

Recommendation GFCM/45/2022/7 on a multiannual management plan for sustainable demersal trawl fisheries targeting giant red shrimp and blue and red shrimp in the Levant Sea (geographical subareas 24 to 27), repealing Recommendation GFCM/42/2018/3

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”;

TAKING INTO ACCOUNT the GFCM 2030 Strategy for sustainable fisheries and aquaculture in the Mediterranean and the Black Sea endorsed with Resolution GFCM/44/2021/12, and particularly its Target 1 “Fisheries and ecosystems: healthy seas and productive fisheries”;

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 fisheries in this area, Recommendation GFCM/42/2018/3 on a multiannual management plan for sustainable trawl fisheries targeting giant red shrimp and blue and red shrimp in the Levant Sea (geographical subareas 24, 25, 26 and 27), as amended by Recommendation GFCM/44/2021/6, introduced a general framework for the management of deep-water red shrimps in the Levant Sea;

NOTING that the Scientific Advisory Committee on Fisheries (SAC) endorsed, at its twenty-third session, technical elements for deep-water red shrimp fisheries in the Levant Sea, including the possibility of a long-term multiannual management plan designed in a stepwise manner over eight years, starting with a three-year transitional period over which a restricted set of measures would be implemented while scientific evidence is gathered towards the identification of long-term adaptive management measures – including catch limits, minimum conservation reference sizes, spatial or spatio-temporal measures to protect juveniles and/or spawners and technical measures on selectivity;

CONSIDERING that the management measures adopted in 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 the multiannual management plan established by Recommendation GFCM/42/2018/3 has not yet achieved its operational objective of maintaining the fishing mortality within agreed precautionary reference points with a view to achieving or maintaining fishing mortality at MSY levels owing to issues related to data, and that hence the management measures need to be reinforced;

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 demersal trawl fishing activities in the Levant Sea (geographical subareas [GSAs] 24 to 27) 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 24 to 27 agree to implement such a multiannual management plan for the fisheries concerned 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 Levant 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 24 to 27.

Geographical scope

6. The multiannual management plan provided by the present recommendation shall apply in GSAs 24 to 27.

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) “Levant Sea” means GSAs 24 to 27 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 non 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 Levant 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 on a regional plan of action to combat illegal, unreported and unregulated fishing in the GFCM area of application;
- 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/42/2018/3, in relation to the exploitation of key stocks in the Levant Sea, prevent increases in fishing capacity and effort from the levels exerted over the years 2014–2017 or over another period of three consecutive years, such as 2015–2018, provided that for such period the levels exerted do not go beyond 50 percent with respect to the 2014–2017 reference period;
 - d) protect nursery and spawning areas and essential fish habitats important for the key stocks in the Levant 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 16 to 19 and the identification of spatio-temporal measures provided for in paragraphs 22 and 23.
13. The catch limits by CPC for the period 2023–2025 in paragraphs 10 to 12 shall be set without prejudice to the discussions to take place in the context of the working group referred to under paragraph 14.
14. A working group shall be established by the GFCM in 2025, within 30 calendar days of the conclusion of the twenty-sixth SAC session, in order to establish a fair and equitable allocation key for

Levant Sea key stocks, taking into consideration the efforts made by CPCs to manage deep-water red shrimp fisheries and the levels of historical catches, and apply in some cases stricter rules than those defined in this recommendation, also based on socioeconomic considerations.

15. By way of derogation from paragraph 14, CPCs intending to start targeting deep-water red shrimps shall submit a management plan for deep-water red shrimp fisheries 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.

16. 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 **Error! Reference source not found.** and **Error! Reference source not found.**, including socioeconomic aspects.

PART III

Long-term management plan

17. 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 annual single-species catch limits for deep-water red shrimps. Such limits shall be based on HCRs, in line with paragraph 18, which shall be proposed by the WK MSE and endorsed by the SAC in 2024 or 2025.

