



# MINISTRY OF AGRICULTURE NATURAL RESOURCES AND ENVIRONMENT

# DEPARTMENT OF FISHERIES AND MARINE RESEARCH 1416 NICOSIA

# CYPRUS ANNUAL REPORT ON EFFORTS DURING 2018 TO ACHIEVE A SUSTAINABLE BALANCE BETWEEN FISHING CAPACITY AND FISHING OPPORTUNITIES

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## Introduction

Article 22 of Regulation (EU) No. 1380/2013 provides 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 report is in accordance with the current Guidelines<sup>1</sup> developed by the Commission.

The relevant findings and advice of STECF (most updated STECF-18-14 reviewing EWG-18-14) have also been taken into account for the preparation of the report.

# 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 31<sup>st</sup> of December 2018 was composed of 812 fishing vessels (source: data submitted under 2019 Fleet Economic Data Call). **Table 1** provides general information on the Cyprus fishing fleet over the period 2009-2018, while **Table 2** provides information on the evolution of the fleet segments.

**Table 1.** General description of the Cyprus fishing fleet (2009-2018)

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Number										
of	1177	1013	1079	1082	1001	951	905	838	817	812
vessels										
of which	266	104	122	175	68	97	65	70	34	33
inactive	200	104	122	1/3	08	37	03	70	34	
Tonnage	F000 7	4200.7	4101.4	4042.0	22042	2511.2	2624.0	2200.2	2504.0	25447
(GT)	5090,7	4399,7	4101,4	4042,8	3384,2	3511,2	3624,9	3390,3	3504,8	2544,7
Engine										
power	49526	44380	45881	45908	41515	41111	41227	36393	37686	39101
(kW)										

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 assignment of such vessels to a fleet segment is based on the predominant fishing gear.

<sup>&</sup>lt;sup>1</sup> 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

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

 $\frac{http://www.moa.gov.cy/moa/dfmr/dfmr.nsf/All/A96C6153D5D65D284225836A00371513?Ope}{nDocument}$ 

**Table 2.** Description and development of Cyprus fishing fleet segments.

Fishing technique		Vessel	2018			2017			2008			Chang	ge in 201	18-2008
Description	Code	length	No.	GT	kW	No.	GT	kW	No.	GT	kW	No. %	GT %	kW%
Vessels using Polyvalent 'passive' gears only	PG	0-< 6 m	26	33	1183	27	33	1143	32	30	844	-19	10	40
Vessels using Polyvalent 'passive' gears only	PG	6-< 12 m	297	1122	16405	296	1107	16127	465	1540	19968	-36	-27	-19
Vessels using Polyvalent 'passive' gears only (category C)	PGO	0-< 6 m	343	345	9522	347	348	9405				100	100	100
Vessels using Polyvalent 'passive' gears only (category C)	PGO	6-< 12 m	71	218	2506	73	216	2172				100	100	100
Vessels using Polyvalent 'passive' gears only	PGP	12-< 18 m	32	821	4976	33	1009	5394	25	815	4947	28	1	1
Purse seiners	PS	24-< 40 m	1	105	294	1	92	257						
Demersal trawlers and/or demersal seiners	DTS	24-< 40 m	9	956	3100	7	735	2328	9	983	3232	0	-3	-4
INACTIVE		0-< 6 m	19	18	585	20	18	585	355	344	8298	-95	-95	-93
INACTIVE		6-< 12 m	14	38	531	14	39	531	294	1703	12380	-95	-98	-96
INACTIVE		12-< 18 m	0	0	0	0	0	0	11	171	1404	-100	-100	-100
INACTIVE		18-< 24 m	0	0	0	0	0	0	3	264	733	-100	-100	-100
INACTIVE		24-< 40 m	0	0	0	0	0	0	3	397	976	-100	-100	-100
		TOTAL	812	3656	39101	818	3597	37944	1197	6246	52782	-32	-41	-26

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 2, they represent the large majority of the fishing vessels in the Register (90%). Cyprus Fisheries Law<sup>1</sup> provides for a limited number of licenses for this

<sup>&</sup>lt;sup>1</sup> Basic Fisheries Law Cap. 135 and subsequent amendments of 1961 to 2016, Cyprus Balance Report for 2018

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 mostly 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 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 VL0012 (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)*.

The vessels using *Polyvalent 'passive' gears with length 12-<18m* range from 12-26m, but are clustered in one length category since the large majority of them are between 12-18m; information on the clustering of this fleet segment is provided in Table 5, in Section F. This fleet segment is 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.

In addition, in accordance with ICCAT management measures, specific fishing licenses are issued for targeting bluefin tuna, swordfish and albacore; the maximum allowable number of specific licenses differs depending on the species. During 2018 specific licenses were issued for targeting large pelagic species using drifting longlines. One vessel received also specific license for targeting bluefin tuna as purse seiner.

