

## **Recommendation GFCM/45/2022/6 on a multiannual management plan for the sustainable exploitation of giant red shrimp and blue and red shrimp stocks in the Ionian Sea (geographical subareas 19 to 21), repealing Recommendations GFCM/44/2021/8 and GFCM/42/2018/4**

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 that 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 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 the 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 stock collapse and guaranteeing stable and more viable fisheries;

*CONSIDERING* the socioeconomic importance of fisheries and the need to ensure their sustainability;

*RECALLING* that owing to the importance of this area, different recommendations have been adopted for the Ionian Sea, including Recommendation GFCM/42/2018/4 on management measures for sustainable trawl fisheries targeting giant red shrimp and blue and red shrimp in the Ionian Sea (geographical subareas 19, 20 and 21) rolled over by GFCM/44/2021/8, which introduced a general framework for the management of deep-water red shrimps in the area;

*NOTING* that the Scientific Advisory Committee on Fisheries (SAC) acknowledged, at its twenty-third session, the status of both giant red shrimp and blue and red shrimp in the Ionian Sea, which have been in overexploitation in recent years;

*CONSIDERING* that the management measures adopted since 2018 have been an important first step towards a unified management of fisheries resources and have contributed to establishing an internationally binding framework that started moving the deep-water red shrimp stocks towards sustainable exploitation levels and combatted illegal, unreported and unregulated (IUU) fishing;

*NOTING*, however, that in biological terms, the plan set forth in Recommendation GFCM/42/2018/4 has not achieved its MSY goal due to a lack of annually established catch limitations set on the basis of scientific advice and the fleets being out of balance with the deep-water red shrimp stocks;

*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**

#### ***General objectives***

1. The present recommendation establishes a multiannual management plan for sustainable demersal trawl fishing activities in the Ionian Sea (geographical subareas [GSAs] 19 to 21) exploiting deep-water red shrimp stocks by means of demersal trawlers. On the basis of SAC advice, the scope of this recommendation could be extended to other types of fishing gear and other stocks.
2. The multiannual management plan shall be consistent with the precautionary approach. It shall be designed to provide high long-term yields consistent with the MSY and to guarantee a low risk of stock collapse while maintaining the sustainability and relative stability of fisheries and dependent industries.
3. Contracting parties and cooperating non-contracting parties (CPCs) whose vessels are actively fishing in GSAs 19 to 21 agree to implement such a multiannual management plan for the fisheries concerned and in accordance with the general and specific objectives and measures set forth by this recommendation.
4. A set of transitional precautionary management measures for the Ionian Sea shall be developed in order to ensure that the stocks and fisheries progress towards biologically sustainable levels while minimizing socioeconomic impacts and finalizing scientific advice by the SAC.
5. The multiannual management plan for the fisheries shall also pursue a reduction in IUU fishing activities in GSAs 19 to 21.

#### ***Geographical scope***

6. The multiannual management plan provided by the present recommendation shall apply to GSAs 19 to 21.

#### ***Definitions***

7. For the purpose of this recommendation:

- 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, or “ $F_{msy}$  proxy”.
- b) “ $B_{lim}$ ” means the limit reference point, expressed as spawning stock biomass, below which there may be reduced reproductive capacity.
- c) “Stock within safe biological limits” means a stock with a high probability of its estimated spawning biomass at the end of the previous year being higher than the limit biomass reference point ( $B_{lim}$ ).
- d) “ $B_{pa}$ ” means the precautionary reference point, expressed as spawning stock biomass, that ensures that the spawning stock biomass has less than a 5 percent probability of being below  $B_{lim}$ .
- e) “Ionian Sea” means GSAs 19 to 21 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.
- f) “Vessel actively fishing” means any vessel fishing with demersal trawls on the key stocks and entitled by the CPC whose flag it flies to carry out specific fishing operations, during a specified period, in a given area or for a given fishery under specific conditions. Fishing vessels not included in the list of authorized vessels are allowed to catch, retain on board, land and offer for sale limited quantities of key stocks that cannot exceed 15 percent of the total catch at any time of a fishing trip.
- g) “Fishing day” means any continuous period of 24 hours, or part thereof, during which a vessel is present within the Ionian Sea and is searching for fish, shooting, setting, towing or hauling a fishing gear, taking catch on board, transshipping, retaining on board, processing on board, transferring or landing fish and fishery products.
- h) “Key stocks” or “deep-water red shrimps” means marine organisms pertaining to the species as defined:
- giant red shrimp (*Aristaeomorpha foliacea*); and
  - blue and red shrimp (*Aristeus antennatus*).
- i) “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.
- j) “Designated landing point” means ports, or places close to the shore, designated by 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, at which landings, transshipments, packaging and/or processing operations of fishery products are permitted.

