

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)

The General Fisheries Commission for the Mediterranean (GFCM),

CONSIDERING that the objective of the Agreement for the establishment of the General Fisheries Commission for the Mediterranean (GFCM Agreement) is to ensure the conservation and sustainable use, at the biological, social, economic and environmental level, of marine living resources in the GFCM area of application;

RECALLING that, in giving effect to the objective of the GFCM Agreement, the GFCM shall adopt recommendations on conservation and management measures aimed at ensuring the long-term sustainability of fishing activities, in order to preserve the marine living resources and the economic and social viability of fisheries and that, in adopting such recommendations, the GFCM shall give particular attention to measures to prevent overfishing and minimize discards as well as to the potential impacts on small-scale fisheries and local communities;

CONSIDERING that the GFCM shall adopt management measures based on an ecosystem approach to fisheries to guarantee the maintenance of stocks at levels which can produce maximum sustainable yield (MSY);

RECALLING that the 2017 Malta MedFish4Ever Ministerial Declaration requires that, in the context of establishing an ecosystem-based fisheries management framework, all key fisheries should be managed with management plans;

CONSIDERING that the GFCM shall apply the precautionary approach in accordance with the United Nations Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea of 10 December 1982 relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks of 4 August 1995 and the Code of Conduct for Responsible Fisheries of the Food and Agriculture Organization of the United Nations (FAO);

CONSIDERING that the FAO Code of Conduct for Responsible Fisheries provides that states “should apply a precautionary approach widely to conservation, management and exploitation of living aquatic resources in order to protect them and preserve the aquatic environment, taking account of the best scientific evidence available. The absence of adequate scientific information should not be used as a reason for postponing or failing to take measures to conserve target species, associated or dependent species and non-target species and their environment”;

CONSIDERING that all measures formulated by the GFCM shall be based on the best scientific advice available, taking into account relevant environmental, economic and social factors;

RECALLING Recommendation GFCM/41/2017/7 on a regional plan of action to combat illegal, unreported and unregulated fishing in the GFCM area of application;

CONSIDERING that fishing mortality should be kept below safe thresholds to ensure long-term high yields while limiting the risk of stocks collapse and guaranteeing stable and more viable fisheries;

CONSIDERING the socio-economic importance of fisheries and the need to ensure their sustainability;

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);

NOTING that the Scientific Advisory Committee on Fisheries (SAC) has recurrently considered that the stocks of anchovy and sardine are in overexploitation in geographical subareas (GSAs) 17 and 18;

RECALLING that, according to the latest scientific advice provided by the SAC at its twenty-second session (online, June 2021), both anchovy and sardine stocks are overexploited and in overexploitation with $F/F_{MSY} = 1.51$, $SSB/SSB_{lim} = 1.05$ and $SSB/SSB_{pa} = 0.80$ for anchovy and $F/F_{MSY} = 4.43$, $SSB/SSB_{lim} = 1.11$ and $SSB/SSB_{pa} = 0.67$ for sardine;

NOTING that, the SAC, at its twenty-second session, acknowledged that the status of small pelagic stocks in the Adriatic Sea, despite extensive measures taken, is both overexploited and in overexploitation ($F_{current}/F_{MSY}$ ratio: 1.51 and 4.43 for anchovy and sardine, respectively; current spawning stock biomass was between B_{pa} and B_{lim} for both species);

ADOPTS, in conformity with Articles 5 b), 8 b), and 13 of the GFCM Agreement the following recommendation:

