



REPUBLIC OF SLOVENIA
**THE MINISTRY OF AGRICULTURE, FORESTRY
AND FOOD OF THE REPUBLIC OF SLOVENIA**

Annual report on efforts to achieve a sustainable balance between fishing capacity and fishing opportunities for the year 2022

SLOVENIA

pursuant to the Article 22. of the Regulation (EU) no 1380/2013 of the European Parliament and of the Council of 11 December 2013 on the Common Fisheries Policy, amending Council Regulations (EC) No 1954/2003 and (EC) No 1224/2009 and repealing Council Regulations (EC) No 2371/2002 and (EC) No 639/2004 and Council Decision 2004/585/EC

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

I. Description of fleets

As it shown in the table below, the majority of the fleet, 87.5 %, is composed from vessels shorter than 12 meters. Only 16 vessels are LOA 12-17.9 m or 11.7 % of the fleet, and only 1 vessel above 18 m (0.7 %). After the implementation of the scrapping measure in the period 2012 – 2013 in the Slovenian fishing fleet there are no vessels longer than 24 m.

At the end of 2022, there were 137 vessels in the fishing fleet, with the total capacity of 672.97 GT and 8,692.52 kW.

Table 1: Fishing fleet in period 2015 – 2022¹

¹For 2022 the state in the fleet is presented as recorded on 31 December 2022

Length overall	Vessel	2015	2016	2017	2018	2019	2020	2021	2022
over 18 m	number	1	1	1	1	1	1	1	1
	GT	30.76	30.76	30.76	113.85	113.85	113.85	113.85	113.85
	kW	199	199	199	0*	0*	0*	0*	0*
12 - 17.9 m	number	13	12	13	15	15	15	15	16
	GT	208.88	197	210.79	255.31	255.31	255.31	255.31	262.57
	kW	2,306.13	2,196.13	2,460.66	2,837.26	2,973.43	2,973.43	2,973.43	3,098.45
up to 11.9 m	number	155	158	158	118	121	120	121	120
	GT	357.31	361.90	362.43	299.73	303.57	301.78	298.48	296.55
	kW	6,034.52	6,139.71	6,161.49	5,629.61	5,868.24	5,872.90	5,719.93	5,390.13
TOTAL	number	169	171	171	134	137	136	137	137
	GT	596.95	589.66	603.98	668.89	672.73	670.94	667.64	672.97
	kW	8,539.65	8,534.84	8,821.15	8,466.87	8,841.67	8,846.33	8,693.36	8,692.52

* This vessel is currently used as a fish restaurant, it's anchored in the port all the time and has no engine at present.

As it can be observed from the table below (Table 2) there were 76 vessels active in Slovenian fishing fleet in 2022. The majority of the active part of the Slovenian fishing fleet used drift and fixed nets (DFN): 47 vessels (61.84 %); demersal trawls (DTS): 11 vessels (14.47 %); while 18 vessels (23.69 %) used other types of fishing gears; combined active and passive gears (PMP), pots and/or traps (FPO) and gears using hooks (HOK).

Table 2: Types of fishing gears used by the active fleet in 2022 and landings per fleet segment

Fishing gear	Number of active vessels	Share of the active vessels (%)	Landed quantity (tons)	Share of the total landings (%)
DFN - drift and fixed nets	47	61.84	34.69	32.64
DTS - demersal trawls	11	14.47	67.88	63.86
FPO - pots and/or traps	5	6.58	0.65	0.61
HOK - hooks and line gears	8	10.53	1.11	1.04
PMP - active and passive gears	5	6.58	1.96	1.84
TOTAL	76	100	106.29	100

II. Link with fisheries

List of the top target species landed in 2022 is presented below.

Musky octopus, Gilthead seabream and Whiting were the most important target species of Slovenian fishermen in 2022. Only these 3 species had landings above 10 tons in 2022.

Table 3: List of the species with a highest share in landings in 2022 (in tons)

Latin name	Name	FAO code	Landed quantity (tons)
Eledone moschata	Musky octopus	EDT	16.70
Sparus aurata	Gilthead seabream	SBG	14.49
Merlangius merlangus	Whiting	WHG	11.48
Loligo vulgaris	European squid	SQR	8.38
Mullus barbatus	Red mullet	MUT	7.77
Solea solea	Common sole	SOL	4.80
Dicentrarchus labrax	European seabass	BSS	4.80
Pecten jacobaeus	Great Mediterranean scallop	SJA	4.27
Mugilidae	Mulletts nei	MUL	3.79
Sepia officinalis	Common cuttlefish	CTC	3.79
Merluccius merluccius	European hake	HKE	3.53
Pagellus erythrinus	Common pandora	PAC	2.40
Venus verrucosa	Warty venus	VEV	1.89
Spicara spp	Picarels nei	PIC	1.27
Mustelus mustelus	Smooth-hound	SMD	1.25
	Other		15.68
Total			106.29

Largest fleet segments, with key species fished and total volumes landed

In the table below all important fishing segments that were active in 2022 are listed, together with the number of active vessels and landings corresponding to each segment.

Table 4: Landings per fleet segments in 2022

Segment by fishing gear	Vessels' length	Number of active vessels	Landed quantity (tons)	Share of the total landings (%)
DFN - drift and fixed nets	VL0006	17	14.27	13.43
	VL0612	28	19.83	18.66
	VL1218	2	0.59	0.56
DFN - TOTAL		47	34.69	32.64
DTS - demersal trawls	VL0612	4	20.62	19.40
	VL1218	7	47.26	44.46
DTS - TOTAL		11	67.88	63.86
FPO - pots and/or traps	VL0006	4	0.60	0.56
	VL0612	1	0.05	0.05
FPO - TOTAL		5	0.65	0.61
HOK - hooks and line gears	VL0006	3	0.70	0.65
	VL0612	5	0.41	0.39
HOK - TOTAL		8	1.11	1.04
PMP - active and passive gears	VL0006	1	0.27	0.25
	VL0612	3	1.57	1.48
	VL1218	1	0.12	0.11
PMP - TOTAL		5	1.96	1.84
TOTAL		76	106.29	100

Table 5: List of top fleet segments by their share in total landings in 2022

Fishing gear	Vessels' length	Number of active vessels	Landed quantity (tons)	Share of the total landings (%)
DTS - demersal trawls	VL1218	7	47.26	44.47
DTS - demersal trawls	VL0612	4	20.62	19.40
DFN - drift and fixed nets	VL0612	28	19.83	18.66
DFN - drift and fixed nets	VL0006	17	14.27	13.43
TOTAL		56	101.98	95.96

56 vessels were active in 4 segments presented in the table above (73.68 % of all active vessels) and they generated 95.96 % of the all landings in 2022 – 101.98 tons.

The most important segment in terms of landed quantity in 2022 was the **demersal trawls (DTS) LOA 12-18 m segment** with 7 vessels. This segment landed 44.47 % of the total landings (47.26 tons). The most important target species of this segment were: Musky octopus (10.88 tons), Whiting (8.76 tons), European squid (6.12 tons), Red mullet (5.16 tons) and European hake (2.36 tons).

The second most important segment of the fishing fleet in terms of the landed quantity was the **demersal trawls (DTS) LOA 06-12 m segment** as it generated 19.40 % of the total landings (20.62 tons). Only 4 vessels were in this segment. The most important

target species of this segment were: Musky octopus (5.79 tons), Great Mediterranean scallop (2.76 tons), Red mullet (2.60 tons) and Whiting (2.52 tons).

The third most important segment of the fishing fleet in terms of the landed quantity was the **drift and fixed nets (DFN) LOA 06-12 m segment** as it generated 18.66 % of the total landings (19.83 tons). 28 vessels were active in this segment. The most important target species of this segment were: Gilthead seabream (6.96 tons), Common sole (3.32 tons), European seabass (1.29 tons) and Common pandora (1.00 tons).

The fourth most important segment in terms of landed quantity in 2022 was the **drift and fixed nets (DFN) LOA 00-06 m segment** as it generated 13.43 % of the total landings (14.27 tons). 17 vessels were active in this segment. The most important target species of this segment were: Gilthead seabream (4.53 tons), European seabass (2.52 tons) and Mullet *nebulosus* (2.30 tons).

III. Development in fleets

In 2022, 1 vessel (28.70 kW and 1.93 GT) left the fleet (RET). There was one new entry into the fleet (132.30 kW and 7.26 GT).

At the end of 2022, there were 137 vessels in the fishing fleet, with the total capacity of 672.97 GT and 8,692.52 kW.

IV. Multiannual management plan for sardine and anchovy in the Northern Adriatic

Since 2013, Slovenia has been a subject of the first multiannual management plan for small pelagic stocks in the Adriatic Sea. This multiannual plan was adopted at the 37th Session of the GFCM in Split (13-17 May 2013) as a “*Recommendation GFCM/37/2013/1 on a multiannual management plan for fisheries on small pelagic stocks in the GFCM-GSA 17 (Northern Adriatic Sea) and on transitional conservation measures for fisheries on small pelagic stocks in GSA 18 (Southern Adriatic Sea)*” and came into force in October 2013. Due to the unfavorable state of small pelagic stocks further emergency measures were adopted at the 42th Session of the GFCM in 2018, with the adoption of the “*Recommendation GFCM/42/2018/8 on further emergency measures in 2019-2021 for small pelagic stocks in the Adriatic Sea (geographical subareas 17 and 18)*”. On the 44th GFCM session a new management plan was adopted with Recommendation GFCM/44/2021/20 on a multiannual management plan for the sustainable exploitation of small pelagic stocks in the Adriatic Sea (geographical subareas 17 and 18) that will be in place from 2024 or 2025 to 2029.

V. Management of demersal stocks in the Adriatic Sea

At its annual session in November 2019 GFCM adopted “Recommendation GFCM/43/2019/5 on a multiannual management plan for sustainable demersal fisheries in the Adriatic Sea (geographical subareas 17 and 18)”. This management plan (MP) regards following species: European hake, Norway lobster, common sole, deep-water rose shrimp and red mullet. On 44th GFCM session also Recommendation GFCM/44/2021/1 on the establishment of a fishing effort regime for key demersal stocks in the Adriatic Sea (geographical subareas 17 and 18) was adopted. Slovenia complies with all the obligations. Moreover, for Slovenia the following exemptions apply:

- GFCM 43/2019/5, 13. paragraph »The provisions in paragraphs 11 and 12 shall not apply to national fleets operating with OTB and fishing for less than 1,000 days during the reference period mentioned in paragraph 9 c); such national fleets shall not exceed the effort limit of 3.000 fishing days per year.«
- GFCM 43/2019/5, 29. paragraph »The provisions of paragraphs 9 c) and 28 shall not apply to national fleets operating with OTB and fishing for less than 1,000 days during the reference period mentioned in paragraph 9 c). The fishing capacity of such active fleets operating with OTB shall not increase by more than 50 percent with respect to the reference period.«

Section B: The impact on fishing capacity of fishing effort reduction schemes adopted under multiannual management or recovery plans or, if appropriate, under national schemes

I. The impact of the “Permanent cessation of fishing activities measure”

Pelagic species (sardine and anchovy) which are highly migratory and whose stocks Slovenia shares with Italy and Croatia in the Northern Adriatic, had been for decades the most important target species of the Slovenian fishermen.

However, the landings of these two species and their share in the composition of the whole landings have changed substantially after Slovenia started the implementation of the “Permanent cessation of fishing activities measure” (scrapping measure financed with funds from the European Fisheries Fund - EFF), which started in the second half of 2012 and ended in the first half of 2013.

The situation of the fishing fleet in the national fishing fleet register on 31 December 2010 was taken as a baseline for the definition of the targets of scrapping measure: then, there were 185 vessels in the fishing fleet register and national fleet ceiling was 1,057 GT and 10,974 kW. The impact of this measure on the Slovenian fishing fleet was significant as the targets to be achieved with its implementation in the programming period, which were set out in the Fishing effort adjustment plan (FEAP), were greatly exceeded. Implementation of the scrapping measure ended in the first half of 2013, and as a result 8 vessels were permanently withdrawn from the fishing fleet, among them also 2 of the largest vessels in the Slovenian fishing fleet. The impact of the implementation of this measure was radical as the capacity of the fleet decreased for 37.6 % expressed in GT (236 GT) and for 19.2 % expressed in kW (1,637 kW).

