REPUBLIC OF CYPRUS

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CYPRUS ANNUAL REPORT ON EFFORTS DURING 2015 TO ACHIEVE A SUSTAINABLE BALANCE BETWEEN FISHING CAPACITY AND FISHING OPPORTUNITIES

Prepared in accordance with Commission Regulation (EU) 1013/2010

Nicosia, May 2016

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Introduction

Article 22 of Regulation (EU) No. 1380/2013 and Article 13 of Commission Regulation (EC) 1013/2010 provide for the submission of an annual report by the Member States on their effort during the previous year to achieve a sustainable balance between fishing capacity and fishing opportunities.

The structure of the present report is based on the required elements specified in Article 14 of Regulation 1013/2010, in accordance with the new Guidelines[1]. The relevant advice of STECF (STECF-15-15 reviewing EWG 15-17) has also been taken into account for the preparation of the report.

According to Article 14(2) of Regulation (EC) 1013/2010, "*The reports by Member State shall not exceed 10 pages*". Due to this limitation, certain information is provided in Annexes. Since the required information to be submitted in the report is progressively increasing, we would like to suggest the removal of the 10 pages limitation from Regulation (EC) 1013/2010.

A. Description of the fishing fleets in relation to fisheries: developments during the previous year, including fisheries covered by multiannual management or recovery plans

A.(i) *Description of fleets*

The Cyprus fishing fleet included in the Fleet Register on the 31st of December 2015 was composed of 832 fishing vessels. **Table 1** provides information on the capacity of the different segments of the fleet, which are based on the fleet segmentation proposed by the DCF (Appendix III of Decision 2010/93/EU). Capacity values for 2015 and 2014 refer to 31st of December of the relevant year, while values for 2004 refer to 1st of May – day of accession of Cyprus to the EU.

It should be noted that there are restrictions on the number of licenses provided each year in the different fleet segments, and that the Fleet Register includes a number of vessels that are not licensed. It is clarified that each license may have been given or suspended at any time during the year; therefore the total number of licenses at any given time may differ from the total number of licenses issued during the year. It is further clarified that a vessel may receive more than one license.

The terms (obligations and restrictions) for each fishing license category are provided online at the following link (in greek):

http://www.moa.gov.cy/moa/dfmr/dfmr.nsf/All/377DC6D5E1EC841642257D9E002F3AF2?OpenDocument.

The vessels using *Polyvalent passive gears with length 0-< 6m and 6-< 12m* compose the small scale inshore fleet and operate mainly with bottom set nets and bottom longlines, targeting demersal species. As it is shown in Table 1, they represent the large majority of the fishing vessels in the Register (96%). Cyprus Fisheries Law[2] provides for a limited number of licenses for this segment annually and divides it into three (3) subcategories: vessels with fishing license category A', vessels with fishing license category B' and vessels with fishing license category C'.

The vessels with license A' or B' have basically length 6-<12m and are allowed to operate every day all year round, with a number of restriction measures on the use of fishing gears and minimum landing sizes, according to the national and community law. The main gears used are trammel nets (GTR), set gillnets (GNS) and set

[1] COM(2014)545 final – Communication from the Commission to the European Parliament and the Council Guidelines for the analysis of the balance between fishing capacity and fishing opportunities according to Art 22 of Regulation (EU) No 1380/2013 of the European Parliament and the Council on the Common Fisheries Policy

[2] Basic Fisheries Law Cap. 135 and subsequent amendments of 1961 to 2007,
Fisheries Regulations of 1990 to 2012 based on Article 6 of the Basic Law

longlines (LLS). Coding used in the current report for Polyvalent passive gears with length 0-< 6m and 6-< 12m of category A&B is *PG VL0006 (Category A&B)* and *PG VL0612 (Category A&B)*.

The vessels with license category C' are mostly 0-<6m and have a limited fishing effort. By Law, the maximum allowable working days for this category are 70 days, and can be exercised only in the weekends. There are very strict measures on the use of fishing gears. Maximum allowable length of nets is 600m, and maximum number of longlines is 2 with no more than 200 hooks each. The primary gear used is trammel nets (GTR) and the secondary gear is hand and pole lines [LHP]. Coding used in the current report for Polyvalent passive gears with length 0-< 6m and 6-< 12m of category C is *PGO VL0006 (Category C)* and *PGO VL0612 (Category C)*.

During 2015, 810 licenses for the small scale inshore fleet were issued. Specifically, there were 393 licenses for A & B category (32 with length 0-<6m, 361 with length 6-<12m), and 414 licenses for the C category (343 with length 0-<6m, 71 with length 6-<12m). As it is mentioned later on, by the end of the year a number of licenses for A & B category were removed, due to a cessation scheme.

During 2015 one vessel received license for operating with purse seines in territorial waters, registered as *Purse seiner* in the Fleet Register.

The vessels using *Polyvalent 'passive' gears with length ≥12m* range from 12-26m (the large majority from 12-18m) and are engaged in two fisheries; mainly in the large pelagic fishery using drifting longlines and operating around Cyprus waters and the eastern Mediterranean (targeting swordfish, bluefin tuna and albacore), but also in the inshore demersal fishery using mostly set nets and set longlines. A limited number of licenses are provided for this segment annually. Furthermore, closed seasons, restriction measures on the use of gears and minimum landing sizes are employed, in accordance to national and community regulations. During 2015, 25 vessels of this segment received license. In addition, 3 non-exclusive trawlers and also the purse seiner received license for operating in the large pelagic fishery with drifting longlines.

Demersal trawlers range from 22-27 m. The licensed trawlers are categorised, based on their type of license, in those fishing in the territorial waters of Cyprus and those fishing in international waters (eastern and central Mediterranean). For the trawlers fishing in territorial waters a limited number of licenses is provided every year, and an extended closed season (from 1st of June until the 7th of November) is employed. It should be noted that additional management measures for this segment were employed during 2011. Furthermore, restriction measures on the use of trawl nets and minimum landing sizes are employed for all licensed trawlers, in accordance with national and community law. As it has already been mentioned, a small number of non-exclusive trawlers may receive a license for participating at the large pelagic fishery as well. During 2015 7 trawlers received a fishing license. From these, 2 had license for fishing with trawl nets both in territorial and international waters, and the remaining 5 for fishing with trawl nets only in international waters.

A.(ii) *Link with fisheries*

The bottom trawl fishery in the territorial waters and the inshore fishery with polyvalent passive gears target a mix of demersal species, as it is the case in all Mediterranean demersal fisheries. The exploited stocks are not shared with other countries' fleets. Landings of both fisheries are mainly composed by *Spicara smaris*, *Boops boops*, *Mullus barbatus*, *M. surmuletus*, *Pagellus erythrinus* and cephalopods (*Octopus vulgaris*, *Eledone moschata*, *Loligo vulgaris* and *Sepia officinalis*). The inshore fishery with polyvalent passive gears catches also relatively large quantities of *Sparisoma cretense, Spicara maena* and *Siganus* spp.

The average landings of the bottom trawl fishery in territorial waters and the inshore fishery with polyvalent passive gears, for the period 2012-2014, were ~ 110 t and 540 t respectively. The average landings of the main demersal commercial species of each fishery for the same period are provided in **Table 2**.

Bottom trawlers in international waters operate in the central and eastern Mediterranean, catching *Merluccius merluccius*, , *P. erythrinus*, *M. surmuletus*, *M. barbatus*, *Spicara* spp., *B. boops* and cephalopods. The average landings in international waters for the period 2012-2014, according to the available data, were ~60t. Concerning

the large pelagic fishery, polyvalent vessels operate in the Eastern Mediterranean, catching basically *Xiphias gladius*, *Thunnus alalunga* and *Thunnus thynnus* with drifting longlines. *T. thynnus* is under a multiannual recovery plan, in accordance with Council Regulation (EU) No. 302/2009. The average landings of these main species for the period 2012-2014 are provided in **Table 3**.

A detailed table with information on landings by species and fleet segments in 2014 is provided in **Annex I**.

Table 1: Description and development of Cyprus fishing fleet

	2015			2014			2004			Change in 2015 - 2004		
	GT	kW	No.	GT	kW	No.	GT	kW	No.	GT (%)	kW (%)	No.(%)
Vessels using Polyvalent 'passive' gears only 0-<6m	394.8	11,116	394	453	12,131	438	100	1,640	104	294	578	279
Vessels using Polyvalent 'passive' gears only 6-<12m	1412.7	19,654	403	1668	22578	481	2,297	26,699	720	-38	-26	-44
Vessels using Polyvalent 'passive' gears only 12-<18m	522.7	3,781	25	494.9	3,710	25	654	6,364	36	-20	-41	-31
Vessels using Polyvalent 'passive' gears only 18-<24m	80	320	1	80	320	1	419	2,412	9	-81	-87	-89
Vessels using Polyvalent 'passive' gears only 24-<40m	108	220	1	108	220	1	208	668	2	-48	-67	-50
Vessels using Polyvalent 'passive' gears only >=40m	0	0	0	0	0	0	415	736	1	-100	-100	-100
Demersal trawlers 18-<24m	103	260	1	92	257	1	1,344	3,513	13	-92	-93	-92
Demersal trawlers 24-<40m	667	2,110	6	816	2,529	7	1,363	4,146	12	-51	-49	-50
Demersal trawlers >=40m	0	0	0	0	0	0	5,008	6,016	2	-100	-100	-100
Purse seiners 18-<24m	51	270	1	51	270	1	51	270	1	0	0	0
Purse seiners 24-<40m	0	0	0	0	0	0	135	589	1	-100	-100	-100
Total	3,339	37,731	832	3,763	42,016	955	11,994	53,052	901	-72	-29	-8
Note: Situation as registered in the Community Fleet Register on 23/3/2016.												

