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ROMANIAN ANNUAL REPORT ON THE NATIONAL DATA COLLECTION PROGRAMME FOR FISHERIES 2016

National Institute for Marine Research and Development “Grigore Antipa” (NIMRD)

Subcontractors

Institute for Research - Development for Aquatic Ecology, Fisheries and Aquaculture - Galati
(IRDFAEFA),

Research and Development Station for Fisheries in Nucet(RDSF)

ASWIC SRL Galați

May 2017

ROMANIAN ANNUAL REPORT ON THE NATIONAL DATA COLLECTION PROGRAMME FOR FISHERIES 2016

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May 2017

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I. General framework

This Annual Report is based on the Romanian National Program for Collection of Fisheries Data for 2016. The Annual Report has been prepared according to the Guidelines version 2015 for the submission of Annual Report under the framework Council Regulation (EC) 199/2008, and implementing Commission Regulation (EC) 665/2008 and Commission Decision 2010/93/EU, which intended to help Member States (MS) in producing Technical Report that contain all the necessary information for evaluation by the Sub-group on Research Needs (SGRN) of the Scientific, Technical and Economic Committee on Fisheries (STECF) and the European Commission (EC).

By Commission Implementation Decision no. 5568 / 30.08.2013, the extension of the national data collection programmes was approved for basic biological, technical, environmental and socio-economic fisheries data for the period 2011 - 2013 to the period 2014 - 2016, including Romania's NDCP - Art. 18, as approved by Commission Decision C (2011) 941 and the subsequent implementation and enforcement legislation.

The aim of this document is to give an overview of what has been achieved in 2014. Materials and comments are arranged by Module sections of the DCF, and being presented what has been achieved by Romania in fulfilment of requirements of the DCF, the reasons for any deviation from the plan or non-conformity in the Annual Report with the provisions of the DCF.

List of derogations

Short title of derogation	NP proposal section	Type of data - Variables	Region	Derogation approved or rejected	Year of approval or rejection	Reason / Justification for derogation
Sampling of <i>Bluefin Tuna and Eels</i> from recreational fishing	NP 2013-2016 III.D.6	Biological - Recreational Fisheries variables	Black Sea	Approved Derogation was approved in December 2010 when the National Programme 2011-2013 was approved	2011	Due to the absence of the target species (<i>Bluefin tuna and Eels</i>) in the area, Romania asks derogation to carry out biological sampling.
Sampling of <i>Trachurus trachurus</i>	NP 2013-2016 III.E.6	Biological - Stock related variables	Black Sea	Approved Derogation was approved in December 2010 when the National Programme 2011-2013 was approved	2011	The species <i>Trachurus trachurus</i> is not present in the Black Sea Romanian waters. Due to the absence of the specie, we ask derogation to carry out biological sampling

II National data collection organisation

II A National correspondent and participating institutes

1 National correspondent

The **National Agency for Fishery and Aquaculture (NAFA)** is designated for the implementation of the **National Data Collection Programme 2014 - 2016 (NDCP 2014 - 2016)**, **Mr. Constantin STROIE**, being the national correspondent:

2 Transilvaniei Street, Sector 1, Bucharest, ROMANIA;

Tel. (40)021 634 44 29, (40) 021 634 44 30, fax: (40)021 332 61 32,

e-mail: constantin.stroie@anpa.ro

Conforming to the Law no. 317/2009, NAFA has attributions on making proposals and implementing the national strategy for fisheries and aquaculture and exercising its functions on the main following domains, as follows:

- fishing quotas policy;
- conducting of FFR;
- licensing and authorizing all fishing activities, aquaculture, processing fish and fishing products units;
- conducting of aquaculture and processing units register;
- managing the all processes concerning the natural fish stocks recovering;
- collecting and managing of statistical system for data collected in fisheries;
- coordinating and monitoring the activities of fisheries and aquaculture, issuing the rowels organizing fishing sites, including "Fisheries Inspection";
- issuing criteria to recognize the organizations and associations of fishermen and of the producers on aquaculture, processing of fish and fish products.

We must specify the fact that at the end of 2014 NAFA was removed from the previous ministry subordination (Ministry for Environment and Climate Change, Department of Waters, Forests and Fishery) and put under the subordination of the Ministry for Agriculture and Rural Development, having its headquarters in Bucharest, at the address indicated above, pursuant to Emergency Government Ordinance 56/2014.

2. Participating institutes

The National Institute for Marine Research and Development "*Grigore Antipa*" (NIMRD) and the subcontractors: Institute for Research - Development for Aquatic Ecology, Fisheries and Aquaculture - Galati (IRDFAEFA), the Research and Development Station for Fisheries in Nucet (RDSF) and the company SC ASWIC SRL Galati.

1. National Institute for Marine Research and Development "*Grigore Antipa*" (NIMRD)

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The National Institute for Marine Research and Development "*Grigore Antipa*" (NIMRD) is an institution with specific responsibilities and experience in elaborating studies (national and international) in the field of Marine Living Resources in the Black Sea, as well as in reporting data

to regional (Black Sea Commission) and international bodies *JRC/DG-MARE*, *GFCM*, *FAO*, *MEDIAS*, *MEDITS*, *ICES*), pursuant to Romania's obligations entailed from the Convention for the Protection of the Black Sea against Pollution and European Environmental legislation (Dir. 2000/60/EEC; Dir. 2008/56/EEC).

The inventory of commercial and conservative fish species in the Black Sea requires historical data collected as a follow-up of previous programmes and projects, carried-out in Romanian transitional, coastal and marine waters. In this respect, NIMRD's concerns on marine living resources span over 50 continuous years.

The National Institute for Marine Research and Development "Grigore Antipa" (NIMRD) has skilled staff and the facilities and endowment required to perform the proposed programme in good conditions. The experts involved in performing the study have scientific knowledge and practical experience in specific fields: knowing the evolution of fish fauna diversity; knowing the biology, ecology and ethology of the main commercial marine fish species; manufacturing proficient gears for commercial and research fishing; fishery statistics and fishery management research; ecosystem approach to Romanian marine fisheries management; scientific support in implementing national legislation in fisheries and marine habitats and species protection, pursuant to European legislation.

In order to achieve the study accordingly, the Institute holds specific technical fittings and gears, such as: research vessel fitted with marine abiotic and biotic sample collecting devices, specialized analyses and measurements laboratories, equipped with high performance devices for processing samples and performing specific analytic investigations.

With the Black Sea Commission (intergovernmental body for the enforcement of the Convention for the Protection of the Black Sea against Pollution), NIMRD acts as Regional Activity Center for Fisheries and other Marine Living Resources (Romanian Focal Point for Fisheries/Black Sea Commission), as well as focal point for Monitoring and Pollution Assessment, Biodiversity, Integrated Coastal Zone Management and Land-Based Pollution Sources. At the same time, NIMRD "Grigore Antipa" hosts the Focal point for fisheries withing GFCM / General Fisheries Commission for the Mediterranean.

NIMRD is the most important public body in the marine research, acting since more than 45 years in the field of marine research, especially in the Black Sea waters. It is participating in the specialized meetings of General Fisheries Commission for the Mediterranean and Black Sea (GFCM), performing all scientific activities on the Romanian Black Sea waters concerning the assessment of the main stocks, issuing overall studies on the methods of fishing and having its own database of all aspects of Romanian marine fisheries.

Pursuant to the Emergency Ordinance no. 71 of 30 June 2010 setting-up the marine environment strategy, NIMRD "Grigore Antipa" Constanta is the competent authority for implementing the strategy, developing research and monitoring activities of the ecological status of marine ecosystems; additionally, NIMRD is the technical operator of the national physical, chemical and biological monitoring network of Romanian marine waters and coastal erosion surveillance, being entitled to propose regulations in the field the Ministry of Environment, Waters and Forests.

The National Institute for Marine Research and Development "Grigore Antipa" (NIMRD) has been directly involved in achieving and implementing the Romanian National Programme for Data Collection, Management and Use during 2008-2011 and 2011-2015. In the NDPC 2016, NIMRD Constanta was involved in the following activities:

- a. evaluation of the fishing sector
- b. data collection and processing on economic variables for marine fishery;
- c. data collection and processing on biological variables;
- d. data collection and processing on recreational fisheries;

- e. data collection and processing on stock related variables;
- f. data collection and processing on transversal variables;
- g. research surveys at sea;
- h. assessment of the effects of fisheries on aquatic ecosystems;
- i. data transmission to end-users;
- j. regional coordination, potential (argued) list of derogations and non-conformities to EU requirements

2. subcontractor: **Institute for Research - Development for Aquatic Ecology, Fisheries and Aquaculture - Galati (IRDFAEFA),**

54 Portului Street, Galati, Romania

Tel.: (40)0236-416914, Fax: (40)0236-414270

E-mail: icdeapa@artelecom.net; icdeapa@icdeapa.ro; <http://www.icdeapa.ro>

Institute of Research-Development for Aquatic Ecology, Fisheries and Aquaculture Galati (IRDFAEFA) public institution subordinated to the Academy of Agricultural and Forestry Sciences "Gheorghe Ionescu Șișești". It has a tradition of over 30 years in research in assessing living aquatic resources, fisheries and aquaculture and is a national scientific pole whose structure works new doctors in science, two of which have the quality of academics.

IRDFAEFA is the scientific body in Romania specialized in all types of studies for aquaculture: technologies of growth, nurseries etc. They have a database which could be used as a helpful source on NPDC 2014 and involving their well trained and qualified specialists (scientific staff). Institute of Research - Development for Aquatic Ecology, Fisheries and Aquaculture Galati: being the focal point for aquaculture GFCM (Romanian Focal Point for Aquaculture / GFCM) by one of the institution specialists, trained in the collective achievement of the study.

Between 2009 - 2015 he coordinated National Programme for Aquaculture Data Collection and Processing Database and realized segments of Aquaculture, Processing and Marine Fisheries.

3. subcontractor: **Research and Development Station for Fisheries in Nucet (RDSF)**

549 Main Street, Nucet, Dimbovit County, ROMANIA

Tel/Fax: 0245-267003, Tel.0245-267009,

E-mail:

The Research and Development Station for Fisheries in Nucet (RDSF) is a public body under the subordination of the Agricultural and Forestry Sciences Academy "Gheorghe Ionescu Șișești". and was established in 1941. In more than 70 years, this institution has had an essential contribution in developinh the national fisheries sector, promoting fundamental and applied research in fish farming/aquaculture. The main results have been the elaboration of spawning and rearing techniques for most freshwater fish species, genetic improvement of culture carp - creating breeds, lines and superior hybrids, introducing and acclimating new species for Romanian aquaculture, building-up the freshwater fish gene pool.

Within the NDCP 2016, the two subcontracting institutions, namely the Institute for Research – Development for Aquatic Ecology, Fisheries and Aquaculture - Galati (IRDFAEFA) and the Research and Development Station for Fisheries in Nucet (RDSF) will be involved in the following activities:

- a. evaluation of aquaculture sector and processing industry;

- b. data collection and processing on economic variables;
- c. data collection and processing on transversal variables;
- d. sampling and handling of data;
- e. implementing new features as analyses and observations result;
- f. assessing data quality;
- g. regional coordination, potential (argued) list of derogations and non-conformities to EU requirements;
- h. description of the actors in the Romanian fisheries sector (manufacturers, importers, processors) and their contribution to the market supply, fish and fishery products import-export, pursuant to EU legal provisions;
- i. collecting and processing data on consumer groups and consumption behavior for fish and fishery products;
- j. analyzing strategies, expectations and need of actors in the Romanian fish and fishery products market;
- k. data transmission to end-users.

4. subcontractor: S.C ASWIC SRL Galati

51 Luceafarului Street, Galati, ROMANIA

Tel: 0721 042950,

E-mail: laura.danilescu@aswic.ro; marcel.danilescu@aswic.ro

SC ASWIC SRL Galati is a company acting in information technology (NACE 6202). The company has skilled staff and the required equipment to build-up the proposed Data Base. The experts who will develop this database Data Base have knowledge and practical experience in the field of information technology. The company participated in creating the Data Base and inserting primary data in the previous Fishery Data Collection Programmes during 2009 - 2010 and 2011-2015.

Within the implementation of the NDCP 2016, SC ASWIC SRL Galati was involved in the following activities:

- a. development and redesign of the Data Base system and associated software and system security;
- b. management, processing, validation, data use, providing data submission to end-users pursuant to EU laws, secured access to the Data Base, developing the programme's website, maintenance of the entire system;
- c. description of the operational capacity on interconnectivity and interoperability with other data bases, pursuant to EU-EC requirements within the EU's Multiannual Programme for Collecting, Managing and Using Fisheries Data 2014-2020.

II B Regional and International coordination

II B 1 Attendance of International meetings

Due to the late conclusion of the contract for 2016 and total lack of funding, Romania did not attend any of the meetings planned by JRC, DG MARE. Medits and Medias (Table II.B1).

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- 2th Workshop on Transversal variables, Nicosia, Cyprus, 22 - 26 February 2016;
- “9th **MEDIAS** Coordination Meeting (*Mediterranean International Acoustic surveys*), Split, Croatia, 5 - 7 April 2016;
- 5th Planning Group on Economic Issue **PGECON** – Zagreb, Republic of Croatia, 29 may – 04 June 2016;
- ◊ **STECF EWG 16-08** Planing Group - Evaluation of DCF 2015 Annual Raports & data transmission to end users in 2015, Lisbon, Portugal, 20 – 24 June 2016;
- ◊ **STECF EWG 16-09** – Assesment of balance indicators for key fleet segments and rewiew of national report on member states efforts to achieve balance between fleet capacity and fishing opportunities, Ispra, Italy, 04 -10 septembrie 2016;
- ◊ **RCM Med BS &LP** (Regional Coordination Meeting for the Mediterranean Black Sea and Large pelagic), Pasaia (Donostia – San Sebastian), Spain, 19 – 23 september, 2016;
- ◊ **PGMED** - Working Group Meeting, Pasaia (Donostia – San Sebastian), Spain, 19 – 23 september, 2016;
- ◊ Working Group Meeting of experts from the National Agencies for Fishery and Aquaculture in Bulgaria / Romania and from the relevant research institutes in Bulgaria / Romania, Constanta, Romania, 26 February 2016;

A good participation was in GFCM meetings, as Romania has become extremely active by the creation of the Working Group for the Black Sea (WGBS/GFCM, whose coordinator was elected dr. Simion **NICOLAEV**, director of NIMRD “*Grigore Antipa*”) and the appointment of national Focal Points for Fisheries. As such, in 2016, Romania participated in the following meetings:

- ◆ the 5th Meeting of the Working Group for the Black Sea (WGBS) of GFCM, held in Kiev, Ukraina, during 06-07 April 2016;
- ◆ Second Regional Symposium on Sustainable Small-Scale Fisheries in the Mediterranean and the Black Sea;
- ◆ **GFCM** High-level Conference towards enhanced cooperation on Black Sea Fisheries and Aquaculture, Bucureşti Romania, 24 - 25 octomber 2016;
- ◆ **GFCM – Working Group on the Black Sea *SGSABS & BlackSea4Fish Project*** [*Brainstorming meeting on the GFCM BlackSea4Fish Project*] - Burgas, Bulgaria, 14 november 2016;
- ◆ **GFCM** - Subregional Group on Stock Assessment in the Black Sea (*SGSABS*) [*including session on benchmark assessment of turbot, anchovy and red mullet, and harmonizing surveys-at-sea*], held in Burgas, Bulgaria, during 15 – 19, November 2016;

Despite of non-achieving of international planned meetings, the three participants followed-up the recommendations at regional and European level, as per the various informing e-mails received through National Correspondent from relevant groups.

II B 2 Follow-up of regional and international recommendations

The main recommendations of RCM Med&BS din 2015 - 2016 reunions and the comments made during Liaison Meetings (LM) are listed below. Follow-up actions of the latest RCM Med&BS meetings are given, as well as observations made during Liaison Meetings (LM).

Source	Recommendation	MS follow-up actions
1	2	3
RCM MED&BS 2015 Recommendation 1	Regarding the penalties Mediterranean MS receive with regards to the submission of GFCM data, the RCM Med&BS 2015 is recommending that the following is to be taken into consideration: Task 1.5 data requests biological data (i.e. data on length, sex and maturity scale) of the main associated species caught from all operational units in which the national fleet is active. However, such data are not always required to be collected under the EU's Data Collection Framework. For example, for some species only length is required to be collected, while for some operational units (e.g. operation of fishing fleets in GSAs other than the national ones) no biological information is collected. In such cases, if the relevant columns are left blank, it is considered that there are missing data and not full coverage. Furthermore, this biological data is required in Task 1.5, irrespective of the importance of the species in the relevant GSA (for example irrespective of its catches, which sometimes can be insignificant). The issues mentioned above should not be encountered once the new GFCM DCRF (Data Collection Reference Framework) will be followed.	Romania entered the data according Task 1.5
RCM MED&BS2015 Recommendation 4	RCM Med&BS-considered that MS should improve their knowledge on the design based sampling and other statistical sampling tools used in other EU regions. For that RCM recommended MS to participate in the EU Working Group and Workshops relative to sampling designs and methods like WGCATCH.	Romania will try to participate in the EU Working Group and Workshops relative to sampling designs and methods like WGCATCH
RCM MED&BS 2015 Recommendation 6	The RCM Med&BS, after having revised the list of species/stocks proposed by the Commission, recommends to: a.maintain the column for prioritizing the species (G1: group 1; G2: group 2; G3: group 3) as revised and updated during the RCM Med&BS 2015 meeting; b.separate the list of species/stocks for the Mediterranean Region and the Black Sea Region as proposed by the meeting; c.keep separate the large pelagic and all shark species from the other species; d.maintain the four columns reporting the variables to be collected (M:mandatory;O:optional) by single species, as checked and revised by the RCM Med&BS 2015 meeting; e.insert the column reporting the frequency of the data collection for the listed variables (A:annually, T:triennial) as revised and updated during the RCM Med&BS 2015 meeting; f.include the list of species pertaining to Group 3 (note:no FAO areas have been assigned to the species of this Group) as agreed during the meeting; g. exclude from the proposed table all mammals, seabirds and reptiles, grouping them as vulnerable species, and reporting in a separate table. For this species there will be no obligation to collect any biological parameter; h.keep the exceptions rules as revised and agreed during the RCM Med&BS 2015 meeting: - the species is/are rare or not present in the national waters; - the species represents less than 10% of EU total landings in the region (note: this value should be applied separately for Mediterranean and Black Sea);	Romania was fulfilled this recommendation following the species list as indicated on it.

	- the species in presents in the national waters, but its total weight accounts for les than 2% or 200 tons of total ladings of the country.	
RCM MED&BS2015 Recommendation 7	The RCM Med&BS recommends keeping on having observers on board under the LO new scenario. Furthermore, the RCM Med&BS members also support that if MS decided to conduct LO control on boards, this should be completely independent from scientific data collection.	Romania has observers on board
PGECON 2015 Recommendation 3	PGECON suggests trying to extend the optional generation of DCFA annualReport (AR) Tables III.B.13 to Tables III.F.1, IV.A.IV.B.2 (transversal, Aquaculture, fish processing). Moreover, it should be evaluated if all information as requested in current AR tables is really necessary (e.g. target/frame population).He approach has been proven successful for fleet economic data. It facilitates the reporting for MS. Moreover, it is directlylinked to submitted data, i.e . the AR table which is derived from the JRC database is based upon data which MS were able to submit.Therefore, the evaluation of MS a ctivities (AR) is also facilitated.	Romania accted according to the recommendation and was sending the data to JRC on their format tables used for data calls.

Minutes of the meeting with representatives of ANPA and fishermen 26.02.2016

- New changes have been made - Order no. 1889/2514/2015 amending and supplementing the rules on access to living aquatic resources in the public domain of the state for the purpose of practicing commercial fishing in natural habitats in protected natural areas approved by the Order of the Minister of Agriculture and Rural Development and of the Minister of Environment and Forests no. 44/1195/2011.
- Fishermen raised the issue of fishing / extracting Rapana; new regulations are to be introduced in order to be exported;
- Diving should be issued with a fishing permit only on the basis of a diving certificate and not a fishing course;
- Establishment of landing and first sale centers according to EU norms and reduction of their number;
- The concept of vessel was introduced;
- It has been determined what tasks can fulfilleach vessel / craft used in fishing;
- It has been established how many members of a fishing crew must be required to have an industrial fishing permit.



Minute of Romanian-Bulgarian coordination meeting with representatives of administration and institutes of both countries - 26 February 2016, Constanta, Romania.

A. Welcome of participants

B. Adoption of the agenda

The chair presented the planning for the day. He invited all participants to provide any updates on

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the latest version of the agenda. The list of meeting activities was adopted without any modifications.

C. Discussion about the surveys during 2015. Researchers from the National Institute for Marine Research and Development "*Grigore Antipa*", Constanta outlined their research surveys and the expected results. The researcher from the Institute of Oceanology, BAS also presented the research surveys at sea made in Bulgaria. The institutes have agreed to exchange the data collected for the common stocks and to deliberate the methodologies, not later than March 31, 2016. After that they will submit the final reports from the research surveys to the administrations. The deadline for submission is consistent with the time for preparing the annual reports.

D. The activities for 2016 were planned: exchanging data; common surveys; exchange of scientists from institutes during the period of the research surveys in the Black Sea, etc.

If it is possible for the two countries, the pelagic research surveys will be conducted in May-June (the spring one) and late September - mid-October (the autumn one), and the two demersal surveys from April to May and mid-October to mid-November.

Bulgaria and Romania will try to coordinate their positions for various working groups organised under DCF focusing on the needs of the new DC Proposal Regulation of the EC;

Discussion of the list of proposed stocks & biological variables that will be included in EU MAP of the three different species Groups listed in the Report of the 2015 Regional Co-ordination Meeting Mediterranean and Black Sea, Large Pelagic Fisheries.

Scientists from Romania and Bulgaria will participate in the meetings of MEDIAS and MEDITS.

E. AOB: - Landing obligation and its related common Discard Plan of Romania and Bulgaria;

- Common positions on GFCM meetings – especially those involving EC commitments;
- Information on the Advisory Council of the Black Sea for mutual benefit of national administrations.
- The need of coordination of the closure period for the pontic shad in the Danube river, because the Romanian prohibition period starts earlier than Bulgarian.
- The cooperation between NAFA Bulgaria, NAFA Romania and Bulgarian Maritime Administration has been discussed.

Minute of the first meeting of the working group on dsf development - Black Sea - 24 March 2016

Agenda:

- * Presentation of the Black Sea turbot case study objectives by dr. Gheorghe Radu
- * Outline of the DSF structure and the proposed HCR measures and IUU reduction packages by dr. Tania Zaharia
- * Feedback

We have previously created a working group with key people for the development of the Black Sea turbot case study DSF, with the structure below:

Boats 0-6 m:

- N/A

Boats 6-12 m:

- PFA - Gartone Stefan (0040-722573290)
- SC Micul Golf SRL: Gheorghe Stanica (0040-748221844)

Boats 12-18 m:

- SC Cherhanaua Pescareasca SRL (vessel Cormoranul): Manole Daniel (0040-743335420)
- SC GabriFish SRL (vessels Olympus 1-2): Briceag Vasile (0040-724535615) and Briceag Gabriel

Vessels 24-40 m

- SC Miadmar Fishing SRL (vessel Flamingo 4): Daniel Buhai (0040-721253444)
- SC Romfish Marina SRL (vessel Romfish): Binali Tarakci (0040-724521386)

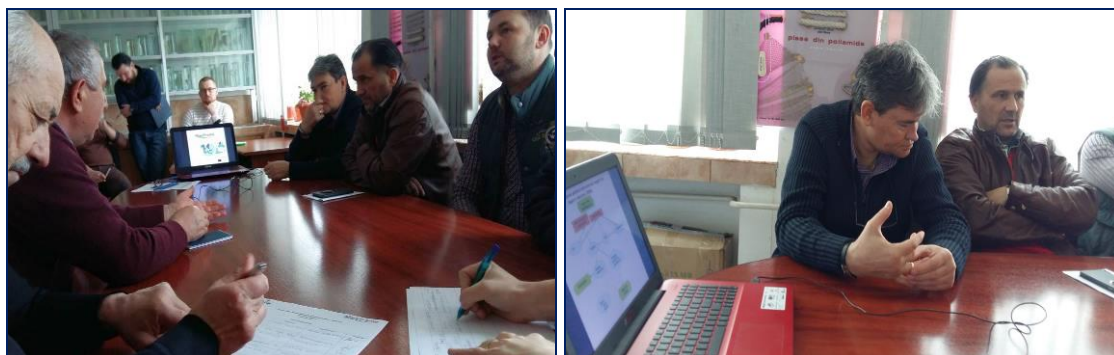
Control and NGO

- National Agency for Fisheries and Aquaculture – Maritime Direction Constanta: Inspection Division: Mihai Serstiuc (0041-751050484)
- NGO Mare Nostrum: Marian Paiu (0040- 763255731)

Discussions:

The discussions focused on receiving the fishermen's inputs on the turbot issue at the Romanian Black Sea coast:

- Fishermen and NGO representatives identified that the main problems are the unreal estimation of IUU and the stringent need to reduce illegal fishing (poaching). Poaching is practiced with small boats (with no VMS) close to the coast during prohibition periods. Additionally, professional fishermen rejected the proposal of NAFA (National Agency for Fisheries and Aquaculture) of extending the prohibition period for turbot fishing (15 additional days before and after the current regulated period). These 15 days before and after prohibition are exactly the period when they catch the largest amounts of turbot of the year.



- Fishermen are also not happy with NAFA's decision to limit the number of gillnets allowed, which makes fishing for turbot economically non viable.
- The proposal of enforcing a TAC for the rapa whelk (*Rapana venosa*) is strongly rejected: fishermen say that free rapa whelk harvesting releases the pressure on turbot stock by simply redirecting their efforts towards this gastropod.

Proposed measures by the group:

- For HCR: they agree with the proposed option, except for the one enforcing closea areas for fisheries;
- For IUU measures: they recommended that all vessels > 12 m should have VMS; for control and inspection, it was agreed that additional staff is needed, as well as some clear benchmarks that should be set (where to act, no. of mandatory inspections etc.)

Finally, it was agreed that only a joint management plan endorsed and enforced by all Black Sea

countries could actually help the restoration of the turbot stock.

Future meetings with the working group will be held.

Minutes of the Working Group of the National Fishery Data Collection Program - 30.08.2016

During this meeting, we discussed:

1. Discussion of non-functionality of the database;
2. Preparing the reception reports of the programs installed on the partners' computers;
3. Demonstration of the operation of the operational nature of the specific parameters for the information system database PNCD;
4. Establishing measures for organizing the activities of the Program in the coming period;
5. Miscellaneous.

This meeting was attended by representatives of the institutions: INCDM "Grigore Antipa" Constanta, ANPA Bucharest, ICDPIP Galati, The Fish Culture Research and Development Station Nucet and S.C. Aswic S.R.L. in which the following issues were discussed:

- a. Following Mr. Dimulescu's meeting with Aswic from Galați, the company's manager has prepared retrospective reception reports of the data collection program and will be reviewed / modified by INCDM for validation;
- b. Following the discussions between ANPA and STS, it was concluded that they could host a work platform for the program at no additional cost, provided the program functions in all respects, that the audit and the other audit institutions can have access;
- c. Expectations from INCDM, ICDPIP Galati, the Fish Culture Research and Development Station Nucet to Aswic are expected to accurately design and accept the format of the database;
- d. The issue of collecting data by the Fish Culture Research and Development Station Nucet was done by a ministerial order sent for approval mentioning the obligation of companies with CAEN code 0322 - freshwater aquaculture;
- e. A Minister Order is to be established for the obligation to fill in the questionnaires for aquaculture, fish farming and research;
- f. It has been established that all requirements addressed to Aswic are written and signed.

III Module of the evaluation of the fishing sector

III A General description of the fishing sector

The Romanian fishing fleet was operating in the area of competence of the Regional Fisheries Management Organisations - G.F.C.M., Area 37 - Mediterranean and Black Sea, Sub-area 37.4., Division 37.4.2, GSA 29.

Main fishing grounds at the Romanian littoral

The Romanian fishing area is comprised between Sulina and Vama-Veche; the coastline extends for over 240 km, which can be divided into two main geographical and geomorphologic sectors:

■ the northern sector (about 158 km in length) lies between the secondary delta of the Chilia branch and Constanta, constituted of alluvial sediments;

■ the southern sector (about 85 km in length) lies between Constanta and Vama-Veche characterized by promontories with active, high cliffs, separated by large zones with accumulative

beaches often protecting littoral lakes.

The distance from the sea shore to the shelf limits (200 m depth) varies from 100 to 200 km in the northern sector and to 50 km in the southern one. The submarine slope of the shelf is very gentle in the north, while in the southern sector the slope increase very quickly (Annex 1; 2; 3).

The shallow waters up to 20 m depth of the northern part are included in the Biosphere Reserve of Danube Delta (declared through the Low no. 82/1993). The marine zone of the Danube Delta Biosphere Reserve is a traditional area for transboundary species spawning and foraging, as well as a passage zone for anadromous species (sturgeons, shads).

Along the Romanian Black Sea coast, the Natura 2000 European Ecological Network has been developed, including Special Protection Areas for birds (SPAs) (ROSPA Black Sea), designated pursuant to the provisions of Directive 79/409/EEC on the conservation of wild birds, and Sites of Community Importance (SCIs), designated pursuant to the provisions of Directive 92/43 EEC on the conservation of natural habitats, wild flora and fauna. The inclusion of these sites into the Natura 2000 Network does not exclude the practice of marine fisheries by traditional methods, performed along the Romanian coast. The following SCIs have been designated along the Romanian Black Sea coast (Annex 1):

► **ROSCI0269** (*Vama Veche - 2 Mai Marine Littoral Aquatory - Natural Reserve*), located in the southern part of the coast, at the Bulgarian border, is important because it shelters European interest habitats. The site is rated under category IV-IUCN and covers an area of 50 km². It is an area with a wide diversity of biotopes and biocoenoses, spanning over migration routes of the main pelagic and demersal fish species and marine mammals;

► **ROSCI0094** (*The Sulphur Seeps in Mangalia*), located in the sandy area, at the base of the underwater cliff, being connected with the Dobrogean karst complex. This site is unique at the Romanian coast and an interdisciplinary study is required to identify both the causes leading to the formation of these gas seeps and their effects on the marine ecosystem. This marine protected area covers 3.60 km².

► **ROSCI0197** (*Submerged beach from Eforie North - Eforie South*), located in the southern part of the coast, this site is characterized by hydrodynamic processes and natural habitats typical for an exposed beach. The site covers 1.4 km².

► **ROSCI0273** (*Marine area from Cape Tuzla*): located in a rocky reef sea bottom area, this site reaches the greatest depths, being the most diverse and rugged marine protected area in the Romanian sector. It covers 17.86 km².

► **ROSCI0237** (*Submerged methanogenic carbonate structures Sf. Gheorghe*), located in the NW of the Black Sea, between depths of 35 m and 784 m, these bubbling gas reefs overcome the oxic/anoxic interface typical for the Black Sea. The area covers 60 km².

► **ROSCI0281** (*Cape Aurora*). Designated in 2011, this site covers 2 elementary sandy and reefy Natura 2000 habitat types.

► **ROSCI0293** (*Costinești - 23 August*). Also designated in 2011, this site is more diverse than the previous one, with 3 elementary sandy and reefy Natura 2000 habitats.

Fleets, fishing gears and fishing effort

Marine fishing, conducted along the Romanian coastline, is limited to the marine areas up to 60 – 70 meter isobaths, as a consequence of the characteristics of the vessels and their limited autonomy (Annexes 4 - 9).

In 1986, Romania declared an Exclusive Economic Zone (EEZ) of about 25,000 km² in the Black

Sea. However, Romania's fishing area in the Black Sea, as stipulated by the UN Convention on sea rights, is yet to be delineated especially after the trial decision of International Court in 2009 with Ukraine contentious for the marine platform, the EEZ increasing at 29,000 km².

Romanian fleet operates up to 30 - 35 marine miles out in the Black Sea. Trawl fishing has a seasonal pattern linked to the presence of the fish in the areas.

An important fishing area is the Danube Delta Biosphere Reserve, where fishing activities are forbidden to trawlers. In addition, the near-shore area of the Black Sea coast up to 20m isobaths is out of limits for fishing vessels that use towed gears. Fishing activities are limited to the utilization of pound nets and gillnets.

Vessels operating in the Black Sea use as landing points of catches the Mangalia, Olimp, Costinesti, Cape Midia, Sfantu Gheorghe and Sulina landing points/ports, none of these being fitted with specific installations for coastal trawlers. The fishing harbor infrastructure, with berths and storage areas, as well as first sale points, is precarious.

Traditionally, the fishing in the Romanian Black Sea area was carried out in two ways:

- ◆ Coastal trawlers, equipped with pelagic trawls and turbot gillnets, activating at depths greater than 20 m (Annex 2). In 2013 has started work with beam trawl, with this fishing gear being equipped boats/vessels over 12 m length. During a fishing season, a vessel may alternate the use of fishing gear such as pelagic trawls, beam trawls or gillnets for turbot;

- ◆ Fishing practiced along of the coastline in about 12 fishing points between Sulina - Vama Veche, in the coastal area with small depth (3.0 - 11.0 m) with fixed gear (pound nets, gillnets, long lines, and beach seine) and up to 40 - 60 m depth, with gillnets and long lines mainly for turbot and dogfish (Annex 3).

In the past 20 years, in the light of the new conditions of fishing practice with the ceasing of state subsidy to the principles of alignment and competitive economy, have led to radical changes in the conditions for national marine fisheries. In the same time, the competition created by the opening of imports on fishery products, especially imports of frozen fish, the lack of experience of exploitation under the new conditions, the hold age of the vessels and especially the rising cost of fuel and maintenance have led to a drastic involution of active fishing in the Romanian Black Sea.

Year after year the activity of active fishing decreased gradually to the point where, in 2016, from 20 vessels with LOA between 24 - 40 m registered in the last years in the Fishing Fleet Register, only three vessels were active, one being a trawler and the two in beam trawl and gillnet fishing.

At the same time, the catches caught at the Romanian shore have always been dependent on the activity and the technology used for fishing. After 2001, economic operators working in the fishing sector from Romanian coast have changed their options and interests, giving priority to the vessels fitted with equipment and fishing gears specialized in fishing of the species with commercial value, like turbot. In these conditions, the number of boats which are operating with gill nets and other fixed gears (hand lines, long lines, etc.) has increased.

In 2015, the number of fishing vessel continued to drop, **151** vessels being recorded, of which only **127** were active. As compared to previous years, the number of active boats increased, by the activation of 10 vessels between 12-18 m long, specialized mainly in rapa whelk fishing (Annexes 4 - 6). This drop in vessel number also continued in **2016**, when only **147** vessels were registered, of which **121** were active. Even though compared to the previous years the total number of registered vessels slightly dropped (about 5%), the number of active vessels increase, by the activation of 12 - 18 m and 18-24 m LOA vessels, specialized for rapa whelk fishing (Tables 1, 2, 3 and Annexes 4 - 9).

Table 1 - Segmentation of the Romanian fleet in 2015 – 2016, active vessels

Length class LOA (m)		< 6 m		6 – 12 m		12 – 18 m		18 - 24 m		24 - 40 m		Total	
		2015	2016	2015	2016	2015	2016	2015	2016	2015	2016	2015	2016
Total vessels registered		16	14	121	115	11	14	1	0	2	0	151	147
Active vessels		12	10	101	94	11	13	1	1	2	3	127	121
Pelagic trawl	Mixed pelagic and demersal species	-	-	-	-	-	-	-	-	1	1	1	1
Beam trawl	Demersal fish	2	-	20	4	11	13	1	1	1	2	35	20
Pound nets	Small pelagic fish, Demersal fish	3	3	22	24	-	-	-	-	-	-	25	27
Gillnets	Pelagic and demersal species	5	3	32	34	-	-	-	-	-	-	37	37
Purse gillnets	Pelagic species	-	-	1	-	-	-	-	-	-	-	1	-
Artisanal fisheries (hand lines, long lines, beach seine)	Other finfish	2	4	26	32	-	-	-	-	-	-	28	36

Table 2 - Segmentation of the Romanian fleet in 2015 – 2016, active / inactive vessels

Length class LOA	Total vessels - active -		Total vessels -inactive -		Total vessels registered	
	2015	2016	2015	2016	2015	2016
< 6 m	12	10	4	4	16	14
6-12 m	101	94	20	21	121	115
12-18 m	11	13	-	1	11	14
18-24 m	1	1	-	0	1	1
> 24 m	2	3	-	0	2	3
Total	127	121	24	26	151	147

Table 3 - Structure of boats (No) by length class (LOA) and fishing gears type in 2015 and 2016 (active vessels)

Fishing gears type	< 6 m		6 – 12 m		12 – 18 m		18 – 24 m		> 24 m		Total	
	2015	2016	2015	2016	2015	2016	2015	2016	2015	2016	2015	2016
Pelagic trawl	-	-	-	-	-	-	-	-	1	1	1	1
Beam trawl	-	-	9	4	11	13	1	1	1	2	22	20
Pound nets	2	2	19	22	-	-	-	-	-	-	21	24
Trap nets	1	1	3	2	-	-	-	-	-	-	4	3
Gillnets	5	3	32	34	-	-	-	-	-	-	37	37
Purse gillnets	-	-	1	-	-	-	-	-	-	-	1	-
Hand lines / long lines	2	2	24	16	-	-	-	-	-	-	26	18
Beach seine	-	-	2	2	-	-	-	-	-	-	2	2
Manual harvesting / beam trawl	2	2	11	14	-	-	-	-	-	-	14	16
Total	12	10	101	94	11	13	1	1	2	3	127	121
No. of fishermen	42	30	229	217	42	54	5	5	13	20	331	326

The fleet is in precarious state, requiring the increase of onboard safety, labor conditions and landing facilities. The fisheries achieved by these small boats is typically traditional, using several gears and catching multiple species, changing gears throughout the year. Currently, vessels operating in the Black Sea use as landing points of catches the Mangalia, Olimp, Costinesti, Cape Midia, Sfântu Gheorghe and Sulina landing points/ports (Annex 3). The fishing harbor infrastructure, with berths and storage areas, as well as first sale points, is precarious.