**PART II**  
**Specific objectives and transitional measures**

8. The multiannual management plan shall aim to contribute to the objectives mentioned in Article 2 and to the principles listed in Article 5 of the GFCM Agreement.
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 the MSY as soon as possible and at the latest by 31 December 2030;
  - c) in continuity with Recommendation GFCM/43/2018/4, prevent increases in fishing capacity and effort in relation to the levels exerted during 2019 for the exploitation of key species in the Ionian Sea;
  - d) protect nursery and spawning areas and essential fish habitats important for the key stocks in the Ionian Sea.
  - e) contribute to the 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 the MSY, with a view to ensuring economically viable fleets without overexploiting marine living resources.
10. The multiannual management plan shall be based on a two-step approach whereby: i) over the first three years, catch limits and spatio-temporal measures shall be applied; and ii) from 2026, on the basis of new scientific data, the SAC shall evaluate the state of the stocks and, on the basis of the harvest control rules (HCRs), propose further measures and advisable yearly catch limits per species in line with the provisions in Parts II, III, IV, V and VI of this recommendation, that would contribute to reaching  $F_{msy}$  or  $F_{msy}$  proxy and staying within safe biological limits.
11. In 2023, 2024 and 2025, a transitional fishing regime shall be established, during which at least all existing efficient measures should be implemented while scientific support is gathered, along with information towards the identification of long-term adaptive management measures based on annual future advice on the evolution of the state of resources and fisheries. Contracting parties and cooperating non-contracting parties shall ensure that a catch limit is established for the key stocks, aligned with annual reductions of 3 percent in 2023, 3 percent in 2024 and 3 percent in 2025. Such reductions should be with respect to reported catches in 2021. Based on this paragraph, the catch limits for 2023, 2024 and 2025, as well as the temporary allocations are established in Annex 1.
12. In 2023, 2024 and 2025, CPCs shall be fully committed to completing the scientific assessments of the key stocks, and the management strategy evaluation provided for in paragraphs 14 to 16, as well as the identification of spatio-temporal measures provided for in paragraphs 19 and 20.
13. By way of derogation from paragraph 11, CPCs intending to start targeting deep-water red shrimps shall submit a management plan for deep-water red shrimps and a development plan during the period between the entry into force of this recommendation and the adoption of permanent management measures by the GFCM. The SAC shall review the development plan and formulate appropriate advice if it is not in line with the general and specific objectives set out in this recommendation. Pending possible amendments in line with SAC advice, the GFCM shall make a decision on the adoption of such a development plan.

14. The SAC, at its twenty-fifth session in 2024, shall give a mandate to the Workshop on the assessment of management measures to carry out a management strategy evaluation in order to define the most appropriate HCRs for the key stocks to be implemented according to paragraphs 15 and 16, including socioeconomic aspects.

### **PART III**

#### **Long-term management plan**

15. A long-term management plan for the period 2026–2030 is established. Each year, on the basis of updated SAC advice, the GFCM shall establish yearly single-species catch limits for deep-water red shrimps. Such limits shall be based on HCRs in line with paragraph 16, which shall be proposed by the Workshop on the assessment of management measures and endorsed by the SAC in 2024 or 2025.

16. The HCRs shall ensure for the deep-water red shrimp stocks a low probability of spawning stock biomass falling below  $B_{lim}$  (5 percent probability).

#### ***Safeguards***

17. Where, based on SAC scientific advice, the spawning biomass of any of the key stocks is below  $B_{pa}$ , the GFCM shall take remedial measures to ensure the rapid return of the concerned stocks to levels above those capable of producing MSY. In particular, catch limits shall be set at levels consistent with producing a fishing mortality lower than  $F_{msy}$ , taking into account the decrease in biomass.

18. Where, based on SAC scientific advice, the spawning biomass of any of the key stocks is below  $B_{lim}$ , the GFCM shall take further remedial measures to ensure the rapid return of the concerned stocks to levels above those capable of producing MSY. In particular, such remedial measures may include suspending the fishery targeting the concerned stocks and an adequate reduction in fishing effort or catch limits.