Table 2: Average landings (t) of the main demersal species in Cyprus waters for the period 2012-2014.

Table 2: Average landings (t) of the main demersal species of the Cyprus fishery for the period 2012-2014			
Species		Inshore fishery with polyvalent passive gears	Trawl fishery (CYP waters)
Boops boops	BOG	81	7
Diplodus spp.	SRG	17	
Mullus barbatus	MUT	9	11
Mullus surmuletus	MUR	25	1
Octopus vulgaris	OCT	36	3
Pagellus erythrinus	PAC	6	4
Pagrus pagrus	RPG	8	
Sepia officinalis	CTC	13	
Siganus spp.	SPI	26	
Sparisoma cretense	PRR	23	
Spicara maena	BPI	18	
Spicara smaris	SPC	33	60

Table 3: Average landings (t) of the main species of the Cyprus large pelagic fishery for the period 2012-2014 caught by surface longlines.

Species		Landings (LLD) in tons
Thunnus alalunga	ALB	372
Thunnus thynnus	BFT	18
Xiphias gladius	SWO	49

A.(iii) *Development in fleets*

As shown in Table 1, from the 1st of May 2004 until the 31st of December 2015 the Cyprus fishing fleet was reduced by 72% in tonnage, 29% in power and 8% in number of vessels.

During the period 2004-2015 there has been a capacity increase in the fleet segment "vessels *using polyvalent gears 0-<6m*"with the entry in the Register of a large number of vessels with length <6m, following the creation by Law in 2007 of a new category of small scale inshore fishing license (category C, see section A(i)). For all other fleet segments there has been a capacity reduction in terms of tonnage, power and number of vessels.

Until the 31st of December 2015, exits financed with public aid involved vessels from the three main fishing fleets as follows:

- destruction of 17 vessels using polyvalent passive gears (12-24m LOA), with tonnage and power
- destruction of 4 demersal trawlers and change of activity (RET) of 2 demersal trawlers,
- destruction of small scale inshore vessels (<12m, category license A&B): 107 vessels were destructed in 2013 and 65 vessels were destructed in 2015. It is noted that an additional vessel was destructed in January 2016, thus the overall number of small scale inshore vessels destructed were 173.

B. Impact of fishing effort reduction schemes on fishing capacity

B.(i) *Statement of effort reduction schemes*

An action plan was made in 2013 and 2014 concerning small scale inshore vessels (vessels with polyvalent passive gears 0-<12m with category licenses A&B), following the demonstration of imbalance between their fishing capacity and fishing opportunities in the 2013 & 2014 Cyprus Balance Reports. The basic tool for achieving balance was the permanent cessation of fishing activities through scrapping or heritage function.

The *Management Plan for the Bottom Trawl Fishery Within the Territorial Waters of Cyprus*, which is based on Article 19 of Council Regulation (EC) 1967/2006 (Mediterranean Regulation), is implemented since the end of 2011. The plan restricts the number and the fishing activity of the bottom trawlers operating in territorial waters.

B.(ii) *Impact on fishing capacity of effort reduction schemes*

Following the action plan included in the 2013 and 2014 Balance Reports, during 2015 65 small scale inshore vessels (and one vessel in January 2016) were permanently withdrawn. The resulting capacity reduction was 189.74 GT (186.62 GT in 2015 and 1.55 GT in 2016) and 2863 kW (2797.08 in 2015 and 14.92 in 2016).

The national technical measures introduced in the Management Plan for the Bottom Trawl Fishery include the restriction of the number of licensed bottom trawlers to 2, and the restriction of 2 areas from fishing with trawl nets on a rotational basis (northwest part of Cyprus from 8 November – 15 February every year and southeastern part of Cyprus from 16 February-31 May every year).

C. Statement of compliance with entry / exit scheme and with level of reference

Cyprus ensures that at all times the fishing capacity in tonnage (GT) and power (kW) is equal or less than the fishing capacity at its accession date as adjusted, according to the provisions of Article 8 of Regulation (EC) 1013/2010 and Article 23 of Regulation (EU) 1380/2013.

The evolution of the fleet capacity of the Cypriot fleet (in tonnage and power) compared to its tonnage ceiling, as registered in the Community Fleet register, is provided in **Annex II**.

D. Strength and weaknesses of the fleet management system together with plan for improvements and information on general level of compliance with fleet policy instruments

D.(i) *Summary of weaknesses & strengths of fleet management system*

The Department of Fisheries and Marine Research (DFMR) is the single authority responsible for the management of fisheries resources and fishing fleet (management measures, issue and management of fishing licenses, control of fishing activities and VMS, record of logbooks, structural funds concerning fisheries). Management measures employed refer to effort restrictions, while TACs apply only for Bluefin tuna (as in the rest of the Mediterranean countries).

Strengths of fleet management system

- Having a single authority for the management of fisheries resources and fishing fleet, as mentioned above, the following are ensured: continuous and precise update of the Fleet Register, monitoring of entries and exits, rapid and efficient evaluation of the eligibility of possible requests to increase tonnage, collection of all necessary information related with the management of the fleet, efficient effort monitoring through VMS and cross-check of effort logbook data, and efficient monitoring and inspection of Bluefin tuna catches.
- The Cyprus Fisheries Law provides for a maximum limit of fishing licenses for the different fleet segments, allowing the Director of the DFMR adjustments on the number of licenses issued year-by-year.
- Fishing licenses are linked to both the vessels and the fishermen.

Weaknesses of fleet management system

- At the moment, the Cyprus Fisheries Law provides for a short duration of fishing licenses (1-3 years), with the possibility of renewal. The evaluation of the applications for the fishing licenses, the selection and the issue of licenses require high administrative effort and are very time-consuming, considering the limited number of DFMR employees engaged with licensing. Furthermore, this short duration of licenses may not be considered secure enough by the fishermen, and may lead to an "opportunistic" fishing behavior with no long-term vision for economic sustainability.
- The absence of auction markets, the existence of many small landing sites and the fact that the majority of the fishing fleet is under 10m create difficulties in monitoring and evaluating the accuracy of the landings and fishing effort.

D.(ii) *Plan for improvements in fleet management system*

The Cyprus Fisheries Law is under revision process. The modifications concern the criteria for obtaining a fishing license, reduction of the number of fishing licenses of the inshore small scale fleet (in accordance with scrapping schemes), multi-year duration of fishing licenses, possibility of transferable licenses, and further restrictions for the recreational fishery. The modifications aim to adjust the fishing capacity of the small scale inshore fleet, relieve administration burden on the issue of licenses, reduce the fishing effort exercised by the recreational fishery and assist the work of the control division. The modifications are under revision by the Cypriot Legal Services since 2012.

D.(iii) *Information on general level of compliance with fleet policy instruments*

Cyprus considers a priority the adjustment of the fishing capacity of its fleet, for achieving a balance between the resources and the fishing capacity. It complies with the provisions of Article 23 of Regulation (EU) 1380/2013, Regulation (EU) 1013/2010, Regulation (EC) 26/2004 on the management of entries and exits, the increase in tonnage (for improving safety, working conditions, hygiene and product quality), the collection, transmission and exchange of information and the financial support through the EMFF on the adaptation of its fishing fleet.

Specifically, Cyprus ensures that at all times the fishing capacity in tonnage (GT) and power (kW) is equal or less than the fishing capacity at its accession date as adjusted, through a continuous and precise update of the Fleet Register, evaluation of the eligibility of possible requests to increase tonnage, monitoring of entries and exits. Necessary information related with the management of the fleet are collected, for evaluating the availability of fisheries resources in relation to the active Cyprus fleet.

Efforts to implement the National and Community Legislation continued in 2015 in order to ensure compliance with the Common Fisheries Policy of the EU and to accomplish the best possible management of the resources. During 2015, the decree put into force was the Application of Community Decisions and Community Regulations that concern the Fisheries Sector, Law 134/2006 (10^{th} Modification of Annexes of Law - Decree 82/2015). In Decree 82/2015, the Regulation (EE) no. 508/2014 on the European Maritime and Fisheries Fund, and relevant implementation Regulations, were included.

