputed Value of Unpaid labour <sup>(3)</sup>		.....	€		
Energy Costs	Energy Costs		.....	€	20 11 0	
Raw Material Costs	Livestock Costs		.....	€		SBS
	Feed Costs		.....	€		SBS
Repair and Maintenance Costs	Repair and Maintenance		.....	€		SBS
Other Operational Costs	Other Operational Costs <sup>(4)</sup>		.....	€		SBS
Capital Costs	Depreciation of Capital		.....	€		ESA 6.05
	Financial Costs, Net <sup>(6)</sup>		.....	€		
Extraordinary Costs, Net	Extraordinary Costs, Net		.....	€		
Capital Value <sup>(7)</sup>	Total Value of Assets		.....	€	43 30 0	ESA

Investments	Net Investments <sup>(8)</sup>		.....	€	15 11 0 15 21 0	ESA 3.11
Dept <sup>(9)</sup>	Dept		.....	€		
Raw Material Volume <sup>(10)</sup>	Live Stock		.....	Tonne / Number		
	Fish Feed		.....	Tonne		
Volume of Sales <sup>(11)</sup>	Volume of Sales		.....	Tonne / Number		
Employment	Number of Persons Employed <sup>(12)</sup>		Men	Number	16 11 0	
			Women	Number		

<sup>(1)</sup> Includes direct payments, e.g. compensation for stopping trading, refunds of fuel duty or similar lump sum compensation payments; excludes social benefit payments and indirect subsidies, e.g. reduced duty on inputs such as fuel or investment subsidies.

<sup>(2)</sup> Including social security costs.

<sup>(3)</sup> Persons that are working but are not paid under real terms, e.g. the spouse of an owner that is working in a family business but does not take any salaries.

<sup>(4)</sup> Packaging costs are included in other operational costs.

<sup>(5)</sup> ESA refers to European system of Accounts 1995 (Regulation (EC) No 2223/96, Regulation (EC) No 1267/2003, ESA 1995 manual).

<sup>(6)</sup> Interest costs of capital; interest on the national five-year Government bonds will be used as a proxy for financial costs.

<sup>(7)</sup> At the end of the year.

<sup>(8)</sup> Purchase and sale of assets during the year.

<sup>(9)</sup> At the end of the fiscal year.

<sup>(10)</sup> The variable for raw material should correspond to the variable of raw material cost.

<sup>(11)</sup> The variable for production volume should correspond to the variable on turnover value.

<sup>(12)</sup> The number of persons employed should account for the total number of persons employed full time and part time. For the purpose the Full Time Equivalent (FTE), based on the national legislation (40 hours / week) shall be used. Also the number of persons employed should be reported separately for men and women.

ANNEX V

**ΕΡΩΤΗΜΑΤΟΛΟΓΙΟ ΜΕΤΑΠΟΙΗΤΙΚΗΣ ΜΟΝΑΔΑΣ**

**I. Στοιχεία Εταιρείας**

Όνομα Εταιρείας .....

Διεύθυνση .....

Όνομα Γενικού Διευθυντή .....

Τηλέφωνα Επικοινωνίας .....

Φαξ .....

Ηλεκτρονική Διεύθυνση .....

**II. Δραστηριότητες μεταποιητικής μονάδας  
Παραγόμενη Ποσότητα**

1.	
2.	
3.	
4.	
5.	

**III. Οικονομικές Παράμετροι**

**1. Ποσότητα πρώτων υλών που χρησιμοποιήθηκε**

<u>Είδος</u>	<u>Ποσότητα</u>
.....	.....
.....	.....
.....	.....
.....	.....

**2. Εισόδημα - Turnover**

Χορηγίες - Subsidies (Direct payments) .....

Άλλο Εισόδημα - Other Income .....  
Σύνολο - Total .....

### 3. Έξοδα παραγωγής

α<sub>1</sub>. Μισθοί προσωπικού .....  
(συμπερ. Κοινωνικές ασφαλίσσεις,  
ιατρική περίθαλψη, αφυπηρητήσεις κ.α.). .....

α<sub>2</sub>. Imputed value of unpaid labour .....  
Συνολικό κόστος Total Cost  
(α<sub>1</sub> + α<sub>2</sub>) .....

β. Ενέργεια (πετρέλαιο, ρεύμα) .....

γ. Πρώτες Ύλες - (Κόστος) για την παραγωγή .....

δ. Άλλα λειτουργικά έξοδα .....  
- Συσκευασία  
- Άλλα .....

### 4. Κεφαλαιουχικά κόστα

Ολική Ετήσια Απόσβεση .....

Συσσωρευμένη Απόσβεση .....

Σύνολο – Financial costs net .....

### 5. Διοικητικά έξοδα – Administration expenses .....

### 6. Extraordinary cost nets .....

.....  
.....

(Περιγραφή) :

.....  
.....

### 7. Συνολική Αξία Επενδύσεων – Capital value

Περιουσιακά στοιχεία – Fixed assets

Ολική συσσωρευμένη αξία των καθαρών επενδύσεων

(Total accumulated value of all net .....  
Investments) .....

**8. Καθαρές επενδύσεις****-Net Investments within the year**

Αγορές περιουσιακών στοιχείων

- Purchases of assets

.....

Πωλήσεις περιουσιακών στοιχείων

- Sales of assets

.....

**9. Χρηματοοικονομική κατάσταση – Financial position**

Ποσό επένδυσης από :

- Ξένα Κεφάλαια (Debt at the end of the year) .....

**10. Ολική Παραγωγή μεταποιημένων προϊόντων – Total Production**

Συνολική Παραγωγή ανά είδος

	Είδη	Τιμή €
1.	.....	.....
2.	.....	.....
3.	.....	.....
4.	.....	.....
5.	.....	.....
6.	.....	.....

**11. Ανθρώπινο Δυναμικό (Αριθμό)**

Πλήρης Απασχόληση 12 μήνες		Μερική Απασχόληση (σε μήνες)		Εποχιακή Απασχόληση (σε μήνες)	
Άρρεν	Θήλυ	Άρρεν	Θήλυ	Άρρεν	Θήλυ

--	--	--	--	--	--

Συνολικό Αριθμό Εργοδοτούμενων .....

## 12. Full Time Equivalent (F T E)

Ημερομηνία ..... Όνομα Λειτουργού .....

Όνομα και ιδιότητα προσώπου  
που έδωσε τα στοιχεία .....

## **ANNEX VI**

### **PART I**

Total planned eligible cost for the implementation of the NP

***National programme for the collection, management and use of data in the fisheries sector for the period 2011-2013***

### **INDICATIVE COST OF MULTI-ANNUAL NATIONAL PROGRAMME 2011-2013**

- EURO -

<b>Year</b>	<b>Planned eligible expenditure</b>	<b>Maximum Community contribution</b>
2011	489,211.00	244,605.50
2012	532,922.10	266,461.05
2013	582,214.31	291,107.16
<b>TOTAL</b>	<b>1,604,347.41</b>	<b>802,173.71</b>