PART I

General objectives, geographical scope and definitions

1. The present recommendation establishes a multiannual management plan for sustainable fisheries exploiting key small pelagic stocks (anchovy and sardine) in the Adriatic Sea (GSAs 17 and 18) by means of purse-seiners and pelagic-trawlers. On the basis of the SAC advice, the scope of this recommendation could be extended to other stocks and types of fishing gear.
2. The multiannual management plan shall be consistent with the precautionary approach. It shall be designed to provide high long-term yields consistent with MSY and to guarantee a low risk of stocks collapse while maintaining sustainable and relatively stable fisheries including dependent industries. The plan should take account of the mixed nature of the fisheries and the nature of stock dynamics.
3. Contracting parties and cooperating non-contracting parties (CPCs) whose vessels are actively fishing in GSAs 17 and 18 agree to implement such multiannual management plan for the fisheries mentioned in paragraph 1 and in accordance with the general and specific objectives and measures set by this recommendation.
4. A set of transitional precautionary management measures for the Adriatic Sea shall be developed in order to ensure that pending the finalization of scientific advice by the SAC and while minimizing socio-economic impacts, the stocks and fisheries progress towards biologically sustainable levels.
5. The multiannual management plan shall also pursue a reduction of illegal, unreported and unregulated (IUU) fishing activities in GSAs 17 and 18.

Geographical scope

6. The multiannual management plan established by this recommendation shall apply to GSAs 17 and 18.

Definitions

7. For the purpose of this recommendation, the following definitions shall apply:
- a) “ F_{msy} ” means the value of the estimated fishing mortality that, with a given fishing pattern and under current average environmental conditions, gives the long-term maximum yield, in the case of anchovy and sardine the agreed F_{msy} proxy is based on the Patterson exploitation rate of $E=0.4$.
 - b) “ B_{lim} ” means the limit reference point, expressed as spawning stock biomass below which there may be reduced reproductive capacity.
 - c) “ $B_{escapement}$ ” means a biomass limit below which a stock is considered to have reduced reproductive capacity, including any identified additional biomass need.
 - d) “ F_{cap} ” means a limit to F , which is used when providing catch advice without directly estimating the probability of stock spawning biomass $> B_{escapement}$.
 - e) “Stock within safe biological limits” means a stock with a high probability that its estimated spawning biomass at the end of the previous year is higher than the limit biomass reference point (B_{lim}).
 - f) “Adriatic Sea” means GSAs 17 and 18 as defined in Resolution GFCM/33/2009/2 on the establishment of geographical subareas in the GFCM area of application, amending Resolution GFCM/31/2007/2.
 - g) “Vessel actively fishing” means any pelagic trawler or purse seiner targeting key stocks and entitled by the CPC whose flag it is flying to carry out specific fishing operations, during a specified period, in a given area or for a given fishery under specific conditions.
 - h) “Key stocks” means marine organisms pertaining to the species as defined hereafter.
 - i) “Anchovy” means fish pertaining to the *Engraulis encrasicolus* species.
 - j) “Sardine” means fish pertaining to the *Sardina pilchardus* species.
 - k) “Small pelagics” means stocks of anchovy and sardine.
 - l) “Pelagic trawler” means a fishing vessel operating single or in pair with pelagic trawl net.
 - m) “Purse seiner” means a fishing vessel operating with purse seine net for small pelagic species.
 - n) “Illegal, unreported and unregulated fishing’ or “IUU fishing” means the activities set out in paragraph 3 of the 2001 FAO International Plan of Action to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing and following the provisions of Recommendation GFCM/41/2017/7.
 - o) “Designated landing points” means ports or places close to the shore designated by the CPCs according to Recommendation GFCM/40/2016/1 on a regional scheme on port state measures to combat illegal, unreported and unregulated fishing in the GFCM area of application, including offshore terminals and other installations for landing, transshipping, packaging, processing, refuelling or resupplying of fishing vessels, where landings, transshipments, packaging and/or processing operations of fishery products are permitted.