The DFMR is using modern technologies in a wise, proper and effective way, in order to identify and combat illegal fishing activities. During the 2015, the monitoring of fishing activities via VMS of the vessels with overall length more than 12 meters and the cargo vessels was successfully carried out by the Fishing Monitoring Center (FMC). Also in 2015, the VMS was upgraded and the new system was delivered, which provides more information and ease of use, but also allowing it to be used in combination with the Electronic Reporting System (ERS) for the conduct of cross checks. With the upgrade, data exchange from the VMS with other Member States, the EU, the EFCA (European Fisheries Commission) and NEAFC (North East Atlantic Fisheries Commission) continued successfully throughout 2015 via FLUX Transportation Layer technology.

Electronic Reporting System is compulsory for the fishing vessels with length more than 12m and for the registered buyers with an annual financial turnover in first sales of fisheries products of more than EUR 200,000. The FMC is monitoring the fishing activities of the vessels via ERS and when there is a need, the VMS data are crosschecked with the ERS data. During the year, DFMR has successfully exchanged ERS data with the EU and the EFCA.

In 2015 the Fisheries inspection and Control System (FICS) was delivered, in which Fishery Inspectors submit data relevant to control and inspections of fishing vessels and recreational freshwater dam fishery, as well as data relevant to the trade of fishery products. Beyond the information submitted by the above users, the system draws data from the Fisheries Resource Management System (FRMS) via the internet. The main goal of the FICS is to improve control and inspection conduct and procedures, providing better information for the Inspectors carrying them out.

During 2015, DFMR Inspectors made 433 patrols along the coast, in harbours and fishing shelters, at selling / storage facilities of fishery products and to inland waters and 156 patrols at sea. Within the framework of the Joint Deployment Plan for the conservation of Bluefin tuna fisheries DFMR conducted 28 patrols at ports regarding polyvalent vessels that fished using longlines and another 14 patrols were performed at sea regarding the same fleet specifically for the control of fishing activities of Bluefin tuna.

During the above mentioned patrols, a total of 890 inspections and 2043 controls were carried out for compliance purposes with the National and Community Legislation. Within the year 2015 DFMR reported a total of 305 Infringements, of different categories of offenses.

E. Information on changes of the administrative procedures relevant to the management of the fleet

As mentioned also in section D (ii), the Fisheries Law is under amendment, among others for modifying the management system of limited licenses (criteria for obtaining a fishing license, duration and transferability of fishing licenses).

During 2015 a technical committee was established, composed by representatives of the DFMR and the Fisheries Association of Small Scale Inshore Fishery (A&B category), for discussing technical issues related to the management of small scale fleet (A&B categories).

F. Estimation and discussion of balance indicators

Given the 10 pages limitation of the report and the extent of the indicators, information on the estimation of indicators and relevant discussion are provided in **Annex III**. For the estimation of the indicators, the requirement of Article 22§3 of Regulation (EU) 1380/2013, to draw "*separate assessments for fleets operating exclusively outside Union waters"* was considered; to meet this requirement, a disaggregation of the trawler fleet was made where possible.

G. Statement of MS opinion on balance of fleet capacity and fishing opportunity

Based on an overview of the estimated balance indicators in traffic light system, the fishing capacity of the different fleet segments in relation to the fishing opportunities is as follows:

- Demersal trawlers operating in both territorial and outside Union waters are fully utilized. The estimated SHI, with an average value above 1, suggests that the fleet relies on stocks that are overfished; however the main species exploited by the fleet (*Spicara smaris* in GSA25*)* is fished sustainably. Both economic indicators show over-capitalization; it is noted that the economic indicators are common for all trawlers, including the trawlers operating exclusively in non-Union waters. The reason for clustering all trawlers for the estimation of the economic indicators is explained in Annex III. It can be suggested that the fleet is not in balance with the resources it exploits and that an action plan is required.

- The vessels with polyvalent passive gears 0-6m (small scale inshore fishery with category licenses A&B) seem to some extent underutilized, suggesting a technical overcapacity. The estimated SHI suggests that the fleet relies on stocks that are overfished; the stocks contributing to the indicator reach almost 30% of the value of landings, including the most important species for the segment (*Boops boops*). The RoFTA is positive, with no indication of economic over-capitalization. The ratio CR/BER suggests that the segment is profitable; however this result should be treated with caution, because of the high difference from previous years and the fact that the information is based only on questionnaires, due to the absence of financial accounts and logbooks. Based on the above, it cannot be concluded that this fleet segment is in balance with the resources. An action plan for the small scale inshore fleet (0-12m with category license A&B) was implemented in 2015, based on the conclusions of previous reports that an action plan was required.

- The vessels with polyvalent passive gears 6-12m (small scale inshore fishery with category licenses A&B) seem to some extent underutilized, suggesting a technical overcapacity. The estimated SHI suggests that the fleet relies on stocks that are overfished; the stocks contributing to the indicator reach almost 30% of the value of landings, including the most important species for the segment (*Boops boops*). The RoFTA is negative but with positive trend, indicating economic over-capitalization. The ratio CR/BER is positive but much lower than 1, showing that the income is not enough for covering the costs; however this result should be treated with caution, because of the high difference from previous years and the fact that the information is based only on questionnaires, due to the absence of financial accounts and logbooks. In overall, the available scientific information indicates that this fleet segment is in imbalance with the resources it exploits. An action plan for the small scale inshore fleet (0-12m with category license A&B) was implemented in 2015, based on the conclusions of previous reports that an

action plan was required. The basic tool for achieving balance of the fleet by 2020 was the permanent cessation of fishing activities, through the withdrawal of fishing vessels from this fleet. In line with the time-frame for the implementation of the action plan, the measure of permanent cessation of fishing activities was finalized by 2016. Considering that the most recent data of the biological and economic indicators included in the current report refer to 2014, the results of the action plan cannot be evidenced in the current report.

- The vessels with polyvalent passive gears 12-18m show a heterogeneous activity, which is considered to exist due to the different fisheries exercised by the fleet, rather than due to a technical overcapacity. The SHI suggests that the fleet relies on sustainably exploited stocks (BFT); however the low contribution of the relevant stocks in the value of landings cannot strongly support this result. Both economic indicators do not indicate an economic over-capitalization. In conclusion, the estimated indicators do not suggest that this fleet segment is in imbalance with the resources.

- Demersal trawlers operating exclusively outside Union waters are under-utilised; however, this is not considered an indication of technical overcapacity, taking into account the small number of licensed vessels, and the possibility of the fleet to exploit a variety of stocks all over the Mediterranean Sea (international waters). The estimated SHI suggests that the fleet relies on stocks that are overfished; however, the stocks contributing to the indicator reach only 10% of the value of landings. The economic indicators, estimated for all trawlers, show over-capitalization. The reason for clustering all trawlers is explained in Annex III. In conclusion, there is not sufficient information to suggest whether this fleet is in balance.

- The vessels with polyvalent passive gears with length 0-< 6m and 6-< 12m of category C [*PGO VL0006 (Category C)* and *PGO VL0612 (Category C)]* show a heterogeneous activity, and exploit stocks that are overfished (with stocks contributing to the indicator SHI reaching about 16% of the value of landings). Due to the very limited fishing effort that they can exercise by Law, i.e. a maximum allowable of 70 working days, which can be exercised only in the weekends, and many limitations on the use of fishing gears [see Secion A(i)], it is considered that a statement of the fishing capacity of these fleet segments in relation to the fishing opportunities is not applicable.

H. Action Plan

Polyvalent passive gears 0-<12m (small scale inshore fishery with category licenses A&B)

An action plan for the small scale inshore fleet (0-12m with category license A&B) was implemented in 2015, based on the conclusions of previous reports that an action plan was required. The target of the action plan has been to achieve balance of the fleet by 2020, with basic tool for achieving it the permanent cessation of fishing activities, through the withdrawal of around/ at least 55fishing vessels from this fleet. In line with the time-frame for the implementation of the action plan, the measure of permanent cessation of fishing activities was finalized by 2016, with the withdrawal of 66 small scale inshore vessels. In parallel, from 2016 onwards the maximum number of licenses for the small scale inshore fishery (0-12m with category license A&B) has been reduced in number equal with the number of licenses already removed. It is anticipated that the results of the measure of permanent cessation of the action plan will be evidenced soon. However, considering that the most recent data of the biological and economic indicators estimated in the current report refer to 2014, the results of the action plan cannot be evidenced in the current report. As stated in the Action Plan of the Cyprus Balance Report for 2014, following the completion of the permanent cessation measure, and based on the annual evaluations, further management measures may be included for achieving balance of the fleet by 2020.

Demersal trawlers operating in territorial and international waters

This action plan sets the adjustment targets and tools to achieve a balance for the *demersal trawlers operating in both territorial and non-EU waters*. As indicated in section G, the causes of the imbalance have a biological and economic background. The target is to achieve balance of the fleet by 2020.

