

REPORT OF THE INTERSESSIONAL MEETING OF PANEL 2

(Part I - Issues related to management of BFT fisheries and farming)

(Online, 1-3 March 2022)

1. Opening of the Meeting and meeting arrangements

The meeting was opened by the Chair of Panel 2, Mr. Shingo Ota (Japan).

2. Nomination of Rapporteur

The European Union (EU) agreed to serve as rapporteur for the meeting.

Maeve White (EU-Ireland) was appointed as rapporteur for part one of the meeting.

3. Adoption of Agenda

Part I of the proposed Agenda was adopted and is attached as **Appendix 1**. The Chair explained that proposals submitted by CPCs would be considered under item 6 of the Agenda.

The Executive Secretary introduced the participating delegations. **Appendix 2** includes a list of delegates from each participating CPC as well as observers.

4. Consideration of fishing, farming, inspection and capacity management plans for 2022 presented by CPCs

The Chair reminded Panel 2 that the Secretariat had circulated a template to be used for the fishing plans this year (Document CP-47) but not all CPCs had used it. Japan had submitted a list of questions for CPCs, some of which had already been answered but some questions remained outstanding. The “Questions and comments on Fishing, Farming, Inspection and Capacity Management Plans” are compiled and contained in **Appendix 3**.

It was also agreed that CPCs should include a list of all designated ports for landing and transshipment in their fishing plans, whether in the body of the text of their report or as an annex.

The Chair suggested that the plans be reviewed in alphabetical order as usual.

Albania

Albania indicated that its plan was very similar to last year's. Albania requested to carryover 8.5 t from 2021 to 2022. In answer to Japan's question on the minimum number of random control checks in farms, Albania stated that 100% of cages would be covered due to the size of the farms.

The Chair requested that only ports designated for landing and transshipment of tuna should be included in the list of designated ports. The European Union expressed concern that the bycatch quota of 1 t was quite low and reminded Albania that discarded bycatch should also be recorded and deducted from the quota. Albania explained that their artisanal vessels are <6m and unable to catch BFT. The European Union asked that a text reflecting this be added to the fishing plan.

Japan and the European Union both questioned why the wild input (700 t) increased from last year (170 t) while the catch quota remained the same as in 2021. These CPCs also requested an explanation about why the farming capacity (1,200 t) increased from last year (500 t) and wondered if the number of cages increased. Albania explained that farms intend to import live BFT from other CPCs. Japan asked for clarification on the definition of capacity as the term “average” seems to mean different things to different CPCs. Albania explained that it was using the term average as found in the SCRS calculation on growth rate. It was confirmed that the figures were approximate but correct figures would be provided to ICCAT in due course when fish are imported and placed in the cages.

The United States suggested that row 3 should include text from last year (with reference to para 35 of *Recommendation by ICCAT amending the Recommendation 19-04 amending recommendation 18-02 establishing a multi-annual conservation and management plan for bluefin tuna in the eastern Atlantic and the Mediterranean* (Rec. 21-08)) to clarify bycatch: “If any bluefin tuna below the minimum size are caught and retained or discarded dead, they will be confiscated and will be counted against Albania’s quota.” The United States also suggested adding footnote 1 below the capacity table to show all of the math, including transfer of the unused 2021 quota.

Albania submitted a revised plan with corrections suggested by Panel 2 and the plan was subsequently endorsed.

Algeria

Algeria introduced its revised fishing plan which was responding to four queries submitted by Japan. This plan included all necessary tools and means to comply with ICCAT Recommendations which had been transposed into national legislation. Algeria would place inspectors on each vessel to supervise and monitor compliance. Algeria had reduced the bycatch quota to 5 t compared to 9 t in 2019 as the 9 t was not being fully utilised.

In response to a query from the Chair, Algeria confirmed that there was no carryover request for the 2021 unused allocation. The Chair also queried page 7 of the fishing plan which states that Algeria cannot dispatch any inspection vessel this year as part of the Joint International Inspection Scheme, while page 8 states that efforts are being made to participate with other CPCs.

Algeria explained that funds were not currently available for the inspection scheme, and it had worked with Tunisia and tried to cooperate with other CPCs. Inspectors on vessels would perform dual roles of inspecting and observing vessels to ensure compliance with ICCAT Recommendations. The European Union pointed out that there is provision that if a CPC has more than 15 purse seiners, it should dispatch an inspection vessel, and expected to see that in the next revision.

The Chair queried if Algeria could work with other CPC enforcement programmes but, if not, Panel 2 should examine the risk analysis conducted by Algeria. The European Union supported this, while stressing the need to see rationale on not participating in the Joint International Inspection Scheme.

Algeria was asked to use the new table and ensure figures are entered correctly. A footnote was also required to explain the calculation of the adjusted quota as per other fishing plans.

The European Union questioned how Algeria would handle the change to Rec. 21-08 which enters into force in June this year and is midway through the fishing season. The Chair noted that Japan had also asked this question, but the response was unclear.

Algeria replied that they had already answered Japan stating that this would be a transition during the fishing season while vessels would be out to sea. They intended to partly implement what could be implemented, and Algeria was updating regulations for this purpose.

The European Union also noted that there is a 121% increase in the capacity of purse seiners in the Algerian fishing plan in comparison to 2018. While developing coastal countries are entitled to a derogation from the 20% maximum increase under paragraph 20 of *Recommendation by ICCAT amending the Recommendation 18-02 establishing a multi-annual management plan for bluefin tuna in the eastern Atlantic and the Mediterranean* (Rec. 19-04), the European Union questioned the longer-term capacity plan and whether the final number would be commensurate with fishing opportunities. Algeria stated that a strategy was in place, and they did not intend to grow indefinitely. They assured Panel 2 that, in any case, these vessels would always follow rules and will stay within the capacity limit.

The United States asked for “Eastern Atlantic and Mediterranean” to be specified in the text rather than international waters. Algeria clarified that it was the Mediterranean.

Algeria submitted an updated version of the plan which covered the transition from Rec. 19-04 to Rec. 21-08 and the Mediterranean as the fishing ground under fisheries openings. Algeria also added new text on its risk analysis to get an exemption from the mandatory participation in the Joint International Inspection Scheme. The capacity table was updated as requested by the Chair along with a footnote explaining the calculation of the figures.

The European Union suggested a new text as regards the transition to Rec. 21-08 that it would apply Rec. 21-08 as of its entry into force during the 2022 bluefin tuna fishing campaign. Algeria agreed to make this change. With these changes the Algerian fishing plan for 2022 was endorsed.

China

China submitted a fishing plan for 2022 in line with previous years. Following comments from Japan submitted in advance of the intersessional meeting, China made the capacity table clearer and added a sentence on designated ports for in-port transshipment.

The Chair confirmed China’s intention not to carry over any unused quota from the 2021 fishing season and asked for a list of all designated domestic ports.

The United States, supported by the Chair, asked that the text on designated ports used in Section 6 of China’s 2021 report be reinserted in the 2022 fishing plan.

The European Union asked China to specify the domestic laws referred to in their fishing plan. The European Union pointed out that how China intends to monitor quota usage was unclear and requested additional explanation. China replied that a text would be added to make this clear.

China submitted a revised version with six modifications; confirmation of no carryover, capacity table updated, domestic law and regulations added, list of ports added, including additional ports in Cabo Verde and Spain, inspection plan updated, and observer coverage updated to 50%. This revised plan was endorsed.

Egypt

In response to Japan’s comments on bycatch, Egypt advised that they were checking requirements to register new vessels as they were currently under-capacity. Egypt expressed its intention to amend the fishing plan once vessels are registered and update all calculations. Egypt clarified that the majority of their fleet would not target bluefin tuna and landing inspections would be in place for bycatch, but no bycatch had been recorded so the 1% set aside for bycatch would be enough.

The Chair confirmed that there is no request for carryover of unused quota and advised Egypt that under paragraph 50 of Rec. 21-08, CPCs shall identify the total number of fishing vessels larger than 24 m and purse seiners as part of the fishing plan to judge if its total capacity is over- or under-capacity.

The European Union asked if bycatch is recorded in logbooks and requested clear language. The European Union also stated that the inspection plan did not provide details on cross checks, noting that how they would be performed should be specified. Egypt clarified that they would be recorded in logbooks although there had been no bycatch and that logbooks would be cross checked in port on landing.

The European Union further asked if the plan could show that fishermen are required to discard bluefin tuna if any accidental catches occur, and these also need to be recorded. Egypt advised that they had issued regulations to not allow any vessel to catch bluefin tuna unless authorised. Egypt also advised that it had done a study with the GFCM which confirmed there had been no discards as most of the fleet operate within coastal waters where there are no bluefin tuna. The Chair requested that Egypt add text to their plan explaining this study and characteristics of vessels not going outside of coastal waters and that there was no possibility that these vessels would catch bluefin tuna.

Egypt submitted a revised plan which included the number of purse seiners authorised (3) and a statement in paragraph 37 on bycatches outlining the GFCM study showing no discards as most vessels are less than 24 m and operate inshore. The capacity table was updated to include reference to these three vessels and to reflect under capacity. In response to the request of the European Union, Egypt added language to the plan to make it clear how cross checks would be performed. Egypt's revised fishing plan was endorsed.

European Union

The European Union expressed its intention to implement Rec. 21-08 from early January, however, they reserved the right to submit the revised farming plan as under Rec. 19-04. There were no significant changes compared to 2021 apart from a transfer to the United Kingdom of 0.25% of the total European Union quota and a request to carry over 5% of the unused quota from 2021. Purse seiners and towing vessels would provide VMS data every hour with a two-hour interval for other vessels. The recreational tagging programmes would continue with 175 tagging vessels around Ireland and Nordic areas. The provisional farming plan redistributed unused capacity in unused farms to others but all within the European Union ceiling.

The Chair requested the list of designated ports to be annexed to the fishing plan with language referring to the same in section one. The Chair also reminded that two questions had been posed by Japan. The first question related to the catch limit for recreational fishing, and the European Union advised that there would be a limit of one fish per vessel per day and that these fish cannot be sold as commercialisation of recreational catches is prohibited.

The second question from Japan related to an investigation into the monitoring and control of farms in Croatia. The European Union responded that as this was an ongoing infringement procedure by the European Union with regard to Croatia, they were not authorised to make details of the case publicly available but provided a press release. Extended discussions were held on this point with CPCs asking for more details than the European Union was able to provide considering the ongoing status of the investigation. Japan and the United States were concerned that this was evidence of non-compliance within European Union farms and lack of proper monitoring and control on farms. Japan informed that it had suspended imports of Croatian farmed tuna and started bilateral consultation with the European Union as it was not confident that they had been properly monitored under ICCAT rules, and that the European Union would be able to properly monitor them in the coming farming season.

The European Union responded that: (i) it wished to give further details on Croatia but was constrained by law; (ii) the European Union took these observations very seriously, and, hence, had started the infringement procedure; (iii) no one should question the commitment of European Union to properly implement ICCAT rules; (iv) the infringement procedure was initiated in February 2022, and Croatia had two months to respond or request an extension; (v) the timeline of the procedure depended on this response since Croatia may disagree with the findings. The European Commission will review the response and provide a reasoned opinion as final decision; however, Croatia may bring this to court if they disagree. If it goes to court, it will go to at least 2023; and (vi) cases are often resolved in the first stage if the Member State agrees with findings and have remedy or can prove that the findings were incorrect.

The Chair questioned how the fishing plan can be endorsed if the result of the infringement procedure is unknown. The European Union stressed that there had been no precedent of a plan not being endorsed because a CPC did not implement the controls and that compliance is a discrete process that is separate to the fishing plan and should not be conflated. Iceland supported the European Union on this point.

The United States expressed concern about the situation and noted that these plans should represent how CPCs will actually monitor, control, and enforce their fisheries for eastern Atlantic and Mediterranean bluefin tuna for 2022. Agreeing that the Compliance Committee should consider this case during the 2022 Annual Meeting, the United States asked the European Union to provide assurances for the record of the March Panel 2 meeting that they would follow up on the case while ensuring that EU Member States follow all the rules this year and to provide details of the case, including discussing any wrongdoing and actions taken to address it, during the Compliance Committee sessions at the Annual Meeting.

While Japan was not fully satisfied with the European Union’s explanation, it agreed with the United States and asked the European Union to record its commitment to follow up this case and keep ICCAT informed of progress as well as make necessary measures if infringement found in Croatia is confirmed. With these conditions, Japan will not block endorsement of the EU fishing plan. Japan also requested that the European Union engage in bilateral discussion with Japan on import of bluefin tuna farmed in Croatian farms before 2021 to Japan.

The European Union provided a statement for the record. The statement on the infringement procedure, “Statement by the European Union on the implementation of the European Union’s eastern Atlantic and Mediterranean bluefin tuna fishing, farming, inspection and capacity management plan for 2022” is included as **Appendix 4**. The European Union also pointed out that no other CPC has a system as transparent as the European Union, saying that if similar problems occur in other CPCs, it does not get raised until a meeting of the Compliance Committee. The European Union had an additional level of compliance and security through an independent body monitoring the fishing activity of Member States. The European Union said that it does more than any other CPC in this area and is taking steps to ensure compliance.

Japan also asked questions to all farming CPCs on the definition of capacity and to specify if they plan to apply derogations regarding the use of ICCAT regional observers at harvest. The European Union farming management plan stated it would implement 100% regional observer coverage, and Japan asked the European Union to specify if a derogation was to be applied. Japan also queried if the European Union was planning to carryover farmed bluefin tuna from the previous farming season.

The European Union reminded Japan that there was no definition of farming capacity in the ICCAT Recommendations, and each CPC had discretion on internal definitions. The European Union suggested that Panel 2 should look at a harmonised approach in future. There is no definition in European Union law either in terms of total farming capacity, maximum amount that can be in cages at any moment. Interpretation could differ between Member States, but the EU noted it was open to examining the topic and harmonising the approach between CPCs. Regarding the derogation for harvest, the European Union confirmed that this would not be applied until it is transposed into European Union law.

The United States sought clarification on the text on intra-farm transfers. The European Union clarified that this was an editing error and agreed to remove the text. The United States also recalled that last year, there was Panel 2 agreement that work was needed regarding wild fish input capacity definitions. The United States noted it would like Panel 2 to harmonise the definitions on farming capacity this year in Rec. 21-08.

The European Union’s revised plan included language on underharvest and carryover. It clarified that sport and recreational catches could not be marketed and included the European Union legislation outlining the same. A text outlining the carryover in farms was added along with a footnote on bycatch. Language was added to clarify that transposition into European Union legislation was underway. The revised EU plan was endorsed.

Iceland

Iceland set aside 10 t for bycatch which is 4.4% of the quota and clarified that if this should not be enough, they would have every means to regulate the catches of vessels and bycatch throughout the fishing season and a formal notification would be made to ICCAT.

The Chair asked for a list of designated ports for landings to be added to the plan. The United States asked Iceland to add a footnote for adjusted quota calculations.

Iceland made these two adjustments, and the revised plan was endorsed.

Japan

Japan’s 2022 fishing plan was almost the same as last year’s. Since the human observer coverage was reduced last year due to Covid-19, Japan trialled an Electronic Monitoring Scheme (EMS) on bluefin vessels. For 2022 subject to Covid-19 Japan would make every effort to ensure 20% observer coverage and continue EMS trials. Japan expressed its intention to provide results of these trials at the Second Meeting of the Electronic Monitoring Measures (EMS) Working Group in June.

The Chair advised that while landings are possible only at domestic ports, domestic ports for landing are not designated, and requested Japan to include these in the revised plan.

The European Union asked if there were a reference to the current situation and contingency from Covid-19 in the plan regarding observer coverage and requested Japan describe it. The European Union also requested Japan to include risk analysis for Japan not being part of the Joint International Inspection Scheme for longliners.

Japan advised that the contingency plan for observers is the trial of the EMS. Due to Covid-19 Japan had and may have future difficulty in placing human observers for distant-water fishing vessels. Japan further advised that the risk analysis was included in section 4 of the fishing plan which described measures that would go beyond what is required by ICCAT. Japan agreed to provide further details on the risk analysis if the European Union requires.

The United States recollected that Japan used to deploy an inspection vessel as part of the Joint International Inspection Scheme and requested Japan to briefly describe what changed in terms of their monitoring and control that they now think it is strong enough without deployment of an inspection vessel.

The Chair advised Panel 2 that Japan used to dispatch one inspection vessel to the North Atlantic but, in the last several years, Japan had been encroached by so many fishing vessels from neighbouring countries that Japan needed to control vessels within its own EEZ and could no longer send such vessels to the North Atlantic. A discussion took place a few years back where Japan asked for this derogation.

The European Union advised that they were not questioning this history; however, the essence of the text on the risk assessment was saying that they do not need it as they can detect it through eBCD. If that was the case, no inspection would be necessary, which is not the case in the European Union's view. The European Union requested Japan to add a text to explain the situation in more detail.

Japan agreed to review this and provide an additional text for review.

Japan made two revisions: an addition of the list of domestic ports for landing (10 ports) and an additional text on risk analysis, explaining that all bluefin, whether legal or illegal, would have to be landed at domestic ports subject to 100% inspection and all would have to be tagged so that poached bluefin tuna could be easily identified. Japan's revised plan was endorsed.

Korea

Korea requested to carryover 10 t of unused quota from 2021. As Korea had no other tuna vessels in the ICCAT temperate zone there was a very low chance of bycatch and Korea set aside 0.5 t for bycatch purposes. Korea expressed its intention to perform landing inspections on 20% of its bluefin tuna landings.

The United States asked Korea to use the updated template and add a footnote on bycatch. The Chair asked Korea to include a list of designated ports in their revised fishing plan.

Korea added the list of ports and revised the capacity table using the new template with two footnotes clarifying a maximum of 4 longliners and bycatch calculations.

The plan was endorsed with the understanding that Korea would advise ICCAT once the list of domestic ports for landing is confirmed.

Libya

Libya submitted a similar plan as last year but updated to take account of Rec. 21-08. The Chair confirmed that there was no request to carryover unused quota from the 2021 season. The plan was endorsed after some minor errors were rectified.

Morocco

Morocco's plan was basically the same as last year. Morocco requested a carryover of 24.65 t from last year. It would use 18 traps and four purse seiners along with small scale artisanal vessels. 20 t was set aside for bycatch. Morocco authorised three farms. The fishing plan defined "the wild input" as the amount that will be farmed and "the farming capacity" as the maximum wild bluefin tuna that a farm is authorised to cage during season. Morocco recognised that not all CPCs would agree with this definition and looked forward to a common definition. Morocco expressed its intention to continue the study on growth rate based on stereoscopic footage and length and weight at caging using artificial intelligence and would contribute to the SCRS study.

The Chair advised that fishery openings on page 2 referred to several different seasons depending on different location and Morocco would need to make a request to apply the derogation to the earlier open fishing season. Names of ports designated for transshipment should also be added.

A discussion was held on the correct assignation of the small-scale vessels which target bluefin during their migration, namely, whether these vessels should be subject to a sectoral quota instead of bycatch quota. The Secretariat pointed out that all 17,000 vessels would have to be added to the ICCAT list of authorised vessels if they are to have a designated sectoral quota rather than the bycatch quota. While recognizing the large number of vessels involved, it was suggested that it might be appropriate for the vessels in question to be on the ICCAT record. Morocco explained that: (i) these are very small vessels <7m that do not target bluefin but happen to catch them as they are inshore during the migration; (ii) these vessels do have logs and their catches are reported in the eBCD.; (iii) this bycatch is discussed every year because it is so unique and many of the vessels catch only 1 or 2 fish; and (iv) Morocco will make sure that the quota reflects it. Morocco asked Panel 2 to make an exception for this quantity of fish caught by small-scale vessels as 424.65 t is being allocated to small-scale vessels along with a 20 t for bycatch. While not wishing for this issue to hinder endorsement of Morocco's 2022 fishing plan, it was suggested that this matter could be further considered by Panel 2 during the 2022 ICCAT Annual Meeting, as needed.

The Chair requested that this remains in the bycatch column and that the issue be discussed by the eBCD Technical Working Group (TWG) for a solution. Morocco explained that it is not necessary to reopen the issue within the eBCD Technical Working Group, given that there is already a procedure for reporting bycatch, and that through application of this procedure, the vessels concerned are registered on the eBCD record and their catches are reported in the eBCD system. The Chair also suggested that Morocco use the same language as is used by the European Union in section three of their plan.

The European Union pointed out that for different fishing seasons, purse seiners would be unable to move from one area to another and therefore only able to partake in one fishing season.

