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# **Science, Technology, and Society Initiative to Minimize Unwanted Catches in European Fisheries**

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tested by fishers**

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# Data-recording application (Apps) tested by fishers

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## 1. Introduction

D.5.2 reflects the activities of Task 5.2 aiming to incentivizing self-monitoring of new-discard reducing measures tested in the field by fishers.

The use of technologies based on smart phones for real time reporting of fisheries catches had to be benchmarked and tested in a pilot study and then extended as a product for the community.

This activity was divided in two main parts: i) the development of an App for the fishermen to self-report catches (see Deliverable 5.1) and ii) adoption by fishers of the smartphone App in their daily work to report unwanted catches.

WWF, in accordance with the project plan, produced an App to promote the self-recording of discard rates by fishers themselves (Task 5.2) so as to follow the request of the [Common Fishery Policy](#) (Regulation (EU) No 1380/2013 of the EUROPEAN PARLIAMENT and of the COUNCIL of 11 December 2013) to empower the fishing sector actors to support scientists and national survey programmes in collecting useful data and information to implement a correct resources management in European waters.

The general objective of this App is to devise technological solutions to control and monitor compliance in the context of the Landings Obligation of the CFP. Through the use of this App, fishers can collect digitally relevant information from their fishing trips, including positioning information using the GPS mobile device and the obtained results will help increase the level of control, compliance and enforcement of rules by the fishers. The App interface is simple and intuitive to allow fishermen to easily enter information on board, during the fishing trips. This will incentivize self-monitoring, which can include community-based data collection programmes, designed and implemented in pilot studies, involving fishers, scientists, NGOs and administrations. Involving fishers and fishing sector stakeholders in self-monitoring will facilitate compliance in terms of effectiveness and policy costs.

The App was developed by QUADRALIA, an IT company specialized in software development, under contract to WWF during the first year of the project. The application has been developed for devices with Android (Android 4.4 and higher) operating system and with GPS enabled. The Android devices, equipped with GPS, can store the sequence of positions automatically in the database of the device, after starting the application. The mobile application has been developed in the following languages: English, Spanish, Italian, Catalan, Portuguese and Greek, covering all the local languages in the pilot study areas plus English. The translations have been provided by the coordinators of the countries belonging to the MINOUW project in

Southern Europe waters. A user friendly manual of use of the App was produced, tested, and reported as Deliverable 5.1. This manual (see Deliverable 5.1) describes in details, with the support of pictures and graphs, the complete functioning of the App and of the back-up system through a web-based application hosting the necessary databases ([www.minouw.com](http://www.minouw.com)), where the information provided by fishers will eventually be stored.

## 2. The problem

Following the objectives of WWF, the MINOUW Consortium, and according to the project program, the use of the App for real time reporting of fisheries catches would have been benchmarked and tested in a pilot volunteer program, in the pilot fisheries case studies, and then extended as a product for the community. In reality, because of external factors, related to the implementation of the Landings Obligation at national level, there arose significant barriers to the adoption of the MINOUW App and it is not being taken into account as a useful tool by stakeholders in the pilot case studies.

The external factors that influenced this negative result are dual. On one side, when the project proposal was written (end of 2014), the MINOUW Consortium could not foresee that national administrations would have developed national mechanisms (first semester of 2017) to collect discard rates within the electronic logbook systems (ERS: electronic recording and reporting systems of member states), that made the MINOUW App redundant because it would have generated both a parallel process and a duplication of data-recording effort (e.g. in the Adriatic Sea or in the West-Mediterranean, with regard to the national discard plans respectively for small pelagic and demersal resources). On another side, the general unclarity of the application of the Landings Obligation at national and local level - coupled with the fact that in the Mediterranean countries economic mechanisms to sell the landings of former discards not for human consumption (as for Art. 15 of the CFP) are not yet in place and fishers have to pay to destroy landed discards as a special waste by paying on their own - generated an overall reluctance by the fishing sector representatives to participate in a voluntary self-collection of discard rates data. It is important to note that the App was designed in consultation with stakeholders during the multi-actor process (last semester 2016 – first semester 2017, as described in D2.1 and D6.2) and its use was agreed in principle by voluntary fishers in pilot case studies.

WWF and the case-study leaders at pilot fishery sites promoted the use of the App but with no uptake success for the above reasons. WWF also presented and promoted the App at the meeting of MedAC ([www.medac.org](http://www.medac.org)), the Mediterranean Advisory Council, on the 13<sup>th</sup> of October 2016 session in Ajaccio (Corse, France), in order to get a possible overall presentation and promotion to the Mediterranean stakeholders. MedAC is a non-profit organization made up of European and national organizations representing the fisheries sector (including the industrial fleet, small-scale fisheries, the processing sector and trade unions) and other interest groups (such as environmental organizations, consumer groups and sports/recreational fishery associations) which operate in the Mediterranean area in the framework of the Common Fishery Policy.

During the MINOUW Consortium first reporting meeting, held in Pisa, on the 14<sup>th</sup>-15<sup>th</sup> of September of 2016, because of the difficulties encountered in getting the fishers buy-in to use the App, WWF asked the Project Officer to postpone the deadline of the deliverable D5.2 for at least six months in order both to see if the overall policy context would have changed, and if the fishers would have changed their attitude towards the self-data collections.

Unfortunately, this further time was not sufficient to get the planned and expected result.

National administrations reconfirmed the national discards plans in the second semester of 2017, each with the associated national mechanisms to collect discards data, based on software modifications to the existing electronic logbook system. Further, discards plans have not yet been included in the Multi-Annual Plan for Fishery (MAP, see Regulation (EU) No 1380/2013 of the EUROPEAN PARLIAMENT and of the COUNCIL of 11 December 2013) creating an even further complication, because Discards plans and MAPs will not have the same time frame.

Within this context, the only clear deadline is January 2019 when the Landings Obligation will be compulsory for all European vessels.

### 3. Solutions

Since WWF and the MINOUW Consortium think that the developed App is a useful, user-friendly instrument and that reliable discards data are extremely needed by scientists, NGOs, administrations, and all fisheries stakeholders, WWF has explored other possible opportunities to promote the use of the App within the fishing/scientific sector.

In the overall Mediterranean Sea, fishery is managed by the [General Fisheries Commission for the Mediterranean](#) (hereinafter GFCM). GFCM is a regional fisheries management organization (RFMO) established under the provisions of Article XIV of the FAO Constitution. The GFCM initially started its activities as a Council in 1952, when the Agreement for its establishment came into force, and became a Commission in 1997. The main objective of the GFCM is to ensure the conservation and the sustainable use, at the biological, social, economic and environmental level, of living marine resources as well as the sustainable development of aquaculture in the Mediterranean and in the Black Sea (GFCM area of application). The GFCM is currently composed of 24 members (23 member countries and the European Union) who contribute to its autonomous budget to finance its functioning and 3 Cooperating non Contracting Parties (Bosnia and Herzegovina, Georgia and Ukraine). The GFCM implements its policy and activities through its Secretariat, based at its headquarters in Rome, Italy. The Commission holds its regular sessions annually and operates during the intersession by means of its committees: the Scientific Advisory Committee on Fisheries (SAC), the Scientific Advisory Committee on Aquaculture (CAQ), the Compliance Committee (CoC), the Committee of Administration and Finance (CAF) and their subsidiary bodies, including the Working Group for the Black Sea (WGBS). The GFCM Bureau steers strategic orientations to the Commission and the Secretariat. The Commission has the authority to adopt binding recommendations for fisheries

conservation and management in its area of application and plays a critical role in fisheries governance in the region. In particular, its measures can relate for instance to the regulation of fishing methods, fishing gear and minimum landing size, the establishment of open and closed fishing seasons and areas and fishing effort control. In cooperation with other RFMOs, the GFCM plays a decisive part in coordinating efforts by governments to effectively manage fisheries at the regional level following the FAO Code of Conduct for Responsible Fisheries (CCRF). Moreover, it closely cooperates with other international organizations in matters of mutual interest and it benefits from the support of cooperation projects and programmes at the regional and subregional level in order to enhance scientific cooperation and capacity-building among its Contracting Parties.

In 2016-17, GFCM developed a scientific strategy to collect scientific data in the Mediterranean and the Black Sea in the time frame 2017–2020. This so-called GFCM-mid-term strategy towards the sustainability of Mediterranean and Black Sea fisheries (see Annex 1) is the fruit of the commitment of GFCM contracting parties, cooperating non-contracting parties and partner organizations to improve, by 2020, the sustainability of Mediterranean and Black Sea fisheries and ensure that the alarming trend in the status of commercially exploited stocks is reversed. It is based on five targets which include selected outputs and proposed actions: (1) Reverse the declining trend of fish stocks through strengthened scientific advice in support of management; (2) Support livelihoods for coastal communities through sustainable small-scale fisheries; (3) Curb illegal unreported and unregulated (IUU) fishing, through a regional plan of action; (4) Minimize and mitigate unwanted interactions between fisheries and marine ecosystems and environment, and (5) Enhance capacity-building and cooperation. This instrument represents an important attempt to tailor the United Nations Sustainable Development Goal 14 (SDG 14) to the needs and specificities of the Mediterranean and the Black Sea. The Mediterranean can already count on long-standing regional mechanisms to coordinate actions addressing the status of stocks and fisheries. In this context, the GFCM is therefore called to play a leading role in steering actions and boosting cooperation in order to bring about a favorable and open environment where different actors could transparently contribute to meet common goals and provide their support, expertise and experiences.

Importantly, the mid-term GFCM strategy includes a bycatch/discard data collection program.

WWF, which is working with GFCM on the base of a formal Memorandum of Understanding, offered to the GFCM scientists to use the MINOUW App to collect the by-catch/discards data needed by the mid-term strategy.

GFCM accepted to use the App (see as Annex 2: meeting notes of GFCM/WWF meeting on 21<sup>st</sup> of April 2017 at GFCM headquarters) but asked to have it also developed for Apple systems. WWF is contracting now QUADRALIA, the IT company who developed the Android version, to upgrade the App to have it running also on iOS Apple devices.

The App will be used by GFCM scientists and collaborators from January 2018.

On the 11<sup>th</sup> of October 2017, WWF organized the second MINOUW High Level Meeting in Palma de Mallorca in collaboration with MEDAC (see Deliverable 6.2) to present to

the Mediterranean fishery stakeholders the results of the scientific tests of the effectiveness of the technical and technological solutions developed by the scientists together with the fishermen within the MINOUW Project. Thereafter, in accordance with the project planning related to the multi-participatory approach, MINOUW researchers have to be back to the field sites at the pilot fisheries locations to present the same results to the fishermen and to the local stakeholders, who participated in the first phase of the project, when the multi-participatory approach was started to be implemented. In this second phase, in the field, at the harbors, a second try will be done in order to propose again the use of the App, may be in strict connection with the use of a technical or technological solutions developed by the MINOUW scientists.