Background

The fleet is composed of 2 trawlers, which annually receive licenses for fishing in territorial waters (GSA 25). These trawlers also receive additional licenses, either for fishing with trawl net in international waters, and/or for fishing large pelagic with surface longlines. The two trawlers operate mostly with trawl nets in territorial waters; during the closed season in territorial waters they operate using the other types of license (operating with trawl nets in international waters and/ or with surface longlines for fishing large pelagic).

An extended closed season for trawling is in place in territorial waters, from 1st of June until the 7th of November, since the 80's. A *Management Plan for the Bottom Trawl Fishery Within the Territorial Waters of Cyprus* is implemented since the end of 2011, based on Article 19 of Council Regulation (EC) 1967/2006 (Mediterranean Regulation). The national technical measures introduced in the Management Plan for the Bottom Trawl Fishery include the restriction of the number of licensed bottom trawlers to 2, and the restriction of 2 areas from fishing with trawl nets on a rotational basis (northwest part of Cyprus from 8 November – 15 February every year and southeastern part of Cyprus from 16 February-31 May every year). The mesh size of trawl nets, either in territorial or international waters, is 50mm diamond shape in accordance with the Mediterranean Regulation. Other provisions of the Mediterranean Regulation include minimum distance from the shore and minimum depth.

Until 2005 the fleet was composed of 8 trawlers. Due to the very narrow continental shelf of Cyprus and its relatively steep slope, the fleet in territorial waters has been operating in the inshore zone, exploiting shared resources with the small scale inshore fishery. Landings of both fisheries are mainly composed by *Spicara smaris*, *Boops boops*, *Mullus barbatus*, *M. surmuletus*, *Pagellus erythrinus* and cephalopods. The main species of the trawlers has always been *Spicara smaris,* a species that is assessed as sustainably exploited. With the implementation of the community provisions on 40mm diamond shape mesh size of the trawl nets, followed by the 50mm diamond-shape mesh size, catches of *S. smaris* have been decreased. During the last decade, 6 out of 8 trawlers permanently ceased their fishing activities, through scrapping or change of activity (RET).

Measures proposed

Taking into account the above mentioned restrictions already in place for this fleet segment, it is considered that the most suitable measure for achieving balance between the fleet and its fishing opportunities is the closing of areas of biological importance for the stocks exploited by the fleet segment. The closing of areas will be made through the establishment of fisheries restricted areas, either permanently or at seasonal level. This measure is expected to be beneficial also for the small scale inshore fleet, considering that the two fleets share common fisheries resources.

The intended time-frame for the establishment of fisheries restricted areas is the following:

- Adoption in 2017 of the management plan for the Natura 2000 site in Cavo Greko (southeast of Cyprus), which includes additional restrictions on fishing activities. Furthermore, during 2016-2017 it is intended to initiate consultation with stakeholders for extending restrictions of fishing activities in larger part of Cavo Greko area.
- Establishment by 2018 of a fisheries restricted area in northwest of Cyprus; the area has been proposed following consultation with scientists, fishermen and other stakeholders.
- Consultation with stakeholders during 2016-2017 for introducing a whole year area closure for trawling in the northwest of Cyprus, where there are indications that it is an area of biological importance; it should be mentioned that in this area there is already in place a seasonal closure for trawling.

Additionally, it is planned to intensify control inspections on trawl activities in territorial waters. The possibility of implementing additional control measures concerning trawlers, including the obligatory use of CCTVs, is being evaluated.

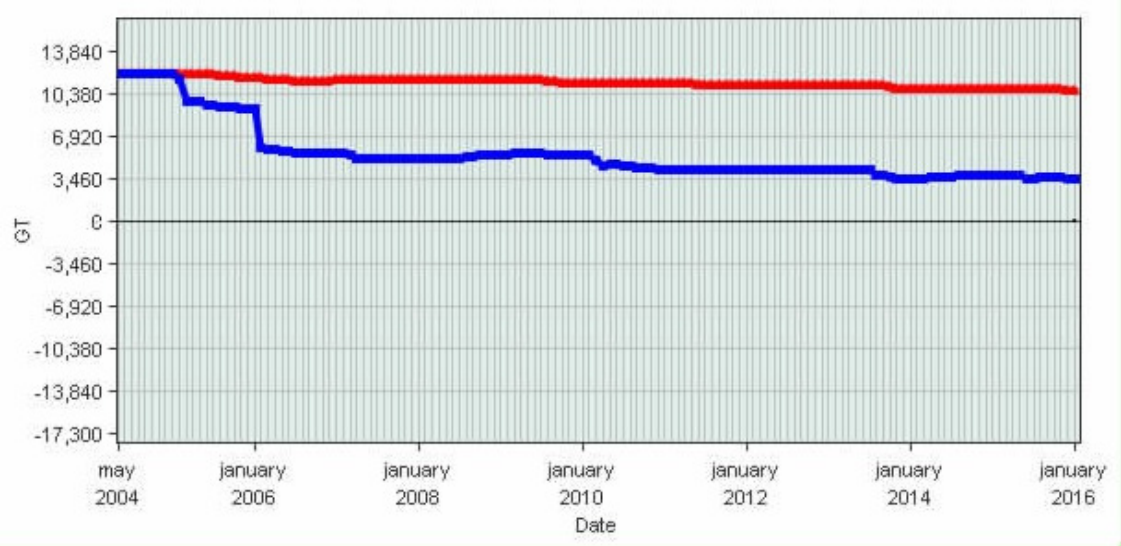
A further way for achieving balance between the fleet segment and its fishing opportunities is to reduce its reliance on demersal stocks fished at territorial waters. In this respect, incentives are being considered for increasing fishing effort in exploiting demersal species at international waters and large pelagic.