Sardine and anchovy landings in period 2011-2022

As stated above, 8 vessels were permanently withdrawn from the Slovenian fishing fleet, but among them also the only pair of vessels that had been using pelagic pair trawls. Slovenian fishing fleet has always been rather small, while these two vessels had been for years the most important vessels in the Slovenian fishing fleet in terms of their size (each had LOA 29 m, 156 GT and 600 kW) and in terms of their landings as they had been generating in the years before scrapping more than half of the total Slovenian landings – almost entirely composed of sardine and anchovy. After the scrapping, the only segment of the Slovenian fishing fleet targeting sardine and anchovy was the segment using purse seines, with only 4 vessels active on average. However, also this segment rapidly began to diminish: in 2017 there were only 2 vessels active in this segment. While from 2018 these vessels were no longer active as the small pelagic that are available in the Slovenian fishing sea can be caught only in sizes that are not attractive for the market.

Such radical reduction of fishing capacity fundamentally changed the situation of the Slovenian fisheries sector, above all in terms of landings and the composition of target species. The results achieved are striking when observing the impact of the withdrawn vessels on the total landings. Landings of anchovy and sardine that had been the most important target species of the Slovenian fishermen for decades, have decreased radically and in 2017 reached the level that has hardly any significance. In 2019, total landings of those two species were less than 1 % (0.6 % or 702 kilograms) of the total

landings. Total landings of sardine and anchovy were 5.3 tons, which is 3.4 % of the total landings in 2020. In 2021 total landings of those two species decreased again. They were 2.9 tons or 2.7 % of the total landings. Last year's total landings of those two species were the lowest in recent years, namely only 0.3 tons, which is 0.27 % of the total landings.

Table 6: Sardine and anchovy landings in period 2011-2022

Year	Landings (tons)	% of decrease in landings compared to landings in 2011
2011	469.3	/
2012	62.0	86.8
2013	49.2	89.5
2014	111.6	76.2
2015	58.5	87.5
2016	34.6	92.6
2017	8.3	98.2
2018	1.0	99.8
2019	0.7	99.9
2020	5.3	98.9
2021	2.9	99.4
2022	0.3	99.9

In **2011** (year before the scrapping measure), landings of sardine and anchovy were still very high and they represented 65.2 % of the total landings with **469.3 tons** landed (sardine 305.9 tons and anchovy 163.4 tons).

However, landings of these two species in **2012** decreased abruptly: they were 86.8 % less than the year before, with total landings of only **62 tons** (sardine 18.3 tons and anchovy 43.6 tons). Consequently, also the share of these two species in total landings in 2012 changed substantially as they represented only 18.8% of the total landings.

Their landings were even lower in **2013**, only **49.2 tons** of small pelagic (sardine 27.7 tons and anchovy 21.5 tons) and thus representing only 20.7% of the total landings. When 2013 landings figures are compared to those from 2011, comparison is striking as it shows that the 2013 landings of sardine and anchovy were lower for 89.5 %.

In **2014**, increase was recorded in the landings of these two species with total of **111.6 tons**: 78.4 tons of sardine and 33.2 tons of anchovy (44 % of the total landings), however exploitation of the concerned species by our fleet continued to remain very low when compared with the exploitation of other countries involved in this fishery in the Northern Adriatic.

In **2015**, landings of these two species dropped again substantially with total of **58.5 tons**: 43.8 tons of sardine and 14.7 tons of anchovy.

In **2016**, landings of these two species were even lower, with total of only **34.6 tons**: 29.0 tons of sardine and 5.6 tons of anchovy. Share of these two species in the total landings in 2016 was 22.7 %.

In **2017**, decrease of landings was even more extraordinary. Landings of these two species were only **8.3 tons**: 7.3 tons of sardine and 1.0 tons of anchovy. Share of these

two species in the total landings in 2017 was just 6.4 %. When these landings are compared with the landings of small pelagic in 2011 decrease of 98.2 % is registered!

In **2018**, situation got even worse as we reached the point where sardine and anchovy can no longer be considered as target species, but only as incidental catches. In PS segment only 1 vessel left had 1 fishing trip and zero recorded catches, while total landings of those two species caught by vessels using other fishing gears were **1.0 tons** (0.84 % of total landings). Landings of anchovy were 1.04 tons (0.83 % of total landings) while landings of sardine were only 14 kg (0.01 % of total landings). When these landings are compared with the landings of small pelagic species in **2011, decrease of 99.8 %** is registered!

In **2019** situation repeated. For the second consecutive year there was no activity in the PS segment, because small pelagic that are available in the Slovenian fishing sea can be caught only in sizes that are not attractive for the market. Only 702 kilograms of sardine and anchovies were caught as a by catch. Landings of anchovy were only 10 kilograms (0.008 % of total landings) while landings of sardine were 692 kilograms (0.57 % of total landings). When these landings are compared with the landings of small pelagic species in **2011, decrease of 99.9 %** is registered!

In **2020**, the landings of both species amounted to only **5.3 tons**, caught as by-catches almost exclusively with OTB and OTM fishing gears, for which these two species aren't target species. The rest of the catch was by-catch with GNS and GTR.

Total landings of sardine and anchovy decreased to **2.9 tons** in **2021**. They were caught as by-catches with mostly OTB fishing gear.

Total landings of both species also decreased in **2022**. Total landings were **0.3 tons**, as by-catches with OTB fishing gear.

In line with the EU legislation Slovenia is entitled to an annual maximum level of catches of small pelagics. For 2022 they were laid down in the »*Council regulation (EU) 2022/110 of 27 January 2022 fixing for 2022 the fishing opportunities for certain fish stocks and groups of fish stocks applicable in the Mediterranean and Black Seas*«. In line with the Annex IV of this Regulation catches of sardine and anchovy by Slovenian fishermen must not exceed 300 tons in 2022.

Table 7: Total landings in period 2011-2022

Year	Landings (tons)	% of decrease in landings compared to landings in 2011
2011	719.4	/
2012	329.0	54.3
2013	237.9	66.9
2014	254.1	64.7
2015	196.2	72.7
2016	152.4	78.8
2017	128.3	82.2
2018	126.3	82.4
2019	120.7	83.2
2020	155.5	78.4
2021	106.4	85.2
2022	106.3	85.2

In parallel, the implementation of the scrapping measure had strong impact on the overall landings. Already in **2012** total landings **decreased by 54.3 %**: from 719.4 tons in 2011 down to 329.1 tons in 2012.

But in **2013** they decreased even more: down to 237.9 tons, which is **66.9 % less than in 2011**.

In **2014**, total landings were again low: 254.1 tons, **64.7 % less than landings in 2011**.

But in **2015** total landings dropped further at only 196.2 tons, **which is 72.7 % less than in 2011**.

In **2016** decline of total landings continued, with total of 152.4 tons, which is **78.8 % less than in 2011**.

In **2017**, reduction continued with total of 128.3 tons, which is **82.2 % less than in 2011**.

In **2018**, reduction of landings was even higher with total of 126.3 tons, **which is 82.4 % less than in 2011**.

In **2019**, total landings were even lower than the year before: **120.7 tons, which is 83.2 % less than in 2011**.

In **2020**, total landings were higher than the year before: **155.5 tons, which is 78.4 % less than in 2011**.

In **2021**, total landings were the lowest in the last ten years: **106.4 tons, which is 85.2 % less than in 2011**.

In **2022**, total landings were practically the same than the year before: **106.3 tons, which is 85.2 % less than in 2011**.

Much decreased landings figures in period 2011-2019 represent a huge contribution from the perspective of the Slovenian fishing fleet to the reduction of the exploitation of fisheries resources. It needs to be stressed that the landings have been decreasing since Slovenia's entry into the EU.

However, it needs to be emphasized that this significant contribution of the Slovenian fishing fleet cannot be expected to have a noticeable impact on the status of the fish stocks exploited by the Slovenian fishing fleet since Slovenia exploits a negligible fraction of these stocks in comparison to other Member States in the North Adriatic whose fishing vessels are targeting the same stocks.

With regard to this, it is important to note that Slovenian **catches of sardine and anchovy stocks have always been low and in the last few years they are less than 0.01 %** of their exploitation in the Northern Adriatic, while the overwhelming share of these two species is caught by Italy and Croatia with whom Slovenia shares these highly migratory stocks in GSA 17.

As it may be summarized from the explanation above, mainly due to the implementation of the scrapping measure and also due to other factors (biological, climate,...), sardine and anchovy are no longer the most important target species of Slovenian fishermen, as their overall landings reduced drastically, down to the levels of hardly any significance.

The constant decrease in landings between 2011 and 2019, both of small pelagic and total landings is becoming alarming and it is more than evident that the livelihood of the Slovenian fishermen is seriously jeopardized.

Anyway, in 2020, a small increase in total landings and small pelagic was observed. The landings of sardine and anchovy were caught as by-catches almost exclusively with OTB and OTM fishing gears, for which these two species aren't target species. The rest of the catch was by-catch with GNS and GTR. In 2022 total landings were the lowest in the last ten years.

II. The multiannual management plan for small pelagic stocks in the Northern Adriatic

Since October 2013 exploitation of sardine and anchovy is regulated by the first multiannual management plan for small pelagic stocks in the Northern Adriatic. This plan was adopted at the 37th Session of the GFCM in Split as "*Recommendation GFCM/37/2013/1 on a multiannual management plan for fisheries on small pelagic stocks in the GFCM-GSA 17 (Northern Adriatic Sea) and on transitional conservation measures for fisheries on small pelagic stocks in GSA 18 (Southern Adriatic Sea)*".

In 2021 (recalling Recommendation GFCM/37/2013/1 on a multiannual management plan for fisheries exploiting small pelagic stocks in geographical subarea 17 (northern Adriatic Sea) and on transitional conservation measures for fisheries on small pelagic stocks in geographical subarea 18 (southern Adriatic Sea) as well as the transitional and emergency measures adopted since 2013 to curb the high levels of fishing mortality and implementing spatio-temporal measures including a catch limit, namely Recommendation GFCM/38/2014/1 on precautionary and emergency measures for 2015 on small pelagic stocks in geographical subarea 17 amending Recommendation GFCM/37/2013/1, Recommendation GFCM/39/2015/1 establishing further precautionary and emergency measures in 2016 for small pelagic stocks in the Adriatic Sea (geographical subareas 17 and 18) and Recommendation GFCM/42/2018/8 on further emergency measures in 2019-2021 for small pelagic stocks in the Adriatic Sea (geographical subareas 17 and 18)) GFCM adopted Recommendation GFCM/44/2021/20 on a multiannual management plan for the sustainable exploitation of small pelagic stocks in the Adriatic Sea (geographical subareas 17 and 18). Vessels actively fishing for anchovy and sardine stocks are subject of the management measures of this plan.

In Slovenia, the only segment of fishing fleet being subject of the adopted multiannual management plans since 2013 was the segment of vessels using purse seines (PS). In first years following the implementation of the scrapping measure in 2012, there were on average 4 vessels active in this segment. In the last couple of years only 2 vessels were active in this segment.

However, in 2018 and 2019, situation reached the point where sardine and anchovy can no longer be considered as target species, but only as incidental catches. PS segment had no activity in these two years, while total landings of those two species caught by vessels using other fishing gears were 702 kilograms (0.6 % of total landings).

In 2020, Republic of Slovenia faced an unprecedented situation in fisheries sector due to the Covid-19 pandemic. In March 2020, epidemic was proclaimed for the Republic of Slovenia. In order to prevent the spread of the virus Covid-19, one of the key measures

was the closure of border with Italy. Slovenian fishermen normally sell fresh fish in Italy, while Slovenian traders purchase fresh and other fisheries products in Italy. Due to the unprecedented situation, the Republic of Slovenia aimed to ensure all possible food resources for the population. One of the key measures was to allow fishing over the whole year. This was also one of the measures where the EU could help Slovenian fisheries sector to face this unprecedented situation, according to the letter sent by the Ministry to the Commission. Among others, this also allowed Slovenian fishermen and their businesses to remain in business during the pandemic. This was connected to pelagic and demersal species and thus ensured at least partial self-sufficiency in terms of fisheries products in the circumstances of the pandemic.

In 2021, total landings decreased again and were 106 tons. The reason for the low activity of the fisheries sector was the situation regarding Covid-19 pandemic measures, which remained the same as in the previous year. Low total landings were also due to higher energy prices and the fact that some vessels were on land due to the Health and Safety measure cofinanced by the EMFF OP 2014-2020. They were not active because of the investments. Large quantities of barrel jellyfish (*Rhizostoma pulmo*), which make fishing activities difficult, have been occurring since December 2021.

In 2022 total landings decreased even more and were the lowest in the last ten years. Reasons for low activity of the fisheries sector were mostly the fact that few vessels were on land due to the Health and Safety measure co-financed by the EMFF OP 2014-2020 and higher energy prices.