### **PART IV**

#### **Technical measures**

#### ***Spatial and temporal closures***

19. Over the transitional period, the SAC shall: i) finalize the identification of the fishing footprint on vulnerable marine ecosystems; and ii) on the basis of updated results from the project on Mediterranean Sensitive Habitats (MEDISEH), finalize the identification of essential fish habitat areas for juveniles and spawners of the deep-water red shrimps. Such work shall increase the understanding of the reproductive peaks and the recruitment and spawning periods of relevant species. On this basis, in 2024 the SAC shall determine appropriate spatio-temporal measures through an analysis of fishery-independent and dependent information, as well as of scientific literature. Such measures could be implemented within the long-term plan.

20. Over the transitional period, as a pilot measure, bottom trawlers targeting deep-water red shrimp spawning aggregations shall stop fishing for 30 consecutive days between the months of March and September. CPCs shall communicate to the GFCM Secretariat, no later than 30 June 2023, and annually thereafter, these temporal restrictions.

#### ***Minimum conservation reference size***

21. During the transitional period, the SAC shall identify, in the context of Resolution GFCM/44/2021/2 on the definition of a minimum conservation reference size for priority stocks in the Mediterranean Sea, appropriate minimum conservation reference sizes (MCRS) for the deep-water red shrimps lacking an MCRS to be then applied within the long-term management plan for the two species

covered.

22. In the long-term management plan, specimens of the key stocks smaller than the MCRS as defined in paragraph 21 shall not be caught, retained on board, transhipped, transferred, landed, stored, sold, displayed or offered for sale by professionals.

## **PART V**

### **Fleet management measures**

23. Contracting parties and cooperating non-contracting parties shall ensure that the overall fleet capacity of the fleets operating with demersal trawls actively fishing for key stocks does not exceed, in terms of gross tonnage (GT), engine power (kW) and number of vessels, as recorded both in national and GFCM registers, over the duration of this recommendation, the fleet capacity for otter trawlers fishing deep-water red shrimps in the year 2019, in continuity with Recommendation GFCM/42/2018/4 on a multiannual management plan for sustainable trawl fisheries targeting giant red shrimp and blue and red shrimp in the Ionian Sea (geographical subareas 19, 20 and 21).

24. Vessels authorized to fish the key stocks with demersal trawls in the Ionian Sea shall be listed by the CPC whose flag they are flying.

25. CPCs shall communicate to the GFCM Secretariat, no later than 1 August in the first year and by 31 March of each subsequent year, the list of the vessels flying their flag and actively fishing for the key stocks for the current year or forthcoming years. This list shall include, for each vessel, the information referred to in Annex 2.

26. Each CPC shall ensure that adequate mechanisms are set up to record each fishing vessel in a national fleet register and to record vessels' catches and fishing effort via the logbook, as well as to monitor fishing vessels' activities and landings via catch and effort sampling surveys according to the rules stipulated by each CPC.

27. CPCs shall maintain and keep updated a register of the above-mentioned fishing authorizations. Unless specifically provided for in the GFCM Data Collection Reference Framework, CPCs shall communicate the following to the GFCM Secretariat:

- a) the list of operating vessels for which such authorization has been issued for current or forthcoming year(s), no later than 31 March of each year; and
- b) a report on fishing activities carried out by the vessels referred to in paragraph 24, in an aggregated format, including the following minimum information – number of exploitation days, exploitation area and catches and discards of deep-water red shrimps – no later than 31 August of each year, starting from August 2023.

28. The GFCM Secretariat shall maintain and update the list of fishing vessels authorized to fish for the key species and publish it on the GFCM website in a manner that is consistent with GFCM data confidentiality policy and procedures.

29. 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.

## **PART VI**

### **Scientific monitoring, adaptation and revision of the plan**

30. The SAC shall provide, on an annual basis starting from 2023, advice on the status of both deep-water red shrimp stocks in the Ionian Sea, including specific objectives to maintain fishing mortality within agreed precautionary fishing mortality reference points and to maintain or restore the key stocks at levels

that can produce the MSY in accordance with the objectives set out in paragraph 9.

31. Based on the SAC advice, the GFCM may review the content of the multiannual management plan.

32. 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 to contribute to achieving those objectives.

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

34. CPCs, with the support of GFCM Secretariat, shall ensure the implementation of the pilot project to improve the selectivity of trawl nets fishing for deep-water red shrimps in the Ionian Sea in 2023.

#### **PART VII**

##### **Specific measures to address illegal, unreported and unregulated fishing**

35. Each CPC shall ensure that adequate mechanisms are in place for the registration of each fishing vessel in a national fleet register, for the recording of the vessel's catch and fishing effort in the logbook and for the monitoring of the vessel's fishing activities and landings, by means of surveys and sampling of catches and fishing effort, carried out in accordance with the rules laid down by each CPC.