Fishing gears used at the Romanian littoral

There are different types of fishing gears for the active and passive fishery practiced in the inshore and offshore coastal fishery.

The passive fishing gears include the equipment for catching in general the fish migrating for spawning and feeding in shallow waters, namely:

- long lines and bottom lines;
- gillnets for turbot, Danube shad, dogfish, gray mullet, gobies and horse mackerel;
- trap nets for gobies
- sea pound nets.

Another category of fishing equipment used in the Romanian coastal zone includes the active fishing gear like beach seine, pelagic trawl and, since 2013, beam trawl.

Employment in marine fisheries sector

The total number of fisherman dropped progressively from **471** people in 2012, to **326** in 2016 (2012 / **471** people, 2013 / **302** people, 2014 / **304** people and 331 people / 2015). The number of fishermen for vessels with length bigger than 24 m decreased from 200 people to the crew of only two vessels (20 persons). Similarly to the situation in the coastal fishing fleet, the stationary fishing at the Romanian littoral has also declined. As such, in 2016, **217** fishermen activated in small scale fisheries (6-12 m boats), using different types of gears, and **30** people activated on boats under 6 m (Table. 3). For 12 - 18 m boats, an increase of staff was reported, from **10** people in 2013 to **54** fishermen in 2016 (Table 3 and Annexes 5, 7 and 8).

Catches and catch composition

In the coastal zone of the Romanian marine sector with small depth, fishing with fixed gear is characterized by the concentration of activity mainly in the first five / six months of the season (March-September), when usually the turbot migrates to the coastal area for reproduction and other species migrate for feeding. Usually, the total stationary fishing season covers about eight months. The capture level and the level of fishing productivity differs from one year to another, depending on the fishing effort (number of pound nets, number of turbot nets and effective fishing days), and also depends on the evolution of hydroclimatic conditions and, last but not least, the state of fish stocks and anthropogenic factors.

The structure on species of the catches mirrored only partly the composition of Black Sea ichthyofauna from the Romanian sector, because the type of gear conditions the ratio between the different fish species. As a general rule, the pelagic species, small-sized and short life cycle keep continue to be dominant in catches (anchovy, sprat).

After a decreasing trend during 2002-2010, when it dropped from more than 2,000 t, in 2002, to 1,390-1,940 t, during 2003-2006, and below 500 t during 2007 - 2009, reaching a minimum value in 2010/258 t, in the past years the total catch has had an increasing trend, namely 568 t, in 2011, 835 t, in 2012, 1,711 t in 2013, 2,231 t in 2014 4,847 in 2015 (more than 105.5 % higher than the previous year) and 6,839 t (41.1 % higher than the previous year)(Fig. 1).

The increase of catches during the past years was not due to the fish fauna, but to the emergence of economic operators' interest in the manual harvesting of the rapa whelk (*Rapana venosa*), which was about 10 % of the total catch in 2010, 65 % in 2012, 89 % in 2014, and 95,1 % in 2016.

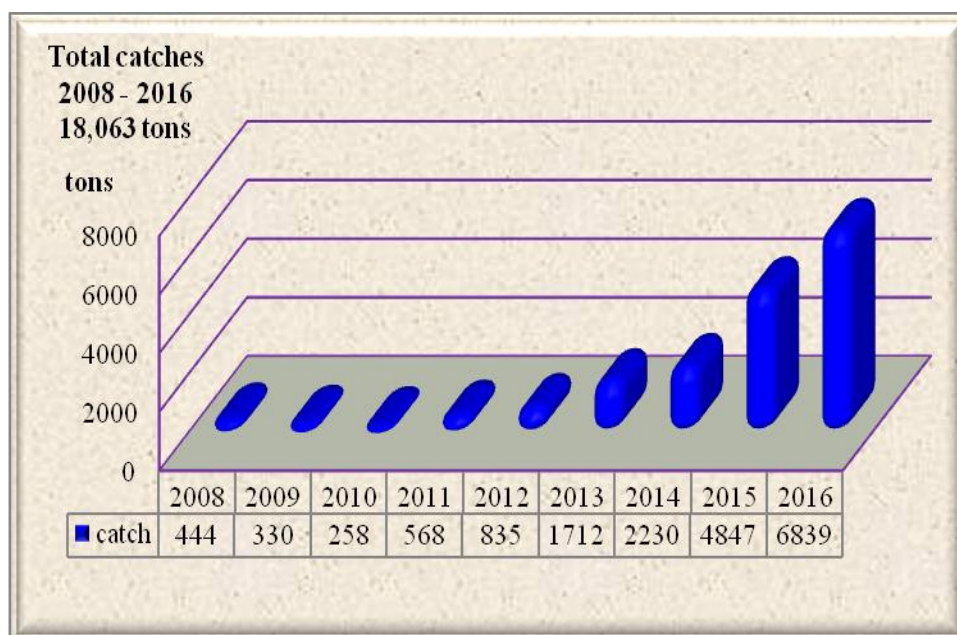


Fig. 1 Total catches and structure on species at the Romanian coast during 2008-2016

The population structure indicates, as in previous years, the presence in the catches of a greater number of species (over 20), in which the mainstream belonged to small species (sprat, anchovy, whiting, goby), as well as to the larger ones (turbot and Danube shad). The low share of some species, such as: dogfish, horse mackerel, mullet, bluefish, but also the occurrence as isolated specimens of blue mackerel and bonito were reported. The main species in 2016 catches were: rapa whelk - 6,505 t; anchovy (102 t), sprat (50 t); horse mackerel (32 t), turbot (29 t); alose (14 t) and, red mullet (4 t)(Fig. 2).

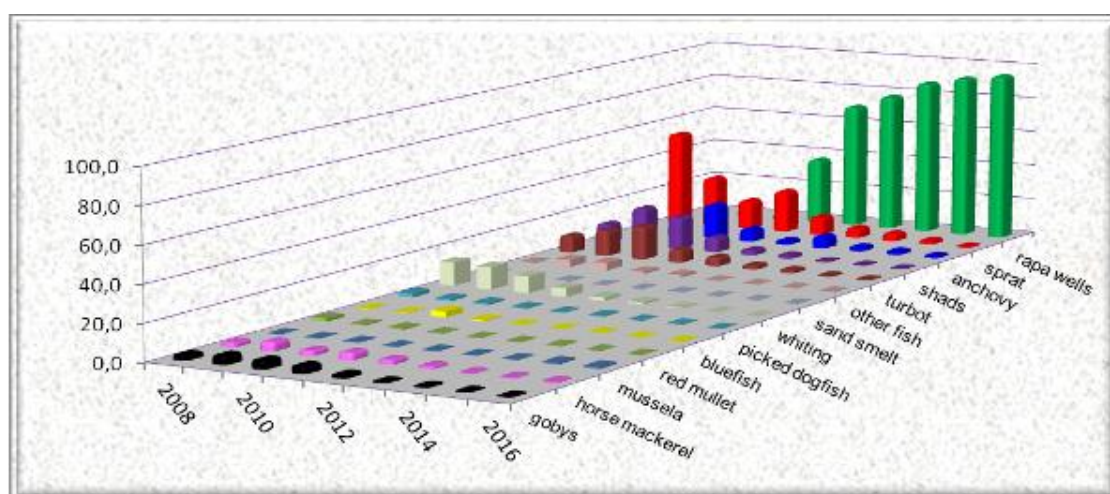


Fig. 2 Catch structure (t) of the main fish species caught at the Romanian coast during 2008-2016

Along with these species, the species were also found in the catches: big-scale sand smelt (0,085 t), flathead grey mullet (0,647 t), chefal (1,212 t), gobiidae (18,853 t), knout goby (1,695 t), caspian shad (5,457 t), pontic shad (8,326 t), mussed (67,420 t), bluefish (8,042 t), garfish (2,486 t), thornblack ray (0,312 t), Atlantic bonito (0,295 t) and common stingray (0,509 t).

III B Economic variables

The Romanian economic data are reported in the area of competence of the Regional Fisheries

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III B 1 Achievements: results and deviation from NP proposal

Data obtained in 2016 are presented in the Annexes 11 - 23 and the tables IIIB1, IIIB2 and III B3. The sources for the data are shown in the Annex 10, mainly through questionnaires, being used according to Romanian's legislation issued by NAFA laying down by the EU regulations.

The data have collected are in accordance with Appendix VI of CD 2010/93/EU, part of them from FFR - and the other ones using questionnaire, containing the following basic data:

- technical data: energy costs, repair and maintenance costs, other operational costs, effort;
- economic/financial data: incomes, personnel costs, capital costs-capital value and investments, financial position, employment, fleet, number of fishing enterprises/units, production value per species.

The data from the Romanian fishing vessels registered in FFR contains also the following information: number of vessels per each segment, vessel length, gross tonnage, main engine power, external marking and year of construction. The effort and catches data are collected from fishing logbooks, fishing licenses and sales notes.

Taking into account the obligations related to various data should be reported to other organisms of EC i.e. Eurostat, was applied the exhaustive method (covering 100 % the active vessel registered in FFR) using the following means:

- ◆ NAFA staff/inspectors, Constanta regional branch, responsible for activities in its area of competence on collecting primary data from economic operators in the field.
- ◆ NIMRD staff - processing, centralizing and interpreting data.

The target population was represented by all active vessels in all segments,.

The calculation of variables complied with instructions in Appendix Vi of DCF and is based on figures obtained from questionnaires distributed to vessel owners by NAFA inspectors and on the national tax law. Data collected by NAFA inspectors required for researchers in their investigations were transmitted, being processed and centralized by NIMRD Constanta experts.

Annexes 11 - 23 show the results obtained in 2016.

According to the described method used for data collection using the legal documents requested in domestic legislation and the work of local NAFA staff, as per the questionnaire – Annex 10, we have assured a 100 % precision level for active vessels over 12 m length.

For the vessels with length under 6 m and length between 6 - 12 m was foreseen random stratified questionnaires to be used in order to achieve target precision level of plus or minus 25% for a 95 % confidence level. But, taking into account the number relative small of active boats (121), the data were collected applying exhaustive method.

For the estimation of the Price per Capacity Unit (PCU), Terms of reference considered were electronic tenders. Average value of the electronic tenders was used for ship body, electronics, engine, electronic devices, gear and fishing equipment. National legislation has used for the values from the Catalogue on classification and duration of fixed assets.

Percentage value of the components of fishing vessels on length classes:

Vessels 0 - 12 m:

- vessel body - 45%;
- engine - 30%;
- electronics - 5%;
- other fishing equipment - 20%

Vessels > 12m:

- vessel body - 50 %;
- engine - 26 %;
- electronics - 14 %;
- other fishing equipment - 10%

As it is shown in Tables 1, 2 and 3 the population segments of vessels is dominated by the small boats, 6-12 m and under 6m, inside of which the dominant characteristic is that of using max 5-6 fishermen (the captain, using an engine, but not all of them, and max 3-4 fishermen) fishing near to the shore and catching small pelagic species, being an fishing for subsistence. As per national legislation the captain has the obligation to fulfil the coastal logbook for each fishing operation, including the no of hours, no and type of gears, the area of fishing and the captures per species, live weight and prices of sales. These obligations are similar with the requested legal obligations as for the vessels bigger than 12 m.

The figures are verified with those registered in company accounts and in the documents reported to the fiscal authorities.

The clustering specified on Table III.B.2 is based on the métier of the vessels, and length classes. Example given: beam trawlers as recorded according to logbooks during the fishing year data and the number of active vessels for both segments 24-40 m, 18 – 24 m and 12-18 m using beam trawlers; the same scheme for clustering is used for segments 0-6 m and 6 – 12 m. The same procedure is used for all clustered segments specified in Table III.B.2.

III B 2 Data quality: results and deviation from NP proposal

The reliability/control of data accuracy by comparing it with other sources, as a statistic rule, is accomplished by crosschecking control between based documents – demanded at the range of regional branch - by local inspectors and the person special assign with data centralization. There are no other sources of investigation or assessment for NAFA, emitted by another authority of the state, which have determined the application of exhaustive method and data collection based on the compiling legal documents and questionnaires transmitted by/to the authorized operators on the fishing sector.

For active vessels over 12 m length has been assured a 100 % precision level. Also, for the vessels with length under 6 m and length between 6 - 12 m, the data were collected applying exhaustive method.

III B 3 Actions to avoid shortfalls

As in previous years, for next DCPs, we hope a better and due time financial support. Also the following actions have been taken to avoid shortfalls:

- Preparation in terms of understanding the questionnaire before the actual interviews start such as information meetings, information leaflets.

- As from 2015 in 2016 the economic survey started to be carried out throughout the data collection year starting in the month of January.

III C Metier-related variables

Region: Mediterranean Sea and Black Sea. The Romanian marine fishery was located only in the Romanian Black Sea waters. The Romanian marine fishery was taking place in the Black Sea (GFCM), Fishing Sub-area 37.4 (Division 37.4.2) and Geographical Sub-area (GSA 29).

III C 1 Achievements: results and deviation from NP proposal

The sampling programme was realised in view to obtain quarterly distribution of length on species from catches (length distribution of landings, the length distribution of discards) and the quarterly volume of discards (number and weight). The data were collected on fishing techniques as there are presented in Appendix IV (4), for fish species from Appendix VII. For the period of the Programme the biological sampling studies has included the sprat, anchovy, horse mackerel, spiny dogfish and turbot (species from group G1) and whiting and red mullet classified in G3 group.

The data on the catches and landings have been obtained from Fisheries Logbooks and cover fish species, fishing gear for all the active vessels. The information is based on exhaustive data reported in logbooks. Also were used data sources as sale notes and Vessels Monitoring System (VMS).

Following-up the procedure described in the guidelines for the implementation of the National programme, Romania determines metiers to be sampled. The following métiers have been sampled (Table III C 1):

- pelagic trawl fishery;
- pound net fishery;
- set gillnet fishery;
- trap nets
- hand and pole lines fishery;
- other types (*MISC* / trap nets and manual harvesting / by divers).

An addition to the report is represented by the presentation and data collection for vessels/boats harvesting rapa whelk using the beam trawl and divers. The word “divers” (also identified as job description) was used to indicate that some fishermen/divers harvest the rapa whelk manually (manual harvest, see Annex 11 and 19) underwater, not using any fishing gears. ***This type of Rapana fishing is not listed in the National Program, as it was drafted in 2010, while rapa whelk fishery started to develop in 2013, when both fishing methods started to be used.***

The sampling scheme, strategies and effort are presented in the tables III C 3 and III C 6.

The tables summarize the sampling strategies that have been adopted for metier-related variables and achieved number of trips on each metier. The sampling resources have been allocated to at-sea sampling and shore-based sampling. We must have in consideration the fact that all marine fishing vessels operate with one fishing day trip.

The number of trips required to observe the sampling scheme was achieved 100% and beyond, in survey along the coast, and only 75% for sea surveys in active pelagic trawl fishing (***given the small number of vessels, only 1 trawler, and low number of fishing days***).

The sampling distribution was made depending on the seasonal character of the target species. The collection of the random samples from unsorted and retained catches has been realised in fishing

harbours, fishery points and at sea on the vessel board.

The samples were extracted from the catch of trawler fishery, beam trawl, pound net fishery, gillnet fishery and long lines and hand lines fishery. The sampling schemes were organized in a way that sampling effort is distributed proportionally to the fishing effort. Relatively larger landings during the year imply higher sampling effort and vice versa. This assured that the biological data correspond directly to the national landing statistics.

The objectives of the sampling scheme to be carried out for the pelagic trawls included the concurrent length sampling of unsorted and retained catches (in terms of weight and numbers). Sampling was performed at sea and fishing ports (see Table III.C.4).

The collection of monthly samples aboard trawler vessels was stipulated (one survey) - 8 times a year. 3 surveys aboards trawlers were made, whereas in 2016 only one vessel used the pelagic trawl, while vessels with lengths of 12-18 m practiced specialized rapa whelk fishing, using the beam trawl. Also, total catches and discards on board of the trawlers were registered in the time of at sea surveys foreseen in the Program. In the same time, fish samples were taken for biological studies.

The target-species of mid-water trawl was sprat, with by-catches of whiting, turbot, anchovy, horse mackerel, bluefish, shads and picked dogfish, while beam trawl fishing targeted rapa whelk. The achieved length sampling from unsorted and retained catches on species and metiers is presented in the tables III C6.

Sampling scheme made for the pound nets, targeting sprat in the spring period and the beginning of the summer and anchovy and horse mackerel in the summer and autumn period included the concurrent length sampling of unsorted and retained catches. The by-catch in the pound net fishery is composed of whiting, turbot, red mullet and others demersal species.

Sampling was performed at sea, based on a probability sample survey.

For stationary uncovered pound nets, the samples were taken such as:

- ♦ from fishing points in the southern part of the Romanian littoral (Vama Veche - Agigea area) - 2 times/month in the fishing season (April - October);

- ♦ from fishing points in the northern part of the Romanian littoral (Constanta - Chituc area) -2 times/month in the fishing season (April - October);

The number of planned trips was 24, have been made a total of 28. The number of trips to meet the sampling scheme was accomplished 116.6 % % (III C 4).

Sampling scheme of set gillnets, long lines and hand lines targeted demersal species, basically exercised by the small scale inshore fleet, was 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.

Sampling was performed at shore (landing sites), based on a probability sample survey. 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.

The catches on board of gillnetters have been registered by NIMRAD observers on board of institute boat in the time of research regarding impact of turbot gill nets on cetaceans (24 trips). Turbot samples were taken for biological studies also in the time of at sea surveys with bottom trawl foreseen in the Program.

Set gillnet for demersal fish, the species with commercial importance was turbot, with by-catch of thornback ray, common stingray, spiny dogfish and cetaceans. Given the drop in trawler numbers,

fishermen turned to gillnet fishery. Under these circumstances, the number and diversity of gillnets increased; mesh size varies between 24 mm and 400 mm. Total number of trips was 24. The number of trips to meet the sampling scheme was accomplished 100 % (III C3).

Hand and pole line for finfish is representative for artisanal fisheries and sample collection was made at fishing points located along the Romanian coast. The main species in catches are gobies and sometimes horse mackerel. For hand and pole line sampling was performed at fishery points, total number of trips was 24, was accomplished 100 % (III C3).

The distribution of samples was made according to the seasonal character of target species. The fact that all marine fishing vessels operate for 1 day - a few days at sea, never more than a week. Random collection of samples from unsorted catches and landings was made in fishing harbors, fishing points and aboard fishing vessels. The sampling scheme was designed so that sampling efforts was proportional with fishing effort.

The sampling frame and stratification scheme is presented in the table III.C.4. The achieved length sampling from unsorted catches on species and metiers is presented in the table III C6.

For almost all species the achieved length and age sampling has exceeded the required and planned levels. The excess sampling has taken place due to continuation of the previous sampling practices because data series are used for analytical assessment purposes. Excess sampling has been realized on the national expense of Romanian NIMRD Constanta.

For sprat, the length measurements scheme was achieved 111,4 %, 11,139 specimens being measured instead of 10,000. For turbot, measurements were 132,00 % achieved (275 specimens / 200 / the reason was the small number of boats in 2016).

III C 2 Data quality: results and deviation from NP proposal

Each of the selected metiers has been established following Commission Decision 2010/93/EC Chapter III. B. B1.2 (2), Appendix IV (1-5), and the recommendation of RCM MED&BS - Working Group.

Table 4 National metier stratification

Metier LVL6	National metier	Target species	Space strata	Time strata	Comments
OTM_MPD_>=13_19_0_0	OTM - pelagic trawl	Sprat	37.4.2	Quarterly, estimates between April and November.	TAC regulated
MISC	manual harvesting	Rapa whelk	37.4.2	Quarterly, estimates between April and October	Species unregulated
TBB_DEF_0_0_0	TBB-beam trawl for demersal species	Rapa whelk and mussels	37.4.2	Quarterly, estimates between April and October	Species unregulated
FPN_MPD_0_0_0	FPN – stationary uncoverend pound nets, pelagic species	Sprat, anchovy, horse mackerel	37.4.2	Quarterly, estimates between April and October.	TAC regulated for sprat
FPO_DEF_0_0_0	Trap nets, demersal species	gobies, red mullet	37.4.2	Quarterly, estimates between April and October	Species unregulated
GNS_DEF_360-400_0_0	GNS – set gill nets for demersal fish	Turbot, other demersal species	37.4.2	Quarterly, estimates between March and November.	TAC regulated for turbot

GNS_DEF_>=16_0_0	GNS – set gill nets for pelagic fish	shad, grey mullet, gobies	37.4.2	Quarterly, estimates between March and November.	Species unregulated
LHP_LHM_FIF_0_0_0	Hand and Pole lines for finfish	Gobies and horse mackerel	37.4.2	Quarterly, estimates between April and October.	Species unregulated
LLS_DEF_0_0_0	Long lines	Gobies	37.4.2	Quarterly, estimates between June and september.	Species unregulated
SB-SV_DEF_0_0_0	Pelagic and demersal fish	Sprat, anchovy, horse mackerel	37.4.2	Quarterly, estimates between June and september.	Species unregulated

The species included in the sampling programme (sprat, anchovy, horse mackerel, turbot and spiny dogfish) are classified in the G1 (Appendix VII). The sampling intensity was proportional to the relative effort of the metier. The sampling scheme depended on the diversity of species and the operational conditions under which sampling takes place. Our option was for scheme 3 where group 1 of species have been sampled on each occasion; with group 2 species sampled every 50 % of occasion and group 3 species sampled at the sea for the all samples on the sea. In the ports and fishing points the sampling scheme were 2, with 30 % samples for all species and 70 % samples only for G1 species.

The length structures obtained from at-sea monitoring was complemented with the length structure from shore sampling.

The sampling was conducted in order to achieve the required precision level (Precision level 3). The analytical analyze have been used to check for data quality issues. For 2014 data have been used available statistical methodologies (WKSCMFD, ICES, 2004) for age composition as well as length and weight at age of sprat, whiting, anchovy, horse mackerel and turbot. Precision for weight at age and weight at length were calculated analytically from the 95% confidence interval around the mean as $\pm t(n-1)_{\alpha} \cdot s / \sqrt{n}$ where $t(n-1)_{\alpha}$ denotes the value of the two-sided t-distribution at α (0.05 for 95% confidence interval) and n-1 degrees of freedom, and $s / \sqrt{n}$ represents the standard error of the mean.

The species *Trachurus trachurus* is not present in the sampling program because is not present in the catches. Due to the absence of the specie, we asked derogation to carry out biological sampling.

In the App. VII of the Comm. Dec. 93/2010 the species whiting *Merlangius merlangus* is not included, but because the Subgroup for Black Sea stock assessment decided to include this species between species which will be evaluated, Romania carried out biological sampling.

For fisheries using seine for, both pelagic and demersal species, demersal long lines and trap nets for gobies, no sampling was planned because these types of fishing is sporadic. It is used from time to time during the fishing year and very small value catches are recorded, these types of fishing being mostly for subsistence, with catches under 50 kg.

III C 3 Actions to avoid shortfalls

For Romania, all the time was and has remained a problem to have in due time the financial support.

As in previous years, for DCP 2016 and next years, we hope a better and due time financial support for:

- ♦ systematically review the length measurements made for each species and to better

collaborate with the fishermen for performing stock-specific sampling;

- ◆ an exploratory analysis of the samples for a possible improvement of its sampling scheme and estimate the number of samples required for reaching the required precision level;
- ◆ to solve the sampling problem with trawlers and gillnetters;
- ◆ to improve the precision levels for the length and age data.

In 2010, Romania adopted a Fishing Effort Adjustment Plan (FEAP) according with the Operational Programme for Fisheries 2007-2013 to adapt the fishing fleet to available quotas and implement the common fishery policy guidelines of reduction fishing capacity. The objective of this plan is to reach the fleet capacity by at least 520 to and 1300 kw.

In these conditions, in 2010, 2011, 2012, 2015 and 2016, only one trawler was operational. In 2013 and 2014 two trawlers were active, yet the mid-water trawl was used during few trips at sea. This explains the low number of achieved trips for pelagic trawlers. In the future we will increase the number of trips in conditions which the fleet of trawlers will be rehabilitated.

In the Bucharest Bilateral Coordination Meeting (2010) was established in common by Bulgaria and Romania the regional metier stratification and also the sampling intensity for metier-based variables at national level. The RCM MED&BS agreed the sampling intensity at national. At the regional level wasn't established a number of fish to be measured.

There is no regional coordination between Romanian and Bulgaria on sampling and calculating Coefficients of variation (CV). The recommendation of **RCM MED & BS** Meeting of 2013 was achieved by signing a new bilateral agreement between the two states, on 25 March 2015 (Annex 48).

III D Recreational fisheries

The Romanian marine fishing area is situated in the Mediterranean and Black Sea (GFCM), Fishing Sub-area 37.4 (Division 37.4.2) and Geographical Sub-area (GSA 29). The main target species in recreational fisheries are: *Neogobius melanostomus* (black spotted goby); *Pomatomus saltatrix* (bluefish); *Mesogobius batrachecephalus* (flat-head goby); *Trachurus mediterraneus* (horse mackerel) and *Liza aurata*.

III D 1 Achievements: results and deviation from NP proposal

Achievements are not relevant due to the absence of the target species (Bluefin tuna and Eels) in the area. Romanian Black Sea recreational fisheries are a minor part due to the lack of valuable and attractive species. This type of fishing is performed mainly from the coast and is connecting only with the species from Gobies and Mediterranean horse mackerel (*Trachurus mediterraneus ponticus*) and sometimes for grey mullet (*Mugilidae*). In Romania there are many fishermen using recreational fisheries for feeding purposes as subsistence fishing. Due to the absence of the target species (Bluefin tuna and Eels) in the area, Romania has asked and obtained derogation to carry out biological sampling.

With regard to sharks, only one species of shark inhabit Romanian marine waters (FishBase; BSC, 2011; Radu G. and Radu E., 2008; Radu G. *et al.*, 2008). Spiny dogfish (*Squalus acanthias*) inhabiting the Romanian marine waters is a migratory species, with long life cycle, whose stock is strong influenced by the environmental conditions and fishing effort size. In the Romanian fisheries, Spiny dogfish was mainly as by-catch in the trawlers catches. When the number of trawlers was high, also the dogfish catches were higher. After 1989, the number of operational

trawlers decreased and the Spiny dogfish catches have the same tendency. In the last years, Spiny dogfish is a target species for dogfish gillnets (Radu G.*et al.*, 2011a, b). At Romanian littoral has never been a recreational fishing for shark - *Squalus acanthias* (Daskalov G. *et al.*, 2009; Radu G. and Radu E., 2008; Radu G. *et al.*, 2008; Radu G.*et al.*, 2011a, b).

III D 2 Data quality: results and deviation from NP proposal

Is not the case

III D 3 Actions to avoid shortfalls

It is not applicable.

III E Stock-related variables

Mediterranean and Black Sea region. The Romanian marine fishery is located only in the Romanian Black Sea waters. The Romanian marine fishery is taking place in the Black Sea (GFCM Fishing Sub-area 37.4 (Division 37.4.2) and Geographical Sub-area (GSA) 29).

III E 1 Achievements: results and deviation from NP proposal

Biological - stock-related variables are required for all stocks listed in Appendix VII of the (Commission Decision 2010/93/EU, Mediterranean Sea and Black Sea) Table III.E.1 lists the stocks corresponding to Appendix VII. The RCM Working Group (Regional Coordination Meeting for the Mediterranean and Black Sea) in September 2015 (Rome), it was proposed to create various groups of species, based on the following rules:

Group 1: species which are assessed at regional/subregional level, and/or species of highest importance with regard to the total landings at regional/subregional level;

Group 2: other species with a certain economic importance for fishery (landed catches and/or economic value, species according to international management plans, species within conservation and recovery plans).

Group 3: species important for any other reason at national level (non-indigenous species impacting the ecosystem and/or species with a minimum reference size pursuant to Regulation EC no.1 967/2006 and the Habitats Directive 92/43/EEC).

Based on these criteria, in 2015, the following species were sampled:

Group 1: sprat / *Sprattus sprattus*; **anchovy** / *Engraulis encrasicolus*; **turbot**/ *Psetta maxima maeotica*; **horse mackerel** / *Trachurus mediterraneus ponticus*;

Group 2: rapa whelk / *Rapana venosa*;

Group 3: whiting / *Merlangius merlangus euxinus*; **red mullet** / *Mullus barbatus ponticus* and **dogfish** - *Squalus acanthias*.

Data are given in Annexes 24 - 47.

The entire number of species subject for data collection under section III.E falls in the group of species (G1) to be sampled triennially (according Appendix VII of Commission Decision 93/2010/EU. The aging of species is foreseen to be realised on annually base, and weight, sex ratio, sexual maturity on triennially base (see Table III E.2).

Although the Commission Decision indicates for all species a triennially sampling scheme, most of the biological parameters will be sampled on an annual basis. This is because the fish is available and the parameters are recorded routinely (without extra costs).

Table III E.2 gives an overview of the long-term sampling strategy with respect to “Stock related variables”.

Table III E.3 gives an overview of the planned sampling intensity. List of variables includes: length on age classes; weight on length classes; weight on age classes; maturity on length classes; sex-ratio on length classes and fecundity on length classes. Data sources was surveys, landings.

For the stocks listed in Table III E.3 biological data have been collected on a stock by stock basis.

The length composition of the catch is available by stock and métier from the métier sampling (see Section III.C.revised). Samples for biological parameters were derived from unsorted catch, retained catch and at-sea surveys. For this purpose, the staff of the research Institute was on board vessels, fishing points on the coast and in fishing ports and participated in at-sea surveys with demersal trawl and pelagic trawl.

For small pelagic and demersal species the representative sampling for size-at-age structure were collected and stratified by length groups. For a number of 3-5 samples for length frequency, one sample for age frequency was drawn up; calculated by the stratified method, that is providing for each length-class of a constant number of age material (otoliths or scales) - about 10 individuals (if is possible, 5 females and 5 males).

Age compositions of the catch (unsorted catches, landings and survey) have been derived by applying “Age-Length-Keys” to the length composition of the catch.

For all species the achieved length and age sampling has exceeded the required and planned levels. The excess sampling has taken place due to continuation of the previous sampling practices because the data series are used for analytical assessment purposes. Excess sampling has been realised on the national expense of Romanian NIMRD Constanta.

The summary results are presented also in the Annex 24 - 47.

III E 2 Data quality: results and deviation from NP proposal

The precision level must in correlation with the requirements of Commission Decision 2010/93/EC, Chapter III, section B 2.4. For average weight and length at age, the precision level is at level 3. Also for maturity and fecundity, precision level 3 must be realised. For the age structure of the stock, only precision level 1 is required for discards.

We have calculated the precision level using analytical methodology. We do not use the Cost software to calculate the CV. Unfortunately, because of the very late financial support from the national budget; we could not attend the COST training course, regarding precision level.

III E 3 Actions to avoid shortfalls

As in previous years, for DCP 2016 and the future, we hope for a better and timely funding, as well as the improvement of the quality of data collected, in order to increase the accuracy extent by designing a better sampling scheme.

It is compulsory to comply with the new bilateral agreement concluded between the two Member States (Romania and Bulgaria), agreement which must observe all obligations for each country, whereas Bulgaria failed to fulfil its obligations for research surveys at sea, particularly for pelagics (mid-water trawl). The Commission’s intervention is absolutely required to clarify this issue with Bulgaria.

III F Transversal variables

Mediterranean and Black Sea region. The Romanian marine fishery is located only in the Romanian Black Sea waters. The Romanian marine fishery is taking place in the Black Sea (GFCM Fishing Sub-area 37.4 (Division 37.4.2) and Geographical Sub-area (GSA 29).

III F 1 Capacity

III F 1.1 Achievements: results and deviation from NP proposal

Data on capacity are available from the fleet register and have been obtained from this data source. The Fishing Fleet Register (FFR) contains the following information: vessel length; gross tonnage; maximum main engine power; age of the vessel.

According to the national legislation, all vessels involved in commercial fisheries should be licensed by NAFA, after their registration in FFR and to provide the legal documents concerning the real and effective activity for the whole Romanian Black Sea waters: catching, landing, sales acts etc.

The structure of the Romanian fishing fleet included in NP 2016 is given in Tables 1, 2 and 3 and Annexes 4 - 9. The total number of registered vessels was 147, but only 121 were active. Fleet segmentation is detailed in Tables 1, 2 and 3, the structure and specifications on length classes and metiers are given in Annexes 4 - 9. The overall data collection procedure is mentioned above.

The reliability/control of data accuracy by comparing it with other sources, as a statistic rule, is accomplished by crosschecking control between based documents - demanded at the range of regional branch by local inspectors and the person special assign with data centralization. Data acquisition will be done in the same time with data for effort pct. III.F.2.1 as per the questionnaire listed in Annex 10, in an exhaustive method.

The results are presented in the Annex 11 - 23.

III F 1.2 Data quality: results and deviation from NP proposal

Full information on capacity indicators is available through the FFR. Therefore only this information source has been used. So, the data have been collected in an exhaustive way by NAFA inspectors from the logbooks, for vessels and coastal logbooks, for small boats. This method ensures 100 % coverage of the population and maximum level of quality.

III F 1.3 Actions to avoid shortfalls

A better collaboration between NAFA inspectors/NIMRD Constanta scientists and vessels owners has to be improved.

III F 2 Effort

III F 2.1 Achievements: results and deviation from NP proposal

The Romanian expert (NIMRD) used the data from completed logbooks for the parameters on fishing effort by techniques. Additional, in ports and fishery points have been distributed questionnaires (Annex 10)

All fishing vessels below 12 m are also included in the FFR. The vessels mainly take their catches in the coastal waters with passive gears and are also obliged to fill the standard fishing logbook.

Data includes the following parameters information:

a) annually:

- number of vessels (vessel name, register number), including small boats;
 - GT, kw, vessel age;
- b) monthly:
- number of vessels, including small boats
 - departure and arrival dates and time,
 - fishing operation date and time, no. of hours fished, in the Black Sea there are not operations longer than one (1) day at sea;
 - kw*fishing days; GT*fishing days;
 - number of trips;
 - gear type used and number by each gear type;
 - number of traps;
 - number of hooks and number of lines;
 - soaking time by hours;
 - value of landings total and per commercial species;
 - live weight of landings total and per species.

The results are presented in the Annex **11 - 23**.

III F 2. 2 Data quality: results and deviation from NP proposal

With the help of the NAFA statistics/collecting data system are performed crosscheck verifications between the logbooks, declarations of origin and (first) sales notes of fish and other aquatic organisms and reports. As described above mentioned, the exhaustive method used ensure the maximum quality level of collected data.

III F 2. 3 Actions to avoid shortfalls

A better collaboration between NAFA inspectors and vessels owners has to be improved.

III F 3 Landings

III F 3 1 Achievements: results and deviation from NP proposal

The information concerning the collection on data landings have follow the same scheme described as general method used by NAFA staff – chapter III.F.1, additional information on value collected by species will cover the needs of our programme.

As a picture of marine fishing sector in Romania, the landings are fresh/alive discharged fish and as a consequence conversion factor unit is “1,00” inserted in standard table III.F.1. Data are presented in the Annex **11 - 23**.

III. F. 3.2 Data quality: results and deviation from NP proposal

The actual methodology applied by NAFA cover all segments of fishing activities, the quality and the validation of data being assured by the crosschecking operations at the each involved regional branch and between central offices and these ones. This standard procedure, as general rule of statistics, is applied on collection data in NAFA Romania. Also, one other method is the periodical

inspections conducted by the inspectors from central offices of NAFA to regional branches. The method used will be an exhaustive one for all landings data by the questionnaire of NAFA inspectors. NAFA inspectors collect data from all vessels and small boats, which are compulsory in conformity with the Romanian legislation, and subsequently the data are processed, centralized and interpreted by NIMRD experts.

III. F.3.3 Actions to avoid shortfalls

A better collaboration between NAFA inspectors/NIMRD Constanta scientists and vessels owners has to be improved.

