REPUBLIC OF CYPRUS

MINISTRY OF AGRICULTURE
NATURAL RESOURCES
AND ENVIRONMENT

DEPARTMENT OF FISHERIES
AND MARINE RESEARCH
1416 NICOSIA

CYPRUS ANNUAL REPORT ON
EFFORTS DURING 2020 TO ACHIEVE A SUSTAINABLE BALANCE BETWEEN
FISHING CAPACITY AND FISHING OPPORTUNITIES

Nicosia, May 2021

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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[1] developed by the Commission.

The relevant findings and advice of STECF (most updated STECF-20-11 reviewing EWG-20-11) 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 31st of December 2020 was composed of 864 fishing vessels (source: data submitted under 2021 Fleet Economic Data Call). **Table 1** provides general information on the Cyprus fishing fleet over the period 2010-2020, while **Table 2** provides information on the evolution of the fleet segments.

Table 1. General description of the Cyprus fishing fleet (2010-2020)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
No. of vessels	1013	1079	1082	1001	951	905	838	817	822	858	864
of which inactive	104	122	175	68	97	65	70	64	54	84	79
Tonnage (GT)	4400	4101	4043	3384	3511	3625	3390	3505	3684	3812	3918
Engine power (kW)	44380	45881	45908	41515	41111	41227	36393	37686	39226	40801	40976

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.

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

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

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

Fishing technique			2020			2019			2008			Change in 2020-2008		
Description	Code	Vessel length	No.	GT	kW	No.	GT	kW	No.	GT	kW	No. %	GT %	kW %
Vessels using Polyvalent 'passive' gears only	PG	0-< 6 m	28	34	1259	29	35	1296	32	30	844	-13	15	49
Vessels using Polyvalent 'passive' gears only	PG	6-< 12 m	298	1111	16165	291	1078	15781	465	1540	19968	-36	-28	-19
Vessels using Polyvalent 'passive' gears only (category C)	PGO	0-< 6 m	344	349	9382	336	339	9111				100	100	100
Vessels using Polyvalent 'passive' gears only (category C)	PGO	6-< 12 m	73	208	2229	78	229	2473				100	100	100
Vessels using Polyvalent 'passive' gears only	PGP	12-< 18 m	36	1238	6115	34	1165	5595	25	815	4947	44	52	24
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	5	500	1640	5	490	1755	9	983	3232	-44	-49	-49
INACTIVE		0-< 6 m	37	33	991	41	39	1102	355	344	8298	-90	-90	-88
INACTIVE		6-< 12 m	39	116	1806	38	142	2116	294	1703	12380	-87	-93	-85
INACTIVE		12-< 18 m	2	96	602	4	61	785	11	171	1404	-82	-44	-57
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	864	3918	40976	858	3812	40801	1197	6246	52782	-28	-37	-22

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. The relevant fleet operates only in Cyprus waters (GSA25). As it is shown in Table 2, they represent the large majority of the fishing vessels in the Register (90%). Cyprus

Fisheries Law[1] 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, until the end of 2019, have been 70 days, exercised only in the weekends; since 2020 the maximum allowable working days has increased to around 100 days. 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; the large pelagic fishery using drifting longlines and operating around Cyprus waters and the eastern Mediterranean (targeting swordfish, bluefin tuna and albacore), and in the inshore demersal fishery using mostly set nets and set longlines. There is also one vessel operating in Adriatic Sea. A limited number of licenses is 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 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 2020 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

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[1] 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

(eastern and central Mediterranean). It should be mentioned that from 2018 only one trawler receives license for operating in the 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 and the inshore fishery with polyvalent passive gears in Cyprus waters target a mix of demersal species, as it is the case in all Mediterranean demersal fisheries. The average landings of the bottom trawl fishery in Cyprus waters and the inshore fishery with polyvalent passive gears, for the period 2018-2020, were around 85 t and 465 t respectively.

Figure 3 provides the species that represent at least 2% of the 2018-2020 Cyprus average landings, either in terms of volume or in value, from the bottom trawl fishery in Cyprus waters.
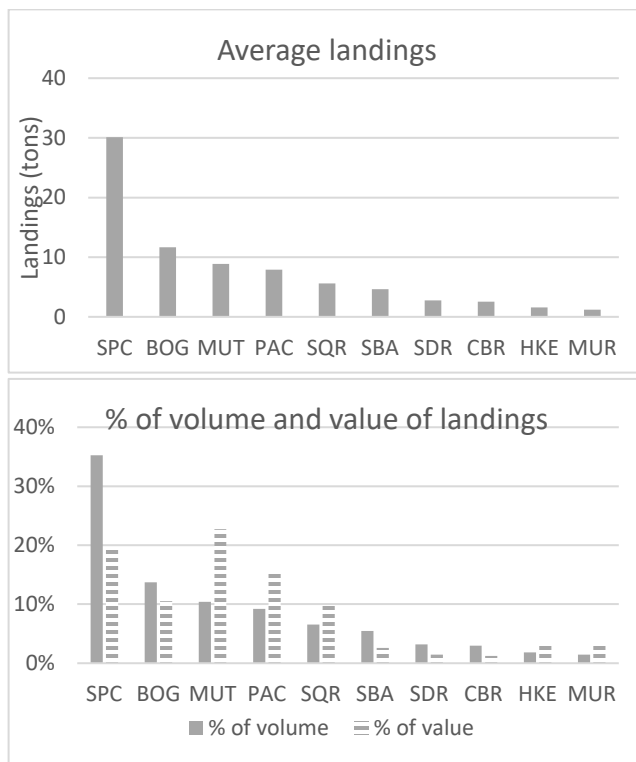
Figure 3: Most important species in 2018-2020 Cyprus landings from bottom trawl fishery (GSA25).