Demersal trawlers range from 19-27 m. Information on the clustering of this fleet segment to 24 - <40m is provided in Table 5, in Section F. 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). 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. 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 since the '80s. 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. Other provisions of the Mediterranean Regulation in the relevant Management Plan include minimum distance from the shore and minimum depth.

# 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*, *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 demersal fishery with polyvalent passive gears, for the period 2015-2017, were  $\sim 100$  t and 670 t respectively. The average landings of the main demersal commercial species of each fishery for the same period are provided in **Table 3**.

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 2015-2017 were ~45 t in the central Mediterranean and ~35t in the Eastern Mediterranean.

Concerning the large pelagic fishery, polyvalent vessels operate in the Eastern Mediterranean, catching *Xiphias gladius*, *Thunnus alalunga* and *Thunnus thynnus* with drifting longlines. *T. thynnus* is under a multiannual recovery plan adopted by ICCAT, incorporated in Council Regulation (EU) 2016/1627; the recovery plan will be replaced in 2019 by a management plan, according to ICCAT Recommendation 18-02. A 15-year Recovery plan of Mediterranean swordfish was adopted in 2016 by ICCAT (Recommendation 16-05). Management measures are also established for Mediterranean albacore by ICCAT Recommendation 17-05. The average landings of the above large pelagic species for the period 2015-2017 are provided in **Table 4**.

**Table 3**: Average landings (t) of the main demersal species in Cyprus waters for the period 2015-2017.

	Species	Inshore fishery with polyvalent passive gears	Trawl fishery (territorial waters)
BOG	Boops boops	101	12
BPI	Spicara maena	38	
MUR	Mullus surmuletus	42	2
MUT	Mullus barbatus	6	12
PAC	Pagellus erythrinus	15	6
PRR	Sparisoma cretense	36	
SBA	Pagellus acarne	14	8
SPC	Spicara smaris	39	42
SPI	Siganus spp.	39	
SWA	Diplodus sargus	15	
СТС	Sepia officinalis	30	
occ	Octopus vulgaris	19	1

**Table 4**: Average landings (t) of the main species of the Cyprus large pelagic fishery for the period 2015-2017 caught by drifting longlines.

	Species	Landings (LLD) in
Species		tons
ALB	Thunnus alalunga	545
BFT	Thunnus thynnus	44
SWO	Xiphias gladius	44

# A.(iii) Development in fleets

As shown in Table 2, from 2008 until 2018 the Cyprus fishing fleet was reduced by 32% in number of vessels, 41% in tonnage and 26% in power.

Following the creation by **Law** in 2007 of a new category of small scale inshore fishing license (category C, see section A(i)), during the period 2004-2017 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, that belong to category C. Over the period 2008-2018 there has also been a capacity increase in the fleet segment *Polyvalent 'passive' gears with length 12-<18m*. For other fleet segments, there has been a capacity reduction.

It should be mentioned that from the 1<sup>st</sup> of May 2004 (date of accession of Cyprus to the EU) until the 31<sup>st</sup> of December 2018, exits financed with public aid involved vessels from the three main fishing fleets as follows:

- destruction of 17 vessels using polyvalent passive gears (12-18m LOA)
- destruction of 4 demersal trawlers and change of activity (RET) of 2 demersal trawlers,
- destruction of 173 small scale inshore vessels (<12m, category license A&B): 107 vessels destructed in 2013, 65 vessels in 2015 and 1 vessel in 2016 (January).

# 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 action plan that was included in the 2013 and 2014 Balance Reports was implemented during 2015 and was finalized early 2016.

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. An action plan was proposed in the 2016 Balance Report for the 2 demersal trawlers operating in territorial and international 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). The 2016 action plan for the 2 demersal trawlers operating in territorial and international waters did not result in any capacity reductions.

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

Cyprus ensures that at all times the fishing capacity of its fleet does not exceed at any time the fishing capacity ceilings in tonnage (GT) and power (kW) set out in Annex II of Regulation (EU) 1380/2013, according to the provisions of 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 I**.

# 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 mostly to effort restrictions. Until 2016, TACs have been applicable only for bluefin tuna, while from 2017 the quota management system is also applicable for Mediterranean swordfish (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 and swordfish catches.
- The upgrading of the Cyprus Fleet Register system was finalized during 2017. With this upgrading, the system is automatically connected with the DFMR Database on Licenses, thus any modifications on the licenses is automatically updated in the Fleet Register system.
- 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 and Regulations are still under revision process. The modifications concern the criteria for obtaining a fishing license, adjustment of the maximum allowable 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. During 2017 the proposed modifications of the Cyprus Fisheries Law and Regulations were approved by the Cyprus Council of Ministers and were submitted to the Parliament, for approval. During the review of the Fisheries Law proposal within the Parliament in 2018, further modifications were agreed on licensing procedures; the updated proposed modifications were approved by the Cyprus Council of Ministers and re-submitted to the Parliament. The revisions of the Fisheries Law and Regulations within the Parliament are expected to initiate within 2019.