## 4. Conclusions

Although with great difficulties, we found a possible and important use of the App, precisely within the framework of the GFCM mid-term strategy. This can be seen as a concrete example of collaboration between the European Commission and the GFCM as requested by the “[MedFish4ever Declaration](#)”, also known as Malta declaration (see Annex 3). It is a practical example of EU's successful neighborhood policy, sets out a detailed work program for the next 10 years, based on ambitious but realistic targets. The Declaration was signed in 30<sup>th</sup> of March of 2017 by Mediterranean ministerial representatives from both northern and southern Mediterranean coastlines.

## Annex 1

### Mid-term strategy (2017–2020) towards the sustainability of Mediterranean and Black Sea fisheries (Mid-term strategy)

#### EXECUTIVE SUMMARY

Thirteen years after the adoption, in 2003, of the Venice Ministerial Declaration for the Sustainable Development of Fisheries in the Mediterranean, great strides have been made in promoting responsible fisheries practices in the Mediterranean and the Black Sea through the adoption of common rules. Much progress has been made, in particular within the General Fisheries Commission for the Mediterranean (GFCM) of the Food and Agriculture Organization of the United Nations (FAO) with the 2014 amendment to its constitutive agreement which has further strengthened its role. Regardless of such advancements, Mediterranean and Black Sea fisheries are still facing serious challenges, with roughly 90 percent of the scientifically assessed stocks considered to be fished outside safe biological limits. Such alarming trends not only negatively impact the fisheries sector itself, but they also hinder attempts to ensure secure livelihoods and food security, through blue growth initiatives, for the coastal communities in the region.

In this regard, the United Nations Sustainable Development Goals (SDG) recognize that fisheries can drive sustainable development and, to this end, they set several targets to meet the objective of the conservation and sustainable use of the marine environment. These objectives are echoed by the FAO Blue Growth Initiative, which implies that all United Nations organizations having a mandate relating to fisheries, including the GFCM, must take urgent actions to revert the alarming trend in the status of commercially exploited stocks. To this end, a mid-term strategy towards the sustainability of Mediterranean and Black Sea fisheries has been elaborated, in line with SDG 14 and the FAO Strategic Objective 2. The mid-term strategy purports to define a course of instrumental action to further progress in the sustainable development of fisheries at the regional level. It is programmatic and multiannual in nature and provides guidance for the 2017–2020 period, based on a series of key activities. The implementation of the mid-term strategy is expected to ensure that, by 2020, the alarming trend in the status of commercially exploited stocks is reversed by means of the following targets, selected outputs and proposed activities relating thereto:

#### **TARGET 1: Reverse the declining trend of fish stocks through strengthened scientific advice in support of management**

Output 1.1: Enhanced knowledge and expertise on Mediterranean and Black Sea fisheries

- creation of a GFCM Forum on fisheries science

- realization of regional surveys at sea
- compilation of catalogues of fishing activities

Output 1.2: Socio-economic information and analysis incorporated into scientific and management advice

- definition of socio-economic indicators and completion of a comprehensive regional survey on the socio-economic characteristics of fisheries
- incorporation of socio-economic information into the assessment of the state of the main commercial fisheries and the provision of advice on the comparative impacts of alternative management scenarios

Output 1.3: Enhanced science-based GFCM regulations on fisheries management

- implementation of a dedicated approach for the provision of advice to the GFCM by its subsidiary bodies
- revision of existing management plans / development of new management plans

**TARGET 2: Support livelihoods for coastal communities through sustainable small-scale fisheries**

Output 2.1: Robust and timely information on the impacts of small-scale fisheries and recreational fisheries on living marine resources and on their interactions with other human activities in coastal communities

- implementation of a regional survey on small-scale fisheries
- establishment of a permanent working group on small-scale and recreational fisheries
- assessment of the impacts of recreational fisheries

Output 2.2: FAO Small-Scale Fisheries Guidelines tailored to the specificities of the Mediterranean and the Black Sea

- development of national plans of action for the implementation of the Small-Scale Fisheries Guidelines (SSF Guidelines)
- establishment of a regional platform to engage and promote dialogue among small-scale fishing associations
- endorsement of the principle of decent work
- organization of a high-level meeting to generate political will in small-scale fisheries

**TARGET 3: Curb illegal unreported and unregulated fishing, through a regional plan of action**

Output 3.1: Regular quantification of illegal unreported and unregulated (IUU) fishing in the Mediterranean and the Black Sea and harmonization of existing measures to fight against IUU fishing

- assessment of the quantity, magnitude and characteristics of IUU fishing in the Mediterranean and the Black Sea
- evaluation of the adequateness of national legislations relating to IUU fishing

Output 3.2: Reinforced inspection procedures in the framework of port state control

- promotion of training of national inspectors
- establishment of a mutual assistance system to facilitate information exchange and of a regional information system to exchange port state measures related data

Output 3.3: Enhanced monitoring, control and surveillance (MCS) at the regional level

- operationalization of a regional vessel monitoring system (VMS) and control system

**TARGET 4: Minimize and mitigate unwanted interactions between fisheries and marine ecosystems and environment**

Output 4.1: Reduced bycatch rates in Mediterranean and Black Sea fisheries

- implementation of a bycatch monitoring programme
- launch of a communication mechanism to educate on the negative impacts of bycatch
- implementation of effective management measures to improve the selectivity of fisheries
- proposal of measures to reduce catches of vulnerable species
- identification and implementation of mitigation measures to address the interaction between cetaceans and fishing gear

Output 4.2: Healthier marine ecosystems and more productive fisheries

- identification and promotion of the establishment of new fisheries restricted areas (FRAs)
- adoption of a comprehensive regional management plan for red coral
- creation of an adaptation strategy to cope with potential effects of invasive species and climate change on fisheries
- creation of an adaptation strategy to cope with the potential effect of marine litter on fisheries

**TARGET 5: Enhance capacity-building and cooperation**

Output 5.1: Improved national capacity for the management of fisheries resources

- provision of capacity building for GFCM contracting parties and cooperating non-contracting parties (CPCs)
- implementation of a technical assistance mechanism

- launch of a regional programme for education and training

Output 5.2: Strengthened fisheries governance in the Black Sea

- organization of a high-level conference on fisheries governance
- launch of a regional, scientific and technical cooperation project for the Black Sea

Output 5.3: Increased cooperation with relevant actors

- operationalization of existing memoranda of understanding (MoU)
- strengthened coordination with the FAO Fisheries and Aquaculture Department and FAO regional projects

Consistent with Article 17 of the GFCM constitutive agreement, the capacity of developing CPCs will be duly taken into account in implementing the mid-term strategy, in order to level the playing field and bridge existing gaps. The effective implementation of existing and future fisheries management-related decisions by CPCs is instrumental in reaching the objectives of the strategy. The GFCM, through its relevant subsidiary bodies, shall regularly assess the attainment of the targets during the period of implementation of the strategy, by reviewing the outcomes of specific activities, revising and updating, as appropriate, the expected outputs, and providing guidance to more effectively reach agreed objectives.

## 1. Introduction

### The need for a strategy

1. Fishing has a tremendous cultural, social and economic importance in the Mediterranean and the Black Sea, providing an important source of food and livelihood for riparian countries and sustaining the traditions and the way of life of many coastal communities. However, Mediterranean and Black Sea fisheries are currently facing serious challenges, with roughly 90 percent of the scientifically assessed stocks considered to be fished outside safe biological limits, decreasing catches and shrinking fleets at the regional scale.

2. As some of these challenges are also experienced globally and in other regions of the world, a pledge to act to avoid the serious risk of irreversible environmental and socio-economic damage was renewed at the level of the United Nations (UN) and at the regional scale. Against the backdrop of international commitments towards the sustainability of fisheries as a means to support the livelihood of coastal communities in a Blue Growth perspective, existing challenges in the Mediterranean and the Black Sea bring about the need to develop tailor-made actions, taking into account the specificities of the region and the capacities of all actors involved.

3. The mid-term strategy is in line with the mandate of the General Fisheries Commission for the Mediterranean (GFCM) as a regional fisheries management organization (RFMO) having competence over the Mediterranean and the Black Sea. It is indeed fully consistent with the Agreement establishing the General Fisheries Commission for the Mediterranean (GFCM Agreement) as amended in 2014. The mid-term strategy is based on key activities identified by the GFCM subsidiary bodies and intends to capitalize on accomplishments in the region over recent years in the field of stock assessment and fisheries management, marine environment and control, as well as to consolidate efforts pursued within the context of the GFCM Framework Programme (FWP), born in 2013 as a platform to promote sustainable development and cooperation in the Mediterranean and the Black Sea through multiannual and multidonor arrangements.

4. In addition, the mid-term strategy has been discussed with relevant organizations having interest in different aspects of fisheries and marine ecosystems, including observers to the GFCM and organizations that have a memorandum of understanding (MoU) with the GFCM (currently adding up to 14 international organizations). Therefore, the implementation of the mid-term strategy is based on a unique interdisciplinary partnership that provides for a perfect opportunity to enhance cooperation in the region and maximize the probability of success.

### Historical background

5. The issue of sustainable fisheries has evolved over the years at the regional and subregional levels, before and after the Venice Ministerial Declaration for the Sustainable Development of Fisheries in the Mediterranean<sup>1</sup>. Created in 1949 as a Council under Article XIV of the FAO Constitution, by means of an international agreement, the GFCM

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<sup>1</sup> In 2003, the Ministers of Mediterranean riparian countries met in Venice (Italy) with a view to renewing their commitment to work together towards developing sustainable and responsible fisheries. This commitment was embodied in the Venice Declaration which focused, in particular, on the future work of the GFCM and its role in this endeavour.

was entrusted with the primary responsibility of supporting Mediterranean and Black Sea riparian countries in elaborating common rules on exploited fisheries. The GFCM Agreement had been amended three times prior to the Venice Declaration, including in 1997 when new obligations were agreed upon by contracting parties, consequently morphing the Council into a Commission endowed with administrative and financial autonomy.

6. With the entry into force of the third amendment to its constitutive Agreement, in 2004, the GFCM was provided with the operational means to step up its work in its area of application. Progress should in fact be measured from 2004 onward, following the Venice Declaration, when the role of its Scientific Advisory Committee on Fisheries (SAC) was reinforced and new subsidiary bodies – such as the Compliance Committee (CoC) and, later, the Working Group on the Black Sea (WGBS), developed as an ad hoc mechanism for scientific work and decision-making for Black Sea riparian states – were created. This allowed to better address the challenges identified. Such challenges include the need to provide timely data and information, to encourage the active participation of scientists in technical work, to revert the overexploitation of main fish stocks, to improve the evaluation and management of fishery resources, to protect marine biodiversity and marine ecosystems from harmful bycatch and discarding practices and to reduce the incidence of illegal, unreported and unregulated (IUU) fishing. Since 2004, some 50 decisions have been taken including binding recommendations underpinning a regional management system consisting of data collection and reporting schemes, assessments and evaluations of commercially exploited stocks, elaboration of management measures, area-based management tools, monitoring, control and surveillance (MCS) instruments and periodical discussions on the implementation of decisions in place.