18. 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).

19. Catch limits allocations to CPCs shall be based on the outcomes of the working group referred to under paragraph 14.

Safeguards

20. 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.

21. 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

22. Over the transitional period, the SAC shall: i) finalize the identification of the fishing grounds, hence the origin of catches and 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.

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

Minimum conservation reference size

24. During the transitional period, the SAC shall identify appropriate minimum conservation reference sizes (MCRS) for the deep-water red shrimps lacking an MCRS 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, to be then applied in the long-term plan for the two species covered.

25. In the long-term plan, specimens of key stocks smaller than the MCRS as defined in paragraph 24 shall not be caught, retained on board, transshipped, transferred, landed, stored, sold, displayed or offered for sale by professionals.

PART V

Fleet management measures

26. Contracting parties and cooperating non-contracting parties shall ensure that the overall fleet capacity or fishing effort 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 number of vessels or fishing effort for otter trawlers fishing deep-water red shrimps during the years 2014–2017 or over another period of three consecutive years, such as 2015–2018, provided that for such period the levels exerted do not go beyond 50 percent with respect to the 2014–2017 reference period.

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

28. Contracting parties and cooperating non-contracting parties 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.

29. 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 via the logbook, as well as to monitor fishing vessels' activities and landings via catch sampling surveys according to the rules stipulated by each CPC.

30. Contracting parties and cooperating non-contracting parties shall maintain and keep updated a register of the above-mentioned fishing authorizations. Unless specifically provided for in the GFCM Data Collection Reference Framework, the 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), not later than 31 March of each year; and
- b) a report on fishing activities carried out by the vessels referred to in paragraph 27, 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.

31. 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.

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.

PART VI

Scientific monitoring, adaptation and revision of the plan

33. The SAC shall provide, on an annual basis starting from 2023, advice on the status of both deep-water red shrimp stocks in the Levant 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.

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

35. 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.

36. 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.

37. Contracting parties and cooperating non-contracting parties, 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 Levant Sea in 2023.

PART VII

Specific measures to address illegal, unreported and unregulated fishing activities

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

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

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

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

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

43. 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 Levant Sea may take place.

44. 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.

45. 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

46. Vessels operating with otter trawls exploiting key stocks in the Levant 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.

47. Starting from 30 April 2023, the authorized vessels above 12 m length overall shall be equipped with a vessel monitoring system. A CPC may grant to its authorized vessels of less than 15 m length overall flying its flag a derogation from the requirement to be fitted with a vessel monitoring system if they operate exclusively within the territorial seas of the CPC or/and never spend more than 24 hours at sea from the time of departure to the return to port. CPCs shall report these derogations, as well as the other control means deployed to monitor concerned fishing vessels, to the GFCM Secretariat without delay.

48. 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 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

National management plans

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

50. 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 X

Final provisions

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

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

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

54. This recommendation repeals and replaces Recommendation GFCM/42/2018/3 on a multiannual management plan for sustainable trawl fisheries targeting giant red shrimp and blue and red shrimp in the Levant Sea (geographical subareas 24, 25, 26 and 27), as amended by Recommendation GFCM 44/2021/6.

Annex 1

Fishing opportunities for the Levant Sea (GSAs 24 to 27) deep-water red shrimp fisheries for the transitional period 2023–2025. In line with paragraphs 11 to 13, catch limits are reported for each CPC with an active fleet fishing for the key stocks.

Catch limit per species (in tonnes)	European Union 2023	European Union 2024	European Union 2025	Türkiye 2023	Türkiye 2024	Türkiye 2025	Egypt 2023	Egypt 2024	Egypt 2025
Giant red shrimp	60	58	56	261	253	246	439	426	413
Blue and red shrimp	16	15	15	123	119	116	135	131	127

Annex 2

Subject to more detailed provisions under the GFCM Data Collection Reference Framework (DCRF), the list referred to in paragraph 28 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)