The European Union asked for clarification on random controls in fattening farms, as the fishing plan did not make it clear if Morocco intended to do random controls. Morocco stated that the plan clearly indicated that random controls of at least 10% of the number of cages on each farm will be carried out following the conclusion of caging operations.

In response to the European Union comment, Morocco advised that it would submit the number of vessels specific to each season ahead of the opening of the seasons.

Japan asked Morocco, for the sake of consistency, to follow the same format as other CPCs in the capacity management table where a CPC deducts bycatch from its original quota plus carryover and show whether there is any over- or under-capacity.

Morocco modified fishery openings and asked for a derogation for 15 May in the East Mediterranean. A list of designated ports was added.

The Chair requested that some figures in the capacity table be changed to reflect the discussion as well as follow the established practice. This revised plan was then endorsed.

Norway

Norway submitted a new plan to address the comments that Japan circulated ahead of the meeting. This year's plan followed Rec. 21-08 and requested a 5% transfer of the unused quota from 2021 totalling 15 t. The main difference from the 2021 plan was an 18 t sectoral quota for small-scale vessels and removal of quota for longliners. The small-scale quota would be for a maximum of 25 vessels. Norway corrected the number of purse seiners in several categories as there was an error.

Discussions centred on Norway's study into catch rates to assess if there is any over-capacity. Norway stressed that they had presented a study regarding catch rates in the Norwegian EEZ to the SCRS. The Chair of the SCRS advised that this report had been received but had yet to be validated. Panel 2 agreed to formally request the SCRS to review the paper.

The European Union asked for the exact lengths of vessels to be included in the plan to assess capacity. Norway explained that the small-scale vessel lengths are limited to 14.99m with three over that length being now incorporated in the longliners. Most longliners are 10m. The reason for including longliners in the plan was that Norway used to have them but now this gear is not the best for the Norwegian waters. The vessels are still in use but will use rods instead of longlines. In response to the question posed by the European Union on whether Norway had any towing vessels which would probably be necessary for Norway to conduct short-term storage of live bluefin tuna, Norway replied that the short-term live storage would not start until necessary modifications would be made to Rec. 21-08 and it would see if a purse seine vessel could transport cages or a towing vessel is necessary.

The Chair requested Norway to revise the capacity table and the list of boats and consider additional info on length of small-scale vessels and purse seiners.

Norway updated their plan to describe the number of purse seiners and revised the capacity table. There would be seven purse seiners between 24-40m and 1 >40m as was last year. There would also be three long line vessels. It clarified that vessels >11m would be obliged to transmit data. In answer to a question from the United States, the quota set aside for bycatch would be the same as 2021. Norway also referred to the exemption that the calculation of the capacity using the standard catch rates should not apply to the northeast Atlantic or those fishing mainly in its own EEZ and asked the Chair if they should demonstrate that the standard catch rates are not directly applicable to Norway every year in the fishing plan.

The Chair advised Norway that they would not have to demonstrate it every year but suggested that Norway request the SCRS to examine these methods and validate if they are suitable as had been discussed in previous years.

Norway's fishing plan was endorsed with correction of an error in the capacity table.

Syria

Syria did not attend the meeting and was unavailable to take questions. The Secretariat forwarded the following questions asked by the Chair and European Union:

1. Please confirm that Syria does not have any intention to request carry-over of any under-harvest from 2021.
2. Please indicate whether the fish will be destined for farming purposes, or whether they will be landed.
3. Please give more details on the domestic legislation under which the plan will be executed.
4. Please confirm that both national and regional observers will be boarded on the vessel, as currently indicated in the plan.
5. The comment on capacity/vessels is misplaced under the farming section.
6. The names of the authorised ports for landing/transhipment should be included in the plan.

Syria submitted a revised plan after the meeting, responding to all these points and the revised plan was endorsed through correspondence.

Tunisia

Tunisia expressed its intention to implement from 2022 Rec. 21-08. As a precautionary measure, one percent of the quota would be reserved for bycatch. Based on monitoring of bluefin tuna fattening activity in Tunisia (season 2021), Tunisia has not requested carryover of its quota for 2022 since all the fattening amount has been used up. Tunisia would participate in the Joint International Inspection Scheme. Japan provided several minor comments, which Tunisia agreed to reflect in the next version.

The Chair asked Tunisia to include the list of designated ports, amend adjusted quota and under capacity figures and revise the text as appropriate.

The United States noted that there was no reference to sealing activities, including whether they would request one year delay as per paragraph 238 of Rec. 21-08. Tunisia agreed to add such a reference to the fishing plan.

The European Union had similar questions for Tunisia as with Algeria regarding the development of capacity. As Tunisia increased purse seiners to 54 in 2022, the European Union asked if there is a development plan with end point in sight or there will be a constant increase in capacity. The European Union also stated that there was no indication in the plan about the VMS transmission frequency of towing vessels. It also pointed out that the number of farms would increase from 3 to 7 while the wild input capacity, which was fully utilized in 2021, would be the same as last year, questioning how such increase could be explained.

Tunisia replied that what had been fully utilized was not the input capacity and it meant that the fish in cages were fully harvested, resulting in no carry-over of the fish to the next farming season. Tunisia stressed that the increase in the number of vessels would be a gradual one compared with the previous years, reminding that Tunisia in 2012 immobilised almost half its fleet, i.e., some 20 vessels and had been trying to revive these vessels over the years. Tunisia stated that it would need those 54 vessels for the development and equitable allocation of its quota throughout Tunisia.

Tunisia amended the plan to include remarks on quota figures on the first page. Bycatch and adjusted quota figures were updated in line with the correct formula for calculating the same. Tunisia confirmed that it would use Rec. 21-08 for random controls. The list of designated ports was also included. Table 1 added "*and towing vessels*" to be in line with Rec. 18-10.

The Chair reminded Tunisia to amend the footnote under the capacity table and the plan was endorsed on that basis.

Turkey

Turkey informed that it would apply Rec. 21-08. Turkey would be happy to work with CPCs on common definitions of farming capacity.

The Chair confirmed that no carryover of unused quota had been requested and advised that as the fishing plan referred to multiple fishing seasons, Turkey would need to request a derogation to allow this.

The European Union noted that Turkey's plan was saying that operators may wish to use Rec. 21-08 in the Mediterranean high seas and sought clarification on whether some vessels could be fishing in both seasons. The European Union also requested confirmation that towing vessels would transmit VMS data every hour. The European Union also noted that the input capacity had increased from 2319 to 2792 while the farming capacity remained the same.

Turkey advised that it had not yet received applications for vessels to operate in the high seas, but Turkey would be able to notify upon request of any such applications once submitted. Turkey also advised that the VMS interval would be one hour for catching and other vessels in line with previous years and that it had no intention to increase the farming capacity, but the input capacity could be increased if the farmers increase the amount of live bluefin tuna imports, so as precaution the wild input were increased within the limit of reference years.

Turkey did not agree to the European Union's interpretation of Rec. 21-08 regarding fisheries opening as Rec. 21-08 did not prevent a vessel from moving between different areas so in previous years purse seiners operated from 15 May in the Eastern Mediterranean and then were entitled to move to the high seas once that season opened on 26 May. Turkey considered that the farming capacity is an established capacity while the input capacity is the limit that shall not be exceeded, and the input could be increased within the limit.

The European Union suggested that Panel 2 should look at whether a restriction to one fishing season should be included in the next review. The Chair agreed with European Union on the ambiguity in paragraph 28 of Rec. 21-08 and Panel 2 could consider modifying it in the future review.

Turkey added text regarding the derogation and explained that the VMS interval being every hour for towing vessels. The plan was then endorsed.

United Kingdom

The United Kingdom submitted the 2022 fishing plan in line with Rec. 21-08, which was similar to the last year's plan with quota to be used solely for bycatch and the catch and release tagging project. The United Kingdom advised that it was considering expanding the tagging project further from England and Wales to Scotland and Northern Ireland. The United Kingdom would have no commercial fishery in 2022 and had no intention to carry over any unused quota from the 2021 fishing season.

The Chair requested that the list of designated ports be added to the fishing plan. The United Kingdom submitted a revised plan, adding the list of United Kingdom ports as annex to the plan and making minor corrections. The revised plan was then endorsed.

Chinese Taipei

Chinese Taipei did not attend the meeting. The Chair explained that they would continue to refrain from targeting bluefin tuna and there would be no change to the past fishing plan. With no comments from Panel 2, the 2022 fishing plan was endorsed.

5. Determination of actions to be taken with respect to the plans under item 4

This item was discussed along with Item 4.

The Panel endorsed all the plans presented under Item 4 during the meeting. The endorsed plans are included in **Appendix 5**.

6. Consideration of issues of interpretation, and possible drafting amendments as required

Japanese proposal on growth rate observed in tuna farms

Japan submitted a revised proposal to the one submitted at the 2021 Annual meeting "Revised proposal on growth rates observed in bluefin tuna farms in the Eastern Atlantic and the Mediterranean". The revised proposal is attached as **Appendix 6**. Japan was concerned with the observed growth rates after farming as they could indicate underestimation of weight at capture undermining ICCAT conservation and management measures. Japan asked for data to analyse growth rates more effectively. Japan had concerns related to imports of farmed tuna and asked for greater transparency in farming practices.

Japan explained that at the 2021 Annual meeting, it had asked farming CPCs to monitor growth rates and to explain the reasons if growth rates are higher than those figures in the SCRS table and that while farming CPCs were providing farming information, this should be formalised in a recommendation to streamline the obligations of farming CPCs. Japan suggested that the eBCD system should consider developing functionality to automatically calculate growth rates.

Japan's proposal included a table summarising the basic role and responsibilities of farming CPCs, importing CPCs, and ICCAT regarding monitoring growth rates. Japan was of the opinion that it is a fundamental responsibility of the farming CPC to ensure that growth rates are coherent with the rate published by SCRS as stipulated in existing recommendations. The role of the importing CPC is to monitor growth rates to confirm that the farming CPC is managing farming activities properly so that importing CPCs can contribute to robust farming. The role of ICCAT is to decide or discuss any non-compliance identified.

Japan further advised that farming CPCs were providing comprehensive data to Japan on a voluntary basis, but there was no clear requirement in ICCAT regulations. Japan also stated that importing CPCs should have an obligation to monitor growth rates. If a higher growth rate is discovered, the importing CPC should advise the farming CPC who should then report to Panel 2. Japan also believed that the importing CPC should also have access to data on tuna being imported into other markets on eBCD and in that case the Secretariat would be asked to compile data.

The European Union welcomed the proposal as this had been an offline/ad hoc bilateral process to date. While the European Union was very interested in a transparent process applicable to all farming CPCs, there were some questions on whether this would fully replace the ad hoc process or if it would be an additional requirement. If this proposal does not replace the ad hoc process, it would not be beneficial.

The European Union also pointed out that in anticipation of receiving new updated growth tables, Japan's previous legitimate concerns could become out-of-date because the new tables would make these kinds of cases more rare/marginal. The question, therefore, would be whether we should create a significant additional reporting mechanism for something that might become much rarer.

The European Union also requested clarification on the frequency of reporting to the Secretariat, i.e., whether it should be annually or more frequent and if it could be changed during the year.

Japan expressed the intention to streamline what CPCs were doing bilaterally and multilaterally. If, in the short-term, the information could be made available through eBCD, the current bilateral framework would no longer be necessary, which could reduce the burden on farming CPCs. Japan also clarified that the reporting frequency should be annually to Panel 2, which would discuss and review growth rates in the previous year.

The United States welcomed Japan's efforts on this to address longstanding issues. The United States requested clarification on the European Union's point regarding the new growth formula just released. The United States requested the SCRS and the Secretariat to clarify if it would apply to fattening or if, it was for weight estimates at catch. It was clarified that the SCRS was to provide by August a new algorithm for fattened fish as the algorithm looking at wild caught fish was not appropriate for farmed fish.

The European Union clarified that the SCRS had presented certain updated growth rates last year which were supposed to be further validated this year or next year and when they would become available, the anomalies detected in the past could be explained as the previous tables did not reflect current farming practices. This would reduce the need for very heavy reporting obligations. The European Union expressed its willingness to work with Japan on this. The EU noted it would prefer for this to apply to every CPC so that the entire process could be more transparent and could provide sufficient assurance to Japan that Japan would no longer require a bilateral process.

Japan expressed its expectation that such anomalies would decrease with the new SCRS tables but stressed again that bilateral communication would no longer be necessary if data from the eBCD system could become available for importing CPCs. If an importing CPC would see anomalies, they would engage in bilateral dialogue with the farming CPC. The SCRS Chair confirmed that the final review of the growth rate study had not been completed yet as it had not been validated.

Japan advised Panel 2 that it would consider comments provided and resubmit the proposal.

European Union proposal

The European Union provided a draft template for reporting random controls, which was supported by Morocco. The United States suggested “*the number of random controls shall cover at least 10% of the number of cages in each farm after completion of caging operations, always involving at least one control per farm and rounded up where needed*” for clarity as a footnote for the box with percentage of cages controlled to indicate minimum requirement. This should show 10% minimum standard with every farm having at least 1 control. The United States also queried if there should be a reference to eBCD and record number tied together to connect this to Rec. 21-08 requirements.

The European Union agreed that eBCD information would be useful and proposed to add new column in section 2 to add eBCD data.

These changes plus grammatical edits were made to the proposal and endorsed by Panel 2. It was confirmed that this template would be used for the coming farming season. The revised “Template proposal to report random controls” is attached as **Appendix 7**.

Norwegian proposal on short-term storage

Norway reminded CPCs that they presented a concept paper on short-term storage of bluefin tuna at the 2021 Annual meeting where Panel 2 asked Norway to submit a concrete proposal at the 2022 Annual meeting. Norway advised Panel 2 that it submitted a proposal to this meeting to get valuable inputs from CPCs to brush up the proposal. Norway explained that the proposal was for short-term storage of 3 months with no aim for fattening with the goal to ensure better meat quality and avoid saturation of the market during Norway’s short bluefin tuna fishing season. Norway suggested that this proposal be incorporated into Rec. 21-08.

The “Draft proposal amending ICCAT Recommendation 21-08” included two additions to definitions, namely, for storing cages and short-term storage of bluefin tuna. Norway was open to whether the short-term storage should be incorporated in its fishing plan, or a separate plan should be submitted for the short-term storage.

The European Union informed Norway that paragraph 145 of Rec. 21-08, which states that farming CPC should make sure a schematic plan is maintained with unique number of all cages, should also apply to the short-term storage and it would be useful to give a short description on different phases.

Norway advised that it was developing a four-phase plan:

1. Catches made by purse seiner will be monitored using an under-water sonar and camera.
2. Catches will be transferred through a transfer channel to a transport cage connected to net.
3. After transfer, the transport cage will be disconnected from the purse seine net and the vessel will bring the cage to a storage cage on coast.
4. Fish will be transferred from the transport cage to the storage cage.

Japan was broadly in favour of the proposal with a question on the duration of the short-term storage since previously Norway had explained that the purpose was to give bluefin a cooling down period to avoid burnt meat and if that is the objective, three months may be too long and several days or a week should be sufficient. Japan also asked if fish are fed when they are kept for more than several weeks and if fed, it would be difficult to control whether fish would gain weight and the control of the activities would be more complicated.

Norway confirmed that they had referred to burnt meat at the 2021 Annual meeting and the main goal would be to get a higher quality, but it would also be connected to the very short fishing season in Norway. This leads to every Norwegian bluefin coming to the market at the same time and Norway would like to prolong the season for market purposes. Regarding feeding, Norway had an experience of live storage of cod and three months was used for bluefin tuna as this had been incorporated in the national legislation for cod. Norway stated that this proposal was connected to research being done over the last few years and Norway hoped to get further data this year on how bluefin would respond to no feeding. Norway explained that the fish are usually very fat when they get to their waters and will not be hungry. Norway understood

the concern of the European Union and Japan and had no intention to create farming loopholes. Although in the case of cod, there is a legislation that there is a maximum of 4 weeks in a cage without being fed, Norway expressed its willingness to discuss this point further in Panel 2 and would try to provide further scientific information by autumn that bluefin could survive without being fed for a long period.

The European Union stated that this was an important topic which would require a well-defined scheme to avoid undermining controls for farming activities and that if a scheme is to be adopted, perhaps it should be limited to the Norwegian zone initially to collect more information. The European Union further indicated that since it resembles caging activities, when drafting a recommendation, there could be two basic choices; an amendment to Rec. 21-08 or a separate recommendation that would cross-reference parts of Rec. 21-08 related to caging and farming, which may be a preferable option. The United States supported this suggestion.

The European Union made several additional comments. First, it requested further definition of the terms, i.e., whether the first transfer would be a transfer to a transport cage and whether caging would be moving fish to a storage cage. Panel 2 should be very clear about the different stages and control issues that might arise. If fish are fed, it should fall under the existing farming regulations and a new recommendation would be only necessary when fish are not fed. It would be important to have clarity of which existing provisions should be applied, namely, whether caging, transfer, harvesting, random controls, etc should be applied without any exception or whether there would be any derogations. The European Union believed that random controls should be applied, for example, since random controls could minimise inherent risks.

Norway agreed that there would be a need to make definitions clearer and ensure that the proposal would not make loopholes.

Iceland strongly supported Norway's proposal, saying that this would be a very brave experiment that could benefit others if successful, and it did not consider that the activity was farming if no feeding was involved. Iceland stressed that Norway was very experienced with farming of salmon and cod and could use this knowledge on storage of bluefin and they must know how to control their industry. Iceland urged Panel 2 not to use the lack of clarity in rules to stop this experiment.

Japan advised Norway that there may be a need to discuss how to record the activity in the eBCD system, saying that it could be similar to farming activities or considered a simple catch from purse seine. Japan suggested amending Rec. 21-08 and also the Recommendation on eBCD. Norway agreed that this activity would have to be recorded, as is done with other activities and must also be very transparent. Norway advised that it revise the proposal to address this question in cooperation with other CPCs.

The United States agreed with the European Union comments on applicability of the existing farming rules, noting that it was not clear whether any derogation to obligations such as the use of stereoscopic cameras for transfer would be applied.

The European Union said that Panel 2 should decide whether this would require amendment of Rec. 21-08, or a new recommendation would be established with cross references to Rec. 21-08. The Chair asked Norway to consider a separate proposal that considers obligations under Rec. 21-08 as trying to incorporate all regulations for this new activity under Rec. 21-08 would be too complicated, noting that Norway could possibly refer to specific paragraphs in Rec. 21-08 being applicable to the short-term storage or, simply copy the applicable provision in Rec. 21-08 and produce a short document for this activity. It was confirmed that: (i) Norway will draft a short proposal incorporating comments made by CPCs and the Secretariat will translate and circulate it for further comments; (ii) Once comments have been received, either Norway or the Chair will further revise it based on the comments for further discussion at the annual meeting; and (iii) The deadline for comments will be established by the Chair once the proposal is circulated by the Secretariat.

Secretariat paper on sealing

The Secretariat put forward a proposal "Specifications for ICCAT Seals" which relates to seals for the regional observer programme under certain circumstances mentioned in Annex 14 of Rec. 21-08, explaining that as this is the first time a specific "ICCAT seal" is mentioned, Panel 2 would need to agree to the technical specifications for these seals and work with the consortium to source seals.

Following discussions, it was agreed that the seals should be a bright colour such as yellow or orange, with text and the ICCAT logo in black using laser printing and tamper proof seals. The Secretariat modified the proposal accordingly and the modified proposal is attached as **Appendix 8**. The European Union submitted seals that were in use by Spain for consideration by Panel 2. The European Union suggested that only the seal number and ICCAT logo would be required as seals have a unique number that is traceable.

It was agreed that the ICCAT seal would be only required for the ROP and not for national observers and the Secretariat and Consortium would source seals and the cost should be included in the overall ROP fees collected by the consortium. CPCs could produce their own seals for national observers. For CPCs that would have trouble procuring seals for national observers, the Chair offered to provide information on a Japanese company.

The European Union believed that the reference in Annex 14 to national observers may be a mistake, which was supported by Morocco. It was agreed to discuss amending Annex 14 at the annual meeting.

The United States questioned if there would be a benefit to standardise national seals also, but the Chair stated that the national authority is the entity to place and check seals so they should be familiar with their own seals and, thus, such standardization would not be required.

In light of the conclusions reached on separate use of ICCAT seals and CPC seals, Morocco indicated that in some cases of transfer, the ICCAT seals will necessarily be opened without the presence of a regional observer, referring to a specific case of intra-farm transfers and random control transfers after which target cages will receive CPC seals.

