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**MINISTRY OF AGRICULTURE  
NATURAL RESOURCES  
AND ENVIRONMENT**



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**CYPRUS ANNUAL REPORT ON  
EFFORTS DURING 2019 TO ACHIEVE A SUSTAINABLE BALANCE BETWEEN  
FISHING CAPACITY AND FISHING OPPORTUNITIES**

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**Nicosia, May 2020**

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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 2019 was composed of 858 fishing vessels (source: data submitted under 2020 Fleet Economic Data Call). **Table 1** provides general information on the Cyprus fishing fleet over the period 2009-2019, while **Table 2** provides information on the evolution of the fleet segments.

**Table 1.** General description of the Cyprus fishing fleet (2009-2019)

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
<b>No. of vessels</b>	1177	1013	1079	1082	1001	951	905	838	817	822	858
<b>of which inactive</b>	266	104	122	175	68	97	65	70	64	54	84
<b>Tonnage (GT)</b>	5091	4400	4101	4043	3384	3511	3625	3390	3505	3684	3811
<b>Engine power (kW)</b>	49526	44380	45881	45908	41515	41111	41227	36393	37686	39226	40801

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>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):

<http://www.moa.gov.cy/moa/dfmr/dfmr.nsf/All/A96C6153D5D65D284225836A00371513?OpenDocument>

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

Fishing technique		Vessel length	2019			2018			2008			Change in 2019-2008		
Description	Code		No.	GT	kW	No.	GT	kW	No.	GT	kW	No. %	GT %	kW %
Vessels using Polyvalent 'passive' gears only	PG	0-< 6 m	29	35	1296	29	36	1245	32	30	844	-9	18	54
Vessels using Polyvalent 'passive' gears only	PG	6-< 12 m	291	1078	15781	283	1041	15569	465	1540	19968	-37	-30	-21
Vessels using Polyvalent 'passive' gears only (category C)	PGO	0-< 6 m	336	339	9111	344	347	9396				100	100	100
Vessels using Polyvalent 'passive' gears only (category C)	PGO	6-< 12 m	78	229	2473	74	225	2589				100	100	100
Vessels using Polyvalent 'passive' gears only	PGP	12-< 18 m	33	1073	5337	31	1006	5017	25	815	4947	32	32	8
Purse seiners	PS	24-< 40 m	1	105	294	1	105	294				100	100	100
Demersal trawlers and/or demersal seiners	DTS	24-< 40 m	6	582	2013	6	596	2013	9	983	3232	-33	-41	-38
INACTIVE		0-< 6 m	41	39	1102	18	17	477	355	344	8298	-88	-89	-87
INACTIVE		6-< 12 m	38	142	2116	32	133	1654	294	1703	12380	-87	-92	-83
INACTIVE		12-< 18 m	4	61	785	3	50	479	11	171	1404	-64	-64	-44
INACTIVE		18-< 24 m	0	0	0	0	0	0	3	264	733	-100	-100	-100
INACTIVE		24-< 40 m	1	128	493	1	128	493	3	397	976	-67	-68	-49
TOTAL			858	3811	40801	822	3684.5	39226	1197	6246	52782	-28	-39	-23

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 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 VL0612 (Category A&B)*. Based on the 2019 modification of the National Fisheries Law, licenses of this category may not exceed the 327 vessels and concern vessels with length from 6-12 metres; owners of fishing vessels below 6m, with license during the adoption of the modified Law, are exempted.

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 800m, 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)*. Based on current National Fisheries Law, licenses of this category may not exceed the 450 vessels.

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 2019 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.

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<sup>1</sup> Basic Fisheries Law Cap. 135 and subsequent amendments of 1961 to 2019, Fisheries Regulations of 1990 to 2019 based on Article 6 of the Basic Law  
Cyprus Balance Report for 2019

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 1<sup>st</sup> of June until the 7<sup>th</sup> 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 2018-2019, were ~ 90 t and 470 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 2018-2019 were 42 t in the central Mediterranean and 6 t 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 management plan adopted by ICCAT (ICCAT Rec. 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 2017-2018 are provided in **Table 4**.