In previous years, the Republic of Slovenia implemented the closure of fisheries from 17 March to 15 April for its vessels targeting sardine and anchovy. Since 2018, there has not been no targeted fishing for species of sardine and anchovy in Slovenia.

As a member of the General Fisheries Commission for the Mediterranean, the Republic of Slovenia follows the recommendations and consequently temporarily prohibits commercial fishing. However, as the Republic of Slovenia is one of the national fleets with less than fifteen vessels fishing with purse seine or pelagic trawls, it may, in accordance with recommendation GFCM/44/2021/20 (PART IV, paragraphs 23, 24 and 25), suspend fishing in separate periods for the closure of sardine and anchovy fishing for at least 15 consecutive days for each fleet segment. Users of fishing vessels have been temporarily banned from fishing on small pelagic stocks of sardines (*Sardina pilchardus*), from 17 to 31 March 2022, and anchovies (*Engraulis encrasicolus*), from 1 to 15 April 2022, with the following fishing gears: PS, PTM and OTM.

In accordance with the adopted multiannual management plan, Slovenia communicates annually to the Secretariat of the GFCM the list of all trawlers, purse seiners and surrounding nets without the purse authorized to fish for small pelagic stocks – these vessels represent national reference fishing capacity for small pelagic stocks. In addition, Slovenia has to prepare and submit to the GFCM, each October, its National programme for control, monitoring and surveillance that is applicable in the year that follows.

Paragraph 11 of the above-mentioned Recommendation GFCM/44/2021/20 on a multiannual management plan for the sustainable exploitation of small pelagic stocks in the Adriatic Sea (geographical sub-areas 17 and 18) stipulates that the GFCM Parties concerned and the participating non-GFCM Parties must establish a transitional fishing regime in 2022 and 2023. They must ensure that national or total catch limits for small pelagic stocks are set in 2022 and 2023. In 2022, the catch of anchovies must decrease

by 5% and the catch of sardines by 8% compared to 2021. In 2023, the catch of anchovies must decrease by 5% and the catch of sardines by 9% compared to 2021.

III. Other management measures

Slovenia is implementing also other measures for the management of the marine fisheries.

Moreover, in line with the adopted Fishing effort adjustment plan (FEAP) that was adopted for the purpose of the implementation of the scrapping measure with the funds from the EFF in the period 2012-2013, additional management measures were introduced, among them a moratorium on the issuing of new fishing licenses that would contain the following fishing gears: purse seines (PS), midwater pair trawls (PTM), set gillnets (GNS) and trammel nets (GTR) and therefore it was not possible to obtain new fishing licenses to fish with these types of fishing gear in the before mentioned period. It is important to highlight that with these types of fishing gears almost entire landings of the Slovenian fishermen are generated.

At its 43rd session in 2019, the General Fisheries Commission for the Mediterranean adopted Recommendation GFCM/43/2019/5 on a multiannual management plan for sustainable demersal stocks in the Adriatic Sea (geographical sub-regions 17 and 18). The twenty-sixth paragraph of Recommendation GFCM/43/2019/5 stipulates that the GFCM Parties concerned shall establish at least a 30-day uninterrupted closure of fishing activities and cover at least 20 % of the national territorial sea for OTB, PTB, OTT and TBB fishing activities in areas and periods identified for the protection of demersal stocks. In accordance with paragraph 1 of Recommendation GFCM/44/2021/1 on the establishment of a fishing effort regime for key demersal stocks in the Adriatic Sea (geographical subareas 17 and 18) the annual reduction in fishing mortality needed to achieve the maximum sustainable yield target in 2026 for all key stocks shall be a progressive linear reduction towards maximum sustainable yield. In line with this, the overall reduction in fishing effort in 2022 was 7 percent for bottom otter trawls and 3 percent for beam trawls overall. In accordance with paragraph 2 the fishing effort allocations for 2022 were established in line with paragraph 1 of Recommendation GFCM/44/2021/1 and with paragraph 12 of Recommendation GFCM/43/2019/5 and based on the latest scientific advice.

From 1 to 30 April 2022, users of fishing vessels were temporarily banned from fishing for demersal stocks of hake (*Merluccius merluccius*), shrimp (*Nephrops norvegicus*), sole (*Solea solea*), red snapper (*Parapenaeus longirostris*) and barbel (*Mullus barbatus*) with the following fishing gear: OTB, PTB, OTT and TBB.

Section C: Information on the compliance with entry/exit scheme

In 2020, Slovenia complied with the entry/exit regime and capacity ceilings in terms of GT and kW, which were not exceeded in accordance with the Articles 22. and 23. of the *Regulation (EU) no 1380/2013 of the European Parliament and of the Council of 11 December 2013 on the Common Fisheries Policy, amending Council Regulations (EC) No 1954/2003 and (EC) No 1224/2009 and repealing Council Regulations (EC) No 2371/2002 and (EC) No 639/2004 and Council Decision 2004/585/EC.*

On 31 December 2022, 137 fishing vessels were in the Slovenian fishing fleet register, with the total capacity of 672.97 GT and 8,692.52 kW, while the fishing capacity ceilings were 675 GT and 8,867 kW.

Section D: Summary report on the weaknesses and strengths of the fleet management system together with a plan for improvements and information on the general level of compliance with fleet policy instruments

I. Summary of weakness and strengths of fleet management system

Strengths:

Although Slovenian fishermen fish only a small fraction of the shared fisheries resources in the North Adriatic Sea, management of the marine resources has strengthened greatly in the recent years in line with provisions that have been adopted within the Common Fisheries Policy and the General Fisheries Commission for the Mediterranean (GFCM).

An important operative management document for the Slovenian fisheries was the “*Fishing Effort Adjustment Plan*” (FEAP) that was adopted in 2011 primarily for the implementation of the scrapping measure in the period 2012-2013, but it contained also other measures for the management of the fisheries and for the limitation of fishing effort. Introduction of these measures had significantly improved Slovenian fleet management system whose core objective was to establish a better balance between fishing capacity and fishing opportunities and thus secure more sustainable exploitation of available fishing resources.

Significant contribution of the “*Permanent cessation of fishing activities*” measure (scrapping measure), financed from the EFF (European Fisheries Fund), to the reduction of fishing effort, above all the one targeting pelagic stocks, was described already in this report. Of great importance are also the results of the implementation of the complementary measure called “*Temporary non-issuing of licenses for commercial fishing for certain fishing gears*”, because this measure introduced temporary moratorium on the issuing of new fishing licenses that would allow use of the following fishing gears: purse seine (PS), pelagic (midwater) pair trawls (PTM), drift and fixed nets (GNS and GTR) and demersal trawls (OTB). Established time frame for the implementation of this measure was period 2012-2013.

Another important document for the management of the Slovenian marine fisheries is “*The management plan for fisheries in waters within the jurisdiction of the Republic of Slovenia*” (MP – Management Plan) that was prepared in accordance with the »Mediterranean regulation« (Council Regulation (EC) No 1967/2006 of 21 December

2006 concerning management measures for the sustainable exploitation of fishery resources in the Mediterranean Sea, amending Regulation (EEC) No 2847/93 and repealing Regulation (EC) No 1626/94).

The MP contains an analysis of the whole commercial marine fishing in Slovenian territorial waters and includes separate management plans for vessels using following types of fishing gear: purse seines (PS), bottom trawls (OTB), set gillnets (GNS) and trammel nets (GTR). Updated version of the MP was submitted to the Commission in August 2021.

A new chapter of the utmost importance for the management of the Slovenian fleet and fish stocks in the Northern Adriatic is the adoption of the first multiannual management plan for small pelagic (sardine anchovy) stocks in the Northern Adriatic (*Recommendation GFCM/44/2021/20 on a multiannual management plan for fisheries on small pelagic stocks in the GFCM-GSA 17 (Northern Adriatic Sea) and on transitional conservation measures for fisheries on small pelagic stocks in GSA 18 (Southern Adriatic Sea)*). Vessels actively fishing for anchovy and sardine stocks are subject of the management measures of this plan. In line with the multiannual plan, vessels actively fishing for small pelagic are not allowed to operate more than 20 days per month and maximum 180 days per year. However, it is important to note that Slovenia exploits less than 0.01% of these shared stocks.

An important and a favorable circumstance for the management of the Slovenian fisheries sector is also its small size that allows good collaboration of fishermen, consulting services and administration and consequently there is a good awareness of the mandatory acts adopted at the EU level or within the GFCM. Small size of the fisheries sector also allows for the entire population to be included in data collection and in control and data reporting obligations.

Since almost whole Slovenian fishing fleet can be characterized as a small-scale coastal fisheries as 88.2 % of the fishing fleet is comprised of vessels under 12 meters, these characteristics by themselves allow for a better management of the fleet and permit more sustainable fishing in comparison to industrial fishing.

A very important step for a better and more effective management of the Slovenian fishing fleet was achieved in 2015 with the adoption of the Act Amending the Marine Fisheries Act (Official Gazette of the Republic of Slovenia, No. 76/15), which provided a legal base for the preparation of national rules for the management of entry/exit regime. These rules: "*Rules on the register of fishing vessels and the vessels used in aquaculture*" (Official Gazette of the Republic of Slovenia, No.60/16) entered into force in September 2016. On the basis of these rules, experts of the Ministry of Agriculture, Forestry and Food thoroughly scrutinized the National fleet register in 2018, and as a result 45 vessels were permanently withdrawn from the register as they were not fulfilling all required criteria stipulated in these rules.

Weaknesses:

Given that the size of the Slovenian fishing sector ranks as the smallest in the whole EU in many terms, where its small fleet generates very low landings that have been rapidly declining in the past years and which are resulting in poor revenues, it takes disproportionate amount of resources for the management of the sector. All these translate in high costs for data collection and control.

Furthermore, complexity and enormous volume of the CFP impose excessive costs and administrative burdens for the administration as well for the sector. EU measures request irrationally expensive monitoring systems to be put in place that can cover in some cases only 5 vessels or less (such as ERS). In addition, control and reporting obligations are excessive and burdensome given the size of the sector and the fisheries administration, which means that the whole process is not cost-effective and therefore the principle of proportionality should have been taken into account.

Taking into account the fact that the landings of the Slovenian fishing fleet have been rapidly decreasing, and that Slovenian fleet targets species from shared and migratory stocks in the Northern Adriatic, where the impact of the fishing industries of other countries of the Adriatic have a much greater impact, collaboration is essential for joint collection of data about fishing stocks in the northern Adriatic at the (sub)regional level, which would also contribute to the formulation of coordinated management measures in accordance with proportions of the impact on fishing of the fleets of other countries which exploit the same stocks.

Therefore, it is necessary to strengthen sub-regional collaboration with the purpose of formulating sustainable methods for the management of the fishing fleet in order to ensure sustainable fishing in the Northern Adriatic (with Italy and Croatia). After the reformed CFP enforced concept of regional cooperation, cooperation in this field is improving, and as a part of this approach Slovenia has been successfully cooperating with Italy and Croatia in the preparation of the discard plans required under the CFP.

It is necessary to establish collaboration with other Member states also for the purpose of exchanging information for the requirements of monitoring and for the needs of ensuring that fishermen are informed, as well as the professional and general public, regarding the regulations of CFP.

II. Plan for improvements in fleet management system

Under this heading it can be reported that the national rules for the management of entries/exits from the fishing fleet were adopted in the mid-September 2016 in accordance with the Act Amending the Marine Fisheries Act (Official Gazette of the Republic of Slovenia, No. 76/15). These rules: "Rules on the register of fishing vessels and the vessels used in aquaculture" (Official Gazette of the Republic of Slovenia, No. 60/16) entered into the force at the end of September 2016.

III. Information on general level of compliance with fleet policy instruments

Slovenia was compliant with the applicable fleet policy instruments in 2022.

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

No specific administrative changes with respect to the management of the Slovenian fishing fleet took place in Slovenia in 2022.

Annex: Balance indicators

From the “*Guidelines for analysis of the balance between fishing capacity and fishing opportunities*” the following indicators are included in this report:

- **Technical indicators:**
 - The Inactive Fleet Indicator
 - The Vessel Utilization Indicator

- **Biological indicators:**
 - Sustainable Harvest Indicator
 - Stocks-at-risk Indicator

- **Economic indicators:**
 - Return on Investment (ROI)
 - Current Revenue Against Break-Even Revenue (CR / BER)

These indicators were calculated for DFN - drift and fixed nets and DTS - demersal trawls segments. Vessels in these segments generated 95.96 % of the all landings in 2022 – 101.98 tons.