It should be clarified that the adjustment of the maximum allowable number of fishing licenses of the inshore small-scale fleet in accordance with scrapping schemes is already been done; the maximum number of licenses was adjusted in 2014, following the 2013 scrapping scheme, and was further adjusted in 2016 following the reduction scheme in 2015 (and early 2016).

# 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) 2017/218 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) do not exceed the fishing capacity ceilings set out in Annex II of Regulation (EU) 1380/2013, 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 2018 in order to ensure compliance with the Common Fisheries Policy of the EU and to accomplish the best possible management of the resources.

During 2018, the decree put into force was the Application of Community Decisions and Community Regulations that concern the Fisheries Sector, Law 134/2006 (13<sup>th</sup> Modification of Annexes of Law - Decree 72/2018). The Decree includes, among others, Regulation (EU)

2017/2107 laying down management, conservation and control measures applicable in ICCAT, Regulation (EU) 2018/120 fixing fishing opportunities for 2018, and Regulation (EU) 2018/161 establishing a *de minimis* exemption to the landing obligation for certain small pelagic fisheries in the Mediterranean Sea.

The DFMR is using conventional and electronic means of control, in order to identify and combat illegal fishing activities. During 2018, the monitoring of fishing activities using VMS and ERS for vessels with overall length more than 12 meters as well as reefers vessels contributed to improving the control of activities in Realtime as well as through crosscheck of these information with landing and sales note declarations. Electronic Reporting System is compulsory for the fishing vessels with length more than 12m, with some exceptions for vessels between 12-15m Electronic sales note declarations for the registered buyers with an annual financial turnover in first sales of fisheries products of more than €20 000 is also compulsory. The FMC is monitoring the fishing activities of the vessels via ERS, logbooks, sales notes and other available information such as AIS radar images and invoices. Regular cross checks are performed to validate information coming from different sources. In 2018, the new sales notes and Fishing activity reports were not used, this is expected now to be in full effect in 2019. Also, catch reporting is automatic and sent to the EU via the transportation layer. Furthermore, standardized procedures of control and inspection has resulted in a more uniform and transparent form of fisheries control, compliance and infringement procedures. Data exchange from the VMS and ERs and other methods of communication with other Member States, the EU, the EFCA (European Fisheries Commission) and NEAFC (North East Atlantic Fisheries Commission) continued throughout 2018.

In 2018 a refined risk-based assessment of inspections and controls using the EFCA standardized procedure for risk assessment of fisheries activities was implemented. In 2018 monthly coordination meetings were held to better disseminate information and exchange of views for the following month in terms of priorities and targets. In 2018 the new IT strategy for DFMR was drafted and a new unified system will be procured in 2019 that will contribute in a more efficient and effective system of control with automatic validation tools for the data received and a real time risk-based analysis in order to identify and select targets for control.

During 2018, DFMR Inspectors conducted 526 patrols along the coast, in harbors/fishing shelters, at selling / storage facilities of fishery products and at inland waters and 134 patrols at sea. In addition, 58 combined patrols (land and sea) were carried out. The total number of patrols conducted during 2018 were 647, with 200 conducted after regular working hours. Within the framework of the Joint Deployment Plan for the conservation of Bluefin tuna and swordfish fisheries in the Mediterranean, the DFMR conducted 16 patrols at sea and 46 patrols exclusively for the control of the fishing activities of the species. During the closed fishing season of swordfish (January to March) the DFMR performed additional 23 sea patrols on pelagic vessels and another 147 land patrols at ports regarding the same fishery and 10 combined patrols (land and sea). During 2018 DFMR reported a total of 462 Infringements.

Regarding engine and capacity verification, a pilot study was conducted for verifying engine power. The limited number of vessels (four in total) showed that engine power measured is lower than the engine power declared in the fleet register and this is due to the fact that engines are very old.

# 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).

With the upgrading of the Fleet Register, which was finalised during 2017, procedures for cross-checking information and updating any modifications of the vessel, the license and owner status have become automatic.

As mentioned in section D (iii), during 2018 the IT strategy for DFMR was drafted and a new data warehouse and validation system according to the control regulation will be build. All current information systems and procedures for collecting, processing and disseminating data by the DFMR will be unified into one single system.

#### F. 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.

For the preparation of the 2018 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 2019 Official Fleet Economic Data Call and the most recent assessments and advice from relevant scientific bodies on stock status and their exploitation rates. 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 was made where possible.

In STECF 18-14 it is stressed that -08 notes that "contrary to the criteria in the guidelines (COM (2014) 545 FINAL), the indicator values for all of the indicators being used to assess the balance between capacity and fishing opportunities merely inform on whether fleet segments should be scrutinised further to determine whether an action plan is warranted. The indicator values (either singly or in combination) cannot be considered reliable metrics to identify which fleet segments require an action plan." Given that the Commission guidelines on balance indicators have not been updated, Cyprus takes into account the comments made by STECF 17-08 when assessing the balance of its fleet segments.