**Table 3:** Average landings (t) of main demersal species in Cyprus waters for the period 2018-2019.

Species		Inshore fishery with polyvalent passive gears	Trawl fishery (territorial waters)
BOG	<i>Boops boops</i>	72	12.1
BPI	<i>Spicara maena</i>	22	
MUR	<i>Mullus surmuletus</i>	20	1.1
MUT	<i>Mullus barbatus</i>	3	9.0
PAC	<i>Pagellus erythrinus</i>	5	8.5
PRR	<i>Sparisoma cretense</i>	25	
SBA	<i>Pagellus acarne</i>	14	5.6
SPC	<i>Spicara smaris</i>	40	30.8
SPI	<i>Siganus</i> spp.	35	
SWA	<i>Diplodus sargus</i>	11	
CTC	<i>Sepia officinalis</i>	11	
OCC	<i>Octopus vulgaris</i>	8	0.8

**Table 4:** Average landings (t) of the main species of the Cyprus large pelagic fishery for the period 2018-2019 caught by drifting longlines.

Species	Landings (LLD) in tons
ALB <i>Thunnus alalunga</i>	638
BFT <i>Thunnus thynnus</i>	62
SWO <i>Xiphias gladius</i>	35

A.(iii) Development *in fleets*

As shown in Table 2, from 2008 until 2019 the Cyprus fishing fleet was reduced by 28% in number of vessels, 39% in tonnage and 23% 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 2008-2019 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. It is noted that the maximum limit is adjusted in accordance with scrapping schemes.
- Professional fishing licenses are linked to both the vessels and the fishermen.
- Following the adoption of the 2019 modifications of Fisheries Law, the maximum duration of fishing licenses has been extended to five years, with the possibility of renewal. The possibility of transferable licenses has also been introduced, with certain requirements. These modifications provide more securement to fishermen, with long-term vision for economic sustainability.
- Following the 2019 modification of the Fisheries Law, the criteria for issuing fishing licenses to small scale inshore vessels (<12m, category license A&B) require much less administrative effort and are less time-consuming.
- The 2019 modification of the Fisheries Regulations introduces further restrictions for the recreational fishery, assisting the work of the control division in combating illegal fishing.

## Weaknesses of fleet management system

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*

Following the long process of revision of the National Fisheries Law and Regulations, and their adopted modifications at the end of 2019, there are currently no further plans for improving the fleet management system.

### 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 2019 in order to ensure compliance with the Common Fisheries Policy of the EU and to accomplish the best possible management of the resources.

During 2019, the decree put into force was the Application of Community Decisions and Community Regulations that concern the Fisheries Sector, Law 134/2006 (14<sup>th</sup> Modification of Annexes of Law - Decree 81/2019). The Decree includes, among others, Regulation (EU) 2019/124 fixing fishing opportunities for 2019.

The DFMR is using conventional and electronic means of control, in order to identify and combat illegal fishing activities. During 2019, the monitoring of fishing activities using VMS and ERS for vessels with overall length more than 12 meters as well as reefer 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. The new sales notes and Fishing activity exchange reports were in full effect by the end of 2019. 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) and other third countries continued throughout 2019.

During 2019, DFMR Inspectors conducted 564 patrols along the coast, in harbors/fishing shelters, at selling / storage facilities of fishery products and at inland waters and 164 patrols at sea. Out of the total number of 727 patrols conducted during 2019, 177 patrols were conducted outside regular working days/hours. Within the framework of the Joint Deployment Plan for the conservation of Bluefin tuna and swordfish fisheries and other demersal stocks in the Mediterranean, the DFMR conducted 25 patrols at sea and 54 patrols exclusively for this purpose. During the closed fishing season of swordfish (January to March) the DFMR performed additional 33 sea patrols on pelagic vessels and another 119 land patrols at ports. During 2019 DFMR reported a total of 329 Infringements.

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

As mentioned also in section D (i), the Fisheries Law has been amended, 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.

In accordance with the DFMR IT strategy, a new data warehouse and validation system according to the control regulation will be build and all current information systems and procedures for collecting, processing and disseminating data by the DFMR will be unified into one single system. The tender procedure for this system was launched in December 2019.

#### **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 2019 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 2020 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.