It was agreed that the Secretariat should circulate suggested technical specifications of the seal for further discussion on this point.

The Chair drew attention to a list of requests for clarification which had been submitted previously by the consortium responsible for the implementation of the ICCAT Regional observer programme for bluefin tuna. These questions had been circulated in advance to CPCs, and most were in agreement regarding the interpretation, but some discrepancies remained. These were discussed and the agreed interpretations have been included as **Appendix 9**.

7. Other matters

7.1 Weight-lengths relationships for estimating weight at caging

The ICCAT Secretariat presented the document “Updated algorithms for estimating bluefin tuna weight at catch for fish destined for farming operations” using size measurements normally taken by stereoscopic camera systems. Panel 2 noted differences in the algorithm in different areas. This document is attached as **Appendix 10**.

The Chair asked Turkey to clarify how they could estimate the weight of the fish if fishermen move from one area to another as this is permitted in Turkey’s view. Turkey clarified they had not received applications for operators moving zones and they could not provide any practical response for this concern but confirmed that it would follow progress on the algorithms put by the SCRS and if catches from different zones are made, it would request farm operators to adopt separate devices to distinguish fish from different zones.

The Chair, with support from the European Union, stated that the only answer would be no mixing of fish caught from different areas and for this purpose it would be necessary to keep fish in different cages or the algorithm could not apply. Turkey agreed that fish caught in different zones in which different SCRS algorithms should apply will be kept in different cages to ensure weights estimated in the most appropriate way in line with the new algorithm suggested by the SCRS.

8. Adoption of Report and closure

The Panel agreed to adopt the report of Part 1 of its intersessional meeting by correspondence.

The Chair thanked all participants for their work and adjourned the meeting.

(Part II – BFT MSE)

(Online, 4 March 2022)

1. Opening of the Meeting

The meeting was opened by the Chair of Panel 2, Mr. Shingo Ota (Japan).

2. Appointment of Rapporteur

Mr. Mathieu Pellerin (Canada) was appointed as rapporteur.

3. Adoption of Agenda and meeting arrangements

The Panel adopted the draft Agenda without any change (**Appendix 1**). **Appendix 2** lists the delegates from the participating CPCs, and observers.

4. Update on BFT-MSE framework and CMPs by SCRS

5. Feedback and guidance on additional changes to the CMPs by PA2

6. Development of initial operational management objectives

These Agenda items were discussed together.

Dr John Walter (Western Atlantic Rapporteur of the SCRS's Bluefin Tuna Species Group) presented an update on BFT-MSE framework (attached as **Appendices 11 and 12**), including the candidate management procedures (CMPs) under development, the performance statistics used to evaluate CMPs in relation to the management objectives, the key tradeoffs related to these management objectives, as well as a demonstration of the management framework and path forward. The SCRS requested views from Panel 2 on several specific questions:

Q1: % TAC change (Stability) and retention of the default of no caps on the maximum TAC

The SCRS reported that caps on TAC for EBFT were explored, but that they did not provide significant benefits to CMP performance. Panel 2 agreed with the SCRS advice that testing should move forward without applying maximum TAC caps.

Consistent with the direction given to the SCRS in 2019 on the stability management objective, Panel 2 requested that the SCRS test several scenarios regarding the % change in TAC between management periods, specifically: +20%/-30%; +20%/-20%; +20%/-10% and no limits. It was noted that this was the first time testing of 10% had been requested and further recalled that the stability rule adopted for northern albacore in 2021 constrained TAC increases to 25% and decreases to 20% unless the stock was below B_{THRESH} . In that case, the downward TAC change restriction was removed. The United States noted the value of this type of approach to support TAC stability while also ensuring speedy action to address a stock decline that threatens the stock. The SCRS noted that the number of analyses requested would take time. The Panel acknowledged that it would be up to the developers to see what amount of testing is realistic before the next intersessional meeting of Panel 2 on bluefin tuna MSE (9-10 May 2022).

Q2: Performance statistics

Panel 2 reiterated its request to the SCRS to continue developing a statistic for fishing mortality as well as B_{LIM} . The SCRS indicated that providing B_{LIM} at the May 2022 Panel 2 BFT MSE meeting is a priority. The SCRS recommended that Panel 2 wait until it sees the proposed B_{LIM} and the performance of the CMPs relative to that level before deciding on a percentage probability for the stocks not falling below B_{LIM} .

Given the interim management objective that asked for evaluation of a 60% or greater probability of the stock being in the green zone of the Kobe plot, a CPC requested the SCRS to produce a statistic looking at this for the 30-year projection period and at the end of it. The SCRS indicated that this statistic could and would be calculated, and a graph of its equivalent by year over the 30-year projection period would be produced.

One CPC asked if the SCRS could provide results for lowest depletion 10th percentile (LD_{10}), instead of only LD_5 and LD_{15} . The SCRS indicated that they could provide and would LD_{10} results for some CMPs to show whether this statistic is informative before Panel 2 decides if it would want to see this performance statistic tested in all CMPs.

One CPC asked about the possibility of using AvgBR as a tuning target, but the SCRS advised against it at this stage. Instead, Panel 2 agreed to request the SCRS to report AvgBR values as an additional statistic shown in the results, for example as an additional column in the quilt plots.

Q3: Initial operational management objectives and management period testing

Several CPCs requested that the SCRS continue to test both 2 and 3 years management periods, as requested at the [Panel 2 Meeting on Atlantic Bluefin Tuna \(BFT\) Management Strategy Evaluation \(MSE\)](#) (12 November 2021). In order to reduce the workload of the SCRS, Panel 2 agreed that the comparison of 2 and 3 years management periods will be conducted later in the process once CMPs are narrowed (culled) after the May 2022 Panel 2 BFT MSE meeting.

One CPC asked the SCRS if it would be possible to test the effect of using different and higher values for the 2022 western BFT TAC as a starting point for CMPs, to evaluate the anchoring effect of the actual 2022 TAC and future potential TAC levels.

One CPC requested the SCRS to perform tests with a tuning target of 60% proportion of Br30 results being equal to or above 1.0 for both East and West bluefin tuna stocks. Another CPC suggested targeting a 70% probability. The SCRS recommended not tuning to a percentage right now, but to keep the tuning as it is currently and then report results for whether there was a greater than 60% probability of Br30 being above 1.0 for each CMPs. Panel 2 agreed to maintain 60% probability of being in the green quadrant for the time being as a management objective, noting that the SCRS would report back at the May 2022 Panel 2 BFT MSE meeting, as suggested above.

Although one CPC requested the SCRS to test development tuning with AvC30, the SCRS indicated that this would be impossible to conduct by the next Panel 2 BFT MSE meeting in May; Panel 2 did not endorse the request.

The SCRS raised the idea of using a phase-in approach for certain CMPs that have difficulty with respect to stability of the TAC for the first one or two management periods, which could cause CPCs to view those CMPs unfavorably. The SCRS noted that these initial drops in TAC are related to the structure of those CMPs, rather than a decline in stock level that would require such a reduction of TAC in response (as evidenced by the fact that other CMPs do not produce these early reductions in TAC yet perform very well and do not pose a risk to the stock). Testing of such an approach was not specifically requested by Panel 2 although it was recognized that developers had broad discretion in testing the performance of CMPs relative to the stability management objective.

Q4: The process of CMP selection/performance tuning and additional information required to facilitate decision points for the May 2022 Panel 2 BFT MSE meeting

The SCRS suggested a two-step process for facilitating CMP selection, which includes development tuning for CMP comparison and performance tuning of a culled list of CMPs to determine the final CMP specifications. Panel 2 agreed that the SCRS present results for all 9 existing CMPs at its next meeting in May, along with guidance to facilitate discussion and allow managers to weigh in on evaluating all CMPs. The meeting agreed that no culling is to be done before that next Panel 2 BFT MSE meeting, but that the SCRS can note poorly performing CMPs that they would recommend for culling along with the rationale for doing so.

The Panel expressed concern about the SCRS proposal to limit the number of finalist CMPs for Panel 2 consideration at its October meeting to a maximum of 3 when the results of the testing were not yet known. It was agreed that this should not be a hard and fast limit as it may constrain the number of CMPs provided to the Panel for consideration to an arbitrarily low figure. One CPC noted in particular that the current approach could result in only one CMP being recommended by the SCRS this fall. It was agreed that, given the differing perspectives and priorities CPCs may have when reviewing the CMPs, the SCRS should be more flexible with regard to the number of finalist CMPs to be recommend to Panel 2 in October and that it would be important for the Panel to have a choice.

To facilitate the communication of results to the Panel in May, one CPC requested the SCRS to present CMP results using both quilt plots and spiderweb (or radar) plots. Another CPC also requested the SCRS to provide a quality overview of the indices used in CMPs, to which SCRS confirmed that they would provide that information. The SCRS did note, however, that the indices had already been through a rigorous scientific review and the selection process was based on scientific merit.

The SCRS expressed concerns regarding the workload and their capacity to respond to the high number of requests made by Panel 2 members, considering the limited amount of time available before the next Panel 2 meeting.

Panel 2 members agreed to continue the BFT MSE development process in accordance with the current calendar of intersessional meetings for the time being, but the Chair suggested that an additional day might need to be added to the May Panel 2 meeting given the number of issues to be discussed at that meeting. There was general support for the Chair's suggestion. It was also confirmed that no CMP culling would be done by the SCRS prior to the May Panel 2 meeting.

In response to a question posed by the Chair on the need to hold additional ambassador meetings after the May Panel 2 BFT MSE Meeting, the SCRS responded that there would be value in doing so and possible dates would be explored. Panel 2 agreed that it would decide at the May Panel 2 BFT MSE Meeting if additional meetings of Panel 2 are required.

7. Other matters

No other matters were discussed.

8. Adoption of Report and closure

It was agreed that the meeting report would be adopted by correspondence. The Chair thanked all participants for their work and adjourned the meeting.

Agenda

Part I (Issues related to management of BFT fisheries and farming) (1-3 March 2022)

1. Opening of the Meeting and meeting arrangements
2. Nomination of Rapporteur
3. Adoption of Agenda
4. Consideration of fishing, farming, inspection and capacity management plans for 2022 presented by CPCs
5. Determination of actions to be taken with respect to the plans under item 4
6. Consideration of issues of interpretation, and possible drafting amendments as required
7. Other matters
 - 7.1 Weight-lengths relationships for estimating weight at caging
8. Adoption of Report and closure

Part II (BFT MSE) (4 March 2022)

1. Opening of the Meeting and meeting arrangements
2. Nomination of Rapporteur
3. Adoption of Agenda
4. Update on BFT-MSE framework and CMPs by SCRS
5. Feedback and guidance on additional changes to the CMPs by PA2
6. Development of initial operational management objectives
7. Other matters
8. Adoption of Report and closure

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Questions and comments on Fishing, Farming, Inspection and Capacity Management Plans

<i>To CPC</i>	<i>From</i>	<i>Question/Comment</i>	<i>Answer</i>
All CPCs (General Comment)	Japan	Quota set aside for by-catch (% and/or quantity in ton) should be specified in the capacity management table and taken into account in the calculation of under/overcapacity.	<p>TURKEY: Quota set aside for by-catch (i.e., 35 t and 1.5% of national quota) has been specified in the capacity management table and taken into account in the calculation of under/overcapacity.</p> <p>MAROCCO: Morocco has indicated the reserved quota for bycatch in %.</p> <p>TUNISIA: See revised capacity table.</p>
General for farming CPCs	Japan	Please provide definitions or interpretation of “wild input” and “capacity”. Please also explain why farming CPCs consider their farming capacity is commensurate with the estimated amount of input. Are there any criteria? (para 22 of Rec. 21-08)	<p>ALBANIA: “Wild input” is the amount of fish to be caged or stocked in farm and “capacity” is the approximate average of the amount of fish to be harvested at that farm.</p> <p>Too many factors influence the farming capacity. It happens that for the same “wild input”, the different farms result to have different “capacity” during harvest, but always in the range foreseen by SCRS.</p> <p>TURKEY: For the purposes of the annual farming management plan presented by Turkey as PA2-15/i2022 (revised version), figures given under the “Capacity” column show the individual established farming capacities of bluefin tuna farms in Turkey. The sum of these individual capacity figures, i.e., 6,840 t, has been interpreted as the “total farming capacity” referred to in paragraph 22 of Rec. 21-08. On the other hand, figures under “input</p>

<i>To CPC</i>	<i>From</i>	<i>Question/Comment</i>	<i>Answer</i>
			<p>capacity” (or “wild input”) column of the table are the estimated annual maximum inputs of wild caught bluefin tuna into each individual farms for 2022. The sum of these figures, i.e. 2,792 metric tons, is considered as the “total input capacity” referred to in paragraph 22 of Rec. 21-08. Figures under “input capacity” column have been updated in the revised farming management plan based on new estimations for potential increases in live bluefin imports in 2022 compared to the previous year.</p> <p>The estimated total input capacity plus total amount of bluefin tuna available for farming provided in the plan has not exceeded the total farming capacity in Turkey.</p> <p>MOROCCO: - Wild input: is the estimated quantity that will be farmed. - Capacity: is the maximum quantity of wild bluefin tuna (t) that a farm is authorised to cage during the fishing season.</p> <p>TUNISIA: The total wild input corresponds to the quantity that will be caged in the fattening facilities.</p> <p>The fattening capacity corresponds to the total harvested amount (live weight).</p>

<i>To CPC</i>	<i>From</i>	<i>Question/Comment</i>	<i>Answer</i>
			<p>In the absence of scientific criteria, Tunisia has used as the basis the statistical data recorded on our farms.</p>
<p>General for farming CPCs</p>	<p>Japan</p>	<p>If CPCs plan to apply derogation of ROP at harvest in accordance with para 102 of Rec. 21-08, please specify this in the plan.</p>	<p>ALBANIA: Albania does not plan to apply derogation of ROP at harvest due to the total farming capacity, more than 50 tons per farm per year.</p> <p>TURKEY: Turkey plans to apply derogation of ROP at harvest in accordance with para 102 of Rec. 21-08 and the following paragraph has been incorporated in the revised plan;</p> <p>“As a derogation to the provisions of para 101, harvesting from farms up to 1000 kg per day and up to a maximum of 50 tons per farm per year to supply the fresh bluefin tuna market may be authorized by the Ministry without an ICCAT regional observer coverage. In such cases, ministerial inspector(s) shall be present in the related farming facility for 100% of such harvests, control the entire operation and validate the harvested quantities in the eBCD system.”</p> <p>MOROCCO: Morocco does not foresee applying a derogation of ROP at harvest.</p> <p>TUNISIA: See revised fishing plan.</p>

<i>To CPC</i>	<i>From</i>	<i>Question/Comment</i>	<i>Answer</i>
General for farming CPCs	Japan	In accordance with para 206 of Rec. 21-08, when carry-over is completed, annual carry-over declaration should be completed and circulated as an annex to the revised farming management plan. It would be helpful if farming CPCs would indicate whether carry-over from 2021 season to 2022 season is expected.	<p>ALBANIA: Albania does not expect carry-over from 2021 season to 2022 season.</p> <p>TURKEY: Carry-over transfers of non-harvested bluefin tuna from 2021 season to 2022 season is still ongoing at some of the farming facilities, despite that some farms have already completed and submitted their carry-over reports to the Ministry. As soon as all carry-over assessment transfers are completed, Turkey will submit an annual carry-over declaration report for all farms, as an annex to the revised farming management plan.</p> <p>MOROCCO: Morocco does not authorise the carry-over of live bluefin tuna.</p> <p>TUNISIA: Based on monitoring of bluefin tuna fattening activity in Tunisia (2021 season), there will be no carryover for 2022 since all the fattened amount has been used.</p>
Albania	Japan	Please add the minimum number of random controls in farms. (paras 207-208, Rec. 21-08)	Albania only has one farm with 4 cages. Considering the size of the farm and the number of cages, the competent authority of the farm will cover 100% of the number of cages in its random controls
Albania	Japan	Please explain why the wild input (700 t) increased from last year (170 t) while Albanian catch quota remains the same from 2021. Also please explain why the farming capacity (1,200 t) increased from last year (500 t). Has the number of cages increased?	The maximum input of wild caught tuna has increased based on the fishing opportunities allocated to Albania (177.5 t) and live bluefin tuna imports should be taken into consideration. Based on this, Albania will inform ICCAT in due time and

INTERSESSIONAL MEETING OF PANEL 2 – ONLINE, MARCH 2022

<i>To CPC</i>	<i>From</i>	<i>Question/Comment</i>	<i>Answer</i>
			will make exact changes regarding wild input, farming capacity and number of cages in its Fishing, Capacity, Inspection and Farming plan.
Algeria	Japan	In several cases, Rec. 19-04 is referred, but Rec. 21-08 should be referred to.	Rec. 21-08 is not mentioned because it will not be in force until June 2022. Moreover, the fishing plan was presented in February and the live bluefin tuna fishing season starts in May 2022.
Algeria	Japan	Information on fishing area (e.g. Mediterranean) is missing in section 2 of the table. (p. 2)	Algeria's fishing plan correctly mentions the fishing area in section 2 of the table (p.3): « Fishing will be conducted in international areas ».
Algeria	Japan	With regard to risk analysis, we believe the presence of an on-board national inspector to be very important. We would like Algeria to confirm it can dispatch national observers in 2022 even under the pandemic situation. In this context, it would be helpful to know whether national observers were dispatched in the 2021 fishing operation.	Algeria will deploy an inspector for each fishing vessel for 2022. It should be noted that the deployment of an observer onboard tuna vessels is required.
Algeria	Japan	In the capacity management plan, there is no column for 2022. A row for the quota set aside for bycatch should be added, rather than just indicating such quota in the footnote of the table. (p.10)	The 2021 fishing plan adopted by PA2 stated that national observers will be deployed for each vessel. There were 21 observers onboard 21 catching vessels during the 2021 bluefin tuna fishing season and this was carried out in accordance with the health protocols implemented by the Algerian Ministry of Health.
China	Japan	Please specify foreign ports where transshipment/landing is authorized.	
Egypt	Japan	Information on the number of fishing vessels for 2022 fishing season is missing in both main text and the capacity management table.	

INTERSESSIONAL MEETING OF PANEL 2 – ONLINE, MARCH 2022

<i>To CPC</i>	<i>From</i>	<i>Question/Comment</i>	<i>Answer</i>
EU	Japan	It is not clear whether, in the case of a maximum catch per vessel and the implemented date for recreational and sports fisheries, the commercialization of fish caught is prohibited or not (section 5, p.5-6).	
EU	Japan	Please provide the detail and update on the investigation by the European Commission concerning the “serious shortcomings in monitoring the transfer and caging operations of bluefin tuna” in Croatia, as published in the EU website.	
Iceland	Japan	Minor mistake in the capacity management table: “Fishing Capacity” for “Longliner over 40m” for 2022 should be 50 (not 2).	
Korea	Japan	Does the 20% coverage of landing inspection apply to all longline vessels (i.e. both BFT catching vessels and non-BFT catching vessels)? If so, to what extent would BFT catching vessels be subject to landing inspection (more than 20% or less)? [p.3]	
Libya	Japan	“para 30 of Rec. 19-04/21-08” should be “para 29/30 of Rec. 19-04/21-08”. [Section 2, p. 2]	Answered in latest version of their plan.
Morocco	Japan	Quota distributed to trap sector is 2,424 t while the sum of wild input of farms is 2,884 ton. Please explain how these two figures are intertwined.	As stated in 1(b) of the fishing plan, the maximum fishing capacity authorised to directly target bluefin tuna is distributed as follows : - 18 traps; - 4 tuna purse seine vessels with LOA > 40 m The quota allocated to these segments is: - Traps: 2,424 t; - Purse seine vessels: 440 t Total (2424+440) = 2884. This quantity will be caught by traps and vessels and farmed by authorised Moroccan farm.
Morocco	Japan	Adjusted quota should be calculated by deducting by-catch quota from the initial quota. [p. 8]	The adjusted quota is understood by Morocco as defined in the CP13-COC form below: Yearly adjusted quota (n) = Initial quota +/- yearly under/overcapacity (n-1) ¹

INTERSESSIONAL MEETING OF PANEL 2 – ONLINE, MARCH 2022

<i>To CPC</i>	<i>From</i>	<i>Question/Comment</i>	<i>Answer</i>
Norway	Japan	Information on the number of small coastal vessels is missing in the capacity management table. What kind of small-scale coastal vessels will catch BFT in 2022? Unlike 2021, will there be no longline vessels in 2022?	Answered in latest version of their plan.
Tunisia	Japan	Old format is used for Table 2 and should be updated with the latest one.	
Turkey	Japan	What does “the estimated total amount of bluefin tuna available for farming is around 1.202,580 t” mean? Is this figure a carry-over from the 2021 season to the 2022 season?	<p>As of 25 February 2022; 3 out of 5 BFT farming facilities have completed their carry-over transfers from 2021 season to the 2022 season and reported the results to the Ministry. As for the remaining 2 farms, the current amount of fish in farm cages has been obtained from the most up-to-date information in Fisheries and Aquaculture Information System (SUBIS) run by the Ministry.</p> <p>In light of the data received so far from the above-mentioned database, the estimated total amount of bluefin tuna available for farming is around 1.225,142 t. As soon as all carry-over assessment transfers are completed, Turkey will submit an annual carry-over declaration report for all farms, as an annex to the revised farming management plan.</p>

¹ Morocco's CP13-COC_Sec form.