Part II

Specific objectives of the multiannual management plan and transitional measures

8. The multiannual management plan shall aim at contributing to the objectives mentioned in Article 2 of the GFCM Agreement and to the principles listed in Article 5 therein.
9. The multiannual management plan shall, in particular:
 - a) apply the precautionary approach to fisheries management;
 - b) ensure that exploitation levels of key stocks are at MSY as soon as possible and at the latest by 31 December 2028, taking into account possible interactions between the two species;
 - c) prevent an increase in fishing capacity in relation to year 2014;
 - d) protect nursery and spawning areas and essential fish habitats important for the key stocks;
 - e) contribute to elimination of discards by avoiding and reducing unwanted catches, and by ensuring that all catches are landed; and
 - f) provide for measures to adjust the fishing capacity and catches to levels of fishing mortalities consistent with MSY, with a view to ensuring economically viable fleets and without overexploiting marine living resources.
10. The multiannual management plan shall be based on a two-steps approach where: i) in the first two years, with the possibility of a third transitional year in case certain conditions are not met as set out in paragraph 12, catch limits and spatio-temporal measures shall be applied; and ii) from 2024 or 2025, on the basis of new scientific data, the SAC shall evaluate the state of the stocks and propose, on the basis of the harvest control rule (HCR), further measures and advisable yearly catch limits per species that would contribute to reaching Fmsy or Fmsy proxy and maintaining the stocks within safe biological limits, in line with the provisions contained in Parts II to VI.
11. In 2022 and 2023, a transitional fishing regime shall be established. The CPCs shall ensure that national or joint catch limits are established for small pelagics, aligned with an annual reduction of 5 percent for anchovy and 8 percent for sardine in 2022, and of 5 percent for anchovy and 9 percent for sardine in 2023. Such reductions shall be calculated with respect to 2021 catch limits. Based on this paragraph, the catch limits for 2022 and 2023, with the temporary allocation, are established in the annex to this recommendation.
12. In 2022 and 2023, the CPCs shall fully engage in supporting and completing the sardine benchmark assessment and the management strategy evaluation (MSE) as planned in paragraph 16 and in line with the details provided in Appendix 12 of the report of the twenty-second session of the SAC. If, by the annual session of the GFCM in 2023 the sardine benchmark and MSE are incomplete, the GFCM shall ensure that the transitional period is extended by one year so that both the benchmark and MSE for sardine are completed and agreed upon, in line with the SAC advice on the catch limits to be applied in 2024 based on latest available status of the stocks.
13. For CPCs with declared catches under 2 500 tonnes in 2014, a joint catch limit shall be established, where the same reductions as those identified in paragraph 11 shall apply. Catch limits for 2022–2023 are reported in the annex to this recommendation. The CPCs falling under the conditions of this paragraph shall not exceed 70 percent of the total joint limit at any time.
14. The catch limits by CPC established in paragraphs 11 to 13 for the period 2022–2023 or 2024, shall be set without prejudice to the discussions to take place in the context of the working group referred to under paragraph 15.

15. In 2022, within 30 calendar days following the twenty-third session of the SAC, the GFCM shall create a working group in order to establish a fair and equitable allocation key for small pelagics in the Adriatic Sea, taking into consideration the efforts made by the CPCs to manage small pelagic fisheries as well as the amount of historical catches, and apply in some cases stricter rules than those defined in this recommendation, also based on socio-economic considerations.

16. The SAC, at its twenty-third session in 2022, shall give mandate to the Working Group on Stock Assessment of Small Pelagic Species (WGSASP) to complete a sardine benchmark assessment in 2022 and to the Workshop on the assessment of management measures (WKMSE) to carry out an MSE in order to define the most appropriate HCR to be implemented for anchovy and sardine according to paragraphs 17 and 18.

PART III

Long-term management plan

17. A long-term management plan is established for the period 2024–2029 or 2025–2029. Each year, on the basis of the SAC advice and of the advisory timing established in paragraph 35, the GFCM shall establish yearly catch limits by single species based on a HCR, in line with paragraph 18, based on the proposals of the WKMSE and endorsed by the SAC in 2023 or 2024.

18. The single species HCR, coupled with management based on catch limits, shall ensure a low probability of stock spawning biomass to fall below B_{lim} (5 percent probability), and shall be based on either:

- a) a fixed F_{msy} strategy HCR based on F_{msy} or $F_{msy proxy}$ and B_{pa} ;
- b) a $B_{escapement}$ HCR, based on an optimal level of $B_{escapement}$ and, if necessary, F_{cap} ; or
- c) another HCR proposed by the WKMSE, in line with the terms of reference provided in Annex 2 of Recommendation GFCM 42/2018/8.