Cyprus has reviewed the findings of the STECF in its most recent ‘Balance/Capacity’ report (STECF-19-13 Report). Based on the relevant report, there is a discrepancy between the STECF and the national calculation of SHI value for the fleet segment CYP PGP 1218 (1.48 and 0.93 respectively). The detailed table with the assessed stocks used by STECF for calculating the SHI value was checked in the following site [http://sirs.agrocampus-ouest.fr/stecf\\_balance\\_2019/](http://sirs.agrocampus-ouest.fr/stecf_balance_2019/). We have concluded that the basic difference between the two reports is the F/Fmsy value used for albacore; in the national report the value F2015/FMSY value was set at 0.830 in accordance with the relevant ICCAT stock assessment ([https://www.iccat.int/Documents/SCRS/ExecSum/ALB\\_ENG.pdf](https://www.iccat.int/Documents/SCRS/ExecSum/ALB_ENG.pdf)), while the STECF has used as F2015/FMSY the value of 1.80. Another difference between the two reports is the fact that in the national report 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 for the calculation of SHI, based on more detailed data than the ones available under the Economic Data Call.

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 are 3 demersal trawlers below 24m and there is not any demersal trawler above 40m thus, for sampling purposes as well as for confidentiality reasons the trawlers below 24m were 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  $\geq 12$ m, where the vessels above the 24m length group are only 2 and none in the length group 18-<24m. 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 30 active vessels with length less than 18m (length group 12-<18m). All the groups of vessels using polyvalent passive gears with length  $\geq 12$ m 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 2018**

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
Passive gears: Polyvalent "passive gears only" 12- <18m*	32	Polyvalent passive gears 12-18 m	30
		Polyvalent passive gears 18-24 m	0
		Polyvalent passive gears 24-40 m	2
Demersal trawlers 24-<40m*	6	Demersal trawlers 18-24 m	3
		Demersal trawlers 24-<40m	3

## 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  $F/F_{msy}$  for each available stock concerned (i) that is exploited by the fleet segment, weighted by the value of the landings  $V_i$  of that stock:

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

Value and catch data used were based on data provided by Cyprus through the 2020 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).

For the calculation of the SHI, all stocks for which the most recent assessment was undertaken in 2014 or more recently were considered.

Information on  $F/F_{msy}$  on stocks exploited by Cyprus fleets was extracted from GFCM Stock Assessment Forms (<http://www.fao.org/gfcm/data/safs/en/>) and GFCM reports, available at <http://www.fao.org/gfcm/reports/en/>. The database of STECF stock assessment results compiled by the JRC and accessible at <https://stecf.jrc.ec.europa.eu/dd/medbs/> ) 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 (<https://iccat.int/en/>).

The Biological Indicator Visualisation Tool, available at [http://sirs.agrocampus-ouest.fr/stecf\\_balance\\_2019/](http://sirs.agrocampus-ouest.fr/stecf_balance_2019/) was consulted.

**Table 6** provides the values of  $F/F_{msy}$  of the stocks used for calculating SHI indicator for the different fleet segments, for the years 2016-2018. **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 3 fleet segments for the period 2016-2018:

- the demersal trawlers CYP DTS VL2440 fishing in in EU and non-EU waters,
- the polyvalent fleet CYP PGP VL1218, and
- the purse seiner CYP PS VL2440).

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 approved 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. It is

worth mentioning that a number of assessments of data-limited stocks in GSA25 were performed during 2020, but have not been evaluated yet by GFCM, and therefore have not been used for the estimation of SHI.

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

Stock	Reference Year	Year	F/FMSY
ALB_all	2015	2016	0.83
ALB_all	2015	2017	0.83
ALB_all	2015	2018	0.83
BFT_all	2014	2016	0.339
BFT_all	2014	2017	0.339
BFT_all	2014	2018	0.339
BOG_25	2016	2016	1.2
BOG_25	2016	2017	1.2
BOG_25	2016	2018	1.2
DPS_12-16	2018	2016	1.52
DPS_12-16	2018	2017	1.52
DPS_12-16	2018	2018	1.52
HKE_12-16	2017	2016	4.55
HKE_12-16	2017	2017	4.55
HKE_12-16	2017	2018	4.55
HKE_17	2018	2016	2.83
HKE_17	2018	2017	2.83
HKE_17	2018	2018	2.83
MUT_12-14	2018	2016	2.17
MUT_12-14	2018	2017	2.17
MUT_12-14	2018	2018	2.17
MUT_15	2017	2016	1.114
MUT_15	2017	2017	1.114
MUT_15	2017	2018	1.114
MUT_25	2018	2016	1.15
MUT_25	2018	2017	1.15
MUT_25	2018	2018	1.15
PAC_25	2017	2016	0.81
PAC_25	2017	2017	0.81
PAC_25	2017	2018	0.81
SPC_25	2015	2016	0.14
SPC_25	2015	2017	0.14
SPC_25	2015	2018	0.14
SWO_all	2015	2016	1.85
SWO_all	2015	2017	1.85
SWO_all	2015	2018	1.85