EBFT	<i>Initial quota</i>				<i>Current catches</i>			<i>Balance</i>			<i>Adjusted quota</i>			
<i>YEAR</i>	<i>2019</i>	<i>2020</i>	<i>2021</i>	<i>2022</i>	<i>2019</i>	<i>2020</i>	<i>2021</i>	<i>2019</i>	<i>2020</i>	<i>2021</i>	<i>2019</i>	<i>2020</i>	<i>2021</i>	<i>2022</i>
	2948,00	3284,00	3284,00	3284,00	2920,00	3453,71	3259,35	28,00	34,91	24,65	2948,00	3488,62	3318,91	3308,65

Statement by the European Union on the implementation of the EU's eastern Atlantic and Mediterranean bluefin tuna fishing, farming, inspection and capacity management plan for 2022

During the Panel 2 meeting on 1-4 March 2022, the European Union (EU) has been asked several questions related to processes and rules applicable in the infringement cases, which under the EU Treaties the European Commission launches against the EU Member States. While the EU considers that any discussions on control and compliance issues in ICCAT have its proper place in the Compliance Committee process, it offers this explanation of the EU legal framework and the unique role of the European Commission in the implementation of the EU's international commitments.

Article 17 of the Treaty on European Union (TEU) provides that the European Commission shall oversee the application of Union law under the control of the Court of Justice of the European Union. The Treaties further state that the European Commission, as the guardian of the EU treaties, has the task of enforcing Union law, by monitoring the application of EU primary and secondary law, an obligation assumed under international law, and ensuring its uniform application throughout the EU. To this end, it gathers information to monitor EU Member States' compliance. Consistent with this role, the European Commission monitors and ensures compliance with ICCAT Recommendations, including ICCAT Recommendation 21-08, and that the EU's eastern Atlantic and Mediterranean bluefin tuna fishing, farming, inspection and capacity management plan by its Member States is compliant with the relevant ICCAT rules and correctly implemented.

The EU would like to highlight that, given its unique structure and legal framework, it is currently the ICCAT Contracting Party (CPC) with the most far-reaching, comprehensive and transparent procedures for addressing possible infringements. Under EU rules, in cases where the European Commission has grounds to suspect any shortcomings in terms of the compliance of one of its Member States, the European Commission may launch an infringement procedure against the Member State concerned seeking clarification on the alleged lack of compliance. This in turn may ultimately lead to a remedy in cases where the allegations are found to be confirmed. This unique prerogative of the European Commission under EU rules presents 'an additional layer' to ensure compliance compared to the situation of any other CPC. Moreover, while the finer details of the EU procedures are confidential to ensure fair process and Member State's right to be heard, the European Commission regularly publishes information about newly launched infringement procedures taken against its Member States.

In accordance with its legal framework described above, the European Commission will of course discharge its obligations under the Union Treaties and take the appropriate steps to ensure compliance with the relevant ICCAT Recommendations.

**Eastern Atlantic and Mediterranean bluefin tuna fishing, farming,
inspection and capacity management plan**

ALBANIA**Fishing Plan Year: 2022****1. Details of annual fishing plan for catching vessels and traps (paras 14-15)**

CPC Albania hereby presents its fishing, inspection and capacity management plan for Mediterranean bluefin tuna.

In accordance with the fishing allocations adopted by ICCAT, Albania's quota for 2022 is established at 170 t.

The catch of BFT in 2021 was 148.4 t, which includes 0.72 t of dead discards, against 170 t (2021 catch quota). This gives an unused quota of 21.6 t and Albania requests to transfer 8.5 t to the 2022 quota in accordance with paragraph 7 of Recommendation 21-08. In addition, the incidental bycatch quota for small pelagic fishery (1 t) is set aside. To conclude, the adjusted quota for 2022 in Capacity Table is 177.5 t accordingly ($170 + 8.5 - 1 = 177.5$).

The Albania's quota of bluefin tuna fishing is allocated to purse seiner vessels (177.5 t) and incidental bycatch (1mt).

Two purse seiner vessels (41 meters and 28 meters) are authorized to fish the Albanian bluefin tuna quota and these vessels are provided with Bluefin Tuna Fishing Authorization. These will be reported to ICCAT in a timely manner.

The method used to allocate and manage the quotas is based on Minister Order No. 334 dated 25/08/2020, implemented the *Recommendation by ICCAT Amending the Recommendation 18-02 establishing a multi-annual management plan for bluefin tuna in the Eastern Atlantic and the Mediterranean* (ICCAT Rec. 19-04), national legislation as well as in the Albanian fishing fleet register and fleet segments.

CPC Albania has prepared the Ministerial Ordinance to adopt Rec. 21-08, *Recommendation by ICCAT amending the Recommendation 19-04 establishing a multi-annual management plan for bluefin tuna in the eastern Atlantic and the Mediterranean*, which will enter in force in June 2022.

Management of fishing activity will be regulated in accordance with the provisions of the Recommendation by ICCAT establishing a multi-annual management plan for bluefin tuna in the Eastern Atlantic and the Mediterranean Sea (Recs. 19-04/21-08), and the national regulation, especially, Law No. 64/2012 "On fisheries", amended, article 69, Paragraph 1/point b and c, Paragraph 3 and 5.

In the Albanian fishing fleet register, there are no baitboats, longliners, handliners or traps. The fishing activity with baitboats, longliners, handliners is not developed and no permissions are issued. Albania reports annually the fishing gear groups and fleet segments (DCRF - GFCM and DG MARE).

The permissions issued to small scale vessels clearly indicate the distance from the coast (1-2 NM) and fishing gears to be used, gill nets and trammel nets with respective length and mesh size (1000 m and 48mm).

During the year 2021 there were no bycatch of BFT caught in other fisheries by the Albanian fishing fleet.

Table below summarizes the actions taken to implement the requirements of the ICCAT Recommendation.

	<i>ICCAT requirement (per Rec. 21-08)</i>	<i>Explanation of CPC actions taken to implement</i>	<i>Relevant domestic laws or regulations (as applicable)</i>	<i>Note:</i>
1	Catch recording and reporting (paras 74-88)	<p>The Electronic logbook is still under development. During this year, the Masters of authorized vessels are obliged to use a bound fishing logbook for their operations in accordance with the requirements set out in Section A of Annex 2 of Rec. 19- 04/21-08.</p> <p>The masters of towing vessels shall record their activities in accordance with the requirements set out in Sections B, C and D of Annex 2.</p> <p>The Master of catching vessel shall transmit every day to the Albanian authorities, during the whole period in which he is authorized to fish bluefin tuna, the daily information from logbooks, including the date, time, location (latitude and longitude), the weight and number of bluefin tuna caught including releases and discards of dead fish under the minimum size, referred to in paragraph 33.</p> <p>Fish that are discarded dead shall be counted against the Albania quota.</p> <p>Masters of purse seine vessels shall produce reports including operations where the catch was zero.</p> <p>The reports shall be transmitted by the operator to the Albanian authorities by 9.00 GMT for the preceding day.</p> <p>On the basis of the information, the Ministry will transmit a bi-weekly catch report to the ICCAT Secretariat.</p> <p>Albania has designated ports where landing/transshipment operations of bluefin tuna are authorized. The list of ports was transmitted to ICCAT and its part of this annual fishing plan.</p>	<p>Annex 4 of DCM Nr. 407 dt. 08/05/2013</p> <p>“Establishing a control system for ensuring compliance with the rules of fisheries policy”, implementation of the EU Regulation 1224/2009 and Commission Implementing Regulation (EU) No. 404/2011 laying down detailed rules for the implementation of Council Regulation (EC) No 1224/2009</p> <p>“Establishing a community control system for ensuring compliance with the rules of the Common Fisheries Policy”.</p> <p>Minister Order Nr. 334 dt. 25/08/2020.</p>	<p>CP24 attached</p>

		Albania shall report to the ICCAT Secretariat the dates when its entire quota of bluefin tuna has been utilized.	Minister Order Nr. 334 dt. 25/08/2020. The designated ports (Article 40 of Regulation No. 1 of 7 March 2014 on the implementation of Law No. 64 of 31 May 2012 “On Fishery” amended.	
2	Fisheries openings (paras 28-32)	Purse seine fishing for bluefin tuna shall be permitted in the Mediterranean Sea during the period from 26 May to 1 July 2022. If the fishing operations are prevented due to weather conditions, the Albanian authorities may decide that the fishing seasons be expanded by an equivalent number of lost days up to 10 days. The fishing period will be extended in the case of wind speeds reaching 4 or more on the Beaufort scale. Assessment of the length of the bad weather conditions for the purpose of the extension is based on VMS reports evidencing that all vessels are halted, including all vessels involved in joint fishing operations.	Fishing authorization Minister Order Nr. 334 dt. 25/08/2020.	
3	Minimum size (paras 33-35)	It is prohibited to catch, retain on board, transshipping, transferring, landing, transporting, storing, selling, displaying or offering for sale bluefin tuna weighing less than 30 kg or with fork length less than 115 cm. Albania does not catch bluefin tuna in the Adriatic Sea for farming purposes (para 34, point c). If any bluefin tuna below the minimum size are caught and retained or discarded dead, they will be confiscated and will be counted against Albania’s quota.	Minister Order Nr. 334 dt. 25/08/2020	

4	By-catch (para 37, including %)	<p>Catching of bluefin tuna as by-catch is not permitted although Albania allocates 1 (one) t as a specific quota for by-catch of bluefin tuna, considering that its purse seiner fleet of small pelagic exercise activity in the Adriatic Sea</p> <p>If the specific quota for by-catch is exhausted all by-catches of dead bluefin tuna, whether retained or discarded, shall be deducted from the quota of Albania and reported to ICCAT.</p> <p>All by-catches which are alive shall immediately be released back to the sea.</p> <p>Albania shall report information on such quantities (landed dead or released live) on an annual basis to the ICCAT Secretariat.</p>	<p>Minister Order Nr. 334 dt. 25/08/2020</p> <p>Minister Order Nr. 334 dt. 25/08/2020</p>	<p>Albania notified the ICCAT Secretariat on January 8, 2020 (para 57, Rec. 19-04) regarding the 252 kg of BFT caught in September 2019, out of the authorization period by one of small pelagic purse seiner vessel and deducted this amount from the Albanian quota in Fishing Plan 2020.</p> <p>Instead of 170000 kg, in the Fishing Plan 2020 Albania had a reduced quota 169748 kg, due to 252 kg caught as bycatch out of the authorization period.</p> <p>During the year 2020 and 2021 there were no bycatches of BFT caught in other fisheries by the Albanian fishing fleet.</p>
5	Recreational and sports fisheries (paras 38-46)	<p>No quota is allocated for the purpose of sport and recreational fisheries and this fishing activity is not permitted.</p>	<p>Minister Order Nr. 334 dt. 25/08/2020</p>	
6	Transshipment (paras 89-94)	<p>The landing and transshipment operations of bluefin tuna shall be allowed only at the designated port of Shengjin and Saranda.</p> <p>Prior to entry into port, the receiving fishing vessel, or its representative, shall provide the Albanian authorities at least 72 h before the estimated time of arrival, with the information listed in Annex 3, according to the port State's domestic law.</p> <p>Any transshipment requires</p>	<p>Minister Order Nr. 334 dt.25/08/2020</p> <p>The designated ports (Article 40 of Regulation No. 1 of 7 March 2014 on the implementation of Law No. 64 of 31 May 2012 "On Fishery" amended.</p>	<p>CP24 attached</p>

		the prior authorization from the flag CPC of the transshipping fishing vessel concerned.		
7	VMS (paras 218-224)	<p>VMS implemented in catching & towing vessels and the polling rate is at least once every hour.</p> <p>Transmission of positions of catching, & towing vessels starts 5 days before the authorisation period of each vessel and continues until 5 days after the end of the authorisation.</p> <p>The transmission of VMS data to the ICCAT Secretariat by each authorized vessel must not be interrupted when the vessel is in port, for control purposes or bad weather.</p>	<p>Law Nr. 64/2012, Article 72: The vessel monitoring system</p> <p><i>1. Fishing vessels with a length equal to or greater than 12 meters shall install on their board the relevant equipment enabling their automatic identification and localization, at an appropriate interval, at specified intervals, through the transmission of data on the relevant location on the satellite system.</i></p> <p>Minister Order Nr. 334 date 25/08/2020.</p>	
8	CPC observers programme (paras 95-100)	<p>Albanian authorities will provide national observer coverage, carrying official identification documents, on board of all towing vessels i.e. 100%, in accordance with the provisions of Recommendation 19-04/21-08.</p> <p>The Albanian observers were trained by EU experts in the frame of EU-IPA project "Support to fishery sector in Albania" in May 2021</p>	<p>Minister Order Nr. 334 dt. 25/08/2020.</p>	
9	Regional observers programme (paras 101-107)	<p>The Albanian administration will ensure implementation of the ICCAT regional observers programme to guarantee observer coverage of all the purse seiners authorised to fish for bluefin tuna, during all bluefin tuna transfers from purse seiners, during all bluefin tuna caging in farming facilities, throughout harvesting of bluefin tuna in farming</p>	<p>Minister Order Nr. 334 dt. 25/08/2020.</p>	

		facilities and during release of bluefin tuna from farming cages in accordance with the provisions of Rec. 19-04/21-08.		
	<i>Other requirements, such as: tagging programme (para 44) etc.</i>			

Attached the list of designated ports for landing and transshipment in CP24 form.

2. Annual fishing capacity management plan (paras 16-21)

Albania's adjusted quota for 2022 will be 178.5 mt. As Albania allocates 1 t for by-catches, the total quota available for the purse seiners will be 177.5 t (Table 2 attached).

3. Annual farming management plan (paras 12; 22-26), as applicable

The farming management plan 2022 for Albania is detailed below.

Country	FFB	Active/ Inactive	Capacity (t)	Input Capacity(t)	FFB Coordinates
ALBANIA	ROZAF	Active	1200	700	39°53'27.84"N 19°53'35.61"E 39°53'31.09"N 19°55'50.45"E 39°52'31.09"N 19°55'51.47"E 39°52'29.91"N 19°54'51.65"E 39°52'46.46"N 19°54'50.64"E 39°52'45.67"N 19°53'34.89"E

Any potential modification to the farming plan will be notified to ICCAT within the required timeframe.

4. Monitoring, control and inspection plan

a) CPC's monitoring, control and inspection (para 12 c)

In accordance with the domestic legislation in force, (Order, No. 5, dated 28.01.2019) issued by the Directorate of Fisheries and Aquaculture Services, a Task Force will be installed at the Shengjini and Saranda fishing port, during the fishing and harvesting season, to carry out duties based on ICCAT Recommendation 19-04/21-08, Albanian legislation and Minister Order Nr. 334 date 25/08/2020.

Requests for entry and use of Albanian ports by foreign-flagged vessels will be granted, if appropriate, by the relevant port and maritime authorities. In case of authorisation for port entry and use, in-port inspections will be carried out by fishery Inspectors of the relevant authority.

The Task Force should prioritize implementation as follow:

5. The Authorized Fishing Vessel should land the fished bluefin tuna only in the designated place and in due time;
6. The Master of the Authorized Fishing Vessel should notify the port authority (including fisheries inspector) four hours before entering the port, about the estimated time of arrival into the port, estimate of quantity of bluefin tuna retained on board, the information on the geographic area where the catch was taken.

Fishery Inspectors takes measures to be present at the fishing port on arrival and landing time and obtain from the master the landing declaration which reflects the above data already specified (through weighing) and not in a random way.

The Master of the authorized catching vessel shall be responsible and certify the completeness and accuracy of the declaration, which shall indicate, as a minimum requirement, the quantities of bluefin tuna landed and the area where they were caught. All landed catches shall be weighed and not only estimated. The Albanian authority shall send a record of the landing to the flag CPC authority of the fishing vessel, within 48 hours after the landing has ended.

7. The Fishery Inspector also keeps a record of all notifications made by the authorized fishing vessel, the data communicated, the landing declarations in the fishing port, as well as other details that are seen as reasonable. The Fishery Inspector shall communicate these data to the Fishery Directorate within 48 hours of the landing of the fish products by the authorized fishing vessel.
8. Ensure that the Master of fishing vessel fills correctly the logbooks and after each arrival (landing) to take delivery of them.
9. Not allow the bluefin tuna fisheries under 30 kg or under 115 cm (measurement made from the snout to the bifurcation of the tail). The Inspector makes measurements of each tuna caught, just landed and verifies implementation of the foregoing obligation to weigh/minimum size of fish caught.
10. Check the functionality of the VMS system of the vessel, with a non-stop signal, which is not interrupted even when in port.
11. Send to the Fishery Authorities at the Ministry any document dealing with catches and transfers of tuna fish products.
12. Observe, identify and monitor any quantity of bluefin tuna caught by the fishing vessel (outside of authorized fishing season).

In addition, control measures are provided for in Rec. 19-04 (paras 83 and 84)/Rec. 21-08 (paras 95 and 96) for regional and national observers programmes which ensure coverage of:

13. 100% of purse seiners authorised to actively fish for bluefin tuna,
14. 100% of authorised towing vessels,
15. 100% of bluefin tuna transfer operations from purse seiners to towing cages and from caging on farms
16. 100% of harvesting operations.

All monitoring, control and surveillance operations will be ensured in accordance with Rec. 19-04/ Rec. 21-08.

Monitoring, control and inspection of E-BFT caging operations

Fishery inspectors nominated in this case as Farm competent authority shall:

- Coordinate the collection and verification of information on national caging activities, for the control of farm activities and for reporting to Albanian competent authorities.
- Shall ensure that farm operators maintain at all times an accurate schematic plan of their farms, indicating the unique number of all cages and their individual position on the farm.
- Shall assign a unique and identifiable number to each cage associated to farms, including those cages used to transport the fish to the farm.
- Issue a caging authorization for each caging operation
- Shall ensure that towing vessel concerned is maintained at a distance of minimum 1 nautical mile from farm until they are physically present
- *Shall ensure that farm cages containing bluefin tuna are sealed at all times*
- Shall ensure that each bluefin tuna caging operation in the farm is recorded by the farm operator using both conventional and stereoscopic cameras
- Shall ensure that the ICCAT regional observer has immediate access to all stereoscopic and conventional camera video footage
- Shall determine the number and weight of bluefin tuna being caged, by analyzing the video footage of each caging operation provided by the farm operator, following the procedures set out in point 1 of Annex 9
- Shall submit the procedures and results related to the stereoscopic camera programme to the SCRS by 31 October annually
- Shall issue a caging report for each single caging operation

- Shall issue the harvesting operation authorization
- Shall inspect all harvesting operations of bluefin tuna destined for processing vessels

Random control operations using conventional cameras will be carried out in the farm by Fishery Inspectorate between the end of caging and the first caging of the following year.

Considering the size of the farm and the number of cages, farm competent authority will cover 100% of the number of cages in its random control.

Modern technologies will be utilized to implement the aforementioned controls in an effective way.

In accordance with Para 119-123 of Rec. 21-08, the transfers from cages to farm shall be monitored by video cameras and the records of each transfer shall be provided to Albanian competent authorities.