In addition, 18 vessels were also active in 2022 in the following gear segments: FPO - pots and/or traps, HOK- hooks and line gears and in PMP - active and passive gears. All these vessels together landed 3,720 kg, which is 3.49 % of the total landings in 2022. Considering our reservations regarding the use of the requested indicators, which are described in more detail in the following two chapters, indicators are not calculated for these segments, since they would show totally distorted picture on the balance of these segments due to the extremely low quantities.

General remarks of Slovenia regarding the limitations of the indicators proposed by the “Guidelines for analysis of the balance between fishing capacity and fishing opportunities” for the Slovenian fisheries sector

Slovenia has serious reservations regarding the application and appropriateness of the indicators proposed by the “Guidelines” and regarding their combine use due to a number of limitations that characterize the Slovenian fishing sector, and probably also other fisheries sectors with similar characteristics, which haven't been addressed and foreseen when preparing these indicators.

These indicators do not take account of the past efforts carried out for the reduction of fishing effort, not even those that have been carried out very recently (and resulted in radical decrease in fishing like in Slovenia's case). The size (number of vessels and active fishermen) of the whole fisheries sector and the size of individual fleet segments, which are very small (sometimes only 2 vessels), have not been regarded when deciding on these indicators.

The fact that Slovenian fishery sector is characterized as mixed fishery and that it depends on the stocks that are shared and migratory is also not taken into account (only PS fishery had been considered as target fishery as it mostly fished for small pelagic, but as already notified in this report, this segment has not been active since 2018). The fact that the total amount of landings is very low and has been declining for decades is also not taken into account.

But above all, these indicators do not consider the fact that Slovenian fishermen exploit these shared and migratory stocks **in very low quantities, which can be considered almost as negligible**, while these stocks are exploited to an incomparably larger extent by the neighbouring countries (the difference between Slovenian fisheries and the fisheries of the neighbouring countries can be distinguished by a factor of few 1000).

The impact of short fishing season (which in practice lasts more or less only from April to September / October) is also not considered. Furthermore, Slovenian fishermen are almost exclusively active only in the territorial waters of Slovenia, which are located in the northernmost part of Adriatic Sea, which is a very limited fishing area and as well as the coldest part of the Mediterranean which affects the occurrence of fish stocks and consequently fishing activity.

For all above listed reasons and in addition to all other reasons that limit our fishermen, which are mentioned in other parts of this report, this report finds that the proposed indicators are not suitable for describing Slovenian fisheries sector and above all it is not suitable to take decisions on management measures on their basis or to draw conclusions whether a certain segment is balanced or not.

However, this report finds that the use of the proposed indicators would be appropriate at the level of the region (Northern Adriatic / GSA 17), where the degree and intensity of the fishery sectors of all concerned countries could be taken into account. And then in instances where imbalances of certain segments would be demonstrated, to propose action plans in order to restore the balance between fishing capacities involved and the stocks affected, which would contain measures and targets that would take due account of the level of the exploitation of all the countries involved in the exploitation of these stocks at the level of the region.

With this purpose, Slovenia has already and will continue to participate at the level of the North Adriatic Sea with other two EU member states concerned (Croatia and Italy) in the

context of regionalization envisaged in Article 18 of the new Regulation (EU) No 1380/2013 on the Common Fisheries Policy.

As concerns of Slovenia regarding the use of the proposed indicators match many of the concerns that were already expressed by the Scientific, Technical and Economic Committee for Fisheries (STECF), in the past years when evaluating national fleet reports, some of these concerns are presented in the next chapter.

Concerns of the Scientific, Technical and Economic Committee for Fisheries (STECF) regarding the limitations of the indicators proposed by the “Guidelines”

After examining annual reports of the Scientific, Technical and Economic Committee for Fisheries (STECF), namely its “*Assessment of balance indicators for key fleet segments and review of national reports on Member States efforts to achieve balance between fleet capacity and fishing opportunities*”, which STEFC has been producing since the use of the “*Guidelines*” became obligatory for the preparation of the “*Fleet report*”, we are able to conclude that also STEFC has strong reservation regarding the use of the “*Guidelines*” and prescribed indicators **and it repeatedly states that it is not possible to scientifically conclude on balance or imbalance on the basis of these indicators, and recurrently urges Commission to prepare new “Guidelines”**.

Below we provide quotes of some of the STEFC’s concerns and conclusions related to the use of the indicator proposed by the “*Guidelines*” that are taken from the STEFC’s first 2 reports, as subsequent reports mostly reiterate and endorse conclusions of these reports.

“The Expert group notes that the current 2014 Balance Indicator Guidelines prepared by the Commission (COM(2014) 545 Final) contain a number of inconsistencies and misleading statements, and proposes that a new version of the Guidelines should be produced taking account of the following points and with suitable review by appropriate scientific experts. A draft of the proposed new version of the guidelines is presented in Annex IV” (15-02¹, p. 79).

“In addition to the issues with current indicators, EWG 14-21 identified a substantial number of ambiguities and issues with the Balance Indicator Guidelines issued by the Commission in September 2014 (COM(2014) 545 final). EWG 14-21 concludes that it is important that the Commission adopts and disseminates to MS new guidelines based on the draft version proposed by the EWG” (15-02, p. 80).

“In particular EWG 14-21 considers that the assertion that the biological indicators will allow an assessment of the imbalance between each fleet segment and the stocks that they rely on is not necessarily correct. To unequivocally draw a conclusion that a single fleet segment is in or out of balance with its fishing opportunities based solely on the values for the above indicators may be erroneous. It is not possible to definitively draw such a conclusion without taking into consideration additional factors. Instead all the indicator values (biological, economic and technical) should be considered when assessing whether the capacity of a fleet segment might, in the years represented, have been out of balance with its fishing opportunity. The EWG considers that one single indicator value that exceeds the threshold for a particular fleet segment cannot be considered as evidence of overcapacity or imbalance between fleet capacity and fishing opportunity.

Furthermore, even when a full set of indicators is available for a fleet segment, it is not valid to draw a conclusion on balance based on the indicator values alone. Instead this is a cue for Member States to further investigate the fleet segment to ascertain whether there is a problem and the fleet is currently, or was recently, out of balance with its fishing opportunity. To reach a conclusion on balance requires

¹ Scientific, Technical and Economic Committee for Fisheries (STECF) – Assessment of balance indicators for key fleet segments and review of national reports on Member States efforts to achieve balance between fleet capacity and fishing opportunities (STECF-15-02). 2015. Publications Office of the European Union, Luxembourg, EUR 27134 EN, JRC 94933, 147 pp.

the consideration of political preferences, cultural values and subjective judgements; it is not a technical or scientific question and cannot be based on a single indicator” (15-02, p. 80-81).

“*STECF reiterates previous advice (see SETCF report 15-02) that no single indicator considered in isolation, can determine whether a fleet segment is overcapacity or imbalance with its fishing opportunities. **Furthermore, STECF notes that indicators are not definitive metrics on which balance can be explicitly measured and therefore require a degree of interpretation and judgement when determining whether a fleet is in or out of balance with the available fishing opportunities.** The values and weighting for all available indicators should be considered when assessing whether the capacity of a fleet segment might, in the years represented, have been out of balance with fishing opportunities. In addition, such evaluations should also include consideration of political aims and preferences, the individual characteristics of fleet segments, communities and fisheries and also consider the broader objectives of the CFP such as achieving Fmsy by 2020 at the latest; the potential impacts of the landing obligation and the potential application of Fmsy ranges in Multi Annual Plans.*

Given these points, STECF considers that the judgement of whether a fleet is in or out of balance is the responsibility of managers and not one that can be scientifically rationalized. STECF considers that it is not competent to make such a judgement and therefore the comments in this report largely relate to the utility of the indicators specified in the 2014 Guidelines and suggestions for future revisions” (15-05², p. 9).”

“*STECF acknowledges that there are no immediate plans by the Commission to revise the current suite of indicators or the Guidelines. Nevertheless, recognizing that there may be a need to undertake such a revision at some future date, STECF suggests that it would be appropriate to commence investigating the properties and utility of alternative indicators at the earliest opportunity and well ahead of any decision on which indicators are to be used”* (15-05, p. 11).

“*The STECF and previous EWGs to assess balance have highlighted numerous problems and concerns regarding the current suite of indicators that are being used in conjunction with the criteria in the 2014 Guidelines to assess the balance between fleet capacities and fishing opportunities (see above). While such concerns primarily relate to the biological indicators SHI and SAR, for some fleet segments, the values for the economic indicators are also questionable. This is particularly problematic for the small-scale fleet segments. **Hence any assessment of balance between capacity and fishing opportunities undertaken by Member States based solely on the indicator values may in some cases be erroneous and potentially give rise to the development of inappropriate or unnecessary action plans”*** (15-05, p. 16-17).

² Scientific, Technical and Economic Committee for Fisheries (STECF) – Assessment of balance indicators for key fleet segments and review of national reports on Member States efforts to achieve balance between fleet capacity and fishing opportunities (STECF-15-15). 2015. Publications Office of the European Union, Luxembourg, EUR 27555 EN, JRC 97991, 160 pp.

Technical indicators

Table 8: The Inactive Fleet Indicator

				Number of vessels							
MS	Fleet segment			2015	2016	2017	2018	2019	2020	2021	2022
SVN	AREA37	INACTIVE	VL0006	46	51	52	31	34	31	34	34
SVN	AREA37	INACTIVE	VL0612	31	33	35	29	25	29	24	20
SVN	AREA37	INACTIVE	VL1218	3	3	4	4	46	4	6	6
SVN	AREA37	INACTIVE	VL1824	1	1	1	1	1	1	1	1
SVN	No. of inactive vessels			81	88	92	57	65	66	65	61
SVN	No. of vessels in the national fleet			169	171	171	134	137	136	137	137

				Number of inactive vessels as % of total vessels							
MS	Fleet segment			2015	2016	2017	2018	2019	2020	2021	2022
SVN	AREA37	INACTIVE	VL0006	25.0	29.8	30.4	20.2	25.0	25.0	24.8	24.8
SVN	AREA37	INACTIVE	VL0612	18.4	19.3	20.5	17.9	18.4	18.4	17.5	14.6
SVN	AREA37	INACTIVE	VL1218	4.4	1.8	2.3	3.7	4.4	4.4	4.4	4.4
SVN	AREA37	INACTIVE	VL1824	0.7	0.6	0.6	0.8	0.7	0.7	0.7	0.7
SVN	National fleet			47.9	48.5	53.8	42.5	47.1	48.5	47.4	44.5

				Inactive kW as % of fleet kW							
MS	Fleet segment			2015	2016	2017	2018	2019	2020	2021	2022
SVN	AREA37	INACTIVE	VL0006	4.9	6.3	4.2	3.3	4.4	5.0	4.8	4.2
SVN	AREA37	INACTIVE	VL0612	18.9	28.1	26.5	25.1	26.6	23.5	20.3	18.5
SVN	AREA37	INACTIVE	VL1218	8.8	9.7	12.8	12.5	5.8	13.9	13.9	14.5
SVN	AREA37	INACTIVE	VL1824	2.3	2.3	2.3	0.0	0.0	0.0	0.0	0.0
SVN	National fleet			34.9	46.5	45.7	40.9	36.9	42.4	39.0	37.2

				Inactive GT as % of fleet GT							
MS	Fleet segment			2015	2016	2017	2018	2019	2020	2021	2022
SVN	AREA37	INACTIVE	VL0006	7.4	8.1	7.7	3.6	4.1	4.6	4.4	4.3
SVN	AREA37	INACTIVE	VL0612	17.8	19.8	21.2	14.7	16.4	15.1	14.7	12.0
SVN	AREA37	INACTIVE	VL1218	5.1	5.7	9.8	8.1	8.5	11.9	11.9	11.9
SVN	AREA37	INACTIVE	VL1824	5.2	5.2	5.1	17.0	16.9	17.0	17.0	16.9
SVN	National fleet			35.4	38.9	43.9	43.3	45.9	48.6	48.0	45.2

The Act Amending the Marine Fisheries Act (Official Gazette of the Republic of Slovenia, No. 76/15) adopted in 2015 provided a legal basise for the preparation of national rules for the management of entry/exit regime. These rules: "Rules on the register of fishing vessels and the vessels used in aquaculture" (Official Gazette of the Republic of Slovenia, No. 60/16) were adopted in September 2016 and entered into force at the end of September 2016.

These rules allowed to scrutinize National fleet register and all those vessels that were not fulfilling all required criteria stipulated in these rules were deleted from the National fleet register.