**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 (fishing in EU and non-EU waters)	2018	<b>0.75</b>	ALB, SWO, BOG_25, MUT_25, PAC_25, SPC_25	6	<b>61%</b>	67%
	2017	<b>0.79</b>	ALB, SWO, BOG_25, MUT_25, PAC_25, SPC_25	6	<b>49%</b>	62%
	2016	<b>0.73</b>	ALB, SWO, BOG_25, MUT_25, PAC_25, SPC_25	6	<b>74%</b>	78%
CYP DTS VL2440 (fishing exclusively in non-EU waters)	2018	<b>3.48</b>	DPS_12-16, HKE_12-16	2	<b>15%</b>	18%
	2017	<b>2.95</b>	DPS_12-16, HKE_12-16	2	<b>27%</b>	25%
	2016	<b>4.55</b>	HKE_12-16	1	<b>6%</b>	7%
CYP PGP VL1218	2018	<b>0.95</b>	ALB, BFT, SWO, BOG_25, MUT_25, PAC_25, SPC_25, HKE_17	8	<b>96%</b>	99%
	2017	<b>0.93</b>	ALB, BFT, SWO, BOG_25, MUT_25, PAC_25, SPC_25	7	<b>92%</b>	95%
	2016	<b>0.88</b>	ALB, BFT, SWO, BOG_25, MUT_25, PAC_25, SPC_25	7	<b>93%</b>	98%
CYP PG VL0612 (A&B category)	2018	<b>0.90</b>	ALB, SWO, BOG_25, MUT_25, PAC_25, SPC_25	6	<b>22%</b>	26%
	2017	<b>1.01</b>			<b>24%</b>	29%
	2016	<b>1.02</b>			<b>18%</b>	23%
CYP PG VL0006 (A&B category)	2018	<b>0.87</b>	BOG_25, MUT_25, PAC_25, SPC_25	4	<b>18%</b>	27%
	2017	<b>0.74</b>	ALB, SWO, BOG_25, MUT_25, PAC_25, SPC_25	6	<b>12%</b>	21%
	2016	<b>0.84</b>	BOG_25, MUT_25, PAC_25, SPC_25	4	<b>14%</b>	21%
CYP PGO VL0612 (C category)	2018	<b>1.08</b>	ALB, BOG_25, MUT_25, SPC_25	4	<b>10%</b>	23%
	2017	<b>1.09</b>	ALB, BOG_25, MUT_25, SPC_25	4	<b>10%</b>	23%
	2016	<b>1.00</b>	BOG_25, MUT_25, SPC_25	3	<b>8%</b>	12%
CYP PGO VL0006 (C category)	2018	<b>1.08</b>	ALB, BOG_25, MUT_25, SPC_25	4	<b>10%</b>	23%
	2017	<b>1.09</b>	ALB, BOG_25, MUT_25, SPC_25	4	<b>10%</b>	23%
	2016	<b>1.05</b>	BOG_25, MUT_25, SPC_25	3	<b>6%</b>	11%
CYP PS VL2440	2018	<b>0.34</b>	BFT	1	<b>100%</b>	100%
	2017	<b>0.41</b>	BFT, SWO, HKE_17, BOG_25, MUT_25, PAC_25, SPC_25	7	<b>99.7%</b>	99.5%
	2016	<b>NA</b>	NA	NA	<b>NA</b>	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