19. Catch limits allocations to CPCs shall be based on the outcomes of the working group referred to in paragraph 15.

20. The catches of species in excess of catch limits for the stocks in question may be deducted from the catch limits for the target species, provided that they do not exceed 9 percent of the catch limits for the target species. This provision shall only apply where the stocks of non-target species are within safe biological limits.

21. Starting from 2024, for the first three years, for any of the two species, the variation between the annual catch limits in comparison to the previous year shall not be higher than 10 percent, while for the remaining years of the multiannual management plan it shall not exceed 20 percent. These limitations in variation between the annual catch limits shall not apply in cases where the stocks are not within safe biological limits.

Safeguards

22. During the transitional period and/or during the long-term management plan, where scientific advice shows that the spawning biomass of any of the key stocks is below B_{lim} , on the basis of SAC scientific advice, the GFCM shall take further remedial measures to ensure the rapid return of the stocks concerned to levels above those capable of producing MSY. In particular, such remedial measures may include suspending the targeted fishery for the stocks concerned and applying an adequate reduction of the catch limit.

PART IV

Technical measures

Spatial and temporal closure

23. During the transitional period, the CPCs shall apply specific temporal closures at the fleet level, not necessarily simultaneous for purse seiners and pelagic trawlers, in view of protecting the stocks during the spawning period. Such closures shall cover the entire distribution of small pelagic stocks in the Adriatic Sea and affect all fleets targeting small pelagics, for no less than 30 successive days per fleet segment. During the closure period, vessels belonging to fleets subject to a closure shall be prohibited to change gear to target small pelagics (such as purse seine to or from pelagic trawl). Such closures shall take place according to the following timeframes:

- a) from 1 October to 31 March for sardine; and
- b) from 1 April to 30 September for anchovy.

24. By way of derogation from paragraph 23, such temporal closures may be implemented for periods of no less than 15 successive days for national fleets of less than 15 purse seiners and/or pelagic trawlers actively fishing for small pelagic stocks.

25. During the transitional period, the CPCs shall apply spatial closures to vessels over 12 metre length overall (LOA) for no less than 9 months. Such closures shall cover 30 percent of the territorial or inner waters identified as important for the protection of early-age classes of fish.

26. The CPCs shall communicate to the GFCM Secretariat, not later than 30 April 2022 and thereafter annually, the spatial restrictions, as defined in paragraphs 23 and 25, that they apply in the waters under their jurisdiction with a view to protecting spawning and nursery areas of small pelagic stocks.

27. In 2023, the WGSASP shall make an analysis and assess the benefits of spatio-temporal restrictions in order to define further appropriate restrictions, in view of protecting spawning and nursery areas for small pelagic stocks.

PART V

Fleet management measures

28. The CPCs shall ensure that the overall capacity of the fleets operating with pelagic trawls and purse-seines and actively fishing for key small pelagic stocks, in terms of gross tonnage and/or gross registered tonnage, engine power (kW) and number of vessels, as recorded both in the national and GFCM registers, does not exceed the fleet capacity of small pelagic fisheries in 2014 over the duration of this recommendation.

29. Vessels authorized to fish for key small pelagic stocks by means of pelagic trawls and purse seines in the Adriatic Sea shall be listed by the CPC whose flag they are flying.

30. The CPCs shall communicate to the GFCM Secretariat, not later than 1 August of the first year and 31 March of each subsequent year, the list of vessels flying their flag and actively fishing for key small pelagic stocks for the current year or the forthcoming years. This list shall include, for each vessel, the information referred to in Annex 3 of 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).

31. Each CPC shall ensure the setting up of adequate mechanisms for the recording of each fishing vessel in a national fleet register and for the recording of vessels' catches and fishing effort via the

logbook as well as for the monitoring of fishing vessels' activities and landings via catch and effort sampling surveys, according to the rules stipulated by each CPC.