Figure 4 provides the species that represent at least 2% of the 2018-2020 average landings, either in terms of volume or in value, from the inshore fishery with polyvalent passive gears.
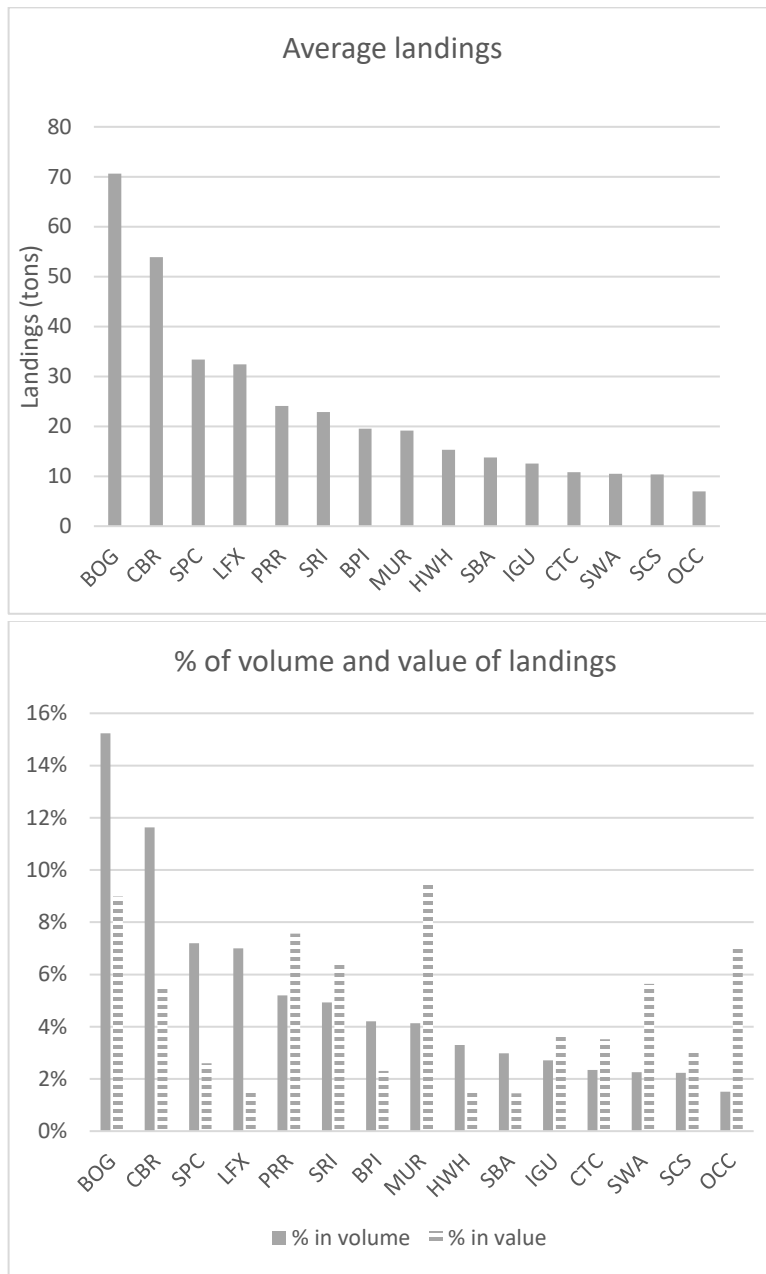
Figure 4: Most important species in 2018-2020 Cyprus landings from inshore fishery with polyvalent passive gears (GSA25).

Bottom trawlers in international waters operate in the central and eastern Mediterranean. The average landings in central Mediterranean for the period 2018-2020 were 33 tons, with stripped red mullet and hake being the main species caught. In the Eastern Mediterranean, the average landings in international waters for the period 2018-2019 was 6 t, with red mullet being the main species; during 2020 there was no fishing activity in this area.

Concerning the large pelagic fishery, polyvalent vessels operate in the Eastern Mediterranean with drifting longlines, catching *Xiphias gladius*, *Thunnus alalunga* and *Thunnus thynnus*; there is also 1 vessel operating in the Adriatic. *T. thynnus* is under a multiannual management plan adopted by ICCAT (ICCAT Rec. 19-04, amended by Rec. 20-07). 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 2018-2020 are provided in **Table 3**.

Table 3: 2018-2020 average landings (t) of target species from Cyprus large pelagic fishery (LLD).