Fleet segment	Sustainable Harvest Indicator		
	2018	2017	2016
CYP DTS VL2440 (fishing in EU and non-EU waters)	0.75	0.79	0.73
CYP DTS VL2440 (fishing exclusively in non-EU waters)	3.48	2.95	4.55
CYP PGP VL1218	0.95	0.93	0.88
CYP PG VL0612 (Category A&B)	0.90	1.01	1.02
CYP PG VL0006 (Category A&B)	0.87	0.74	0.84
CYP PGO VL0612 (Category C)	1.08	1.09	1.05
CYP PGO VL0006 (Category C)	1.08	1.09	1.05
CYP PS VL2440	0.34	0.41	NA

#### ***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; or
- (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; or
- (c) subject to a fishing opportunities regulation which stipulates that the fish should be returned to the sea unharmed or that landings are prohibited; or
- (d) a stock which is on the IUCN "red list" or is listed by CITES.

and for which either:

- 1- the stocks make up to 10% or more of the catches by the fleet segment; or
- 2- the fleet segment takes 10% or more of the total catches from that stock.

Cyprus reviewed the findings of the STECF in its most recent ‘Balance/Capacity’ report (STECF-19-13 Report) concerning this indicator. Based on the report, no stock at risk was detected for Cyprus active fleets.

## 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:

$$\text{RoFTA} = \text{Net profit} / \text{Depreciated Replacement Value}$$

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 2017-2018 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 Traffic light system is used: **red** < TRP; **green** > TRP ; **yellow** 0 – TRP

**Table 9: RoFTA indicator**

FLEET SEGMENTS	YEARS		Δ
	2017	2018	
DTS VL2440	0.47	-7.73	↘
PG VL0006 (A&B)	251.54	23.51	↘
PG VL0612 (A&B)	21.80	9.69	↘
PGP VL 1218	-0.79	-1.61	↘

## RISK FREE INTEREST RATE

YEARS	2017	2018
	0.5	0.5

The development trend is analysed for all indicators for the latest year (2018) to 2017 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 and for the demersal trawlers 24-<40m, indicating economic over-capitalization. However, the other two fleet segments are positive despite the fact that they are worsen than last year, showing viability of these fleet segments. All the fleet segments are deteriorated compared to the previous year.

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) is good.

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**

	2017				2018			
	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	1,234,141	5,410,499	2,164,983	1,459,889	273,864	3,218,775	2,059,466	1,106,154
Less Exp	146,474	1,967,190	2,273,242	1,423,872	164,340	1,927,888	2,261,255	1,523,614
Net Profit	1,087,667	3,443,309	-108,259	36,017	109,525	1,290,887	-201,789	-417,460
Cap.Val	432,407	15,791,887	13,710,337	7,592,807	465,792	13,320,576	12,510,464	5,402,112
RoFTA	251.53	21.8	-0.79	0.47	23.51	9.69	-1.61	-7.73

***Ratio between current revenue and break-even revenue***

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

$$\text{Ratio} = \text{Current Revenue (CR)} / \text{BER}$$

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:

$$\text{BER} = (\text{Fixed Costs}) (1 - \{ \text{Variable Costs} / \text{Current Revenue} \})$$

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

**Table 11: CR/BER\*****CR/BER**

		2017	2018	
DTS	VL2440	1.09	-0.03	↓
PG	VL0006 (A&B)	59.64	5.91	↓
PG	VL0612 (A&B)	6.45	3.27	↓
PGP	VL1218	0.79	0.63	↓

The fleet segments with ratio less than 1 is the polyvalent passive 12-24m (PGP 12-24m) segment and the trawlers 24-40m (DTS 24-40m), 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. These fleet segments have been deteriorated in 2018 compared to the previous year 2017.

The calculations for this indicator are shown below:

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

	2017				2018			
Variables	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	1,234,141	5,410,499	2,164,983	1,459,889	273,864	3,218,775	2,059,466	1,106,154
FC	18,547	631,345	520,952	403,201	22,314	569,665	547,808	404,777
VC	127,927	1,335,845	1,752,290	1,020,671	142,026	1,358,224	1,713,448	1,118,837
BER	20,692	838,327	2,732,909	1,340,174	46,352	985,526	3,260,495	-35,302,790
CR/BER	59.64	6.45	0.79	1.09	5.91	3.27	0.63	-0.03

### *F(iii) Vessel Use Indicators*

#### *Inactive Fleet Indicator*

**Table 13** provides the proportion of inactive vessels of the fleet with respect to number of vessels, power and tonnage for the period 2012-2019, by length class and in total. The development trend is analyzed for the latest year (2019) to the average over the period 2012-2018 and indicated by an arrow: "↗" increased; "↘" decreased and "↔" stable.