7. Consistent with the calls by the UN General Assembly and the Committee on Fisheries of the FAO, a performance review was carried out in 2009–2011 to assess the effectiveness of the GFCM, under the stewardship of an ad hoc Task Force that eventually recommended a set of amendments to the GFCM Agreement with the objective of further modernizing the Commission. From an institutional point of view, the legacy of the Venice Declaration is enshrined in the GFCM Agreement, as amended in 2014. The renewed institutional framework of the GFCM is a response to a new generation of challenges currently affecting sustainable fisheries in the region. Its premise is a subregional approach to fisheries management, reinforced by a strong network of partner organizations that collaborate based on several MoU and with the support of the GFCM FWP to carry out the increasing technical activities.

8. The positive impacts of the resolute actions stemming from the GFCM reform will likely play out in the near future. Although the challenges ahead are important, the GFCM nowadays is a modern RFMO with the capability and expertise to take appropriate decisions based on the best available scientific advice and ensure their implementation. In parallel, a number of organizations have made substantial progress in working on several aspects connected to fisheries in the Mediterranean and the Black Sea, placing them among their priorities and thus paving the way for enhanced collaboration and synergies

#### **International context**

9. At the UN Sustainable Development Summit 2015 (New York, 25–27 September),

world leaders adopted the 2030 Agenda for Sustainable Development, which includes a set of 17 Sustainable Development Goals (SDG) to end poverty, fight inequality and injustice, and tackle climate change by 2030. The SDG 14 – entitled “Conserve and sustainably use the oceans, seas and marine resources for sustainable development” – builds upon the provisions of numerous legal instruments that have been adopted to ensure the conservation and sustainable use of the marine environment and its resources – e.g. the United Nations Convention on the Law of the Sea (UNCLOS), the FAO Code of Conduct for Responsible Fisheries and the United Nations Fish Stocks Agreement – and advocates for healthy and resilient marine ecosystems based on multiple elements. Similar relevance in the context of sustainable fisheries can be attributed to the Aichi Biodiversity Targets (ABT), in particular Target 6 which concerns fisheries. The SDG 14 and ABT 6 can therefore be regarded as embodying comprehensive strategies calling for phased action at all levels of governance, including at the regional level. The SDG 14 in particular offers substantial guidance as to how challenges to the sustainability of fisheries should be tackled, including the following, which are particularly relevant to the sustainability of Mediterranean and Black Sea fisheries:

<b>SDG 14</b>	
<b>Target 14.2</b>	by 2020, sustainably manage and protect marine and coastal ecosystems to avoid significant adverse impacts, including by strengthening their resilience, and take action for their restoration in order to achieve healthy and productive oceans
<b>Target 14.4</b>	by 2020, effectively regulate harvesting and end overfishing, illegal, unreported and unregulated fishing and destructive fishing practices and implement science-based management plans, in order to restore fish stocks in the shortest time feasible, at least to levels that can produce maximum sustainable yield as determined by their biological characteristics
<b>Target 14.5</b>	by 2020, conserve at least 10 percent of coastal and marine areas, consistent with national and international law and based on the best available scientific information
<b>Target 14.7</b>	by 2030, increase the economic benefits to Small Island developing states and least developed countries from the sustainable use of marine resources, including through sustainable management of fisheries, aquaculture and tourism
<b>Target 14.7.a</b>	increase scientific knowledge, develop research capacity and transfer marine technology, taking into account the Intergovernmental Oceanographic Commission Criteria and Guidelines on the Transfer of Marine Technology, in order to improve ocean health and to enhance the contribution of marine biodiversity to the development of developing countries, in particular small island developing states and least developed countries
<b>Target 14.7.b</b>	provide access for small-scale artisanal fishers to marine resources

	and markets
<b>Target 14.7.c</b>	enhance the conservation and sustainable use of oceans and their resources by implementing international law as reflected in UNCLOS, which provides the legal framework for the conservation and sustainable use of oceans and their resources

10. As a UN specialized agency, the FAO already contributes to the global implementation of the SDGs through a strategic framework, of which Strategic Objective 2 specifically aims to increase and improve the provision of goods and services from fisheries in a sustainable manner, addressing in particular multi-sectoral approaches for ecosystem management, capacity building, governance frameworks and the like.

11. In order to support the achievement of UN targets, as well as the international obligations stemming therefrom, including the FAO Strategic Objectives, the mid-term strategy towards the sustainability of Mediterranean and Black Sea fisheries has been elaborated.

12. The mid-term strategy will have an external dimension in that progress in implementing SDG 14 and ABT 6 through the regional targets, outputs and activities foreseen therein will be reported to international fora where the achievement of globally agreed goals is being monitored. As a regional body having a competence relevant to the implementation of SDG 14 and ABT 6, the GFCM is expected to provide information on the Mediterranean and Black Sea through, *inter alia*, the submission of reports and participation in meetings.

### **Regional context**

13. The geopolitical situation in the Mediterranean and the Black Sea is currently complex. As of late, the Mediterranean has been experiencing significant instability due to ongoing conflicts and political turmoil in the region which, in turn, has exacerbated the problem of migration across the sea. At the same time, the existing gap in the level of development between the different subregions of the Mediterranean remains a top priority on the regional agenda. Similar considerations apply to the case of the Black Sea although different issues are at stake, including weaker fisheries governance resulting *inter alia* from the fact that not all six riparian countries are members of a same institutional arrangement such as the GFCM. In light of the special characteristics of the Mediterranean and Black Sea, it is all the more imperative to ensure a sound strategy is in place to promote sustainable development in the region. The fisheries sector, in particular, has an important role to play in such a strategy, as it is crucial to livelihood protection, food security and sustainable long-term development in the Mediterranean and Black Sea.

14. The GFCM recently released assessment *The state of Mediterranean and the Black Sea fisheries* (SoMFi 2016) highlights the impact of fisheries, and in particular the small-scale fisheries sector, within the region. Indeed, 80 percent of the region's fisheries are small-scale fisheries, underlining the role of fisheries in sustaining the coastal communities of the region. Although the value generated from the first sale of fish products from Mediterranean and Black Sea fisheries may seem relatively small compared with other sectors (representing less than 1 percent of regional gross domestic

product [GDP]), the ability of the sector to target some of the most economically vulnerable coastal communities in the region makes it a key player in any sustainable development strategy. In fact, the value at first sale as a percentage of GDP is six times greater in the developing countries of the southern Mediterranean than in the wealthier northern Mediterranean countries. Furthermore, exports of fish products from this region represent over 10 percent of total global exports, indicating significant secondary impacts of this sector on the wider economy.

15. Likewise, around a quarter of a million people are directly employed onboard fishing vessels in this region; yet the number of people dependent on the fishing sector for their livelihoods increases exponentially when considering the families supported by the fishers of the region and those employed in related sectors, such as fish processing, vessel maintenance and tourism. Furthermore, around 60 percent of fishing employment is found in the developing countries of the southern and eastern Mediterranean, meaning that the majority of the jobs provided by this sector are located precisely where jobs are needed.

16. Taken together, these factors endorse the potential of the fishing sector to play an instrumental role in the sustainable development of the Mediterranean and Black Sea region and, in particular, its most vulnerable coastal communities. To this end, reliable data on the status and trends on stocks and fisheries is needed, so that management plans embracing the ecological, economic and social aspects are adopted to ensure the sustainability of fisheries. Building on the success of the SDGs in drawing the attention of the international community to the role of fisheries in sustainable development, a regional strategy which adapts such principles to the Mediterranean and Black Sea context is of paramount importance to address current challenges in this area.

## **2. Nature and scope**

17. The proposed mid-term strategy is linked to SDG 14 and the FAO Strategic Objective 2. As this strategy stems from existing international and regional legal instruments, it does not create any new obligations on GFCM contracting parties and cooperating non-contracting parties (CPCs). On the other hand, it purports to define a course of instrumental action to further progress in the development of sustainable fisheries at the regional level. It is programmatic and multiannual in nature and provides guidance for the strategic priorities in the 2017–2020 period, identifying key activities that complement, when needed, the regular work carried out by the different organizations in relation to fisheries. The mid-term strategy addresses three main pillars of the work of the GFCM, as the RFMO in the area: i) the scientific and technical work of the SAC and its subregional committees in the Mediterranean Sea and of the WGBS in the Black Sea, each of them carrying out core functions towards the provision of scientific advice for the Commission in light of relevant biological, social and economic parameters; ii) the decisions taken by the Commission in relation to capture fisheries, including all industrial, small-scale and recreational fisheries, and iii) the thorough assessment of the implementation of adopted management measures by CPCs, including efforts to fight against IUU fishing through the enhancement of MCS, as overseen by the CoC.

18. The mid-term strategy does not apply to aquaculture as this increasingly important sector has distinctive requirements that need to be addressed specifically. A dedicated

Task Force within the framework of the GFCM is currently developing a strategy for the sustainable development of Mediterranean and Black Sea aquaculture.

### 3. Guiding principles

19. The implementation of the proposed mid-term strategy towards the sustainability of Mediterranean and Black Sea fisheries will be guided by the following select principles which are in place at the FAO level:

Best available knowledge: The provision of advice, including on the status and trends of stocks and fisheries, should be based on the best available knowledge, including scientific advice and relevant information emanating from a variety of sources and stakeholders. Efforts to collect all information available shall be ensured, and standards for assuring the quality of information should be applied wherever and whenever practicable and appropriate within SAC and WGBS;

Objectivity and transparency: The collection, analysis and dissemination of information on the status and trends of fisheries, ecosystems and marine environment should contribute to the transparent provision of the best scientific evidence available, while respecting any confidentiality requirements. Uncertainty associated with information on status and trends should be expressed, without detracting from the application of the precautionary approach, when data and information are incomplete. Information on activities towards the fight against IUU fishing should be made available, respecting confidentiality requirements;

Timeliness: The collection, analysis and dissemination of information on the status and trends of fisheries, ecosystems and marine environment, as well as information on IUU fishing, should be provided in as timely a manner as possible;

Participation and cooperation: The collection, analysis and dissemination of information on the status and trends of fisheries, ecosystems and marine environment, as well as information on IUU fishing, should account for all relevant participants in the preparation, analysis and presentation of scientific advice and conclusions. Relevant participants may include, *inter alia*, representatives of CPCs and other riparian states, relevant international, non-governmental and civil society organizations. The existing cooperative network established through the adoption of MoU would be relied upon, having regard to the cross-sectoral nature of the strategy;

Adaptability: The collection, analysis and dissemination of information on the status and trends of fisheries, ecosystems and marine environment, as well as information on IUU fishing, should be adaptive enough to permit adjustments, as necessary, to ensure their effective support of fisheries management based on the most recent scientific advice available.

### 4. Objective and targets

20. The overall objective of the mid-term strategy is to improve, by 2020, the sustainability of Mediterranean and Black Sea fisheries, by achieving five targets and related outputs and activities.

### **TARGET 1: Reverse the declining trend of fish stocks through strengthened scientific advice in support of management**

It is recognized that, with only 40 percent of the landings in the GFCM area of application coming from stocks for which scientific advice is provided to the Commission, and with an even smaller percentage of the landings coming from fisheries that are subject to comprehensive management plans, there is a need to improve the coverage of advice on the status of stocks and to increase the percentage of landings coming from fisheries regulated by specific multiannual management plans.