Officials of The Ministry for Agriculture, Forestry and Food carried out a thorough scrutiny in 2018 and permanently withdrew 45 vessels from the register. In 2017 there were 171 vessels in the national register, while in 2018 there were 134. Slovenia considers this a huge achievement in its endeavors for a balanced fleet.

The results of the **Inactive fleet indicator** show that on average more than 50 % of the vessels of the Slovenian fishing fleet were not active in the past years. However, due to the scrutiny of the register carried out in 2018, this figure improved as 42.5 % of the vessels were inactive.

In 2022, 88.5 % of the inactive vessels were shorter than 12 m and more than half of them were shorter than 6 meters.

Table 9: The Vessel Utilization Indicator

Fleet segment		Vessel utilization indicator							
		2015	2016	2017	2018	2019	2020	2021	2022
DFN	VL0006	0.26	0.27	0.28	0.23	0.21	0.30	0.19	0.30
	VL0612	0.25	0.31	0.27	0.18	0.17	0.31	0.17	0.30
	VL1218	0.25	0.31	0.27	0.18	0.62	0.99	0.59	0.89
DTS	VL0612	0.27	0.40	0.58	0.34	0.65	0.84	0.71	0.55
	VL1218	0.27	0.40	0.58	0.34	0.53	0.75	0.61	0.40
FPO	VL0006	NA	NA	NA	NA	NA	0.70	0.74	0.62
	VL0612	NA	NA	NA	NA	NA	1.00	1.00	1.00
HOK	VL0006	NA	NA	NA	NA	NA	NA	NA	0.40
	VL0612	NA	NA	NA	NA	NA	0.55	0.41	0.61
PGP	VL0006	NA	NA	NA	NA	NA	1.00	1.00	NA
	VL0612	NA	NA	NA	NA	NA	1.00	NA	NA
PMP	VL0006	NA	NA	NA	NA	NA	1.00	1.00	1.00
	VL0612	NA	NA	NA	NA	NA	1.00	0.52	0.55
	VL1218	NA	NA	NA	NA	NA	1.00	NA	1.00
PS	VL1218	0.68	0.93	0.83	NA	NA	NA	NA	NA

* Due to the provisions on personal data in accordance with the General Data Protection Regulation, for the period 2015-2018, 3 vessels from the DFN VL1218 segment were joined with the vessels in the DFN VL0612 segment for the calculation of the indicator, therefore the two segments share the same indicator value.

** Due to the provisions on personal data in accordance with the General Data Protection Regulation, for the period 2015-2018, 3 vessels from the DTS VL0612 segment were joined with the vessels in the DTS VL1218 segment for the calculation of the indicator; therefore the two segments share the same indicator value.

*** 2021-2022: Indicator was calculated on the base of between average days at sea per vessel and the maximum days at sea observed in a fleet segment..

Vessel utilization indicator is based on observed maximum activity.

Vessels in the purse seines (PS) segment have not been active since 2018 (in 2018 there was only 1 vessel in the PS segment, with only one fishing trip and zero catches / landings), as there is no occurrence of small pelagic fish in size that would be attractive for the market.

We deem that the proposed indicators of vessels' activity are not really suitable indicators for the fisheries sector as is Slovenian, since they do not take into account its unique characteristics, above all its many constraints. Some of the reasons why we deem that these indicators are of limited use when applied to Slovenian fisheries sector are explained below, while a more detail explanation regarding the limitations of the proposed indicators is given in the section "7.1 General remarks of Slovenia regarding the limitations of the indicators proposed by the "Guidelines for analysis of the balance between fishing capacity and fishing opportunities" of this report.

Results of low vessel activity in many segments are predominantly a consequence of the following characteristics of the Slovenian fisheries sector:

Figures below 0.7 can be seen especially in fleet segments with large proportion of small vessels. The majority of fishing vessels of the Slovenian fisheries sector are vessels

engaged in small scale coastal fishing (87.6 % of all Slovenian fishing vessels - 120 vessels out of 137 are vessels below 12 meters). For most of the Slovenian fishermen, fishing does not represent their main economic activity, it is not the main source of their income, but it is an additional, complementary activity to other activities (such as tourism etc.), therefore fishing activity of many fishermen is rather low.

Most of the fish caught by Slovenian fishermen are migratory species which means that they occur occasionally or seasonally in the northernmost part of the North Adriatic Sea, which is the fishing area of Slovenian fishermen. As a consequence, the fishermen must adjust their fishing trips to the occurrence of these migratory species. Therefore, there can be many periods during a year when they do not fish at all and many fishers try to engage in other gainful activities. For example, vessels using purse seines used to be active mainly in period April-September and also duration of seasons of other segments is similar.

Therefore, when interpreting the results of “Vessel utilization indicator”, the above mentioned specificities that characterize the Slovenian fishing sector and explanations regarding the limitations of the proposed indicators should be taken into account and thus the obtained results should be interpreted in the light of these observations.

Moreover we recall again that is highlighted in the chapter regarding the Concerns of the Scientific, Technical and Economic Committee for Fisheries (STECF) regarding the limitations of the indicators proposed by the “Guidelines” that ***to reach a conclusion on balance requires the consideration of political preferences, cultural values and subjective judgements; it is not a technical or scientific question and cannot be based on a single indicator.***

Biological indicators

Biological sustainability indicators

Stock assessments on regional level (GSA 17 or GSA 17-18) are available only for the most important Adriatic stocks. The fishing area of Slovenian fishermen is in general restricted to the territorial sea of the Republic of Slovenia. This is the northernmost part of Adriatic where the species composition is significantly different from the rest of the Adriatic. The average number of stocks caught by Slovenian fishermen in the period from 2016 to 2022 was 84. Stock assessments at regional level were only available for a small number of these stocks (Table 10).

Table 10: Stock assessments available at regional level (GSA 17 or GSA 17-18) and used to calculate biological indicators.

Publication year	Stock	Area	Method	Reference
2016	<i>Engraulis encrasicolus</i>	GSA 17 18 SAM		Working Group on Stock Assessment of Small Pelagic Species (WGSASP), GFCM and FAO headquarters, Rome, Italy, 7-12 November 2016
2016	<i>Mullus barbatus</i>	GSA 17 XSA, SCA		General Fisheries Commission for the Mediterranean. Report of the eighteenth session of the Scientific Advisory Committee on Fisheries, Nicosia, Cyprus, 21-23 March 2016
2016	<i>Sardina pilchardus</i>	GSA 17 18 SAM		Working Group on Stock Assessment of Small Pelagic Species (WGSASP), GFCM and FAO headquarters, Rome, Italy, 7-12 November 2016
2016	<i>Solea solea</i>	GSA 17 533, Y/R, short-term forecast		General Fisheries Commission for the Mediterranean. Report of the eighteenth session of the Scientific Advisory Committee on Fisheries, Nicosia, Cyprus, 21-23 March 2016
2017	<i>Engraulis encrasicolus</i>	GSA 17 18 SAM		Working Group on Stock Assessment of Small Pelagic Species (WGSASP), FAO HQ, Rome, Italy, 13-18 November 2017
2017	<i>Merluccius merluccius</i>	GSA 17 18 533		General Fisheries Commission for the Mediterranean. Report of the nineteenth session of the Scientific Advisory Committee on Fisheries, Ljubljana, Slovenia, 16-19 May 2017
2017	<i>Mullus barbatus</i>	GSA 17 533		General Fisheries Commission for the Mediterranean. Report of the nineteenth session of the Scientific Advisory Committee on Fisheries, Ljubljana, Slovenia, 16-19 May 2017
2017	<i>Sardina pilchardus</i>	GSA 17 18 SAM		Working Group on Stock Assessment of Small Pelagic Species (WGSASP), FAO HQ, Rome, Italy, 13-18 November 2017
2017	<i>Sepia officinalis</i>	GSA 17 CMSY		Working Group on Stock Assessment of Small Pelagic Species (WGSASP), FAO headquarters, Rome, Italy, 13-18 November 2017
2017	<i>Solea solea</i>	GSA 17 533		General Fisheries Commission for the Mediterranean. Report of the nineteenth session of the Scientific Advisory Committee on Fisheries, Ljubljana, Slovenia, 16-19 May 2017
2017	<i>Squilla mantis</i>	GSA 17 533		Working Group on Stock Assessment of Demersal Species (WGSAD), FAO headquarters, Rome, Italy, 13-18 November 2017
2018	<i>Engraulis encrasicolus</i>	GSA 17 18 SAM		General Fisheries Commission for the Mediterranean. Report of the twentieth session of the Scientific Advisory Committee on Fisheries, Tangiers, Morocco, 26-29 June 2018
2018	<i>Merluccius merluccius</i>	GSA 17 18 533		General Fisheries Commission for the Mediterranean. Report of the twentieth session of the Scientific Advisory Committee on Fisheries, Tangiers, Morocco, 26-29 June 2018
2018	<i>Mullus barbatus</i>	GSA 17 533		General Fisheries Commission for the Mediterranean. Report of the twentieth session of the Scientific Advisory Committee on Fisheries, Tangiers, Morocco, 26-29 June 2018
2018	<i>Sardina pilchardus</i>	GSA 17 18 SAM		General Fisheries Commission for the Mediterranean. Report of the twentieth session of the Scientific Advisory Committee on Fisheries, Tangiers, Morocco, 26-29 June 2018
2018	<i>Sepia officinalis</i>	GSA 17 CMSY		General Fisheries Commission for the Mediterranean. Report of the twentieth session of the Scientific Advisory Committee on Fisheries, Tangiers, Morocco, 26-29 June 2018
2018	<i>Solea solea</i>	GSA 17 533		General Fisheries Commission for the Mediterranean. Report of the twentieth session of the Scientific Advisory Committee on Fisheries, Tangiers, Morocco, 26-29 June 2018
2018	<i>Squilla mantis</i>	GSA 17 533		General Fisheries Commission for the Mediterranean. Report of the twentieth session of the Scientific Advisory Committee on Fisheries, Tangiers, Morocco, 26-29 June 2018
2019	<i>Engraulis encrasicolus</i>	GSA 17 18 SAM		General Fisheries Commission for the Mediterranean. Report of the twenty-first session of the Scientific Advisory Committee on Fisheries, Tangiers, Morocco, 26-29 June 2019
2019	<i>Merluccius merluccius</i>	GSA 17 18 533		General Fisheries Commission for the Mediterranean. Report of the twenty-first session of the Scientific Advisory Committee on Fisheries, Tangiers, Morocco, 26-29 June 2019
2019	<i>Mullus barbatus</i>	GSA 17 18 24a		General Fisheries Commission for the Mediterranean. Report of the twenty-first session of the Scientific Advisory Committee on Fisheries, Tangiers, Morocco, 26-29 June 2019
2019	<i>Penaeus kerathurus</i>	GSA 17 CMSY		General Fisheries Commission for the Mediterranean. Report of the twenty-first session of the Scientific Advisory Committee on Fisheries, Tangiers, Morocco, 26-29 June 2019
2019	<i>Sardina pilchardus</i>	GSA 17 18 SAM		General Fisheries Commission for the Mediterranean. Report of the twenty-first session of the Scientific Advisory Committee on Fisheries, Tangiers, Morocco, 26-29 June 2019
2019	<i>Sepia officinalis</i>	GSA 17 CMSY		General Fisheries Commission for the Mediterranean. Report of the twenty-first session of the Scientific Advisory Committee on Fisheries, Tangiers, Morocco, 26-29 June 2019
2019	<i>Squilla mantis</i>	GSA 17 533		General Fisheries Commission for the Mediterranean. Report of the twenty-first session of the Scientific Advisory Committee on Fisheries, Tangiers, Morocco, 26-29 June 2019
2020	<i>Engraulis encrasicolus</i>	GSA 17 18 SAM		General Fisheries Commission for the Mediterranean. Report of the twenty-first session of the Scientific Advisory Committee on Fisheries, Tangiers, Morocco, 26-29 June 2019
2020	<i>Merluccius merluccius</i>	GSA 17 18 533		General Fisheries Commission for the Mediterranean. Report of the twenty-first session of the Scientific Advisory Committee on Fisheries, Tangiers, Morocco, 26-29 June 2019
2020	<i>Mullus barbatus</i>	GSA 17 18 24a		General Fisheries Commission for the Mediterranean. Report of the twenty-first session of the Scientific Advisory Committee on Fisheries, Tangiers, Morocco, 26-29 June 2019
2020	<i>Penaeus kerathurus</i>	GSA 17 CMSY		General Fisheries Commission for the Mediterranean. Report of the twenty-first session of the Scientific Advisory Committee on Fisheries, Tangiers, Morocco, 26-29 June 2019
2020	<i>Sardina pilchardus</i>	GSA 17 18 SAM		General Fisheries Commission for the Mediterranean. Report of the twenty-first session of the Scientific Advisory Committee on Fisheries, Tangiers, Morocco, 26-29 June 2019
2020	<i>Sepia officinalis</i>	GSA 17 CMSY		General Fisheries Commission for the Mediterranean. Report of the twenty-first session of the Scientific Advisory Committee on Fisheries, Tangiers, Morocco, 26-29 June 2019
2020	<i>Squilla mantis</i>	GSA 17 533		General Fisheries Commission for the Mediterranean. Report of the twenty-first session of the Scientific Advisory Committee on Fisheries, Tangiers, Morocco, 26-29 June 2019
2021	<i>Anchoovy</i>	GSA 17 18 FLSAM		General Fisheries Commission for the Mediterranean. Report of the twenty-second session of the Scientific Advisory Committee on Fisheries, Online, 22-25 June 2021
2021	<i>Bolus brandaris</i>	GSA 17 CMSY		General Fisheries Commission for the Mediterranean. Report of the twenty-second session of the Scientific Advisory Committee on Fisheries, Online, 22-25 June 2021
2021	<i>Lophus budegosa</i>	GSA 17 CMSY		General Fisheries Commission for the Mediterranean. Report of the twenty-second session of the Scientific Advisory Committee on Fisheries, Online, 22-25 June 2021
2021	<i>Merluccius merluccius</i>	GSA 17 18 533		General Fisheries Commission for the Mediterranean. Report of the twenty-second session of the Scientific Advisory Committee on Fisheries, Online, 22-25 June 2021
2021	<i>Mullus barbatus</i>	GSA 17 18 24a		General Fisheries Commission for the Mediterranean. Report of the twenty-second session of the Scientific Advisory Committee on Fisheries, Online, 22-25 June 2021
2021	<i>Parapenaeus longirostris</i>	GSA 17 18 24a		General Fisheries Commission for the Mediterranean. Report of the twenty-second session of the Scientific Advisory Committee on Fisheries, Online, 22-25 June 2021
2021	<i>Pecten jacobaeus</i>	GSA 17 533		General Fisheries Commission for the Mediterranean. Report of the twenty-second session of the Scientific Advisory Committee on Fisheries, Online, 22-25 June 2021
2021	<i>Sardine</i>	GSA 17 18 24a, FLSAM		General Fisheries Commission for the Mediterranean. Report of the twenty-second session of the Scientific Advisory Committee on Fisheries, Online, 22-25 June 2021
2021	<i>Sepia officinalis</i>	GSA 17 CMSY		General Fisheries Commission for the Mediterranean. Report of the twenty-second session of the Scientific Advisory Committee on Fisheries, Online, 22-25 June 2021
2021	<i>Solea solea</i>	GSA 17 533 ensemble		General Fisheries Commission for the Mediterranean. Report of the twenty-second session of the Scientific Advisory Committee on Fisheries, Online, 22-25 June 2021
2021	<i>Squilla mantis</i>	GSA 17 533		General Fisheries Commission for the Mediterranean. Report of the twenty-second session of the Scientific Advisory Committee on Fisheries, Online, 22-25 June 2021
2022	<i>Engraulis encrasicolus</i>	GSA 17 18 FLSAM		General Fisheries Commission for the Mediterranean. Report of the twenty-third session of the Scientific Advisory Committee on Fisheries, FAO headquarters, Rome, Italy, 21-24 June 2022
2022	<i>Merluccius merluccius</i>	GSA 17 18 533		General Fisheries Commission for the Mediterranean. Report of the twenty-third session of the Scientific Advisory Committee on Fisheries, FAO headquarters, Rome, Italy, 21-24 June 2022
2022	<i>Mullus barbatus</i>	GSA 17 Previous validated advice;		General Fisheries Commission for the Mediterranean. Report of the twenty-third session of the Scientific Advisory Committee on Fisheries, FAO headquarters, Rome, Italy, 21-24 June 2022
2022	<i>Parapenaeus longirostris</i>	GSA 17 18 24a		General Fisheries Commission for the Mediterranean. Report of the twenty-third session of the Scientific Advisory Committee on Fisheries, FAO headquarters, Rome, Italy, 21-24 June 2022
2022	<i>Sardina pilchardus</i>	GSA 17 18 24a		General Fisheries Commission for the Mediterranean. Report of the twenty-third session of the Scientific Advisory Committee on Fisheries, FAO headquarters, Rome, Italy, 21-24 June 2022
2022	<i>Sepia officinalis</i>	GSA 17 CMSY		General Fisheries Commission for the Mediterranean. Report of the twenty-third session of the Scientific Advisory Committee on Fisheries, FAO headquarters, Rome, Italy, 21-24 June 2022
2022	<i>Solea solea</i>	GSA 17 533		General Fisheries Commission for the Mediterranean. Report of the twenty-third session of the Scientific Advisory Committee on Fisheries, FAO headquarters, Rome, Italy, 21-24 June 2022
2022	<i>Squilla mantis</i>	GSA 17 533		General Fisheries Commission for the Mediterranean. Report of the twenty-third session of the Scientific Advisory Committee on Fisheries, FAO headquarters, Rome, Italy, 21-24 June 2022