The indicator suggests an overall decrease in the number and GT of inactive vessels, while there is an increase in the % of inactive vessels as of total vessels, and their relevant kW.

Specifically by length class, there has been an increase of inactive vessels in length classes 0-6m, 12-18m and 24-40m, while inactive vessels have been decreased for length class 6-12m. Further information on the inactivity of vessels in 2019 are provided below:

**Table 14:** Information on inactive vessels in 2019

Length class of inactive vessels	Information on inactive vessels
VL0006	all 41 inactive vessels unlicensed
VL0612	27 unlicensed, 11 licensed
VL1218	2 unlicensed, 2 licensed
VL2440	1 licensed inactive vessel

As seen from the above table, most of the inactive vessels were unlicensed; considering this, there is no indication of technical inefficiency in the licensed fishing fleet.

**Table 13: Inactive Fleet Indicator**

				Number of inactive vessels							Δ	no. inactive vessels as % of total vessels								Δ	
MS	Fleet segment			2012	2013	2014	2015	2016	2017	2018	2019	#	2012	2013	2014	2015	2016	2017	2018	2019	#
CYP	NONE	INACTIVE	VL0006	75	28	44	31	29	20	18	41	↗	6.9%	2.8%	4.6%	3.4%	3.5%	2.4%	2.2%	4.8%	↗
CYP	NONE	INACTIVE	VL0612	94	38	48	32	40	40	32	38	↘	8.7%	3.8%	5.0%	3.5%	4.8%	4.9%	3.9%	4.4%	↘
CYP	NONE	INACTIVE	VL1218	3	2	4	1	1	3	3	4	↗	0.3%	0.2%	0.4%	0.1%	0.1%	0.4%	0.4%	0.5%	↗
CYP	NONE	INACTIVE	VL1824	2	0	0	1	0	0	0	0	↘	0.2%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	↘
CYP	NONE	INACTIVE	VL2440	1	0	1	0	0	1	1	1	↗	0.1%	0.0%	0.1%	0.0%	0.0%	0.1%	0.1%	0.1%	↗
<b>CYP</b>	<b>National inactive fleet</b>			<b>175</b>	<b>68</b>	<b>97</b>	<b>65</b>	<b>70</b>	<b>64</b>	<b>54</b>	<b>84</b>	↘	<b>16.2%</b>	<b>6.8%</b>	<b>10.2%</b>	<b>7.2%</b>	<b>8.4%</b>	<b>7.8%</b>	<b>6.6%</b>	<b>9.8%</b>	↗
				Inactive kW as % of fleet kW							Δ	Inactive GT as % of fleet GT								Δ	
MS	Fleet segment			2012	2013	2014	2015	2016	2017	2018	2019	kW	2012	2013	2014	2015	2016	2017	2018	2019	GT
CYP	NONE	INACTIVE	VL0006	4.2%	1.8%	2.9%	2.0%	2.3%	1.6%	1.2%	2.7%	↗	1.9%	0.9%	1.3%	0.8%	0.8%	0.5%	0.5%	1.0%	↗
CYP	NONE	INACTIVE	VL0612	8.7%	4.3%	4.9%	4.1%	5.1%	6.7%	4.2%	5.2%	↘	6.9%	3.9%	4.4%	3.1%	3.9%	5.3%	3.6%	3.7%	↘
CYP	NONE	INACTIVE	VL1218	1.5%	0.5%	1.7%	0.5%	0.6%	0.8%	1.2%	1.9%	↗	1.2%	1.0%	2.9%	0.9%	1.0%	0.9%	1.4%	1.6%	↗
CYP	NONE	INACTIVE	VL1824	1.2%	0.0%	0.0%	0.6%	0.0%	0.0%	0.0%	0.0%	↘	4.9%	0.0%	0.0%	2.8%	0.0%	0.0%	0.0%	0.0%	↘
CYP	NONE	INACTIVE	VL2440	0.7%	0.0%	1.0%	0.0%	0.0%	1.2%	1.3%	1.2%	↗	3.1%	0.0%	4.2%	0.0%	0.0%	3.3%	3.5%	3.4%	↗
<b>CYP</b>	<b>National inactive fleet</b>			<b>16.2%</b>	<b>6.6%</b>	<b>10.5%</b>	<b>7.3%</b>	<b>8.1%</b>	<b>10.2%</b>	<b>7.9%</b>	<b>11.0%</b>	↗	<b>18%</b>	<b>6%</b>	<b>13%</b>	<b>8%</b>	<b>6%</b>	<b>10%</b>	<b>9%</b>	<b>10%</b>	↘

## *Vessel Utilisation Indicator*

**Table 15** 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 (2018) to the average over the period 2012-2017 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.