32. The above provisions are without prejudice to Recommendation GFCM/33/2009/7 concerning minimum standards for the establishment of a vessel monitoring system in the GFCM area of application.

33. By way derogation from paragraph 28, for national fleets with less than ten purse seiners and/or pelagic trawlers actively fishing for key small pelagic stocks, as recorded in national registers and in the GFCM fleet register in 2014, the CPCs shall ensure that the overall fleet capacity in terms of gross tonnage and/or gross registered tonnage, engine power (kW) and number of vessels, does not increase by more than 50 percent over the duration of this recommendation.

PART VI

Scientific monitoring, adaptation and revision of the plan

34. From 2022, the SAC shall provide, on an annual basis, advice on the status of the key small pelagic stocks in the Adriatic Sea, including specific objectives to maintain fishing mortality within agreed precautionary reference points and to maintain or restore key stocks at levels which can produce MSY, in accordance with the objectives set out in paragraph 9.

35. Since the timely provision of scientific advice is essential for a correct management of short-lived species such as small pelagics, the CPCs shall ensure yearly that all scientific data (such as those from echo surveys) and commercial data (such as those on catch and discards) collected in Year N, are provided to the GFCM Secretariat by 1 April of year N+1 in order to perform a yearly updated stock assessment in May of year N+1. From 2024 or 2025, yearly, on the basis of scientific advice and HCR and taking into account the socio-economic effects on fleets and on the industry, the SAC shall propose catch limits by single species to be adopted by the GFCM at its annual session of year N+1 and implemented from 1 January of year N+2.

36. Based on the SAC advice, the GFCM may review the contents of the multiannual management plan.

37. Where SAC advice indicates that the general or specific objectives of the multiannual management plan are not being met, the GFCM shall decide on additional and/or alternative management measures in order to contribute to achieving those objectives.

38. Where, for any reason (e.g. lack of appropriate data), the SAC is not in a position to provide an accurate advice on the status of the key small pelagic stocks and on their exploitation levels, the GFCM shall decide on the most appropriate management measures to ensure the sustainability of the fisheries. Such measures shall be based on the SAC advice, in accordance with the precautionary approach and taking into consideration environmental and socio-economic elements in a way that guarantees the sustainability of the fisheries.

PART VII

Specific measures to address IUU fishing activities

39. The CPCs shall establish a mechanism to ensure that vessels actively fishing in the Adriatic Sea declare all the catches of key small pelagic stocks. From 1 January 2022, the obligation to declare catches by electronic means, including catches of non-target species in excess of 50 kg, shall apply, irrespective of the volume of the catch, to vessels above 12 metres LOA and to vessels catching more than 10 000 kg per year regardless of their length. For vessels below 12 metres LOA catching less than 10 000 kg per year, the Compliance Committee shall assess the most appropriate catch reporting system.

40. Each CPC shall designate landing points where the landings by vessels actively fishing for key small pelagic stocks in the Adriatic Sea shall take place.
41. For each designated port, the port CPC shall specify permitted landing and transshipping times and places.
42. The CPCs shall carry out inspections on the basis of a risk analysis.
43. It shall be prohibited to land or transship from fishing vessels any quantity of key small pelagic species fished by pelagic trawlers or purse seiners in the Adriatic Sea at any place other than the landing ports designated by the CPCs in accordance with paragraph 40.
44. The CPCs shall transmit to the GFCM Secretariat, not later than 30 April 2022 and subsequently 30 November each year, any changes to the list of the designated landing points in which landings of key small pelagic species in Adriatic Sea may take place.
45. The CPCs shall engage in cooperation for the fight against IUU fishing, in particular by sharing information and gathering intelligence to fight against illegal activities.
46. The above provisions are without prejudice to Recommendation GFCM/41/2017/7.