ANNEX I

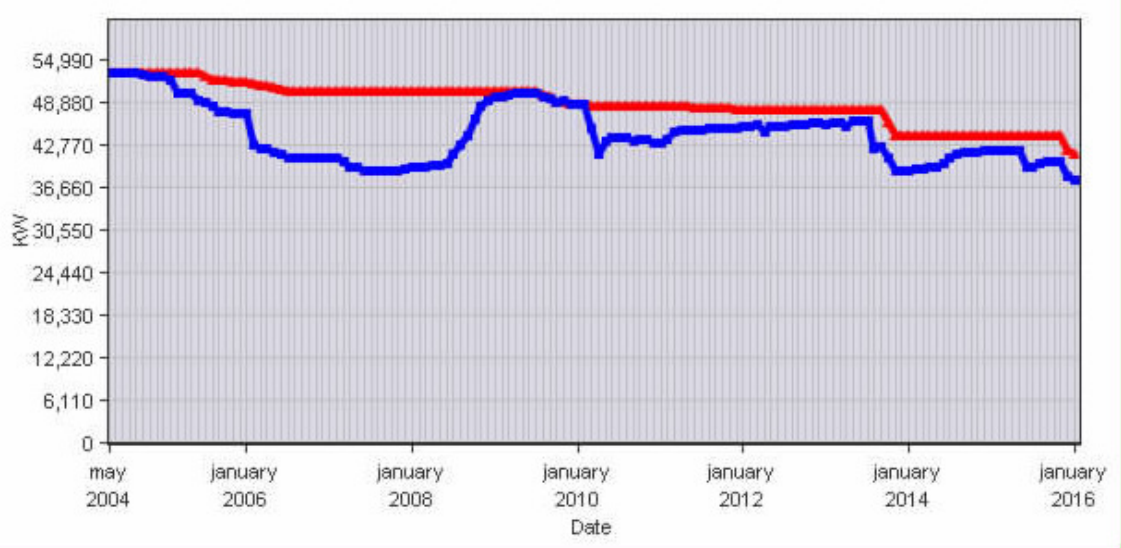
Estimated Capture Production for 2014 (in Kg)												
Species		Bottom Trawl Fishery			Small Scale Inshore Fishery (length <12m)			Polyvalent Fishery (length ≥12m)			Purse seine Fishery	Total Production
		Cyprus waters	International Mediterranean Waters	Total	A&B Category	C Category	All Categories	Surface Longlines	Nets / Set Longlines	All gears		
Thunnus alalunga	**ALB**			**0**	5,593		**5,593**	392,224		392,224		**397,817**
Seriola dumerili	**AMB**			**0**	5,729	1,581	**7,310**		37	37		**7,347**
Echelus myrus	**AOM**	27	67	**94**	998		**998**		10	10		**1,102**
Engraulis encrasicolus	**ANE**			**0**	511		**511**			0		**511**
Diplodus annularis	**ANN**		5	**5**	303	233	**536**			0		**541**
Sphyraena spp.	**BAR**	16	2	**18**	2,624	1,039	**3,663**		2	2		**3,683**
Thunnus thynnus	**BFT**			**0**			**0**	3,630		3,630		**3,630**
Boops boops	**BOG**	5,952	2,911	**8,863**	94,515	2,651	**97,166**		3,561	3,561	50	**109,589**
Sarda sarda	**BON**			**0**	11,902		**11,902**		40	40		**11,942**
Spicara maena	**BPI**	4		**4**	18,471		**18,471**		22	22		**18,497**
Spondyliosoma cantharus	**BRB**		20	**20**	248		**248**			0		**268**
Helicolenus dactylopterus	**BRF**	3		**3**	33		**33**			0		**36**
Dicentrarchus labrax	**BSS**			**0**	2,971	632	**3,603**			0		**3,603**
Serranus cabrilla	**CBR**	3,723	78	**3,801**	75,597		**75,597**		671	671		**80,068**
Clupeidae	**CLP**	326	**447**	**773**	1,112		**1,112**		235	235		**2,120**
Umbrina cirrosa	**COB**		40	**40**	100		**100**			0		**140**
Conger conger	**COE**			**0**	12		**12**			0		**12**
Palinurus spp.	**CRW**			**0**	450		**450**		1	1		**451**
Diplodus vulgaris	**CTB**	19		**19**	2,317		**2,317**		17	17		**2,353**
Sepia officinalis	**CTC**	355	861	**1,216**	17,361		**17,361**		268	268		**18,844**
Dentex dentex	**DEC**	51		**51**	4,064		**4,064**		4	4		**4,119**
Squalus spp.	**DGZ**			**0**	187		**187**			0		**187**
Coryphaena hippurus	**DOL**			**0**	14		**14**		52	52		**66**
Epinephelus caninus	**EFJ**	384	325	**709**	544		**544**		69	69		**1,321**
Centracanthus cirrus	**EHI**	342		**342**			**0**			0		**342**
Fistularia comersonni	**FIO**			**0**	1,405		**1,405**			0		**1,405**
PLEURONECTIFORMES	**FLX**	42	68	**110**			**0**			0		**110**
Phycis spp.	**FOX**			**0**	221		**221**			0		**221**
Epinephelus marginatus	**GPD**	9	**6**	**15**	5,250		**5,250**		18	18		**5,283**
Epinephelus aeneus	**GPW**	103		**103**	174		**174**			0		**277**
Triglidae	**GUX**	572	1,005	**1,577**	75		**75**		83	83		**1,735**
Sargocentron rubrum	**HWH**			**0**	3,998		**3,998**		1	1		**3,999**
Merluccius merluccius	**HKE**	438	78	**516**	2,108		**2,108**		19	19		**2,642**
Siganus luridus	**IGU**			**0**	5,216		**5,216**		21	21		**5,237**
Trachurus spp.	**JAX**	503	587	**1,090**	1,366		**1,366**		57	57		**2,513**
Zeus faber	**JOD**	216	16	**232**	90		**90**			0		**322**
Synodus saurus	**LIX**	1,685	545	**2,230**	1,092		**1,092**		127	127		**3,449**
Euthynnus alletteratus	**LTA**			**0**	801		**801**		100	100		**901**
Scomber scombrus	**MAC**	132	25	**157**	174		**174**		3	3		**334**
Scomber japonicus	**MAS**	129	23	**152**	5,435		**5,435**		59	59	2,170	**5,645**
Muraena helena	**MMH**			**0**	134		**134**			0		**134**
Lophius spp.	**MNZ**	100		**100**			**0**			0		**100**
Mugilidae	**MUL**			**0**	1,136	2,078	**3,214**		1	1		**3,215**
Mullus surmuletus	**MUR**	2,143	1,215	**3,358**	29,117	1,418	**30,535**		1,113	1,113		**35,006**
Mullus barbatus	**MUT**	9,233	5,947	**15,180**	7,672	313	**7,985**		5,097	5,097		**28,262**
Miscellaneous	**MZZ**		**903**	**903**	32,480	7,585	**40,065**		904	904		**41,872**
Octopodidae	**OCT**	1,525	1,293	**2,818**	35,036		**35,036**		449	449		**38,302**
Pagellus erythrinus	**PAC**	2,628	2,479	**5,106**	4,607		**4,607**		874	874		**10,586**
Spicara spp.	**PIC**	976	1,560	**2,536**	16,225	705	**16,930**		115	115		**19,581**
Sparisoma cretense	**PRR**	10		**10**	26,920	2,797	**29,717**			0		**29,727**
Rajidae	**RAJ**	96		**96**	1,359		**1,359**			0		**1,455**
Pagrus pagrus	**RPG**	27	110	**137**	8,475	129	**8,604**			0		**8,741**
Etrumeus teres	**RRH**			**0**	97		**97**			0		**97**
Caranx crysos	**RUB**			**0**	574		**574**			0		**574**
Pagellus acarne	**SBA**	2,355	5,964	**8,319**	8,759		**8,759**		4,150	4,150		**21,228**
Sparus aurata	**SBG**		55	**55**	2,658		**2,658**			0		**2,713**
Pagellus bogaraveo	**SBR**			**0**	23		**23**			0		**23**
Oblada melanura	**SBS**			**0**	1,206		**1,206**			0		**1,206**
Scorpaena spp.	**SCS**		55	**55**	10,168		**10,168**		226	226		**10,449**
Sarpa salpa	**SLM**	971		**971**	739	1,300	**2,039**			0		**3,010**
Spicara smaris	**SPC**	38,270	1,127	**39,397**	13,652		**13,652**		15,058	15,058	367	**68,107**
Siganus spp.	**SPI**			**0**	565	7,874	**8,439**			0		**8,439**
Loligo spp.	**SQC**	2,694	568	**3,262**	3,527		**3,527**		1,371	1,371		**8,160**
Siganus rivulatus	**SRI**			**0**	11,089		**11,089**		7	7		**11,096**
Serranus scriba	**SRK**			**0**	2,107		**2,107**			0		**2,107**
Lithognathus mormyrus	**SSB**			**0**	478	2,269	**2,747**		3	3		**2,750**
Dasyatidae	**STT**	465	14	**479**	4,702		**4,702**		121	121		**5,303**
Diplodus sargus	**SWA**	3	15	**18**	12,339	2,144	**14,483**		24	24		**14,525**
Xiphias gladius	**SWO**	344		**344**	4,802		**4,802**		38,455	38,455	59	**43,601**
Trachinidae	**TRA**	15	71	**86**	26		**26**		4	4		**116**
Balistes capriscus	**TRG**			**0**	274		**274**			0		**274**
Uranoscopus scaber	**UUC**	162	23	**185**	214		**214**		7	7		**406**
Labridae	**WRA**			**0**	9,836		**9,836**			0		**9,836**
Polyprion americanus	**WRF**			**0**	94		**94**			0		**94**
Xyrichtys novacula	**XYN**			**0**	43		**43**			0		**43**
Scyllarides latus	**YLL**			**0**	413		**413**			0		**413**
Echelus myrus	**AOM**	25	67	**92**	998		**998**		10	10		**1,100**
TOTAL		**77,072**	**28,575**	**105,646**	**525,598**	**34,748**	**560,346**	**395,854**	**73,460**	469,314	**2,645**	**1,135,306**

ANNEX II - Tonnage and Power Statistics for Cyprus

Cyprus: **Tonnage** of the fleet compared to its tonnage ceiling
Evolution between 1-5-2004 and 1-1-2016
(tonnage ceiling: red line)



Cyprus: **Power** of the fleet compared to its power ceiling.
Evolution between 1-5-2004 and 1-1-2016.
(power ceiling: red line)



ANNEX III: Estimation and Discussion of Balance Indicators

In accordance with the 2014 Balance Indicator Guidelines adopted by the Commission, two *biological* (sustainable harvest indicator, stocks-at-risk indicator), two *economic* and two *vessel use indicators* should be used for assessing the balance of the different Cyprus fleet segments. STECF 15-15 noted that for the two biological indicators there are serious problems and limitations, an issue raised with detail also by STECF 15-02.

STECF 15-15 considers that "*the judgement of whether a fleet is in or out of balance is the responsibility of managers and not one that can be scientifically rationalised*", and that by using the biological indicators in combination with the economic indicators "*may help Member States and the European Commission to identify problematic fleet segments that have recently had both a major biological impact and a high economic dependency on overharvested stocks, thereby providing an indication on which fleet segments may need to be targeted for management action*".

Another comment made by STECF 15-15 which should be considered for the evaluation of the balance of the fleets with their fishing opportunities concerns the small scale fishing segments, in which many vessels only fish part-time; in such a case, the vessel use indicators and the economic indicators may be misleading.

For the preparation of the 2015 Report, Cyprus has calculated the indicators required by the 2014 Commission Guidelines, considering that there has not been any further revision of the Guidelines. Data used are the ones transmitted by Cyprus to the Commission through the 2016 Official Fleet Economic Data Call. For the calculations, the requirement of Article 22§3 of Regulation (EU) 1380/2013, to draw "*separate assessments for fleets operating exclusively outside Union waters"* was considered; to meet this requirement, a disaggregation of the trawler fleet had to be made.

Information is provided below on the clustering of fleet segments that were done for the estimation of indicators.