It is also recognized that, whenever possible, the advice provided to the GFCM as the international body in charge of adopting binding recommendations for the region should address all relevant aspects needed for decision making, including past and current socio-economic characteristics of the fisheries, as well as the potential socio-economic impacts of alternative management measures. Furthermore, when this information is lacking or scarce, precautionary measures should be advised so that, based on the precautionary approach, the Commission can still efficiently take decisions to regulate fisheries.

It is agreed that, consistently with SDG Targets 14.2, 14.4 and 14.7, commitment is needed to implement, by 2020, actions to increase the existing scientific and socio-economic knowledge in support of fisheries management, and to adopt necessary decisions to reverse the current overexploitation rates, reducing the percentage of stocks outside biologically safe limits, through the achievement of the following:

Output 1.1: Enhanced knowledge and expertise on Mediterranean and Black Sea fisheries  
Mediterranean and Black Sea riparian states have systems in place for the collection of fisheries data and information and its subsequent submission in line with specific binding recommendations. The GFCM in particular receives such information through dedicated data calls, national reports to its technical subsidiary bodies and through ad hoc questionnaires. The GFCM Data Collection Reference Framework (DCRF) organizes the different data calls and provides indications and tools on how to collect and submit data to the GFCM, with a view to creating a more rational and efficient database in support of decision making. Furthermore, regional workshops and working groups on a variety of topics, including stock assessment, and dedicated conferences such as the Regional Conference “Building a future for sustainable small-scale fisheries in the Mediterranean and the Black Sea” (SSF Conference) have provided experts with fora in which information could be exchanged and incorporated into the advice from the subsidiary bodies to the Commission. However, this information is still fragmented and unbalanced between different subregions and aspects such as socio-economic characteristics of fisheries are still not well understood and incorporated in the advice.

This output will require the compilation of data and information on different fisheries-related issues, including through the implementation of the DCRF, as well as the execution of a number of activities as listed below:

a. The creation of a GFCM Forum on Fisheries Science (GFCM FishForum), expected to act as a hub for collecting in a more comprehensive manner experiences and scientific information/data on aspects related to fisheries, from stock assessment to socio-economic issues and anthropogenic effects on fisheries and ecosystems. Among other

results, the GFCM FishForum should support stock assessment-related work, the compilation of existing knowledge on the status of stocks and discussions on harmonized ways to provide advice on stocks and fisheries, the creation of a database with comprehensive and reliable fisheries data and the establishment of a network of experts and research institutions covering different domains of fisheries science. The Forum will be organized around the following thematic clusters: stock assessment, socio-economic aspects, small-scale and recreational fisheries, bycatch and discards, IUU fishing, fishing technology, interactions between fisheries and marine ecosystems, stakeholders and regional/subregional platforms.

b. The realization of regional surveys at sea, including acoustic surveys for pelagic species as well as trawl surveys for demersal fisheries. These joint surveys, carried out in the context of FAO, are expected to provide information on a large number of species over large areas and serve as tuning indices for assessment purposes, as well as provide validation on the advice on the status of the main commercial stocks.

c. The compilation of catalogues of fishing activities by geographical subarea, also for small-scale and recreational fisheries, and including information on fishing gear and fishing operations, description of fishing areas as well as target and bycatch species. This catalogue is expected to provide a comprehensive summary of fishing activities in the Mediterranean and the Black Sea, as well as updated estimates of fishing capacity by fleet segment and subregion.

All information gathered through this output is expected to feed into the process of the provision of advice (see Outputs 1.2 and 1.3) and will also be summarized among others in the next issues of the report on *The state of Mediterranean and Black Sea fisheries* (SoMFi), expected to be delivered biennially under the framework of this strategy (in 2018 and 2020).

#### Output 1.2: Socio-economic information and analysis incorporated into scientific and management advice

In recent years, GFCM subsidiary bodies have made efforts to integrate available socio-economic analysis into the advice provided to the Commission through dedicated workshops on bioeconomic assessment of management measures. Despite data limitations, attempts have been made to review existing methodologies to perform management strategy evaluation (MSE) simulations and to assess the economic, social and biological implications of alternative management scenarios for certain stocks. However, the quality and quantity of available socio-economic data are still limited and work is needed to harmonize methodologies for socio-economic analysis, including on the definition of adequate indicators that could be used across the region, so as to further integrate socio-economic data into management advice. Furthermore, information on socioeconomic characteristics should facilitate an analysis of profitability and therefore the integration of dedicated measures for the valorization of fish products into management measures (see Output 1.3). In order to achieve this output, the following activities should be executed within the mid-term strategy:

a. The definition of socio-economic indicators and the completion of a comprehensive regional survey on the socio-economic characteristics of fisheries in the Mediterranean and the Black Sea. This survey is expected to help overcome a main barrier to the

integration of socio-economic data in management advice by providing accurate, timely and complete socio-economic baseline data on fisheries in the region.

b. The incorporation of socio-economic information into the assessment of the state of main commercial fisheries and the provision of advice on the comparative impacts of alternative management scenarios.

**Output 1.3:** Enhanced science-based GFCM regulations on fisheries management

In recent years, relevant GFCM subsidiary bodies have improved their advice, both in terms of scope (e.g. covering aspects ranging from red coral to artificial reefs to the status of stocks and fisheries) and coverage (e.g. improving subregional coverage and increasing the percentage of the landings for which advice on stock status is given) and cooperation has been enhanced with relevant partner organizations towards an increased scientific base. At the same time, and following the adoption of the GFCM Guidelines on precautionary conservation measures pending the development and adoption of GFCM multiannual management plans for relevant fisheries at the subregional level in the GFCM area<sup>2</sup>, the GFCM has advanced towards the regulation of fisheries in its area of application, with the adoption of comprehensive management plans for small pelagic fisheries in the Adriatic Sea and for demersal trawling fisheries in the Strait of Sicily, and with an incipient management plan for turbot gillnet fisheries in the Black Sea.

However, advice in support of management measures still focuses on a limited number of topics and still addresses a small percentage of exploited stocks, marine populations, ecosystems and areas. In some cases, existing advice at the national level (e.g. assessment of national stocks) is not presented to the GFCM subsidiary bodies and therefore is not taken into account in the provision of advice. In other cases, information is scarce or lacking, and no scientific advice is provided. Furthermore, scientific advice is not always immediately incorporated into recommendations and, as a result, only a very small percentage of the landings come from fisheries regulated by comprehensive management plans.

Technical work for the improvement of the advice on cases with limited information (data-limited stock assessment methods) as well as technical work in support of the establishment of new management plans (e.g. for small pelagic fisheries in the western Mediterranean, deep-water shrimp in the central-eastern Mediterranean, anchovy in the Black Sea or European eel in the Mediterranean Sea) is already underway within the GFCM. Output 1.2, coupled with the work towards the estimation of IUU activity (see Output 3.3), will also support better decision making through the incorporation of socio-economic information, including aspects of valorization of fish products, as well as information on the impact of IUU.

In order to achieve this output, the following activities should be carried out within the mid-term strategy:

a. The implementation of a dedicated approach for the provision of advice to the GFCM by its subsidiary bodies. Such an approach envisions action for stocks/fisheries

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<sup>2</sup> OTH-GFCM/37/2013/1

where information on stocks/fisheries is either fragmented or not made available, and stocks/fisheries for which a validated scientific advice exists. In the former situation, immediate actions to collect the required information and make it available should be launched, while at the same time precautionary advice should be issued. On the other hand, when a validated scientific advice exists, the advice should include indications on the effect of alternative management measures on both the stocks and the fisheries, including on socio-economic aspects. Within this approach, and without prejudice to addressing additional species, the GFCM agreed on a list of priority commercial species by subregion for which an advice should be produced:

	Western Mediterranean	Central Mediterranean	Adriatic Sea	Eastern Mediterranean	Black Sea	
Pelagic species	<i>Engraulis encrasicolus</i>	<i>Engraulis encrasicolus</i>	<i>Engraulis encrasicolus</i>	<i>Engraulis encrasicolus</i>	<i>Engraulis encrasicolus</i>	<i>Trachurus mediterraneus</i>
	<i>Sardina pilchardus</i>	<i>Sardina pilchardus</i>	<i>Sardina pilchardus</i>	<i>Sardinella aurita</i>	<i>Sprattus sprattus</i>	<i>Sarda sarda</i>
Demersal species	<i>Parapenaeus longirostris</i>	<i>Parapenaeus longirostris</i>	<i>Mullus barbatus</i>	<i>Mullus barbatus</i>	<i>Merlangius merlangus</i>	<i>Psetta maxima</i>
	<i>Merluccius merluccius</i>	<i>Merluccius merluccius</i>	<i>Merluccius merluccius</i>	<i>Saurida lessepsianus</i>		<i>Mullus barbatus</i>
	<i>Pagellus bogaraveo</i>					
Species of conservation concern	<i>Anguilla anguilla</i>				<i>Squalus acanthias</i>	
	<i>Corallium rubrum</i>					
Invasive species	<i>Pterois miles</i>				<i>Rapana venosa</i>	
	<i>Lagocephalus sceleratus</i>					

b. [The operationalization of the Review Panel, as established by GFCM (Rule XVI of the GFCM Rules of Procedure) to review the scientific advice formulated by its subsidiary bodies and provide conclusions to support the decision-making process.]

c. The revision of existing management plans / development of new management plans, based on the technical advice provided by the subsidiary bodies, with the objective of addressing the

main commercial fisheries as well as those fisheries that rely on or show a strong interaction with resources in need of urgent action.

## **TARGET 2: Support livelihoods for coastal communities through sustainable small-scale fisheries**

It is recognized that small-scale fisheries play an important role in providing income and ensuring food security, particularly within economically vulnerable coastal communities.

Therefore, concerted action should be taken to support this sector.

It is recognized that the data available to measure the extent and impact of small-scale fishing activity are limited and can vary widely from country to country. Due to these data limitations, small-scale fisheries tend to be undervalued, potentially leading to their marginalisation in the decision-making process.

It is also recognized that states should be responsible for collecting complete, timely and accurate socio-economic data on the impact of small-scale fishing and for developing coherent policies to ensure resource and market access for small-scale fishers. Support will be provided within the mid-term strategy to enhance the coordination of efforts and to harmonize existing measures to support the small-scale fishing sector.