*In 2020 SAC meeting was not held. As a proxy we used fish stock assessment results from previous year.

Landing of Slovenian fisherman is negligible compared to total Adriatic landing. It has been on a declining trend since 1983, from 7916 tons to 196 tons in 2015. Landings have also been declining over the last years, from 152 tons in 2016 to 106 tons in 2022. Species composition and its quantities of landings indicate that Slovenian fisheries mainly target stocks for which there is no stock assessment available (Figure 1).

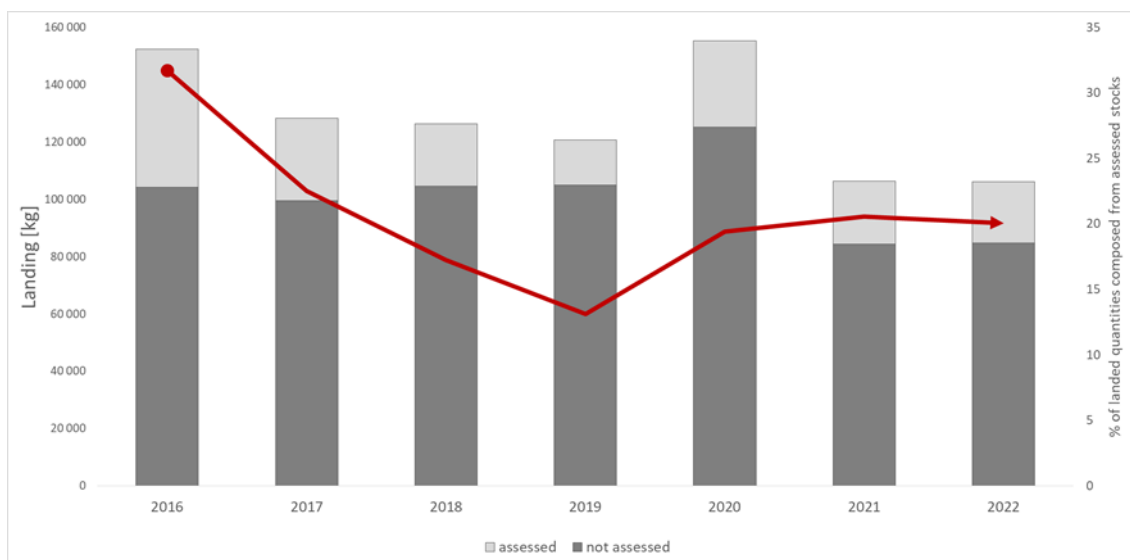


Figure 1: Quantities of landings composed from assessed stocks and not assessed stocks in period 2016-2022. The line shows the percentage of landed quantities composed from assessed stocks.

For the calculation of biological indicators we took in consideration DG Fisheries and Maritime Affairs Guidelines for analysis of the balance between fishing capacity and fishing opportunities from 2014 (hereinafter "Guidelines"). Below, we calculated both indicators, however because of obvious lack of complete stock assessments for a significant number of stocks, the results are not meaningful, especially for calculation of Sustainable Harvest Indicator. In our case there is more than 90 % of stocks with unavailable values of F and Fmsy.

Sustainable Harvest Indicator (SHI)

The analysis of data has been performed over period from 2016 till 2022. We took in consideration seven most important fleet segments. From stocks in Table 8, for calculation of SHI we chose those stocks with available F and Fmsy (Table 11). In line with the Guidelines, the following formula was used for the calculation of SHI indicator:

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

Where V_i = value of the landings.

Calculation of the indicator depends on the availability of quantified scientific advice for the stocks in question. In cases where more than 60% of the value of the catch is made up of stocks for which values of F and Fmsy are unavailable this indicator is also deemed to be unavailable. That was the case for most fleet segments in period 2016 to 2018 and all fleet segments in 2022.

Table 11: Stock assessments used to calculate SHI.

Publication year	Stock	Area	Method	F	Fmsy	Fmsy comment
2016	<i>Engraulis encrasicolus</i>	GSA 17-18	SAM	0.99	0.554	F_msy
2016	<i>Mullus barbatus</i>	GSA 17	XSA, SCAA	1.3	0.52	F0.1 as proxy for Fmsy
2016	<i>Sardina pilchardus</i>	GSA 17-18	SAM	1.486	0.715	F_msy
2016	<i>Solea solea</i>	GSA 17	SS3, Y/R, shortterm forecast	0.62	0.26	F0.1 as proxy for Fmsy
2017	<i>Engraulis encrasicolus</i>	GSA 17-18	SAM	1.43	0.64	F_msy
2017	<i>Merluccius merluccius</i>	GSA 17-18	SS3	0.48	0.21	F0.1 as proxy for Fmsy
2017	<i>Mullus barbatus</i>	GSA 17	SS3	0.39	0.3	F0.1 as proxy for Fmsy
2017	<i>Sardina pilchardus</i>	GSA 17-18	SAM	1.3	0.47	F_msy
2017	<i>Sepia officinalis</i>	GSA 17	CMSY	0.39	0.48	F_msy
2017	<i>Solea solea</i>	GSA 17	SS3	0.35	0.26	F0.1 as proxy for Fmsy
2017	<i>Squilla mantis</i>	GSA 17	SS3	0.99	0.51	F0.1 as proxy for Fmsy
2018	<i>Merluccius merluccius</i>	GSA 17-18	SS3	0.33	0.21	F0.1 as proxy for Fmsy
2018	<i>Mullus barbatus</i>	GSA 17	SS3	0.5	0.21	F0.1 as proxy for Fmsy
2018	<i>Sepia officinalis</i>	GSA 17	CMSY	0.39	0.48	F_msy
2018	<i>Solea solea</i>	GSA 17	SS3	0.41	0.26	F0.1 as proxy for Fmsy
2018	<i>Squilla mantis</i>	GSA 17	SS3	0.99	0.51	F0.1 as proxy for Fmsy
2019	<i>Merluccius merluccius</i>	GSA 17-18	SS3	0.56	0.17	F0.1 as proxy for Fmsy
2019	<i>Mullus barbatus</i>	GSA 17-18	a4a	0.48	0.41	F0.1 as proxy for Fmsy
2019	<i>Penaeus kerathurus</i>	GSA 17	CMSY	0.96	0.46	F_msy
2019	<i>Sepia officinalis</i>	GSA 17	CMSY	0.4	0.48	F_msy
2019	<i>Squilla mantis</i>	GSA 17	SS3	0.66	0.43	F0.1 as proxy for Fmsy
2020	<i>Merluccius merluccius</i>	GSA 17-18	SS3	0.56	0.17	F0.1 as proxy for Fmsy
2020	<i>Mullus barbatus</i>	GSA 17-18	a4a	0.48	0.41	F0.1 as proxy for Fmsy
2020	<i>Penaeus kerathurus</i>	GSA 17	CMSY	0.96	0.46	F_msy
2020	<i>Sepia officinalis</i>	GSA 17	CMSY	0.4	0.48	F_msy
2020	<i>Squilla mantis</i>	GSA 17	SS3	0.66	0.43	F0.1 as proxy for Fmsy
2021	<i>Bolinus brandaris</i>	GSA 17	CMSY	0.57	0.53	F_msy
2021	<i>Lophius budegassa</i>	GSA 17	CMSY	0.31	0.22	F_msy
2021	<i>Merluccius merluccius</i>	GSA 17-18	SS3	0.45	0.167	F_msy
2021	<i>Mullus barbatus</i>	GSA 17-18	a4a	0.69	0.34	F0.1 as proxy for Fmsy
2021	<i>Parapenaeus longirostr</i>	GSA 17-18	a4a	1.49	0.5	F0.1 as proxy for Fmsy
2021	<i>Pecten jacobaeus</i>	GSA 17	SS3	0.71	0.248	F_msy
2021	<i>Sepia officinalis</i>	GSA 17	CMSY	0.2	0.252	F_msy
2021	<i>Solea solea</i>	GSA 17	SS3 ensemble	0.5	0.49	F0.1 as proxy for Fmsy
2022	<i>Merluccius merluccius</i>	GSA 17-18	SS3	0.41	0.167	F_msy
2022	<i>Parapenaeus longirostr</i>	GSA 17-18	a4a	1.62	0.7	F0.1 as proxy for Fmsy
2022	<i>Sepia officinalis</i>	GSA 17	CMSY	0.21	0.18	F_msy

*In 2020 SAC meeting was not held. As a proxy we used fish stock assessment results from previous year.