Covering 100% of all caging operations with stereoscopic cameras shall be used to estimate the number and weight of bluefin tuna to be caged. Farm operator shall communicate the results of this program to competent authorities and to the Regional Observer.

b) Joint Scheme of International Inspection (paras 228-231)

N/A

5. Others

N/A

INTERSESSIONAL MEETING OF PANEL 2 – ONLINE, MARCH 2022

<i>Tuna vessel fleet</i>	<i>Fishing fleet</i>					<i>Fishing Capacity</i>					
Type	Best catch rates defined by the SCRS in 2009 (t)	2008	2019	2020	2021	2022	2008	2019	2020	2021	2022
Purse seiner over 40m	70.7		1	1	1	1		70.7	70.7	70.7	70.7
Purse seiner between 24 and 40m	49.78			1	1	1			49.78	49.78	49.78
Purse seiner less than 24m	33.68										
Purse seine total fleet											
Longliner over 40m	25										
Longliner between 24 and 40m	5.68										
Longliner less than 24m	5										
Total longline fleet											
Baitboat	19.8										
Handline	5										
Trawler	10										
Trap	130										
Small coastal vessels and baitboats from the Azores, Canary Islands and Madeira	N/A										
Other (please specify)	5										
Total fleet/fishing capacity									120.48	120.48	120.48
Quota									156	169.748	170
Percentage allocated to by-catch									0.6%	0.58%	0.58%
Adjusted quota (if applicable) ⁽¹⁾									155	168.748	169
Allowance for sports/recreational (if applicable)											
Under/ overcapacity									-84.3	-46.268	-48.52

(1) "Adjusted quota" = Quota + Carry-over - Allowance for discards and/or bycatch (170 + 8.5 - 1 = 177.5).

ALGERIA

Fishing Plan Year: 2022

- **Details of annual fishing plan for catching vessels and traps (para 14-15)**

Algeria presents its eastern Atlantic and Mediterranean fishing, farming, inspection and capacity management plan below.

Algeria's 2022 fishing plan is based on the relevant provisions of the ICCAT recommendations, in particular Recommendation 19-04, 20-07 and the national regulation and legislation, including in particular the Law 01-11 regarding fisheries and aquaculture, amended and supplemented by the Executive Decree No. 03-481 establishing the methods and conditions for exercising fishing and the Ministerial Order of 19 April 2010, amended and supplemented, which establishes bluefin fishing quotas for Algerian-flagged vessels and sets the methods for their distribution and implementation.

The new regulatory mechanism, implemented in 2021, strengthens monitoring and control methods as well as sanctions for any potential non-compliances observed.

In effect, the regulatory mechanism referred to above strengthens the control and surveillance arrangements of the bluefin tuna fishing campaign - upstream and downstream - especially through extension of the prerogatives and scope of action of national controllers onboard tuna purse seine vessels as well as on land, in particular:

- carrying out inspection on departure of tuna vessels to verify fishing methods;
- carrying out controls at landing ports as well as national service controls by coast guards;
- controlling the tuna vessels on landing;
- daily control of the logbook;
- controlling operation of the positioning beacon (VMS);
- monitoring bluefin fishing and transfer operations;
- controlling compliance of information recorded in the logbook;
- controlling bluefin tuna transfer documents following each transfer;
- analysing transfer videos and preparing reports and related documents;
- controlling the content of storage spaces and cold-storage rooms;
- preparing reports on non-compliances and infringements observed.

The objective of these new tasks assigned to fisheries administration controllers is to strengthen monitoring and control of fishing and transfer operations and to ensure compliance with the national regulation and the relevant ICCAT requirements.

Bluefin tuna fishing activities in 2022 will be carried out in accordance with the conditions and methods for fishing live bluefin tuna in accordance with the regulatory mechanism and ICCAT monitoring and control conditions and requirements.

In accordance with paragraph 5 of *ICCAT Recommendation amending Recommendation 19-04 on eastern Atlantic and Mediterranean bluefin tuna*, the bluefin tuna quota allocated to Algeria in 2022 is 1,655 t.

For 2022, Algeria will implement its fishing plan to catch 1,650 t, which will be distributed among the tuna purse seine vessel owners that have been selected in accordance with the fishing and maritime security regulatory conditions to participate in the 2022 campaign.

Individual quotas for each of the vessels authorised to participate in the campaign are established in accordance with a national quota distribution criterion, which is established in the national regulation for the 2022 bluefin tuna fishing campaign, Algeria will allocate fishing quotas only to the tuna purse seine vessels with a length overall between 22 and 40 m. The list of live bluefin tuna catching vessels authorised to actively fish for bluefin tuna will be communicated to the ICCAT Secretariat by the deadlines established in paragraph 50 of Recommendation 19-04, i.e. 12 May 2022.

With regard to bycatch, vessels that do not hold a permit specifically for bluefin tuna, issued in accordance with the current Algerian regulation and that do not target bluefin tuna, will not be authorised to catch, retain on board or land bluefin tuna. Specimens taken as bycatch, alive or dead, will be discarded and recorded in logbooks.

Bluefin tuna catches caught as bycatch and released dead, shall be deducted from the reserved bycatch quota. If there is there is an excess of catches of this reserved quota, these quantities will be deducted from the national quota.

In this context, it should be noted that the entire Algerian fishery is traditional and during the period of passage of bluefin tuna in Algeria. Generally, the weather is consistently bad during this period, which reduces the trips and fishing activity.

Regarding the bluefin tuna fishery opening period, and in accordance with paragraph 29 of Recommendation 19-04, Algeria authorises fishing for bluefin tuna by purse seine vessels for the 2022, from 26 May to 1 July 2022.

In addition, Algeria will implement the necessary measures for compliance with the provisions of Recommendation 21-08 as from its entry into force.

The table below summarises the actions taken to implement the requirements of ICCAT Rec. 19-04 as well as the relevant domestic laws or regulations when applicable.

	<i>ICCAT Requirement (per 21-08)</i>	<i>Explanation of CPC actions taken to implement</i>	<i>Relevant domestic laws or regulations (as applicable)</i>	<i>Note:</i>
1	Catch recording and reporting (paras 74-88)	Purse seiners participating in the fishing season must record catches (including null catches) in the logbook. The logbook is bound and maintained onboard the vessel in accordance with domestic regulations the requirements of the ICCAT Recommendation. Weekly catches of bluefin tuna are communicated to the fishing administration in accordance with paragraphs 65-66 of Rec. 19-04/21-08. Likewise, the dead fish retained or discarded will be deducted from the quota and recorded in the fishing license.	Article 13 and its Annex 6 of the Order of 10 March 2019, which amends and supplements the Order of 19 April 2010, which establishes bluefin tuna fishing quotas for vessels flying the national flag operating in waters under national jurisdiction and sets the methods for their distribution and implementation.	
2	Fisheries openings (para 28-32)	Bluefin tuna fishing is open for purse seine tuna vessels: 26 May 1 July.	Article 5 of the Order of 10 March 2019, which amends and	

		<p>Fishing will be conducted in international areas of the Mediterranean.</p>	<p>supplements Article 23 of the Order of 19 April 2010, which establishes bluefin tuna quotas for vessels flying the national flag operating in waters under national jurisdiction and sets the methods for their distribution and implementation.</p> <p>However, in accordance with paragraph 30 of Rec. 19-04, Algeria may possibly extend the fishing period of its affected vessels, by an equivalent number of lost days up to 10 days in the event of bad weather conditions during the authorised fishing period. The fishing period will be extended in the case of wind speeds reaching 4 or more on the Beaufort scale.</p> <p>Assessment of the length of the bad weather conditions for the purpose of the extension is based on VMS reports evidencing that all vessels are halted, including all vessels involved in joint fishing operations.</p>	
3	Minimum size (para 33-35)	<p>115 cm - 30 kg. However, bycatch of up to a maximum of 5% of bluefin tuna weighing between 8 and 30 kg or with a</p>	<p>Executive Decree No. 20-266 of 20 September 2020 which amends and supplements. Executive Decree</p>	

		<p>fork length of 75 to 115 cm in relation to total catch may be authorised. Dead fish will be declared and deducted from Algeria's quota and live fish will be released.</p>	<p>No. 04-86 of 18 March 2004 which fixes the minimum trade sizes of biological resources. Article 23 quarter of the Order of 18 March 2015, which amends and supplements the Order of 19 April 2010, which establishes bluefin tuna quotas for vessels flying the national flag operating in waters under national jurisdiction and sets the methods for their distribution and implementation.</p>	
4	<p>Bycatch (para 37, including %)</p>	<p>With regard to bycatch, all vessels that do not hold a specific permit for bluefin tuna, issued in accordance with the Algerian regulation in place, are not authorised to catch, retain on board or land bluefin tuna. Any discard of dead bluefin tuna will be deducted from the 5 t allocated to bycatch or from Algeria's quota. Discards will be recorded in logbooks and counted against Algeria's quota. In addition, catches are controlled at port accesses by members of the National Coast Guard Service and at landing sites by fishing inspectors. 2,3 t were consigned in 2020.</p>	<p>Executive Decree No. 20 September 2020 which amends and supplements Executive Decree No. 04-86 of 18 March 2004, which fixes the minimum trade sizes of biological resources.</p>	
5	<p>Recreational and sport fisheries (para 38-46)</p>	<p>There are no recreational and sport fisheries targeting bluefin tuna in Algeria.</p>	<p>Article 16 of Executive Decree No. 03-481, dated 13 December</p>	

		No quota is allocated to recreational and sport fisheries.	2003 establishing the fishing conditions which stipulate that only bluefin tuna vessels carrying a fishing license are authorised to catch bluefin tuna.	
6	Transshipment (paras 89-94)	Transshipment is prohibited.	Article 58 of Law 01-11 on fisheries and aquaculture, as amended and supplemented.	
7.	VMS (paras 218-224)	Legislative and regulatory obligation	Article 20 bis of Law No. 15-08, which amends and supplements the Law 01-11 on the fisheries and aquaculture, and Article 7 of the Order of 15 May 2012, which amends and supplements the Order of 19 April 2010, which establishes bluefin tuna quotas for vessels flying the national flag operating in waters under national jurisdiction and sets the methods for their distribution and implementation.	For purse seine tuna vessels, VMS messages are transmitted every hour, in accordance with the provisions of ICCAT Recs 19-04 and 18-10.
8	CPC observer programmes (paras 95-100)	Boarding of one controller / national observers onboard each of the bluefin tuna purse seine vessels actively targeting bluefin tuna throughout the fishing season. There is a 100% coverage for purse seine vessels.	Article 8 of the Order of 19 April 2010, which establishes bluefin tuna quotas for vessels flying the national flag operating in waters under national jurisdiction and sets the methods for their distribution and implementation.	
9	Regional observers programme (para 101-107)	Regulatory requirement: Purse seine tuna vessel	Article 8 of the Order of 15 May 2012, which	

		owners are required to take onboard ICCAT regional observers.	amends and supplements the Order of 19 April 2010, which establishes bluefin tuna quotas for vessels flying the national flag operating in waters under national jurisdiction and sets the methods for their distribution and implementation.	
	Other requirements, such as the tagging programme (para 44c).	Use of video camera for transfer surveillance: Transfer operations from the fishing net to the transport cage will be recorded by video camera, as required by paragraph 91 and Annex 8 of ICCAT Rec. 19-04.	Article 17 of the Order of 19 April 2010, which establishes bluefin tuna quotas for vessels flying the national flag operating in waters under national jurisdiction and sets the methods for their distribution and implementation.	

2. Annual fishing capacity management plan (para 16-21)

The fishing capacity, represented by a fleet of 31 tuna purse seine vessels, is adapted to the quota allocated to Algeria, i.e. 1,650 t. Therefore, Algeria will not exceed its bluefin tuna fishing capacity.

The number of bluefin catching vessels will be enacted in accordance with the criteria established by the national regulations enforced.

Individual quotas are attributed in accordance with the national quota distribution criterion, which is established in the national regulation Ministerial Order of the 18 March 2015 which establishes bluefin fishing quotas for vessels flying the national flag and sets the methods for their distribution and implementation.

The list of vessels that should participate in the 2022 fishing campaign will be notified to the ICCAT Secretariat by the deadlines established in paragraph 50 of Recommendation 19-04.

3. Annual farming management plan (paras 12; 22-26), if appropriate

Algeria is not operating any bluefin tuna farming facilities in 2022.

4. Monitoring, control and inspection plan

a) Monitoring, control and inspection by CPC (para 12c)

A national inspection programme for all bluefin tuna fishing operations will be implemented for the 2022 campaign, in accordance with national legislation and the domestic regulation and the relevant provisions of ICCAT recommendations. This programme consists in carrying out in-port inspections on tuna vessels authorised to participate in the 2022 fishing campaign, before and after the campaign.

One controller / observer of the Fisheries Administration is embarked onboard each of the tuna purse seine vessels throughout the fishing season. The controllers / observers are responsible for monitoring fishing, transfer operations and verifying information and data on the fishing campaign. They will ensure compliance with ICCAT recommendations on bluefin tuna fishing. Each controller / observer are required to produce campaign reports at the end of the campaign.

The controllers / observers will remain in constant contact with the fisheries administration and communicate all information on fishing and transfer operations.

In addition, for the purposes of monitoring, the tuna vessels that are authorised to participate in the fishing campaign will be equipped with a VMS beacon which will be operational throughout the campaign. Transmission of VMS data is mandatory for all tuna vessels and must start 5 days before the authorisation period and will continue 5 days after the fishing campaign. The polling rate will be every hour in accordance with the latest relevant ICCAT Recommendation.

With regard to landing ports, tuna vessels flying the national flag are authorised to land bluefin tuna caught during the fishing campaign in the authorised ports only, i.e.: Port of Algiers, port of Annaba, port of Bejaïa, port of Cherchell, port of Oran, port of Ténès, port of Bouzedjar and the port of Beni Saf. An inspection of products to be landed by tuna purse seine vessels that have participated in the bluefin tuna fishing season, and all the onboard documents will be carried out by the relevant State institutions (Fisheries and Coast Guard). It is prohibited for foreign vessels to land bluefin tuna.

In accordance with the decision taken by the Commission at the annual meeting held in Dubrovnik, regarding the IMO number of fishing vessels on the ICCAT record, IMO number is a regulatory requirement of tuna vessels that will participate in the bluefin tuna fishing campaign.

b) Scheme of Joint International Inspection (paras 228-231)

Algeria has more than 15 tuna vessels that will participate in the 2022 live bluefin tuna fishing campaign.

It should be recalled that in the preparation of financial regulations for 2021, Algeria has initiated internal procedures with the Ministry of Finance to grant the necessary funds to hire an inspection vessel for the implementation of the joint international inspection programme.

The release of funds has been enabled for 2022. However, and in accordance with domestic legislation and regulations, the necessary public market procedures for the implementation to hire an inspection vessel entails important waiting times. In this regard, Algeria cannot hire an inspection vessel for the 2022 campaign.

In addition, 2020 and 2021 have been marked by the world health context due to the pandemic that has impacted and hindered considerably the steps taken to release the funding. Procedures need to be established, in particular regulatory procedures, to make the financial envelop available.

Therefore, Algeria will not operate an inspection vessel in 2022 for implementation of the joint international inspection programme.

It is important to note that within the context of international joint inspection, Algerian vessels undergo inspections by inspection vessels of the European Union and Tunisia. The results of each of these visits are taken into account to improve the national regulatory arrangements.

In addition, efforts have been made to participate with other CPCs in the ICCAT Joint Scheme of International Inspection.

In this context and in accordance with the provisions of paragraph 111 of Recommendation 19-04, Algeria has carried out a risk analysis of alternative measures, which can be summarised as follows:

As regards authorisation to fish, it should be noted that pursuant to regulations, bluefin tuna fishing is only authorised to those vessels carrying a fishing license, with individual quotas, issued by the Ministry of Fisheries and Fishery Resources.

As to monitoring of fishing campaigns, Algerian tuna purse seine vessels are monitored by VMS by the National Coast Guards Service and the Fisheries Administration.

Also, tuna purse seine fishing vessels that only participate in international waters carry out bluefin tuna fishing, inspected by European Union or Tunisian inspection vessels during each inspection campaign.

In addition, fishing administration inspectors onboard tuna vessels submit to the fisheries administration reports on monitoring of the fishing campaign and enquiries based on crosschecks of information are carried out in the case of potential non-compliance with the national regulation and ICCAT rules.

In addition, it should be noted that Algeria has strengthened compliance with regard to the fisheries through implementation of the legislative provisions transcribed in the new law 15-08 that regulates the fisheries and aquaculture and carries heavier sanctions and penalties including custodial sentences, depending on the type of infringement incurred.

Despite the efforts undertaken to commission an international inspection vessel, Algeria will not deploy for 2022, an international inspection vessel due to financial and regulatory constraints.

It should be noted that according to the provisions of ICCAT Recommendations, Algeria has commenced a process together with Tunisia to participate in the joint inspection programme, but it has not been possible to carry out the steps.

On account of the above, alternative measures have been implemented to ensure monitoring and control, i.e.

- *Control and inspection prior to the bluefin tuna fishing season:*

All tuna purse seiners are subject to inspections for the purpose of controlling fishing equipment, the relevant documents, in accordance with the Ministerial Decision of 19 April 2010, as amended and supplemented.

- *Control and monitoring during the fishing season:*

Permanent inspectors of the fisheries administration, are embarked onboard each tuna purse seiner, throughout the authorised bluefin tuna fishing period. Therefore, 100% coverage of tuna purse seiners is ensured, in accordance with the Ministerial Decision of 19 April 2010, as amended and supplemented.

These national inspectors, duly qualified to ensure application and compliance with ICCAT conservation and management measures, have been strengthened by broadening of their prerogatives and missions, in terms of monitoring and control, in accordance with the Ministerial Decision of 19 April 2010, as amended and supplemented. (Refer to page 1 of this fishing plan).

- *Coordination of monitoring and control:*

A unit responsible for monitoring and control, has been established by a Ministerial Decision. This unit carries out coordination with controller observers embarked onboard all the tuna purse seiners and constantly receives relevant information from the controller observers onboard all the purse seiners, in accordance with the Ministerial Decision of 19 April 2010, as amended and supplemented.

- *Use of VMS:*

Two bodies monitor the use of VMS data: the National Coast Guard Service and the ministerial unit referred to in point (iii). If failures are registered by the VMS onboard the vessels, the controller observers will transmit the positions regularly, in addition to the masters.

- *Control and inspection on return of tuna purse seiners to ports of landing:*

On return, all tuna purse seiners undergo an inspection in the designated ports by two control bodies i.e. the National Coast Guard Service and the fisheries inspectors. In addition, landing of bluefin tuna is only authorised in the ports designated for this purpose, in accordance with the Ministerial Decision of 19 April 2010, as amended and supplemented.

- *Cross-checking of monitoring and control data and enquiries:*

The information transmitted by the national controller observers, the monitoring unit, VMS are used to monitor and control fishing operations during the fishing season.

In addition to this, and on the return of the tuna vessels, all the reports submitted by the masters and the controller observers, as well as the documents are used, for the purpose of cross-checking the data and potentially improving the control for future fishing seasons.

- *Strengthening of legislation and regulations promoting compliance with ICCAT requirements:*

The provisions transcribed in Law 15-08, regulating fishing in Algeria, through strengthening of sanctions and penalties aim to ensure abidance by tuna purse seiners, and strict compliance of the relevant ICCAT provisions.

5. Others

INTERSESSIONAL MEETING OF PANEL 2 – ONLINE, MARCH 2022

<i>Tuna vessel fleet</i>	<i>Fleet (vessels)</i>						<i>Fishing capacity</i>				
Type	Best catch rates defined by the SCRS in 2009 (t)	2008	2019	2020	2021	2022	2008	2019	2020	2021	2022
Purse seiner over 40m	70,7	0	0	0	0	0	0	0	0	0	0
Purse seiner between 24 and 40m	49,78	8	20	24	27	30	398,24	995,60	1194,72	1344,06	1493,4
Purse seiner less than 24m	33,68	0	2	2	1	1	33,68	67,36	67,36	33,68	33,68
Purse seine total fleet		8	22	26	28	31	398,24	1062,96	1262,08	1377,74	1527,08
Longliner over 40m	25	0	0	0	0	0	0	0,00	0,00	0,00	0,00
Longliner between 24 and 40m	5,68	1	0	0	0	0	5,68	0,00	0,00	0,00	0,00
Longliner less than 24m	5	1	0	0	0	0	5	0,00	0,00	0,00	
Total longline fleet		2	0	0	0	0	10,68	0,00	0,00	0,00	
Baitboat	19,8	0	0	0	0	0	0	0,00		0,00	
Handline	5	0	0	0	0	0	0	0		0,00	
Trawler	10	0	0	0	0	0	0	0		0,00	
Traps	130	0	0	0	0	0	0	0		0,00	
Small coastal vessels and baitboats from the Azores. Canary Islands and Madeira	NA	0	0	0	0	0	0	0		0,00	
Other (please specify)	5	0	0	0	0	0	0	0		0,00	
Total fleet/fishing capacity		10	22	26	28	31	408,92	1062,96	1262,08	1377,74	1527,08
Quota							1460,04	1446,00	1655,00	1655,00	1655,00
Percentage allocated for bycatch		0%	0.54%	0.30%	0.30%	0.30%	0	9	5	5	5
Adjusted quota (if applicable)							1460,04	1437,00	1650,00	1650,00	1650,0
Allowance for sports/recreational (if applicable)		0	0	0	0	0	0	0	0	0	0
Under/overcapacity							-1051,12	-365,04	-382,92	-267,26	-117,92

Note: The calculation of undercapacity is carried out using the following formula: (total fishing capacity + quota allocated to bycatch) – Adjusted quota (if applicable).