Clustering of fleet segments

The segments that have been clustered are shown on the Table below "Economic Clustering of fleet segments", where the clusters are named after the biggest segment in terms of number of vessels. The demersal trawlers below 24m is only 1 and thus, for sampling purposes as well as for confidentiality reasons it was regrouped in the >24m length group (up to 28m). Both groups are engaged in the same metier and they target the same group of species with the same gear despite their vessels length.

The same, as above, stands for the vessels using polyvalent passive gears where the vessels belonging in the length group 18-<24m are only one and the vessels above the 24m length group are only one. Thus for sampling purposes, as well as for confidentiality reasons they were regrouped in the 12-<18m length group. It is noted that there are 20 active vessels with length less than 18m (length group 12-<18m). All the groups of vessels using polyvalent passive gears with length>12m are engaged in the same metiers since these vessels target the same group of species with the same gears despite their vessels length; this is evident from the landings value and volume.

It is emphasized that the cost structure of the clustered segments does not change much. It is important to have in mind that for all segments a census was performed.

Table - Economic Clustering of fleet segments

Name of the clustered fleet segments	Total number of vessels in the cluster by the 1st of January of the sampling year	Fleet segments which have been clustered	Number of vessels in the segment by the 1st of January of the sampling year
Passive gears : Polyvalent "passive gears only" 12-<18m*	22	Polyvalent passive gears 12-18 m	20
		Polyvalent passive gears 18-24 m	1
		Polyvalent passive gears 24-40 m	1
Demersal trawlers 24-<40m*	5	Demersal trawlers 18-24 m	1
		Demersal trawlers 24-<40m	4

(i) ***Biological Sustainability Indicators***

Sustainable Harvest Indicator

The Sustainable Harvest Indicator (SHI) was calculated based on data provided by Cyprus through the 2016 Official Fleet Economic Data Call. The SHI indicator was calculated by the DFMR in accordance with the guidelines, using the available values of $F/F_{msy\ proxies}$ for the stocks concerned (included in the STECF 14-24 Report[1], the 2015 GFCM-SAC Report[2], the STECF 13-27 Report[3] and the 2016 GFCM-SAC Report[4]).

Table 2 provides the calculations made for estimating SHI for the different fleet segments. As seen from Table 2, only for one fleet, the demersal trawlers fishing in both territorial and international waters, the indicator SHI covers stocks that constitute at least 40% of the value of landings. The inclusion of stocks in the SHI indicator that constitute at least 40% of the value of landings is difficult to reach, due to the limited available number of stock assessments, and the high number of species caught, especially for the small scale inshore fleet.

In the case of the small scale inshore fleet, the species (stocks) represented in the indicator are important species in value and catch, and are been traditionally assessed; therefore this indicator

[1] Scientific, Technical and Economic Committee for Fisheries (STECF) – Consolidated Advice on Fish Stocks of Interest to the European Union (STECF-14-24). 2014. Publications Office of the European Union, Luxembourg, EUR 27028 EN, JRC 93360, 747 pp

[2] FAO General Fisheries Commission for the Mediterranean 2015. *Report of the seventeenth session of the Scientific AdvisoryCommittee. FAO headquarters, Rome, 24–27 March 2015.* FAO Fisheries and Aquaculture Report No. 1110. Rome, FAO. 300 pp.

[3] Scientific, Technical and Economic Committee for Fisheries (STECF) – Review of scientific advice for 2014 – Consolidated Advice on Fish Stocks of Interest to the European Union (STECF-13-27). 2013. Publications Office of the European Union, Luxembourg, EUR 26328 EN, JRC 86158, 575 pp.

[4] FAO General Fisheries Commission for the Mediterranean. 2016. Draft Report of the eighteenth session of the *Scientific Advisory Committee. FAO headquarters, Nicosia, Cyprus, 21–23 March 2016.* FAO Fisheries and Aquaculture Report No. xxxx Rome, FAO. xxx pp.

is considered the best available scientific information for assessing biologically the balance of the small scale inshore fleet.

Concerning the polyvalent fleet (12-18m), for the two main species caught (*Thunnus alalunga* and *Xiphias gladius*) there are no available F values (see STECF 14-24 Report)[1]. Taking into account that the use of catch per unit effort is not recommended by the guidelines, this indicator is considered as the best available for assessing biologically the balance of this fleet.

As regards the trawlers fishing exclusively in non-Union waters, the indicator represents stocks in central and eastern Mediterranean with very small contribution in catches and value (<1%), except for one stock in central Mediterranean which represents more than 5%.

Table 3 provides the values of the SHI for the different fleet segments, in traffic light system.

Table 3: Estimated Sustainable Harvest Indicator for the Cyprus fleet segments in traffic light system

Fleet segment	Sustainable Harvest Indicator		
	2012	2013	2014
CYP DTS VL2440 (fishing in territorial and international waters)	1.5	1.4	1.7
CYP DTS VL2440 (fishing only in international waters)	3.8	3.9	3.7
CYP PGP VL1218	0.7	0.6	1.0
CYP PG VL0612 (Category A&B)	2.7	2.7	2.6
CYP PG VL0006 (Category A&B)	2.7	2.7	2.7
CYP PGO VL0612 (Category C)	2.6	3.7	2.4
CYP PGO VL0006 (Category C)	2.6	3.7	2.3

Stocks-at-risk indicator

According to the guidelines, a stock at high biological risk means a stock which is either (a) assessed as being below the B_{lim} biological level; (b) subject to an advice to close the fishery, to prohibit directed fisheries, to reduce the fishery to the lowest possible level, or similar advice from an international advisory body, even where such advice is given on a data-limited basis; (c) subject to a fishing opportunities regulation which stipluates that the fish should be returned to the sea unharmed or that landings are prohibited; (d) a stock which is on the IUCN "red list"or is listed by CITES.

None of the stocks exploited by the Cyprus fishing fleet segments seems to meet the above criteria. It is noted though that in the Mediterranean there is no agreed reference point concerning stock biomass (B), therefore the first criterion cannot be evaluated.

Difficulties in applying both biological indicators to Mediterranean stocks are indicated in the STECF-14-09 report.

[1] Scientific, Technical and Economic Committee for Fisheries (STECF) – Review of scientific advice for 2014 – Consolidated Advice on Fish Stocks of
Interest to the European Union (STECF-13-27). 2013. Publications Office of the European Union, Luxembourg, EUR 26328 EN, JRC 86158, 575 pp.

Table 2: Calculation of SHI for the fleet segments.

Fleet	CYP DTS VL2440 (fishing in territorial and international waters)					CYP DTS VL2440 (fishing only in international waters)					CYP PGP VL1218				
Year	stock	Fi/Fmsy	Vi	% in total V	% in total Catch	stock	Fi/Fmsy	Vi	% in total V	% in total Catch	stock	Fi/Fmsy	Vi	% in total V	% in total Catch
2014	bog-gsa25	3.80	63869	7.1%	7.1%	bog-gsa26	1.85	2139.5	0.5%	0.8%	bog-gsa25	3.80	14498	0.8%	0.4%
	mur-gsa25	1.83	47084	5.2%	2.0%	mur-gsa26	2.70	3296	0.8%	0.4%	mur-gsa25	1.83	9254	0.5%	0.1%
	mut-gsa25	2.4	261109	29.0%	11.3%	pac-gsa26	1.91	3143	0.8%	0.9%	bft	0.4	85344	4.5%	3.1%
	spc-gsa25	0.60	294776	32.7%	54.1%	ank-gsa15_16	1.88	225	0.06%	0.5%	mut-gsa25	2.4	7701	0.4%	0.1%
	bog-gsa26	1.85	572	0.0006	0.0008	hke-gsa12_16	3.90	57550	14.2%	11.7%	spc-gsa25	0.60	8745.06	0.5%	0.4%
	mur-gsa26	2.7	2112	0.0023	0.001										
	SHI=	**1.70**	sum	74.4%	74.6%	**SHI= 3.7**		sum	16.4%	14.3%	**SHI= 1.0**		sum	**6.6%**	**3.6%**
2013	bog-gsa25	3.80	28908	4.0%	4.5%	ank-gsa15_16	1.88	212.5	0.02%	0.12%	bog-gsa25	3.80	3781	0.26%	0.10%
	mur-gsa25	1.83	21004	2.9%	1.0%	hke-gsa12_16	3.90	64038	5.88%	7.35%	mur-gsa25	1.83	9357	0.65%	0.11%
	spc-gsa25	0.60	293441	40.5%	56.3%	mut-gsa15_16	2.89	270	0.02%	0.02%	bft	0.4	164056	11.40%	4.42%
	mut-gsa25	2.4	182434	25.2%	10.0%	bog-gsa26	1.85	123	0.01%	0.05%	mut-gsa25	2.4	7588	0.53%	0.09%
						mur-gsa26	2.70	1100	0.10%	0.08%	spc-gsa25	0.6	2445	0.170%	0.11%
						pac-gsa26	1.91	174	0.02%	0.04%					
	SHI= 1.4		sum	72.6%	71.9%	**SHI= 3.9**		**sum**	**6.1%**	**7.7%**	**SHI = 0.6**		**sum**	**13.0%**	**4.8%**
2012	bog-gsa25	3.80	30470	5.5%	6.9%						bog-gsa25	3.80	5769	0.4%	0.2%
	mur-gsa25	1.83	4954	0.9%	0.3%	hke-gsa12_16	3.90	39900	8.19%	7.7%	mur-gsa25	1.83	4106	0.3%	0.1%
	mut-gsa25	2.4	110283	19.9%	8.0%	pac-gsa15_16	2.40	838	0.17%	0.2%	bft	0.40	87825	6.8%	4.6%
	spc-gsa25	0.60	173264	31.2%	46.9%	bog-gsa26	1.85	1017	0.21%	0.5%	mut-gsa25	2.4	1498	0.1%	0.0%
	bog-gsa26	1.85	444	0.1%	0.1%	pac-gsa26	1.91	424	0.09%	0.1%	spc-gsa25	0.60	12373	1.0%	1.0%
	pac-gsa26	1.91	509	0.1%	0.1%										
	SHI= 1.5		**sum**	**57.6%**	**62.4%**	**SHI= 3.8**		**sum**	**8.7%**	**8.4%**	**SHI= 0.7**		sum	8.7%	5.8%

(Table 2 cont..)