III. G Research surveys at sea

III. G. 1 Achievements: results and deviation from NP proposal

In the frame of the Romanian National Programme for Collection of Fisheries Data 2016, to evaluate the abundance and distribution of fish stocks independently of the data obtained from the commercial fisheries, Romania had liability undertake scientific research at sea. The research surveys qualified for the NP 2016, listed in Appendix IX of the Commission Decision, are presented in the following table no. 5.

During the period 2011-2016 will undertake annually two priority surveys in the Black Sea for turbot and sprat. Additional information on the surveys is presented in Standard NP - Proposal Tables. In conformity with table G.1, list of surveys is the following (Table no. 5):

Table 5 Scientific surveys schedule in the Romanian area, 2016

Name of survey	Area	Period	Main targeted species etc	Survey effort	
				Days (Maximum)	Hauls
Bottom Trawl Survey	Black Sea	2 nd and 4 th Quarter	Turbot, whiting, dogfish	20	81
Pelagic Trawl Survey	Black Sea	2 nd and 4 th Quarter	Sprat and Whiting	16	76

Bottom trawl survey

Expected actions

The survey for turbot stock assessment, by swept area method, are conducted in April - May and October-November. The main goal is to define the stock biomass indices and respectively the annual quota for turbot fishery. Through this field research, biological data about the turbot size-at-age structure, distribution, sex ratio, and by-catch will be gained. Each survey includes 60 bottom trawl hauls for 20 days, for each surveyed area.

The surveys were made with the “*Steaua de Mare 1*” research vessel, using the demersal trawl, all over the entire Romanian area. The same gear used during past years will be used and similar data will be collected, using the same methodologies and creating a common age-length key.

Achievements

The two surveys were performed during quarters 2 and 4 of 2016, only in Romanian waters, pursuant to the obligations stipulated by the new Collaboration Agreement (Annex 48), concluded between NAFA Romania and NAFA Bulgaria, on 25 March 2014, namely:

1. **Surveys at sea: during the period covered by the Agreement (2015-2020), each country shall perform annual research surveys in the territorial waters and their EEZ** - surveys with demersal trawl and hydroacoustic (pelagic) surveys, using the common methodology to be adopted by other EU Member States (MEDIAS and MEDITS). The number of surveys and the target species can be changed, following the recommendations of the Regional Coordination Meetings, which was approved by EC_DG MARE. The national research teams are responsible for collecting and analyzing data, stock assessment, providing information on economic variables and reporting only for national waters (territorial waters and EEZ).
2. The two parties shall perform the pelagic and demersal surveys in the territorial waters of the respective countries and, in order to facilitate the harmonization of methodologies used, **they shall provide for the presence of researchers from the other country aboard research vessels of the contracting party**, as the case may be.
3. Pursuant to the legislation in force in Bulgaria and Romania, **the parties commit to provide financial means for scientific surveys and working meetings (the costs shall be covered by NAFA, with EMFF contribution). Each party shall cover the survey costs for their own vessels in national waters and the costs incurred by the participation of the research team aboard the other vessels during surveys.**

In the meaning of the above, each time before starting the research surveys at sea, the National Institute for Marine Research and Development "Grigore Antipa" notified the National Correspondent of the FDCNP, who, in turn, notified the Bulgarian National Correspondent, in order to appoint the observers (submitted e-mail). No reply was received in any of the cases.

----- Original Message -----

From: Constantin Stroie [constantin.stroie@anpa.ro]

Sent: Wednesday, April 27, 2016 10:44 AM

To: simona.nicheva@iara.government.bg; dimitar.valkov@iara.government.bg

Cc: konstantin.petrov@bg-permrep.eu; KONSTANTINPETROV@HOTMAIL.COM; vio_raykov@abv.bg; 'Larissa BURU'; 'Valodia Maximov'; 'snicolaev'

Subject: COMMON SPRING SURVEYS 2016 DEMERSAL AND PELAGIC SPECIES

Importance: High

Dear Mrs. Simona Nicheva

Mr. Dimitar Valkov,

We would like to renew our request to you related to the common surveys in the EU Black Sea waters as stated in our Agreement 2449/23.03.2015, under our commitments (Romania and Bulgaria included in the multiannual program of data collection).

According to these commitments we let you know that Romania marine research institute – NIMRD Constanta is planning to start the surveys in the Romania waters on 04.05.2016, 08.00 hrs from Constanta under weather conditions.

Consequently please be so kind and inform us on the research expert that would participate on board of Romanian vessel during the survey. For better coordination please be in direct contact (copy to us) with our research team in NIMRD Constanta, namely the persons in charge with: George Tiganov: gtiganov@alpha.rmri.ro or Dr. eng. Valodia Maximov: vmaximov@alpha.rmri.ro, as Head of department.

Waiting your urgent replay in order to start the surveys, as planned, and stated in our Common Agreement, in order to inform EU Commission as appropriate.

Best regards,

Constantin Stroie

National Correspondent of Romania for Data Collection Program

----- Original Message -----

From: Contantin Stroie [/squirrelmail/src/compose.php?send_to=constantin.stroie@anpa.ro]
Sent: Tuesday, October 04, 2016 11:01 AM
To: simona.nicheva@iara.government.bg; dimitar.valkov@iara.government.bg
Cc: vmaximov@alpha.rmri.ro; cdanilov@alpha.rmri.ro; konstantin.petrov@bg-permrep.eu; konstantinpetrov@hotmail.com; 'Larissa BURU'; bas.drukker@ec.europa.eu
Subject: COMMON SURVEYS DEMERSAL AND PELAGIC AUTUMN 2016
Importance: High

Dear Mrs. Nicheva,
Dr. Mr. Valkov,
Dear all,

Please be informed that according to the Agreement between both countries – Bulgaria and Romania – and the National Programmes for Data Collection 2014-2016, we are in the position to start the autumn survey on October 10th, 2016, weather permitted, from Constanta. The survey will be carried out with research vessel STEAUA DE MARE, and will start with the pelagic survey, and will continue with the demersal survey in the Romanian waters of the EU Black Sea. Please be so kind and take note that the responsible persons of NIMRD Grigore Antipa Constanta, for both surveys are:

Dr. Valodia MAXIMOV – Chief of Live Marine Resources Department – vmaximov@alpha.rmri.ro;
Cristian DANILOV – Surveys Chief in charge – cdanilov@alpha.rmri.ro.

We stress the necessity to contact both Romanian scientists in NIMRD Constanta indicating the name of your scientists that will be on board of Romanian vessel during the surveys. Meantime, please send us your information on the similar surveys that should be carried out in Bulgarian EU waters of the Black Sea, according to the provisions of the actual National Programmes approved by the EU Commission.

Please send your urgent reply to the e-mail addresses, as indicating above, without delay, the matter being very important and urgent, in order to fulfill our common obligations to the EU Commission.

Kind regards,

Constantin Stroie / NAFA Romania

During the demersal surveys the demersal trawl 22 / 27-34, with an opening of 13 m, was used. The mean speed of the vessel was 2.20-2.4 kts during the spring survey and 2.1-2.4 kts during the autumn survey, with a standard trawling time of 60 minutes. 41 hauls were performed off the Romanian coast (Fig. 5) in quarter 2 and 40 hauls in quarter 4 (Fig. 6), with the following details being recorded:

- geographical coordinates of the trawling points;
- water depth (m);
- mean trawling speed (knt);
- trawling duration;
- total catch;
- structure on species.

For each haul a random sample was collected for small species and for large species (turbot and dogfish), each individual was recorded and measured. With data of the horizontal opening of the trawl, trawling speed and time, the swept area, the catch per area unit and the extrapolation of catch per Nm² were calculated for each species.

The calculated biomasses for the main demersal fish species at the Romanian coast were: **turbot** (2,116.72 t si 1,374.63 t / Fig. 3 and 4; Annexes 49 and 57); **whiting** (6,927.66 t / Annexes 50); **picked dogfish** (1,550.25 t and 747.18 t / Annexes 51 and 58). In 2016, mainly turbot agglomerations biomass increased cu approximately 100 %, compared to 2015. For dogfish and whiting, the biomasses were close to the values of previous years.

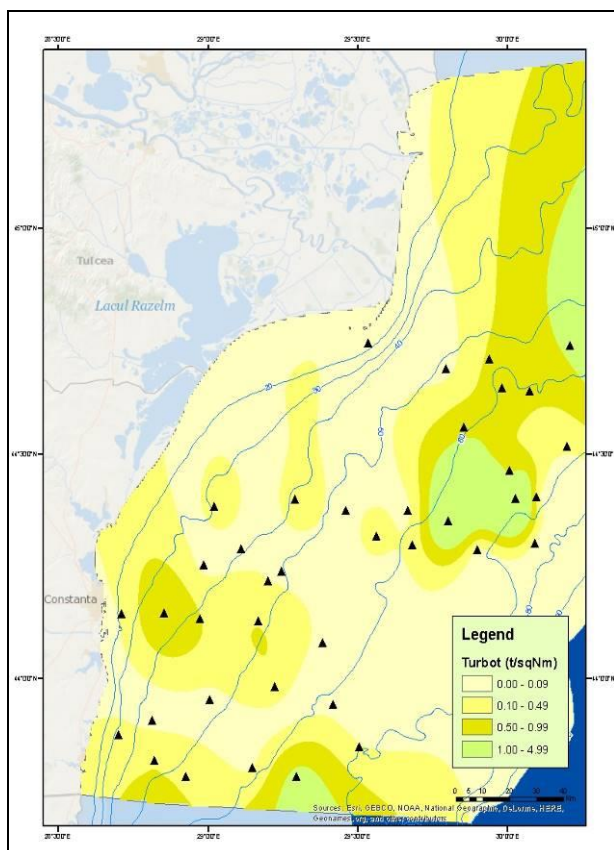


Fig. 3 Distribution of the sampling points and turbot agglomerations in demersal surveys realised in the 2nd Quarter 2016 in Romanian waters

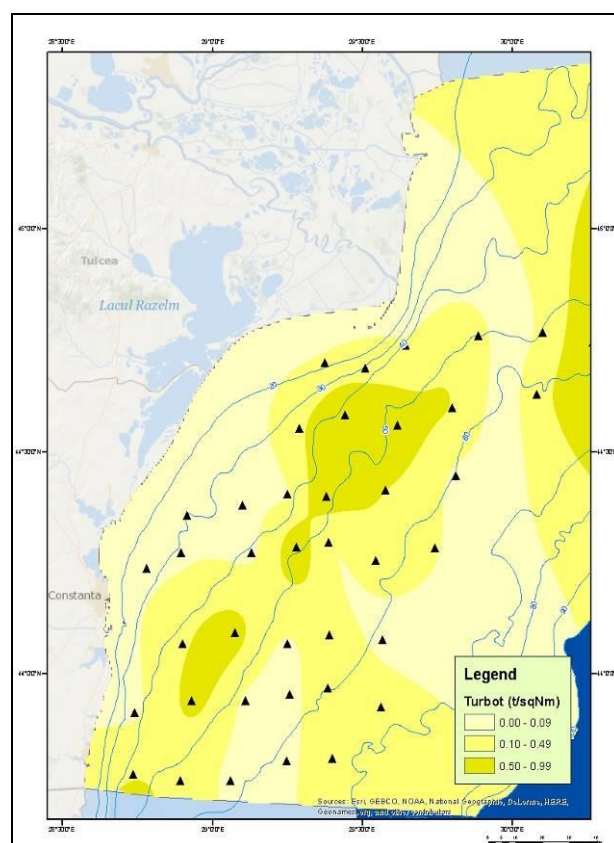


Fig. 4 Distribution of the sampling points and turbot agglomerations in demersal surveys realised in the 4th Quarter 2016 in Romanian waters

Pelagic trawl surveys

Expected actions

In conformity with the Bilateral Coordination Meeting from Bucharest (4-5 February 2010), in 2014 Romania and Bulgaria should have conducted the survey in two parts, in May/June and September/October, using hydroacoustic method with adopted methodology for data collection, processing and evaluation of data. RV Akademik (from Bulgaria) will be involved for hydro-acoustics and will cover BG and RO areas.

Pursuant to the new provisions (mentioned at demersal surveys / Annex 48) of the Collaboration Agreement concluded between NAFA Romania and NAFA Bulgaria (25 March 2015), in 2016 the pelagic surveys were performed only in the Romanian area, using the swept area method, during the planned time frames. The Bulgarian side was notified in due time, but they did not appoint any observers (see e-mail above). During the surveys, the collected information included length, weight, sex structure and maturation degree. Otoliths for age determination were also be collected and discards were documented. Each survey included more than 30 hauls with the mid-water trawl, covering a period of 8 days/survey.

Achievements

Pursuant to the Bilateral Agreement, Romania performed the pelagic surveys of 2016 in the Romanian Black Sea area, using the "Steaua de Mare" R/V, during quarters 2 (June) and 4 (October - November). The following parameters were considered during the surveys:

Mid water trawl (57/63 - 62 m):

- trawling speed - **2.3 - 2,5 Kts**;
- horizontal opening - **22 m**;
- trawling time - **30 min**.

The results obtained were presented as maps and tables comprising data on:

- surface of the swept grid (Nm^2 , m^2);
- mean weight per area unit (g/m^2 , t/Mm^2);
- weight variation ranges per area unit;
- total biomass values (t).

42 hauls were performed in the Romanian coast area in quarter 2 and 34 hauls in quarter 4, and the following details were recorded: geographical coordinates of the trawling points; water depth (m); mean trawling speed (knt); trawling duration; total catch; structure on species.

The calculated biomasses for the main pelagic species of the Romanian coast were: **sprat** (**114.652,7 t** și **17.929,32 t** / Fig. 5 and 6; Annexes 52 and 55). In 2016, sprat agglomerations biomass increased compared to the previous year by about 115.40%, compared to 2015. Other species were also caught, mainly **whiting**, whose biomass was estimated around **5.389,51 t** and **6.042,48 t** / Annexes 53 and 56), and **dogfish** (96.59 t / Annex 54). For dogfish and whiting, the calculated biomasses were close to the values of previous years.

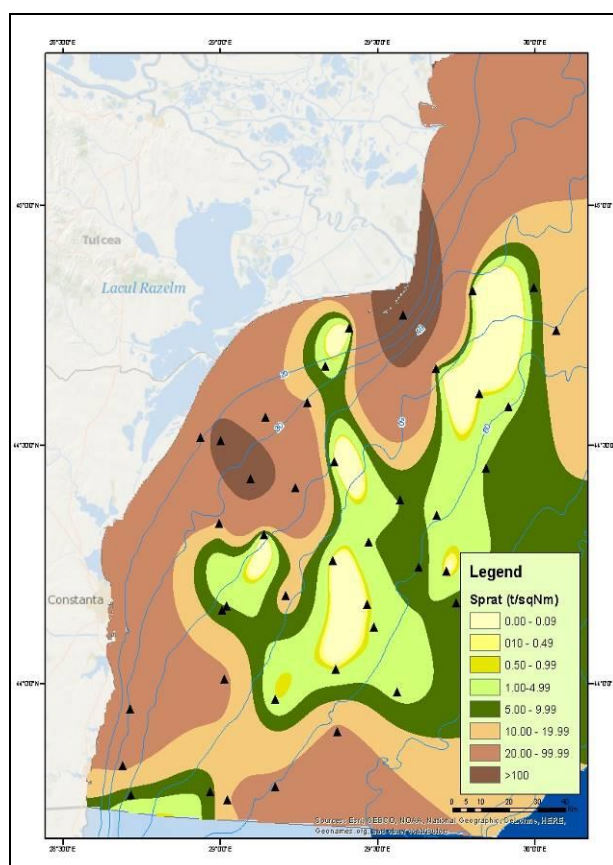


Fig. 5 Distribution of the sprat agglomerations in the 2nd Quarter 2016 in Romanian marine waters

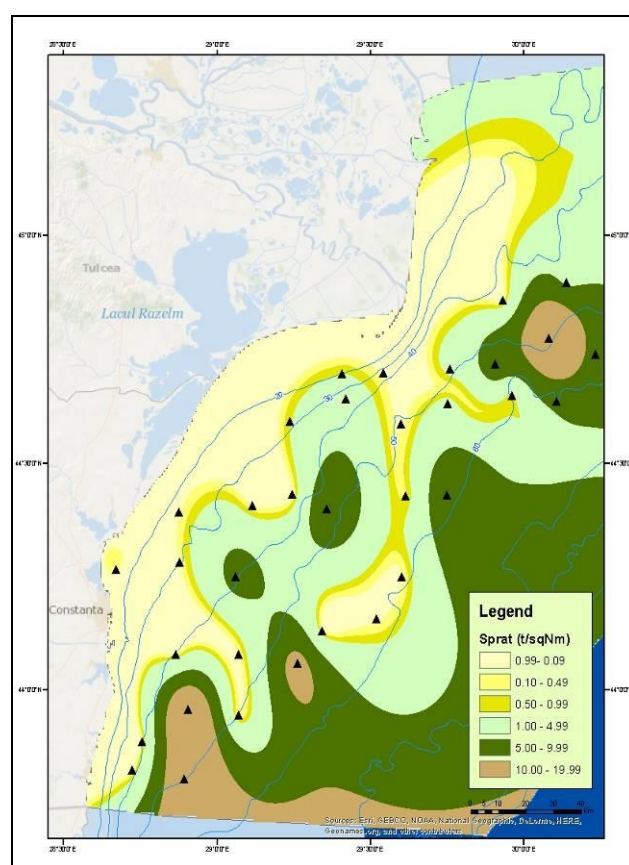


Fig. 6 Distribution of the sprat agglomerations in the 4th Quarter 2016 in Romanian marine waters

III. G. 2 Data quality: results and deviation from NP proposal

There are no deviations from the DCP 2016 objectives for the demersal trawl surveys, which were performed in time (quarter 2 and 4) and under good circumstances. No deviations were also recorded for pelagic surveys, as they were performed according to the plan and under good circumstances,

namey in quarters 2 and 4.

III. G. 3 Follow-up of Regional and international recommendations

Review of the bilateral and multilateral agreements in place

The RCM Med BS recommendations of 2013, on the conclusion of a good cooperation between BG and RO, materialized by the two agencies signing the new Bilateral Collaboration Agreement in early 2015 (25 March 2015) (Annex 48).

The main objectives of this Collaboration Agreement are:

- ◆ cooperation for joint surveys at sea;
- ◆ adopting common methodologies when performing surveys at sea;
- ◆ adopting coordination and good practices exchange between national systems;
- ◆ enhancing the efficiency of scientific activity of the institutes and the accuracy of the collected data and analyses.

Some of the parties' responsibilities include (part of them were mentioned in the demersal surveys paragraph):

- ◆ the parties shall harmonize the methodologies used for collecting/processing biological data, sample collection and stock assessment pursuant to the state of the art methodologies available, taking into account the suggestions from GFCM/STECF and, if required, they shall cooperate with third countries from the Black Sea region, with the aim of improving data quality and any interferences in stock assessment.

- ◆ the contracting research institutes organize every year, prior to initiating the surveys at sea, meetings for planning the surveys (which should start simultaneously in both areas) and harmonizing the methodology used.

- ◆ the signatory parties commit to collaborate when working on the following national fisheries data collection programmes to be approved and cofinanced by the EC and nationally by NAFA (2014-2020).

III. G. 4 Actions to avoid deviations

For DCP 2016, we hope NAFA Romania will provide the financial support in due time for research surveys. We also hope for a good collaboration with the Bulgarian side, complying with its obligations.

A new bilateral agreements between the two member states is compulsory, which should stipulate the obligation for each MS, taking into account that Bulgaria failed to achieve its obligations on hydroacoustic pelagic surveys. The Commission's intervention is compulsory to settle this issue with Bulgaria.

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

General description of the aquaculture and processing industry

General description of the aquaculture sector

Although, at the level of 2016 is still dominated aquaculture Romanian units practicing polyculture

cyprinid species, in combination with predator species (catfish, perch, etc.), and trout, rainbow trout dominated, is notes for the year 2016 increased aquaculture units specializing in other species, with investments made through the Fisheries Operational Program 2007 - 2014. In this regard, freshwater aquaculture has developed a range of approx. 22 units specialized in other species than cyprinids or trout, as follows: 1 unit of shrimp rearing; 2 units of African catfish; 1 unit of tilapia (mainly); 2 units to rearing of perch-pike (mainly) and 16 units of sturgeon rearing. Currently, NAFA statistics (Register of aquaculture - RUA since September 2009 and the date of January 2017) shows that, in 2016 there were a total of 963 licenses for aquaculture for a number of 762 facilities owned by to 702 units. The distribution of aquaculture facilities licensed of Fishery owned facilities, and licenses issued are shown in the figure below.

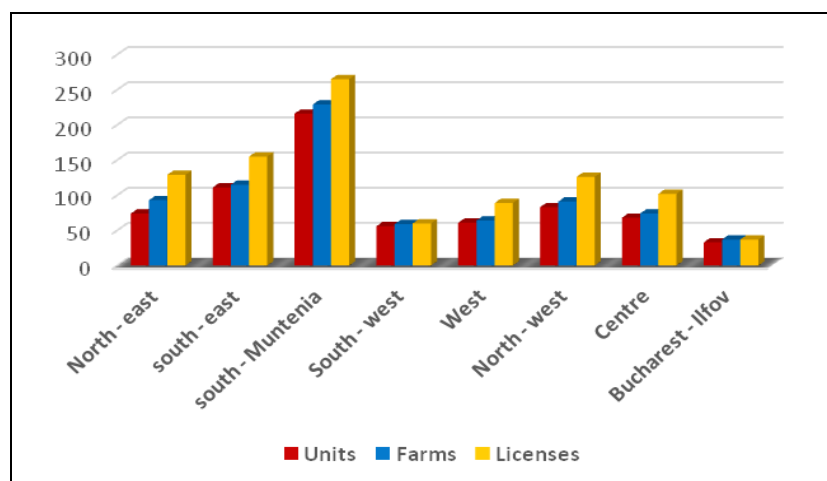


Fig. 9 - The number of aquaculture units, facilities and licenses for the year 2016

Analysis of the aquaculture unit based on the technology shows that 67% are on growing farms (512 units), 29% are combined units (222 units) and only 4% are hatcheries and nurseries (28 units). The 762 registered units are divided into:

The surface of the authorized units corresponding to 2016 was 88,011 ha, from which: nurseries 1,625 (1.84%), 52,430 ha on growing farms (59.58%) and 33.956 ha (38.58%) the combined farms, according to the table 6.

Table 6 – Total surface of aquaculture facilities use in the year

Region	Total surface	Nurseries surface	On growing surface	Combined units surface
ha				
North - East	11,393	11	2,878	8,504
South - East	38,176	546	20,466	17,164
South- Muntenia	16,415	850	12,037	3,528
South - West	7,773	196	7,167	410
West	2,067	0	1,290	777
North - West	4,435	0	2,098	2,337
Center	5,667	21	4,409	1,237
Bucharest - Ilfov	2,085	0	2,085	0
TOTAL	88,011	1,625	52,430	33,956

General description of the processing industry

In Romania, the fish processing industry is a traditional activity. Currently processing of fish is showing signs of recovery. This sector is processing aquaculture products.

The raw material used by the fish processing industry is harnessed technology to ensure a wider range of fish products for consumers and achieve added value by processors.

In Romania, since 1989 there has been a steady decline in the number of companies processing fish products. In the last two years (2015-2016) demand for fish and fish products registered a continuous growth trend, which increased the number of companies reporting that business - Processing and preserving of fish and shellfish.

According to the Register of processing (RUP) developed by ANPA Bucharest, reports and records of NAFA and the Trade Register, 2007-2013 POP and veterinary permits issued ANSVSA the units preparing fish and fishery products, we expect to have functioned 19 number of processing units whose main activity according to NACE 1020, and the processing unit 34 with secondary activity of the 20 units have processed 2016 (Table 7).

Table 7 – Processing units distributed in Romania by development regions

Development regions	North East	South East	South	South West	West	North West	Center	Bucharest–Ilfov	TOTAL
Number of units	3	21	5	1	3	7	6	7	53

The 19 processing units whose main activity according to NACE 1020 were classified by number of employees, in three segments units: companies ≤ 10 persons (5 units), companies with 11-49 persons (7 units) and companies ≥ 50 persons (7 units).

IV A Collection of data concerning the aquaculture

Shares aquaculture sector assessments undertaken in 2016 were aimed primarily determine the number of active units of the total number of units licensed. The total number of licensed companies active in the aquaculture sector in 2016 was 521, including: nurseries - 16 units; on-growing farms – 335 units and combined units – 170 (Table 8).

Following data collection activities of the aquaculture sector in 2016 received 386 questionnaires, with 372 questionnaires from active units in 2016.

Table 8 – Number of active units on regions, in 2016

Region	Authorized units, according AUR	Active units	Units responding
North - East	74	70	62
South - East	111	86	68
South - Muntenia	216	144	93
South - West	56	40	15
West	61	40	30
North - West	83	65	58
Center	68	51	40
Bucharest - Ilfov	33	25	6
TOTAL	702	521	372

Analysis of data collected from respondents allowed an additional segmentation by a number of other technical and social characteristics, i.e. distribution units responding aquaculture by class size and the number of employees (tables 9 and 10).

Table 9 – The distribution of the responding aquaculture units by size class

Class size	No. units	Percent (%)
≤ 1 ha	100	26.88
1– 10 ha	54	14.52
10 – 50 ha	83	22.31
50 – 200 ha	73	19.63
200 – 400 ha	31	8.33
≥ 400 ha	31	8.33
TOTAL	372	100

The total number of employees reported is 2,035, of which 344 women and 1,674 men, the share of women being 17.74%. From this sample, 1,530 people working full time, including 254 women and 1,276 men (women hold jobs in aquaculture at the rate of 16.6%).

Table 10 – The personnel structure of the aquaculture sector

Personnel	Total number of employees			FTE national		
	Total, of which:	Women	Men	Total, of which:	Women	Men
Number of persons employed	2035	361	1674	1530	254	1276
Percent (%)	-	17.74	82.26	-	16.60	83.40

Further analysis of targeted segmentation units thereof responding by:

- the main productions species, resulting in that:
 - 26.88% of respondents report that the main species trout, *Oncorhynchus mykiss* or *Salvelinus fontinalis*;
 - 68.82% of the respondents reported as the main species, cyprinids (*Cyprinus carpio*, *Ctenopharyngodon idella*, *Hypophthalmichthys nobilis*, *Hypophthalmichthys molitrix*, *Carassius auratus gibelio*) polyculture with other species grown in freshwater (prey species);
 - 0.27% of the respondents reported as the main species turbot (*Psetta maxima*);
 - 0.27% of the respondents reported as the main species (*Mytilus galloprovincialis*);
 - 0.54% of the respondents reported as the main species (*Sander lucioperca*);
 - 0.54% of the respondents reported as the main species (*Clarias gariepinus*);
 - 2.68% of the respondents reported as the main species sturgeon (*Acipenser ruthenus Baeri* *Acipenser*, *Huso huso*, *Acipenser gueldenstaedti*, *Acipenser stellatus* or Bester).
- technologies applied, resulting in that: 2,96% are hatchery and nurseries, on growing farms 60.22% and 36.82% are classified as farms were combined, having two licenses, nursery respectively (with or without incubation station) and farmed.

IV A 1 Achievements: results and deviation from NP proposal

Collecting data on aquaculture was performed in accordance with Annex X and XI of Commission Decision of 18 December 2009 - adopting a multiannual Community program for the collection, management and use of data in the fisheries sector for the period 2011-2013.

Technical and economic data were collected in three ways: by questionnaire, by interview to aquaculture units throughout the country and by accessing and using the database of economic statistics indicators of the Ministry of Finance.

Segmentation units was carried out on production species (quantitative).

IV A 2 Data quality: results and deviation from NP proposal

The method of data collection was exhaustive namely the census questionnaires were distributed by staff NAFA all active farms in the year 2016.

Data quality analysis involved the calculation of the response. After analyzing the input is constant for all segments of the population response rates of between 50 and 100%

Analysis of economic variables and statistical indicators can be found in standard table IV A 3 where it can be observed an improvement in the collection of data by obtaining the response rates that ranged from 63.33% to 71.4%.

IV A 3 Actions to avoid deviations

To avoid deficiencies, we propose to make some improvements to a degree of accuracy higher data:

- regularly updating the Register of the aquaculture sector;
- improving the response rate by organizing regional meetings / national businesses and organizations of producers.

In this section, we should mention that in November 2016, the National Agency for Fisheries and Aquaculture - NAFA has approved a legislation (GEO no. 85/2016 amending GEO 23/2008) on fisheries and aquaculture, regarding that the unit's operating in the fisheries sector are required to complete the questionnaire needed for NAFA to implement the Common Fisheries Policy.

IV.B Collection of data concerning the processing industry

Technical and economic data collection from businesses was done in two ways: by questionnaire and interview facilities across the country. The questionnaires were collected sector specific technical and economic data on 2016. The role of the interview was to validate and verify data reported in questionnaires. Also, primary data validation was achieved by using information obtained from the Ministry of Finance or the National Trade Register Office.

In 2016, we collected economic data from 23 processing units, as follows:

- ◇ 11 respondents were processing units whose main activity according to NACE 1020;
- ◇ 6 respondents were the processing whose secondary activity;
- ◇ 6 respondents were super / hypermarkets.

The allocation of the processing units on the 8 regions of Romania is shown in table 11.

Of the 34 units of activity they were identified by carrying out secondary processing activity of fish in 2016, 20 units. Among them were recorded data on turnover, number of employees and its output from 12 units (6 units are hypermarkets).

Total number of employees in units respondents whose main activity is classified in three segments is 500, of which:

- Companies ≤ 10 : 22 employees / 3 units;
- Companies 11-49: 113 employees / 5 units;
- Companies ≥ 50 : 365 employees / 3 units.

Table 11 - Processing units respondent, distributed by region

Development regions	Total	Processing units number	
		Main activity	Secondary activity
		Respondent	Respondent
North-East	3	3	0
South-East	21	1	1
South	5	1	4
South-East	1	0	1
West	3	2	2
North-West	7	1	3
Center	6	0	1
Bucharest - Ilfov	7	3	0
TOTAL	53	11	12

In fish processing industry, in the past 3 years predominated raw material from import (82% in 2014, 81% in 2015, and 63% in 2016), faced to indigenous material (18% in 2014, 19% in 2015, respectively 32% in 2016). However, it is noticed that in the last year the indigenous raw material used increased compared to 2014 and 2015.

The species of fish processed form of semi preserved but also by primary processing were: carp aquaculture, Danube carp, grass carp, silver carp / bighead carp, bream, crucian carp, rudd, catfish, perch, herring, trout, clarias, pike, salmon, butterfish cod, herring, hake, hake, sprat, mackerel, Nile perch, shark, capellini, sardine, bighead carp, tuna, sea bream, mullet. Native species are commonly used for processing cyprinids (90% of the fish processed), perch, pike, trout, catfish, perch.

Assortments produced in the processing industry have diversified every year but decreased as a percentage. The largest quantities of assortments obtained in 2016 were the egg salad at a rate of 43%, followed by marinated products (18%) and smoked (17%). The reported data shows that in 2016 were manufactured canned fish at a rate of 3%

IV.B.1 Achievements: Results and deviation from NP proposal

Segmentation respondent units processing industry segmentation was performed by number of employees, according to Table IV B1 Standard.

The method of data collection was exhaustive, namely census is sending questionnaires to all registered units. Following the data collection were obtained from 58% of establishments surveyed.

This year has been achieved good economic data collection and production segment units 10 - 49. 50 - 249 units in the segment, which includes production share in Romania, reported in 60% of production data and 43% economic data. This exemption from collecting and processing units with secondary activity affecting the real situation overall processing sector in Romania.

IV.B.2 Data quality: Results and deviation from NP proposal

Economic data evaluated in the aquaculture sector have sought to cover all the variables

listed in Annex XII to the Commission Decision (2010/93 / EU). Data quality was assessed by the response rate calculated according to the guide's instructions "Guidance for the submission of Annual Reports on the National Data Collection Programmes" Values January 2016. The response rate related economic indicators are shown in Table IV B2 standard.

In 2016, 7 units with principal activity of the 11 respondents have fully completed section III of the questionnaire on economic data (economic variables corresponding Appendix XII).

IV.B.3 Actions to avoid deviations

To avoid shortcomings, we intend to have some improvements to achieve a degree of higher data accuracy:

- ♣ a cooperation protocol between the National Agency for Fisheries and Aquaculture and the National Sanitary Veterinary and Food Safety;
- ♣ improving response rate by regional / national businesses and organizations of producers

Promoting a legal act by the Ministry of Agriculture and Rural Development to establish a legislative framework in which companies are obliged to report to the National Agency for Fisheries and Aquaculture technical and economic data.

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

V 1 Achievements: results and deviation from NP proposal

Data requirements needed for the calculation of the ecosystem indicators are specified in Appendix XIII of EC Decision 2010/93.

The first four indicators listed in Appendix XIII require data on species abundance and length distribution by species from fishery independent research surveys. Such information is collected routinely in established trawl surveys. The surveys which contribute to the collection of data for the calculation of these ecosystem indicators are specified in section III.G.1. The results are presented in the Annex 59 – 86, for all fish species which are not included in the Appendix VII of the (Commission Decision 2010/93/EC, Mediterranean Sea and Black Sea).

We have data regard population structure and parameters for: sprat/*Sprattus sprattus* (Annexes 59 - 63; anchovy/*Engraulis encrasicolus* (Anexxes 63 – 66); horse mackerel/*Trachurus mediterraneus ponticus* (Anexxes 67 – 70); whiting/*Merlangius merlangus euxinus* (Anexxes 71 – 74); turbot - *Psetta maxima maeotica* (Anexxes 75 – 78); dogfish - *Squalus acanthias* (Anexxes 759 – 82) and red mullet – *Mullus barbatus* (Anexxes 83 – 86).

Indicators 5 - 7 require position registration data based on VMS. For 2016, Romanian NAFA has 17 vessels registered with VMS: Alexaria, Angel Wite, Baracuda, Flamingo 4, Hisar, Olympus 1, Olympus 2, Caltis 1, Cormoran 1, Cormoran 2, Hisar 1, Pescador, Tomis 1, Blue Fish, Pescador, Tunet și Romfish 1 (Annexes 87).

Indicator 8 of the rate of discarding of commercially exploited species in relation to landings is based on logbooks and observer trips processed separately. In 2016 there were no discards.

The data collected for economic and transversal variables allows the direct calculation fuel costs per quarter and metier for some segments (III.B.1). Estimation of the total costs for fuel in these metiers is based on total effort (from logbooks) and fuel costs per sea day. For all other fleet segments, fuel costs per metier are estimated, based on the effort by metier. Data are presented in the Annexes 11-23.

V 2 Actions to avoid deviations

For DCP 2015, we hope that the national budget of Romania will finance in due time the foreseen actions and surveys. We hope also that the structure of Romanian fleet will be improved with vessels equipped with VMS.

VI Module for management and use of the data

Final implementation report, specifically under includes:

- a. management (achieving) specific PNCD database:
 - design
 - storage methods
 - security system for data privacy
 - ◆ processing
 - ◆ validation,
 - ◆ utilization of data
 - ◆ ensuring data transmission to users as required by EU law
 - ◆ secure system access to the database
 - ◆ website development program
 - ◆ maintenance of the entire system.
- b. description of operational capacity on the interconnection and interoperability with other databases, as required by the EU-EC Multiannual Program for the collection, management and use of data in the fisheries sector of the EU 2014-2020;
- c. ensuring data transmission to end users;
- d. regional coordination, any list (motivated) derogations and non-conformities to the requirements of EU.

VI 1 Achievements: Results and deviation from NP proposal

Management and use of data

Activities developed from the project PNCD 2016 starting date until the statement delivery

1. Designing the complex client-server application connected to the databases to obtain reports in the required formats to display the **structure by length classes** (mm), to the species: *Sprattus sprattus*, *Psetta maxima maeotica*, *Trachurus mediterraneus*, *Engraulis encrasicolus*, *Mullus barbatus*, *Squalus acanthias*, *Merlangius merlangus*, *Rapana venosa*, *Raja clavata*, *Dasyatis pastinaca*, , with monthly / quarterly / annual data centralization, for active / stationary / total fishing

The application implements the following programs:

- connecting to the server on which the data is stored in the databases;
- transport of data to local tables;
- data filtering as required;
- establishing and applying the conditions for the selection of data: species, year, quarter, month and fishing type;
- generating virtual tables and making calculations to obtain structure and average weights by length classes, and average lengths;
- building through Excel, using OLE technology, through programs, reports and graphs.

2. Designing the complex client-server application connected to the databases to obtain reports in the required formats to display the **structure by age classes** (year), to the species: *Sprattus sprattus*, *Psetta maxima maeotica*, *Trachurus mediterraneus*, *Engraulis encrasicolus*, *Mullus barbatus*, *Squalus acanthias*, *Merlangius merlangus*, *Rapana venosa*, *Raja clavata*,

Dasyatis pastinaca, with monthly / quarterly / annual data centralization, for active / stationary / total fishing

The application implements the following programs:

- connecting to the server on which the data is stored in the databases;
- transport of data to local tables;
- data filtering as required;
- establishing and applying the conditions for the selection of data: species, year, quarter, month and fishing type;
- generating virtual tables and making calculations to obtain frequency, average weights and average lengths by age classes;
- building through Excel, using OLE technology, through programs, reports and graphs.