Species		Landings (LLD) in tons
ALB	*Thunnus alalunga*	615
BFT	*Thunnus thynnus*	61
SWO	*Xiphias gladius*	33

A.(iii) Development *in fleets*

As shown in Table 2, from 2008 until 2020 the Cyprus fishing fleet was reduced by 28% in number of vessels, 37% in tonnage and 22% 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 2008-2020 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 2008-2020 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 1st of May 2004 (date of accession of Cyprus to the EU) until the 31st of December 2020, 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 are 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 2020 in order to ensure compliance with the Common Fisheries Policy of the EU and to accomplish the best possible management of the resources.

During 2020, the decree put into force was the Application of Community Decisions and Community Regulations that concern the Fisheries Sector, Law 134/2006 (15th Modification of Annexes of Law - Decree 64/2020). The Decree includes, among others, the following Regulations:
-   Regulation (EU) 2019/1241 on the conservation of fisheries resources and the protection of marine ecosystems through technical measures;
-   Regulation (EU) 2019/2236 of 16 December 2019 fixing for 2020 the fishing opportunities for certain fish stocks and groups of fish stocks applicable in the Mediterranean and Black Seas;
-   Delegated Regulation (EU) 2020/4 amending Delegated Regulation (EU) 2017/86 establishing a discard plan for certain demersal 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 2020, 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 2020. 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 2020.

During 2020, DFMR Inspectors conducted 617 patrols along the coast, in harbours/fishing shelters, at selling / storage facilities of fishery products and at inland waters and 156 patrols at sea. Out of the total number of 773 patrols conducted during 2020, 242 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 29 patrols at sea and 49 land 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 25 sea patrols on pelagic vessels and another 131 land patrols at ports and landing sides regarding the same fishery. During 2020 DFMR reported a total of 402 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 December 2019, DFMR procured the Tender for Development, Implementation, Operation and Enhanced Maintenance of the Integrated Fisheries Management Platform (IFMP), aiming at the complete digitization of the Department, including e-Services, ensuring optimized performance, compliance and alignment of the EU Regulations for Fisheries Control and Management. The evaluation procedure has been completed in March 2021. Due to a recourse filed to the Tender Review Authority, the awarding to the successful vendor is expected by October 2021.

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 2020 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 2021 Official Fleet Economic Data Call and the most recent assessments and advice from relevant scientific bodies on stock status and their exploitation rates.

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 in the case of the polyvalent passive gears with length $>=12m$ fleet segment. The vessels above the 24m length group are only 2 and 3 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 29 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 vessel's length; this is evident from the landings value and volume.

As for the demersal trawlers fleet segment, there are 3 demersal trawlers in the length group 18-<24m and 2 in the length group 24-<40m. It is noted that there is not any demersal trawler above 40m thus, for sampling purposes as well as for confidentiality reasons all the trawlers were regrouped in the same below length group. Actually, there were regrouped in the length group 24-<40m (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. For comparability reasons with the previous years this cluster was not named after the biggest segment in terms of number of vessels. It is emphasized that the vessels belonged in this fleet segment are the same as the ones in the last year's group with the exception of one, which does not use trawl nets anymore.

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 2019

Name of the clustered fleet segments	Total number of vessels in the cluster by the 31st of December of the sampling year	Fleet segments which have been clustered	Number of vessels in the segment by the 31st of December of the sampling year
Passive gears: Polyvalent "passive gears only" 12-<18m*	34	Polyvalent passive gears 12-18 m	29
		Polyvalent passive gears 18-24 m	3
		Polyvalent passive gears 24-40 m	2
Demersal trawlers 24-<40m*	5	Demersal trawlers 18-24 m	3
		Demersal trawlers 24-<40m	2

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 2021 Official Fleet Economic Data Call.

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/Fmsy on stocks exploited by Cyprus fleets was extracted from the following sources:
- GFCM Stock Assessment Forms available at http://www.fao.org/gfcm/data/safs and GFCM reports, available at http://www.fao.org/gfcm/reports
- GFCM Stock assessment Forms related to GSA25 and validated by GFCM WGSAD that at the time of the report were not available at http://www.fao.org/gfcm/data/safs
- ICCAT website, specifically from document "2020 SCRS advice to the Commission" (https://www.iccat.int/Documents/SCRS/SCRS_2020_Advice_ENG.pdf)