DFN VL0006

In the fleet segment DFN VL0006 the average landing percentage of stocks with unavailable F and Fmsy was 90.47 %, and ranged from 83.03 % to 97.59 % (Table 12). In all years the landing percentage of stocks with unavailable F and Fmsy was well above the 60 % threshold and consequently we could not calculate SHI.

Table 12: Number of stocks and percentage of the landing value with availability of F and Fmsy, for fleet segment DFN VL0006.

Year	F and Fmsy are available		Unavailable	
	Number of stocks	Landing [%]	Number of stocks	Landing [%]
2016	3	11.85	58	88.15
2017	5	14.53	53	85.47
2018	5	16.97	54	83.03
2019	4	3.61	60	96.39
2020	5	6.54	49	93.46
2021	3	10.81	50	89.19
2022	2	2.41	54	97.59

DFN VL0612

In the fleet segment DFN VL0612 the average landing percentage of stocks with unavailable F and Fmsy was 81.89 %, and ranged from 71.60 % to 94.81 % (Table 13). In all years the landing percentage of stocks with unavailable F and Fmsy was well above the 60 % threshold and consequently we could not calculate SHI.

Table 13: Number of stocks and percentage of the landing value with availability of F and Fmsy, for fleet segment DFN VL0612.

Year	F and Fmsy are available		Unavailable	
	Number of stocks	Landing [%]	Number of stocks	Landing [%]
2016	4	26.93	69	73.07
2017	7	28.40	69	71.60
2018	5	26.63	58	73.37
2019	5	7.63	57	92.37
2020	5	5.19	54	94.81
2021	5	24.77	52	75.23
2022	2	7.19	58	92.81

DFN VL1218

In the fleet segment DFN VL1218 the average landing percentage of stocks with unavailable F and Fmsy was 70.82 %, and ranged from 17.44 % to 97.95 % (Table 14). In last two years the landing percentage of stocks with unavailable F and Fmsy was well above the 60 % threshold and consequently we could not calculate SHI. We are only able to provide SHI for the first two years: 2.04 in 2016 and 2.73 in 2017.

Table 14: Number of stocks and percentage of the landing value with availability of F and Fmsy, for fleet segment DFN VL1218.

Year	F and Fmsy are available		Unavailable	
	Number of stocks	Landing [%]	Number of stocks	Landing [%]
2016	3	82.56	34	17.44
2017	3	49.85	26	50.15
2018	2	2.71	12	97.29
2019	2	2.05	10	97.95
2020	2	3.15	19	96.85
2021	3	58.05	20	41.95
2022	1	5.86	14	94.14

DTS VL0612

In the fleet segment DTS VL0612 the average landing percentage of stocks with unavailable F and Fmsy was 88.80 %, and ranged from 82.30 % to 96,10 % (Table 15). In all years the landing percentage of stocks with unavailable F and Fmsy was well above the 60 % threshold and consequently we could not calculate SHI.

Table 15: Number of stocks and percentage of the landing value with availability of F and Fmsy, for fleet segment DTS VL0612.

Year	F and Fmsy are available		Unavailable	
	Number of stocks	Landing [%]	Number of stocks	Landing [%]
2016	3	3.90	47	96.10
2017	7	9.62	43	90.38
2018	5	13.20	39	86.80
2019	5	10.67	39	89.33
2020	5	17.70	43	82.30
2021	5	16.55	42	83.45
2022	2	6.79	42	93.21

DTS VL1218

In the fleet segment DTS VL1218 the average landing percenaget of stocks with unavailable F and Fmsy was 86.92 %, and ranged from 78.87 % to 92.78 % (Table 16). In all years the landing percentage of stocks with unavailable F and Fmsy was well above the 60 % threshold and consequently we could not calculate SHI.

Table 16: Number of stocks and percentage of the landing value with availability of F and Fmsy, for fleet segment DTS VL1218.

Year	F and Fmsy are available		Unavailable	
	Number of stocks	Landing [%]	Number of stocks	Landing [%]
2016	4	7.22	60	92.78
2017	7	12.50	55	87.50
2018	5	11.30	46	88.70
2019	5	18.28	57	81.72
2020	5	21.13	54	78.87
2021	5	12.95	59	87.05
2022	2	8.18	54	91.82

PS VL0612

In the fleet segment PS VL0612 the values are only available for first two years. After 2017 the fleet segment was not active. The landing percentage of stocks with unavailable F and Fmsy was 1.82 % in 2016 and 3.38 % in 2017 (Table 17). In those years the landing percentage of stocks with unavailable F and Fmsy was well below the 60 % threshold. Because of inactivity of the segment, we are only able to provide SHI for the first two years: 2.04 in 2016 and 2.64 in 2017.

Table 17: Number of stocks and percentage of the landing value with availability of F and Fmsy, for fleet segment DFN PS VL0612.

Year	F and Fmsy are available		Unavailable	
	Number of stocks	Landing [%]	Number of stocks	Landing [%]
2016	3	98.18	15	1.82
2017	3	96.62	6	3.38
2018	NA	NA	NA	NA
2019	NA	NA	NA	NA
2020	NA	NA	NA	NA
2021	NA	NA	NA	NA
2022	NA	NA	NA	NA

PS VL1218

In the fleet segment PS VL1218 the values are only available for first year. After 2016 the fleet segment was not active. The landing percentage of stocks with unavailable F and Fmsy was 4.27 % in 2016 (Table 18). In this year the landing percentage of stocks with unavailable F and Fmsy was well below the 60 % threshold. Because of inactivity of the segment, we are only able to provide SHI for 2016, which was 2.03.

Table 18: Number of stocks and percentage of the landing value with availability of F and Fmsy, for fleet segment PS VL1218.

Year	F and Fmsy are available		Unavailable	
	Number of stocks	Landing [%]	Number of stocks	Landing [%]
2016	3	95.73	15	4.27
2017	NA	NA	NA	NA
2018	NA	NA	NA	NA
2019	NA	NA	NA	NA
2020	NA	NA	NA	NA
2021	NA	NA	NA	NA
2022	NA	NA	NA	NA

Stocks-at-risk indicator (SAR)

The stocks-at-risk indicator is a measure of how many stocks are being affected by the activities of the fleet segment that are biologically vulnerable. According to the guidelines, a stock at high biological risk means a stock which is either:

- a) assessed as being below the Blim 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.

The criteria that stock at high biological risk is exploited by the fleet segment are either:
 1- stock(s) at high risk each make up more than 10% of the catches of the fleet; or
 2- that the fleet takes more than 10% of the catches of the stock.

For items a, b and c we have not found any stocks that meet the criteria. For item d, we have provided a list of species taken from the IUCN website³ (Mediterranean and Black Sea species list) and CITES (Appendices I, II, III⁴). The IUCN species list contained threatened species with the following statuses: Critically Endangered and Endangered.

The species list from CITES contained species that occur in the Mediterranean Sea. As proposed in the Guidelines the following formula was taken for the calculation of SAR indicator:

$$\sum_{i=1}^{i=n} (1 \text{ if } (C_i > 0.1C_t) \text{ or } (C_i > 0.1T_i); \text{ otherwise } 0)$$

Where C_i = catch, C_t = total catch of all stocks taken by the fleet segment and T_i = total catch of stock i taken by all segments, for n stocks that fall into any one of categories a) to c) above.

In the period 2016-2022, Slovenian fishing vessels landed the following stocks that are considered biologically vulnerable: *Alopias vulpinus* (CITES Appendix II; IUCN Endangered), *Carcharhinus plumbeus* (CITES Appendix II; IUCN Endangered), *Centrolophus niger* (CITES Appendix II), *Squalus acanthias* (IUCN Endangered) (Table 29). All these stocks were caught accidentally and their landings were very small.

Table 19: Input data for SAR index calculation.

Year	Fleet segment	Stock	C_i [kg]	C_t [kg]	T_i [kg]	$C_i > 0.1 * C_t$	$C_i > 0.1 * T_i$	SAR	Status	
2016	DFN	VL0612	Squalus acanthias	2.7	35719	2.7	0	1	1	IUCN Endangered
2017	DFN	VL0612	Squalus acanthias	5.1	44322	6.1	0	1	1	IUCN Endangered
2017	DTS	VL0612	Squalus acanthias	1	15120	6.1	0	1	1	IUCN Endangered
2017	DTS	VL1218	Alopias vulpinus	19	42723	19	0	1	1	CITES Appendix II; IUCN Endangered
2018	DFN	VL0612	Alopias vulpinus	52.4	33942	52.4	0	1	1	CITES Appendix II; IUCN Endangered
2018	DFN	VL0612	Squalus acanthias	0.5	33942	0.5	0	1	1	IUCN Endangered
2019	DFN	VL0006	Carcharhinus plumbeus	4	12960	4	0	1	1	CITES Appendix II; IUCN Endangered
2019	DTS	VL1218	Alopias vulpinus	12.5	54591	12.5	0	1	1	CITES Appendix II; IUCN Endangered
2019	DTS	VL1218	Squalus acanthias	0.8	54591	0.8	0	1	1	IUCN Endangered
2020	DFN	VL0006	Squalus acanthias	5	13106	5	0	1	1	IUCN Endangered
2021	DFN	VL0612	Centrolophus niger	0.8	17379	0.8	0	1	1	CITES Appendix II
2021	DFN	VL0612	Squalus acanthias	4.2	17379	4.2	0	1	1	IUCN Endangered
2021	DTS	VL1218	Alopias vulpinus	12	55668	12	0	1	1	CITES Appendix II; IUCN Endangered
2022	DFN	VL0006	Alopias vulpinus	93	14280	93	0	1	1	CITES Appendix II; IUCN Endangered
2022	DFN	VL0006	Squalus acanthias	0.7	14280	0.7	0	1	1	IUCN Endangered

³ <https://www.iucnredlist.org/>

⁴ <https://cites.org/sites/default/files/eng/app/2023/E-Appendices-2023-05-04.pdf>

Table 20: Number and landings of all and biologically vulnerable stocks affected by the activities of the fleet segments.