It is agreed that commitment is needed, by 2020, to support livelihoods within sustainable small-scale fisheries, consistent with SDG Targets 14.b and 14.7, through the realization of the following:

Output 2.1: Robust and timely information on the impacts of small-scale fisheries and recreational fisheries on living marine resources and on their interactions with other human activities in coastal communities

In recent years, work has been carried out to better understand the importance of small-scale fisheries in the Mediterranean and the Black Sea. Preliminary analyses have shown that these fisheries are the predominant sector in the region (accounting for 80 percent of the regional fishing fleet, 60 percent of all on-vessel fishing labour and approximately 25 percent of the total landing value from the region's capture fisheries), highlighting the crucial role that these fisheries must play in any strategy to sustainably manage living marine resources in the region. As discussed in depth at the First Regional Symposium on sustainable small-scale fisheries (27–30 November 2013, Malta) and the subsequent SSF Conference (7–9 March 2016, Algeria), due to the delicate socio-economic role these fisheries play in the region in providing livelihoods for hundreds of thousands of people in the coastal communities, concerted efforts are needed to support this sector. The importance of producing an accurate, timely and comprehensive socio-economic description of small-scale fisheries, and their interactions with other sectors such as recreational fisheries, have been identified as a crucial first step towards mitigating detrimental socio-economic impacts of efforts to manage the region's marine resources. However, despite similarities between small-scale fisheries and recreational fisheries, the latter deserve a specific action. Socio-economic indicators are needed to inform policy interventions that will help to maximize economic and social benefit, while minimizing environmental and ecological impacts. This output will require the execution of a number of activities as listed below:

a. The implementation of a regional survey on small-scale fisheries. This survey is expected to provide a snapshot of the ecological, social and economic impacts of small-scale fisheries in the Mediterranean and Black Sea and at the same time improve the capacity to collect relevant data on small-scale fisheries as requested through the DCRF. Information on the different gear used in SSF will be collected as part of the catalogue of fishing activities (Target 1) with a view to better linking SSF to the different fishing activities in coastal areas.

- b. The establishment of a permanent Working Group on Small-Scale and Recreational Fisheries. This working group is expected to foster knowledge-sharing platforms among small-scale and recreational fishers in region for the dissemination of best practices and the sharing of information, to oversee the completion of the regional survey on small-scale fisheries and to coordinate efforts among CPCs and relevant organizations.
- c. The assessment of the impacts of recreational fisheries and the consideration of best management measures to regulate these activities.

The information gathered through these activities should result in an estimate of the economic impact of small-scale fisheries on coastal communities and their interactions with related sectors, as well as inform the development of indicators to monitor the socio-economic status of small-scale fisheries and the management of recreational fisheries.

Output 2.2: FAO Small-Scale Fisheries Guidelines tailored to the specificities of the Mediterranean and the Black Sea

The FAO *Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries in the Context of Food Security and Poverty Eradication* (SSF Guidelines) constitute an important tool for supporting actions to secure sustainable small-scale fisheries and support livelihoods in coastal communities. These guidelines take a holistic approach, among others, promoting the importance of tenure rights, livelihood diversification, market access, decent working conditions and the engagement of women and marginalized groups, as crucial elements towards improving socio-economic conditions and strengthening small-scale coastal fishing communities. This output will require a holistic approach to supporting small-scale fisheries in the region, including by carrying out the following activities:

- a. The development of national plans of action for the implementation of the SSF Guidelines is expected to provide roadmaps for bolstering valorization, commercialization and livelihoods in small-scale fisheries and coastal communities in a way that adapts to the specific needs at the regional, subregional and national levels.
- b. The establishment of a regional platform to engage and promote dialogue among small-scale fishing associations in the Mediterranean and the Black Sea. This platform is expected to build on and reinforce existing subregional and national platforms in order to provide a participatory mechanism for knowledge-sharing, collaboration, stakeholder involvement, and the dissemination of best practices.
- c. The endorsement of the principle of decent work, as defined by the Work in Fishing Convention (C188) of the International Labour Organization (ILO), so as to promote, without compromising environmental sustainability, the improvement of socio-economic conditions within small-scale fisheries and the promotion of livelihood diversification.
- d. The organization of a high-level meeting in collaboration with strategic partners, including the Mediterranean Initiative of the World Wildlife Fund (WWF), to generate political will in small-scale fisheries within a Blue Growth context.

### **TARGET 3: Curb illegal unreported and unregulated fishing, through a regional plan of action**

It is recognized that better management of fisheries in the Mediterranean and the Black Sea is undermined by IUU fishing activities and the disregard of common rules. Although the impacts of IUU fishing are currently not assessed and therefore under-represented in the current status of fisheries and trends information, they must be adequately considered in the development of scientific advice for management.

It is stressed that CPCs, in their capacity as flag states, coastal states, port states and market states, have the primary responsibility to ensure respect of common rules by fishing vessels. Support will be provided within the mid-term strategy to enhance coordination of efforts and harmonize existing measures aimed at improving monitoring, control and surveillance.

It is acknowledged that, while the implementation of the two roadmaps to fight IUU fishing in the Mediterranean and the Black Sea adopted by the GFCM has been positive thus far, there is an important need to set political and operational objectives to counter illegal activities, building upon the elements of these roadmaps and reflecting relevant elements in the FAO International Plan of Action against IUU, which is already voluntarily applied in the region. It is also acknowledged that support will be provided for the organization and celebration of an international day for the fight against IUU fishing, to be imminently declared by the FAO upon the request of the GFCM.

It is agreed that there is a need to commit to effectively reducing IUU fishing in the Mediterranean and the Black Sea by 2020, consistent with SDG Target 14.4, by developing a holistic regional plan of action to fight IUU fishing, to eventually be transposed at the national level and that would among others achieve the following:

#### Output 3.1: Regular quantification of IUU fishing in the Mediterranean and the Black Sea and harmonization of existing measures to fight against IUU fishing

IUU fishing remains one of the greatest threats to the conservation and sustainable use of fisheries, undermining national and regional management efforts. In 2003, it was calculated that the lower and upper estimates of the total value of IUU fishing worldwide were between US\$10 billion and US\$23 billion annually, representing between 11.06 and 25.91 million tonnes of fish, and there is today a general recognition that the incidence of IUU fishing has not decreased since. Another topical issue relating to IUU fishing is the need to harmonize at the regional level existing measures used to counter illegal activities. In this regard, guidance is not only sought from the Regional Plan of Action to fight IUU fishing but also from an evaluation of relevant national legislations in place which are collected in the GFCM database of national legislations. In order to meet the target of considerably reducing IUU fishing, it will be instrumental to carry out the following activities:

a. The realization of an assessment of the quantity, magnitude and characteristics of IUU fishing in the Mediterranean and the Black Sea. Whereas work is ongoing within the FAO to bring about a common methodology to assess IUU fishing, a tailored approach for the Mediterranean and the Black Sea is needed with a view to supporting the scientific work of the SAC and WGBS.

b. The evaluation of the adequateness of national legislations relating to IUU fishing adopted by CPCs as contained in the GFCM database of national legislations. As appropriate, this evaluation should lead to the revision of national legislations in view of the harmonization of measures to fight IUU fishing which will be facilitated by the Regional Plan of Action to fight IUU fishing.

#### Output 3.2: Reinforced inspection procedures in the framework of port state control

The regional system of port state measures in the Mediterranean and the Black Sea should be aligned with the provisions in the FAO Port State Measures Agreement (PSMA). Most importantly, the 5 June 2016 entry into force of the FAO PSMA brings about actions and initiatives to promote port controls worldwide. The GFCM should be involved in the correct implementation of the FAO PSMA, through the adoption of robust port state measures. Efforts will be needed, on the one hand, to support the ratification of the FAO PSMA by states and, on the other hand, to make sure that appropriate conditions are in place to strengthen port state measures (both political, legal and technical). This will entail carrying out several activities within the remit of the GFCM:

a. The promotion of training of national inspectors and, as appropriate, relevant officers, including jointly with other partners and by developing specific online instruments, with a view to launch national actions to better take stock of the needs of each recipient country relating to efficient port controls.

b. The establishment of a mutual assistance system will facilitate exchange of information between flag states and port states via the GFCM Secretariat and that of a regional information system to exchange port state measures related data will operationalize port state measures in the GFCM area of application, consistent with the provisions of the FAO PSMA, complementing the ongoing establishment of a regional monitoring and control system.

#### Output 3.3: Enhanced modular monitoring, control and surveillance (MCS) at the regional level

Since the adoption of the GFCM recommendation on the establishment of a vessel monitoring system (VMS), the Commission has been advancing on the phased development of a regional control system, with a view to enhancing monitoring, control and surveillance capabilities in the Mediterranean and the Black Sea. This system is needed in order to have the same control standards in place across the Mediterranean and the Black Sea and therefore ensure all CPCs are on par, regardless of whether or not they have a fishing monitoring centre. In this regard, priority will be given to the development of national VMS to verify whether these are consistent with minima requirements in place at the GFCM level. Furthermore, because of the high number of small-scale vessels operating in the Mediterranean and the Black Sea, the system will underpin a modular approach which is responsive to the needs of those CPCs which rely primarily on small-scale vessels. This output will complement control related activities already agreed upon by the GFCM, such as the working group on integrated MCS measures for demersal fisheries in the Strait of Sicily, and will be achieved by carrying out the following action:

a. The continuation of the operationalization of a regional VMS and control system, in order to help monitor adherence to fisheries restricted areas and to underpin GFCM data collection systems by progressively incorporating electronic tools, such as the e-logbook, which could be developed at the regional level. Effort and catches information deriving from this system would support the enhanced assessment of fisheries stocks, identification of fishing grounds and fishing activities, contributing to the achievement of Target 1.

#### **TARGET 4: Minimize and mitigate unwanted interactions between fisheries and marine ecosystems and environment**

It is underlined that healthy and productive marine ecosystems are an important means to supporting maximum sustainable yield and facilitating blue growth.

It is recognized that fisheries, as well as other anthropogenic-driven phenomena, such as climate change or the introduction of non-indigenous species, can have potentially negative effects on the marine environment and marine ecosystems.

It is agreed that, by 2020, consistent with SDG Targets 14.1, 14.2 and 14.5, necessary measures will be taken to minimize and mitigate negative impacts of fisheries on marine biodiversity and ecosystems, especially in relation to vulnerable species and ecosystems, as well as to mitigate negative anthropogenic effects on fisheries, in close coordination with partner organizations. These measures should be implemented by achieving the following outputs:

##### Output 4.1: Reduced bycatch rates in Mediterranean and Black Sea fisheries

Bycatch is considered as one of the most important threats to the profitability and sustainability of fisheries and, as such, it is considered to be one of the major concerns for most RFMOs and other fisheries management bodies. In the Mediterranean and the Black Sea, based on the analysis presented in SoMFi 2016, discard rates vary between areas and fishing gear, but can reach up to 20 percent of the total catch. In order to address this threat and to take into account previous concerns raised, this output will require the execution of the activities as listed below:

a. The implementation of a bycatch monitoring programme, including through the use of observers onboard commercial fishing vessels. This programme is expected to obtain representative data on the discard component of total bycatch in Mediterranean and Black Sea fisheries, as well as information on the incidental catch of vulnerable species that could occur during sampled fishing operations, with a view to facilitating the adoption of required management measures towards the reduction of bycatch rates.

b. The development and launch of a fully encompassing communication mechanism to educate fishers on the negative impacts of bycatch on fisheries productivity and on marine ecosystems. This activity entails, among others, the publication of infographics, cards and posters. Ecolabelling and certificates for fishers who ensure their commitment in fishing according to sustainable practices in the Mediterranean and the Black Sea should also be envisaged.

c. The implementation of effective management measures to improve the selectivity of

fisheries, including the possibility to use artificial reefs to protect fish essential habitats (e.g. nursery areas) as well as the implementation of more selective fishing gear.

d. The proposal of measures to reduce catches of vulnerable species when appropriate, by entrusting the SAC with this task.

e. The identification and implementation of mitigation measures to address the interaction between cetaceans and fishing gear.