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. In addition, the Biological Indicator Visualisation Tool, available at http://sirs.agrocampus-ouest.fr/stecf_balance_2020/ 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 2017-2019. **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 2017-2019:
- the demersal trawlers CYP DTS VL2440,
- 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	Reporting Year	Reference Year	Year	F/FMSY
ALB_all	2017	2015	2017	0.83
ALB_all	2017	2015	2018	0.83
ALB_all	2017	2015	2019	0.83
BFT_all	2017	2014	2017	0.426
BFT_all	2017	2014	2018	0.426
BFT_all	2017	2014	2019	0.426
BOG_25	2017	2016	2017	1.2
BOG_25	2017	2016	2018	1.2
BOG_25	2017	2016	2019	1.2
DPS_12-16	2019	2018	2017	1.52
DPS_12-16	2019	2018	2018	1.52
DPS_12-16	2019	2018	2019	1.52
HKE_12-16	2019	2018	2017	1.65
HKE_12-16	2019	2018	2018	1.65
HKE_12-16	2019	2018	2019	1.65
HKE_17-18	2019	2018	2017	2.81
HKE_17-18	2019	2018	2018	2.81
HKE_17-18	2019	2018	2019	2.81
MUT_12-14	2019	2018	2017	2.17
MUT_12-14	2019	2018	2018	2.17
MUT_12-14	2019	2018	2019	2.17
MUT_15	2018	2017	2017	1.114
MUT_15	2018	2017	2018	1.114
MUT_15	2018	2017	2019	1.114
MUT_25	2020	2019	2017	1.15
MUT_25	2020	2019	2018	1.15
MUT_25	2020	2019	2019	1.15
PAC_25	2019	2019	2017	0.81
PAC_25	2019	2019	2018	0.81
PAC_25	2019	2019	2019	0.81
SPC_25	2016	2015	2017	0.14
SPC_25	2016	2015	2018	0.14
SPC_25	2016	2015	2019	0.14
SWO_all	2020	2018	2017	1.106
SWO_all	2020	2018	2018	0.929
SWO_all	2020	2018	2019	0.929

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)	N. of stocks included in SHI	N. of stocks in SHI in sustainable exploitation	% of landings value of stocks included in SHI	% of landings volume of stocks included in SHI
CYP **DTS** VL2440	2019	**0.93**	DPS12-16, HKE12-16, MUT12-14, BOG25, MUT25, PAC25, SPC25, ALB, SWO	9	4	**51%**	65%
	2018	**0.89**	DPS12-16, HKE12-16, BOG25, MUT25, PAC25, SPC25, ALB, SWO	8	4	**42%**	52%
	2017	**1.00**	DPS12-16, HKE12-16, BOG25, MUT25, PAC25, SPC25, ALB, SWO	8	3	**40%**	53%
CYP **PGP** VL1218	2019	**0.85**	BOG25, MUT25, PAC25, SPC25, HKE17-18, ALB, SWO, BFT	8	5	**93%**	96%
	2018	**0.83**	BOG25, MUT25, PAC25, SPC25, HKE17-18, ALB, SWO, BFT	8	5	**96%**	99%
	2017	**0.81**	BOG25, MUT25, PAC25, SPC25, ALB, SWO, BFT	7	4	**92%**	95%
CYP **PG** VL0612 (A&B category)	2019	**0.90**	BOG25, MUT25, PAC25, SPC25, ALB	5	3	19.5%	24%
	2018	**0.90**	BOG25, MUT25, PAC25, SPC25, ALB, SWO	6	4	22%	26%
	2017	**1.01**	BOG25, MUT25, PAC25, SPC25, ALB, SWO	6	4	24%	29%
CYP **PG** VL0006 (A&B category)	2019	**0.87**	BOG25, MUT25, PAC25, SPC25	4	2	18%	28%
	2018	**0.84**	BOG25, MUT25, PAC25, SPC25	4	2	18%	27%
	2017	**0.92**	BOG25, MUT25, PAC25, SPC25, ALB, SWO	6	3	12%	21%
CYP **PGO** VL0612 (C category)	2019	**1.10**	BOG25, MUT25, PAC25, SPC25, ALB	5	3	4%	8%
	2018	**1.08**	BOG25, MUT25, SPC25, ALB	4	2	10%	23%
	2017	**1.09**	BOG25, MUT25, SPC25, ALB	4	2	10%	23%
CYP **PGO** VL0006 (C category)	2019	**1.10**	BOG25, MUT25, PAC25, SPC25, ALB	5	3	4%	8%
	2018	**1.08**	BOG25, MUT25, SPC25, ALB	4	2	10%	23%
	2017	**1.09**	BOG25, MUT25, SPC25, ALB	4	2	10%	23%
CYP **PS** VL2440	2019	**0.43**	BFT	1	1	**100%**	100%
	2018	**0.43**	BFT	1	1	**100%**	100%
	2017	**0.47**	BOG25, MUT25, PAC25, SPC25, HKE17-18, SWO, BFT	7	3	**99.7%**	99.5%

Table 8 provides the values of the SHI in traffic light system, for the fleet segments for which the indicator represents at least 40% of the value of landings. 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 Cyprus fleet segments in traffic light system

Fleet segment	Sustainable Harvest Indicator		
	2019	2018	2017
CYP DTS VL2440	0.93	0.89	1.00
CYP PGP VL1218	0.85	0.83	0.81
CYP PS VL2440	0.43	0.43	0.47

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 stipluates 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-20-11 Report) concerning this indicator. Based on the report, SAR indicator values were not calculated for any of the segments.