3. Designing complex client-server applications connected to the databases to obtain reports in the required formats to display the templates with biological data that are transmitted annually to the JRC, namely: *xxx. Catch, xxx. Landings, xxx Discards, xxx Efforts, xxx Abundance, xxx Biomass, xxx Abund Biom, xxx GP, xxx MA, xxx ML, xxx SRA, xxx SRL*.

4. Providing system maintenance

a. As a result of moving the databases from the INCDM server to the STS server, tests have been performed resulting in increased database connection time and decreased data transfer speed. Therefore, because it is not possible data interactive collection for an application, from multiple workstations, was subjected to test several ODBC drivers to determine the optimal solution for connecting and transferring data to the POSTGRESS database engine. The identified solution will be applied in the future by purchasing the software that obtained the best result in the tests. Until the purchase of the product, data uploading to the central server will continue to be performed by ASWIC to monitor the transfer accuracy and to treat the incidents that may occur.

b. The "Aquaculture", "Processing," "Marine Fishing" and "Expeditions" application's interfaces have been improved, where the data entry selection button has been entered in the data grid for ease of data selection.

c. The structure of the table containing classes size was modified by entering the fields of *classmin* and *clasmax*, of a numerical type, in order to perform the calculations.

d. At the request of "Aquaculture" users, a client-server application was designed to allow data collection from multiple workstations simultaneously.

VI. 1 Achievements: results and deviations from the National Programme

NIMRD "Grigore Antipa" Constanta and IRDAEFA Galati involved in the NDCP 2016 transmitted fisheries data to the following meetings and end users (Tables VI 1):

Fisheries:

■ upon request of the European Commission / *DIRECTORATE GENERAL FOR MARITIME AFFAIRS AND FISHERIES* (by Ref. Ares (2016) 439081-30/03/2016 on "Call for fleet economic scientific data concerning 2008 - 2015" uploaded the available data on the JRC server). The following were submitted in due time:

- ◆ dcf – *CAPACITY*
- ◆ dcf – *CAPVAL*
- ◆ dcf – *EFFORT*

- ◆ dcf – *EMPLYMENT*
- ◆ dcf – *EXPEDITURE*
- ◆ dcf – *FISHENT*
- ◆ dcf – *INCOME*
- ◆ dcf – *LANDINGS*
- ◆ dcf – *REC-CATCH*

■ upon request of the European Commission / *DIRECTORATE GENERAL FOR MARITIME AFFAIRS AND FISHERIES* by Ref. ARES (2016) 2023205 - 28/04/2016 “Official call for data on landings, discards, length and age compositions, fishing effort, trawl and hydro acoustic surveys in the Mediterranean and in the Black Sea” uploaded the available data on the JRC server). The following were submitted in due time:

- ◆ *ABUNDANCE_MEDBS*
- ◆ *BIOMASS_MEDBS*
- ◆ *CATCH_MEDBS*
- ◆ *DISCARDS_MEDBS*
- ◆ *LANDINGS_MEDBS*
- ◆- *ABUND_BIO_MEDBS*

■ GFCM – Romania National Fisheries Report; April 2016;

■ GFCM – Task 1 and 2; March and May 2016

■ JRC-STEFCF- Data call (2016);

■ GFCM - Working group on stock assessment of small pelagic species (Burgas, Bulgaria, November, 2016);

■ GFCM - Working group on stock assessment of demersal species (Burgas, Bulgaria, November, 2015);

■ 17th FOMLR AG Annual Raport, december 2016, Istanbul, Turkey;

Aquaculture:

► STECF-JRC (Scientific, Technic and Economic Committee for Fisheries - Joint Research Centre);

► DGP-AMPOPAM (General Directorate for Fishing - Managing Authority for Fisheries and Maritime Operational Programme);

► GFCM (General Fisheries Commission for the Mediterranean) – within the SIPAM platform of CAQ (Committee on Aquaculture);

► EUROSTAT, INS – together with NAFA, IRDAEFA provides the submission of data collected within the NDCP;

► FAO - together with NAFA, IRDAEFA provides the submission of data collected within the NDCP;

Processing:

■ NAFA (National Agency for Fishing and Aquaculture);

■ DGP-AMPOPAM (General Directorate for Fishing - Managing Authority for Fisheries and Maritime Operational Programme);

■ STECF-JRC (Scientific, Technic and Economic Committee for Fisheries - Joint Research Centre).

VI. 2 Actions to avoid deviations

The staff of the institutes involved in the program attempted to prepare in good time to meet the deadlines for their transmission and their required limits and quality. No deviation from 2016 year NP proposal occurred on data transmission to end users and data management.

VII Follow-up of STECF recommendations

In the designing and implementing operations/activities the recommendations of STECF received before finalising the Programme and during the execution of it were followed – up. The following recommendations were followed-up from an overview of STECF and STECF expert groups' recommendations made during 2013-2015, were selected to be included in the AR for 2015.

Source 1	Recommendation to MS 2	MS action 3
STECF EWG (Evaluation of AR 2015)	In Table II.B.2, are the relevant regional and international recommendations (RCM's/STECF/LM / Survey Planning Groups) listed?	The table was amended and filled-in.
STECF EWG (Evaluation of AR 2015)	Some segments in table III.B.3 not present in table III.B.1 (for instance beam trawlers 0 – 6 m). For most of the Income variables, sample rate and response rate are not available	Corrections were made for tables III.B.1 and III.B.3 in order to match the fleet grouped or ungrouped segments. Data income rights, direct subsidies and other income data were not available.
STECF EWG (Evaluation of AR 2015)	The codes of the metiers reported in table III.C.1 do not correspond with the agreement reached at Regional level (MS should check and correct names and revise the table accordingly). MSs should check the discrepancies between the names of the metiers reported in the tables and the ones reported in the text of the AR (e.g. GNS_MPD_24-400_0_0??). MS should carefully check the discrepancies between Regional agreements and AR tables, and between MS-AR tables and MS-AR text. Furthermore, MS should clearly indicate the metiers that have been selected through the ranking system, indicating also according to which of the three parameters were selected (i.e. PS has been selected according to all variables, landing, values and effort, having only 4 days of activity, 300 kg landings and 500 euros landings value).	For table III.C.1 the fishing techniques were revised in line with the RCM recommendations.

Source	Recommendation to MS	MS action
STECF EWG (Evaluation of AR 2015)	Four of the metiers identified in table III.C1 for sampling were not planned to be sampled (table III.C.4) (FPO_DEF_16-20_0_0, PS_SPF_16-20_0_0, LLS_DEF_0_0_0,SB_DEF_16-20_0_0). Inconsistency between NP and AR2015 in the planned number of trips to be sampled for most of the metiers in Table III.C.4	Corrections have been made to establish a correlation between Tables III.C.3, III.C.4 and III.C.1 on fishing techniques, as recommended by the RCM.
STECF EWG (Evaluation of AR 2015)	Partly. The metiers codes should be revised. Furthermore, table III.C.3 is not consistent with table III.C.1. The codes of the metiers do not correspond (see also the mesh size reported in the two tables) with the agreement reached at Regional level	Corrections were made for a correlation between Tables III.C1 and III.C.3 on fishing techniques, as recommended by the RCM.
STECF EWG (Evaluation of AR 2015)	The metiers codes should be revised. Furthermore, table III.C.3 is not consistent with table III.C.1. The codes of the metiers do not correspond (see also the mesh size reported in the two tables) with the agreement reached at Regional level	Table III C 3 was completed with all segments from Table III C 1. The table was amended and filled-in.
STECF EWG (Evaluation of AR 2015)	MS could not create it's own group of species (example Mullus barbatus is group 1, M. barbatus ponticus is not included in the regional agreement!!!) MS should better explain to which GFCM resolution refers (??). What is reported in the AR text should be revised carefully (starting from page 26 second paragraph). MS should follow the rules establish at Regional level in agreement with the EU Dec 93/2010	The table was amended and filled-in.
STECF EWG (Evaluation of AR 2015)	Recommendations of the RCM Med&BS 2015 are only partly relevant to the AR 2015, as the meeting was in Sep. 2015. Instead, the recommendations of 2014 should be listed. The list of recommendations appears in the AR text as well and should be deleted there.	Romania clarified this issue, it was also modified in the text.
STECF EWG 15-12 (Evaluation of AR 2014)	Even if not present, MS should correctly report in the table the species object of the recreational fisheries in the Med&BS region, and should indicate in the appropriate column if the species are present or no in the current data collection	Romania clarified this issue. Species <i>Thunnus thynnus</i> and <i>Anguilla anguilla</i> are not present in the Romanian littoral.

VIII List of acronyms and abbreviations

CDB	Centralised Data Base
CPUA	Catch per unit area
CPUE	Catch per unit effort
DCP	Data collection programme
DCR	Data Collection Regulation
DCF	Data Collection Framework

EC	European Commission
EU	European Union
FAO	Food and Agriculture Organization
FFR	Fishing Fleet Register
GFCM	General Fishery Commission for Mediterranean and Black Sea
GT	Gross tonnage
ICES	International Council for Exploration of the Sea
IRDFAEFA	Institute for Research – Development for Aquatic Ecology, Fisheries and Aquaculture - Galati
ISNAFA	Information System of NAFA
NAFA	National Agency of Fisheries and Aquacultures
NIMRD	National Institute for Marine Research and Development
NP	National Program
NSI	National Statistic Institute
RDSF	Research and Development Station for Fisheries in Nucet
RUA	Aquaculture Units Register
RUP	Processing Units Register
STECF	Scientific, Technical and Economic Committee for Fisheries
TAC	Total Allowable Catch
kW	Kilowatts
VMS	Vessel monitoring system

IX Comments, suggestions and reflections

After the 9th year of implementing such a programme, unfortunately, our comments, suggestions and reflections are all most as in the last year report for 2016; due to the fact the basic issues for the programme implementation/execution encountered are:

► There is a strongly need EC to undertake all opportunities to stress to the national authorities responsible for fisheries and aquaculture to adopt the necessary legal measures to avoid delays on financing the Programme and to ensure the appropriate conditions to achieve the objectives of EC under its internal and international obligations/commitments;

► EC should have a decisive role on fulfilment of the international coordination actions of the MSs, as stated in the DCF provisions (i.e. common research surveys at sea in the EU waters – in this case BG failed to fulfil the surveys on the EU community waters of the Black Sea); this role should be preserved in the new Regulation for DCMAP for the period 2014-2020);

► Chairman of the groups/meetings should inform in due time the national correspondents to ensure the transmission of the invitation for participation in due time to the meetings; so that the specialists involved in the implementation of the programme to be fully informed;

► EC to improve actions and to use the good practice and experience spreading among MSs either a Regulation, either a Decision requesting the translation in national legislation, as a subsidiary principle application, by the authority in charge, together with other national bodies (e.g.

National Institute for Statistics etc.) internal rules aiming better collection of data from domestic actors in fisheries, specially in aquaculture and processing industry (the super markets are playing a huge role in Romania and they almost ignore their duty .! on reporting in due time and without other special actions of the collectors);

► Also, there is a strong need to establish a list of type of data and/or metadata envisaged to be putted in regional data bases, the list of indicators for economic and social needs – Eurostat and DG MARE to strengthen and to accelerate their co-operation on this goal;

► EC should take decision on the establishing with GFCM the regional data base for Mediterranean and Black Sea, avoiding duplication of data transmmission;

► Very important is: to be established the financial aspect related to the depository of regional data base– who is going to finance the running cost of such a data base;

► STECF should endorse the EWG recommendations on aquaculture and processing industry related to the all MSs to collect data to better be assessed those sectors at whole EU level, improving the reliability of analyses should be provide to the Conuncil and EP, as bases for political decision process.

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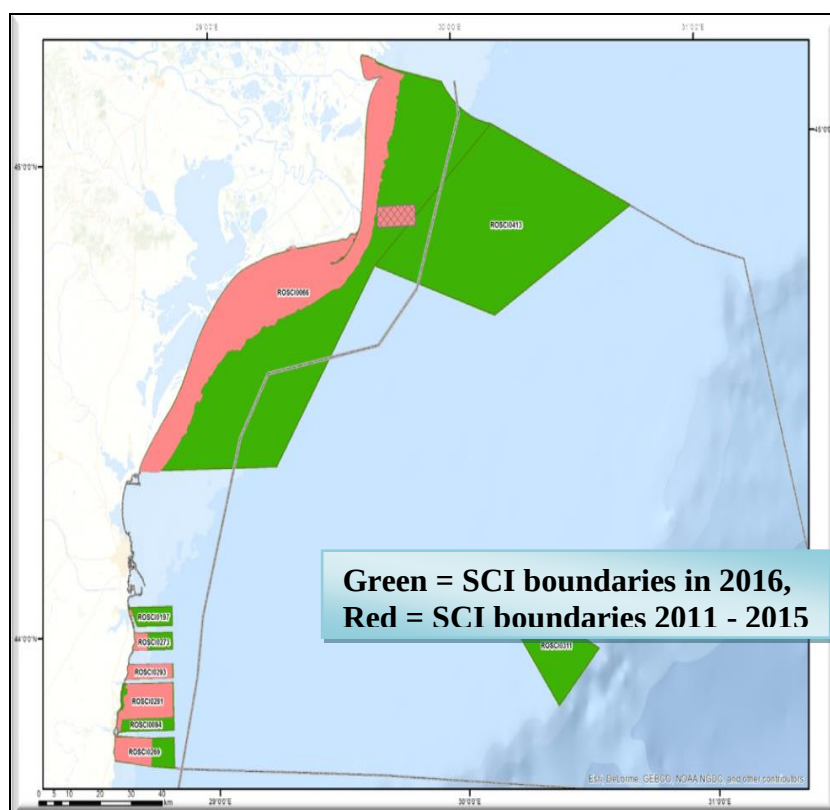
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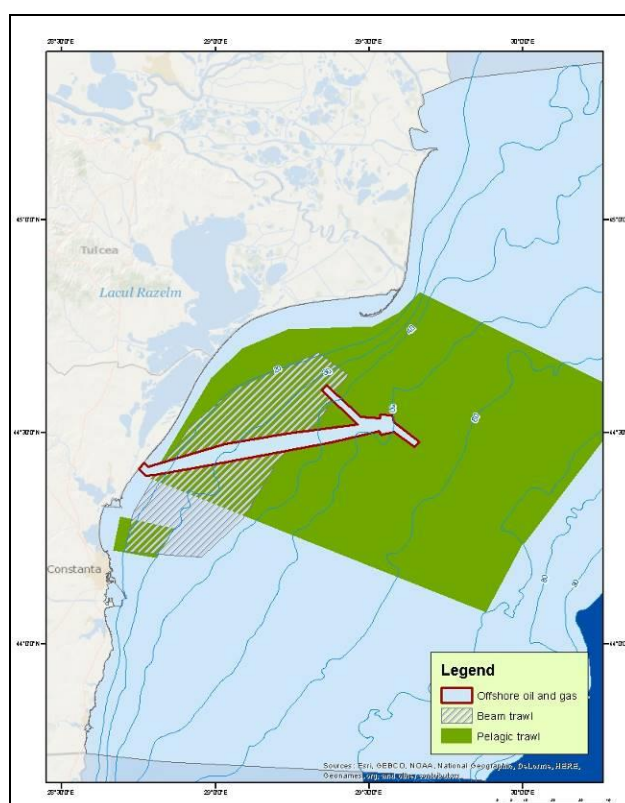
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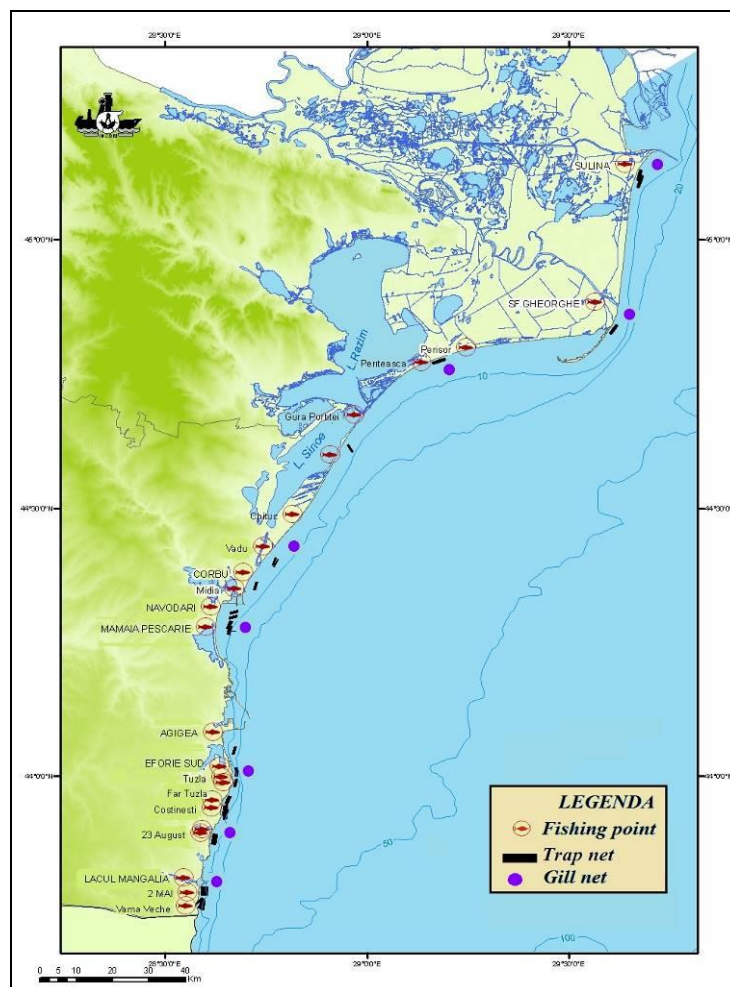
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Annex 3 - Distribution area for passive fishing gears;



Annex 4 – Segmentation of the Romanian fleet in 2015 and 2016 - active vessels

Length class LOA (m)		< 6 m		6 – 12 m		12 – 18 m		18 - 24 m		24 - 40 m		Total	
		2015	2016	2015	2016	2015	2016	2015	2016	2015	2016	2015	2016
Total vessels registered		16	14	121	115	11	14	1	0	2	0	151	147
Active vessels		12	10	101	94	11	13	1	1	2	3	127	121
Pelagic trawl	Demersal and pelagic species	-	-	-	-	-	-	-	-	1	1	1	1
Beam trawl	Demersal species	2	-	20	4	11	13	1	1	1	2	35	20
Pound nets	Specii pelagice mici și demersale	3	3	22	24	-	-	-	-	-	-	25	27
Gillnets	Demersal and pelagic species	5	3	32	34	-	-	-	-	-	-	37	37
Purse seine	Pelagic species	-	-	1	-	-	-	-	-	-	-	1	-
Artisanal fisheries (hand lines, set long lines beach seine)	Other finfish	2	4	26	32	-	-	-	-	-	-	28	36

Annex 5 – Structure of the active boats (no) on length class and fishing techniques in 2015 and 2016

<i>Fishing technique</i>	< 6m		6 – 12 m		12 – 18 m		18 - 24m		> 24 m		<i>Total</i>	
	2015	2016	2015	2016	2015	2016	2015	2016	2015	2016	2015	2016
<i>Pelagic trawl</i>	-	-	-	-	-	-	-	-	1	1	1	1
<i>Beam trawl</i>	-	-	9	4	11	13	1	1	1	2	22	20
<i>Pound nets</i>	2	2	19	22	-	-	-	-	-	-	21	24
<i>Trap nets</i>	1	1	3	2	-	-	-	-	-	-	4	3
<i>Gill nets</i>	5	3	32	34	-	-	-	-	-	-	37	37
<i>Purse seine</i>	-	-	1	-	-	-	-	-	-	-	1	-
<i>Hand lines/Long lines</i>	2	2	24	16	-	-	-	-	-	-	26	18
<i>Beach seine</i>	-	-	2	2	-	-	-	-	-	-	2	2
<i>Manual harvesting/ beam</i>	2	2	11	14	-	-	-	-	-	-	14	16
Total	12	10	101	94	11	13	1	1	2	3	127	121
<i>Number of fishermen</i>	42	30	229	217	42	54	5	5	13	20	331	326

Annex 6 – Segmentation of the Romanian fleet in 2015 and 2016 (active and inactive boats/vessels)

Length class	Total boats/vessels -active-		Total boats/vessels -inactive-		Total boats/vessels	
	2015	2016	2015	2016	2015	2016
< 6 m	12	10	4	4	16	14
6-12 m	101	94	20	21	121	115
12-18 m	11	13	-	1	11	14
18-24 m	1	1	-	0	1	1
> 24 m	2	3	-	0	2	3
Total	127	121	24	26	151	147

Annex 7 – Characteristics of active boats/vessels on lengths classes and fishing techniques in 2015

Length class (m)	Boats number	Fishing techniques	Average length (m)	Average age	Total GT	Total kW	Number of fishermen
< 6 m	12	PG	5,08	16	8,78	201,84	42
6 - 12 m	78	PG	7,62	20,18	120,39	1256,46	169
6 - 12 m	23	PMP	8,02	18	65,25	678,42	60
12 - 18 m	11	PMP	14,63	8,18	340,37	2305,00	42
18 – 24 m	1	PMP	20,20	16	70	272,06	5
> 24 m	2	PMP	26,00	15,5	240,00	1111,60	13
Total	127		8.45	18.24	844,79	5825,38	331

Annex 8 – Characteristics of active boats/vessels on lengths classes and fishing techniques in 2016

Length class (m)	Boats number	Fishing techniques	Average length (m)	Average age	Total GT	Total kW	Number of fishermen
< 6 m	10	PG	5,18	15,7	6,76	189,78	30
6 - 12 m	63	PG	7,58	20	99,81	836,08	129
6 - 12 m	21	PMP	8,1	17,8	85,97	426,35	88
12 - 18	13	PMP	14,58	7,8	388,13	2.309,30	54
18 – 24	1	PMP	20,2	17	70	272,06	5
> 24 m	3	PMP	25,83	24,7	359	1.332,25	20
Total	121		8.15	16.39	1009.67	5365.82	326

Annex 13 - Characteristics of inactive boats on lengths classes in 2015 and 2016

Length class	Boats number		Average length		Average age		Total GT		Total kW	
	2015	2016	2015	2016	2015	2016	2015	2016	2015	2016
6 -12 m	20	4	7,28	5,23	15,3	18,5	25,38	3,66	196,29	4,41
< 6 m	4	21	5,31	8,09	20,0	23,7	3,16	41,88	10,00	291,59
12 - 18 m	-	1	-	14,95	-	1,0	-	53,77	-	184,00
Total	24	26	6.95	7.91	16.08	22.03	28,54	99,31	206,29	480,00

Annex 10: Sources for data collection

DATA	SOURCE
Incomes, including: gross value of landings, income from leasing out quota or other fishing rights, direct subsidies, other income	Questionnaire
Personnel costs, including: wages and salaries of crew, imputed value of unpaid labour	Questionnaire
Energy costs	Questionnaire ; NSI
Repair and maintenance costs	Questionnaire
Other operational costs, including: variable costs, non-variable costs, lease/rental payments for quota or other fishing rights	Questionnaire
Capital costs, annual depreciation	Questionnaire
Capital value: value of physical capital (depreciation replacement value, depreciation historical value)	Questionnaire
Investments, in physical capital (only those during the programme)	Questionnaire
Financial position, debt/asset ratio for the capital	Questionnaire
Employment, engaged crew, FTE national, FTE harmonised	Questionnaire; NSI
Fleet, number, mean LOA, mean vessel's tonnage, mean vessel's power, mean age	Questionnaire; FR
Effort, days at sea, energy consumption	FFR ; Logbooks
Number of fishing enterprises/units	Questionnaire; FFR
Production value per species, value of landings per species and average price per species	Questionnaire

Annex 11 – Economic and transversal variables for boats < 6m in 2016

BOATS < 6 m

Fishing technique PMP

<i>Transversal and economic variables on fishing gears type</i>	<i>Hand lines</i>		<i>Long lines</i>	
Fished species	<i>GPA</i>	<i>MBF</i>	<i>GPA</i>	<i>MBF</i>
Number of boats	1		1	
Average length of boats (m)	4,52		4,52	
Average age of boats (years)	19		19	
No. fishing gears (pieces)	4		4	
Water depth in the working area (m)	12-14 m		10-14 m	
No. of hooks	2		100	
No. of trips	4		13	
No. state boat days at sea	4		13	
No. maximum days at sea	4		13	
No. state hour boat at sea	20		51	
No. of fishing months	1		4	
Soaking time (days)	4		10	
No. fisherman	2		2	
No. fishing days	4		9	
No. fishing hours	16		13	
GT _{total}	0,35		0,35	
GT fishing days	1,4		3,15	
KW _{total}	2,57		2,57	
KW fishing days	10,28		23,13	
Total catches on species (kg)	46	16	124	61
Landings on species(kg)	46	16	124	61
Discards on species (kg)	0	0	0	0
Landing value on species (euro)	72	54	195	207
Total catch value (euro)	126		402	

Annex 12 – Economic and transversal variables for boats < 6 m, in 2016

BOATS < 6 m

Fishing technique PMP

<i>Transversal and economic variables on fishing gears type</i>	Manual harvesting	Beach seine
Fished species	<i>RPW</i>	<i>ATB</i>
Number of boats	2	1
Average length of boats (m)	5,25	5,7
Average age of boats (years)	12,5	20
No. fishing gears (pieces)	-	1
Water depth in the working area (m)	6-15 m	2 m
No. of trips	45	1
No. state boat days at sea	45	1
No. maximum days at sea	37	1
No. state hour boat at sea	275	4
No. of fishing months	10	1
Soaking time (days)	45	1
No. fisherman	6	7
No. fishing days	45	1
No. fishing hours	242	2
GT _{total}	1,66	0,98
GT fishing days	74,7	0,98
KW _{total}	10	0
KW fishing days	450	0
Total catches on species (kg)	7078	65
Landings on species(kg)	7078	65
Discards on species (kg)	0	0
Landing value on species (euros)	3.327	47
Total catch value (euro)	3.327	47

Annex 13 – Economic and transversal variables for boats < 6 m in 2016

BOATS < 6 m

Fishing technique PG _ a

<i>Transversal and economic variables on fishing gears type</i>	<i>Pound nets</i>										<i>Trap nets</i>	
	<i>ANE</i>	<i>SHC</i>	<i>HMM</i>	<i>GPA</i>	<i>CUI</i>	<i>JDP</i>	<i>MGA</i>	<i>MUT</i>	<i>MBF</i>	<i>BLU</i>	<i>GPA</i>	<i>MBF</i>
Fished species												
Number of boats					2						1	
Average length of boats (m)					5,3						5,43	
Average age of boats (years)					23,5						9	
No. fishing gears (pieces)					2						10	
Water depth in the working area (m)					4						10-15 m	
No. of trips					84						21	
No. state boat days at sea					84						21	
No. maximum day from the sea					49						21	
No. state hour boat at sea					388						94	
No. of fishing months					8						3	
No. state of days the water pound					82						18	
No. fisherman					7						3	
No. fishing days					82						16	
No. fishing hours					231						37	
GT _{total}					1,35						0,48	
GT fishing days					110,7						7,68	
KW _{total}					29,41						0	
KW fishing days					2411,62						0	
Total catches on species (kg)	258	3645	44	805	55	13	18	125	109	10	767	26
Landings on species(kg)	258	3645	44	805	55	13	18	125	109	10	767	26
Discards on species (kg)	0	0	0	0	0	0	0	0	0	0	0	0
Landing value on species (euro)	152	4739	144	2117	86	25	53	665	263	45	1204	88
Total catch value (euro)	9.581										1.292	

Annex 14 – Economic and transversal variables for boats < 6 m, in 2016

BOATS < 6 m

Fishing technique PG _ b

Transversal and economic variables on fishing gears	Gillnets														
	<i>Turbot</i>	<i>Shad</i>									<i>Goby</i>				
	<i>TUR</i>	<i>SHC</i>	<i>GPA</i>	<i>ANE</i>	<i>HM</i>	<i>MUT</i>	<i>CUI</i>	<i>MGA</i>	<i>BLU</i>	<i>SOL</i>	<i>GPA</i>	<i>MBF</i>	<i>HMM</i>	<i>MGA</i>	<i>ANE</i>
Fished species	<i>TUR</i>														
Number of boats	1	5									2				
Average length of boats (m)	5,65	5,22									5,22				
Average age of boats (years)	9	14,4									13				
No. fishing gears (pieces)	20	41									9				
Gillnet length (m)	60	60 - 80									60 - 80				
Water depth in the working area (m)	40-45	6 - 12									6 - 12				
No. of trips	14	80									14				
No. state boat days at sea	14	80									14				
No. maximum day from the	29	29													
No. state hour boat at sea	110	291									38				
No. of fishing months	5	23									6				
No. state of days the water	52	59									8				
No. fisherman	2	13									5				
No. fishing days	9	57									8				
No. fishing hours	16	137									21				
GT _{total}	0,90	3,61									1,65				
GT fishing days	8,1	205,77									13,2				
KW _{total}	36,80	123,57									10				
KW fishing days	331,2	7043,49									80				
Total catches on species	532	1510	722	403	216	35	35	302	184	27	303	2	45	5	33
Landings on species(kg)	532	1510	722	403	216	35	35	302	184	27	303	2	45	5	33
Discards on species (kg)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Landing value on species (euro)	5591	4953	113	524	568	84	67	894	830	59	476	7	118	15	43
Total catch value (euro)	5.591	9.113									659				

Annex 15 – Economic and transversal variables for boats 6 - 12 m, in 2016

BOATS 6 – 12 m

Fishing technique PG_a

Transversal and economic variables on	Gillnets																
	Turbot		Shad						Goby								
Fished species	TUR	RJC	SHC	MGA	GPA	CUI	HMM	BLU	GPA	MGA	MBF	MUF	GAR	JDP	HMM	ANE	BLU
Number of boats	16		26						11								
Average length of boats (m)	7,69		7,25						7,47								
Average age of boats (years)	16,73		19,69						17,40								
No. fishing gears (pieces)	502		179						60								
Gillnet length (m)	60 - 85		60 - 70						60 – 70								
Water depth in the working area	20 - 69		3 - 20						3 - 21								
No. of trips	142		136						138								
No. state boat days at sea	28		18						95								
No. maximum day from the sea	142		136						138								
No. state hour boat at sea	1226		589						534								
No. of fishing months	46		43						22								
No. state of days the water	543		119						123								
No. fisherman	34		49						23								
No. fishing days	92		96						116								
No. fishing hours	212		203						179								
GT _{total}	33,03		33,93						15,87								
GT fishing days	3038,76		3257,28						1840,92								
KW _{total}	531,96		266,31						47,78								
KW fishing days	48940,32		25565,76						5542,48								
Total catches on species (kg)	10801	237	3671	266	25	91	34	345	882	15	105	70	11	16	372	67	29
Landings on species (kg)	10801	237	3671	266	25	91	34	345	882	15	105	70	11	16	372	67	29
Discards on species (kg)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Landing value on species (euro)	113519	953	12041	787	39	175	89	1556	1385	44	357	154	59	47	978	87	131
Total catch value (euro)	114.472		14.687						3.242								

Annex 16 – Economic and transversal variables for boats 6 - 12 m, in 2016

BOATS 6 – 12 m

Fishing technique PG_b

<i>Transversal and economic variables on fishing gears type</i>	<i>Pound nets</i>																		<i>Trap nets</i>	
Fished species	ANE	SPR	CUI	HMM	GAR	MUT	JDP	GPA	MGA	BLU	MBF	DGS	SHC	MUF	TUR	ATB	RJC	BON	MBF	GPA
Number of boats	17																		1	
Average length of boats (m)	9,10																		6,82	
Average age of boats	20,56																		5,00	
No. fishing gears (pieces)	18																		10	
Water depth in the working area	4 - 15																		6 - 17	
No. of trips	620																		47	
No. state boat days at sea	620																		47	
No. maximum day from the sea	2975																		400	
No. state hour boat at sea	66																		4	
No. state of days the water	612																		44	
No. fisherman	73																		2	
No. fishing days	610																		43	
No. fishing hours	1853																		344	
GT _{total}	40,65																		0,73	
GT fishing days	24796,5																		31,39	
KW _{total}	41,13																		3,68	
KW fishing days	25089,3																		158,24	
Total catches on species	78574	12217	4914	19074	1238	1846	260	1810	223	422	422	52	1283	184	31	20	27	172	279	737
Landings on species(kg)	78574	12217	4914	19074	1238	1846	260	1810	223	422	422	52	1283	184	31	20	27	172	279	737
Discards on species (kg)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Landing value on species (euro)	102146	7208	9435	50165	6586	4449	770	2842	660	1903	1435	150	4208	405	326	15	109	1355	949	1157
Total catch value (euro)	194.167																		2.106	

Annex 17 – Economic and transversal variables for boats 6 - 12 m, in 2016

BOATS 6 – 12 m

Fishing technique PG_c

<i>Transversal and economic variables on fishing gear type</i>	<i>Hand lines</i>					<i>Long lines</i>	
	<i>GPA</i>	<i>MBF</i>	<i>BLU</i>	<i>SHC</i>	<i>HMM</i>	<i>GPA</i>	<i>MBF</i>
Fished species							
Number of boats	15					19	
Average length of boats (m)	6,56					6,66	
Average age of boats (years)	23,93					21,74	
No. of hooks	50 / 24					60	
Water depth in the working area (m)	7 - 25					7-16	
No. of trips	2 /10 buc					100	
No. maximum day from the sea	82					139	
No. state boat days at sea	82					139	
No. maximum day from the sea	11					13	
No. state hour boat at sea	366					656	
No. of fishing months	34					35	
No. state of days the water	78					109	
No. fisherman	24					32	
No. fishing days	80					100	
No. fishing hours	206					187	
GT _{total}	10,9					13,61	
GT fishing days	872					1361	
KW _{total}	69,86					84,61	
KW fishing days	5588,8					8461	
Total catches on species (kg)	1412	55	15	10	291	3.088	20
Landings on species(kg)	1412	55	15	10	291	3.088	20
Discards on species (kg)	0	0	0	0	0	0	0
Landing value on species	2217	187	68	33	765	4848	69
Total catch value (euro)	3.270					4.916	

Annex 18 - Economic and transversal variables for boats 6 - 12 m, in 2016

BOATS 6 – 12 m

Fishing technique PMP_ a

Variabile economice și transversale pe tip unelte	Gillnets											Long lines goby		Trap nets	
	Shad										Turbot				
Fished species	GPA	GPA	BON	GAR	SHC	MBF	JDP	MUF	BLU	MGA	TUR	GPA	MBF	GPA	MBF
Number of boats	12										8	2	1		
Average length of boats (m)	7,43										8,38	7,03	8,2		
Average age of boats (years)	21,68										23,37	15	29		
No. fishing gears (pieces)	87										308	11	40		
Gear length (m)	60 - 70										60 - 80	100			
Water depth in the working area (m)	3 - 20										21 - 44	10 - 12	14		
No. of trips	85										57	19	2		
No. state boat days at sea	85										57	19	2		
No. maximum day from the sea	16										16	16	2		
No. state hour boat at sea	338										450	171	9		
No. of fishing months	21										22	3	1		
No. state of days the water	69										166	17	2		
No. fisherman	2										18	4	2		
No. fishing days	62										31	16	1		
No. fishing hours	123										81	117	4		
GT _{total}	16,19										24,5	1,64	1,03		
GT fishing days	1003,78										759,5	26,24	1,03		
KW _{total}	110,52										158,58	4,41	0		
KW fishing days	6852,24										4915,98	70,56	0		
Total catches on species	33	256	24	8	1277	23	7	366	1278	176	2698	524	17	50	45
Landings on species (kg)	33	256	24	8	1277	23	7	366	1278	176	2698	524	17	50	45
Discards on species (kg)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Landing value on species (euro)	87	402	189	43	4189	78	21	805	5764	521	28.356	823	58	79	153
Total catch value (euro)	12.099										28.356	881	232		