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 **Table 5** "Economic Clustering of fleet segments", where the clusters are named after the biggest segment in terms of number of vessels. There is only one demersal trawler below 24m and there is not any demersal trawler above 40m thus, for sampling purposes as well as for confidentiality reasons the trawler below 24m was regrouped in the >24m length group (up to 28m). All 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 active vessels using polyvalent passive gears with length > =12m, where the vessels belonging in the length group 18-<24m are only 2 and the vessels above the 24m length group are only 1. Thus for sampling purposes, as well as for confidentiality reasons they were regrouped in the 12-<18m length group. It is noted that there were 28 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 5: Economic Clustering of fleet segments for 2017** 

Name of the clustered fleet segments	Total number of vessels in the cluster by the 31 <sup>st</sup> of December of the sampling year	Fleet segments which have been clustered	Number of vessels in the segment by the 31 <sup>st</sup> of December of the sampling year
		Polyvalent passive	
Passive gears:	31	gears 12-18 m	28
Polyvalent "passive		Polyvalent passive	
gears only" 12-		gears 18-24 m	2
<18m*		Polyvalent passive	
		gears 24-40 m	1
		Demersal trawlers 18-	
Demersal trawlers	5	24 m	1
24-<40m*	)	Demersal trawlers 24-	
		<40m	4

# **F(i)** Biological Sustainability Indicators

#### Sustainable Harvest Indicator

The Sustainable Harvest Indicator (SHI) was calculated by the DFMR in accordance with the current guidelines i.e. as an average of F/Fmsy proxie for each available stock concerned (i) that is exploited by the fleet segment, weighted by the value of the landings Vi of that stock:

$$\frac{\sum_{i=1}^{i=n} V_i \frac{F_i}{Fmsy_i}}{\sum_{i=1}^{i=n} \sum V_i}$$

Value and catch data used were based on data provided by Cyprus through the 2019 Official Fleet Economic Data Call. For calculating the indicator for the trawlers (DTS), more disaggregated data had to be used, at vessel level. The more disaggregated data were required for calculating the indicator *separately for the fleet operating exclusively outside Union waters* (CYP DTS VL2440 fishing only in international waters).

In the STECF-18-14 report it is stated that the EWG 18-14 Prep. Meeting "agreed that the SHI should take into account all stocks for which the most recent assessment was undertaken in 2014 or more recently". Cyprus has followed this approach for the calculation of the SHI in the current report.

Information on F/Fmsy on stocks exploited by Cyprus fleets was extracted from GFCM Stock Assessment Forms (<a href="http://www.fao.org/gfcm/data/safs/en/">http://www.fao.org/gfcm/data/safs/en/</a>) and GFCM reports, available at <a href="http://www.fao.org/gfcm/reports/en/">http://www.fao.org/gfcm/reports/en/</a>. The database of STECF stock assessment results compiled by the JRC and accessible at <a href="https://stecf.jrc.ec.europa.eu/dd/medbs/">https://stecf.jrc.ec.europa.eu/dd/medbs/</a>) was also reviewed, but no relevant data were found for the stocks exploited by Cyprus fleets. Information on tuna / tuna-like species was obtained from the ICCAT website (<a href="https://iccat.int/en/">https://iccat.int/en/</a>).

The Biological Indicator Visualisation Tool, mentioned in the STECF-18-14 report and available at <a href="http://sirs.agrocampus-ouest.fr/stecf\_balance\_2018/">http://sirs.agrocampus-ouest.fr/stecf\_balance\_2018/</a> was consulted.

**Table 6** provides the values of F/Fmsy of the stocks used for calculating SHI indicator for the different fleet segments, for the years 2015-2017. **Table 7** provides the SHI calculations for each fleet segment, as well as information on the stocks included in the indicator.

As seen from **Table 7**, the indicator SHI covers stocks that constitute at least 40% of the value of landings for two fleet segments for the period 2015-2017, the demersal trawlers fishing in both territorial and international waters and the polyvalent fleet 12-18m length. The new fleet segment "Purse seiner 24-40m length" that operated only in 2017 has also an SHI covering stocks exceeding 40% of the value of landings. In the case of the small-scale inshore fleet, it is difficult to reach the 40% of the value of landings due to the limited available number of stock assessments, and the high number of species caught. The species (stocks) represented in the indicator are important species in value and catch, and are been traditionally assessed; therefore, this indicator is considered the best available scientific information for assessing biologically the balance of the small-scale inshore fleet.

Table 6: Values of F/Fmsy of stocks used for calculating SHI indicator for Cyprus fleet.