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

Table 9: RoFTA indicator

ROFTA

FLEET SEGMENTS	YEARS		
	2018	2019	Δ
DTS VL2440	-7.73	-4.15	↗
PG VL0006 (A&B)	23.51	33.17	↗
PG VL0612 (A&B)	9.69	9.67	↔
PGP VL 1218	-1.61	-4.23	↘

YEARS	2018	2019
	0.2	0.1

The development trend is analysed for all indicators for the latest year (2019) to 2018 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. Yet, the trawlers fleet segment is showing significant improvement compared to previous year. On the other hand, the PGP fleet segment is deteriorated compared to the previous year. As for the small -scale fleet segments, both of them are positive. The development trend of the polyvalent passive gears 0-<6m length group is stable compared to last year and the polyvalent passive gears 6-<12m fleet segment is positive, showing viability of these fleet segments.

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 may be rather early to come up with safe results the situation for this fleet segment (PG 6-12m) is good showing important improvement.

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

	2018				2019			
	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	273,864	3,218,775	2.059,466	1,106,154	289,955	3,289,046	2.234,095	1,320,106
Less Exp	164,340	1,927,888	2,261,255	1,523,614	142,386	1,954,841	2,865,308	1,580,457
Net Profit	109,525	1,290,887	-201,789	-417,460	147,569	1,334,205	-631,213	-260,351
Cap.Val	465,792	13,320,576	12,510.464	5,402,112	444,928	13,802,880	14,905,856	6,272,000
RoFTA	23.51	9.69	-1.61	-7.73	7.88	3.12	0.25	0.34

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

		2018	2019	
DTS	VL2440	-0.03	0.34	↗
PG	VL0006 (A&B)	5.91	7.88	↗
PG	VL0612 (A&B)	3.27	3.12	
PGP	VL1218	0.63	0.25	↘

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. The polyvalent passive 12-24m length group has been deteriorated in 2019 compared to the previous year 2018 but, this is not the case with the trawlers 24-40m since a significant improvement is shown.

The calculations for this indicator are shown below:

TABLE 12: Calculation of Ratio= CR/BER

YEARS	2018				2019			
Variable	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	273,864	3,218,775	2,059,466	1,106,154	289,955	3,289,046	2.234,095	1,320,106
FC	22,314	569,665	547,808	404,777	21,440	628,419	838,927	394,152
VC	142,026	1,358,224	1,713,448	1,118,837	120,946	1,326,422	2,026,381	1,186,305
BER	46,352	985,526	3,260,495	-35,302,790	36,783	1,053,130	9,023,187	3,888,780
CR/BER	5.91	3.27	0.63	-0.03	7.88	3.12	0.25	0.34

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 2014-2020, by length class and in total. The development trend is analyzed for the period 2014-2020, using the slope equation and a 5% threshold to indicate significance: Slope > 0.5 increasing; Slope < -0.5 decreasing; -0.5 < Slope < 0.5 no trend and slope = 0 flat/null trend.

In 2020 the inactive fleet accounted for less than 10% of the total number of vessels, GT and kW. Inactivity concerned 4 length classes (VL0006, VL0612, VL1218 and VL2440), in which inactive vessels where either unlicensed, licensed, or both (see Table 14 below). Length class VL2440 displayed increasing trends in all 3 categories (number, GT, kW).

Table 14: Information on inactive vessels in 2020

Length class of inactive vessels	Number of inactive vessels	Information on inactive vessels
VL0006	37	all vessels unlicensed
VL0612	39	26 unlicensed, 13 licensed
VL1218	2	1 unlicensed, 1 licensed
VL2440	1	1 licensed vessel

Based on the Guidelines, which set a threshold of 20% of inactivity as indication of technical inefficiency, the inactive fleet indicator does not indicate any technical inefficiency at national level.

Table 13: Inactive Fleet Indicator

MS		Fleet segment	Number of inactive vessels							Δ	no. inactive vessels as % of total vessels							Δ
			2014	2015	2016	2017	2018	2019	2020	#	2014	2015	2016	2017	2018	2019	2020	#
CYP	NONE	INACTIVE VL0006	44	31	29	20	18	41	37	increasing	4.6%	3.4%	3.5%	2.4%	2.2%	4.8%	4.3%	increasing
CYP	NONE	INACTIVE VL0612	48	32	40	40	32	38	39	no trend	5.0%	3.5%	4.8%	4.9%	3.9%	4.4%	4.5%	no trend
CYP	NONE	INACTIVE VL1218	4	1	1	3	3	4	2	decreasing	0.4%	0.1%	0.1%	0.4%	0.4%	0.5%	0.2%	decreasing
CYP	NONE	INACTIVE VL1824	0	1	0	0	0	0	0	decreasing	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	decreasing
CYP	NONE	INACTIVE VL2440	1	0	0	1	1	1	1	increasing	0.1%	0.0%	0.0%	0.1%	0.1%	0.1%	0.1%	increasing
CYP	**National inactive fleet**		**97**	**65**	**70**	**64**	**54**	**84**	**79**	increasing	**10.2%**	**7.2%**	**8.4%**	**7.8%**	**6.6%**	**9.8%**	**9.1%**	increasing