Annex 19 - Economic and transversal variables for boats 6 - 12 m, in 2016

BOATS 6 – 12 m

Fishing technique PMP_ b

<i>Transversal and economic variables on fishing gears type</i>	<i>Gillnets goby</i>					<i>Beach seine</i>										<i>Manual harvesting</i>		<i>Beam trawl</i>
	<i>GPA</i>	<i>MBF</i>	<i>GAR</i>	<i>AN</i>	<i>HMM</i>	<i>GPA</i>	<i>MBF</i>	<i>SHC</i>	<i>MGA</i>	<i>ANE</i>	<i>TUR</i>	<i>HMM</i>	<i>MUT</i>	<i>CUI</i>	<i>GAR</i>	<i>RPW</i>	<i>MSM</i>	<i>RPW</i>
Fished species																		
Number of boats	11					2										25	7	4
Average length of boats (m)	6,7					7,38										8,68	7,96	10.43
Average age of boats (years)	19,43					27,5										18,47	21,86	11,74
No. fishing gears (pieces)	58					2												8
Gear length (m)	60 - 80																	
Water depth in the working area (m)	7 - 18					4										4 - 12	4 - 11	21 -
No. of trips	135					15										277	121	142
No. state boat days at sea	135					15										277	121	220
No. maximum day from the	24					13										50	72	79
No. state hour boat at sea	514					135										1819	707	2940
No. of fishing months	23					5										63	17	23
No. state of days the water	112					14										277	118	219
No. fisherman	20					8										79	17	15
No. fishing days	108					14										277	118	219
No. trawl																		704
No. fishing hours	202					63										2088	749	901
GT _{total}	13,86					2,82										219	12,92	36,11
GT fishing days	1496,88					39,48										60663	1524,	7908.
KW _{total}	67,62					37,41										112,4	16,17	280,9
KW fishing days	7302,96					523,74										31134,	1908	61517
Total catches on species (kg)	5567	240	23	100	30	555	67	15	197	81	32	151	32	81	13	63571	6742	69904
Landings on species(kg)	5567	240	23	100	30	555	67	15	197	81	32	151	32	81	13	63571	6742	69904
Discards on species (kg)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Landing value on species (euro)	8740	816	122	130	79	871	228	49	583	105	336	397	77	156	69	29878	8023	32855
Total catch value (euro)	9.887					2.871										379.014		328.5

Annex 20 – Economic and transversal variables for boats 6 - 12 m, in 2016

BOATS 6 – 12 m

Fishing technique PMP_ c

<i>Transversal and economic variables on fishing gears type</i>	<i>Pound nets</i>															<i>Hand lines / Taparine</i>	
	<i>SHC</i>	<i>MUT</i>	<i>SPR</i>	<i>ANE</i>	<i>MGA</i>	<i>GAR</i>	<i>HMM</i>	<i>GPA</i>	<i>MBF</i>	<i>CUI</i>	<i>RJC</i>	<i>JDP</i>	<i>TUR</i>	<i>BLU</i>	<i>BON</i>	<i>GPA</i>	<i>MBF</i>
Fished species																	
Number of boats								11									1
Average length of boats (m)								8,38									7,15
Average age of boats (years)								21,18									21
No. fishing gears (pieces)								12									8
Water depth in the working area								6 - 9									6
No. of trips								355									4
No. state boat days at sea								355									4
No. maximum day from the sea								35									4
No. state hour boat at sea								1605									16
No. of fishing months								48									1
No. state of days the water								342									4
No. Fisherman								41									4
No. fishing days								342									4
No. fishing hours								1061									17
GT _{total}								23,84									0,83
GT fishing days								8153,28									3,32
KW _{total}								64,31									4,41
KW fishing days								21994,02									17,64
Total catches on species (kg)	476	110	1361	1951	28	106	113	1890	287	193	40	203	126	4465	99	40	30
Landings on species (kg)	476	110	1361	1951	28	106	113	1890	287	193	40	203	126	4465	99	40	30
Discards on species (kg)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Landing value on species (euro)	1561	265	803	2537	83	568	297	2967	976	371	161	601	1324	2013	780	63	102
Total catch value (euro)								93.196									165

Annex 21 Economic and transversal variables for boats 12 - 18 m, in 2016

BOATS 12 – 18 m

Fishing technique PMP

<i>Transversal and economic variables on fishing gears type</i>	Gillnets turbot		<i>Pelagic trawl</i>						<i>Beam trawl</i>	
Fished species	<i>TUR</i>	<i>RJC</i>	<i>DGS</i>	<i>BLU</i>	<i>NMM</i>	<i>JDP</i>	<i>CUI</i>	<i>MUT</i>	<i>RPW</i>	<i>MSM</i>
Number of boats	11		2						13	
Average length of boats (m)	14,61		13,8						14,59	
Average age of boats (years)	8,8		6,5						7,8	
No. fishing gears (pieces)	1351		2						26	
Gear length (m)	60-80									
Water depth in the working area	30-73		24-30						20-40	
No. of trips	60		6						347	
No. state boat days at sea	60		10						779	
No. maximum day from the sea			87							
No. state hour boat at sea	684		157						12161	
No. of fishing months	25		5						77	
No. state of days the water	379		10						773	
No. Fisherman	44		9						54	
No. fishing days	52		10						773	
No. trawl									3460	
No. fishing hours	199		46						5151	
GT _{total}	327,14		50,62						388,13	
GT fishing days	17011,28		506,2						300024,49	
KW _{total}	2040,3		312						2309,3	
KW fishing days	106095,6		3120						1785088,9	
Total catches on species (kg)	9255	8	587	736	10	5	130	260	37861	0
Landings on species(kg)	9255	8	587	736	10	5	130	260	37861	0
Discards on species (kg)	0	0	0	0	0	0	0	0	0	0
Landing value on species (euro)	9727	32	1691	331	26	15	250	627	17794	0
Total catch value (euro)	9.759		5,928						177.977	

Annex 22 Economic and transversal variables for boats 18 - 24 m, în 2016

BOATS 18 - 24 m

Fishing technique PMP

<i>Transversal and economic variables on fishing gears type</i>	<i>Beam trawl</i>	<i>Pelagic trawl</i>			
Fished species	RPW	<i>SHC</i>	<i>HMM</i>	<i>MUT</i>	<i>BLU</i>
Number of boats	1				
Average length of boats (m)	20,2				
Average age of boats (years)	17				
No. fishing gears (pieces)	2	1			
Water depth in the working area	21 - 26	23			
No. of trips	35	2			
No. state boat days at sea	61	2			
No. maximum day from the sea	66	66			
No. state hour boat at sea	940	33			
No. of fishing months	7	1			
No. state of days the water	66	2			
No. Fisherman	5	5			
No. fishing days	66	22			
No. trawl	299	8			
No. fishing hours	417	12			
GT _{total}	70				
GT fishing days	4620,96	1540			
KW _{total}	272,06				
KW fishing days	1795	5985,32			
Total catches on species (kg)	359889	40	35	21	558
Landings on species(kg)	359889	40	35	21	558
Discards on species (kg)	0	0	0	0	0
Landing value on species (euro)	169148	131	92	51	2517
Total catch value (euro)	169.148	2,791			

Annex 23 Economic and transversal variables for boats 24 - 40 m, în 2016

BOATS 24 - 40 m

Fishing technique PMP

<i>Transversal and economic variables on fishing gears type</i>	<i>Pelagic trawl</i>		<i>Gillnets turbot</i>	<i>Beam trawl</i>
	<i>SPR</i>	<i>CUI</i>	<i>TUR</i>	<i>RPW</i>
Fished species				
Number of boats	1		3	3
Average length of boats (m)	25,3		25,83	25,83
Average age of boats (years)	20		24,67	24,7
No. fishing gears (pieces)	1		450	6
Gear length (m)			60-70	
Water depth in the working area (m)	21-30		48-85	21-26
No. of trips	14		18	115
No. state boat days at sea	18		18	234
No. maximum day from the sea		131		
No. state hour boat at sea	330		296	4215
No. of fishing months	3		6	17
No. state of days the water	18		89	234
No. Fisherman	7		20	20
No. fishing days	18		13	234
No. Trawl	43			1711
No. fishing hours	90		47	2385
GT _{total}	129		359	359
GT fishing days	2322		4667	84006
KW _{total}	441,6		1111,6	1332,25
KW fishing days	7948,8		14450,8	311746,5
Total catches on species (kg)	35.439	0	6.017	1.016.595
Landings on species(kg)	35.439	0	6.017	1.016.595
Discards on species (kg)	0	0	0	0
Landing value on species (euro)	20.909	0	63.239	477.800
Total catch value (euro)	20.909		63.239	477.800

Annex 24 - Sampling material obtained in the Romanian area of the Black Sea in 2016

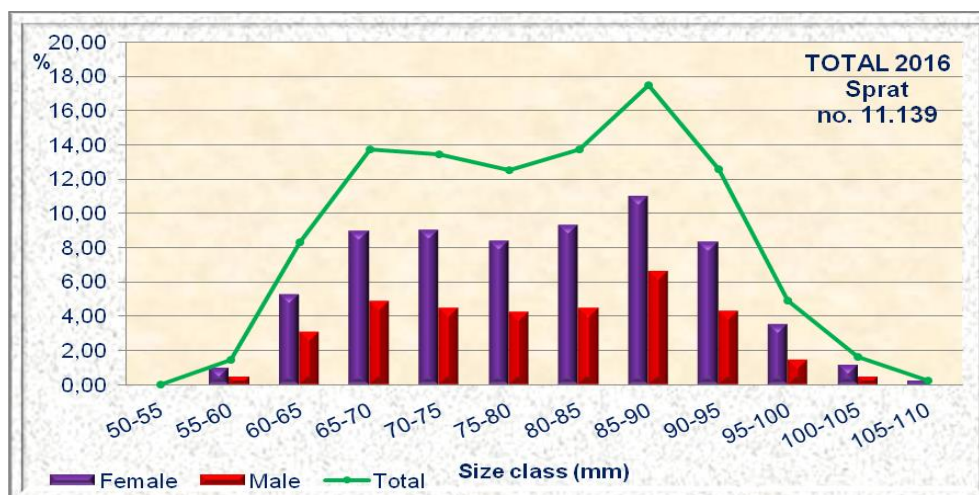
LENGTH STRUCTURE

SPECII	Months										TOTAL
	March	April	May	June	July	August	September	October	November	December	
<i>Sprattus sprattus</i>	-	-	1800	7004	400	335	-	800	800	-	11,139
<i>Psetta maxima maeotica</i>	75	-	104	-	-	-	-	-	72	24	275
<i>Engraulis encrasicolus</i>	-	-	800	205	-	2965	1800	1001	-	-	6,771
<i>Merlangius merlangus</i>	-	-	3400	600	-	-	-	1000	2202	600	7,802
<i>Trachurus mediterraneus</i>	-	-	-	-	-	-	1400	400	400	-	3,402
<i>Squalus acanthias</i>	-	-	27	-	-	-	-	-	32	-	59
<i>Mullus barbatus ponticus</i>	-	-	-	1200	600	406	-	-	-	-	2,206
<i>Rapana venosa</i>	-	789	2001	3009	4079	2411	2803	1011	1620	-	17,723
TOTAL	75	789	8132	12,018	5,079	6,117	6,003	4,212	5,126	624	49,377

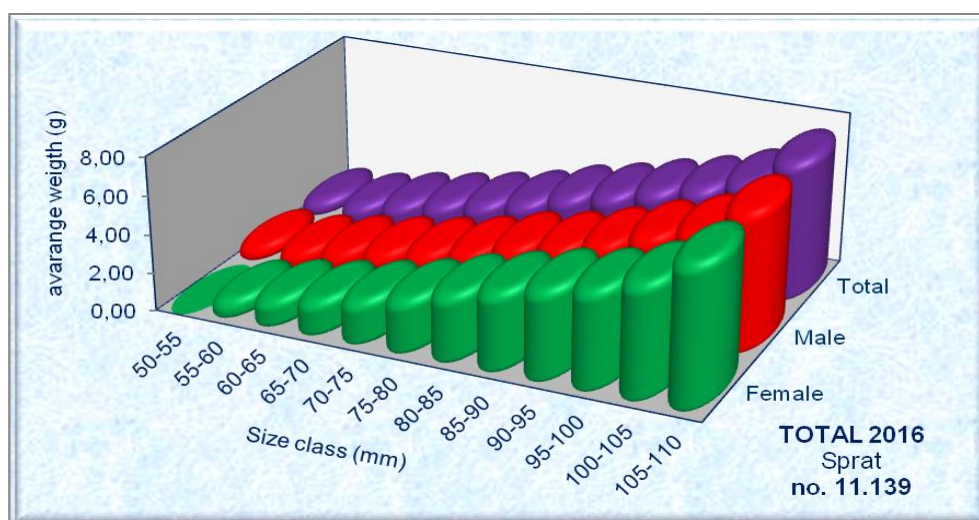
AGE STRUCTURE

SPECII	Months									TOTAL
	March	May	June	July	August	September	October	November	December	
<i>Sprattus sprattus</i>	-	969	3899	222	209	-	375	399	-	6.073
<i>Psetta maxima maeotica</i>	75	104	-	-	-	-	-	72	24	274
<i>Engraulis encrasicolus</i>	-	400	100	-	1498	958	533	-	-	3.489
<i>Merlangius merlangus</i>	-	1658	339	-	-	-	517	1196	330	4.040
<i>Trachurus mediterraneus</i>	-	-	-	-	-	710	216	207	-	1.833
<i>Squalus acanthias</i>	-	27	-	-	-	-	-	32	-	59
<i>Mullus barbatus ponticus</i>	-	-	616	311	208	-	-	-	-	1.135
TOTAL	75	3.158	4.954	533	1.915	1.668	1.641	1.906	354	16.903

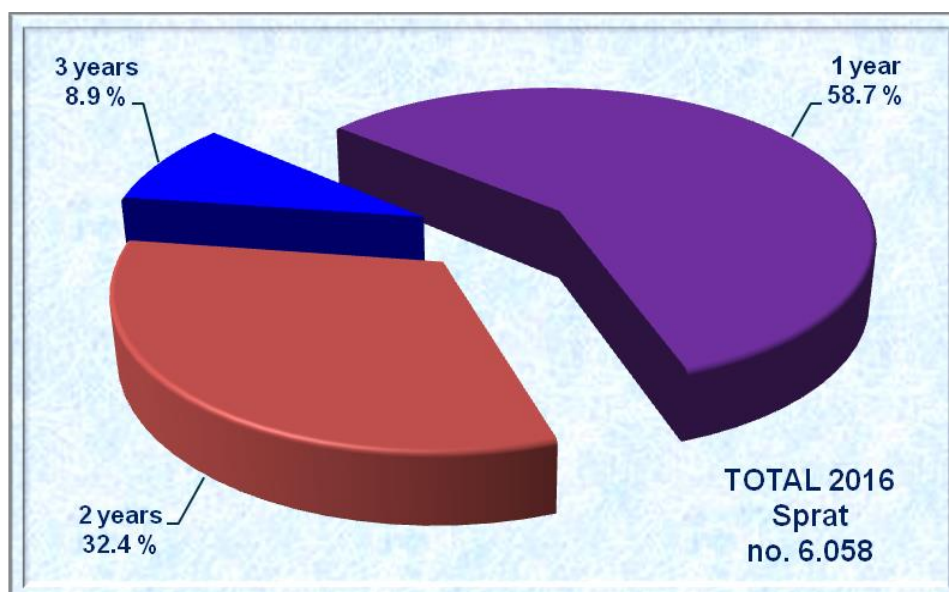
Annex 25 - Structure on length classes for sprat in 2016, total catches



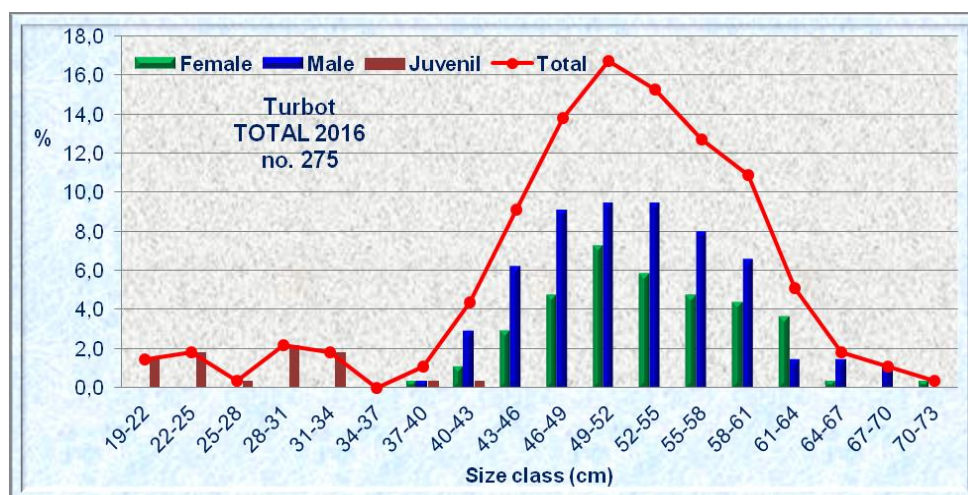
Annex 26 - Mean weight on length classes for sprat 2016, total catches



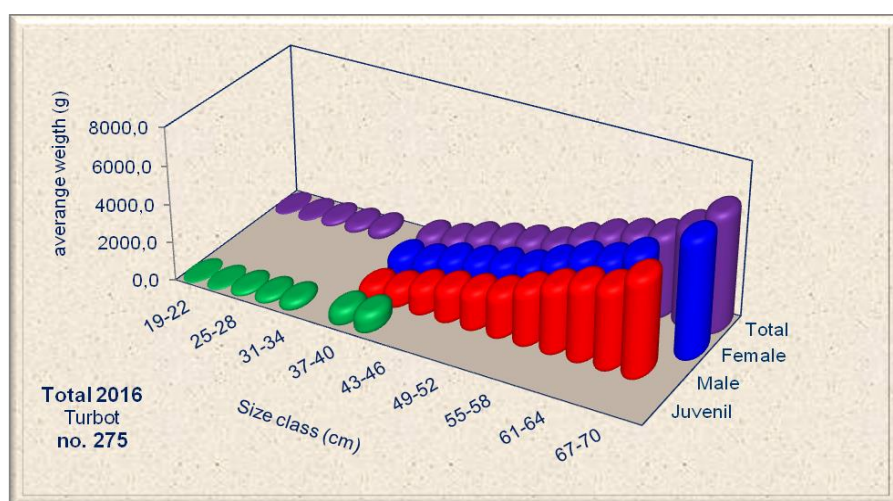
Annex 27 - Percentage on age classes for sprat 2016, total catches



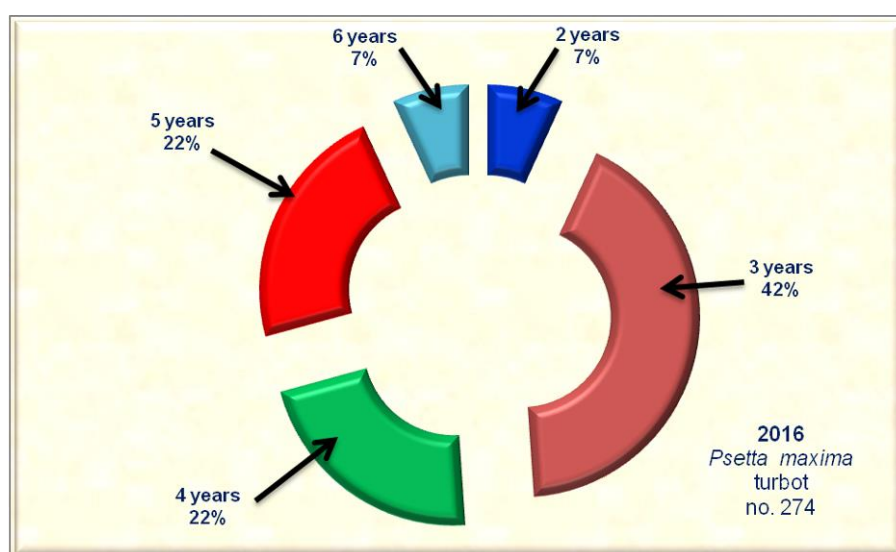
Annex 28 - Structure on length classes for turbot in 2016, total catches



Annex 29 - Mean weight on length classes for turbot in 2016, total catches



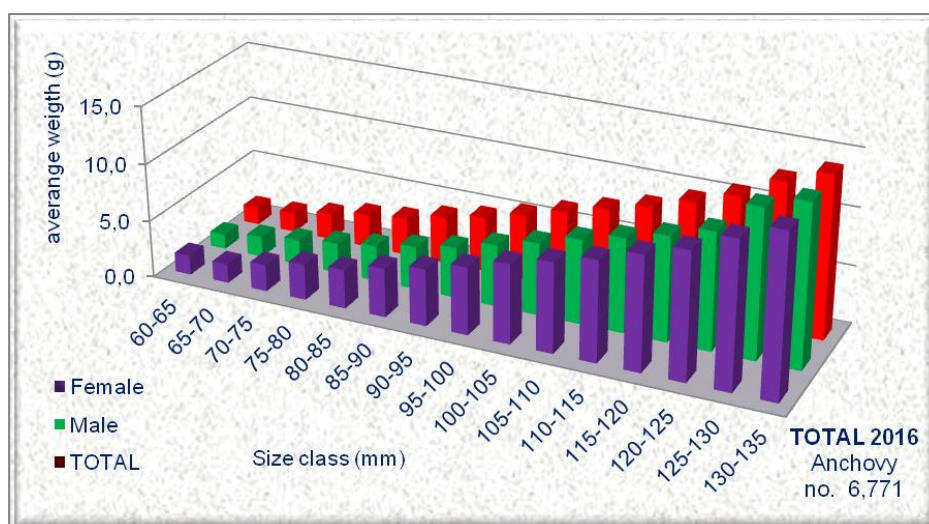
Annex 30 - Percentage on age classes for turbot in 2016



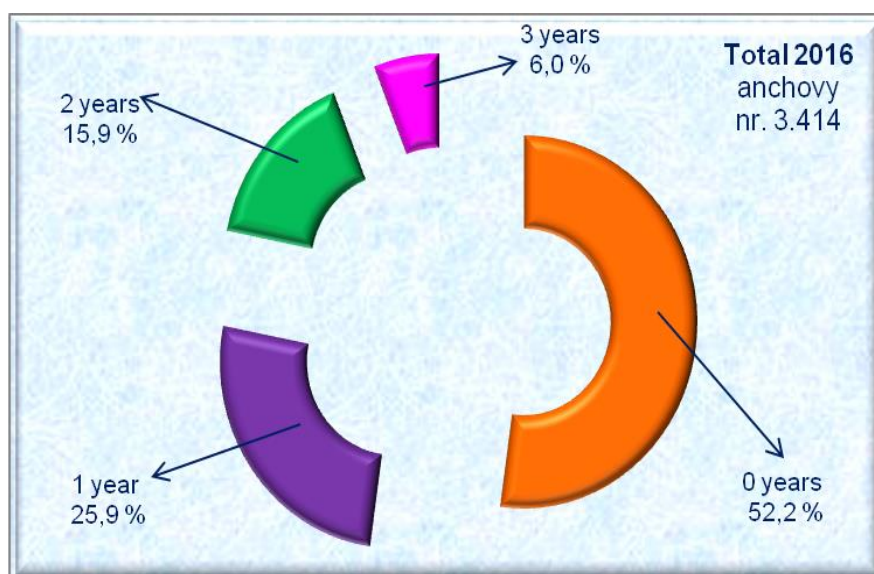
Annex 31 - Structure on length classes for anchovy in 2016, total catches



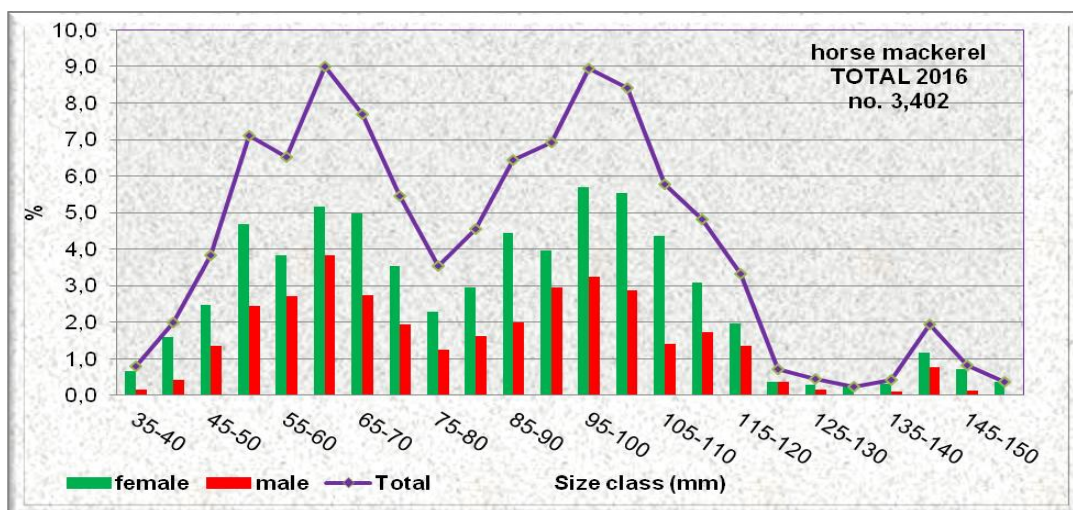
Annex 32 - Mean weight on length classes for anchovy 2016, total catches



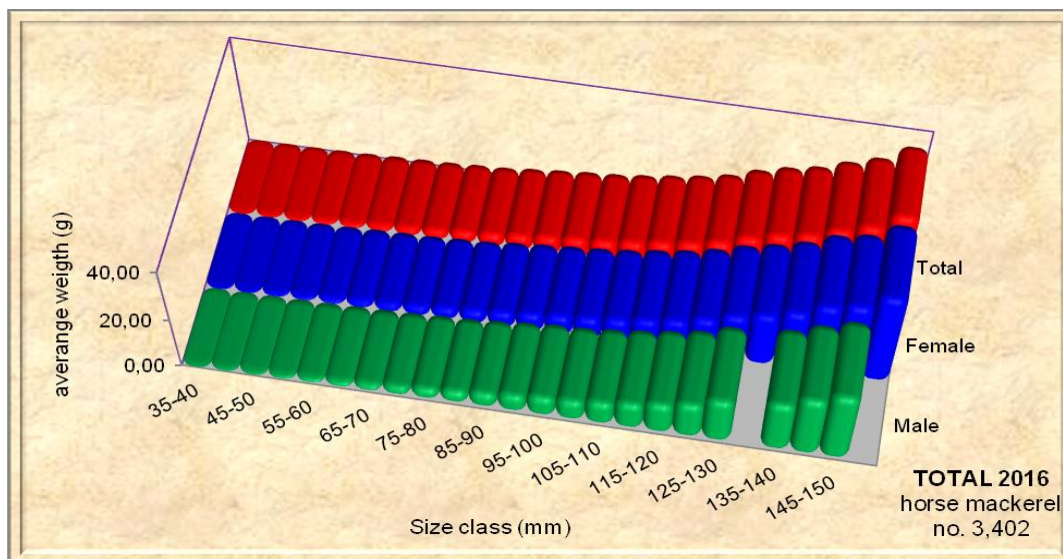
Annex 33 - Percentage on age classes for anchovy 2016, total catches



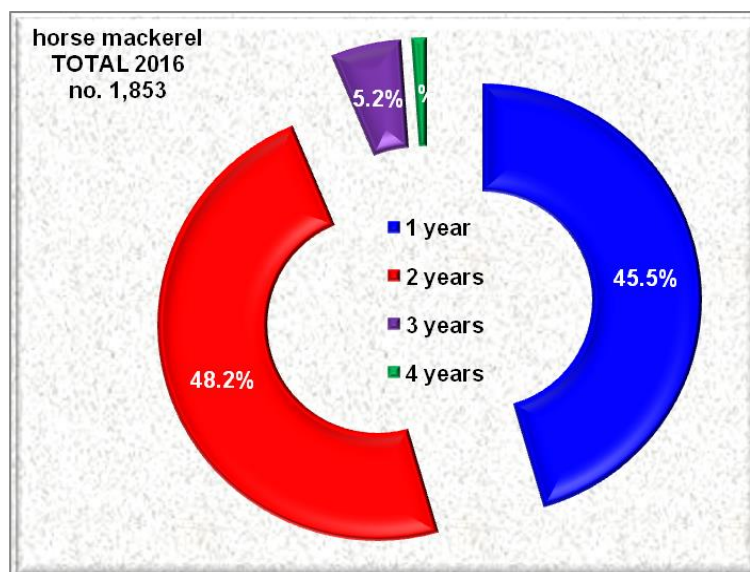
Annex 34 - Structure on length classes for horse mackerel in 2016, total catches



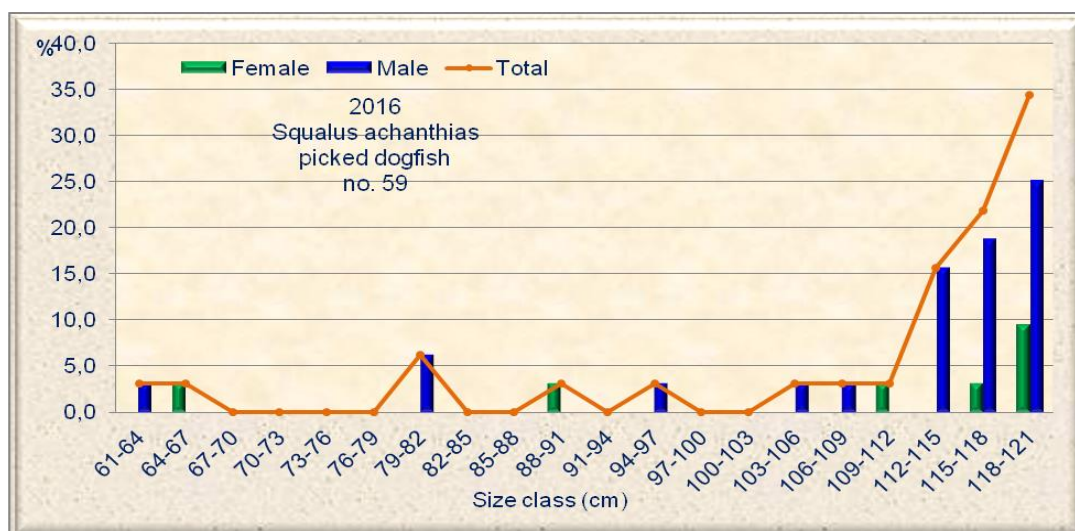
Annex 35 - Mean weight on length classes for horse mackerel 2016, total catches



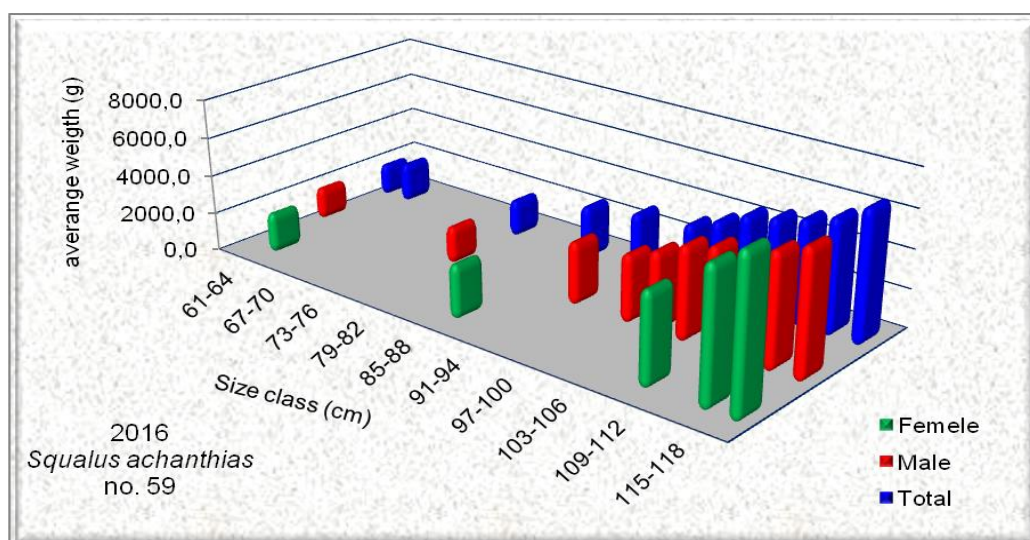
Annex 36 - Percentage on age classes for horse mackerel 2016, total catches



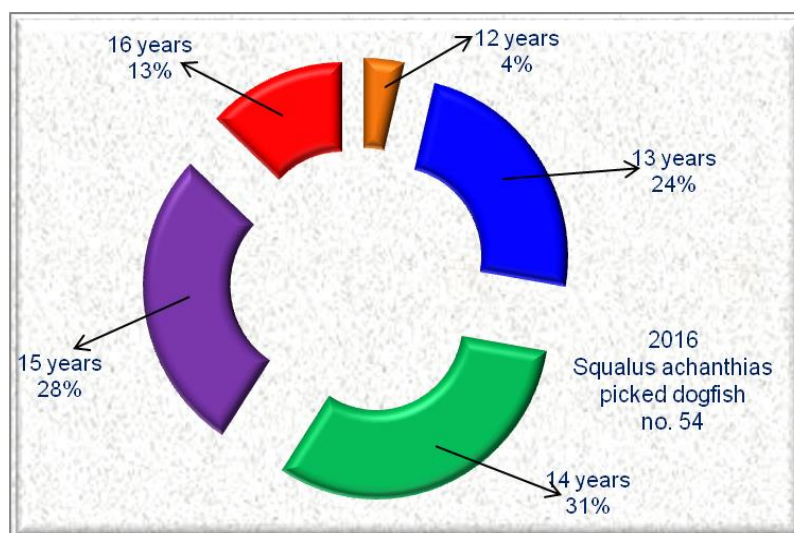
Annex 37 - Structure on length classes for picked dogfish in 2016, total catches



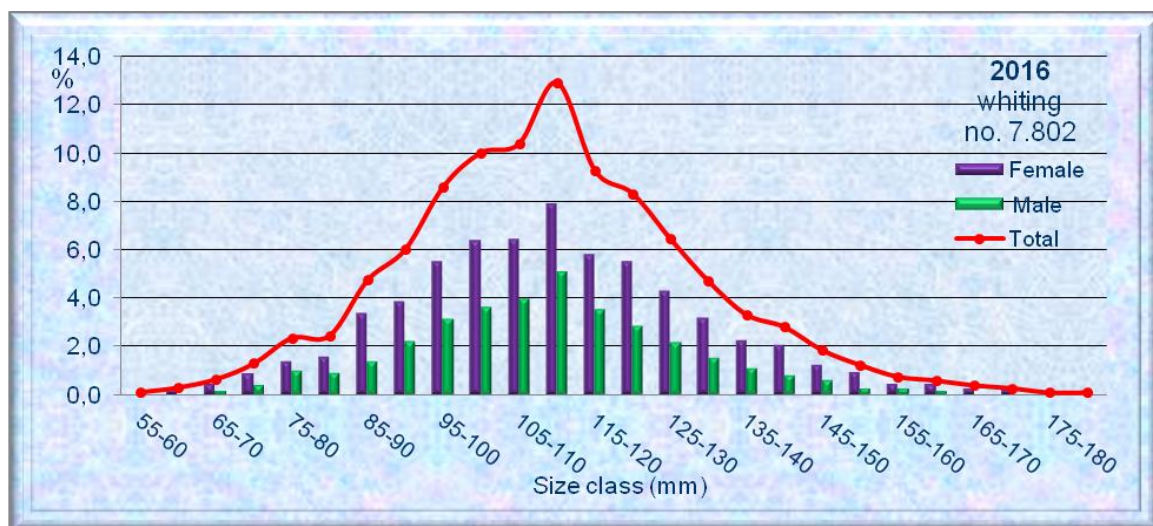
Annex 38 - Mean weight on length classes for picked dogfish 2016, total catches



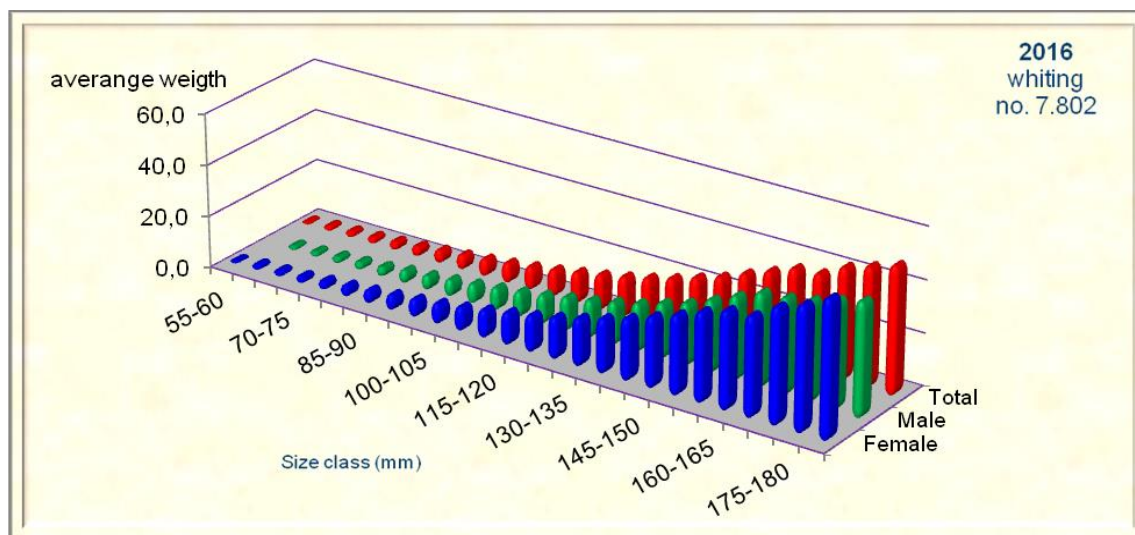
Annex 39 - Percentage on age classes for picked dogfish 2016, total catches