PART VIII
Monitoring, control and surveillance programme

47. Vessels operating with purse seines and pelagic trawls exploiting small pelagic stocks in the Adriatic Sea shall only be allowed to carry out specific fishing activities if these are indicated in a valid fishing authorization issued by the competent authorities.
48. Starting from 30 April 2022, authorized vessels above 12 metres LOA shall be equipped with a vessel monitoring system (VMS). A CPC may grant to its authorized vessels of less than 15 metres LOA flying its flag a derogation from the requirement to be fitted with a VMS if they exclusively operate within the territorial seas of the CPC and/or never spend more than 24 hours at sea from the time of departure to the return to the port. The CPCs shall notify these derogations as well as other control means deployed to monitor the fishing vessels concerned to the GFCM Secretariat without delay.
49. The CPCs shall monitor the consumption of the catch limit or total allowable catch set in accordance with paragraphs 11 to 13 and reported in the annex to this recommendation until the end of the transitional period and thereafter set in accordance with paragraph 17 as follows:
 - a) In case of individual catch limits by CPC, as from the date when 80 percent of the quota have been exhausted, the CPC concerned shall communicate to the GFCM Secretariat monthly reports on the catch. Such reports shall be sent by the fifteenth day of the following month. When the catch limit has been reached, the CPC shall prohibit the catch of small pelagics or individual species, taking into account paragraph 20.
 - b) In case of joint catch limits, the CPCs shall communicate to the GFCM Secretariat monthly reports on the catch. Such reports shall be sent by fifteenth of the following month. When 70 percent of the joint catch limit have been exhausted or one CPC has reached 70 percent of the total joint catch limit, the GFCM Secretariat shall notify the CPCs involved, which shall establish a plan for fishing activities in order to avoid exceeding the jointly allocated catch limit. When the joint catch limit has been reached, all CPCs involved shall prohibit the catch of small pelagics or individual species.

PART IX
Permanent inspection scheme

50. The pilot inspection scheme established for small pelagic fisheries in the Adriatic Sea by Recommendation GFCM/42/2018/8 shall be extended until 31 December 2023.

51. From 1 January 2024, the GFCM shall establish a permanent observation and inspection programme in order to ensure compliance with the conservation and management measures contained in this recommendation.

52. The permanent observation and inspection programme referred to in paragraph 51 shall be based on the results of the pilot inspection scheme referred to in paragraph 50. It shall comprise, *inter alia*, the following elements:

- a) high seas inspections;
- b) procedures for an effective investigation of alleged violations of the conservation and management measures contained in this recommendation and for reporting to the GFCM on the actions taken, including procedures for exchanging information;
- c) provisions for appropriate action to be taken when inspections reveal serious violations as well as the expedient and transparent follow-up of such actions in order to uphold the flag state's responsibility within the intended programme;
- d) port inspections;
- e) monitoring of landings and catches, including statistical follow-up for management purposes; and
- f) specific monitoring programmes, including boarding and inspection.

PART X
National management plans

53. In order to ensure adequate conservation of small pelagic stocks, the CPCs shall adopt fisheries management measures or national management plans in the Adriatic Sea.

54. From 30 September 2022, the CPCs shall notify to the GFCM Secretariat the management measures or management plans adopted at the national level. Where appropriate, should these measures be modified, the CPCs shall communicate such modifications by 30 April of the following year.

PART XI
Final provisions

55. The multiannual management plan shall remain in force for seven years from the date of its adoption.

56. This recommendation shall be without prejudice to stricter measures adopted by the CPCs.

57. On the basis of scientific advice, the SAC may revise this recommendation.

Annex

Fishing opportunities in the Adriatic Sea (GSAs 17–18) for small pelagics during the 2022–2023 transitional period, including a possible conditional year in 2024 in case the conditions specified in paragraph 12 are not met.

In line with paragraphs 11 to 13, starting from catch limits for 2021, the catch limits for combined species are reported in table below.

Species	EU 2022	EU 2023	[EU 2024]	Joint catch limit 2022	Joint catch limit 2023	[Joint catch limit 2024]
Anchovy and sardine combined	91 998 tonnes	84 976 tonnes	□	4 650 tonnes	4 301 tonnes	□