CHINA**Fishing Plan Year: 2022****1. Details of annual fishing plan for catching vessels and traps (paras 14-15)****1.1 Introduction**

According to Recommendation 19-04/21-08, China was allocated 102 metric tons of BFT in the 2022 fishing season. China will dispatch two longline fishing vessels to conduct BFT fishing activities seasonally in the eastern Atlantic, as in the past several years.

The Fisheries Law (renewed by the Standing Committee of the National People's Congress in December 2013) and the Regulation on Management of Distant Water Fisheries (Document No. 2020-2, issued by the Ministry of Agriculture and Rural Affairs in April 2020) are the main national legislation to manage Chinese distant water fishing vessels conducting fishing activities on the high seas. In addition, the fisheries authority of China also issued the Regulation on VMS Management (Document No. 2019-22, issued by the General Office of the Ministry of Agriculture and Rural Affairs in January 2019) and the Regulation on the Implementation Guidance on the Management of National Observer Program in Distant Water Fisheries (Document No. 2016-72, issued by the General Office of the Ministry of Agriculture and Rural Affairs in January 2019) which respectively specify the stipulation of VMS and observer on China's distant water fishing vessels. In addition, the Ministry of Agriculture and Rural Affairs updated the ministerial-level document, namely Notification on Further Strictly Complying with Conservation and Management Measures Adopted by Tuna-RFMOs (Document No. 2019-01, issued by the General Office of Ministry of Agriculture and Rural Affairs in January 2019) which entered into force from 1 January 2019, which includes the main requirements contained in the ICCAT Recommendation 19-04, such as minimum size, observer coverage, VMS requirement, logbook requirement, fishing season and designated transshipment/landing port requirement and so on.

1.2 Details of fishing plan

China will dispatch two fishing vessels to catch BFT which are longliners. Both vessels will be allocated 50.5 metric tons; each vessel will hold one half of the 101 t, the other 1 t will be allocated for possible bycatch and discarded catch.

It is relatively simple to monitor and respect the quotas since only two fishing vessels share the limited quotas and they belong to one company. We could manage the quotas through the following ways:

Observer program: We implement 50% or above observer coverage for BFT fishing vessels which is higher than the requirement in Rec. 19-04/21-08. The observer must be familiar with the BFT recommendation and will record every day the accurate weight and number of BFT, including the weight for round fish and GG weight.

Catch report: We have daily\weekly\monthly BFT catch reports and we could cross-check the catch. The fishing vessel owner will be notified when 80% and 90% of the catch is reached, and the BFT fishing vessel must cease to fish and immediately leave the fishing ground when the quota is exhausted.

Logbook: The fishing vessel master must strictly and accurately fill in the logbook (both paper version and electronic version), including any other bycatch and incidental catch.

Landing/transshipment: Only in the designated port authorized by ICCAT can these vessels conduct landing or transshipment activities. China intends to use the port of Dakar in Senegal, Mindelo in Cabo Verde or Las Palmas in Spain. Chinese vessels will only be authorized to land E-BFT in these ports and that transshipments in port (in addition to at sea transshipments), are not allowed.

VMS requirement: We could monitor these vessels through our VMS platform and their positions could be polled whenever we need.

Catch documentation: Use the catch documentation system to check the quotas.

BFT bycatch is not allowed for any other fishing vessels which are not authorized to catch BFT. Our BFT fishing area is delimited by west of 10°W and north of 42°N, and no fishing vessels operate in the Mediterranean Sea which means no bycatch and small-scale BFT. However, we reserved 1 t for discarded catch just in case.

Training program: Each year we hold a training program for the fishing vessel owners and vessel masters, interpret the relevant recommendations and the main requirements, meanwhile, Rec.19-04/21-08 was translated into Chinese and distributed to them for better understanding and learning.

	<i>ICCAT requirement (per Rec. 21-08)</i>	<i>Explanation of CPC actions taken to implement</i>	<i>Relevant domestic laws or regulations (as applicable)</i>	<i>Note:</i>
1	Catch recording and reporting (paras 74-88)	We distribute to every Chinese fishing vessel operating on the high seas the standardized logbook (both paper and electronic) and ask the master to fill it in timely and accurately. The BFT must be landed and transhipped at the designated port. The fishing vessel owner must report daily/weekly/monthly catch. We will issue the warning notice when the quota approaches 80% and 90% respectively of the total. When the quota is exhausted we will ask the fishing vessels to stop operations and leave the fishing ground immediately, then we will report the closure to the Secretariat at once.	<ol style="list-style-type: none"> 1. Regulation on Management of Distant Water Fisheries. 2. Notification issued by the General Office of the Ministry of Agriculture and Rural Affairs on Further Strictly Complying with Conservation and Management Adopted by Tuna RFMOs. <p>For example, Section 2, Logbook: Each tuna fishing vessel must file in the logbook and record truly all the catches including marine mammals. The bluefin tuna company must report its catches to the China Overseas Fisheries Association daily/weekly/monthly.</p>	
2	Fisheries openings (paras 28-32)	Usually, our vessels will start to fish at the end of September until the quotas are exhausted but usually stop before the end of the year given the very few limited quotas.	<ol style="list-style-type: none"> 1. Regulation on Management of Distant Water Fisheries. 2. Notification issued by the General Office of the Ministry of Agriculture and Rural Affairs on Further Strictly Complying with Conservation and management Measures adopted by Tuna RFMOs. 	

			For example, Section 4: Fishing area and gear limitation and prohibition: the fishing seasons and fishing area in the Atlantic Ocean shall be from 1 August to 31 January next year, in the area delimited by West of 10°W and North of 42°N.	
3	Minimum size (paras 33-35)	Through the observer program and logbook as well as the daily/weekly/monthly catch reports we could monitor the minimum size. Any catch under the minimum size must be released and recorded. We set the minimum size limit which corresponds to Rec. 19-04/21-08, and prohibit catching, retaining, transhipping, landing and selling BFT less than 30 kg or 115 cm; a maximum tolerance of 5% is authorized. Discarded catch is also counted against our quotas.	<ol style="list-style-type: none"> 1. Regulation on Management of Distant Water Fisheries. 2. Regulation on the Implementation of National Observer Management. 3. Notification issued by the General Office of the Ministry of Agriculture and Rural Affairs on Further Strictly Complying with Conservation and Management Measures Adopted by Tuna RFMOs. <p>For example, Section 5: Vessels targeting BFT in the Atlantic Ocean must follow the minimum size requirement.</p>	
4	By-catch (para 37, including %)	Bycatch is not allowed for any other fishing vessels. Any vessels other than BFT fishing vessels are prohibited to catch, retain and tranship BFT. Any BFT caught by other vessels are not issued eBCD. All the bycatch must be discarded. These discarded BFT will be counted against China's BFT quota and these data will be reported to ICCAT. And we allocate 1 t for this kind of discarded bycatch.	<ol style="list-style-type: none"> 1. Regulation on Management of Distant Water Fisheries. 2. Regulation on the Implementation of National Observer Management, which stipulated that tuna fishing vessels are obliged to receive national observers according to tuna-RFMOs requirements. 3. Notification issued by the General Office of the Ministry of Agriculture and Rural 	

			<p>Affairs on Further Strictly Complying with Conservation and Management Measures Adopted by Tuna-RFMOs.</p> <p>For example, Section 3: Fishing quota: tuna fishing vessel is not allowed to catch if no quota is allocated.</p>	
5	Recreational and sports fisheries (paras 38-46)	Not applicable as we do not have such fishery.	Not applicable as we do not have such fishery.	
6	Transshipment (paras 89-94)	<p>Bluefin tuna fishing vessel shall only tranship and/or land bluefin tuna catches in the designated ports.</p> <p>Transshipment at sea is not allowed for BFT fishing vessel.</p>	<ul style="list-style-type: none"> - Regulation on Management of Distant Water Fisheries. - Notification issued by the General Office of Ministry of Agriculture and Rural Affairs on Further Strictly Complying with Conservation and Management Measures Adopted by Tuna-RFMOs. <p>For example: Section 7: transshipment: Tuna longline fishing vessels targeting Atlantic BFT is only allowed to conduct transshipment at the designated port in accordance with relevant ICCAT requirement.</p>	
7	VMS (paras 218-224)	The VMS could be reported to the Secretariat directly and we will also poll the vessel position from our VMS platform. From our platform we could monitor and poll 24 positions per day, once every one hour which is higher than the ICCAT requirement.	<ol style="list-style-type: none"> 1. Regulation on Management of Distant Water Fisheries. 2. Regulation on Management of VMS, which stipulates vessels must report their position once every hour. 3. Notification issued by the General Office of the Ministry of Agriculture and Rural Affairs on Further 	

			Strictly Complying with Conservation and Management Measures Adopted by Tuna-RFMOs.	
8	CPC observers programme (paras 95-100)	Usually, we will implement 50% or above observer coverage which is higher than 20% for longliners stipulated in Rec. 19-04/21-08.	<p>1) Regulation on Management of Distant Water Fisheries.</p> <p>2) Regulation on the Implementation Guidance on the Management of National Observer, which stipulates that tuna fishing vessels are obliged to receive national observers according to tuna-RFMOs requirements.</p> <p>3) Notification issued by the General Office of the Ministry of Agriculture and Rural Affairs on Further Strictly Complying with Conservation and Management Measures Adopted by Tuna-RFMOs.</p>	
9	Regional observers programme (paras 101-107)	Not applicable as we do not have any purse seiners. Neither do we have caging or farming activities.	Not applicable as we do not have any purse seiners. Neither do we have caging or farming activities.	
	<i>Other requirements, such as: tagging programme (para 44) etc.</i>	Each BFT will have a tag with a unique number.	Based on China's Fisheries Law, the competent Chinese fishery authority has notified the relevant company of such ICCAT requirement on BFT.	

2. Annual fishing capacity management plan (paras 16-21)

Please see the attachment.

3. Annual farming management plan (paras 12; 22-26), as applicable

Not applicable as China has no BFT farming.

4. Monitoring, control and inspection plan

a) CPC's monitoring, control and inspection (para 12 c)

Observer program: We implement 50% or above observer coverage for BFT fishing vessels. The observer must be familiar with the BFT recommendation and will record every day the accurate weight and number of BFT, including the weight for round fish and GG weight.

Catch report: We have daily\weekly\monthly BFT catch reports and we could cross-check the catch. The fishing vessel owner will be notified when 80% and 90% of the catch is reached, and the BFT fishing vessel must cease to fish and immediately leave the fishing ground when the quota is exhausted.

Logbook: The fishing vessel master must strictly and accurately fill in the logbook (both paper version and electronic version), including any other bycatch and incidental catch.

Landing/transshipment: Only in the designated port authorized by ICCAT can these vessels conduct landing or transshipment activities. China intends to use the port of Dakar in Senegal, Mindelo in Cabo Verde or Las Palmas in Spain. Chinese vessels will only be authorized to land E-BFT in these ports and that transshipments in port (in addition to at sea transshipments), are not allowed.

VMS requirement: The VMS could be reported to the Secretariat directly at least every two hours and we will also poll the vessel position from our VMS platform. From our platform we could monitor and poll 24 positions per day, once every one hour.

Catch documentation: Use the catch documentation system to check the quotas.

These vessels can only conduct landing or transshipment activities in the designated port authorised by ICCAT. China will use the port on the ICCAT BFT authorised port list. The vessels are required to follow the regulation set by the port CPC.

b) Joint Scheme of International Inspection (paras 228-231)

Not applicable as China has only two BFT fishing vessels.

5. Others

Not applicable as China has no such research projects.

INTERSESSIONAL MEETING OF PANEL 2 – ONLINE, MARCH 2022

<i>Tuna vessel fleet</i>	<i>Fishing fleet</i>						<i>Fishing Capacity</i>				
Type	Best catch rates defined by the SCRS in 2009 (t)	2008	2019	2020	2021	2022	2008	2019	2020	2021	2022
Purse seiner over 40m	70.7										
Purse seiner between 24 and 40m	49.78										
Purse seiner less than 24m	33.68										
Purse seine total fleet											
Longliner over 40m	25	4	2	2	2	2	100	50	50	50	50
Longliner between 24 and 40m	5.68										
Longliner less than 24m	5										
Total longline fleet		4	2	2	2	2	100	50	50	50	50
Baitboat	19.8										
Handline	5										
Trawler	10										
Trap	130										
Small coastal vessels and baitboats from the Azores, Canary Islands and Madeira	N/A										
Other (please specify)	5										
Total fleet/fishing capacity		4	2	2	2	2	100	50	50	50	50
Quota							63.55	90	102*	102*	102*
Percentage allocated to by-catch									0.98% (1t)	0.98% (1t)	0.98% (1t)
Adjusted quota (if applicable)									101	101	101
Allowance for sports/recreational (if applicable)											
Under/ overcapacity							36.4	-40	-51	-51	-51

* A 1 ton quota is set aside for incidental by-catch.

EGYPT

Fishing Plan Year: 2022

a) Details of annual fishing plan for catching vessels and traps (para 16-17)

In accordance with the fishing allocations adopted by ICCAT during the 27th Regular Meeting of the Commission which was held online due to the COVID-19 pandemic, the allocated quota for Egypt for the 2022 fishing season is 330 t. In accordance with para 37 (Rec. 21-08), the adjusted quota will be 326.7 t on the basis of 1% bycatch allocation. The Egyptian fishing vessels catching bluefin tuna in the Mediterranean Sea are purse seiner (P.S.). All Egyptian vessels targeting BFT are equipped with a VMS system and are required to transmit on an hourly basis.

The General Authority for Fish Resources Development (GAFRD) is the Egyptian authority in Egypt which enforces the ministerial resolutions related to Egyptian fishermen. Three P.S. vessels are authorised to fish for MED BFT. GAFRD will licence P.S. to catch BFT for the 2022 fishing season which starts on 26 May 2022 and ends on 1 July 2022, in accordance with ICCAT Rec. 21-08.

In the case of non-compliance with the Egyptian resolutions or any of ICCAT Recommendations by the fishing vessel, the penal code will be applied, and the vessel will not be allowed to work in the bluefin tuna fishery for the next season, and in case of repetition of non-compliance, this vessel will be banned from the bluefin tuna fisheries.

	<i>ICCAT requirement (per Rec. 21-08)</i>	<i>Explanation of CPC actions taken to implement</i>	<i>Relevant domestic laws or regulations (as applicable)</i>	<i>Note:</i>
1	Catch recording and reporting (paras 74-88)	The master of the catching vessels records all information in the logbooks according to the requirements set in Rec 21-08, to be submitted to GAFRD for verification using available inspection reports, regional and national observers' reports, in addition to recording and reporting obligations laid down by relevant ICCAT Recommendations.	Resolution Number (121) for the year 2022, Article (8)	
2	Fisheries openings (paras 28-32)	The authorized period for fishing bluefin is from 26 May 2022 – 1 July 2022. In accordance with paragraph 28 of Recommendation 21-08, Egypt may possibly extend its fishing period in the event of bad weather conditions during the authorized fishing period. The fishing season may be extended up to 10 days based on operators' request, due to bad weather conditions. Moreover, the closed season for bluefin tuna fisheries will be announced by the Fisheries Agency once the allowed quota is caught even during the authorized fishing period. No coastal recreational, sport fisheries will be allowed.	Resolution Number (121) for the year 2022, Article (3)	

<p>3</p>	<p>Minimum size (paras 33-35)</p>	<p>Provisions regulating minimum size laid down by the relevant ICCAT Recommendation 21-08 shall be strictly implemented.</p> <p>National observer / inspector on board shall ensure the full commitment of the minimum size in accordance with the relevant ICCAT Rec. 21-08 during the season.</p> <p>Regulations prohibit catching, retaining onboard, transshipping, transferring, landing, storing, selling, displaying or offering for sale bluefin tuna weighing less than 30 kg or with a fork length of less than 115 cm.</p> <p>Incidental catch of max. 5% of BFT weighting (8 to 30 kg) or fork length 75 to 115 cm may be authorized.</p> <p>All live undersized BFT must be released into the sea and dead BFT should be reported and deducted from the quota.</p>	<p>Resolution Number (121) for the year 2022, Article (4)</p>	
<p>4</p>	<p>By-catch (para 37, including %)</p>	<p>Egypt allocated a specific quota for BFT bycatch, 1% of the total allowable quota yearly, on the basis that there was not any bycatch recorded in 2021. 1% of total allowable quota (3.3 ton) will be set aside for by catch.</p> <p>All bycatch shall not exceed 20% of the total catch on board at the end of each fishing trip. Those quantities as bycatches shall be calculated in relation with the total catches on board (in weight or number of specimens).</p> <p>Vessels not fishing actively for bluefin tuna are monitored by our national inspectors in landing ports to count any bycatches of BFT (if any) in order to ensure implementation of ICCAT Rec. 21-08.</p> <p>All our inspectors in landing ports have been instructed to monitor and report any bycatch of BFT throughout the year.</p> <p>Egypt does not have any discards for bluefin tuna, as most of the purse seiners in Egypt are less than 24 m vessels working in our near shore so there is no chance to catch bluefin tuna (BFT), only the authorized</p>	<p>Resolution Number (121) for the year 2022, Article (5)</p>	

		<p>vessels targeting the BFT are allowed to work in deep water to catch BFT. Moreover, Egypt in collaboration with FAO (EastMed-project) conducted a study to assess the discards in the Mediterranean, the study shows that the percentage of discards for purse seiners is less than 2% and there was no record for BFT in the report.</p> <p>Egypt shall submit its bycatch report by the end of the year declaring all BFT bycatches (if any) which must be deducted from the specified bycatch quota of the year.</p> <p>The amount of bycatch discarded whether alive or dead in status should be reported to GAFRD immediately, and these data will be reported to ICCAT.</p> <p>All quantities of BFT bycatch shall be landed only at the designated ports</p>		
5	Recreational and sports fisheries (paras 38-46)	No coastal recreational, sport fisheries are allowed.	Resolution Number (121) for the year 2022, Article (6)	
6	Transshipment (paras 89-94)	Transshipment at sea is completely prohibited.	Resolution Number (121) for the year 2022, Article (12)	
7	VMS (paras 218-224)	All authorized BFT vessels fishing actively in the 2022 fishing season, shall be equipped with a fulltime operational satellite tracking device (vessel monitoring system, VMS) onboard, as required by GAFRD, to be transmitted every 1 hour as minimum requirement.	Resolution Number (121) for the year 2022, Article (16)	
8	CPC observers programme (Paras 95-100)	One of national observers of fisheries specialists will inspect the fishing operations on board during the fishing operations for monitoring the catch, recording the required data and ensuring the compliance of the fishing vessel with the ICCAT Recommendations and GAFRD resolutions. The permanent observer in port is assigned to follow up the landed catches (if any) and reviewing the onboard observers reports.	Resolution Number (121) for the year 2022, Article (14)	
9	Regional observers programme (paras 101-107)	All BFT vessels, fishing actively in 2022 fishing season have to be covered (100%) by two observers (one national observer and one ICCAT ROP Observer).		

10	<i>Other requirements, such as: tagging programme (para 44) etc.</i>	Egypt is not involved in the tagging programme.		
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The designated ports for BFT landing through form CP24 are Alexandria commercial port platform and El-Meadia fishing port platform.

2. Annual fishing capacity management plan (paras 16-21)

The GAFRD will allocate to each P.S. an individual quota and it will ensure that its fishing capacity is commensurate with its allocated quota according to Recommendation 21-08.

3. Annual farming management plan (paras 12; 22-26), as applicable

No farming activities will take place in 2022.