MS		Fleet segment	Inactive kW as % of fleet kW							Δ	Inactive GT as % of fleet GT							Δ
			2014	2015	2016	2017	2018	2019	2020	kW	2014	2015	2016	2017	2018	2019	2020	GT
CYP	NONE	INACTIVE VL0006	2.9%	2.0%	2.3%	1.6%	1.2%	2.7%	2.4%	increasing	1.3%	0.8%	0.8%	0.5%	0.5%	1.0%	0.8%	no trend
CYP	NONE	INACTIVE VL0612	4.9%	4.1%	5.1%	6.7%	4.2%	5.2%	4.4%	decreasing	4.4%	3.1%	3.9%	5.3%	3.6%	3.7%	3.0%	decreasing
CYP	NONE	INACTIVE VL1218	1.7%	0.5%	0.6%	0.8%	1.2%	1.9%	1.5%	increasing	2.9%	0.9%	1.0%	0.9%	1.4%	1.6%	2.5%	increasing
CYP	NONE	INACTIVE VL1824	0.0%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%	decreasing	0.0%	2.8%	0.0%	0.0%	0.0%	0.0%	0.0%	decreasing
CYP	NONE	INACTIVE VL2440	1.0%	0.0%	0.0%	1.2%	1.3%	1.2%	1.2%	increasing	4.2%	0.0%	0.0%	3.3%	3.5%	3.4%	3.3%	increasing
CYP	**National inactive fleet**		**10.5%**	**7.3%**	**8.1%**	**10.2%**	**7.9%**	**11.0%**	**9.5%**	no trend	**12.8%**	**7.7%**	**5.7%**	**10.0%**	**8.9%**	**9.7%**	**9.5%**	no trend

Vessel Utilisation Indicator

Table 15 provides the estimated Vessel Utilisation Indicator per fleet segment in traffic light system (Status: 0.7< red (out of balance); 0.7 ≥ green (in balance). The development trend is analyzed for the period 2015-2019, using the slope equation and a 5% threshold to indicate significance, as: Slope > 0.05 increasing; Slope < -0.05 decreasing; -0.5 < Slope < 0.5 no significant trend and slope = 0 flat/null trend.

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

As indicated in Table 15, the indicator was calculated mainly based on observed maximum days. For fleet segment PG VL0612 (Category A&B), the "observed maximum days" is given as the "Average number of days of the top 10 most active vessels in the fleet segment"; this definition is used under FDI Data Call for maximum days at sea. For the rest of the fleet segments, for which "observed maximum days" is used, this value has been calculated based on the most active vessel of the fleet segment. 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 maximum observed effort of Demersal trawlers during 2019 was 205 days. The results of this indicator suggest technical overcapacity for this fleet. It is noted that the vessels exhibit some heterogeneous activity; vessels operating in Eastern Mediterranean are involved also in the large pelagic fishery using drifting longlines, while the trawler in the central Mediterranean operates also as tug vessel.

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 noted, "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". Similarly, EWG 20-11 noted that VUR and Inactive vessel indicators are most likely largely uninformative for small-scale part time segments. 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	2015		2016		2017		2018		2019		Δ	Comments
	kW-days	GT-days	kW-days	GT-days	kW-days	GT-days	kW-days	GT-days	kW-days	GT-days		
CYP DTS VL2440	0.67		0.64		0.77		0.57		0.59		decreasing	calculated based on observed maximum days (205 days in 2019)
CYP PGP VL1218		0.61		0.53		0.50		0.54		0.50	decreasing	calculated based on observed maximum days (148 in 2019)
CYP PG VL0612 (Category A&B)		0.48		0.55		0.50		0.47		0.51	no trend	calculated based on observed maximum days (220 days in 2019)
CYP PG VL0006 (Category A&B)		0.50		0.70		0.60		0.59		0.60	no trend	calculated based on observed maximum days (194 days in 2019)
CYP PGO VL0612 (Category C)		0.39		0.38		0.35		0.37		0.25	decreasing	calculated based on maximum allowable days (70 days)
CYP PGO VL0006 (Category C)		0.39		0.39		0.40		0.40		0.22	decreasing	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 seem to be under- utilized, with a decreasing trend. It is noted that the vessels exhibit some heterogeneous activity; vessels operating in Eastern Mediterranean are involved also in the large pelagic fishery using drifting longlines, while the trawler in the central Mediterranean operates also as tug vessel. It is important to mention that the fishing areas available to the fleet 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 (evidenced in **Annex II**). The estimated SHI, which represents more than 40% of the value of landings, is positive (<1). Four of the stocks included in the indicator are fished sustainably (2 demersal and 2 large pelagic species), while one stock (MUT25) that is not sustainably exploited is mostly fished by this segment. The economic performance of this fleet segment is still in net loss-making position, though there is some improvement compared to previous year. Taking into account the above, it is suggested that the fleet is not in balance with its exploited resources, based on its economic performance.