#### Output 4.2: Healthier marine ecosystems and more productive fisheries

The GFCM was a pioneer in adopting, in 2005, a binding recommendation on the protection of seabeds below 1 000 meters depth from trawling, as a measure to minimize the impact of these fisheries on deep-sea ecosystems. Moreover, in 2006, the GFCM adopted a specific area-based management tool, the fisheries restricted areas (FRAs), to protect vulnerable marine ecosystems (VMEs) in the region. Furthermore, the Joint Cooperation Strategy on Spatial-based Protection and Management Measures for Marine Biodiversity has been elaborated among the Secretariats of the Agreement on the Conservation of Cetaceans of the Black Sea, Mediterranean Sea and Contiguous Atlantic Area (ACCOBAMS), the GFCM, the Mediterranean Programme of the International Union for Conservation of Nature (IUCN-Med), the UNEP/MAP through its Regional Activity Centre for Specially Protected Areas (RAC/SPA) and in collaboration with the Network of Managers of Marine Protected Areas in the Mediterranean (MedPAN), which will focus on the identification of priority spatial areas at regional scale for the implementation of protection measures, in order to maximize the potential benefits of such measures.

Specific actions towards the protection of Mediterranean populations of red coral (*Corallium rubrum*) have also been developed, and, within the context of the MoU between the GFCM and the United Nations Environment Programme – Mediterranean Action Plan (UNEP-MAP), a number of indicators for good environmental status (GES) of exploited marine populations have been established. In addition, within the same MoU, work towards the implementation of the Mediterranean Regional Plan on Marine Litter has been initiated. Finally, SAC subsidiary bodies have highlighted the potential combined effects of climate change and other direct and indirect anthropogenic impacts such as the introduction of non-indigenous species (often referred to as “alien species”) in the Mediterranean and the Black Sea, stressing the need to launch dedicated actions to better understand such phenomena so as to better mitigate their effects.

To achieve Output 4.2, coordination will be guaranteed between relevant regional organizations so to ensure:

a. The promotion of the identification and establishment of new FRAs to protect priority areas within ecologically or biologically significant marine areas (EBSAs), VMEs, etc. from harmful fishing activities, and the implementation of monitoring and control systems to ensure the efficiency of these spatial measures, also in relation to Target 3. This action should aim to achieve at least the protection of 10% of the coastal and marine areas, as expressed in Aichi Target 11. The CPCs should be closely involved in the definition of new FRAs.

b. The adoption of a comprehensive regional management plan for red coral, based on previous technical work carried out in the context of the GFCM subsidiary bodies,

including relevant GFCM guidelines, and updated advice as provided within Output 1.3.

c. The creation of an adaptation strategy to cope with potential effects of invasive species and climate change on fisheries. Such a strategy should be based on the results of an evaluation of the potential ecological and socio-economic effects of climate change and of the introduction of non-indigenous species on Mediterranean and Black Sea fisheries.

d. The creation of an adaptation strategy to cope with potential effect of marine litter on fisheries, as well as the implementation of fisheries management measures aimed to minimize the production of litter from fishing activities (e.g. abandoned fish gear), in line with existing Mediterranean regional management plan on marine litter.

### **TARGET 5: Enhance capacity-building and cooperation**

It is urged that CPCs, relevant intergovernmental and non-governmental organizations and concerned stakeholders enhance cooperation to promote sustainable development and blue growth in the Mediterranean and the Black Sea.

It is acknowledged that fulfilling the objective of the mid-term strategy through the proposed activities both requires and promotes increased scientific and technical cooperation a throughout the region. Particular efforts will be needed for the Black Sea, given that not all riparian countries are currently contracting parties to the GFCM.

It is agreed that commitment is needed, by 2020, in line with SDG Target 14.7, to help level the playing field for developing countries and to ensure the accrual of socio-economic benefits from the sustainable management of fisheries, by achieving the following:

#### Output 5.1: Improved national capacity for the management of fisheries resources

In recent years, the CoC has acknowledged that there is strong political willingness to support the work of the GFCM and to routinely carry out the assessment of adopted GFCM decisions. Some CPCs are, however, experiencing some difficulties in meeting their obligations stemming from GFCM decisions and, therefore, capacity-building efforts must be enhanced. In this regard, the GFCM Agreement recognizes, in particular, the needs of developing CPCs. This output will be achieved through the completion of the following activities:

a. The provision of capacity building for CPCs, as obliged by the Commission, when necessary, to assist CPCs in meeting their obligations stemming from relevant GFCM decisions. The provision of technical assistance by the GFCM has been sparse up to now as no clear mechanism existed to govern the provision of technical assistance, including from the identification of needs to the actual support on the ground.

b. The implementation of a technical assistance mechanism to support CPCs in bridging existing gaps. Such a mechanism should be based on recent work carried out by the CoC to thoroughly address the link between national gaps/shortcomings and the implementation of GFCM recommendations. Based on requests for technical assistance received by the GFCM thus far, the main following areas would be, among others, covered by the technical assistance mechanism: i) stock assessment and management plans; ii) data collection, analysis and transmission; iii) elaboration and amendment of

national legislations; iv) assessment and development of national VMS and control systems in accordance with GFCM standards; v) the strengthening of port controls and vi) the elaboration and development of case studies on small-scale fisheries.

c. The launch of a regional programme for education and training to lay down the foundation for a new generation of fisheries experts through mid- and long-term specialization curricula, in collaboration with regional and national research/training institutions, which would essentially cover domains such as population dynamics, including stock assessment, fishing technology, socio-economic analysis and fisheries legislation.

#### Output 5.2: Strengthened fisheries governance in the Black Sea

On the occasion of the 2014 amendment to the GFCM Agreement, the specificities of the Black Sea were recognized when it was decided to establish a specific mechanism to promote cooperation among riparian countries. Over the past decades, many efforts have been made to bring about a concerted approach to the issues and challenges that are faced in the Black Sea. The trend has shifted towards a regional decision-making process which has been promoted through the WGBS since 2011 (the year it was established). The contribution of the WGBS to fisheries governance has been decisive, to the extent that three binding recommendations have been adopted by the GFCM in the years that followed the establishment of the WGBS. Furthermore, a non-binding roadmap to fight IUU fishing in the Black Sea was also adopted. The most crucial element for fisheries governance in the Black Sea remains cooperation among the riparian countries. Enhanced cooperation has been staunchly pursued by the GFCM, leading to the granting of cooperating non-contracting party status to Georgia and Ukraine in 2015. There is momentum, at present, to build upon ongoing cooperation and further strengthen fisheries governance in the Black Sea. To this end, this output will be achieved through the completion of the following activities:

a. The organization of a high-level conference on fisheries governance in order to examine existing institutional hurdles and provide a forum for riparian countries to provide inputs to the ongoing process of cooperation in the Black Sea. Discussions are needed in particular to ensure full membership of the six riparian countries to the GFCM, in due course.

b. The launch of the start-up phase of a regional, scientific and technical cooperation project for the Black Sea, the BlackSea4Fish project, carried out in the remit of the WGBS. It is expected that this project would operate under the umbrella of the GFCM, with the aim to support the activities of the WGBS, and would contribute to further bridging gaps at the regional level, endowing the WGBS with the necessary support to make sure that its work programme is efficiently implemented.

#### Output 5.3: Increased cooperation with relevant actors

As part of the same organization, tight collaboration with the FAO Fisheries and Aquaculture Department on issues such as the development and implementation of the SSF Guidelines, the management of marine areas beyond national jurisdiction (ABNJ), the implementation of the FAO PSMA or the Global Record, has been instrumental to align

regional actions with global practices and to showcase regional initiatives in reply to international guidelines. The establishment of the FAO regional projects for the Mediterranean, starting with the launch of Copemed in 1996 and followed by MedSudMed, AdriaMed and EastMed, has substantially supported the SAC in the provision of scientific advice, thanks to the technical support and capacity-building activities directly provided to countries over the years.

In addition to the ongoing collaboration of the GFCM with relevant FAO departments and projects, at the time of writing, the GFCM has concluded 14 MoU. These instruments have been central to fostering synergies and avoiding duplications. Moreover, several initiatives are being undertaken in the framework of these instruments which are extremely important due to the transversal nature of the areas of cooperation addressed therein. In addition to the governmental cooperation promoted by the GFCM, intra-governmental cooperation with other institutions is also important. This output will be achieved through the following activities:

- a. The operationalization of existing MoU, including the launching of joint activities, with a view to avoiding duplications. Where new possibilities arise for new MoU, these should be submitted to the Commission for its consideration and adoption.
- b. In line with the FAO Strategic Objective 2, the strengthened coordination with the FAO Fisheries and Aquaculture Department and FAO regional projects, taking into account current challenges and recent changes within the GFCM, including the focus on a subregional approach and the launch of this strategy.

## 5. Implementation mechanisms

21. Consistent with Article 17 of the GFCM Agreement, the capacity of developing CPCs will be duly taken into account in implementing the strategy in order to level the playing field and bridge existing gaps. Technical assistance will be provided where there is a need to build national capacities so that existing commitments can be fulfilled equally. In this respect, the promotion of the “concerted actions” initiative or the signature of bilateral letters of agreement, as already implemented by the GFCM in the past with selected CPCs, should be encouraged.

22. The effective implementation of existing and future fisheries management-related decisions by CPCs is instrumental in reaching the objectives of the mid-term strategy.

23. The GFCM, through its relevant subsidiary bodies, should regularly assess the attainment of the targets during the period of implementation of the strategy, by reviewing the outcomes of specific activities, revising and updating, as appropriate, the expected outputs and providing guidance to reach more effectively agreed objectives.

*This strategy is dedicated to the late Mohamed HadjAli Salem, an important member of the GFCM family having twice served as GFCM Chairperson and also as the long-standing coordinator of the SIPAM network. His experience and commitment intelligently led the Commission through delicate times of change.*

## Annex 2

### Coordination meeting between GFCM Secretariat and WWF Mediterranean Marine Initiative

21 April 2017

Through this document, we attempt to provide a summary of discussions carried out in the course of the coordination meeting between the GFCM Secretariat and WWF, highlight potential areas for overlap between each organization's strategic activities, and begin to identify next steps for future collaboration.