Fleet	CYP PG VL0612 (A&B category)					CYP PG VL0006 (A&B category)					CYP PGO VL0612 (C category)					CYP PGO VL0006 (C category)				
Year	stock (i)	Fi/Fmsy	Vi	% in total V	% in total Catch	stock (i)	Fi/Fmsy	Vi	% in total V	% in total Catch	stock (i)	Fi/Fmsy	Vi	% in total V	% in total Catch	stock (i)	Fi/Fmsy	Vi	% in total V	% in total Catch
2014	bog-gsa25	3.80	563514	14.7%	18.3%	bog-gsa25	3.80	26681	10.0%	12.2%	bog-gsa25	3.80	2604	4.7%	7.6%	bog-gsa25	3.80	12712	4.8%	7.6%
	mur-gsa25	1.83	595817	15.5%	5.7%	mur-gsa25	1.83	18386	6.9%	2.5%	mur-gsa25	1.83	4733	8.6%	4.1%	mur-gsa25	1.83	23109	8.7%	4.1%
	spc-gsa25	0.60	123759	3.2%	5.6%	spc-gsa25	0.60	6761	2.5%	4.6%	mut-gsa25	2.4	1022	1.9%	0.9%	mut-gsa25	0.60	4992	1.9%	0.9%
	mut-gsa25	2.4	160603	4.2%	1.6%	mut-gsa25	2.4	4129	1.5%	0.6%	spc-gsa25	0.60	456	0.8%	2.0%	spc-gsa25	2.4	2224	0.8%	2.0%
	SHI = 2.6		**sum**	**37.7%**	**31.1%**	**SHI= 2.7**		**sum**	**20.9%**	**19.8%**	**SHI= 2.4**		**sum**	**15.99%**	**14.64%**	**SHI= 2.3**		**sum**	**16.2%**	**14.6%**
2013	bog-gsa25	3.80	458484	12.9%	12.1%	bog-gsa25	3.80	43514	12.9%	12.12%	bog-gsa25	3.80	2813	16.9%	18.7%	bog-gsa25	3.80	12391	16.9%	18.7%
	mur-gsa25	1.83	367051	10.4%	4.2%	mur-gsa25	1.83	34836	10.4%	4.23%	mur-gsa25	1.83	9	0.1%	0.0%	mur-gsa25	1.83	40	0.1%	0.0%
	mut-gsa25	2.4	211986	6.0%	2.4%	mut-gsa25	2.4	20119	6.0%	2.45%	mut-gsa25	2.4	229	1.4%	0.7%	mut-gsa25	2.40	1010	1.4%	0.7%
	spc-gsa25	0.60	50214	1.4%	2.3%	spc-gsa25	0.60	4766	1.4%	2.29%										
	SHI = 2.7		**sum**	**30.7%**	**21.1%**	**SHI = 2.7**		**sum**	**30.7%**	**21.1%**	**SHI= 3.7**		**sum**	**18.3%**	**19.4%**	**SHI = 3.7**		**sum**	**18.3%**	**19.4%**
2012	bog-gsa25	3.80	629176	15.7%	14.7%	bog-gsa25	3.80	57601	15.7%	14.7%	bog-gsa25	3.80	3973	0.06	0.08	bog-gsa25	3.80	22516	5.9%	7.6%
	mur-gsa25	1.83	395108	9.8%	4.0%	mur-gsa25	1.83	36172	9.8%	4.0%	mur-gsa25	1.83	4871	0.07	0.04	mur-gsa25	1.83	27604	7.2%	4.1%
	mut-gsa25	2.4	107511	2.7%	1.1%	mut-gsa25	2.4	9843	2.7%	1.1%	mut-gsa25	2.4	1073	0.02	0.01	mut-gsa25	2.4	6080	1.6%	0.9%
	spc-gsa25	0.60	151828	3.8%	9.4%	spc-gsa25	0.60	13900	3.8%	9.4%	spc-gsa25	0.60	399	0.01	0.02	spc-gsa25	0.60	2261	0.6%	2.0%
	SHI = 2.7		**sum**	**32.0%**	**29.3%**	**SHI = 2.7**		**sum**	**32.0%**	**29.3%**	**SHI = 2.6**		**sum**	**15.2%**	**14.6%**	**SHI = 2.6**		**sum**	**15.2%**	**14.6%**

.**(ii)** ***Economic indicators***

Return on Fixed Tangible Assets (RoFTA)

The ROI indicator shows the long term viability. The return on investment compared to the potential return that would be received from investing the capital asset value elsewhere. Due to the fact that there is not a market for fishing rights in Cyprus the data on intangible assets are not available. It is noted that the fishing licences in Cyprus are issued annually and quotas exist only for blue-fin tuna but they are granted on an annual basis. Thus, the value of intangible assets is considered small. Having this in mind, the indicator Return on Fixed Tangible Assets (RoFTA) for each category of the fleet is considered more appropriate, since the value of fishing rights is not included.

The indicator is calculated as follows:

RoFTA = Net profit/ Depreciated Replacement Value

The indicator is compared against TRP: return on risk free long term investment minus inflation.

The RoFTA indicator is estimated for the four segments of the active fishing fleet (vessels with polyvalent passive gears 0-<6m, vessels with polyvalent passive gears 6-<12m vessels, with polyvalent passive gears 12-24m and demersal trawlers 24-40m, based on 2012-2013 data. These four segments were chosen by JRC, checked by EWG 14-04 and accepted by STECF 14-09 for the balance report of 2013. It is noted that the fleet segments: polyvalent passive gears 12-24m and demersal trawlers 24-40m, have been clustered as shown and explained on the Annex Table:"Economic Clustering of fleet segments", where the clusters are named after the biggest segment in terms of number of vessels.

The Trafic light system is used: red < TRP; green > TRP ; yellow 0 - TRP

RoFTA

	YEARS		
FLEET SEGMENTS	2013	2014	Δ
DTS VL2440	1.6	-4.6	↘
PG VL0006 (A&B)	-9.4	6.5	↗
PG VL0612 (A&B)	-9.7	-5.3	↗
PGP VL 1218	-7.5	3.4	↗

RISK FREE INTEREST RATE - INFLATION

YEARS	2013	2014	
	4.2	4.3	

The development trend is analysed for all indicators for the latest year (2014) to 2013 and indicated by an arrow: "↗" improved/increased; "↘"deteriorated/decreased and "↔"stable.

The RoFTA regarding the fleet segments of DTS and PG 6-12m is negative, indicating economic over-capitalization. This is not the case for PG 0-6m and PGP 12-18m, for which the RoFTA is positive.

In 2013 the small scale fishery fleet was reduced by 107 vessels, scrapped within the framework of the Scheme of Permanent Cessation, co-funded by European Fisheries Fund, and despite the fact that it is too early to come up with safe results the situation for this fleet segment (PG 0-6m and PG 6-12m), as it is shown by the development trend above, is getting improved. Comparing the RoFTA with the interest rate of a low risk long term investment, as calculated above, shows that it is more beneficial to invest elsewhere.

The calculations of indicator RoFTA are the following:

TABLE: Calculation of RoFTA

		2013				2014		
	PG VL0006 (A&B)	PG VL0612 (A&B)	PGP VL1218	DTS VL2440	PG VL0006 (A&B)	PG VL0612 (A&B)	PGP VL1218	DTS VL2440
Income	336,141	3,541,779	1,504,440	1,812,575	267,752	3,832,190	1,888,147	1,293,624
Less Exp	386,114	5,294,339	2,199,398	1,700,183	222,053	5,082,521	1,678,388	1,701,217
Net Profit	-49,973	-1,752,559	-694,958	112,392	45,699	-1,250,331	209,760	-407,593
Cap. Value	662,952	18,065,120	7,421,260	7,056,000	698,627	23,486,470	6,213,431	8,834,000
RoFTA	-7.54	-9.70	-9.36	1.59	6.54	-5.32	3.38	-4.61

Ratio between current revenue and break-even revenue

This ratio gives a short term view of financial viability and it is calculated as follows:

Ratio = Current Revenue (CR) / BER

Where, the break even revenue (BER) is the revenue required to cover both the fixed and variable costs so that zero profits and losses are generated and it is calculated as follows:

BER = (Fixed Costs) (1 – {Variable Costs / Current Revenue})

It is noted that the opportunity cost of capital is excluded.