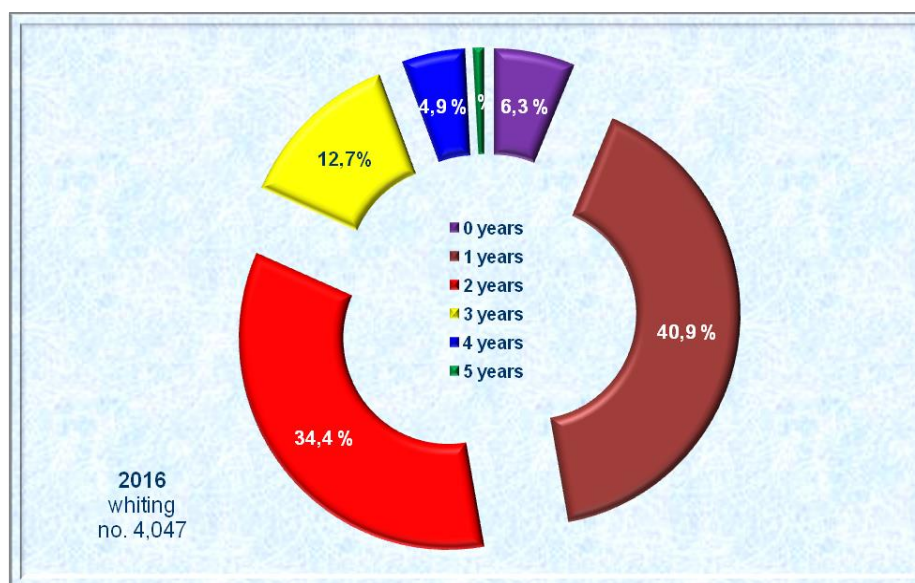
Annex 40 - Structure on length classes for whiting in 2016, total catches



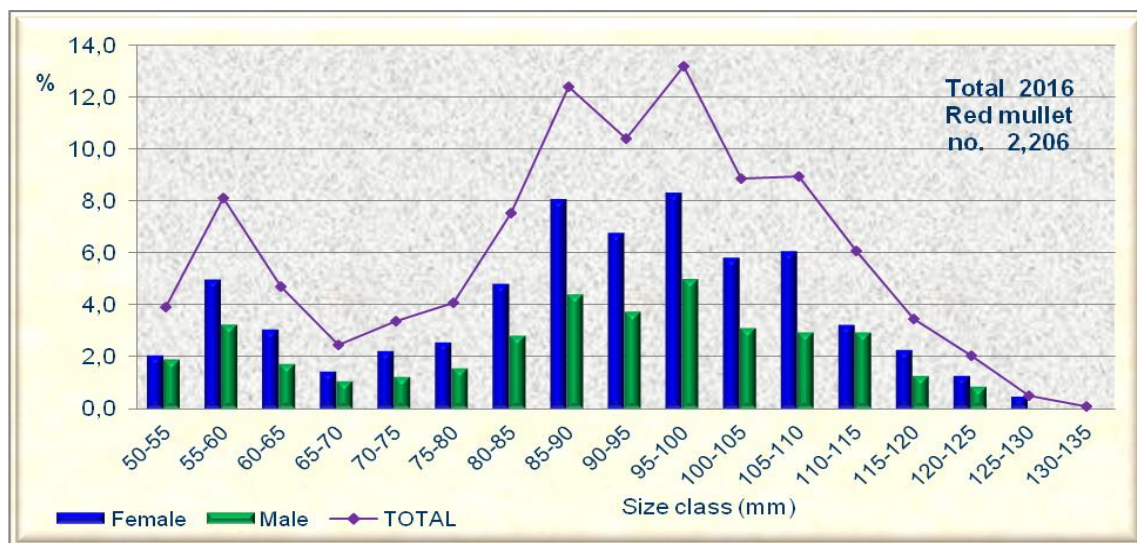
Annex 41 - Mean weight on length classes for whiting 2016, total catches



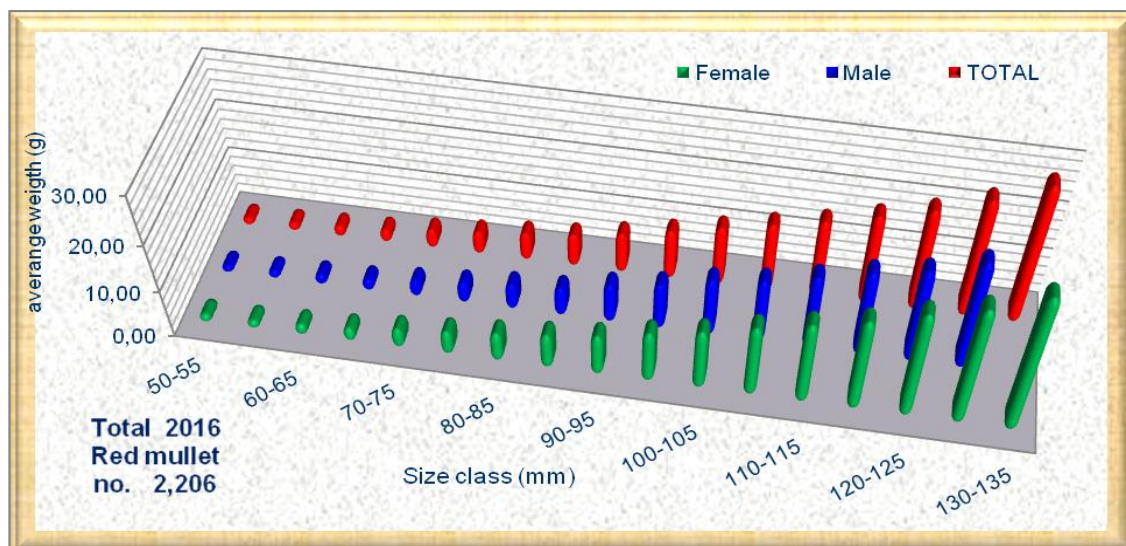
Annex 42 - Percentage on age classes for whiting 2016, total catches



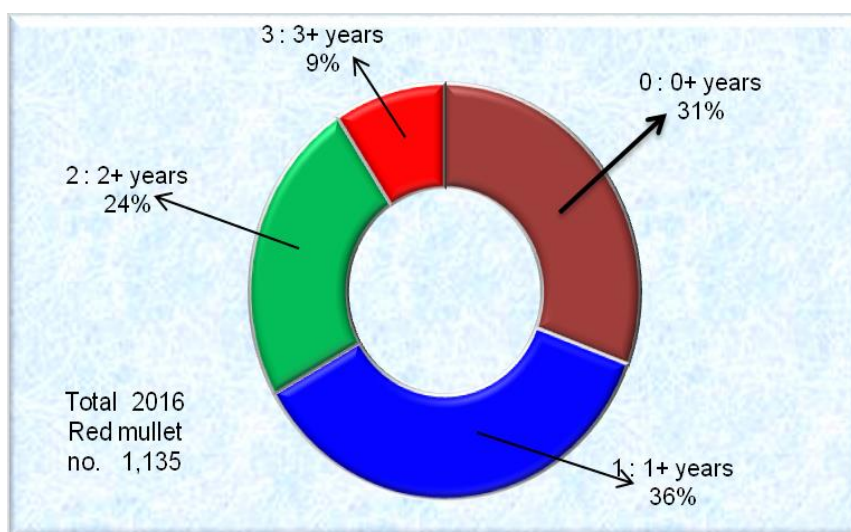
Annex 43 - Structure on length classes for red mullet in 2016, total catches



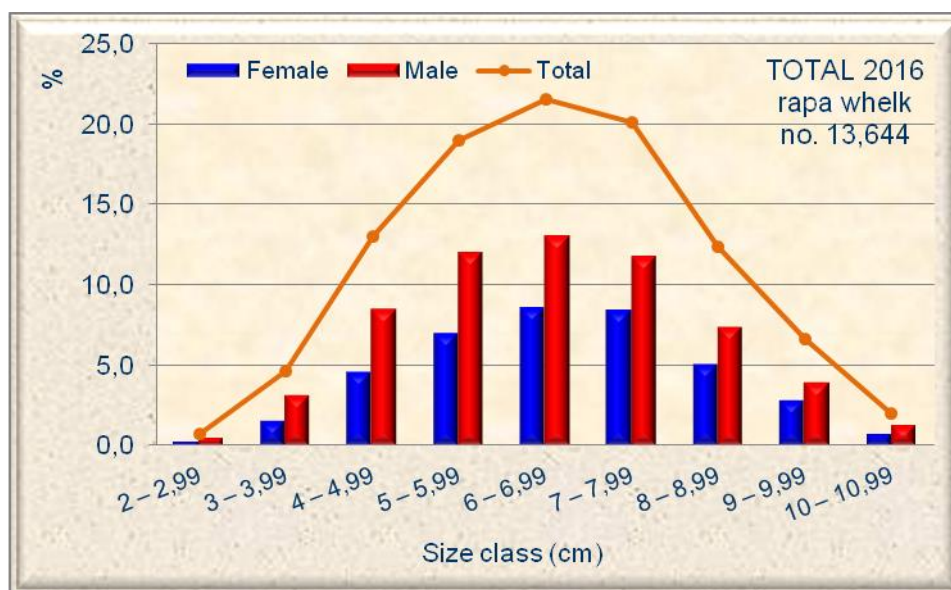
Annex 44 - Mean weight on length classes for red mullet 2016, total catches



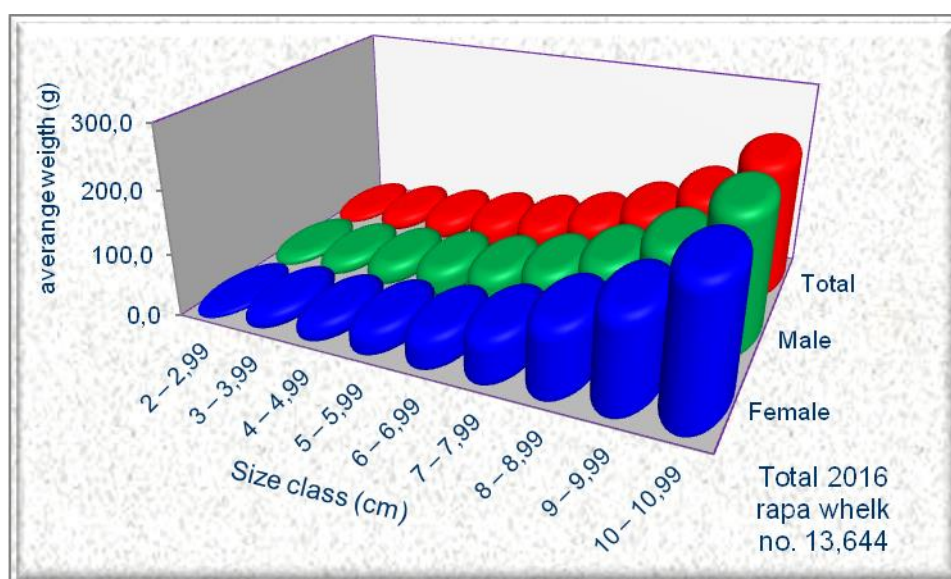
Annex 45 - Percentage on age classes for red mullet 2016, total catches



Annex 46 - Structure on length classes for rapa whelk, in 2016, total catches



Annex 47 - Mean weight on length classes for rapa whelk 2016, total catches



Anexa 48 AGREEMENT between NAFA Bulgaria and NAFA Romania



25.03.2015
2445/25.03.2015

AGREEMENT

Between

NATIONAL AGENCY FOR FISHERIES AND AQUACULTURE OF BULGARIA
and
NATIONAL AGENCY FOR FISHERIES AND AQUACULTURE OF ROMANIA

Today 25. MARCH 2015, in...SOFIA., between:

The NATIONAL AGENCY FOR FISHERIES AND AQUACULTURES OF BULGARIA,
Sofia, Hristo Botev bul. 17, BULSTAT 000649519, tel.: 02/805 16 66, fax: 02/805 16 86, represented by
Yancho Yanev - Executive director, on one side
and

The NATIONAL AGENCY FOR FISHERIES AND AQUACULTURES OF ROMANIA, Str
Transilvaniei, nr. 2, sectorul 1, București, represented by Cristinel George Gherghisan - President, on the
other side,

The two parties having regarded to:

- Regulation (EC) No 199/2008 which establishes the Community framework for the collection, management and use of data for the purpose of providing a solid basis for scientific analyses for the field of fisheries and of providing for the formulation of sound scientific advice for the implementation of the common fisheries policy (CFP). Commission Decision of 18 December 2009, 2010/93/EU adopting multiannual Community programmes for the collection, management and use of data in the fisheries sector for the period 2011-2013.
- Commission Implementing Decision C(2013) 5568 final /30.08.2013 extending the national programmes for the collection of primary biological, technical, environmental and socio-economic data for fisheries for the period 2011-2013 to the period 2014-2016.
- Report of the 10th Regional Coordination Meeting for the Mediterranean and Black Sea.
- Bulgarian national legislation on fisheries: Fishery and Aquaculture Act (FAA)/2013.
- Romanian national legislation on fisheries: G.E.O. No. 23/2008 on Fisheries and Aquaculture.

HAVE AGREED ON THE FOLLOWING:

Art. 1. Scope of the collaboration

Cooperation in implementing the National Programmes for collection, management and use of data for marine fisheries in Bulgaria and Romania, in accordance with the objectives of the Common Fisheries Policy (CFP) in the Black Sea.

Art. 2 (1). Objectives of the collaboration

The present Cooperation Agreement covers activities included in the following modules of the Multi-annual community programme for data collection (Commission Decision 2010/93/EU):

Romanian Annual Report on the National Data Collection Programme for Fisheries, 2016

1. Module of evaluation of the fishing sector

Section for the collection of biological variables Section for research surveys at sea

- a. Module of evaluation of the effects of the fishing sector on the marine ecosystems
- b. Module for management and use of the data covered by the data collection framework

2. The main objectives of this Collaboration Agreement are:

- Cooperation on conducting research surveys-at-sea;
- Adoption of common methodology when conducting research surveys-at-sea;
- Adoption of a coordination and sharing best practices between the national systems;
- Increasing the efficiency of scientific work of the institutes and the accuracy of collected data and analyses;

3. Specific objectives of the collaboration:

- Harmonization of the sampling methods and data analyses (characteristics of the nets used, biological parameters to be sampled, statistical analyses);
- Harmonization of methods for stock assessment of commercially important fish species in the Romanian and Bulgarian marine zones (growth parameters, mortality rates);
- Collected data to be used for the development of indicators to assess the effects of fisheries on marine ecosystems;
- To protect and conserve living aquatic resources and their sustainable exploitation through a common approach on the implementation of management measures.

Art. 3. Participating institutions

Both Agencies for Fisheries and Aquaculture from Bulgaria and Romania are the national institutions responsible for implementation of the Fisheries Data Collection Program in each country. For the implementation of scientific objectives, the participating institutes are:

In Bulgaria:

Institute of Fishing Resources, Varna (IFR)

Institute of Oceanology of the Bulgarian Academy of Science, Varna (IOBAS) Institute for fisheries and aquaculture, Plovdiv

In Romania:

National Institute for Marine Research and Development *Grigore Antipa* (NIMRD), Constanta

Art. 4. Planned activities for 2014-2020:

1. Research surveys at sea:

During the period of agreement (2015 - 2020), each country will undertake annually research surveys in their territorial waters and EEZ under their jurisdiction - demersal trawl surveys and acoustic surveys, following common methodology that is going to be adopted by the countries and that will follow the methodology already adopted by other EU countries (MEDIAS and MEDITS). The survey number and the target species can be amended following Regional Coordination Meetings recommendations subject to EC-DG MARE approval. National scientific teams are responsible for collection and analysis of data, stock assessments, providing information on biological variables and reporting only for their national waters (territorial waters and EEZ).

2. Harmonization of biological data sampling and analysis:

- Sampling of the catch and landings: age, size, spawning intensity, growth parameters, mortality rates;

3. Harmonization of stock assessment methods:

- Methodology for demersal Trawl Surveys;
- Methodology for hydroacoustic surveys;
- Methodology for collection and analysis of biological variables;

Art. 5. Responsibilities of the partners:

1. The partners must harmonize the methodologies used for biological sampling/data processing and stock assessment according to the best available methodologies following suggestions from GFCM/STECF and, as necessary, to cooperate with the third countries in the Black Sea region in order to improve the quality of the data and the stock assessments interferences.
2. The partners shall take the necessary steps to coordinate the sampling methodology in similar segments/métiers. These methodologies are to be specified at the Regional coordination meeting between representatives of NAFA and scientists from the two countries.
3. The National Agencies for Fisheries and Aquaculture of Bulgaria and Romania are obliged to contract the respective national research institutes, responsible for the surveys, ensuring the Programme and Agreement implementation for each year.
4. The contracted research institutes shall organize meeting annually before starting the surveys for planning of the surveys-at-sea (starting dates, simultaneously in both areas) and harmonize the methodology that shall be used.
5. The two parties shall carry out the pelagic and bottom trawl surveys in the territorial waters of their respective countries, and, in order to facilitate the harmonization of the methodologies used, are committed to ensure the presence of scientists of the country's research institutes on board of the research vessels of the other contracting party, depending of the case.
6. The undersigned parties engage to collaborate when working on the next National Programmes for Fisheries Data Collection (NPFDC), submitted for approval to be co- financed by EC and national NAFA (for 2014-2020).
7. The procedures and methodologies to be used in collecting and analyzing data and in estimating their accuracy and precision shall be included in the national programmes.
8. In accordance with the acting legislation in Bulgaria and Romania, respectively, the partners commit to provide the financial means for the scientific surveys and working meetings (the cost will be covered by national NAFA with contribution of European Maritime and Fisheries Fund (EMFF). Each party will cover the costs of the surveys (according to Appendix IX - List of research survey at sea, of Decision (EC)93/2010) for own research vessel in its national waters and the costs of participation of its scientific team on board the other research vessel during the surveys execution.
9. The data obtained is to be stored in national computer databases so that they are accessible to the Partners and Commission, and could also be transmitted to end-users.
10. The Partners and the Commission should coordinate and cooperate in the relevant international scientific bodies. Priority should also be given to ensure the attendance of scientific personnel in the expert groups conducting the scientific evaluation needed to achieve the goals of the CFP.
11. Recommendations made at the Regional Coordination Meetings shall be taken into account when drafting and amending the National Programmes during the programming period.
12. All the expenses for specialists (surveys, data analyses, data managements, working meetings, etc.) will be supported by the NP under EC Regulations.
13. Each year, both parties shall have a meeting aiming exchanging of data, best practices and knowledge, and discussing the results of the Agreement implementation for the previous year. The meeting shall take place at a date prior Annual Report Data Collection submission to CE/DG MARE, under the commitments to the EU legislation on DCF.

FOR NAFA BULGARIA

Yancho Yanev
Executive director NAFA - Bulgaria



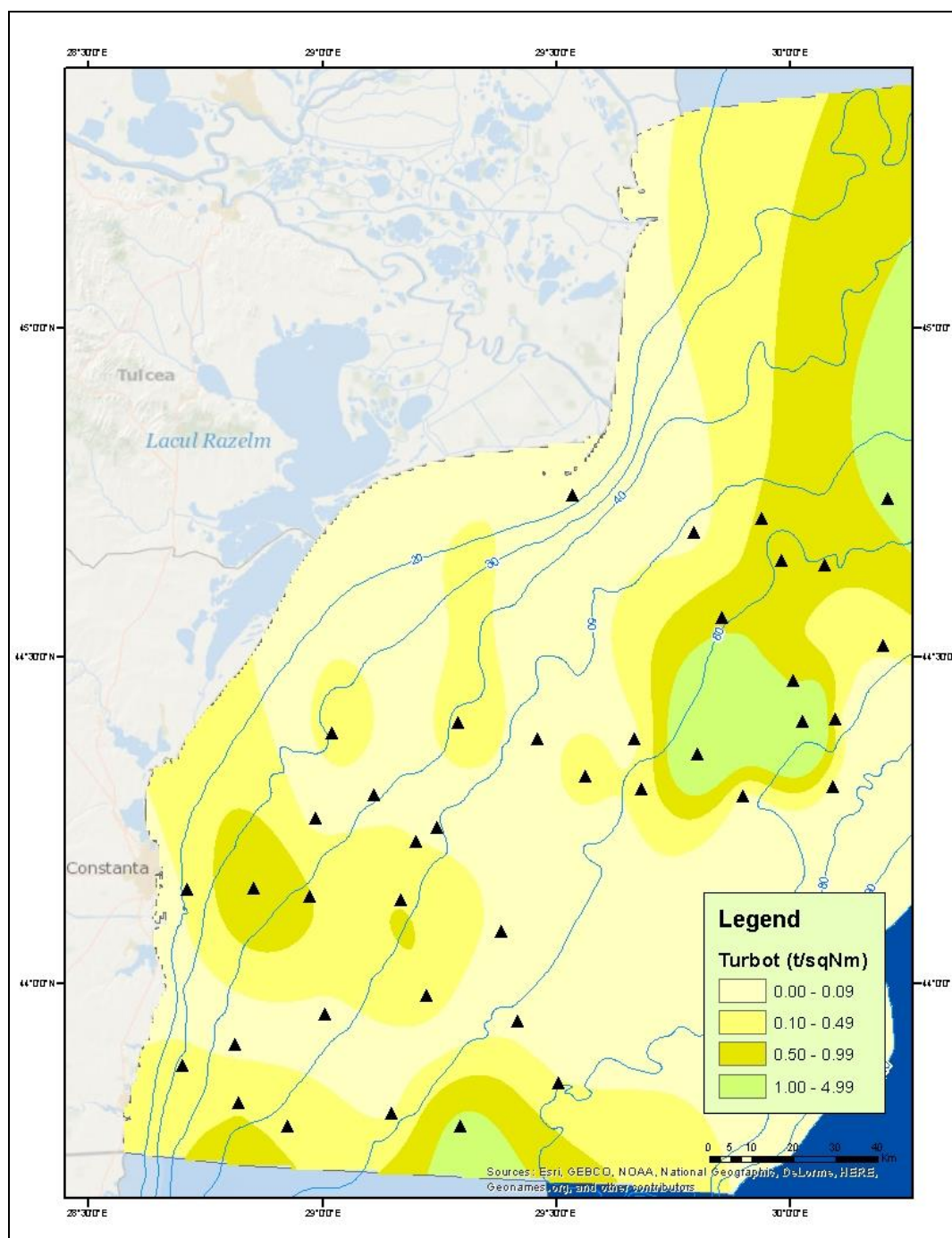
FOR NAFA ROMANIA

Cristinel George Gherghisan
President NAFA - Romania



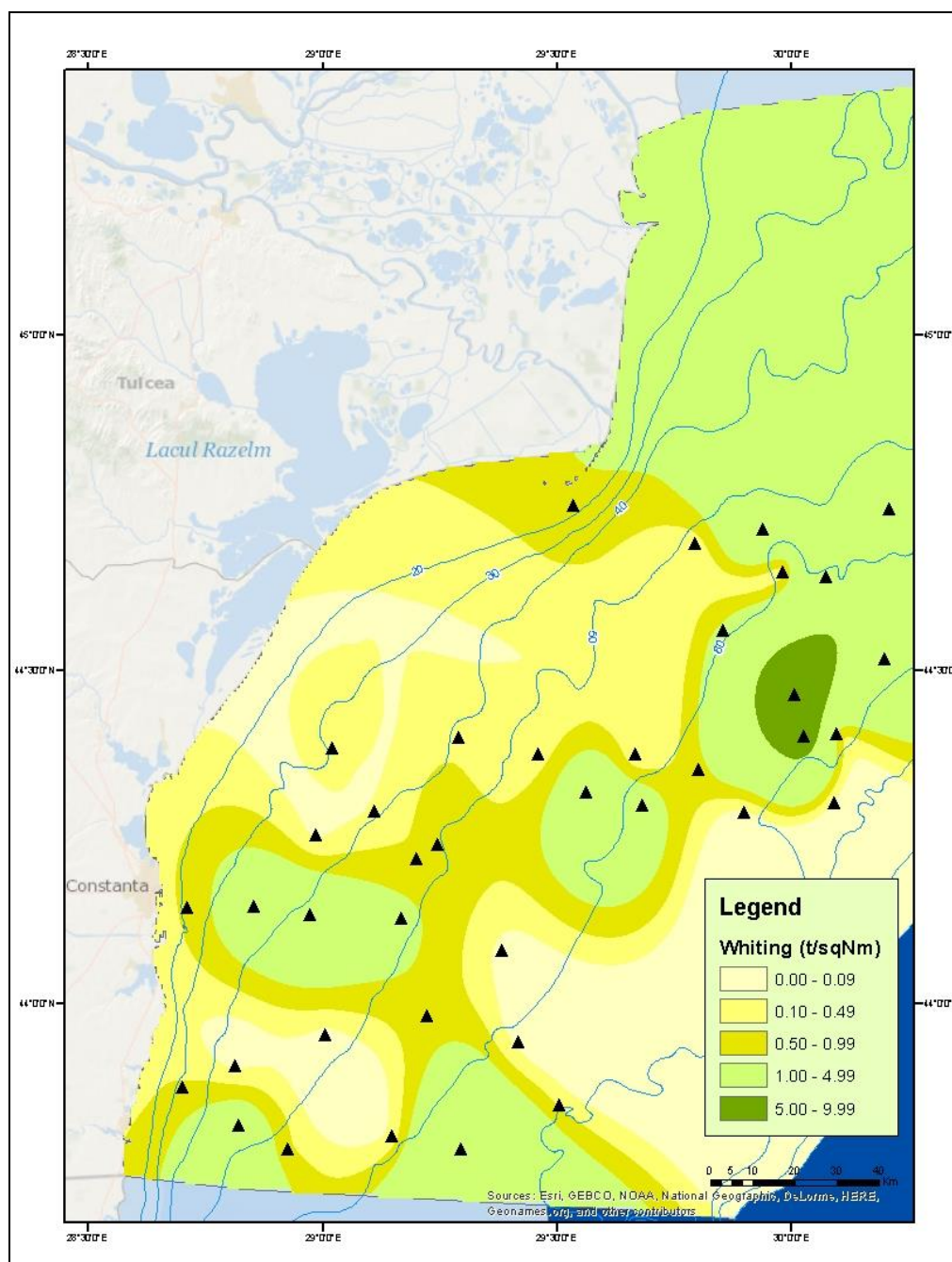
Annex 49 Assessment and distribution of turbot agglomerations in spring period (May 2016), demersal trawl survey, Romanian area

Depth range (m)	0 – 30 m	30 – 50 m	50 - 70 m	Total
Investigated area (Nm ²)	600	1125	1500	3225
Variation of the catches (t/ Nm ²)	0.027-0.129	0-0.918	0-3.112	0-3.112
Average catch (t/ Nm ²)	0.078	0.225	0.508	0.423
Biomass of the fishing agglomerations (t)	47.3076	253.366	762.884	1365.282
Biomass extrapolated the Romanian shelf (t)				2,116.716



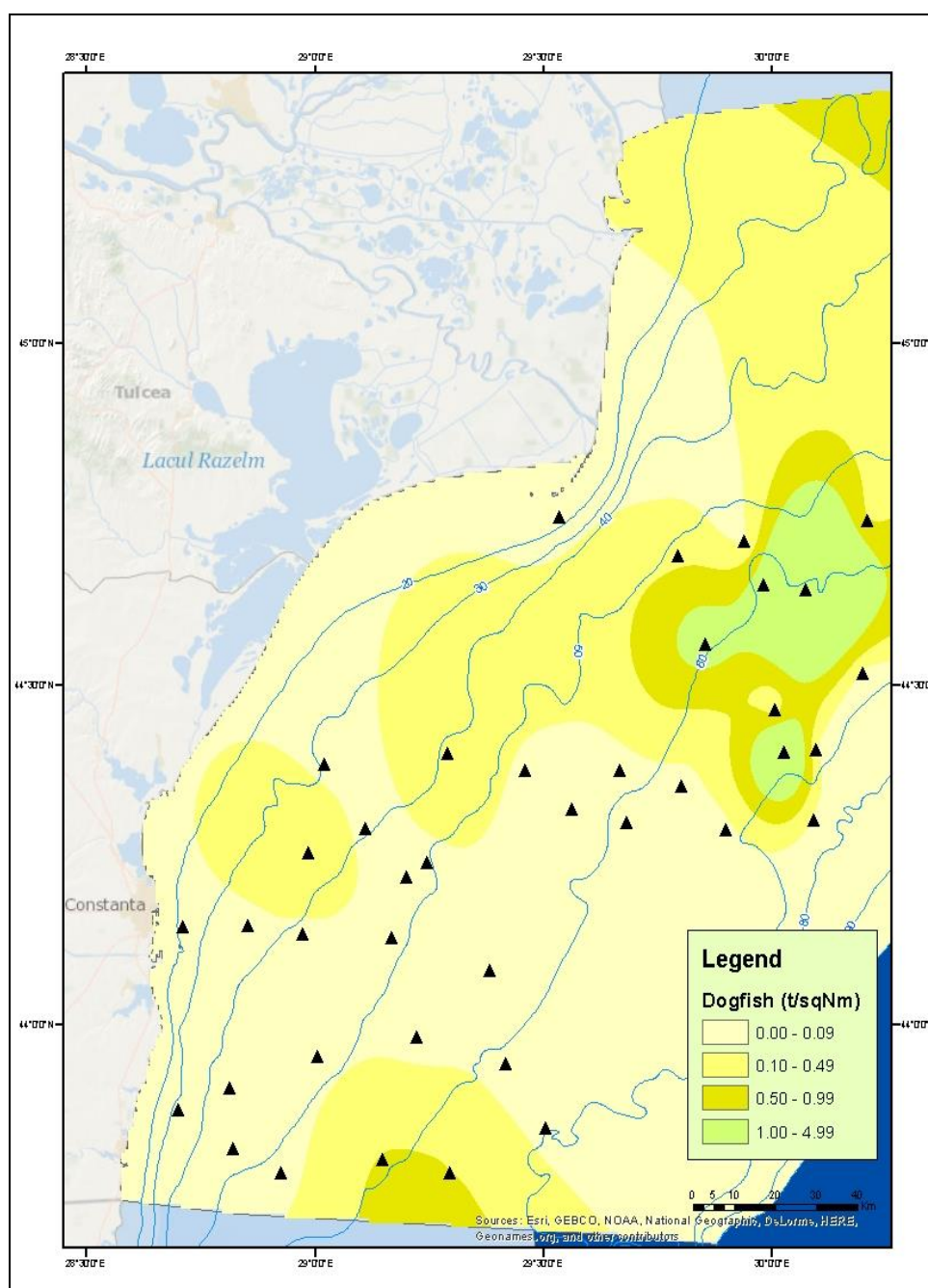
Annex 50 Assessment and distribution of the whiting whiting agglomerations in spring period (May 2016), demersal trawl survey, Romanian area

Depth range (m)	0–30 m	30–50 m	50–70 m	Total
Investigated area (Nm ²)	600	1125	1500	3225
Variation of the catches (t/ Nm ²)	0.586-0.791	0-2.138	0-7.919	0-7.919
Average catch (t/ Nm ²)	0.689	0.600	1.677	1.385
Biomass of the fishing agglomerations (t)	413.679	675.49	2515.782	4468.344
Biomass extrapolated the Romanian shelf (t)				6,927.664



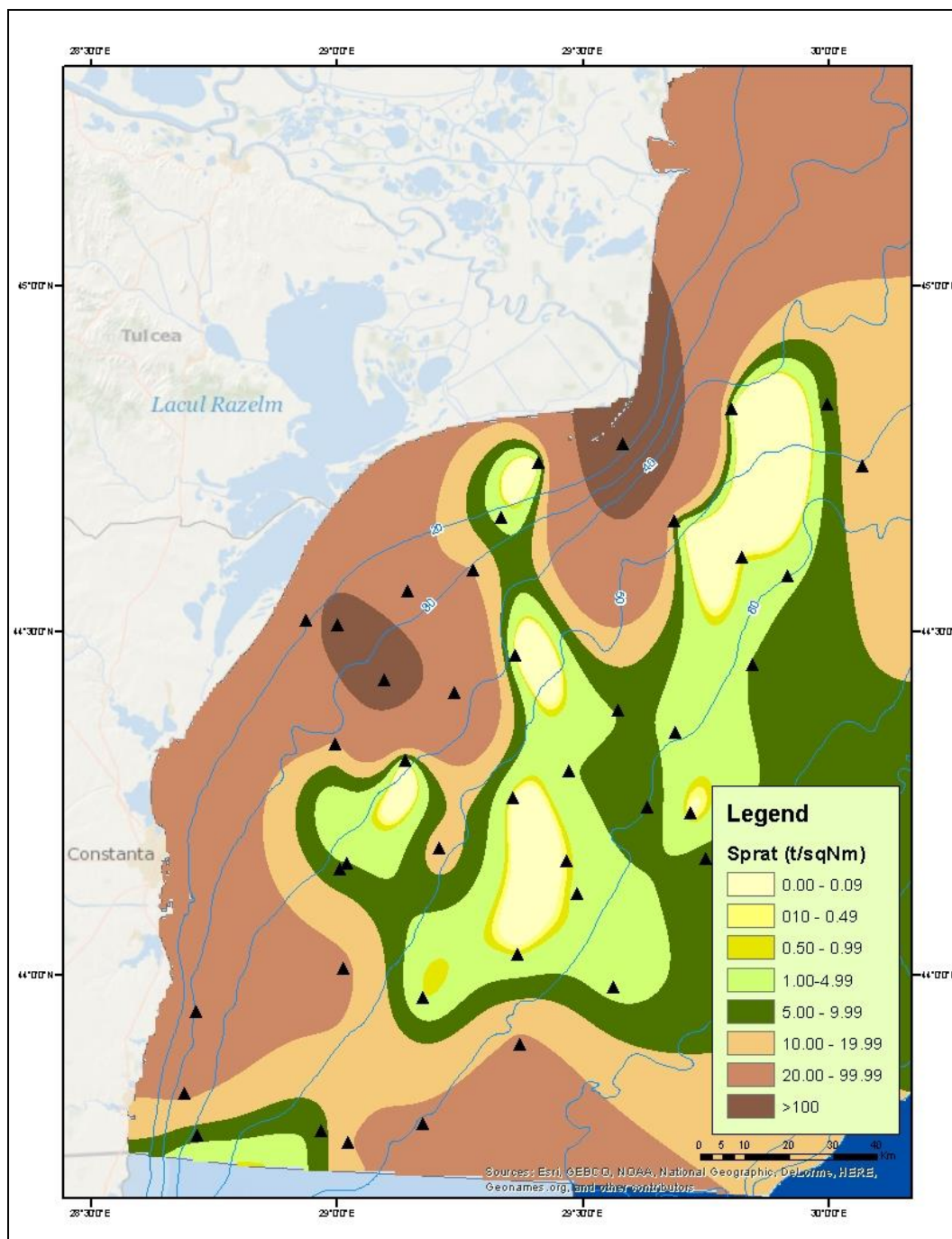
Annex 51 Assessment and distribution of the picked dogfish agglomerations in spring period (May 2016), demersal trawl survey, Romanian area

Depth range (m)	0–30 m	30–50 m	50–70 m	Total
Investigated area (Nm ²)	600	1125	1500	3225
Variation of the catches (t/ Nm ²)	0	0-0.463	0-0.902	0-0.902
Average catch (t/ Nm ²)	0	0.102	0.395	0.310
Biomass of the fishing agglomerations (t)	0	114.833	593.922	999.843
Biomass extrapolated the Romanian shelf (t)				1,550.145