As indicated in Table 14, the indicator was calculated mainly based on observed maximum days.

The maximum observed effort of Demersal trawlers fishing in EU and non-EU waters during 2018 was 165 days, and was lower compared to previous years (e.g. in 2017 it was 240 days). The relative low maximum observed effort was mainly due to repairs that had to be made to vessels of this segment during the year. For 2018 the indicator had a relative low value (0.7). However, the results of this indicator are not considered an indication of technical overcapacity, since the reduced activity was due to the repairs made to the fishing vessels.

Concerning the segment “Demersal trawlers fishing exclusively in non-EU waters”, in 2018 it concerned only one vessel, with observed effort more than 220 days.

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).

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. However, as EWG 19-13 notes, “for the VUR indicator, the small-scale fleet should be treated differently due to the fact that many fishers are only working part-time or fishing is only one source of income”. Indeed, in Cyprus many of the fishers in the small-scale inshore fleet segments do not work full-time as fishermen, and have additional sources of income.

Regarding the tuna purse seiner segment, there is only one purse seiner, with fishing capacity management plan in accordance with ICCAT Recommendation [19-04]; the Vessel Utilisation Indicator has not been calculated.



**Table 15:** Estimated Vessel Utilisation Indicator for the Cyprus fleet segments in traffic light system.

Fleet segment	Vessel Utilisation Indicator																		Δ	Comments	
	2010		2011		2012		2013		2014		2015		2016		2017		2018				
	kW-days	GT-days	kW-days	GT-days	kW-days	GT-days	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)	0.79		0.65		0.98		0.98		1.00		0.99		0.90		0.80		0.70		↘	calculated based on observed maximum days	
CYP OTB VL1824 (fishing only in international waters)	0.55		0.48		0.23		0.42		0.71		0.53		0.55		0.72		1.00		↗	In 2018 the segment involved only 1 vessel, with activity more than 220 days.	
CYP PGP VL1218		0.61		0.50		0.47		0.45		0.54		0.61		0.53		0.50		0.54		↗	calculated based on observed maximum days
CYP PG VL0612 (Category A&B)		0.48		0.41		0.55		0.50		0.49		0.48		0.55		0.50		0.47		↘	calculated based on observed maximum days
CYP PG VL0006 (Category A&B)		0.54		0.57		0.83		0.60		0.69		0.50		0.70		0.60		0.59		↘	calculated based on observed maximum days
CYP PGO VL0612 (Category C)		0.28		0.23		0.41		0.40		0.46		0.39		0.38		0.35		0.37		↗	calculated based on maximum allowable days (70 days)
CYP PGO VL0006 (Category C)		0.27		0.25		0.41		0.40		0.39		0.39		0.39		0.40		0.40		↗	calculated based on maximum allowable days (70 days)

## 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 not under- 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 Section F. The economic performance of all trawlers has been deteriorated compared to previous year and they are in net loss-making position. Considering the above, we cannot conclude on the balance of this fleet with its exploited resources.
- Demersal trawlers operating exclusively outside Union waters (only one vessel in 2018) seem to be fully utilized in 2018. The estimated SHI, which represents less than 40% of the value of landings, suggests that the fleet relies on stocks that are overfished; this concerns the fishing activity in the Central Mediterranean, in which a multiannual management plan for bottom trawl fisheries exploiting demersal stocks is in place (GSAs 12 to 16), and in which only one vessel will be operating from 2018 onwards. 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 economic performance of all trawlers has been deteriorated compared to previous year and they seem to be in net loss-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. It is important to mention that the fishing areas available to the fleet for fishing large pelagic fish in the Eastern Mediterranean have been decreased, since they are hindered by illegal activities of Turkey to fish in international waters of GSA24 and Cyprus EEZ; this forces the fleet to reduce their fishing days targeting large pelagic fish, with subsequent economic consequences. 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 2018. The small deterioration of economic performance was mainly due to the decrease in the value of landings in 2018. RoFTA is negative in 2018 and it was deteriorated compared to the previous year, indicating economic over-capitalization. The Ratio between current revenue and break-even revenue is considered to be around 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; considering though that many of the fishers do not work full-time as fishermen and have additional sources of income, it is not concluded that there is technical overcapacity. The estimated SHI is around 1; however, it is based on stocks that account for less than 40% of the value of landings. The fleet segment shows deterioration of its economic performance but the segment is still in