4. Monitoring, control and inspection plan

a) CPC's monitoring, control and inspection (para 12 c)

For the national vessels, full inspection coverage shall be ensured during the 2022 bluefin tuna fishing season by GAFRD's inspectors. The inspection will include all the activities that will be conducted during the fishing season, i.e., fishing, transfer, caging, and landing if any. The national observer covers all fishing activities through the complete fishing period.

All catching vessels are crosschecked as they maintain and submit daily information from logbooks by electronic or any other effective means to GAFRD and in case of landing, all landed catches are weighed and are inspected based on a risk assessment system involving quota, fleet size and fishing effort by national inspectors.

All vessels shall be equipped and monitored with an operational Vessel Monitoring System (VMS) to be transmitted every 1 hour as minimum requirement. GAFRD submit weekly reports including information such as date, time, location (latitude, longitude), weight and number of BFT caught in the area covered by the plan, including releases and discards of dead fish.

b) Joint Scheme of International Inspection (para 228-231)

Egypt has not been involved in an international inspection plan up till now.

INTERSESSIONAL MEETING OF PANEL 2 – ONLINE, MARCH 2022

<i>Tuna vessel fleet</i>	<i>Fleet (vessels)</i>														<i>Fishing capacity</i>																
Type	Best catch rates defined by the SCRS in 2009 (t)	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Purse seiner over 40m	70.7																														
Purse seiner between 24 and 40m	49.78	0	0	0	0	0	1	1	1	1	1	1	1	1	1	3	0	0	0	0	0	50	50	50	50	49.78	49.78	49.78	49.78	49.78	149.34
Purse seiner less than 24m	33.68	0	0	0	1	1	1	1	1	1	1	0	1	1	0	0	0	0	0	34	34	34	34	34	34	33.7	0	33.68	33.68	0	0
Purse seine total fleet		0	0	0	1	1	2	2	2	2	2	1	2	2	1	3	0	0	0	34	34	84	84	84	84	83.46	49.78	83.46	83.46	49.78	149.34
Longliner over 40m	25																														
Longliner between 24 and 40m	5.68																														
Longliner less than 24m	5																														
Total longline fleet																															
Baitboat	19.8																														
Handline	5																														
Trawler	10																														
Trap	130																														
Small coastal vessels and baitboats from the Azores, Canary Islands and Madeira	N/A																														
Other (please specify)	5																														
Total fleet/fishing capacity		0	0	0	1	1	2	2	2	2	2	1	2		1	3	0	0	0	34	34	84	84	84	84	83.46	49.78	83.46	83.46	49.78	149.34
Quota																	0	50	33	65	65	77	77	79	100	113.67	181	266	330	330	330
Percentage allocated to by-catch																														1%	1%
Adjusted quota (if applicable)																										123.67			326.7	326.7 ¹	326.7 ¹
Allowance for sports/recreational (if applicable)																															
Under/overcapacity																				-31	-31	+7	+7	+5	-16	-40.21	-131.22	-182.54	-243.24	-276.92	-177.36

¹ 3.3 ton is set aside for bycatch.

EUROPEAN UNION (EU)**Fishing Plan Year: 2022****Introduction**

The European Union hereby provides its Fishing, Inspection and Capacity Management plans and its Farming Management plan for Eastern Bluefin tuna (E-BFT) for 2022.

The eight EU Member States actively fishing Bluefin tuna are Croatia, Cyprus, France, Greece, Italy, Malta, Portugal and Spain. These EU Member States fish with a range of fishing gears, with the majority of the quotas being attributed to the purse seine and trap sectors. However, significant catches are also made by longline vessels and more artisanal sectors, such as the bait-boats, hand-lines and pelagic trawlers, in both the Atlantic and Mediterranean Sea. The eight EU Member States also cooperate to implement a Joint Deployment Plan of inspections means, in coordination with the European Commission and the European Fisheries Control Agency (EFCA).

The European Union adopted Council Regulation (EC) No 302/2009 on 6 April 2009 transposing into EU Law ICCAT Recommendation [08-05] to establish a Multiannual Recovery Plan for Bluefin tuna in the Eastern Atlantic and the Mediterranean. Following ICCAT Recommendation [10-04] amending ICCAT Recommendation [08-05], adopted at the 2010 ICCAT Annual Meeting in Paris, the EU has amended Council Regulation (EC) 302/2009 transposing ICCAT Recommendation [10-04] into EU law. In 2014, the EU transposed the amendments of the recovery plan, which took place under ICCAT Recommendation [13-07]. Regulation (EU) 544/2014 transposed these additional measures into EU law. Finally, the EU adopted Regulation (EU) 2016/1627 of the European Parliament and of the Council on 14 September 2016 transposing ICCAT Recommendation [14-04] replaced by Recommendation [17-07]. Regulation (EU) 2019/833¹ partially transposes Recommendation [18-02] replaced by Recommendation [19-04]. The EU is currently working in the full transposition of the Recommendation [21-08]. In the meantime, and pursuant to Article 216(2) of the Treaty on the Functioning of the European Union, international agreements concluded by the Union are binding upon the institutions of the Union and on its Member States. In these circumstances, Member States are bound to take necessary direct measures designed to ensure compliance with ICCAT Recommendations, and in particular Recommendation [21-08].

Details of annual fishing plan for catching vessels and traps (para 16-17)

In 2022, the EU will implement the provisions of Recommendation [21-08].

In accordance with the current Total Allowable Catch (TAC) provided for under Recommendation 21-08, and following the transfer to the United Kingdom, the quota for the EU in 2022 will be 19,411.60 t. In accordance with paragraph 7 of Recommendation 21-08, the EU has the intention to request to transfer a maximum of 5% of its 2021 quota to 2022. In 2020, the underharvest for the EU was of 325.97 t, which is less than the maximum allowed 5% provided in Rec 19-04. Therefore, the EU could carry over 325.97 t to 2022. The decision to make effective this transfer as well as the exact quantities will be communicated at a later stage.

The EU has drawn up the annual Fishing plan identifying catching vessels over 24 meters and their associated individual quotas. All purse seine vessels over 24 meters are allocated an individual vessel quota superior to the SCRS catch rates as adopted by the ICCAT Commission for estimating fleet capacity.

The EU will authorise 'catching vessels' and 'other' vessels', and will continue to submit the lists of authorised vessels that will participate in the fishery in 2022 in accordance with the reporting deadlines laid down under paragraph 52 of the Rec. [21-08].

¹ Regulation (EU) 2019/833 of the European Parliament and of the Council of 20 May 2019 laying down conservation and enforcement measures applicable in the Regulatory Area of the Northwest Atlantic Fisheries Organisation, amending Regulation (EU) 2016/1627 and repealing Council Regulations (EC) No. 2115/2005 and (EC) No 1386/2007 (hereinafter: Regulation (EU) No. 2019/833).

The EU has allocated quotas.² to the following sectors:

<i>Tuna Vessel Fleet</i>	<i>2022</i>	
<i>Type</i>	<i>Fleet (No. vessels)</i>	<i>Quota allocated (t)</i>
Purse seiner over 40m	31	6104,84
Purse seiner between 24 and 40m	33	4327,93
Purse seiners less than 24m	5	220,53
Total Purse Seine fleet	69	10653,30
Longliner over 40m	0	0,00
Longliner between 24 and 40m	4	46,10
Longliner less than 24m	192	1672,71
Total longline fleet	196	1718,81
Baitboat	74	1322,40
Handline	60	256,00
Trawler	57	401,00
Trap	13	2260,21
Small scale ³	1041	1759,60
Other	74	271,00
Total fleet/fishing allocation	1584	18642,33
Quota		19411,60
Recreational		135,95
By-catch reserve		633,32
Adjusted quota (if applicable)		18642,33
Under-capacity (t)		0,00

Following the provision in para 80 of Recommendation [21-08], the list of designated ports is provided in annex to this plan. The EU hereby submits a complementary Inspection plan covering all Bluefin tuna fisheries and capable of addressing effectively the control requirements of the fishery.

The EU undertakes real-time monitoring of the Bluefin tuna fishery and is committed to take the necessary measures to ensure full respect of ICCAT Recommendation concerning the management of E-BFT fisheries, including Recommendations [21-08], [06-07], [18-13], [18-12] and [18-10].

The table below summarises the actions taken to implement the requirements of ICCAT Rec. [21-08] as well as the relevant domestic laws or regulations when applicable.

² The EU fishing plan shows the number and length category of vessels that will be authorized by EU in 2022 and the quota allocated to them.

³ A sectorial quota has been allocated to the small-scale coastal vessels in accordance with para 17 of Recommendation [21-08].

	<i>ICCAT requirement (per Rec. 21-08)</i>	<i>Explanation of CPC actions taken to implement</i>	<i>Relevant domestic laws or regulations (as applicable)</i>	<i>Note:</i>
1	Catch recording and reporting (paras 74-88)	<p>Purse seine vessels, vessels over 24 meters and traps shall send daily reports to their flag Member State administration. Weekly reports for all vessels are sent by Member States to the European Commission, which transmits them to the ICCAT Secretariat.</p> <p>In 2022, all vessels authorized to fish for BFT independently of the length shall record their catches in a logbook.</p>	<p>Regulation (EU) 2016/1627⁴ Section 2 Article 25 "Recording Requirements" "Catches", Article 26 "Catch reports sent by masters and trap operators", Article 27 "Weekly and monthly catch reports sent by the Member States", Article 28 "Information on quota exhaustion" Article 29 "Yearly reporting of catches by the Member States".</p>	<p>All catch reports are recorded at EU level, and cross-checked with authorizations, individual quotas, national quotas and JFO quotas (when relevant).</p> <p>In accordance with Art. 14 of Council Regulation (EC) No 1224/2009⁵ all EU fishing vessels above 10 m have to be equipped with a bound logbook with chronologically numbered pages. For fishing vessels over 12m, an electronic logbook is required. Additional requirements set up by ICCAT are covered by Art. 25 and Annex II of Regulation (EU) No 2016/1627.</p>
2	Fisheries openings (paras 28-32)	<p>The fishing seasons applicable to the EU fleets in all Member States concerned are in line with the seasons established by ICCAT Rec. [21-08]. Art 11 and Art 12 of Regulation (EU) No 2016/1627 transpose them into EU law.</p> <p>According to Article 35 of Regulation (EC) No 1224/2009 of 20 November 2009, Member States shall inform the Commission as soon as the BFT quota is exhausted.</p> <p>In addition, under Regulation (EU) 2016/1627, Member States shall inform the Commission when the BFT quota allocated to a gear group referred to in Article 11 or Article 12 of this Regulation or to a JFO or to a purse seiner is deemed to be exhausted.</p> <p>A special reporting and alert system is in place to verify at EU level the quota used in each Member State for each fleet.</p>	<p>Regulation (EU) 2016/1627 Chapter III "Technical measures", Section 1 "Fishing seasons",</p> <p>Article 11 "Longliners, purse seiners, pelagic trawlers, traps and sport and recreational fisheries"</p> <p>Article 12 "Baitboats and trolling boats"</p>	<p>According to provisions in Recommendation [21-08], fishing seasons will be as follows:</p> <p>Fishing season for purse seine vessels will be from 26 May to 1 July.</p> <p>By derogation, the fishing season for purse seiner will be extended until 15 July in the Adriatic Sea.</p> <p>Within the EUs Specific Control and Inspection Programme, inspection missions focus on the verification of the respect of the fishing seasons.</p> <p>In accordance with paragraph 29 of Recommendation [21-08], EU may extend its fishing period for the affected vessels for the equivalent number of lost days up to a maximum of 10 days in case of wind speeds</p>

⁴ Regulation (EU) 2016/1627 of the European Parliament and of the Council of 14 September 2016 on a multiannual recovery plan for Bluefin tuna in the eastern Atlantic and the Mediterranean amended by Regulation (EU) 2019/833.

⁵ Council Regulation (EC) No 1224/2009 of 20 November 2009 establishing a Union control system for ensuring compliance with the rules of the common fisheries policy.

				reaching 5 or more on the Beaufort scale. Assessment of the length of the bad weather conditions for the purpose of the extension will be based on VMS reports evidencing the day/s that the vessel/s have been inactive; in the case of JFOs, evidence of concurrent inactivity of all the vessel members of the JFO is to be proven.
3	Minimum size (paras 33-35)	<p>According to Art. 15 of Regulation (EU) 2016/1627, incidental catches of a maximum 5 % of Bluefin tuna weighing between 8 and 30 kg or with a fork length between 75 and 115 cm are allowed for all catching vessels and traps fishing actively for Bluefin tuna. These catches are subject to logbook entry, designated port and prior arrival notification requirements, and shall be deducted from the quota.</p> <p>Art. 15 of Regulation EU No 1380/2013⁶ establishes a general landing obligation across the EU. Where a derogation to this Regulation is granted in accordance with Article 15.2 and in line with international obligations, this is provided for by Commission Delegated Regulation (EU) 2015/98⁷.</p>	Regulation (EU) 2016/1627 Chapter III "Technical measures", Section 2 "Minimum conservation reference size, incidental catch, by-catch", Article 14 "Minimum conservation reference size" Article 15 " Incidental catches" and Annex I of the same Regulation "specific conditions applicable to the fisheries referred to in Article 14(2).	<p>For the implementation of the derogation to the Minimum size set up by Article 14(2) of Regulation (EU) 2016/1627, Article 17 of Council Regulation (EU) 2022/109⁸ of 27 January 2022 and Annex VI, sets fishing, farming and fattening capacity limitations for BFT by fixing yearly the number of vessels per Member State concerned, including the maximum number of vessels allowed to fish actively for bluefin tuna between 8 kg/75 cm and 30 kg/115 in the eastern Atlantic and the Mediterranean Sea, as well as in the Adriatic for farming purposes.</p> <p>Compliance with capacity limitation provisions is monitored in the context of the JDP (Joint Deployment plan) (see 3.2.2.).</p> <p>A tolerance of a maximum of 7% weight for specimens with a minimum size of 6.4 or 66 cm caught for farming purposes by PS operating in the Adriatic Sea.</p>

⁶ Regulation (EU) No 1380/2013 of the European Parliament and of the Council of 11 December 2013 on the Common Fisheries Policy.

⁷ Commission Delegated Regulation (EU) 2015/98 of 18 November 2014 on the implementation of the Union's international obligations, as referred to in Article 15(2) of Regulation (EU) No. 1380/2013 of the European Parliament and of the Council, under the International Convention for the Conservation of Atlantic Tunas and the Convention on Future Multilateral Cooperation in the Northwest Atlantic Fisheries, amended by Commission delegated Regulations (EU) 2016/171, (EU) 2017/1352, (EU) 2018/191 and (EU) 2019/2020.

⁸ Council Regulation (EU) 2022/109 of 27 January 2022 fixing for 2022 the fishing opportunities for certain fish stocks and groups of fish stocks, applicable in Union waters and, for Union fishing vessels, in certain non-Union waters.

4	By-catch (para 37, including %)	<p>In accordance with ICCAT measures, the EU deducts all dead fish caught as by-catch from its quota. As every year, for Member States without a quota, the EU reserves part of its quota in Annex ID of Council Regulation (EU) 2022/109 of 27 January 2022.</p> <p>A quota of 633.32 t allocated to by-catch has been included in the EU fishing plan provided to ICCAT.</p> <p>In 2020 and 2021, the level of by-catches from the EU vessels amounted 444 t and 454 t respectively, far below the quota allocated in 2022. Additionally, the EU Member States also do transfer of quotas to cover the by-catches, should there be a need to.</p>	<p>Regulation (EU) 2016/1627 Chapter III "Technical measures", Section 2 "Minimum conservation reference size, incidental catch, by-catch", Article 16 "By-catch"</p>	<p>A by-catch quota for accidental catches by EU Member States without a BFT quota is provided in Annex ID of Council Regulation (EU) 2022/109 of 27 January 2022. Catching vessels not fishing actively bluefin tuna shall not retain on board bluefin tuna exceeding 20 % of the total catch by weight or number of specimens, compared to tuna and tuna-like species. For small-scale coastal vessels, the amount of by-catch may be calculated on an annual basis.</p> <p>Any by-catch in excess of the 20% of the total catches on board at the end of each fishing trip shall be released alive whenever possible.</p> <p>Commission Delegated Regulation (EU) 2015/98 regulates under which circumstances BFT may be released or discarded within the EU Regulation (EU) 404/2011⁹ provides that discards shall be recorded in the logbook.</p> <p>All by-catches discarded or retained on-board are counted against the quota.</p>
5	Recreational and sports fisheries (paras 38-46)	<p>Recreational and sport fisheries are managed in different ways across the EU from a total ban of these activities to a catch and release or a maximum catch per vessel and day. In any case, dead catches from sport and recreational fisheries are counted against the quota. In this regard, a quota has been allocated for sport and recreational fisheries in the 2022 fishing plan. Furthermore, in the context of its Joint Deployment Plan, the EU conducts a series of inspections</p>	<p>Regulation (EU) 2016/1627 Chapter IV "Sport and Recreational Fisheries", Article 19 "Sport and Recreational Fisheries"</p>	<p>Under Art. 19 of Regulation (EU) 2016/1627 each EU Member State is obliged to record catch data, including weight and length of each BFT caught during sport and recreational fishing and communicate the data for the preceding year to the European Commission by 30 June of each year. The EU Commission forwards that information to the SCRS.</p>

⁹ Commission Implementing Regulation (EU) No 404/2011 of 8 April 2011 laying down detailed rules for the implementation of Council Regulation (EC) No. 1224/2009 establishing a community control system for ensuring compliance with the rules of the Common Fisheries Policy.

		targeting sport and recreational activities, based on minimum benchmarks established based on a risk assessment procedure. Finally, in addition to these common activities, each Member States also conducts programs of inspections, targeting sport and recreational fisheries. The European Commission through verification missions assesses these programs.		According to Article 4(8) of Commission Delegated Regulation (EU) 2015/98, the limit of one fish per vessel per day shall apply for all recreational vessels. Art. 19(4) of Regulation (EU) 2016/1627 stipulates that the marketing of bluefin tuna caught during sport and recreational fishing shall be prohibited.
6	Transshipment (paras 89-94)	Transshipments at sea are prohibited. Land inspections in the context of the Joint Deployment Plan also cover transshipments.	Regulation (EU) 2016/1627 SECTION 3" Landings and transshipments", Article 32 "Transshipment"	Art. 32 of Regulation (EU) 2016/1627 prohibits all transshipments at sea in the Convention area. Fishing vessels can only tranship BFT catches in designated ports. Full inspection coverage is ensured during all transshipment times and at all transshipment places.
7	VMS (paras 218-224)	The team responsible within the European Commission for catch reporting and satellite Vessel Monitoring System (VMS) monitors in real time the VMS submissions. To this end, a special IT system is in place. All vessels are continually monitored by VMS and any interruption in the transmission of VMS data will immediately be followed up with the Member State concerned.	According to EU Regulation (EC) No 1224/2009 of 20 November 2009, Article 9 "Vessel Monitoring system", all EU vessels over 12 meters are equipped with a VMS. By Article 49 Regulation (EU) 2016/1627 this obligation was extended to all BFT tug and towing vessels irrespective of their length. Pursuant to Article 216(2) of the Treaty on the Functioning of the European Union, Member States are bound to take necessary direct measures designed to ensure compliance with ICCAT Recommendations by their vessels and, as appropriate, their nationals.	EU also follows the additional provisions set up ICCAT Recommendation [18-10]. VMS messages from the fishing vessels flying their flag are forwarded to the European Commission at least once every one hour for purse seine vessels and once every two hours for other vessels. Notwithstanding the above, all towing vessels used to transport live bluefin tuna shall, irrespective of their length, install and operate a VMS, in accordance with Rec. 18-10, and transmit messages at least once every hour. A specific IT system is in place to ensure the implementation of this obligation at EU level.
8	CPC observers programme (paras 95-100)	Masters of any fishing vessel holding a European licence for E-BFT pelagic trawler, long liner, bait-boat and traps as well as masters of towing vessels receive national observers according to measures set up by Regulation (EU) 2016/1627.	Regulation (EU) 2016/1627 Section 6 "Monitoring and surveillance", Article 50 "National observer programme"	Article 50 of Regulation (EU) 2016/1627 "National observer programme" establishes the minimum levels of national observer coverage and describes the tasks to be performed by national observers. The

				<p>minimum national observer coverages in vessels other than purse seiners are established in accordance with para 95 of Rec. 21-08.</p> <p>EU Member States also ensure a representative temporal and spatial presence of national observers on their vessels and traps to ensure that the European Commission receives adequate and appropriate data and information on catch, effort and other scientific and management aspects, taking into account characteristics of the fleets and fisheries. The implementation of these provisions is ensured through the Data Collection Framework.</p>
9	Regional observers programme (paras 101-107)	The EU ensures 100% coverage of all purse seine vessels and for all caging and harvesting activities. As in previous years, replies to all the cases highlighted by ROs will be duly provided to the ICCAT Secretariat.	Regulation (EU) 2016/1627 Section 6 "Monitoring and surveillance", Article 51 "ICCAT Regional Observer Programme".	
10	Tagging programme (para 44)	In accordance with ICCAT provisions, the use of tags is authorised only upon request and when the accumulated catch amounts are within Member States' quotas or catch limits for each management year, including, where appropriate, individual quotas allocated to catching vessels or traps. A summary of any tagging programs implemented by MS is sent to ICCAT.	Art. 5 of (EU) Reg. 640/2010.	EU also follows the additional provisions set up at ICCAT level by para 5d of ICCAT Recommendation [20-08].
		Up to 175 ¹⁰ sport/recreational vessels will conduct catch-and-release activities in the context of scientific projects of Marine Institutes integrated in scientific programmes. The activity is expected to run from 1 July to mid-November ¹⁰ in the areas around Ireland, Skagerrak, Kattegat and the Sound.		Sport or recreational vessels intending to conduct catch-and-release activities from 1 July to mid-November, in the context of scientific projects of Marine Institutes integrated in scientific programmes shall be authorised. Fitting and operation of a simple VMS

¹⁰ The number and period is subject to revision according to the level of funding and weather conditions.