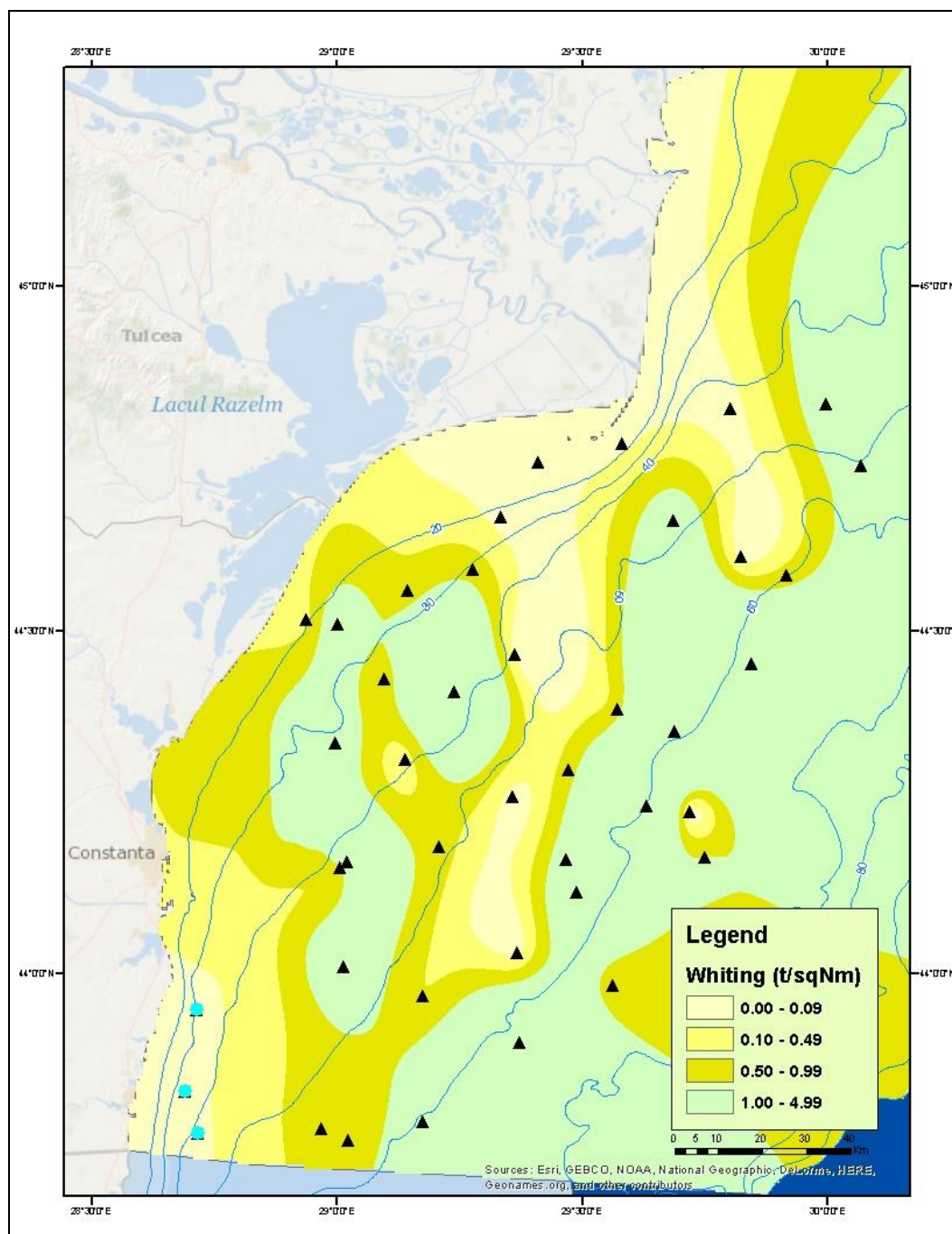
Annex 52 Assessment and distribution of the sprat agglomerations in spring period (June 2016), pelagic trawl survey, Romanian area

Depth range (m)	0–30 m	30–50 m	50–70 m	Total
Investigated area (Nm ²)	600	1225	1250	3075
Variation of the catches (t/ Nm ²)	0.37-209.687	0-147.448	0-22.228	0-209.687
Average catch (t/ Nm ²)	75.144	23.877	6.509	22.930
Biomass of the fishing agglomerations (t)	45086.602	29249.331	8136,519	70511.39
Biomass extrapolated the Romanian shelf (t)				114,652.7



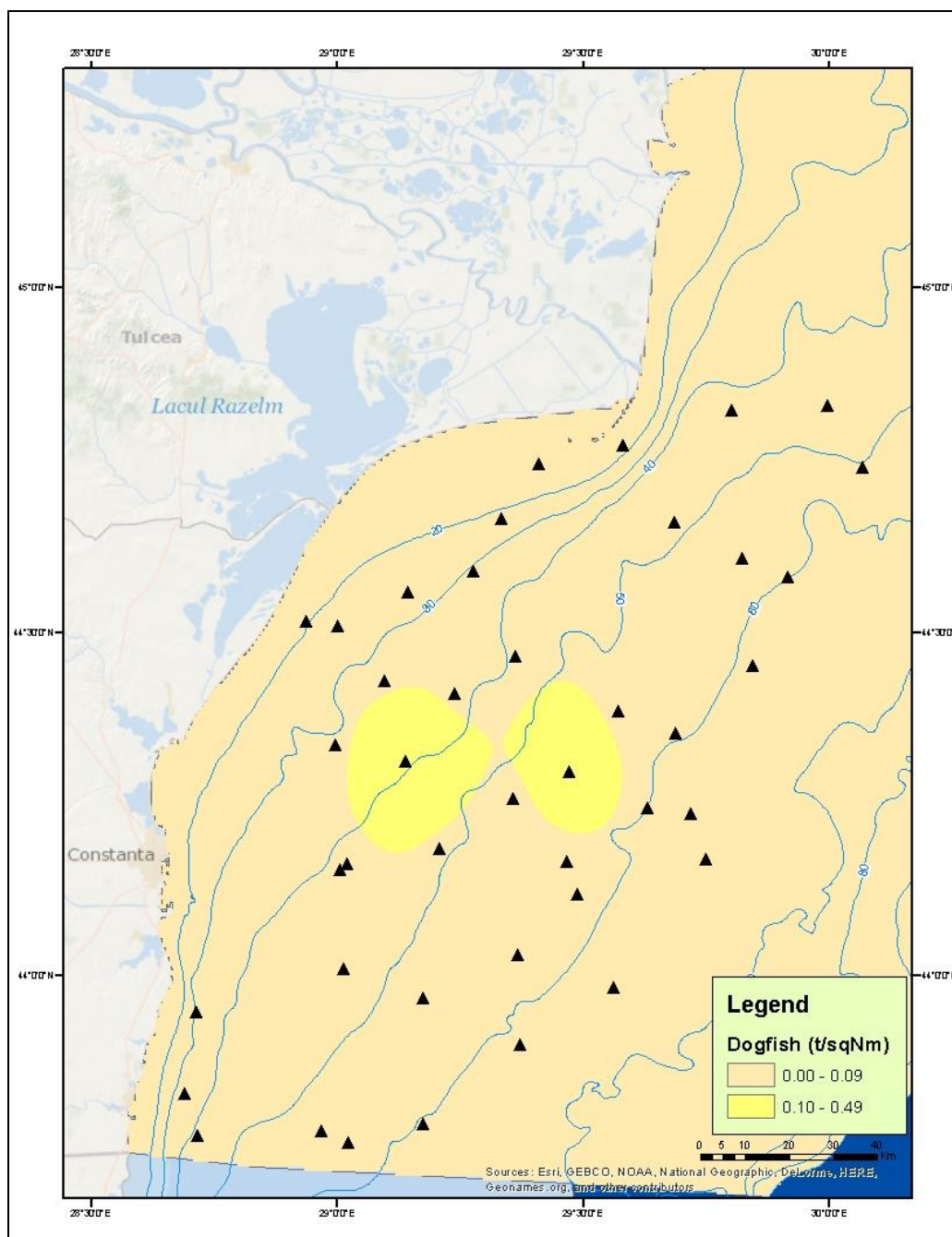
Annex 53 Assessment and distribution of the whiting agglomerations in spring period (June 2016), pelagic trawl survey, Romanian area

Depth range (m)	0–30 m	30–50 m	50–70 m	Total
Investigated area (Nm ²)	600	1225	1250	3075
Variation of the catches (t/ Nm ²)	0-1.480	0-3.704	0-3.704	0-3.704
Average catch (t/ Nm ²)	0.432	0.953	1.370	1.077
Biomass of the fishing agglomerations (t)	259.3313	1168.61172	1713.439	3314.545
Biomass extrapolated the Romanian shelf (t)				5,389.504



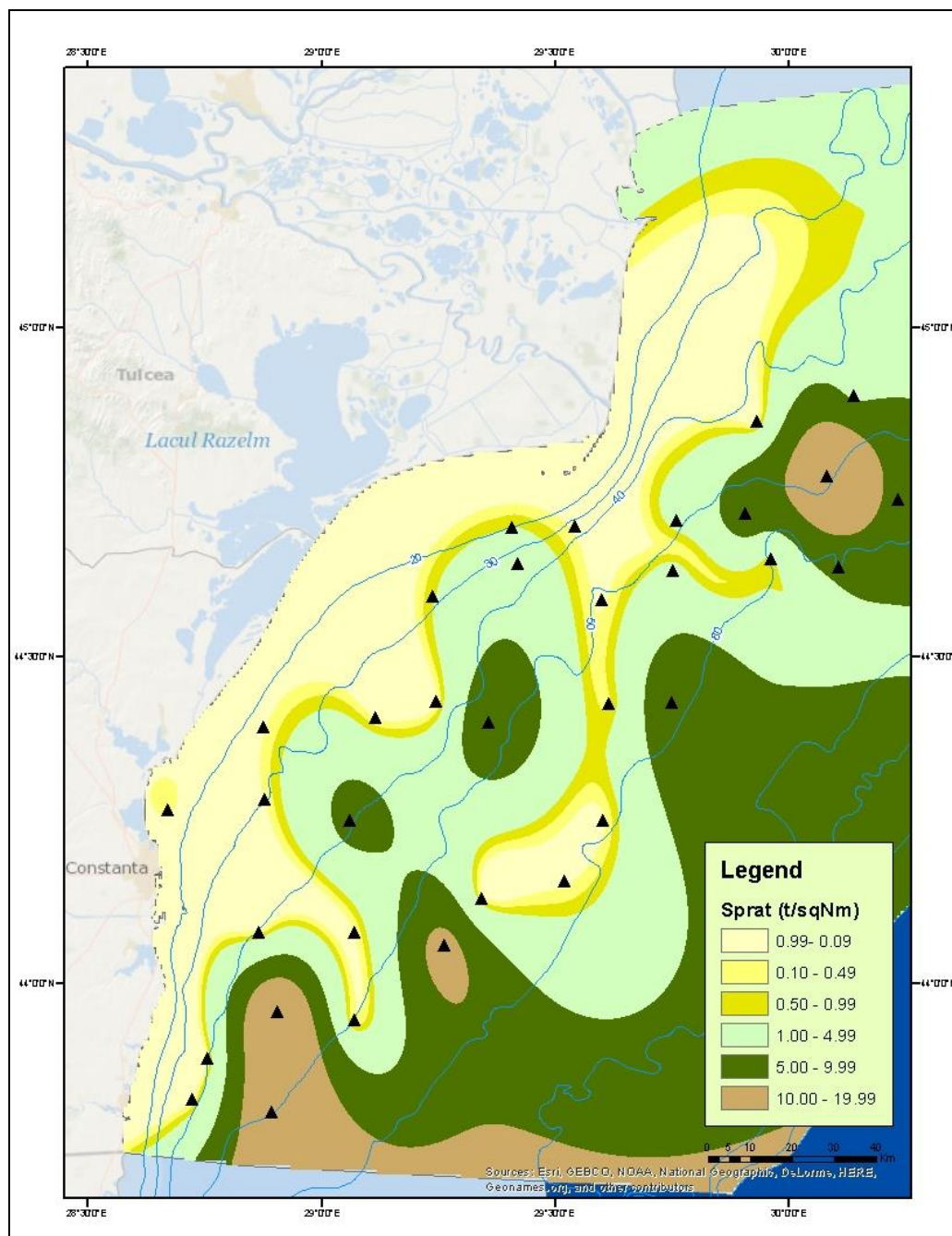
Annex 54 Assessment and distribution of the picked dogfish agglomerations in spring period (June 2016), pelagic trawl survey, Romanian area

Depth range (m)	0–30 m	30–50 m	50–70 m	Total
Investigated area (Nm ²)	600	1225	1250	3075
Variation of the catches (t/ Nm ²)	0	0-0.426	0-0.318	0-0.426
Average catch (t/ Nm ²)	0	0.026	0.019	0.019
Biomass of the fishing agglomerations (t)	0	32.618	24.080	59.401
Biomass extrapolated the Romanian shelf (t)				96.587



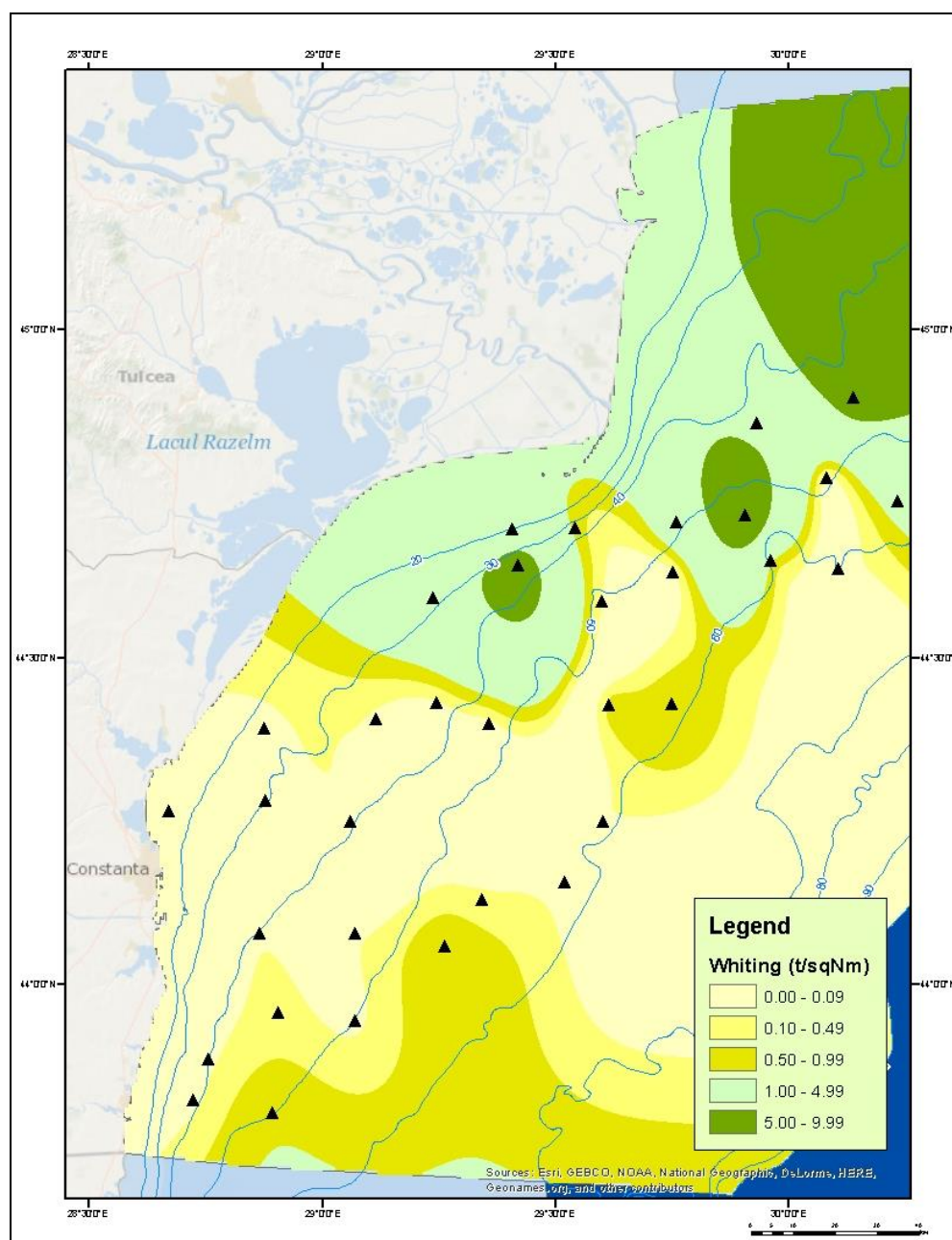
Anexa 55 Assessment and distribution of the sprat agglomerations in the autumn period (October - November 2016), pelagic trawl survey, Romanian area

Depth range (m)	0 – 30 m	30 – 50 m	50-70 m	<i>Total</i>
Investigated area (Nm ²)	625	1325	725	2675
Variation of the catches (t/ Nm ²)	0-0.168	0-17.008	0-16.839	0-17.008
Average catch (t/ Nm ²)	0.505	3.88	4.691	3.585
Biomass of the fishing agglomerations (t)	315.744	4490.410	3401.016	9592.187
Biomass extrapolated the Romanian shelf (t)				17,929.32



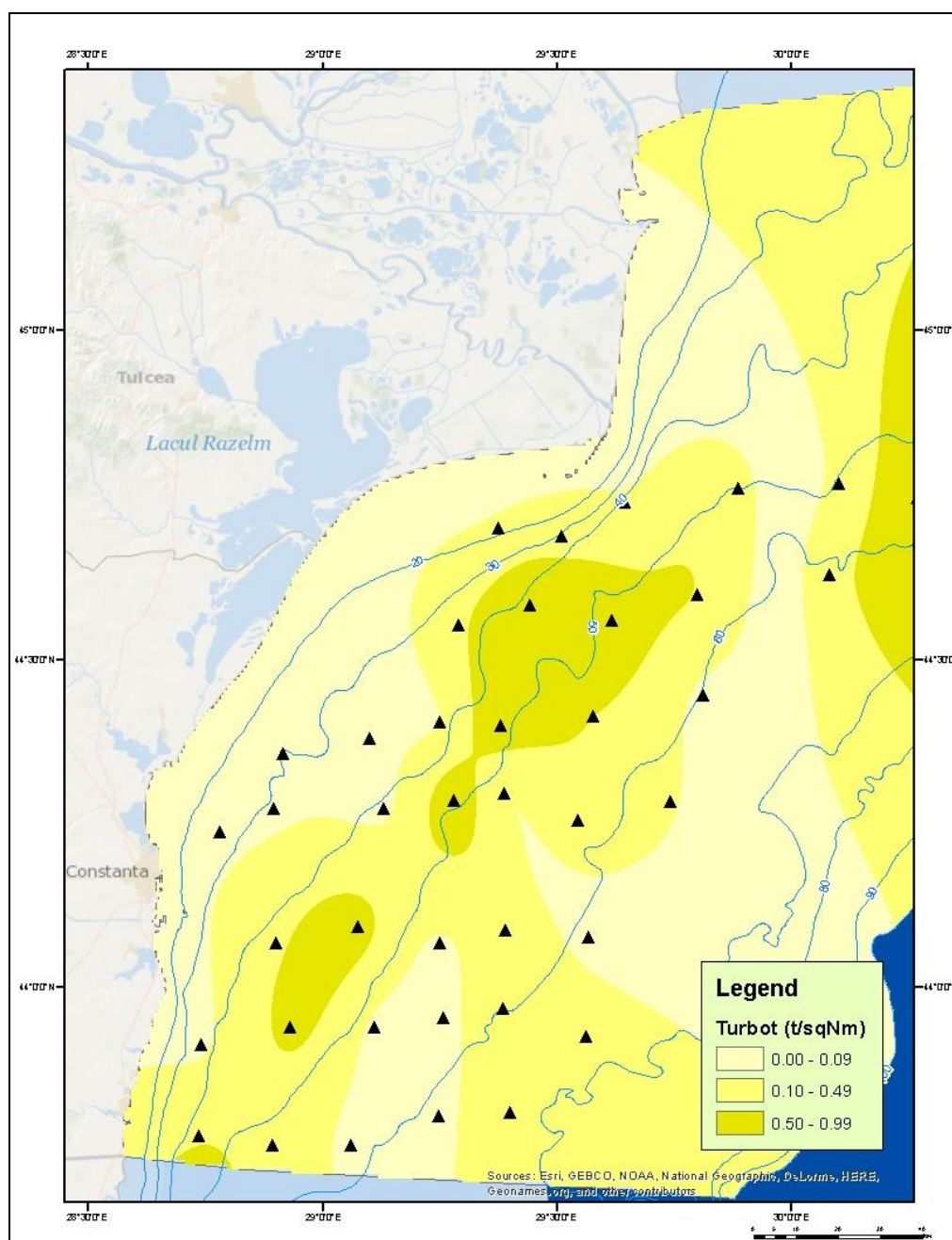
Anexa 56 Assessment and distribution of the whiting agglomerations in the autumn period (October - November 2016), pelagic trawl survey, Romanian area

Depth range (m)	0 – 30 m	30 – 50 m	50-70 m	<i>Total</i>
Investigated area (Nm ²)	625	1325	725	2675
Variation of the catches (t/ Nm ²)	0-3.36	0-6.735	0-7.998	0-7.998
Average catch (t/ Nm ²)	1.473	1.226	1.112	1.208
Biomass of the fishing agglomerations (t)	920.920	1624.635	806.651	3232.726
Biomass extrapolated the Romanian shelf (t)				6,042.479



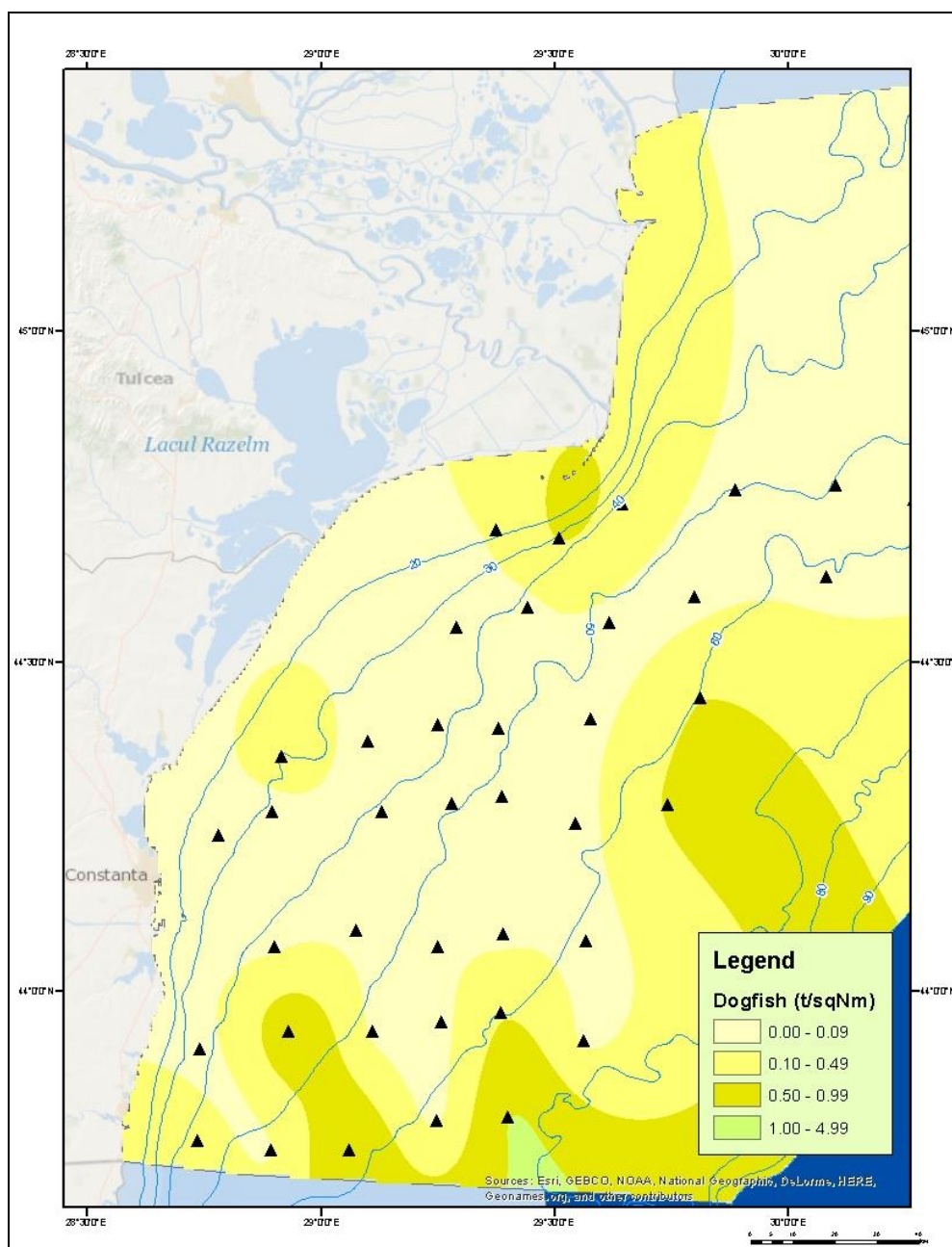
Annex 57 Assessment and distribution of the turbot agglomerations in the autumn period
(November - December 2016), demersal trawl survey, Romanian area

Depth range (m)	0 – 30 m	30 – 50 m	50-70 m	<i>Total</i>
Investigated area (Nm ²)	600	1125	1275	3000
Variation of the catches (t/ Nm ²)	0-0.136	0-0.887	0-0.16	0-916
Average catch (t/ Nm ²)	0.068	0.299	0.275	0.274
Biomass of the fishing agglomerations (t)	4.821	337.006125	350.738881	823.576
Biomass extrapolated the Romanian shelf (t)				1,372.627

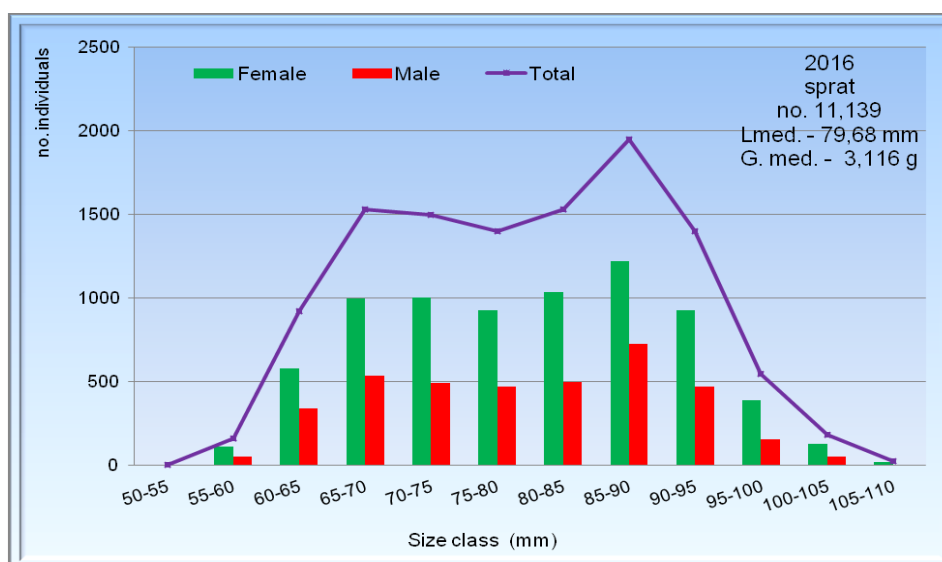


Annex 58 Assessment and distribution of the picked dogfish agglomerations in the autumn period (November - December 2016), demersal trawl survey, Romanian area

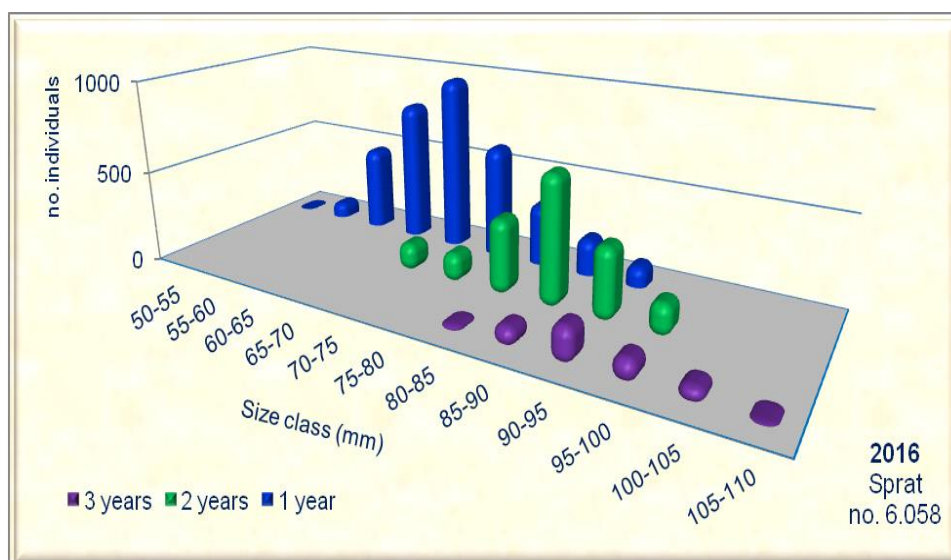
Depth range (m)	0–30 m	30–50 m	50–70 m	<i>Total</i>
Investigated area (Nm ²)	600	1125	1275	3000
Variation of the catches (t/ Nm ²)	0-0.126	0-0.401	0-1.020	0-1.020
Average catch (t/ Nm ²)	0.063	0.096	0.195	0.149
Biomass of the fishing agglomerations (t)	37.9059	109.115	249.159	448.308
Biomass extrapolated the Romanian shelf (t)				747,181



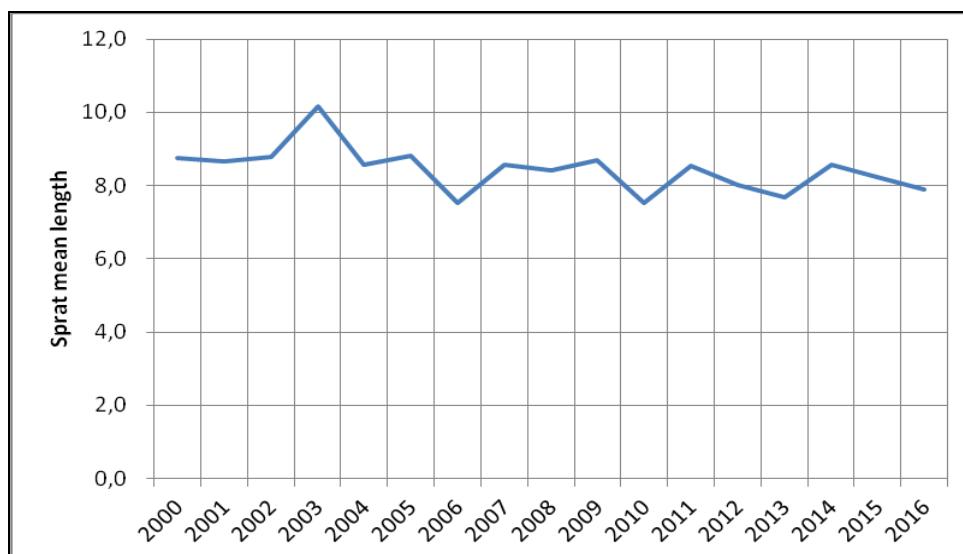
Annex 59 - Percentage of total number of sprat specimens on length classes



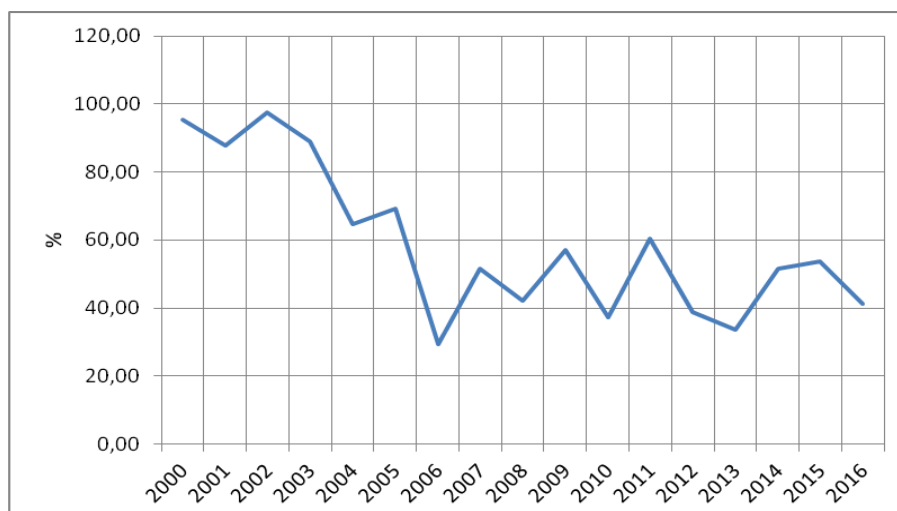
Annex 60 - Percentage of total number of sprat specimens on age classes



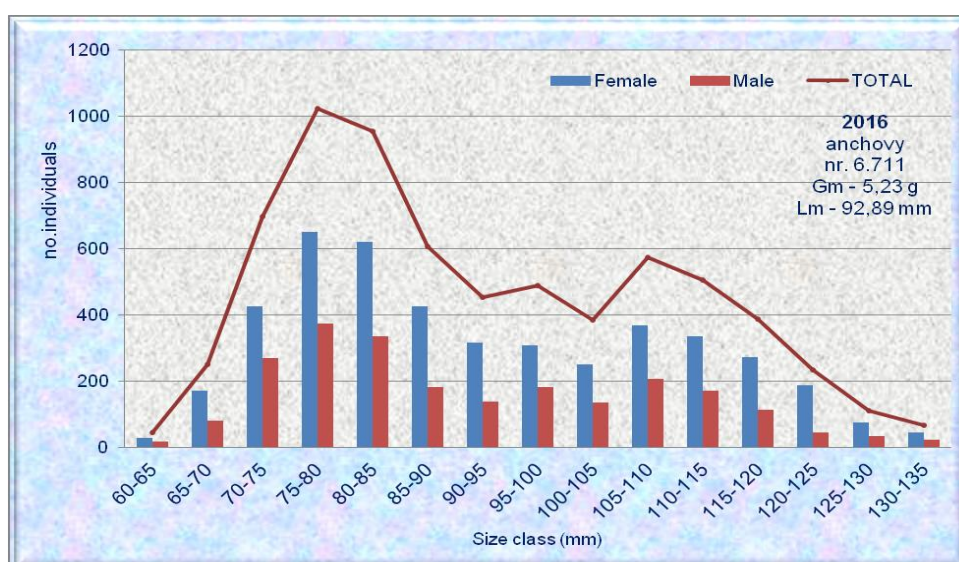
Annex 61 - The average length of sprat in the period 2001 to 2016



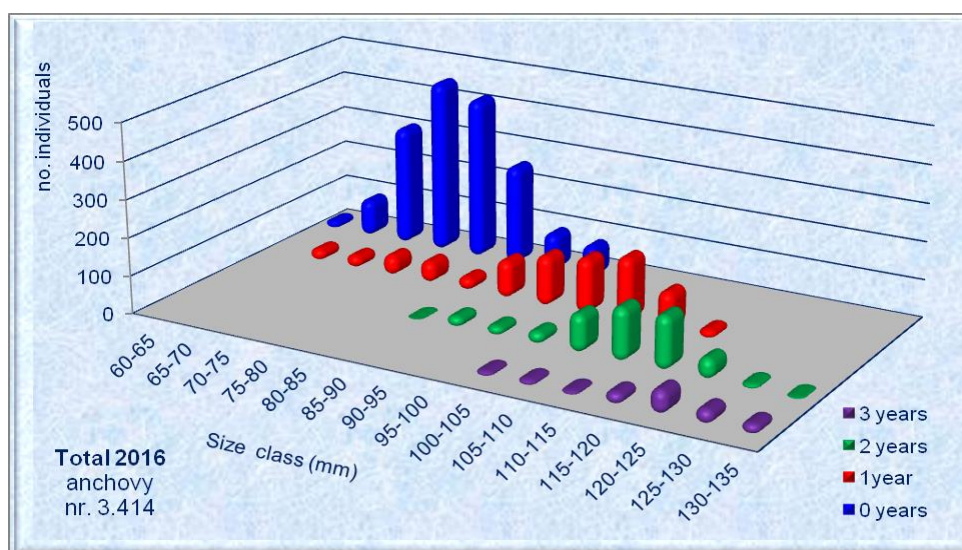
Annex 62 - Percentage of sprat specimens larger than the average size at first sexual maturation (2000-2016)



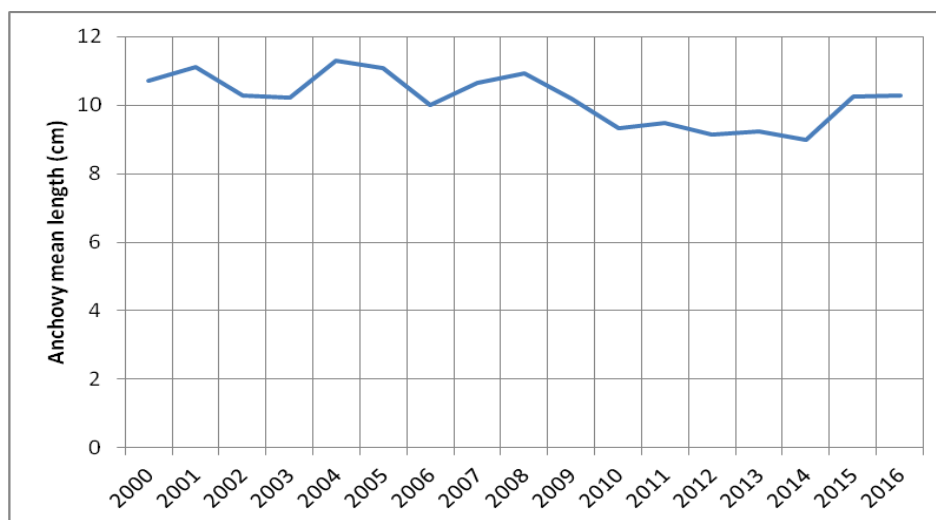
Annex 63 - Percentage of total number of anchovy specimens on length classes