- 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 ((evidenced in **Annex II**); 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 2019. The deterioration of economic performance was mainly due to the significant increase of nearly all expenditures in 2019, especially in regards to variable costs and depreciation costs. RoFTA is negative in 2019 and it was deteriorated compared to the previous year, indicating economic over-capitalization. The Ratio between current revenue and break-even revenue is also deteriorated compared to previous year. It is noted though, that for some of the vessels there are no audited financial accounts. In addition, it has recently come to our attention that economic data provided are not representative, and a process has initiated in 2021 for correcting the data received, in collaboration with the fishing industry. We consider that the economic performance of the fleet is not as negative as the indicators suggest. Considering all the above, 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.

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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 and the segment is in a net profit-making position. The improved economic performance was mainly due to the increase in value of landings and the stability in expenditures. The total expenditure did not vary much from one year to the other. The RoFTA is positive and around the same value in the previous year, indicating long term viability. The same picture stands for the ratio CR/BER which is positive and again more or less at the same rate as in the 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 also much above 1. Both of these indicators were better compared to 2018. 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

The analysis of the balance indicators suggests that demersal trawlers (DTS VL2440) are not in balance with the fishing opportunities, therefore an action plan is proposed for this fleet segment.

The objective of the proposed action plan relates to the fleet segment considered to be imbalanced (DTS VL2440). A secondary objective relates to stocks that are not sustainably exploited and are mostly fished by this fleet segment (MUT25). The measure proposed is the permanent cessation of fishing activities, and the target is the cessation of the two trawlers operating in the territorial waters

of Cyprus. A time frame of 2 years is given for reaching the target for permanent cessation. However, considering that the measure of permanent cessation is voluntary, it cannot be guaranteed that the target will be achieved.

In the case the target of permanent cessation of the two trawlers is not achieved, the proposed measure is the replacement of the diamond meshed trawl net of 50mm by a square meshed net of 40mm. Based on available scientific evidence, which was also presented in GFCM Working Group on Fishing Technology – WGFIT (April 2021), the square meshed net of 40mm is considered more selective than the 50mm diamond net. Having in mind the extended closed trawling season that is in force for decades, it is expected that the replacement of the trawl net will contribute to the sustainable exploitation of the stocks fished by this fleet segment, especially the ones mostly exploited by it (MUT). A time frame of 3 years (1 year following the two years given for reaching the target for permanent cessation) is proposed.

An additional measure that is currently under evaluation is a closed area for trawling in the north-west part of Cyprus. Following the 2 year - time frame for reaching the target of permanent cessation, it will be decided whether this measure will be implemented as well.