**Each organization provided an overview of their respective strategic initiative:**

GFCM:

*"Mid-term strategy (2017-2020) towards the sustainability of Mediterranean and Black Sea fisheries"* (Mid-term strategy – full document available online: <http://www.fao.org/gfcm/activities/fisheries/mid-term-strategy/en/>)

Composed of 5 different targets:

1. Reverse the declining trend of fish stocks through strengthened scientific advice in support of management  
GFCM Forum on fisheries sciences, socio-economic surveys, etc.
2. Support livelihoods for coastal communities through sustainable small-scale fisheries  
SSF associations/platforms, recreational fisheries, high-level meeting on SSF
3. Curb illegal unreported and unregulated fishing, through a regional plan of action  
IUU assessment, MCS for SSF
4. Minimize and mitigate unwanted interactions between fisheries and marine ecosystems and environment  
Bycatch monitoring programme, selectivity of fisheries, awareness campaigns on bycatch, MPAs and FRAs, climate change adaptation strategy, marine litter
5. Enhance capacity-building and cooperation

WWF strategy:

Including 3 different axes:

1. Ocean governance  
UN SDGs, MPAs, implementation of international protocols, etc.
2. Fisheries  
CFP policy work with DG-MARE
  - a. Bluefin tuna
  - b. Small-scale fisheries and fisheries footprint
  - c. Seafood (value chain)
3. People & ocean

## **Main points of discussion for synergies between both organizations & potential next steps:**

### Bluefin tuna:

- Potential need to revitalize joint GFCM-ICCAT Working Group due to pending changes in bluefin tuna quotas and potential opening of quotas to SSF, therefore in interaction with a sector of direct interest to the GFCM.

#### NEXT STEPS:

- WWF and GFCM to keep on coordinating towards potential revitalization of the working group

### Small-scale fisheries:

- *SSF platforms:*
  - GFCM shares WWF's concerns about not duplicating work that has already been carried out, such as existing regional/sub-regional SSF platforms.
  - The GFCM is currently carrying out a census of existing platforms/organizations throughout its area of application. Next steps to build on the outcomes of this census will be discussed at the WGSSF (September 2017).
  - GFCM is interested in facilitating mechanisms for small-scale fishers to participate in or provide input for management decision-making processes, therefore, the GFCM's work in this area seeks to determine best practices and ways to support existing and well-functioning mechanisms.
  - WWF is planning on launching national SSF stakeholder platforms in countries of pilot study (particularly Turkey and Greece)
- *SSF data collection:*
  - GFCM will be conducting a socio-economic survey throughout its area of application for all fleet segments, based on the socio-economic data collection requirements requested through the DCRF
  - As part of WWF's SSF project, data is needed to characterize Mediterranean SSF (number of vessels, catches, gears, etc.)

#### NEXT STEPS:

- *SSF platforms:*
  - The GFCM welcomes WWF's inputs on next steps for reinforcing SSF participation in GFCM decision-making processes. Input on a draft roadmap (to be presented at WGSSF) is strongly encouraged, particularly in light of WWF's ongoing work in this area.
  - WWF to keep GFCM informed as planning takes shape for the project to promote national platforms in select countries. Areas where GFCM can support or complement this work to be discussed as plans become clearer. These national dialogues could potentially input to the GFCM Fish Forum
- *SSF data collection:*

- WWF is welcome to provide feedback on the GFCM's socio-economic survey methodology (presentation and discussion at WGSSF) and efforts can be made, to a reasonable extent, to attempt to accommodate WWF's data collection needs within the survey.
- GFCM can share data with WWF on the characterization of Mediterranean SSF once the socio-economic survey is complete (end of 2018).

#### Marine litter

- With regard to marine litter, WWF engages particularly on the issue of plastics
- WWF discussing a possible big campaign on marine litter in the Mediterranean for 2018
- It was noted that the good collaboration between GFCM and UNEP/MAP has been showcased at the UN/global level as a best practice scenario, including regarding work on marine litter. Marine litter could potentially be an area where collaboration between GFCM, UNEP/MAP and WWF could be widely showcased.

#### NEXT STEPS:

- Potentially develop a common project to facilitate recycling of fishing gears, taking into account recent advances in marking of fishing nets towards mitigation of abandoned fishing gears.
- Identify joint projects to promote "fishing for litter" activities.

#### Bycatch (discards and incidental catch of vulnerable species):

- GFCM has launched a discards monitoring programme and will launch a joint project on incidental catches of vulnerable species (funded by MAVA Foundation – WWF could provide some inputs as programmatic partners).
- GFCM planning to produce materials that governments can use for awareness campaigns on discards and incidental catch of vulnerable species at the national level. In particular, a priority area would be campaigns directed at fishers on why it is useful to collect data on these issues.
- WWF participates in the execution of the EU H2020 MINOUW Project (active until February 2019 - targeting discards in EU countries), progress and results were presented at the MEDAC meeting in Palma de Mallorca (Oct 2017), along with related communications activities to promote these results are planned.
- WWF noted the App produced by the MINOUW project, which could be useful for the GFCM discard monitoring programme (if technical difficulties, such as compatibility with iOS, can be resolved, see below)

#### NEXT STEPS:

- The GFCM could benefit from WWF's communications expertise in the awareness activities; any related material to be approved by both organizations
- WWF to assess if it could be possible to widen the scope of current awareness campaigns on discards (currently only for EU countries) to the entire Mediterranean – GFCM potentially to cover some expenses of specific awareness

activities led by WWF

- Potential to carry out specific awareness campaigns through WWF country offices: Algeria, Morocco, Tunisia (WWF Fishery Officer), Turkey (WWF Marine Officer)
- GFCM is recruiting a communication consultant, to be put in contact with WWF communication officers (MMI Communication Officer and Project MINOUW Communication Officer)
- GFCM will reach out to WWF when preparing a regional review on bycatch, for sharing and integration of relevant existing information
- WWF to liaise with MINOUW project App developer (Quadralia) to ensure compatibility of the App with iOS so that it can also be used by iPhones, rather than just Android devices. GFCM will then test and assess the possibility to use the App in its discards monitoring programme, to be carried out in 2018.

#### Other issues

In reply to WWF's specific request, the GFCM indicates the following meetings as those that would most benefit from the contribution and presence of WWF:

#### *Technical fora*

- Meetings of the SAC subregional committees (of subregions relevant for WWF's work)
- WGSSF
- WGIUU

#### *Institutional fora*

- Regular session of SAC

Regular session of the Commission

## Annex 3

### Malta MedFish4Ever Ministerial Declaration

*Malta, 30 March 2017*

#### MINISTERIAL CONFERENCE ON THE SUSTAINABILITY OF MEDITERRANEAN FISHERIES

MALTA, 30 MARCH 2017

#### MALTA MEDFISH4EVER MINISTERIAL DECLARATION

##### *Preamble*

1. We, Ministers, heads of national delegations and the European Commissioner for Environment, Maritime Affairs and Fisheries, have met in Valletta, Malta, on 30 March 2017 to strengthen governance to attain the environmental, economic and social sustainability of Mediterranean fisheries;
2. For millennia, Mediterranean fisheries have supported the livelihood of the coastal communities and local economies. They are of vital importance for food security and provide essential socio-economic value and function. Over 300 000 persons are directly employed on fishing vessels in the Mediterranean, whilst many more indirect jobs depend on the sector;
3. 14 years after the ministerial declaration for the sustainable development of fisheries in the Mediterranean adopted in Venice, Italy, we are standing once again at a historical juncture;
4. The objectives set by the Venice declaration have led to significant progress in regional fisheries management at institutional, scientific, technical and inter-governmental levels;
5. However, despite common efforts, with more than 85 % of the scientifically assessed stocks fished beyond safe biological limits, the future of fisheries in the Mediterranean is today at stake, putting increasing pressure on our fishermen as sub-optimal yields become an increasing threat to employment, further jeopardising stability of food supply and regional security;
6. Increasing pressures are exerted on marine ecosystems by a variety of human activities which include overfishing and unsustainable fishing practices, as well as drilling, transport, coastal urbanisations, agriculture and industry oriented pollution, climate change and invasive species;
7. In the light of the unprecedented humanitarian challenges faced in the Mediterranean, securing fishery resources is a major leverage to preserve the livelihoods of coastal communities, especially the most fragile ones, and contribute to set the conditions for stabilisation and fruitful international cooperation in the region;

8. In the spirit of solidarity in the Mediterranean, recognise that we have the shared responsibility to ensure the biological, social and economic sustainability of Mediterranean fishery resources for present and future generations, taking into account the importance to implement management, conservation and control measures, giving due consideration to the particular needs of developing coastal States in the definition and implementation of such measures;

*We agree to strengthen governance for Mediterranean fisheries based on the following objectives and principles*

9. Develop a comprehensive governance involving all stakeholders and empowering fishermen, especially within small scale fleets, to take direct responsibility in the participative management of fisheries, building on the Mediterranean self-regulatory tradition;
10. Highlight the central role of the Food and Agriculture Organization and the General Fisheries Commission for the Mediterranean to support cooperation in sustainable development of both fisheries and aquaculture among coastal States, together with the International Commission for the Conservation of Atlantic Tunas;
11. Achieve exploitation at Maximum Sustainable Yield to preserve food security, artisanal and subsistence fisheries and the socio-economic role of fisheries, in line with the Johannesburg declaration on sustainable development and Sustainable Development Goal 14 to 'Conserve and sustainably use the ocean, seas and marine resources for sustainable development';
12. Building on the applicable national and international rules, establish a culture of compliance based on transparency, cross-border cooperation as well as efficient prevention, detection and action to ensure a rule-based management of fisheries;
13. Ensure adequate data collection and exchange on all types of fleets including small-scale and recreational fisheries to reinforce scientific knowledge on fish stocks and ecosystems;
14. Recognize that small scale and recreational fisheries must play an increased role in contributing to data collection and collective research efforts;
15. Further integrate the socio-economic dimension in fisheries management and data collection;
16. Encourage fair and balanced distribution of fishing opportunities between small scale and larger fleets, especially where fleet interoperability exists for different high-value iconic fish stocks, giving due consideration to low impact methods as well as other environmental, social and economic criteria;
17. Improve working conditions and promote the role of women in the fisheries sector and aquaculture and support young people experiencing difficulties in accessing the labour market;
18. Develop fisheries management in the framework of a comprehensive eco-systemic approach, in order to strive towards the gradual elimination, on case by case basis, of discards, bycatches, and of incidental catches of vulnerable species, to enhance the protection of sensitive habitats and address the effects of pollution and other external factors on fisheries; In this respect, without prejudice to the sovereign rights of States and in accordance with relevant international law,

- implement and promote well-managed marine protected areas and other area-based management tools such as fisheries restricted areas, to ensure complementarity between objectives for biodiversity protection and sustainable fisheries;
19. Take into account the specificity of small-scale fisheries and the potential of aquaculture as a major source of food, income and activity for coastal communities;
  20. Devise and consider appropriate incentives for small scale and recreational fisheries to play a more active role as 'guardians of the sea' to meet environmental and security objectives;
  21. Increase the profitability and value chain of fishery products whilst ensuring food security; in line with the FAO strategic objectives;
  22. Take into account the Union for the Mediterranean Ministerial Declaration on the Blue Economy of 17 November 2015, which stresses the need for the Mediterranean region to make the best use of the potential of the blue economy to promote growth, jobs and investments and reduce poverty, whilst safeguarding healthy seas and developing a clear vision for the sustainable and integrated development of marine and maritime sectors, including fisheries, at national and sea basin level;
  23. Investing in the sustainable development of the blue economy as a new attractive alternative for fisheries under increasing pressure;
  24. Seek a comprehensive approach to promote sustainable fisheries and economic diversification towards sustainable blue economy in coastal communities, in particular by encouraging coordinated actions through the existing cooperation frameworks in the Mediterranean, both at political and technical levels;

