

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)

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;

RECALLING that, in giving effect to the objective of the GFCM Agreement, the GFCM shall foster, as appropriate, a subregional approach to fisheries management and aquaculture development in order to better address the specificities of the Mediterranean and the Black Sea;

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

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;

CONSIDERING that the GFCM shall apply the precautionary approach in accordance with 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”;

NOTING that the Scientific Advisory Committee on Fisheries (SAC) has considered that the stocks of anchovy and sardine are distributed in geographical subarea (GSA) 17 and in GSA 18 and has carried out the first joint assessments at its eighteenth session;

NOTING that the revision of input data and the benchmark assessment for sardine and anchovy in GSA 17 and GSA 18 were undertaken in 2015–2016 and final stock assessment models based on the revised data were provided by the Working Group on Stock Assessment of Small Pelagic Species (WGSASP) in November 2017;

CONSIDERING that the SAC, at its twentieth session (June 2018, Morocco), concluded that both anchovy and sardine stocks in GSA 17 and GSA 18 are overexploited and in overexploitation with F/F_{msy} at 2.23 and 2.77 respectively and advised once again to decrease fishing mortality;

CONSIDERING that fishing mortality is an overall measurement system, which can be adjusted by applying reductions in terms of fishing capacity and/or fishing effort;

CONSIDERING that the emergency measures for 2017 and 2018 (Recommendation GFCM/40/2016/3 establishing further emergency measures in 2017 and 2018 for small pelagic stocks in the Adriatic Sea [geographical subareas 17 and 18]) have expired, that the Commission shall update the current management plan (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 exploiting small pelagic stocks in geographical subarea 18 [southern Adriatic Sea]) with the latest scientific advice to ensure implementation in 2022 at the latest, and that, due to the particularly bad state of anchovy stocks, it is necessary to adopt new emergency measures to reduce the fishing mortality of the small pelagic stocks in 2019, 2020 and 2021;

CONSIDERING that, in accordance with paragraph 18 of Recommendation GFCM/40/2016/3, if the SAC concludes that anchovy and sardine are still overexploited, the Commission may adopt more stringent measures aiming at ensuring that the exploitation levels of small pelagic stocks in the Adriatic Sea are at MSY by 2020.

NOTING that acoustic survey data for both small pelagic species, sardine and anchovy, indicate a declining trend in total biomass;

NOTING that the latest assessment of stock status made by the SAC in 2018 also indicates a further declining trend in spawning stock biomass (SSB) of anchovy since 2005 and a decline in SSB of sardine compared to the assessment of 2017;

NOTING that, since temporal restrictions are considered to have a beneficial effect on fisheries, a closed period during the spawning season of anchovy and sardine in the Adriatic Sea shall be applied;

CONSIDERING that, due to stock dynamics, it may take several years to observe the effects of the management measures adopted and applied to date on the stock status of small pelagic species in the Adriatic Sea but that this delay should not be taken as a justification to delay action to improve the status of these stocks;

CONSIDERING that the GFCM may envisage to adopt additional measures including catch limitations;

CONSIDERING the socio-economic importance of fisheries exploiting sardine and anchovy in the Adriatic Sea and the need to ensure their sustainability;

RECALLING Recommendation GFCM/27/2002/1 on the management of selected demersal and small pelagic species and, notably, paragraph 2 therein;

RECALLING Recommendation GFCM/30/2006/1 on the management of certain fisheries exploiting demersal and small pelagic species and, notably, paragraph 2 and 3 therein;

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 exploiting small pelagic stocks in geographical subarea 18 (southern Adriatic Sea);

RECALLING 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;

NOTING that, under Recommendation GFCM/38/2014/1, a reduction of fishing effort as well as spatio-temporal closures was applied in 2015 for vessels fishing for small pelagic stocks in GSA 17;

RECALLING 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);

NOTING that, under Recommendation GFCM/39/2015/1, a reduction of fishing effort was applied in 2016 for fishing vessels targeting anchovy in GSA 17 and spatio-temporal closures were applied in 2016 for vessels fishing small pelagic stocks in GSA 17 and GSA 18;

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

PART I

General objective, geographical scope and definitions

1. The general objective of the present recommendation is to ensure that exploitation levels of small pelagic stocks in the Adriatic Sea are reduced in order to achieve MSY by 2020 and to ensure the stability, in socio-economic terms, of fishing fleets targeting small pelagics.
2. The present recommendation shall apply to GSA 17 and GSA 18 (Adriatic Sea) until 2021.
3. For the purpose of this recommendation:
 - a) “anchovy” means fish pertaining to the *Engraulis encrasicolus* species;
 - b) “sardine” means fish pertaining to the *Sardina pilchardus* species;
 - c) “small pelagics” means stocks of anchovy and sardine;
 - d) “pelagic trawler” means fishing vessel operating single or in pair with pelagic trawl net; and
 - e) “purse seiner” means fishing vessel operating with purse seine net for small pelagic species.