36. Each CPC shall designate landing points at which landings by vessels actively fishing for the key stocks in the Ionian Sea shall take place.

37. For each designated port, the concerned CPC shall specify permitted landing and transshipping times and places.

38. Contracting parties and cooperating non-contracting parties shall carry out inspections on the basis of a risk analysis.

39. It shall be prohibited to land or transship from fishing vessels any quantity of key stocks fished in the Ionian Sea at any place other than ports designated by CPCs in accordance with paragraph 36.

40. Contracting parties and cooperating non-contracting parties shall transmit to the GFCM Secretariat, no later than 30 April 2023 and subsequently on 30 November each year, any changes to the list of the designated landing points at which landings of key stocks in the Ionian Sea may take place.

41. Contracting parties and cooperating non-contracting parties shall engage to cooperate in the fight against IUU fishing activities, in particular through sharing information and gathering intelligence to fight against illegal activities.

42. Part VII of this recommendation is without prejudice to Recommendation GFCM/41/2017/7 on a regional plan of action to combat illegal, unreported and unregulated fishing in the GFCM area of application.

#### **PART VIII**

##### **Monitoring, control and surveillance programme**

43. Vessels operating with otter trawls exploiting key stocks in the Ionian Sea shall be allowed to carry out specific fishing activities only if these are indicated in a valid fishing authorization issued by the competent authorities.

44. Authorized vessels shall be equipped with a vessel monitoring system in accordance with Recommendation GFCM/33/2009/7.

45. Contracting parties and cooperating non-contracting parties shall monitor the consumption of the catch limits, as follows: beginning from the date when 80 percent of the quota has been exhausted, the CPC concerned shall communicate to the GFCM monthly reports on catch. Such a report should be sent by the fifteenth day of the month for the previous month. When the catch limit has been reached, the CPC shall prohibit any further catches of the key stocks.

#### **PART IX**

##### **Permanent inspection scheme**

46. An international joint inspection and surveillance scheme outside the waters under national jurisdiction in the Ionian Sea is established with Recommendation GFCM/45/2022/16 on an international joint inspection and surveillance scheme outside the waters under national jurisdiction in the Ionian Sea (geographical subareas 19 to 21) to cover this recommendation.

#### **PART X**

##### **National management plans**

47. In order to ensure adequate conservation of deep-water red shrimp stocks, CPCs shall adopt fisheries management measures or national management plans in the Ionian Sea.

48. Contracting parties and cooperating non-contracting parties shall notify the GFCM Secretariat, from 30 September 2023, of 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**

49. The multiannual management plan established by this recommendation remains in force for eight years from the date of its adoption.

50. Measures in this recommendation shall be without prejudice to stricter measures adopted by the CPCs.

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

52. This recommendation repeals and replaces Recommendation GFCM/44/2021/8 and GFCM/42/2018/4.

**Annex 1**

Fishing opportunities for deep-water red shrimp fisheries in the Ionian Sea (GSAs 19 to 21) over the transitional period 2023–2025. In line with paragraphs 10 and 11, catch limits are reported for each CPC with an active fleet fishing for the key stocks.

	<b>European Union 2023</b>	<b>European Union 2024</b>	<b>European Union 2025</b>	<b>Tunisia 2023</b>	<b>Tunisia 2024</b>	<b>Tunisia 2025</b>
Catch limit (tonnes) for giant red shrimp	393	381	370	5.8	5.6	5.5
Catch limit (tonnes) for blue and red shrimp	265	257	250	5.8	5.6	5.5

## Annex 2

Subject to more detailed provisions under the GFCM Data Collection Reference Framework (DCRF), the list referred to in paragraph 25 shall contain, for each vessel, the following information:

- Vessel name
- National registration number (code assigned by the CPCs)
- Vessel registration number (country ISO 3-alpha code + 9 digits, e.g. xxx000000001)
- Port of registration (full name of the port)
- Previous name (if any)
- Previous flag (if any)
- Previous details of deletion from other registers (if any)
- International radio call sign (if any)
- VMS (indicate yes/no)
- Vessel type, length overall (LOA) and gross tonnage (GT) and engine power expressed in kW
- Name and address of owner(s) and/or charter and/or operator(s)
- Main target species
- Main gear used for deep-water red shrimps and DCRF fleet segment allocation
- Time period authorized for fishing with bottom trawl or any other gear likely to fish deep-water red shrimps (if any of such authorization)