***We urge all riparian States to***

25. Comply with the management measures adopted by the GFCM and fully implement the GFCM mid-term strategy for 2017-2020 towards the sustainability of Mediterranean and Black sea fisheries;
26. Ratify and implement the FAO agreement on port State measures to prevent, deter and eliminate illegal, unreported and unregulated fishing;
27. Ratify and implement the Barcelona convention and its protocols on the conservation of Mediterranean environment, as applicable for the signatories;
28. Ensure an effective implementation of the United Nations Framework Convention on Climate Change and relevant climate change objectives, as well as the COP 22 Marrakech proclamations and provide their support to the Med COP process;
29. Strengthen solidarity across the Mediterranean basin to address the needs of coastal States and provide them with technical, scientific and financial support to improve their administrative capability, making the best use of existing international, regional and bilateral funding mechanisms to develop their sustainable use of marine resources, in particular through the

European Neighbourhood Policy Instrument, the European Maritime and Fisheries Fund and the European External Investment Plan;

30. Cooperate to establish fisheries restricted and marine protected areas including in international waters without prejudice to the sovereign rights and in accordance with relevant international law;

*We commit to implement the following actions*

*A) Enhance data collection and scientific evaluation*

31. Ensuring proper data collection and enhancing the knowledge on stocks are of utmost importance to achieve sustainable management of stocks. To this aim, we:
32. Will ensure that 100 % of key Mediterranean stocks are subject to adequate data collection and scientifically assessed on a regular basis by 2020, taking into account the impact of recreational fisheries and external factors such as pollution. We ask the GFCM during its 2018 annual session at the latest, to prepare a progressive calendar to achieve this target;
33. Call upon the forum on fisheries science to be convened by GFCM to ensure an effective unity of action of scientific activities through effective coordination of stock assessment, common guidelines on data collection and stocks assessment methodologies to ensure reproducibility and data quality as well as data exchange on a need-to-share basis through the effective interconnection of databases, taking into account existing systems and relevant data protection requirements. We ask the regional forum on fisheries science to submit to the Scientific Advisory Committee on Fisheries (SAC) a proposal for common working rules implementing the abovementioned objectives, to be then submitted to the GFCM annual session in 2019 for adoption as recommendation;

*B) Establish an ecosystem-based fisheries management framework*

34. Existing management measures will be complemented and expanded to progressively achieve exploitation at maximum sustainable yield. To this end, we undertake to:
35. To the extent possible no later than 2020, establish and implement a regional capacity plan ensuring an adequate balance between resources and the fleet capacity in all riparian countries;
36. To the extent possible no later than 2020, manage 100 % of the key fisheries with a multi-annual management plan in order to restore and maintain the populations of fish stocks above fishing mortality levels capable of producing maximum sustainable yield. We ask the GFCM to agree during its 2018 annual session on the list of key fisheries for which a multi-annual management plan should be implemented and on a progressive calendar with yearly quantified objectives to set-up management plans by 2020. The plans should be based on the GFCM guidelines for multiannual management and include *inter alia* and whenever applicable management measures based on effort capacity or catch limits and associated technical measures, targeting the gradual elimination of discards and increased selectivity;

37. Ensure adequate protection of vulnerable species and sensitive habitats, with a specific attention to cetaceans, turtles, seabirds, seagrass habitats and coralligenous and maërl beds, including in marine protected areas without prejudice, if applicable, to the sovereign rights of States, designated for their conservation, through inter alia specific fisheries management measures embedded in multi-annual management plans;
38. Further develop fisheries restricted and marine protected areas ensuring an effective protection of at least 10% of the Mediterranean Sea by 2020, in line with the United Nations Sustainable Development goal 14.5 and Aichi Biodiversity Target 11 and by implementing the relevant actions under the Barcelona Convention's 'Roadmap for a comprehensive coherent network of well-managed marine protected areas (MPAs)'. We call upon GFCM contracting parties and the SAC to present to the GFCM annual session in 2018 proposals for the development of new fisheries restricted areas, without prejudice to the state's sovereign rights and in accordance with relevant international law, in particular to establish a consistent network of essential fish habitats, following a thorough consultation process. We invite the GFCM during this 2018 annual session to agree on a progressive calendar with quantified objectives to achieve this target;
39. Establish, as soon as possible and by 2020 at the very latest, a set of baseline rules to ensure an effective management of recreational fisheries across the Mediterranean. This common base will be further complemented by additional measures in in multi-annual management plans when relevant;

*C) Develop a culture of compliance and eliminate illegal, unreported and unregulated fishing*

40. The fight against IUU fishing must be reinforced to effectively eliminate illegal fishing activities in the Mediterranean, through the efficient and responsible action of flag States in coordination with coastal, port and market States to ensure an effective level playing field across the Mediterranean. To achieve this result, we will:
41. Ensure that by 2020, in line with the United Nations Sustainable Development Goal 14.4 all States have an adequate legal framework and the necessary human and technical capabilities to meet their control and inspection responsibilities as flag, coastal and port State. To this end, we ask GFCM to support the development of national control and sanctioning systems, including the training of inspectors, the implementation of modular solutions for monitoring, control and surveillance and the continuation of the operationalization of a regional VMS and control system, in the frame of the GFCM regional plan of action against IUU;
42. Establish, as soon as possible and where it is appropriate, Joint Schemes of International Inspection by sub-regional area to ensure the monitoring of high seas areas subject to IUU fishing with joint patrolling and inspections;
43. By 2018, invite the GFCM through its Compliance Committee to set-up and maintain compliance indicators, available to the public, to monitor the evolution of control and surveillance activities as well as IUU fishing and its quantification;

44. By 2020, ensure the allocation of a unique vessel identifier (IMO number) to commercial fishing vessels of 24 meters and above<sup>1</sup>, in line with the applicable international rules;

*D) Support sustainable small-scale fisheries and aquaculture*

45. The sustainable development of small-scale fisheries should be supported to ensure the livelihood of coastal communities. To this end, we will set up as from 2018 a regional plan of action for small-scale fisheries, on the basis of the FAO Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries and the FAO Regional Conference on "Building a future for sustainable small-scale fisheries in the Mediterranean and the Black Sea" (March 2016, Algiers, Algeria). This plan of action will streamline funding schemes to strengthen the support to local projects related inter alia to fisheries co-management, low-impact techniques and fishing gear, social inclusion, valorisation of catches, diversification, the contribution of fishermen to environmental protection, data collection and collective research efforts;
46. The sustainable development of aquaculture should be supported to contribute to food security in the Mediterranean and to strengthen coastal economies. To this end, we commit, as from 2017, to the implementation of the GFCM Strategy for the sustainable development of Mediterranean and Black Sea aquaculture which will support, inter alia, farming of food fish products, market access and trade, thereby creating employment opportunities and reducing the current stress on marine capture fisheries;
47. Support partnerships between producers and the marketing chain to enhance the valorisation of catches with a balanced distribution of profits, in particular those resulting from selective and low-impact fishing techniques;

*E) Greater solidarity and coordination in the Mediterranean*

48. A permanent network for cooperation and technical assistance will be established within GFCM by end 2018, taking into consideration FAO existing projects, to ensure an optimal coordination of the actions undertaken to develop the scientific and administrative capabilities of riparian countries, including monitoring and inspection;
49. We call upon the GFCM to present a work programme on spatial planning with a pre-identification of priority areas during its 2018 annual session. This work programme will be based on the result of consultations with riparian countries and relevant regional organisations and instruments;
50. We invite all relevant regional organizations and instruments competent for the environmental, economic and social sustainability in the Mediterranean Sea to formalize their cooperation through relevant instruments, such as memoranda of understanding, in order to avoid duplications and promote synergies;

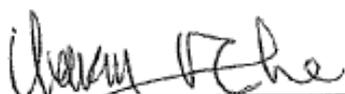
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<sup>1</sup> With the exemption of wooden vessels

*Follow-up of the declaration*

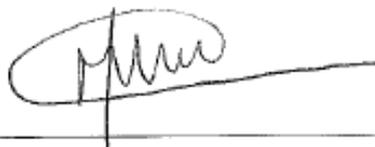
51. We invite the GFCM to steer and coordinate actions to ensure the implementation of the declaration, and to provide an annual report on the implementation of the actions set forth in this declaration, reflecting the reports provided by riparian countries when relevant.

Signed in Malta, on 30 March 2017, in two original copies in English.



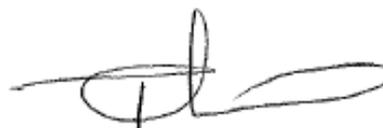
Karmenu Vella

EU Commissioner for Environment,  
Maritime Affairs and Fisheries, on behalf of  
the European Union



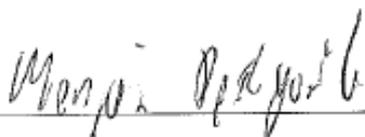
Hon. Roderick Galdes

Parliamentary Secretary, Ministry for  
Sustainable Development, Environment and  
Climate Change, Republic of Malta



Tomislav Tolusic

Minister,  
Ministry of Agriculture, Republic of Croatia

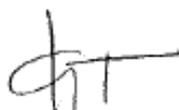


Marjan Podgorsek

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Evangelos Apostolou

Minister,  
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Danijela Stolica

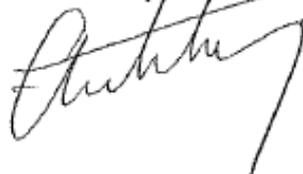
General Director,  
Ministry of Agriculture and Rural Development,  
Montenegro



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Mustafa Altuğ Atalay

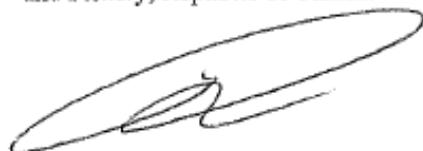
General Director,  
Ministry of Food, Agriculture and Livestock,  
Republic of Turkey



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Abdallah Rabhi

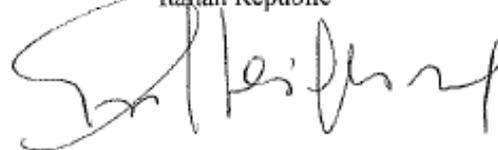
Secretary of State,  
Ministry of Agriculture, Hydraulic Resources  
and Fishery, Republic of Tunisia



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Giuseppe Castiglione

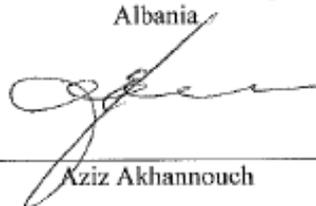
Under Secretary of State,  
Ministry for Agriculture Food and Forestry,  
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