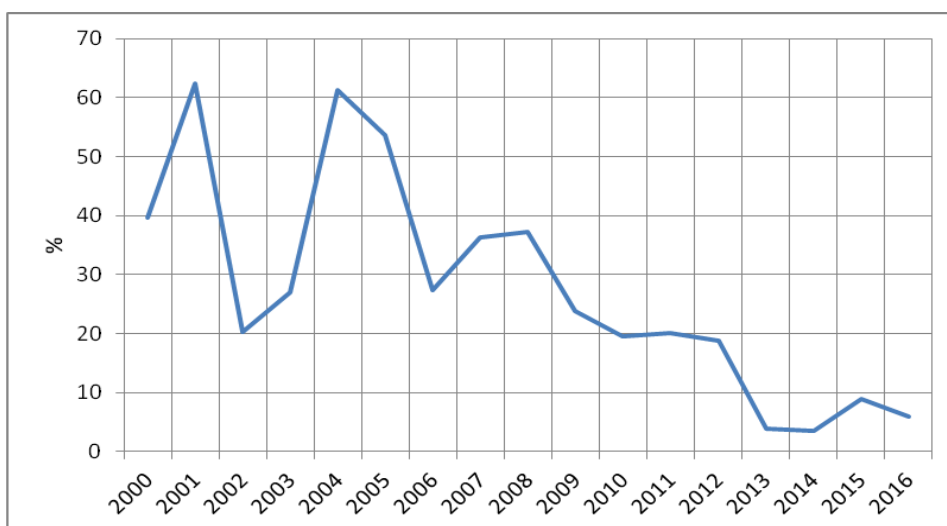
Annex 64 - Percentage of total number of anchovy specimens on age classes



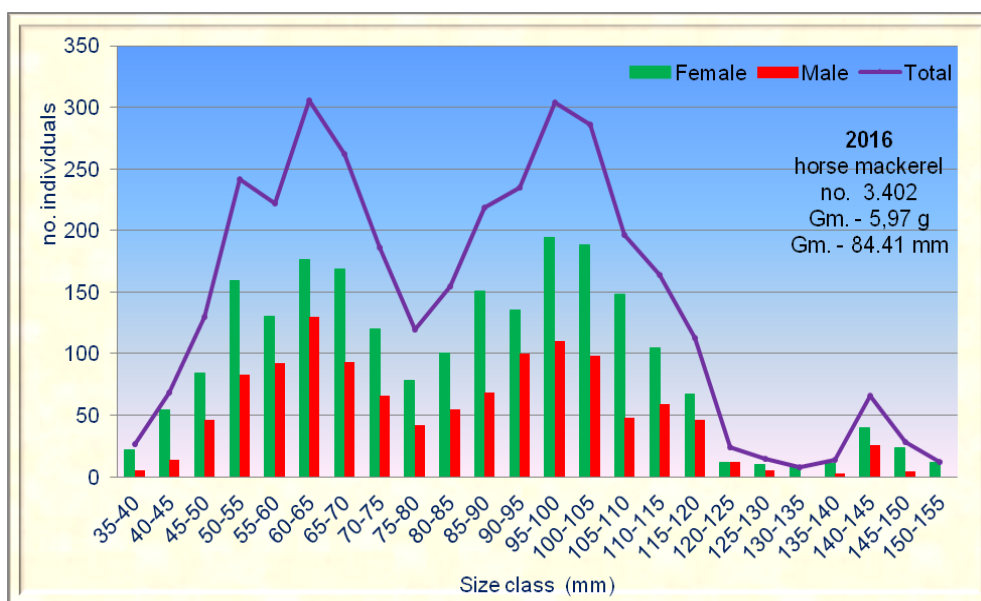
Annex 65 - The average length of anchovy in the period 2001 to 2016



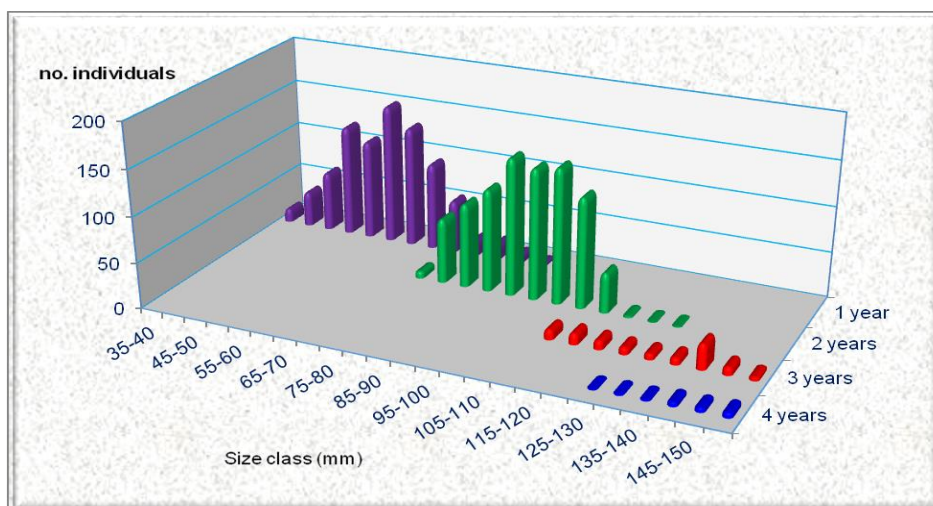
Annex 66 - Percentage of anchovy specimens larger than the average size at first sexual maturation



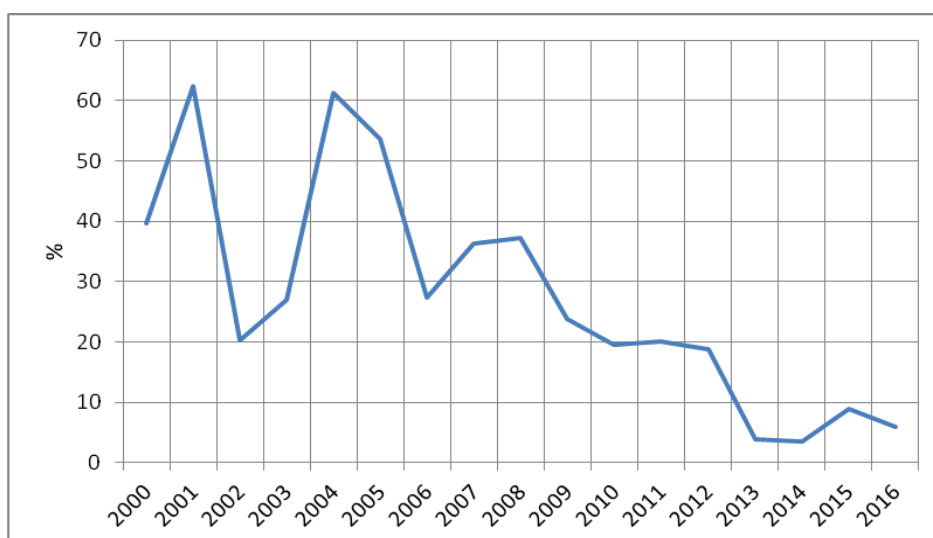
Annex 67 - Percentage of total number of horse mackerel specimens on length classes



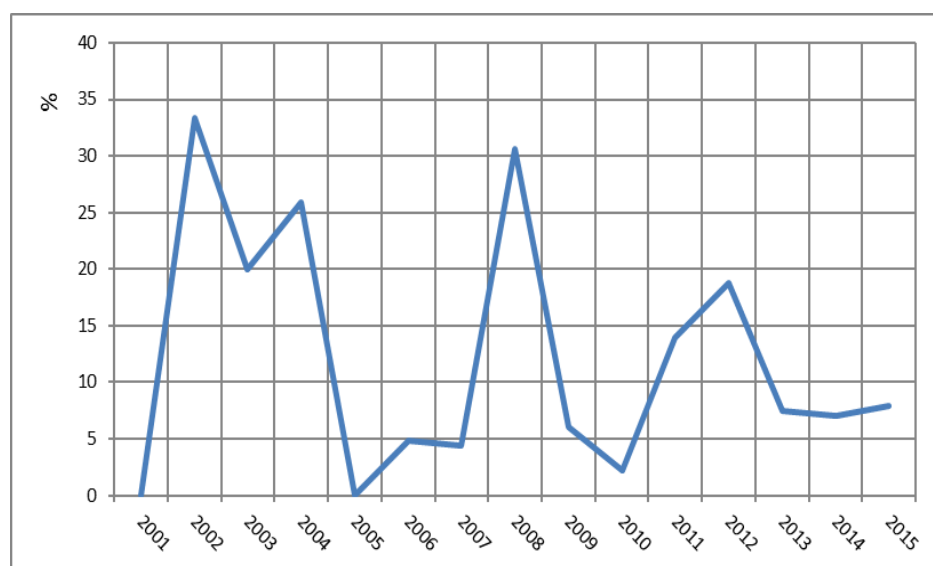
Annex 68 - Percentage of total number of horse mackerel specimens on age classes



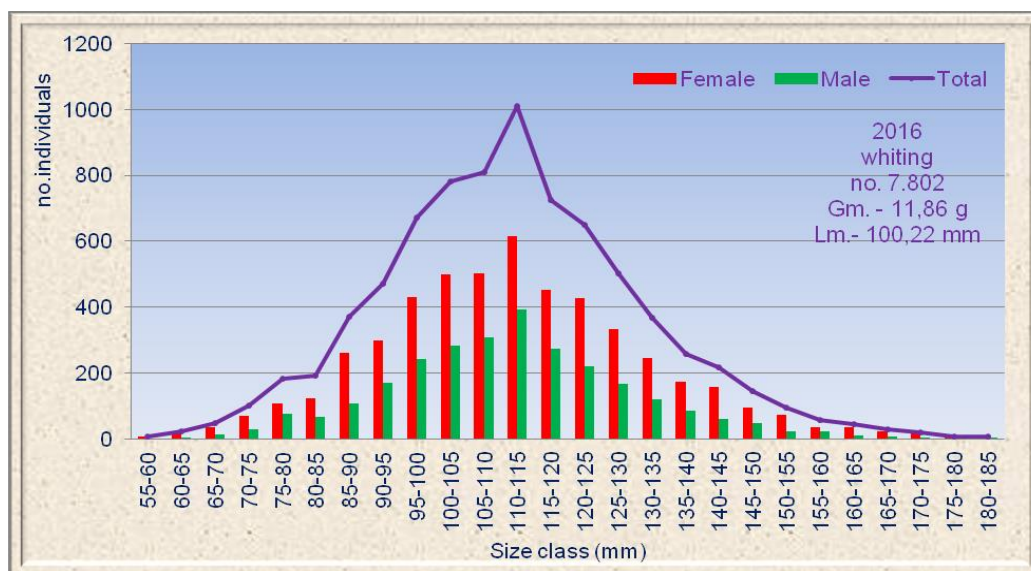
Annex 69 - The average length of horse mackerel in the period 2001 to 2016



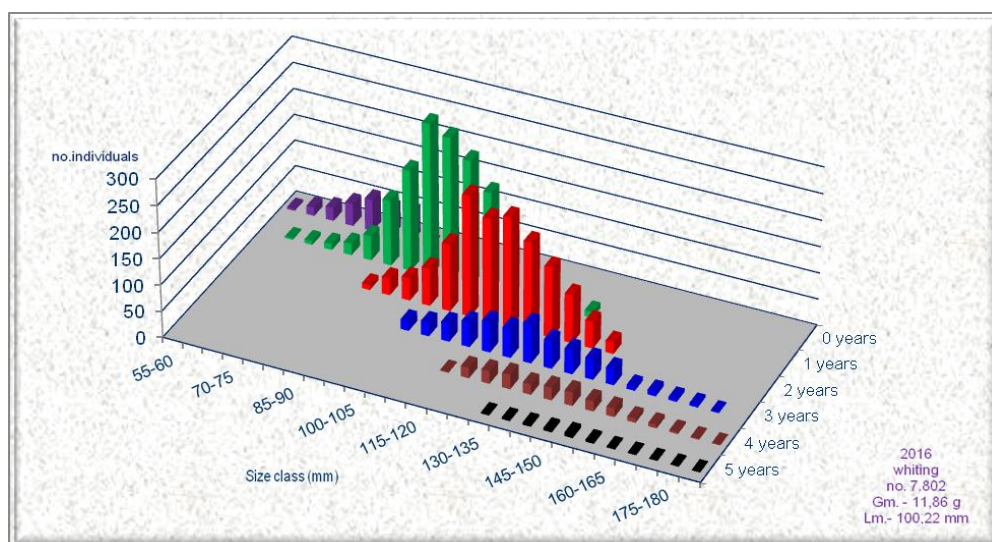
Annex 70 - Percentage of horse mackerel specimens larger than the average size at first sexual maturation



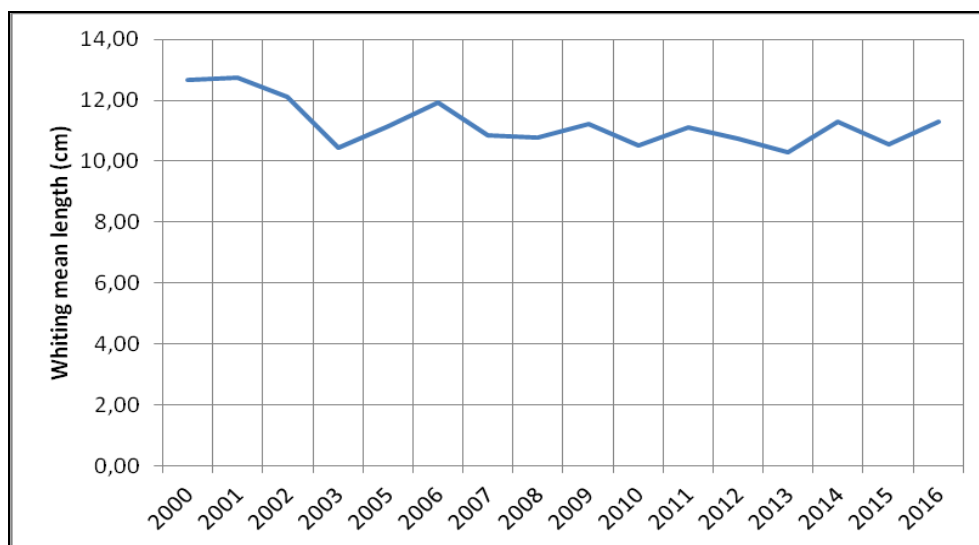
Annex 71 - Percentage of total number of whiting specimens on length classes



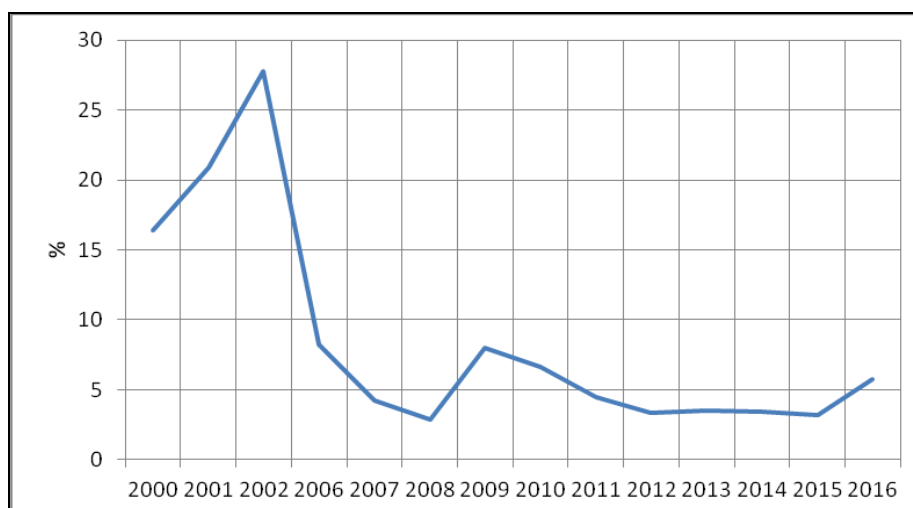
Annex 72 - Percentage of total number of whiting specimens, on age classes



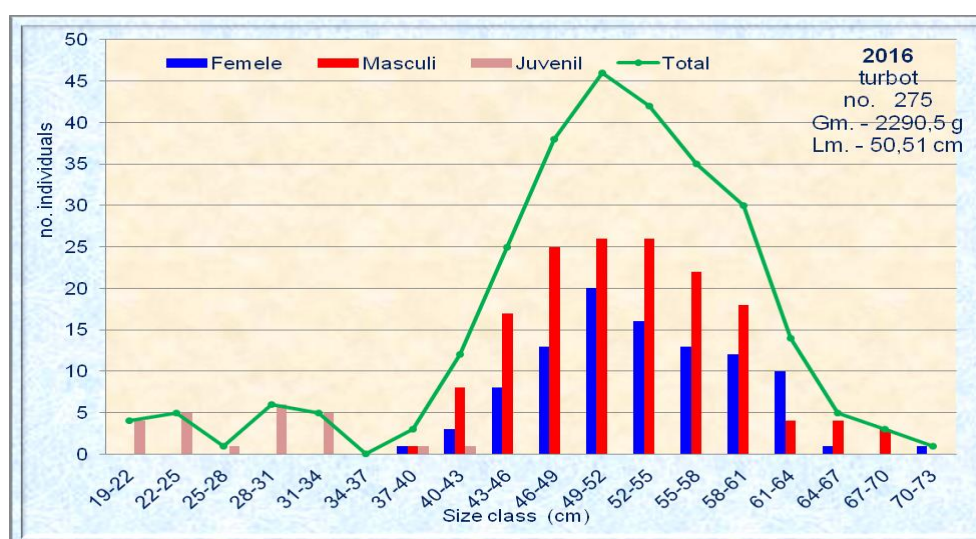
Annex 73 - The average length of whiting in the period 2000 to 2016



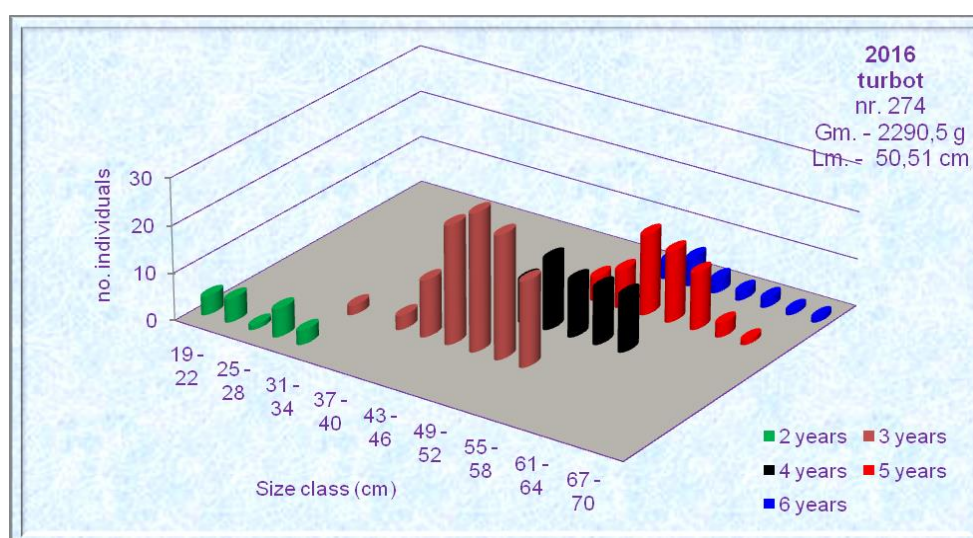
Annex 74 - Percentage of whiting specimens larger than the average size at first sexual maturation



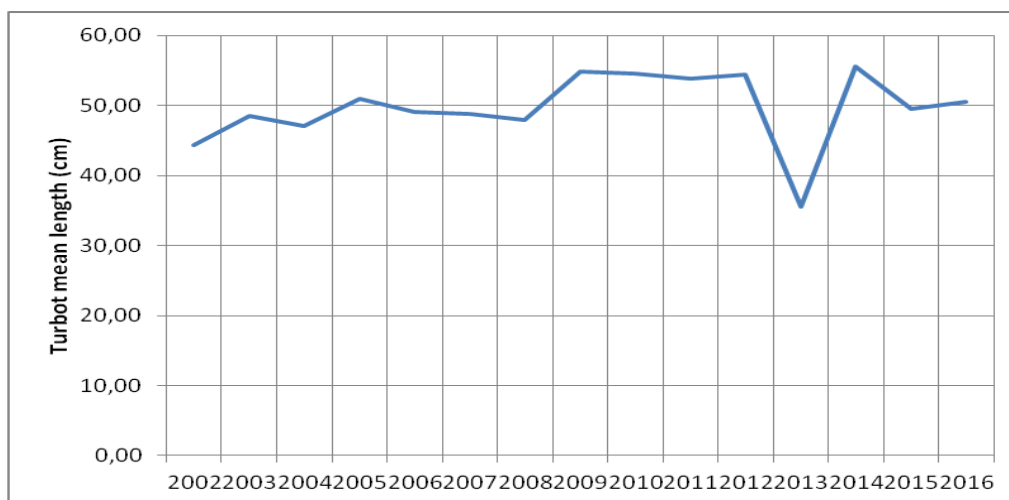
Annex 75 - Percentage of total number of turbot specimens on length classes



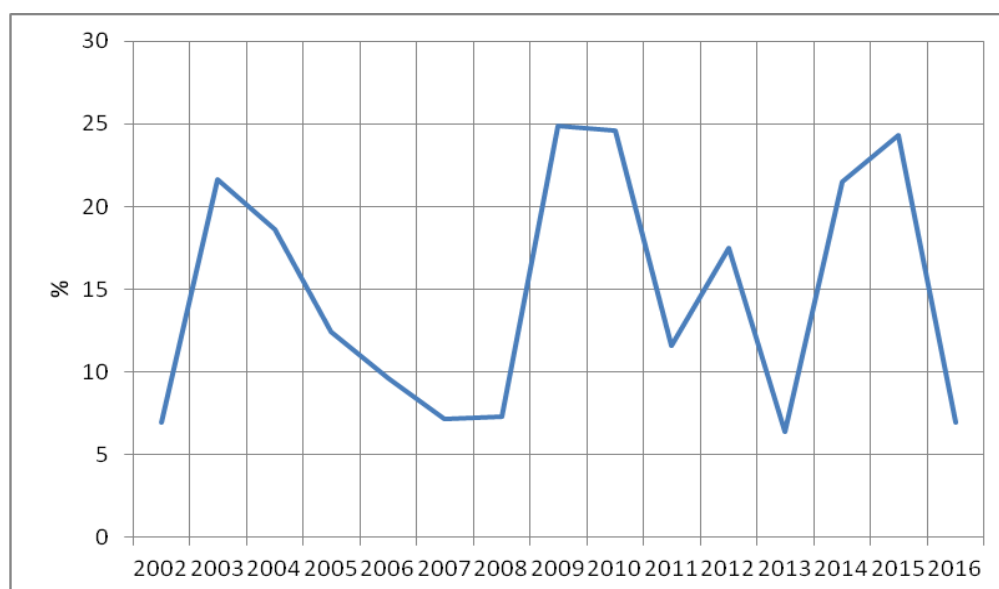
Annex 76 - Percentage of total number of turbot specimens on age classes



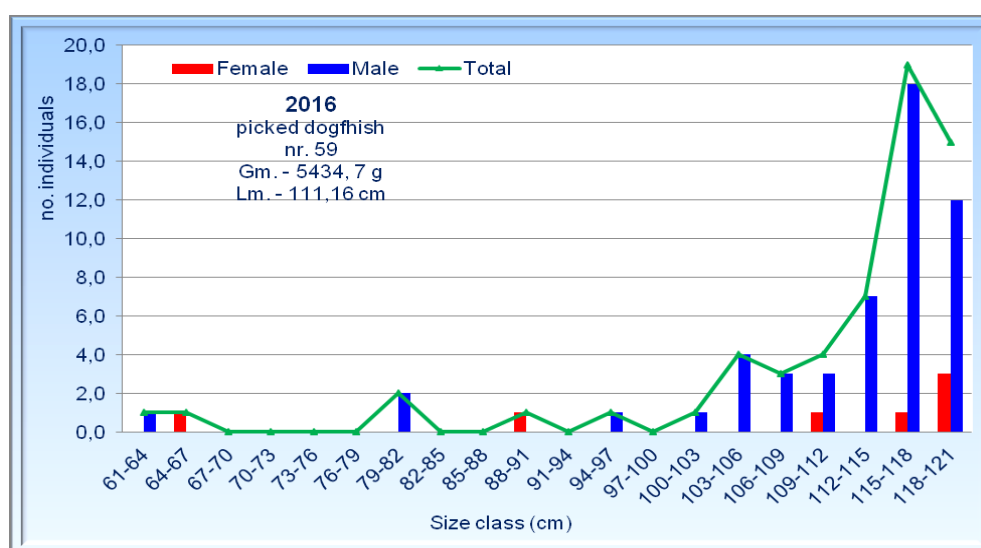
Annex 77 - The average length of turbot in the period 2003 to 2016



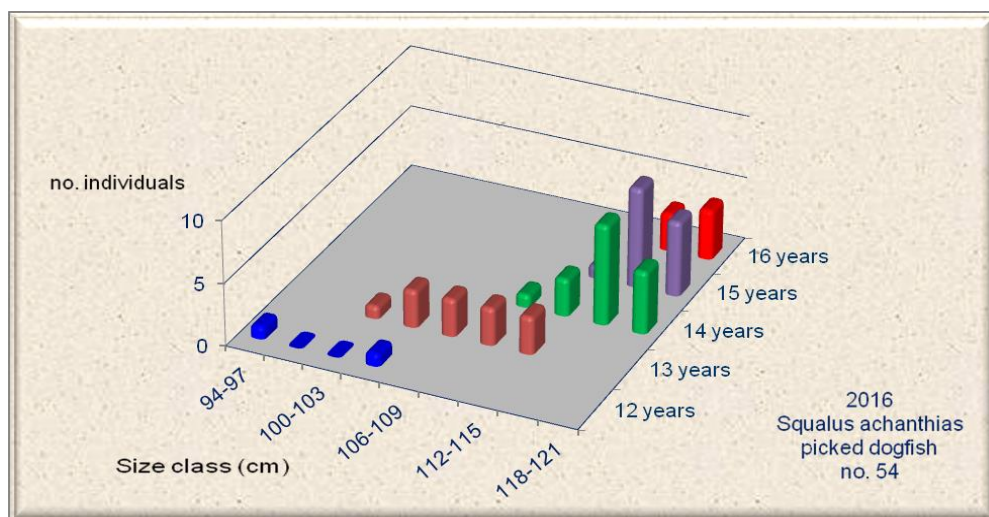
Annex 78 - Percentage of turbot specimens larger than the average size at first sexual maturation



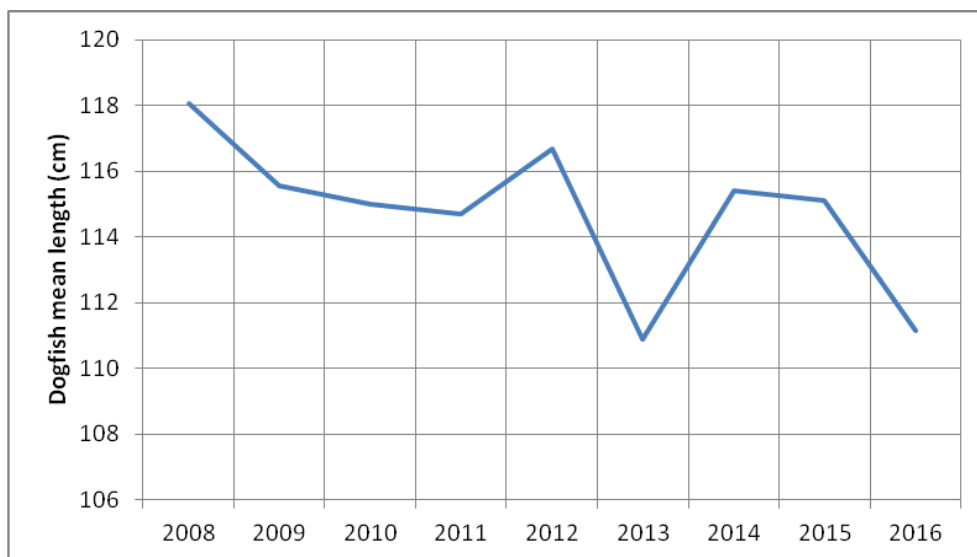
Annex 79 - Percentage of total number of picked dogfish specimens on length classes



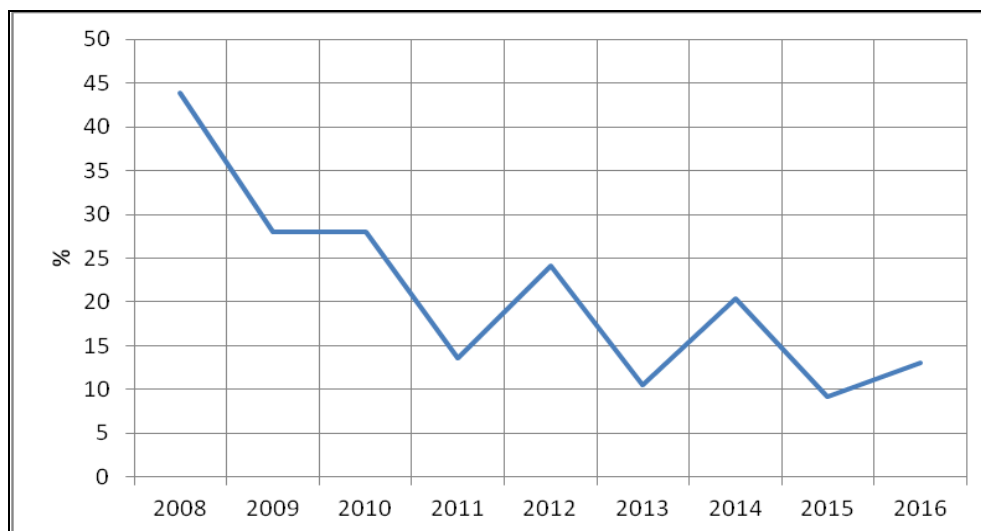
Annex 80 - Percentage of total number of picked dogfish specimens on age classes



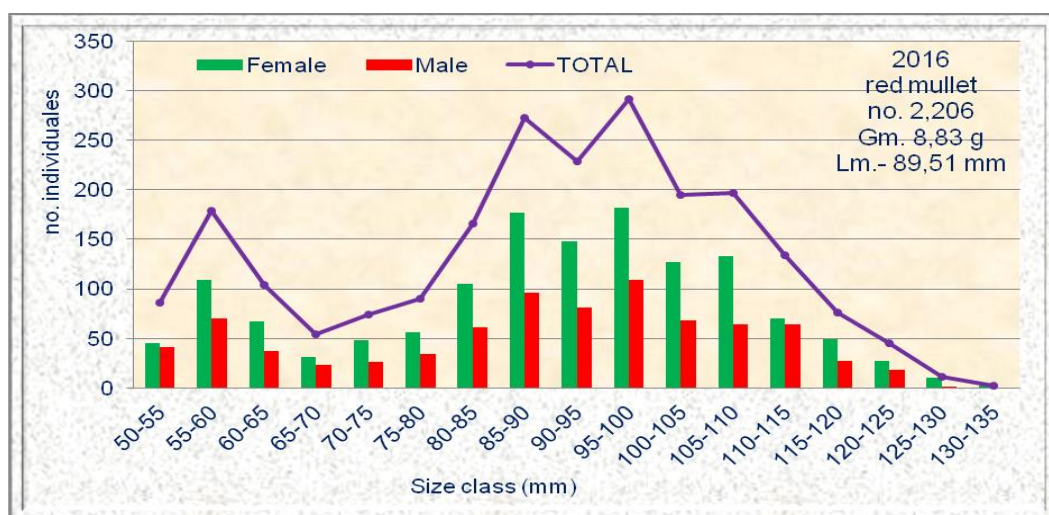
Annex 81 - The average length of picked dogfish in the period 2008 to 2016



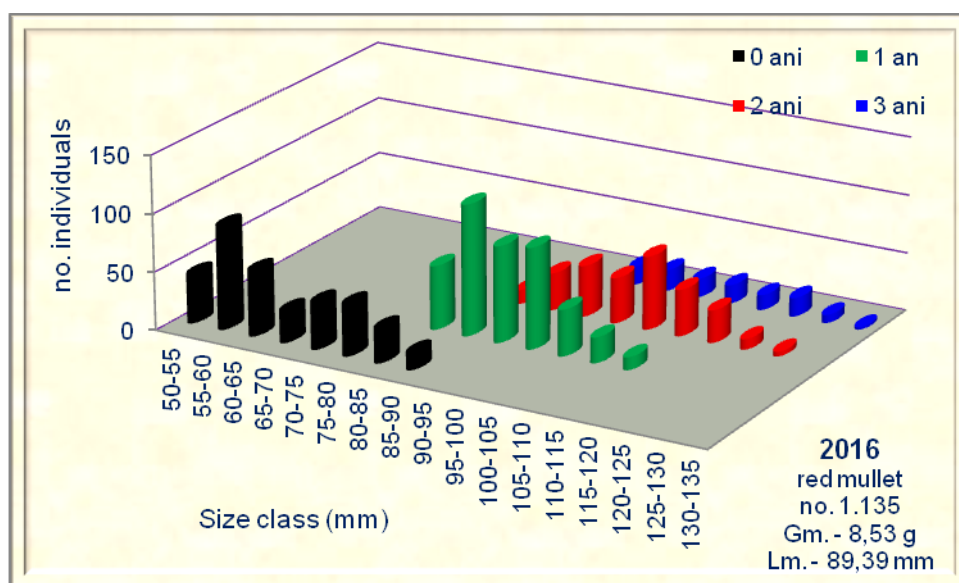
Annex 82 - Percentage of picked dogfish specimens larger than the average size at first sexual maturation



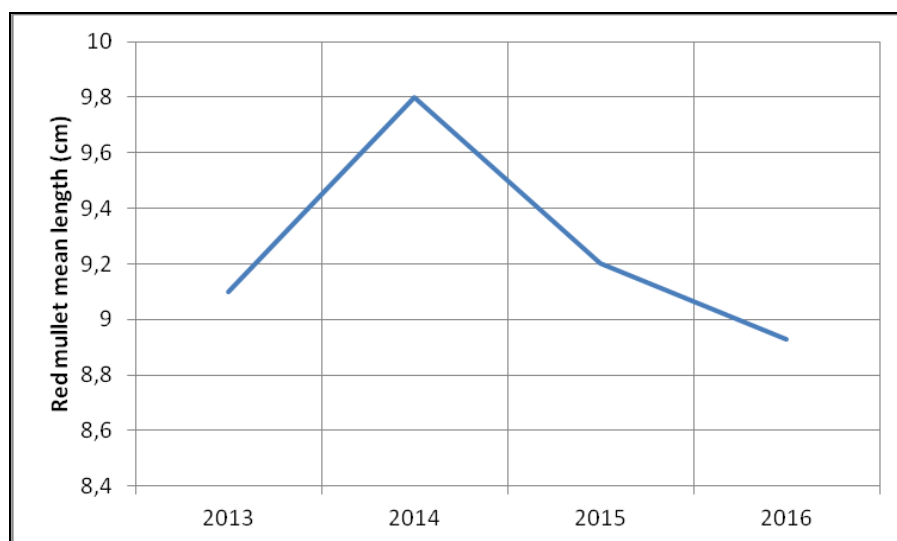
Annex 83 - Percentage of total number of red mullet specimens on length classes



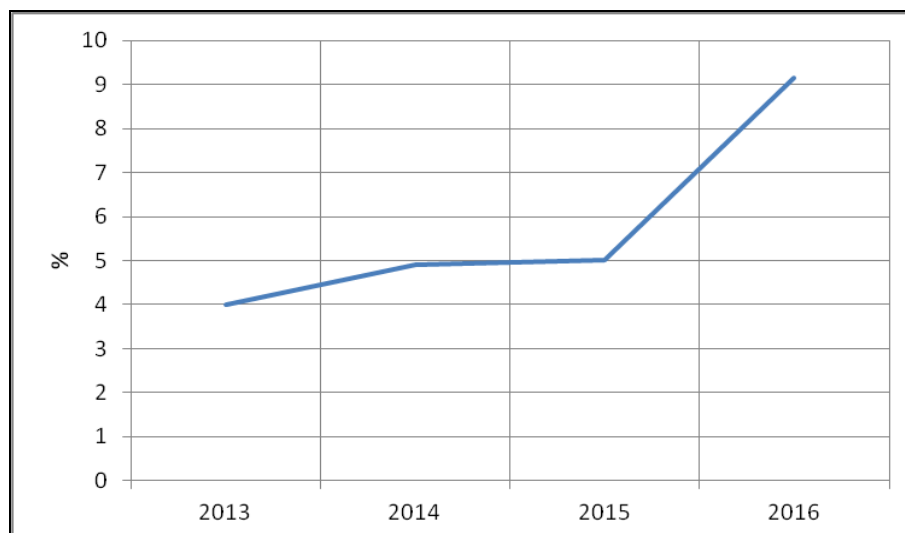
Annex 84 - Percentage of total number of picked dogfish specimens on age classes



Annex 85 - The average length of red mullet in the period 2013 to 2016



Annex 86 - Percentage of red mullet specimens larger than the average size at first sexual maturation



Annex 87 – Activity zone for vessels (VMS), in anul 2016