Year	Fleet segment	All stocks		Biologically vulnerable stocks	
		Number	Landings [kg]	Number	Landings [kg]
2016	DFN VL0006	62	15360	0	0
2016	DFN VL0612	73	35719	1	2.7 Squalus acanthias (IUCN Endangered)
2016	DFN VL1218	37	12437	0	0
2016	DTS VL0612	50	17234	0	0
2016	DTS VL1218	64	46919	0	0
2016	PS VL0612	19	7427	0	0
2016	PS VL1218	19	15899	0	0
2017	DFN VL0006	59	13517	0	0
2017	DFN VL0612	77	44322	1	5.1 Squalus acanthias (IUCN Endangered)
2017	DFN VL1218	29	8320	0	0
2017	DTS VL0612	50	15120	1	1 Squalus acanthias (IUCN Endangered)
2017	DTS VL1218	62	42723	1	19 Alopias vulpinus (CITES Appendix II; IUCN Endangered)
2017	PS VL0612	9	3074	0	0
2017	PS VL1218	0	0	0	0
2018	DFN VL0006	59	13211	0	0
2018	DFN VL0612	63	33942	2	52.9 Alopias vulpinus (CITES Appendix II; IUCN Endangered), Squalus acanthias (IUCN Endangered)
2018	DFN VL1218	14	153	0	0
2018	DTS VL0612	44	23235	0	0
2018	DTS VL1218	51	55058	0	0
2018	PS VL0612	0	0	0	0
2018	PS VL1218	0	0	0	0
2019	DFN VL0006	64	12960	1	4 Carcharhinus plumbeus (CITES Appendix II; IUCN Endangered)
2019	DFN VL0612	62	31407	0	0
2019	DFN VL1218	12	249	0	0
2019	DTS VL0612	44	19124	0	0
2019	DTS VL1218	62	54591	2	13.3 Alopias vulpinus (CITES Appendix II; IUCN Endangered), Squalus acanthias (IUCN Endangered)
2019	PS VL0612	0	0	0	0
2019	PS VL1218	0	0	0	0
2020	DFN VL0006	54	13106	1	5 Squalus acanthias (IUCN Endangered)
2020	DFN VL0612	59	26920	0	0
2020	DFN VL1218	21	1016	0	0
2020	DTS VL0612	48	30358	0	0
2020	DTS VL1218	59	79826	0	0
2020	PS VL0612	0	0	0	0
2020	PS VL1218	0	0	0	0
2021	DFN VL0006	53	11018	0	0
2021	DFN VL0612	57	17379	2	5 Centrolophus niger (CITES Appendix II), Squalus acanthias (IUCN Endangered)
2021	DFN VL1218	25	805	0	0
2021	DTS VL0612	51	17695	0	0
2021	DTS VL1218	68	55668	1	12 Alopias vulpinus (CITES Appendix II; IUCN Endangered)
2021	PS VL0612	0	0	0	0
2021	PS VL1218	0	0	0	0
2022	DFN VL0006	56	14280	2	93.7 Alopias vulpinus (CITES Appendix II; IUCN Endangered), Squalus acanthias (IUCN Endangered)
2022	DFN VL0612	61	19746	0	0
2022	DFN VL1218	17	589	0	0
2022	DTS VL0612	46	20620	0	0
2022	DTS VL1218	56	47263	0	0
2022	PS VL0612	0	0	0	0
2022	PS VL1218	0	0	0	0

The incidental catches of stocks at high levels of biological risk and their low landings are the reason for the seemingly impression that Slovenian fishermen are causing a high biological risk to a depleted stocks. Landings of biologically sensitive stocks are so low that a SAR, calculated as $C_i > 0.1C_t$, would always be 0. Only when SAR is calculated as $C_i > 0.1T_i$, we reach an index value of 1.

This is because the total catch of stock i taken by all segments are almost always equal to the landings of these stocks in the fishing fleet segment. Despite the distorted picture of the indicator, we give an overview of the SAR index in the Table 21.

Table 21: Overview of a stocks-at-risk indicator (SAR) by fleet segment in the period 2016-2022.

Fleet Segment	2016	2017	2018	2019	2020	2021	2022
DFN VL0006	0	0	0	1	1	0	2
DFN VL0612	1	1	2	0	0	2	0
DFN VL1218	0	0	0	0	0	0	0
DTS VL0612	0	1	0	0	0	0	0
DTS VL1218	0	1	0	2	0	1	0
PS VL0612	0	0					
PS VL1218	0	0	0				

SAR ≥ 1 out of balance (red); SAR = 0 in balance (green); inactive fleet segment (white)

Economic indicators

Table 22: Economic indicators on marine fisheries for 2021

Fleet segment	CR/BER	ROFTA (%)
DFN VL0006	83.9	429
DFN VL0612	107.98	114
DFN VL1218*	107.98	114
DTS VL0612**	39.65	86.05
DTS VL1218	39.65	86.05

* Due to the provisions on personal data in accordance with the General Data Protection Regulation, 2 vessels from the DFN VL1218 segment were joined with the vessels in the DFN VL0612 segment for the calculation of the indicator, therefore the two segments share the same indicator value.

** Due to the provisions on personal data in accordance with the General Data Protection Regulation, 3 vessels from the DTS VL0612 segment were joined with the vessels in the DTS VL1218 segment for the calculation of the indicator; therefore the two segments share the same indicator value.

ROI (ROFTA) - Return On Investment

The indicator shows the return on the invested capital in the fisheries sector. To be considered as good status of a particular segment in the Slovenian fishing fleet the value of the indicator should be higher or equal to the low-risk long term interest rates. In this case the invested capital is at least as remunerative as risk-free long-term investments (e.g. state bonds). If the value is negative it means that it would be more profitable to invest money elsewhere than in fisheries. (Please see above for the remarks on indicators and their interpretive value as regards Slovenian fishing fleet.)

The average long-term interest rates for Slovenia in period 2017-2021 were 0.46 % (source: <http://www.ecb.int/stats/money/long/html/index.en.html>).

"Traffic light system":

- - poor; ROI < 0
- - satisfactory; 0 < ROI < rate of return on investment of risk-free investment
- - good; ROI > rate of return on investment of risk-free investment

Table 23: Return on investment for period 2017-2021

Fleet segment	ROFTA (%)				
	2017	2018	2019	2020	2021
DFN VL0006	434	690	610	496	429
DFN VL0612	47	18	23	86	114
DFN VL1218*	47	18	23	86	114
DTS VL0612**	-5	-1	-3	67	86.05
DTS VL1218	-5	-1	-3	67	86.05
PS VL1218	-15	NA	NA	NA	NA

* Due to the provisions on personal data in accordance with the General Data Protection Regulation, 2 vessels from the DFN VL1218 segment were joined with the vessels in the DFN VL0612 segment for the calculation of the indicator, therefore the two segments share the same indicator value.

** Due to the provisions on personal data in accordance with the General Data Protection Regulation, 3 vessels from the DTS VL0612 segment were joined with the vessels in the DTS VL1218 segment for the calculation of the indicator; therefore the two segments share the same indicator value.

All three **drift and fixed nets (DFN) segments** had very good results in the observed period 2017-2021.

Both **demersal trawls (DTS) segments** were profitable in the last two years of the observed period. In the period 2017-2019, negative profitability was recorded due to the conditions and factors explained below in the section dedicated to the **CR / BER** indicator.

Vessels in the **purse seines (PS) segment** are no longer active, already for 5 years, as there is no occurrence of small pelagic fish in size that would be attractive for the market.

CR / BER – Current Revenue Against Break-Even Revenue

The indicator shows whether the sector is commercially profitable or not. If the value of the economic indicator CR/BER is less than one, this indicates expenditure surplusses. It means that the current revenue does not cover expenditure and that fishing is not commercially remunerative.

The CR/BER ratio shows the short-term profitability of the fisheries sector. The BER shows the break-point which is the point where total revenue is equal to total expenditure (TR = TC). If the value of the indicator CR/BER is smaller than one, the cash flow is negative and the fisheries sector is not profitable in the short term, but if the value is higher than one, it shows a remunerative fishing. The short-term indicator does not deal with the relationship between the capital and the costs of the capital.

"Traffic light system":

- - poor; CR/BER < 1
- - satisfactory; CR/BER = 1
- - good; CR/BER > 1

Table 24: Current Revenue Against Break-Even Revenue for period 2017-2021

Fleet segment	CR/BER				
	2017	2018	2019	2020	2021
DFN VL0006	61.92	142.65	464.67	166	83.90
DFN VL0612	18.53	7.25	17.07	145.06	107.98
DFN VL1218*	18.53	7.25	17.07	145.06	107.98
DTS VL0612**	-0.61	0.57	0.14	33.38	39.65
DTS VL1218	-0.61	0.57	0.14	33.38	39.65
PS VL1218	-1.99	NA	NA	NA	NA

* Due to the provisions on personal data in accordance with the General Data Protection Regulation, 2 vessels from the DFN VL1218 segment were joined with the vessels in the DFN VL0612 segment for the calculation of the indicator, therefore the two segments share the same indicator value.

** Due to the provisions on personal data in accordance with the General Data Protection Regulation, 3 vessels from the DTS VL0612 segment were joined with the vessels in the DTS VL1218 segment for the calculation of the indicator; therefore the two segments share the same indicator value.

All three **drift and fixed nets (DFN) segments** had very good results in the observed period 2017-2021.

Both **demersal trawls (DTS) segments** were profitable in the last two years of the observed period. In the period 2017-2019, negative profitability was recorded.

Demersal trawls (DTS) segments records a significant improvement in economic performance, which is largely due to increased landings and higher other incomes in

2020. Volume of landings increased by 51% compared to 2019. The increase was mainly due to higher catches of whiting (+40% regarding 2019), which is one of target species in DTS segments. One of the reasons for the increased landings could be the reduced fishing effort of Italy and Croatia fishing fleets due to COVID-19 restrictions. The positive trend, despite lower landings, continued also in 2021.

Vessels in both length segments depend greatly on the incomes generated from other activities than fisheries. The amount of income generated by the Slovenian national fleet in 2021 was EUR 4.34 million. This consisted of EUR 0.84 million in landings value, EUR 3 million in non-fishing income and EUR 0.5 in subsidies. The Slovenian fleet's landings income decreased for more than 80 % between 2008 and 2021, while other income more than doubled in value during the same period. Due to reduced landings, Slovenian fishers are looking for the opportunity to generate earnings in other industries, such as tourism, aquaculture etc.

A very important reason for the poor results in 2019 is also the high price of fuel (the second highest since 2014). **DTS segment** is the segment of fishing vessels with by far the highest fuel consumption per kilogram of catch, so fuel costs have a significant impact on the final economic situation of the segment.

Vessels in the **purse seines (PS) segment** are no longer active, already for 5 years, as there is no occurrence of small pelagic fish in size that would be attractive for the market.

It needs to be emphasized that the analysed segments exploit available fish stocks in very low quantities, which results in low incomes, which hinders their profitability in itself.

Conclusion on balance by fleet segments assessed in accordance with the proposed indicators

Slovenia has serious reservations regarding the use of the indicators proposed by the “*Guidelines for analysis of the balance between fishing capacity and fishing opportunities*” for assessing the balance of the Slovenian fisheries sector.

These reservations are presented in the chapter “*General remarks of Slovenia regarding the limitations of the indicators proposed by the “Guidelines for analysis of the balance between fishing capacity and fishing opportunities” for the Slovenian fisheries sector.*” Moreover, also STEFC has many reservations regarding the use of these indicators and conclusions that may be drawn on their basis. Some of these concerns are compiled in the chapter 7.2.

Nevertheless, **biological indicators**, which are directly linked to the exploitation of the stocks are **showing good results for all fleet segments**.

Despite the concerns regarding the appropriateness of the proposed indicators, **all three length segments using drift and fixed nets (DFN)** show very balanced picture in line with the results of the calculated indicators.

Demersal trawls (DTS) segments records a significant improvement in economic performance, which is largely due to increased landings and higher other incomes in 2020. Volume of landings increased by 51% compared to 2019. The positive trend, despite lower landings, continued also in 2021.

As already mentioned in this report, **in purse seines (PS) segment** there was no activity already for the fourth year and thus we consider it balanced.

Moreover, as stated at the beginning of the report, 18 vessels were active in 2022 in the following gear segments: FPO - pots and/or traps (5 vessels), HOK- hooks and line gears (8 vessels) and in PMP - active and passive gears (5 vessels). All these vessels together landed 3,720 kg, which is 3.5 % of the total landings in 2022. For these segments we calculated vessel utilization indicators that were mostly balanced.

Conclusion on balance it is not a technical or scientific question and cannot be based only on a single indicator or combination of numeric indicators. Based on data from this report, considering all available scientific advice, past STECF evaluations and comments, political situation, impact of our fleet to shared stocks on regional level cultural values and subjective national judgements **we consider that all segments of Slovenian fishing fleet are in balance with the fishing opportunities**.

Slovenia is committed to contribute to achieving of the objectives of the Common Fisheries Policy as defined in Article 2 of Regulation (EU) No 1380/2013 on the Common Fisheries Policy through its efforts to achieve a sustainable balance between fishing capacity and fishing opportunities for its fishing fleet. However, at the same time, it needs to be taken into consideration that Slovenian fishery sector and its landings are extremely low (in 2022 only 106.3 tons), and thus making Slovenian fisheries sector one of the smallest in the EU. This means that **the contribution of the Slovenian fisheries sector to achieving MSY on regional level can only be proportional to the actual size and impact of the Slovenian fishing fleets**.

Slovenian landings have been decreasing rapidly in recent years, due to a number of factors such as high fuel prices, Covid-19 pandemic, declining stocks and seasonal nature of fishing and due to many other factors described in various parts of this report. However, an important factor has also been represented by the constraints of the requirements of the Common Fisheries Policy. Although Slovenia will continue to do everything in its power to achieve a sustainable balance between fishing capacity and fishing opportunities, these efforts should not lead to an eventual disappearance of the Slovenian fisheries sector thus measures are needed in support of a continued existence and sustainable development of the Slovenian fisheries sector.