Stock	Year	F/FMSY
ALB_all	2015	0.83
ALB_all	2016	0.83
ALB_all	2017	0.83
BFT_all	2015	0.339
BFT_all	2016	0.339
BFT_all	2017	0.339
BOG_25	2015	1.2
BOG_25	2016	1.2
BOG_25	2017	1.2
DPS_12-16	2015	1.63
DPS_12-16	2016	1.63
DPS_12-16	2017	1.63
HKE_12-16	2015	3.7
HKE_12-16	2016	3.7
HKE_12-16	2017	3.7
HKE_17	2015	4.5
HKE_17	2016	4
HKE_17	2017	3.33
MUT_13-14	2015	2.48
MUT_13-14	2016	2.48
MUT_13-14	2017	2.48
MUT_15-16	2015	1.2
MUT_15-16	2016	1.2
MUT_15-16	2017	1.2
MUT_25	2015	0.8
MUT_25	2016	0.8
MUT_25	2017	0.8
PAC_25	2015	0.51
PAC_25	2016	0.51
PAC_25	2017	0.51
SPC_25	2015	0.14
SPC_25	2016	0.14
SPC_25	2017	0.14
SWO_all	2015	1.84
SWO_all	2016	1.84
SWO_all	2017	1.84

**Table 7:** SHI values and relevant stocks for the different Cyprus fleet segments

Fleet segment	Year	Sustainable Harvest Indicator (SHI)	List of stocks included in SHI (with F/Fmsy available)	Number of stocks included in SHI	% of landings value of stocks included in SHI	% of landings volume of stocks included in SHI
CYP DTS VL2440	2017	0.67	ALB, SWO, BOG_25, MUT_25, PAC_25, SPC_25	6	76%	81%
(fishing in territorial	2016	0.56	ALB, SWO, BOG_25, MUT_25, PAC_25, SPC_25	6	68%	71%
and international waters)	2015	0.61	ALB, BFT, SWO, BOG_25, MUT_25, PAC_25, SPC_25	7	76%	82%
CYP DTS VL2440	2017	2.60	DPS_12-16, HKE_12-16, BOG_25, MUT_25, PAC_25	5	18%	15%
(fishing only in	2016	3.70	HKE_12-16	1	14%	14%
international waters)	2015	2.56	ALB, BFT, SWO, HKE_12-16, MUT_13-14, MUT_15-16, MUR_26	7	15%	26%
	2017	0.93			92%	95%
CYP PGP	2016	0.88	ALB, BFT, SWO, BOG_25,	7	93%	98%
VL1218	2015	1.09	MUT_25, PAC_25, SPC_25		95%	98%
CYP PG	2017	0.93	ALB, SWO, BOG_25, MUT_25,		18%	23%
VL0612 (A&B	2016	0.97	PAC_25, SPC_25	6	18%	23%
category)	2015	0.96	ALD SWO DOG OF ANIT OF		21%	23%
CYP PG	2017	0.77	ALB, SWO, BOG_25, MUT_25, PAC_25, SPC_25	6	12%	21%
VL0006 (A&B category)	2016	0.85	BOG_25, MUT_25, PAC_25, SPC_25	4	14%	21%
	2015	1.14	ALB, SWO, BOG_25, MUT_25, PAC_25, SPC_25	6	3%	6%
CVP DCO	2017	1.06	ALB, BOG_25, MUT_25, SPC_25	4	10%	23%
CYP PGO VL0612 (C category)	2016	0.92	BOG_25, MUT_25, SPC_25	3	8%	12%
categoly)	2015	1.08	ALB, BOG_25, MUT_25	3	6%	9%
CVP PCC	2017	1.06	ALB, BOG_25, MUT_25, SPC_25	4	23%	10%
CYP PGO VL0006 (C	2016	0.99	BOG_25, MUT_25, SPC_25	3	11%	6%
category)	2015	1.08	ALB, BOG_25, MUT_25	3	9%	6%
CYP PS	2017	0.41	BFT, SWO, HKE_17, BOG_25, MUT_25, PAC_25, SPC_25	7	99.7%	99.5%
VL2440	2016	NA	NA	NA	NA	NA
	2015	NA	NA	NA	NA	NA

**Table 8** provides the values of the SHI for the different fleet segments, in traffic light system According to the 2014 Balance Indicator Guidelines, for SHI "Values of the indicator above 1 indicate that a fleet segment is, on average, relying for its income on fishing opportunities which are structurally set above levels corresponding to exploitation at levels corresponding to MSY". Therefore, where SHI >1 it is considered 'out of balance' and is indicated in red; where SHI < 1 it is considered 'in balance' and indicated in green; where SHI=1 it is indicated with yellow.