a net profit-making position. The worst economic performance was mainly due to the decreased volume and consequently value of landings. But the value of landings in 2017 was unusual high for this fleet segment. The total expenditure did not vary much from one year to the other. The RoFTA is positive and despite the fact that it is at a lower value than the previous year, indicating long term viability. The ratio CR/BER is positive but again lower 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.

- The vessels with polyvalent passive gears 0-6m (small scale inshore fishery with category licenses A&B) seem to be underutilized; considering though that many of the fishers do not work full-time as fishermen and have additional sources of income, it is not concluded that there is technical overcapacity. The estimated SHI is <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 despite the fact that both indicators were worsen compared to 2017. 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.
- 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.
- The tuna purse seiner segment concerns only one vessel, which is under a fishing capacity management plan in accordance with ICCAT Recommendation [19-04]. The estimated SHI is <1. Due to confidentiality reasons (only one vessel is included in the segment), no economic information can be provided. It is considered that this segment is in balance with the fishing opportunities.

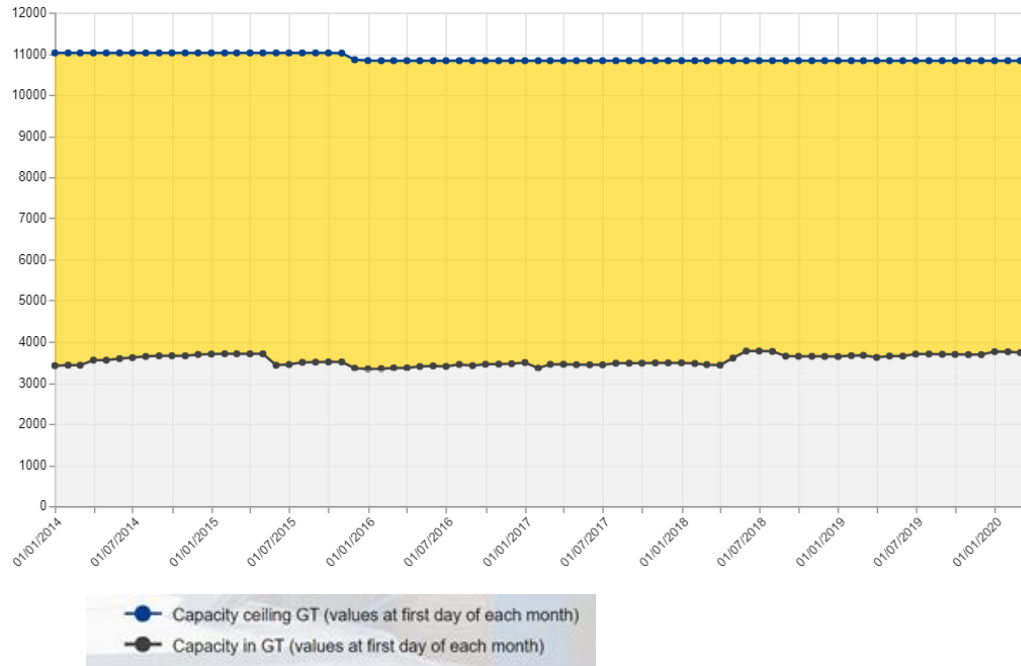
## **H. Action Plan**

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

## ANNEX I

### Tonnage and Power Statistics for Cyprus - Evolution between 1/1/2014 and 1/1/2020.

#### Cyprus: tonnage of the fleet compared to its tonnage ceiling



#### Cyprus: power of the fleet compared to its power ceiling