CR/BER*

				2013	2014	
CYP	AREA37	DTS	VL2440	1.22	0.22	↘
CYP	AREA37	PG	VL0006 (A&B)	-0.67	2.08	↗
CYP	AREA37	PG	VL0612 (A&B)	-0.62	0.08	↗
CYP	AREA37	PGP	VL1218	-0.13	1.54	↗

In the fleet segment of demersal trawlers and small-scale fishery 6-12m the ratio is less than 1 showing that the income is not enough to cover all the costs: fixed, variable and capital, indicating that the segment is not profitable, with potential overcapitalization. This is not the case for small-scale fishery 0-6m and polyvalent vessels 12-18m.

The calculations for this indicator are shown below:

TABLE: Calculation of Ratio= CR/BER

		2013				2014		
	PG VL0006 (A&B)	PG VL0612 (A&B)	PGP VL1218	DTS VL2440	PG VL0006 (A&B)	PG VL0612 (A&B)	PGP VL1218	DTS VL2440
Income	336,141	3,541,779	1,504,440	1,812,575	267,752	3,832,190	1,888,147	1,293,624
FC	29,953	1,081,300	616,088	514,299	42,343	1,359,001	389,720	519,811
VC	356,161	4,213,039	1,583,310	1,185,884	179,710	3,723,520	1,288,668	1,181,406
BER	-502,915	-5,705,284	-11,751,843	1,487,504	128,773	47,924,451	1,227,479	5,992,265
CR/BER	-0.67	-0.62	-0.13	1.22	2.08	0.08	1.54	0.22

(iii) Vessel Use Indicators

Inactive Fleet Indicator

Table 5 provides the proportion of inactive vessels of the total fleet with respect to number of vessels, power and tonnage for the period 2008-2015. The development trend is analysed for the latest year (2015) to the average over the period 2008-2014 and indicated by an arrow: "↗" increased; "↘"decreased and "↔"stable; the analysis is the same with the one made by JRC for the 2013 Report. The indicator suggests a decrease in the inactive capacity (in terms of number, GT and kW), with relative stabilization in the last years.

Table 5: Inactive Fleet Indicator

				Number of inactive vessels								Δ	no. inactive vessels as % of total vessels								Δ
MS		Fleet segment		2008	2009	2010	2011	2012	2013	2014	2015	#	2008	2009	2010	2011	2012	2013	2014	2015	#
CYP	NONE	INACTIVE	VL0006	165	83	38	34	22	25	25	24	↘	17.9%	6.9%	3.8%	3.3%	2.3%	2.6%	2.8%	2.7%	↘
CYP	NONE	INACTIVE	VL0612	207	183	40	35	24	15	18	25	↘	22.5%	15.3%	4.0%	3.4%	2.5%	1.6%	2.0%	2.8%	↘
CYP	NONE	INACTIVE	VL1218	10	15	3	3	5	4	3	0	↘	1.1%	1.3%	0.3%	0.3%	0.5%	0.4%	0.3%	0.0%	↘
CYP	NONE	INACTIVE	VL1824	3	4	1	1	0	0	0	1	↘	0.3%	0.3%	0.1%	0.1%	0.0%	0.0%	0.0%	0.1%	↘
CYP	NONE	INACTIVE	VL2440	3	2	1	3	2	2	2	0	↘	0.3%	0.2%	0.1%	0.3%	0.2%	0.2%	0.2%	0.0%	↘
CYP	National inactive fleet			388	287	83	76	53	46	48	50	↘	42.1%	24.0%	8.4%	7.4%	5.5%	4.8%	5.3%	5.6%	↘

				Inactive kW as % of fleet kW								Δ	Inactive GT as % of fleet GT								Δ
MS		Fleet segment		2008	2009	2010	2011	2012	2013	2014	2015	kW	2008	2009	2010	2011	2012	2013	2014	2015	GT
CYP	NONE	INACTIVE	VL0006	8.5%	3.2%	2.5%	2.2%	1.4%	1.5%	1.8%	1.7%	↘	3.1%	1.5%	1.0%	0.8%	0.6%	0.7%	0.7%	0.7%	↘
CYP	NONE	INACTIVE	VL0612	17.7%	12.7%	3.3%	2.8%	3.1%	1.8%	1.9%	3.3%	↘	13.8%	10.7%	2.4%	2.1%	1.9%	1.5%	2.1%	2.6%	↘
CYP	NONE	INACTIVE	VL1218	3.0%	5.2%	0.9%	0.8%	1.4%	1.2%	1.7%	0.0%	↘	2.9%	7.4%	1.5%	1.5%	2.5%	2.5%	1.8%	0.0%	↘
CYP	NONE	INACTIVE	VL1824	1.8%	1.8%	0.6%	0.6%	0.0%	0.0%	0.0%	0.6%	↘	5.3%	6.8%	1.2%	1.3%	0.0%	0.0%	0.0%	2.9%	↗
CYP	NONE	INACTIVE	VL2440	2.4%	1.3%	1.0%	2.2%	1.7%	2.2%	1.9%	0.0%	↘	7.9%	4.9%	3.5%	9.4%	5.9%	7.5%	6.9%	0.0%	↘
CYP	National inactive fleet			33.3%	24.3%	8.2%	8.7%	7.6%	6.7%	7.2%	5.7%	↘	33%	31%	10%	15%	11%	12%	11%	6%	↘

Vessel Utilisation Indicator

Table 6 provides the estimated Vessel Utilisation Indicator per fleet segment in traffic light system (red < 0.7; green ≥ 0.9; yellow 0.7-0.9). The development trend is analyzed for the latest year (2015) to the average over the period 2009-2014 and indicated by an arrow: "↗" improved/increased; "↘"deteriorated/decreased and "↔"stable.

In accordance with the Guidelines, the capacity is indicated in kW for active and in GT for passive gear segments. For all fleets, except the trawlers fishing exclusively in non-EU waters, the maximum activity was based on the maximum effort actually expended by a vessel in the segment (in kWdays or GT-days) in the reference year. This is because, based on DFMR experience, this can be considered as the maximum effort that could be exerted by the fleets. For the trawlers fishing exclusively in non-EU waters, the maximum activity of all reference years was based on the maximum number of days exercised by this fleet during 2014; while in the previous years the maximum observed number of days of this fleet was quite low, in 2014 it was significantly increased and it can be considered as a reference for the previous years.

Table 6: Estimated Vessel Utilisation Indicator for the Cyprus fleet segments in traffic light system.

Fleet segment	Vessel Utilisation Indicator												Δ	Comments
	2009		2010		2011		2012		2013		2014			
	kW-days	GT-days	kW-days	GT-days	kW-days	GT-days	kW-days	GT-days	kW-days	GT-days	kW-days	GT-days		
CYP OTB VL1824 (fishing in territorial and international waters)	0.93		0.79		0.65		0.98		0.98		1.00		↗	calculated based on observed maximum days
CYP OTB VL1824 (fishing only in international waters)	0.23		0.55		0.48		0.23		0.42		0.71		↗	observed maximum for 2014, used as theoretical maximum for 2009-2013
CYP PGP VL1218		0.33		0.61		0.50		0.47		0.45		0.54	↗	calculated based on observed maximum days
CYP PG VL0612 (Category A&B)		0.54		0.48		0.41		0.55		0.50		0.49	↘	calculated based on observed maximum days
CYP PG VL0006 (Category A&B)		0.84		0.54		0.57		0.83		0.60		0.69	↗	calculated based on observed maximum days
CYP PGO VL0006 (Category C)		0.35		0.27		0.37		0.41		0.41		0.39	↗	calculated based on maximum allowable days (70 days)
CYP PGO VL0612 (Category C)		0.35		0.27		0.31		0.41		0.40		0.46	↗	calculated based on maximum allowable days (70 days)

The indicator suggests that only one fleet segment, the "demersal trawlers operating in both territorial and international waters", does not have low values of capacity utilization (>0.7). Concerning the different small scale inshore fleet segments, the relatively low values of capacity utilization suggest a technical overcapacity. The segment "vessels using polyvalent passive gears 12-18 m" exhibits heterogeneous activity; however this heterogeneous activity can be explained on the fact that the segment includes vessels using mainly drifting longlines targeting large pelagic, and vessels using mainly bottom nets and longlines targeting demersal species. Therefore, for the segment "vessels using polyvalent passive gears 12-18 m" it is considered that the low value of capacity utilization does not indicate technical overcapacity.