**Table 8**: Estimated Sustainable Harvest Indicator for the Cyprus fleet segments in traffic light system

	Sustainable Harvest Indicator			
Fleet segment	2015	2016	2017	
CYP DTS VL2440 (fishing in territorial and international waters)	0.61	0.56	0.67	
CYP DTS VL2440 (fishing only in international waters)	2.56	3.70	2.60	
CYP PGP VL1218	1.09	0.88	0.93	
CYP PG VL0612 (Category A&B)	0.96	0.97	0.93	
CYP PG VL0006 (Category A&B)	1.14	0.85	0.77	
CYP PGO VL0612 (Category C)	1.08	0.92	1.06	
CYP PGO VL0006 (Category C)	1.08	0.99	1.06	
CYP PS VL2440	NA	NA	0.41	

## 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. According to the criteria in the 2014 Balance Indicator Guidelines, the SAR indicator suggests that all fleet segments may be in balance with their fishing opportunities.

#### **F(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 for the small-scale fleet (Categories A'& B') are issued on a three-year basis. As for the rest of the fleet segments, the licences are issued annually and quotas exist only for two species: the blue-fin tuna and the swordfish which they are also 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 2016-2017 data. 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

**Table 9: RoFTA indicator** 

**ROFTA** 

		YEARS	
FLEET SEGMENTS	2016	2017	Δ
DTS VL2440	-8.63	0.47	7
PG VL0006 (A&B)	-6.72	251.54	7
PG VL0612 (A&B)	3.5	21.80	7
PGP VL 1218	-0.17	-0.79	Z

## **RISK FREE INTEREST RATE**

YEARS	2016	2017
	1.0	1.0

The development trend is analysed for all indicators for the latest year (2017) to 2016 and indicated by an arrow: "↗" improved/increased; "↘"deteriorated/decreased and "↔"stable.

The RoFTA is negative for the fleet segment polyvalent passive gears 12-<18m vessels, indicating economic over-capitalization. However, all the other three fleet segments are positive and all of them are greatly improved compared to 2016, showing viability of these fleet segments. The only fleet segment which is slightly deteriorated compared to the previous year is the fleet segment of polyvalent passive gears 6-<12m vessels.

In 2015 the small-scale fishery fleet was reduced by 66 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 6-12m), as it is shown by the development trend above, is getting improved. It is noted that this improvement was also shown in last year's report when comparing 2016 to 2015.

Comparing the RoFTA with the interest rate of a low risk long term investment, as calculated above, it shows that it is more beneficial to invest elsewhere for polyvalent passive gears 12-24m and demersal trawlers 24-40m. On the contrary, this is not the case for the polyvalent passive gears 0-<6m and 6-<12m fleet segments.

The calculations of indicator RoFTA are provided in Table 10.

**TABLE 10: Calculation of RoFTA** 

		2016				2017		
	PG	PG			PG	PG		
	VL0006	VL0612	PGP	DTS	VL0006	VL0612	PGP	DTS
	(A&B)	(A&B)	VL1218	VL2440	(A&B)	(A&B)	VL1218	VL2440
Income	260,629	3,566,291	2,255,781	1,202,291	1,234,141	5,410,499	2,164,983	1,459,889
Less Exp	312,034	3,013,666	2,273,383	2,089,975	146,474	1,967,190	2,273,242	1,423,872
Net Profit	-51,405	552,625	-17,602	-887,684	1,087,667	3,443,309	-108,259	36,017
Cap.Val	765,033	15,776,06 9	10,236,628	10,281,926	432,407	15,791,887	13,710,337	7,592,807
				<u> </u>				
RoFTA	-6.72	3.50	-0.17	-8.63	251.53	21.8	-0.79	0.47

# 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.

Table 11: CR/BER\*

CR/BER

		2016	2017	
DTS	VL2440	-0.08	1.09	7
PG	VL0006 (A&B)	-0.05	59.64	7
PG	VL0612 (A&B)	1.64	6.45	71
PGP	VL1218	0.97	0.79	K

The only fleet segment with ratio less than 1 is the polyvalent passive 12-24m (PGP 12-24m) segment, 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. It is noted though that the segment is closed to one. This fleet segment has not been improved in 2017 compared to the previous year 2016.

The calculations for this indicator are shown below:

**TABLE 12: Calculation of Ratio= CR/BER** 

	-		2016		2017							
Variable s	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	260,629	3,566,291	2,255,781	1,202,291	1,234,141	5,410,499	2,164,983	1,459,889				
FC	48,943	860,606	635,911	823,970	18,547	631,345	520,952	403,201				
VC	263,091	2,153,060	1,637,472	1,266,005	127,927	1,335,845	1,752,290	1,020,671				
BER	-5,180,923	2,171,741	2,319,997	-15,548,543	20,692	838,327	2,732,909	1,340,174				
CR/BE R	-0.05	1.64	0.97	-0.08	59.64	6.45	0.79	1.09				

# F(iii) Vessel Use Indicators

# **Inactive Fleet Indicator**

**Table 13** provides the proportion of inactive vessels of the total fleet with respect to number of vessels, power and tonnage for the period 2011-2018. The development trend is analyzed for the latest year (2018) to the average over the period 2011-2017 and indicated by an arrow: "¬" increased; "¬" decreased and "↔"stable. The indicator suggests a decrease in the inactive capacity (in terms of number, GT and kW) and a very small percentage of inactive vessels.