PART II

Emergency management measures

4. In 2019, 2020 and 2021, contracting parties and cooperating non-contracting parties (CPCs) shall not exceed the level of catches for small pelagics exerted in 2014 as reported in accordance with Recommendation GFCM/33/2009/3 on the implementation of the GFCM Task 1 statistical matrix and repealing Resolution GFCM/31/2007/1.
5. The provisions under paragraph 4 shall not apply to CPCs with catches below 2 500 tonnes in 2014 and these CPCs shall not exceed catches of 2 500 tonnes in any of the three years covered by this recommendation.

6. In addition, in 2019, 2020 and 2021, the CPCs with declared catches over 2 500tonnes in 2014 shall implement a progressive 5 percent reduction each year starting from the level of catches of small pelagics in 2014, as reported in Recommendation GFCM/33/2009/3.

7. If the catch limit set in paragraph 4 is exceeded in any given year, the GFCM shall recommend appropriate management measures compensating the overcatch.

Fishing effort

8. Notwithstanding the fishing effort established under paragraph 27 of Recommendation GFCM/37/2013/1 and under Recommendation GFCM/38/2014/1, CPCs shall ensure that their fishing vessels targeting small pelagics shall not exceed 180 fishing days per year, with a maximum of 144 fishing days targeting sardine and of 144 fishing days targeting anchovy.

Closures

9. In 2019, 2020 and 2021, CPCs shall apply specific temporal closures at the fleet level (even if not simultaneous for purse seiners and pelagic trawlers) in view of protecting stocks during spawning periods. Such closures shall cover the entire distribution of small pelagic stocks in the Adriatic Sea and affect all fleets targeting small pelagics, for periods of no less than 30 continuous days per fleet segment. Vessels belonging to fleets subject to closure shall be prohibited to change gear for targeting small pelagics (purse seine to/from pelagic trawl) during the closure period. Such closures shall take place during the following timeframes:

- for sardine, from 1 October to 31 March
- for anchovy, from 1 April to 30 September

10. By way of derogation from paragraph 9, such temporal closures may be implemented for periods of no less than 15 continuous days for national fleets of less than 15 purse seiners and/or pelagic trawlers actively fishing for small pelagic stocks.

11. CPCs shall apply spatial closures to vessels over 12 m length overall for no less than 7 months in 2019, 8 months in 2020 and 9 months in 2021. Such closures shall cover 30 percent of the territorial or inner waters identified as important for the protection of early age classes of fish.

12. In order to protect small pelagics, in 2019, 2020 and 2021 fishing activity with purse seiners and pelagic trawlers targeting anchovy or sardine shall be prohibited in the area outlined in the map in Annex 1.

13. CPCs shall notify to the GFCM Secretariat, not later than 31 December 2018, the set of closure dates and areas of application listed under paragraphs 9, 10 and 11.

Fleet capacity and fleet register

14. CPCs shall communicate to the GFCM Secretariat, not later than 30 November 2018, the list of all pelagic trawlers (single or pair trawlers) and purse seiners actively fishing for small pelagic stocks in 2014.

15. CPCs shall ensure that the overall fleet capacity of trawlers and purse seiners actively fishing for small pelagic stocks, in terms of gross tonnage (GT) and/or gross registered tonnage (GRT), engine power (kW) and number of vessels, as recorded both in national and GFCM registers, does not exceed the fleet capacity for small pelagics in 2014.

16. The provision under paragraph 15 shall not apply to the national fleets of less than ten purse seiners and/or pelagic trawlers actively fishing for small pelagic stocks. In such case, the capacity of active fleets may increase by not more than 50 percent in number of vessels and in terms of GT and/or GRT and kW.

PART III

Scientific monitoring

17. The SAC shall suggest alternative solutions to ensure the availability of the results of hydroacoustic surveys of the previous year not later than 31 January of a given year including the implementation of additional winter surveys.

18. The SAC shall evaluate each year the effectiveness of the emergency measures established by this recommendation towards achieving the objectives set out in paragraph 1.

19. The SAC, at its twenty-second session in 2020, shall give mandate to the Workshop on the assessment of management measures (WKMSE) to carry out a management strategy evaluation (MSE) in order to test alternative management approaches to be implemented starting from 2022, in accordance with the terms of reference in Annex 2.

20. On the basis of the outcomes of the work mentioned at paragraph 19 and of SAC advice, the GFCM shall, in 2021, revise Recommendation GFCM/37/2013/1 and, in 2022 at the latest, implement a management plan.