Important information is provided below concerning the trawl fishery in territorial waters of Cyprus from past years:
- As indicated in Figure 5 below, the trawlers operating in the territorial waters of Cyprus have been traditionally exploiting mostly picarel (SPC).
- Since the '80s, there has been an extensive closed trawling season in territorial waters from 1 June until 7 November.
- Until the accession of Cyprus in the EU in 2004, the mesh size of the trawl net was 34 mm diamond shape; following the accession of Cyprus in the EU and the implementation of Community Law, the requirements of the former Mediterranean Regulation (EC) 1626/1994 for a 40 mm diamond shape trawl net and minimum sea depth for the use of trawl net at 50m isobath were incorporated in the management measures of the fleet.
- During the period 2004-2006, 4 bottom trawlers were removed from the fishing fleet, which constituted the 50% of the total number of trawls that traditionally operated in the territorial waters of Cyprus.
- By 2011 any part of the trawl net was at least 50mm (diamond shape).
- Based on the 2011 management plan for the bottom trawling fishery in territorial waters of Cyprus, submitted in accordance with Article 19 of Council Regulation (EC) 1967/2006, a derogation was accepted for trawlers to operate between 0.7 and 1.5 nautical miles off the coast due to geographical constraints.
- During 2011 two trawlers were permanently withdrawn, resulting to a further decrease of fishing fleet at 50%; since then, the maximum allowable number of licenses for bottom trawlers in territorial waters is limited to 2 licenses.
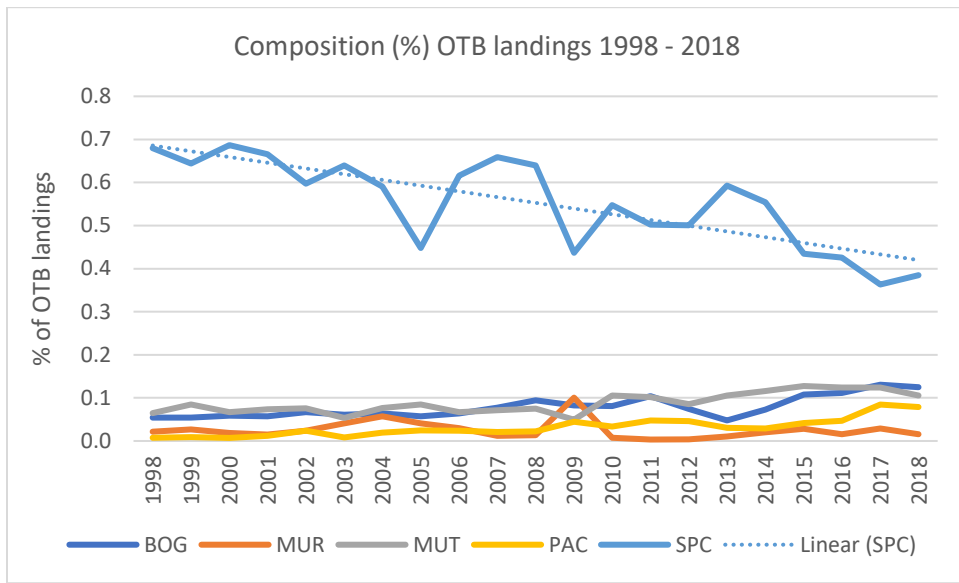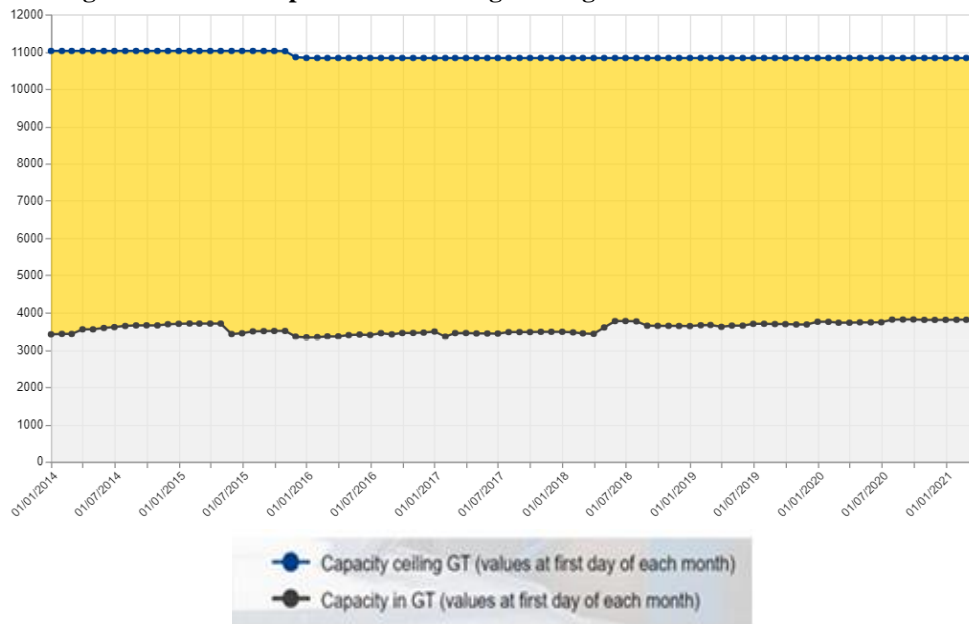
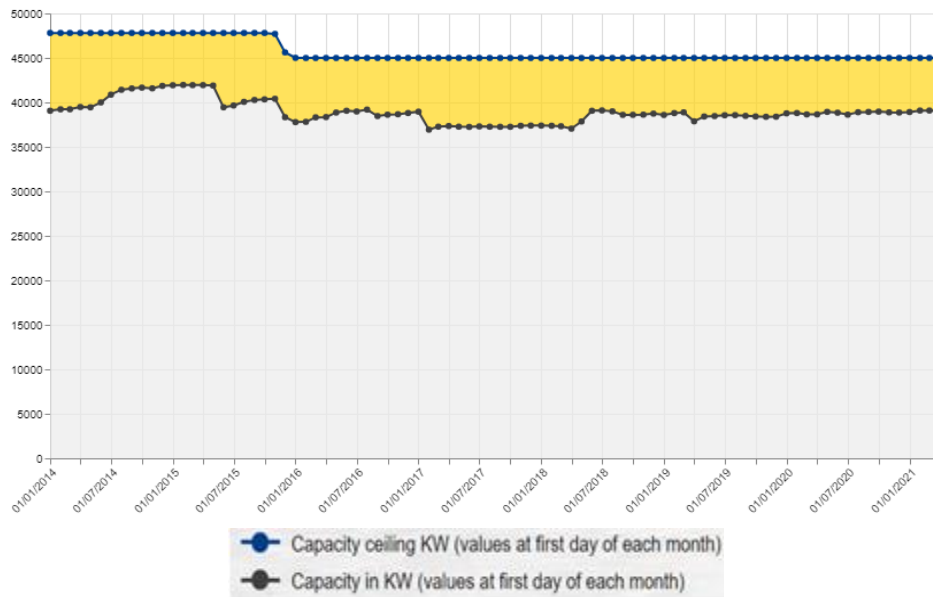**Figure 5**. Composition (%) of OTB landings for the period 1998-2018.

ANNEX I

Tonnage and Power Statistics for Cyprus - Evolution between 1/1/2014 and 1/1/2021.

Cyprus: tonnage of the fleet compared to its tonnage ceiling

Cyprus: power of the fleet compared to its power ceiling

Annex II

Annual density grid analysis (Gaussian Kernel - 1 km radius) of historical VMS (Vessel Monitoring System) data of the offshore (>200 m depth) Cypriot fishing fleet, for the years 2012 to 2020 (points with speed >4 kt excluded).

2012

2013

2014

2015

2016

2017

2018

2019

2020