 Table 13: Inactive Fleet Indicator

	Number of inactive vessels											Δ	no. inactive vessels as % of total vessels							Δ	
MS	MS Fleet segment		2011	2012	2013	2014	2015	2016	2017	2018	#	2011	2012	2013	2014	2015	2016	2017	2018	#	
CYP	NONE II	NACTIVE	VL0006	53	75	28	44	31	29	20	19	Z	4.9%	6.9%	2.8%	4.6%	3.4%	3.5%	2.4%	2.3%	И
CYP	NONE II	NACTIVE	VL0612	64	94	38	48	32	40	14	14	N	5.9%	8.7%	3.8%	5.0%	3.5%	4.8%	1.7%	1.7%	7
CYP	NONE II	NACTIVE	VL1218	1	3	2	4	1	1				0.1%	0.3%	0.2%	0.4%	0.1%	0.1%	0.0%		
CYP	NONE II	NACTIVE	VL1824	3	2	0	0	1					0.3%	0.2%	0.0%	0.0%	0.1%	0.0%	0.0%		
CYP	NONE II	NACTIVE	VL2440	1	1	0	1						0.1%	0.1%	0.0%	0.1%	0.0%	0.0%	0.0%		
СҮР	P National inactive fleet		et	122	175	68	97	65	70	34	33	И	11.3%	16.2%	6.8%	10.2%	7.2%	8.4%	4.2%	4.1%	И
					Inactive kV	V as % of fl	eet kW					Δ		Inactive G	iT as % of f	eet GT					Δ
MS	MS Fleet segment			2011	2012	2013	2014	2015	2016	2017	2018	kW	2011	2012	2013	2014	2015	2016	2017	2018	GT
CYP	NONE II	NACTIVE	VL0006	2.9%	4.2%	1.8%	2.9%	2.0%	2.3%	1.6%	1.5%	И	1.2%	1.9%	0.9%	1.3%	0.8%	0.8%	0.5%	0.5%	7
CYP	NONE II	NACTIVE	VL0612	5.3%	8.7%	4.3%	4.9%	4.1%	5.1%	1.4%	1.4%	И	4.4%	6.9%	3.9%	4.4%	3.1%	3.9%	1.1%	1.0%	7
CYP	NONE II	NACTIVE	VL1218	0.1%	1.5%	0.5%	1.7%	0.5%	0.6%	0.0%			0.4%	1.2%	1.0%	2.9%	0.9%	1.0%	0.0%		
CYP	NONE II	NACTIVE	VL1824	1.8%	1.2%	0.0%	0.0%	0.6%	0.0%	0.0%			6.1%	4.9%	0.0%	0.0%	2.8%	0.0%	0.0%		
CYP	NONE II	NACTIVE	VL2440	0.9%	0.7%	0.0%	1.0%	0.0%	0.0%	0.0%			3.6%	3.1%	0.0%	4.2%	0.0%	0.0%	0.0%		
CYP National inactive fleet				11.1%	16.2%	6.6%	10.5%	7.3%	8.1%	3.0%	2.9%	K	16%	18%	6%	13%	8%	6%	2%	2%	И

## Vessel Utilisation Indicator

**Table 14** provides the estimated Vessel Utilisation Indicator per fleet segment in traffic light system (red < 0.7; green  $\geq$  0.9; yellow 0.7-0.9). The development trend is analyzed for the latest year (2017) to the average over the period 2011-2016 and indicated by an arrow: " $\nearrow$ " improved/increased; " $\searrow$ " deteriorated/decreased and " $\leftrightarrow$ " stable.

In accordance with the Guidelines, the capacity is indicated in kW for active and in GT for passive gear segments.

As indicated in Table 13, the indicator was calculated mainly based on observed maximum days.

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 most of the reference 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 rest of the years.

For the two segments of Category C, the maximum activity is considered to be the maximum by Law allowable days during a year (70 days).

Vessel Utilisation Indicator Fleet segment 2009 2010 2011 2012 2013 2014 2015 2016 2017 cW-days GT-da W-days GT-days kW-days GT-day W-days GT-day kW-day GT-days kW-day GT-days kW-day GT-day kW-days GT-days CYP OTB VL1824 (fishing in 0.93 0.98 territorial and international

Table 14: Estimated Vessel Utilisation Indicator for the Cyprus fleet segments in traffic light system.