PART IV

Monitoring, control and surveillance programme

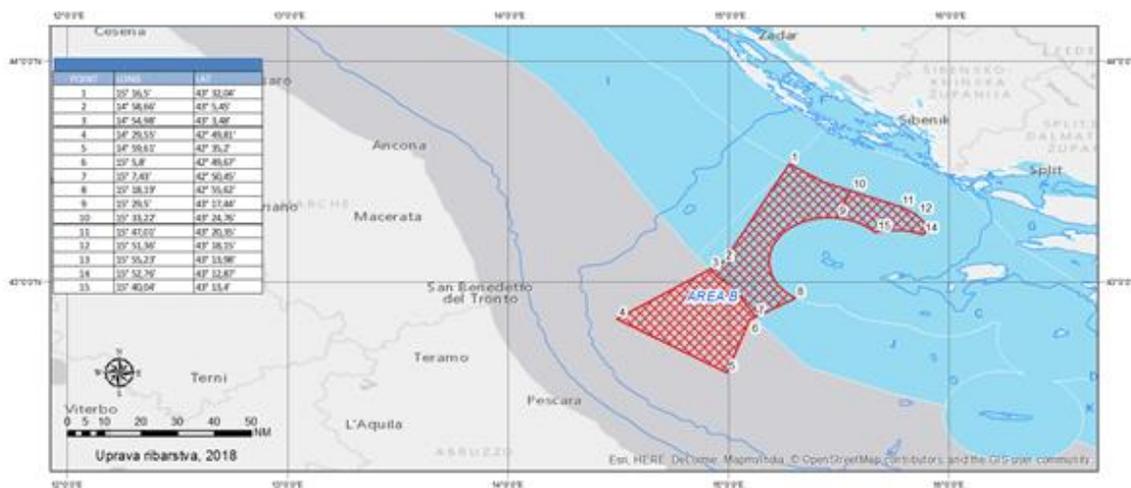
21. In order to facilitate the monitoring of catches, all catches shall be landed, with the exception of those catches which may be discarded in accordance with existing national legislation.

22. Upon request of CPCs, with the assistance of the GFCM Secretariat, a pilot project shall be established in 2019 with a view to establishing a voluntary observation and inspection programme, in order to ensure compliance with the conservation and management measures of this recommendation.

23. Such voluntary observation and inspection programme, to be implemented in 2019, 2020 and 2021, shall comprise, *inter alia*, the following elements:

- a) Inspections at sea;
- 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 for 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;
- f) Specific monitoring programmes, including boarding and inspection.

Annex 1



Pomo/Jabuka Pit		
Point	Latitude	Longitude
1	43°32,044' N	15°16,501' E
2	43°05,452' N	14°58,658' E
3	43°03,477' N	14°54,982' E
4	42°49,811' N	14°29,550' E
5	42°35,205' N	14°59,611' E
6	42°49,668' N	15°05,802' E
7	42°50,450' N	15°07,431' E
8	42°55,618' N	15°18,194' E
9	43°17,436' N	15°29,496' E
10	43°24,758' N	15°33,215' E
11	43°20,345' N	15°47,012' E
12	43°18,150' N	15°51,362' E
13	43°13,984' N	15°55,232' E
14	43°12,873' N	15°52,761' E
15	43°13,494' N	15°40,040' E

Terms of reference for the Working Group on Management Strategies for Small Pelagics in the Adriatic Sea

The working group shall test, starting from 2022, alternative management approaches (harvest control rule [HCR]) for anchovy and sardine in the Adriatic Sea using different effort and/or catch-based management strategies and reference points operating on the basis of fixed values of fishing mortality and biomass.

Management decisions

- a) Test fixed F_{msy} HCR coupled with effort and catch-based management that will ensure a low probability of SSB to fall below B_{lim} (5 percent probability), including the scenarios agreed at the WKMSE 2017.
- b) Test a biomass escapement HCR that will ensure a low probability of SSB to fall below B_{lim} (5 percent probability), coupled with effort and catch-based management. For this HCR, define:
 - an optimal level of the biomass escapement ($B_{escapement}$)
 - the need of a fishing mortality cap (F_{cap})
- c) The WKMSE may propose and test other appropriate management scenarios for small pelagics fisheries in the Adriatic based on the ecosystem approach.

Economic performance

Evaluate the impact of the different HCR on the socio-economic aspects of the concerned fleets and related industries (processing and tuna farming).

Performance statistics

Evaluate the performance of alternate scenarios on a 5–10–20 year time scale using standard MSE diagnostic tools, focusing in particular on the following in relation to harvest rate:

- Probability of SSB falling below B_{lim} .
- Risk versus catch level
- Catch variability
- Average catch
- Level of SSB
- Probability of fisheries closure