Vessel Utilisation Indicator

calculated based on observed observed maximum for 2017 and 2014, 2014 CYP OTB VL1824 (fishing only in value used as 0.72 international theoretical waters) maximum for the other reference ye a rs calculated based CYP PGP VL1218 on observed maximum days calculated based CYP PG VL0612 on observed (Category A&B) maximum days calculated based CYP PG VL0006 0.84 0.83 0.70 on observed (Category A&B) maximum days calculated based CYP PGO VL0612 on maximum allowable days (Category C) (70 days) calculated based on maximum CYP PGO VL0006 allowable davs (Category C) (70 days)

The indicator suggests that the demersal trawlers operating in both territorial and international waters exhibit a homogeneous level of activity, with high values of capacity utilization. The average activity level of Demersal trawlers operating only in international waters was estimated higher than 70% of the potential one only for 2017, suggesting that the fleet segment was not under-utilised in that year.

The segment "vessels using polyvalent passive gears 12-18 m" exhibits heterogeneous activity; however, this heterogeneous activity can be explained by the fact that the segment includes vessels using only drifting longlines

targeting large pelagic with seasonal closures, and vessels using both drifting longlines for large pelagic and bottom nets and set 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.

Concerning the small-scale inshore fleet segments, the relatively low values of the indicator may indicate technical overcapacity.

# 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 is positive (<1), since the main species exploited by the fleet are fished sustainably. Concerning the economic indicators, it is noted that they 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. The economic performance of all trawlers has been improved compared to previous year and they seem to be in a marginal net profit-making position. Specifically, for trawlers operating in both territorial and outside Union waters it can be suggested that the fleet is in balance with the exploited resources.
- Demersal trawlers operating exclusively outside Union waters seem to be under-utilised in the period 2011-2017, with the exemption of 2017. 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), it is considered that there is no technical overcapacity of the fleet. The estimated SHI suggests that the fleet relies on stocks that are overfished; this concern mainly the fishing activity in the Central Mediterranean, in which a multiannual management plan for bottom trawl fisheries exploiting demersal stocks in in place (GSAs 12 to 16), and in which only one vessel will be operating from 2018 onwards. Concerning the fishing activity of the trawlers in the Eastern Med, there are no available stock assessment results from GSA24, for this the estimated SHI does not cover stocks that constitute at least 40% of the value of landings. Concerning the economic indicators, as it has been mentioned, they are common for all trawlers, including the trawlers operating in both territorial and outside Union waters. The reason for clustering all trawlers is explained in Annex III. The economic performance of all trawlers has been improved compared to previous year and they seem to be in a marginal net profit-making position. Taking into account the small number of licensed vessels in this segment, their possibility to exploit a variety of stocks all over the Mediterranean Sea (international waters), and the overview of the estimated balance indicators, we cannot conclude on the balance of this fleet with its exploited resources.
- 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 represents more than 90% of the value of landings with value <1, since the fleet mainly relies on large pelagic species for which management plans / measures are in place by ICCAT. However, the fleet segment seems to have been operating at a net loss-making situation in 2017. The deterioration of economic performance was mainly due to the decrease in the value of landings in 2017. RoFTA is slightly negative in 2017 and it was deteriorated compared to the previous year, indicating economic over-</p>

capitalization. The Ratio between current revenue and break-even revenue is considered to be at the same levels compared to previous year. It is noted though, that for some of the vessels there are no audited financial accounts, therefore this economic result should be treated with caution. In conclusion, it is suggested that this fleet segment is in balance with the resources.

- The vessels with polyvalent passive gears 6-12m (small scale inshore fishery with category licenses A&B) seem to some extent underutilized. The estimated SHI is <1; however, it is based on stocks that account for less than 40% of the value of landings. The fleet segment shows improvement of its economic performance at a great extent. The fleet segment is in a net profit-making position. Furthermore, the Gross Profit shows an important increase. The improved economic performance was mainly the highly increased volume and consequently value of landings, as well as the reduction of total expenditure. The RoFTA is positive and much improved if compared to the previous year, indicating long term viability. The ratio CR/BER is positive and much higher than previous year, showing that the income is sufficient to cover the costs. Based on all the above, it is suggested that this segment is in balance with the fishing opportunities.</p>
- The vessels with polyvalent passive gears 0-6m (small scale inshore fishery with category licenses A&B) seem to be underutilized. The estimated SHI is <1 (except for 2015 that was slightly higher than 1); however, the indicator is based on stocks that account for less than 40% of the value of landings. The RoFTA is highly positive, and the ratio CR/BER is much above 1. However, this economic result should be treated with caution, since the information is based only on questionnaires, due to the absence of financial accounts and logbooks and due to the small population of the fleet segment. Based on all the above, it can be concluded that this fleet segment is in balance with the resources.</p>
- 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)] seem to be underutilised based on the maximum allowable days. The estimated SHI is around 1; however, it is based on stocks that represent less than 40% 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

No action plan is proposed for any of the fleet segments of Cyprus.

# **ANNEX I - Tonnage and Power Statistics for Cyprus**

Cyprus: Tonnage of the fleet compared to its tonnage ceiling. Evolution between 1-5-2004 and 1-6-2018.



Cyprus: Power of the fleet compared to its power ceiling. Evolution between 1-5-2004 and 1-6-2018.