		<p>The objective of the project will be to study the horizontal and vertical distribution and stock composition of the Bluefin tuna, to define periods of residency and philopatry, and to understand overlap between fishing activity and tuna spatial distribution as well as behaviour of tuna over periods of months, its migration patterns, population ecology, genetic specificities and its role in the ecosystem as a predator. Researchers will report about their activities in accordance the provisions applicable for this in ICCAT. The data collection will be consistent with the ICCAT GBYP research programme, and will be communicated to and discussed with ICCAT as necessary.</p>		<p>system will be a requirement of the authorisation.</p> <p>National Control Authorities would monitor the activities of these vessels both at sea and at landing to ensure compliance with National and EU Regulations.</p> <p>Tagging will be operated by staff of Marine Institutes or by recreational fishing vessel operators. The method to collect data is to tag a number of bluefin tunas with different types of tags: pop-up satellite tags, acoustic tags, accelerometer tags, camera tags and ICCAT’s ordinary tags (Floy tags). The tags are designed to collect a series of complementary data. Operators concerned will be trained in tagging.</p> <p>Any person authorised to target bluefin tuna in a catch-tag-release fishery shall not retain on board, tranship, transfer, tow, land, transport, store or sell bluefin tuna.</p> <p>Any bluefin tuna caught alive shall not be removed from the sea but, if so, shall be carefully handled and returned alive to the waters from which it was taken.</p> <p>Any bluefin tuna that dies during capture must be recorded and discarded by returning immediately to the sea. The master of the vessel concerned shall immediately report to the flag authorities any discards of bluefin tuna in that trip.</p>
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<p>11</p>	<p>Intra-farm transfers, inter-farm transfers and random controls in farms (paras 195-217)</p>	<p>Traceability in farms shall be ensured, including by way of the control of all transfers of tuna between cages (“intra-farm transfers”). Transfers undertaken by the farm operators between farm cages of the same farm shall follow all the requirements of transfers as laid down in paragraph 195 of ICCAT Recommendation [21-08] and hence require the necessary completion in the eBCD system. The presence of control authorities is mandatory for such transfers.</p> <p>In accordance with paragraph 207 of ICCAT Rec. [21-08], random controls shall take place in farms between the time of completion of the caging operations and the first caging of the following year. Such controls shall involve the compulsory transfers of all fish from farm cage(s) to other empty farm cage(s) in order that the number of bluefin tuna can be counted by way of control video record(s).</p> <p>The number of controls shall be decided by the farm Member State authorities on the basis of their risk assessment. Notwithstanding, the number of controls per year shall cover not less than 10% of the total number of cages in each farm under each farm MS jurisdiction, always involving at least one control/cage and, rounded up where needed.</p> <p>If required, following the outcome of the risk analysis, the percentages referred to above can be increased as necessary. Transfers require the necessary completion in the eBCD system. The MS farm control authorities responsible for the controls shall require that the video footage is of sufficient quality to accurately count the number of specimens of BFT. If this is not the case, the operation shall be repeated.</p>		<p>These elements are addressed in Joint Deployment Plan, in particular in Annex V of those Plans, which include harmonised procedures for all the EU.</p>
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		<p>For those controls where transfer(s) need to be repeated, the farming cages concerned shall be blocked by way of seals and the control authorities shall take the necessary measures to avoid manipulation of the contents of the concerned cage(s) prior to the transfer. Such measures must be documented.</p> <p>Differences in number of BFT as a result of the random controls shall be duly investigated following the procedures in the EU joint deployment plan (JDP) and recorded in the eBCD system. In the event that differences in number of BFT are found to be in excess, the farm MS farm control authorities shall order a release order for the corresponding amount(s).</p>		
12	<p>Carry-over estimations in farms (para 199)</p>	<p>In accordance with the measures laid down in para 199 of ICCAT Rec. [21-08], the following procedures shall be followed for the implementation of carry-over assessments:</p> <p>Prior to the beginning of the next purse seiner and trap fishing seasons, all fish remaining in cages reported in the Carry-over Declaration shall be transferred to other empty farm cages in order that they can be counted and estimates of weight be taken by way of stereoscopic cameras.</p> <p>Until the SCRS develops an algorithm to convert length into weight for fattened and/or farmed fish, the determination of the weight of the carried-over fish shall be estimated using the updated growth rates tables produced by the SCRS as referred to in para 203 of ICCAT Rec. [21-08]. Average weights shall be estimated according to the growth tables taking into account the fish that has already been harvested from the cages concerned.</p>		<p>The EU will carryover in 2022, live bluefin tuna in its farms that was not harvested in 2021.</p>

13	Sectorial quota	<p>A total sectorial quota is allocated to a group of small-scale vessels with special fishing authorisations, valid for a defined season going from one to four months.</p> <p>The fleets and gear types under the small-scale category are very heterogeneous in the EU. Each EU Member State is responsible for the monitoring of its fleet, including quota uptake, according to the EU legislation control regulation¹¹ in place and the national legislation.</p> <p>The quota uptake is monitored following the national legislation.</p>		
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2. Annual fishing capacity management plan (paras 16-21)

The EU Capacity management plan is included below.

3. Annual farming management plan (paras 12; 22-26), as applicable

The farming management plan for EU is detailed below.

Hereby, the EU reserves its right to submit, if appropriate, revised farming management plans to the Secretariat by 1 June 2022, in accordance to paragraph 24 of Recommendation [19-04] by ICCAT establishing a multi-annual management plan for bluefin tuna in the Eastern Atlantic and Mediterranean.

	<i>Wild input (t) 2022</i>	<i>Capacity (t) 2022</i>
Spain	6,850	11,852
Italy	945.23	8,370
Greece	785	2,100
Cyprus	2,195	3,000
Croatia	2,947	7,880
Malta	11,054	15,703
Portugal	350	500
Total EU	25,126	49,405

¹¹ Regulation (EC) No 1224/2009 of 20 November 2009 establishing a Community control system for ensuring compliance with the rules of the common fisheries policy.

<i>Farm Name</i>	<i>ICCAT FFB</i>	<i>Geographical coordinates</i>	<i>Wild Input (t)</i>	<i>Capacity (t)</i>
Tuna Graso	ATEU1ESP00001	N 37°45,95' W 00°39,49'	2,400	3,560
Atunes de Mazarron ¹²	ATEU1ESP00002	A:37°47'36.47"N 00°40'55.56"W B:37°47'36.55"N 01°22'45.30"W C:37°30'15.90"N 01°23'03.02"W D:37°30'24.94"N 01°23'19.63"W	0	277
Caladeros del Mediterraneo	ATEU1ESP00003	A:37°34'30.40"N 00°49'95.30"W B:37°34'06.60"N 00°50'11.40"W C:67°34'25.80"N 00°50'56.20"W D:37°34'49.60"N 00°50'40.10"W	2,000	3,100
Ensenada de Barbate ¹²	ATEU1ESP00004	36°09'13" N 5°55'45" W	0	400
Balfegó Tuna, S.L.	ATEU1ESP00005	A:40° 51,5'N 00° 51,0 'E B:40° 51,95'N 00° 51,17'E C:40° 51,57'N 00° 51,5'E D: 40° 51,9'N 00° 51,61'E	2,450	3,550
Piscifactorias de Levante ¹²	ATEU1ESP00006	A:37°47'36.47"N 00°40'55.06"W B:37°47'35.98"N 00°40'30.55"W C:37°47'19.77"N 00°40'31.06"W D:37°47'20.26"N 00°40'55.57"W	0	100
Proyecto de Engorde de Atún Rojo en Estructuras Flotantes Desmontables ¹²	ATEU1ESP00008	A:37°34'25"N 00°52'32"W B:37°34'25"N 00°52'12"W C:37°34'13"N 00°52'32"W D:37°34'13"N 00°52'12"W	0	235
Tuna Graso ¹²	ATEU1ESP00011	37°34'06,341''N; 0°52'39,300''W 37°33'59,998''N ; 0°53'12,358''W 37°33'44,272''N ; 0°53'12,802''W 37°33'43,683''N; 0°52'39,943''W	0	230
Nature Pesca S.L. ¹²	ATEU1ESP00013	A: 37° 13,79°N 0001° 44,803 W B:37° 13,1°N 001W C:37° 13,6N 001° 44,5W D:37° 13,2°N 001 45,2 W	0	200

¹² Farms currently inactive but subject to be active in the future.

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Mediterraneo ¹²	ATEU1ESP00014	A: 37° 49',6N 000° 40',7 W C: 37° 49',6N 000° 40',4W B: 37° 49',0 N 000° 40',5 W D: 37° 49',0 N 000° 41',0 W"		0	200
Jadran Tuna D.O.O.	ATEU1HRV00008	y 5540056,00 5540410,00 5539883,45 5540237,52	x 4854937,0 0 4854333,00 4854835,87 4854231,75	664	1,776
Pelagos Net Farma D.O.O.	ATEU1HRV00011	y 5521777,07 5522396,80 5522324,84 5521705,39	x 4865868,1 0 4865705,51 4865434,70 4865597,28	541	1,447
Sardina D.O.O.	ATEU1HRV00006	y 5620531 5620851,14 5620663,29 5620343,141	x 4795026,7 5 4794700 4794518,74 4794846,83	649.5	1,737
Kali Tuna D.O.O.	ATEU1HRV00012	y 5514248,71 5514346,2201 5514401,68 5514499,2376 5515214,66 5514694,4002 5515061,69 5514541,3353 5517392,279 5517553,927 5517303,667 5517142,018 5517801,279 5517962,927 5517712,667 5517551,018 5493440,00 5493498,70 5494068,42 5494006,73 5494273,27 5494331,97 5494898,70 5494840,00 5509116 5509264 5508712 5508860	x 4877864,5 4 4877750,5522 4877993,40 4877879,4528 4877043,84 4877651,5991 4876914,98 4877522,6578 4868049,255 4867931,485 4867587,981 4867705,751 4867662,255 4867544,485 4867200,981 4867318,751 4892040,00 4892120,96 4891710,08 4891629,12 4891535,88 4891516,84 4891105,96 4891025,00 4875654 4875520 4875211 4875076	797.5	2,132
MF	ATEU1MLT00004	35.8785 (N) 14.6430 (E) 35.8784 (N) 14.6600 (E) 35.8640 (N) 14.6600 (E) 35.8640 (N) 14.6430 (E)		2,096.19	2,977

Ta Mattew	ATEU1MLT00007	35.8784 (N) 14.6600 (E) 35.8785 (N) 14.6770 (E) 35.8640 (N) 14.6770 (E) 35.8640 (N) 14.6600 (E)	600	853
Fish & Fish	ATEUMLT00003	35.8640 (N) 14.6430 (E) 35.8640 (N) 14.6600 (E) 35.8496 (N) 14.6600 (E) 35.8495 (N) 14.6430 (E) 35.8496 (N) 14.6430 (E) 35.8496 (N) 14.6600 (E) 35.8352 (N) 14.6600 (E) 35.8352 (N) 14.6430 (E)	2,696.11	3,830
Mare Blu	ATEUMLT00008	35.8930 (N) 14.6430 (E) 35.8930 (N) 14.6600 (E) 35.8784 (N) 14.6600 (E) 35.8785 (N) 14.6430 (E) 35.8930 (N) 14.6600 (E) 35.8930 (N) 14.6770 (E) 35.8785 (N) 14.6770 (E) 35.8784 (N) 14.6600 (E)	2,696.11	3,830
MML	ATEUMLT00002	35.58.33 (N) 14.24.48 (E) 35.58.45 (N) 14.24.54 (E) 35.58.34 (N) 14.25.43 (E) 35.58.19 (N) 14.25.38 (E)	1,545.6	2,196
AJD	ATEUMLT00001	35.58.33 (N) 14.24.48 (E) 35.58.45 (N) 14.24.54 (E) 35.58.34 (N) 14.25.43 (E) 35.58.19 (N) 14.25.38 (E)	1,420	2,017
Tuniraise	ATEU1PRT00002	N 37° 01.006' W 07° 42.615' N 37° 00.975' W 07° 42.607' N 37° 01.048' W 07° 42.500' N 37° 01.024' W 07° 42.485'	250	357
Barril	ATEU1PRT00003	Latitude N 37°02'21.4"; Longitude W 07°39'51.4"	100	143
Kitiana Fisheries Ltd. ¹²	ATEU1CYP00002	South coast of Cyprus (Vasiliko). Coordinates: 33° 14' 95" E; 34° 41' 09" N.	731.66	1,000
Oceanis Aquaculture Ltd ¹²	ATEU1CYP00003	South coast of Cyprus (Vasiliko). Coordinates: 33° 16' 03" E; 34° 40' 79" N.	731.66	1,000
Kimagro Fishfarming Ltd ¹²	ATEU1CYP00001	South coast of Cyprus (Limassol). Coordinates: 33° 02' 40" E 34° 38' 49" N	731.66	1,000
Bluefin Tuna Hellas S.A. ¹²	ATEU1GRC00001	Echinades Islands, Prefecture of Kefallonia - Ithaki Islands	635	1,000
Poseidon Tuna Hellas S.A. ¹²	ATEU1GRC00002	Messaras Gulf Prefecture of Herakleion	150	1,100
Pescazzurra S.R.L. ¹²	ATEU1ITA00005	MILAZZO (ME)	0	1,442
Consorzio Operatori Del Tonno Del Mediterraneo ¹²	ATEU1ITA00006	MARINA DI CAMEROTA (SA)	0	1,442

Soc. Ittica Trappeto A.R.L. ¹²	ATEU1ITA00007	TRAPPETO (PA)	0	568
La Favorita Snc. ¹²	ATEU1ITA00015	ERCOLANO (NA)	358	500
Ittica Offshore Del Tirreno S.P.A. ¹²	ATEU1ITA00016	POZZUOILI (NA)	0	288
De.Mo. Pesca di Pasquale della Monica & C. s.a.s. ¹²	ATEU1ITA00017	CETARA (SA)	0	568
Soc. Coop. Pescatori San Francesco di Paola ¹²	ATEU1ITA00019	VIBO VALENTIA (VV)	0	1,442
Orizon Maritimas Italia ¹² SARL12	ATEU1ITA00020	SALINE DI MONTEBELLO JONICO (RC)	0	1,250
Tonnare Sulcitane s.r.l. ¹²	ATEU1ITA00021	PORTOSCUSO (CI)	110	155
DG PESCA 1 ¹²	ATEU1ITA00022	ROMA (RM)	0	0
DG PESCA 2 ¹²	ATEU1ITA00023	ROMA (RM)	0	0
DG PESCA 3 ¹²	ATEU1ITA00024	ROMA (RM)	0	0
DG PESCA 4 ¹²	ATEU1ITA00025	ROMA (RM)	477.23	715

4. Monitoring, control and inspection plan

a) CPC's monitoring, control and inspection (para 12 c)

Under the EU Common Fisheries Policy (CFP), the primary responsibility for control and enforcement lays with the Member State Authorities.

The European Commission and the EFCA coordinate with the Member States to ensure that the provisions laid down by ICCAT are reflected in EU and Member States law and fully enforced. The tools in place are explained under 5.2 below. In addition, the following verification activities are carried out by the European Commission:

a) 1. Evaluation of the implementation by the Member States of the fisheries rules in force

Whilst different in its powers and mandate, the European Commission also has its dedicated unit, whose main role is to monitor and evaluate Member States fulfilment of their duties and obligations, including those under the Bluefin tuna management plan and associated ICCAT Recommendations concerning BFT. The main tools used by the Commission for that are verifications, autonomous inspections and audits.

Although the inspection plan is still subject to change in response to the specificities of the 2022 fishing campaign, European Commission inspectors will once again be very active in 2022.

a) 2. Vessel monitoring system and Operations team

The team responsible within the European Commission for catch reporting and satellite Vessel Monitoring System (VMS) will monitor in real time the VMS submissions and undertake extensive cross-checks to avoid any potential quota overshoot.

All vessels will be continually monitored by VMS and any interruption in the transmission of VMS data will be immediately followed up with the Member State concerned.

b) Joint Scheme of International Inspection (paras 228-231)

The ICCAT Scheme of joint international inspection as laid down by paras 228-231 and Annex 7 of Rec. [21-08] will be fully implemented by the EU and coordinated by EFCA. EFCA will also coordinate any agreed voluntary exchange of inspection personnel with other CPCs in accordance with the provisions of Resolution [19-17].

b) 1. Specific Control and Inspection Programme

Working under the framework of the ICCAT Scheme of Joint International Inspection and building on experiences from recent years, the EU has currently in place a Specific Control and Inspection Programme (SCIP)¹³ to monitor and enforce the implementation of the bluefin tuna management and swordfish recovery plans. This programme is a joint initiative bringing together the resources of the European Commission, EFCA and the Member States involved in the fishery.

b) 2. Joint Deployment Plan (JDP) for the Eastern Atlantic and Mediterranean

In cooperation with the European Commission and Member States, EFCA adopts annually a Joint Deployment Plan (JDP), which includes Bluefin tuna in the Eastern Atlantic and Mediterranean, Mediterranean Swordfish from 2017 and Mediterranean Albacore from 2018. This Joint Deployment plan (JDP) brings the Specific Control and Inspection Programme into effect and covers all stages of the market chain as well as controls at sea, on land, traps and farms.

Under the JDP, EFCA will in 2022 coordinate joint inspections and control activities in the Eastern Atlantic and the Mediterranean involving a number of fishery patrol vessels and aircrafts. EFCA also has its own chartered offshore fisheries patrol vessels and aerial surveillance capacity. Whilst the operational strategies and precise areas of operation remain confidential, the general areas covered by the 2022 JDP will be the Eastern Atlantic (ICES Areas VII, VIII, IX X and COPACE 34.1.1, 34.1.2 and 34.2.0) and the Mediterranean (Western, Central and Eastern). The control operations will particularly focus on, but are not restricted to purse seiners, towing vessels, longliners and farming activities. In 2022, the EU will conduct a minimum of 299 days of control and inspection activities at sea and 57 flights of air surveillance, which reflects the number of days committed for specific campaigns under the JDP.

A JDP Steering Group, composed by representatives of EFCA, the European Commission and the European Member States, guides the overall strategy of inspection activities and supervises the JDP implementation. The strategy and control priorities are based on an annual risk assessment carried out by Member States under the coordination of EFCA.

All cases of potential non-compliance will be forwarded to the flag state of the vessel/operator concerned and to the ICCAT Secretariat where required in accordance with the procedures laid down in the respective dedicated ICCAT recommendations.

¹³ Commission Implementing Decision (EU) 2018/1986 of 13 December 2018 establishing specific control and inspection programmes for certain fisheries.

The EFCA is also cooperating with EMSA (European Maritime Safety Agency) and FRONTEX (European Border and Coast Guard Agency), each within its mandate, to support the national authorities carrying coast guard functions, by providing services, information, equipment and training as well as by coordinating multipurpose operations. Among the tools used to support these multipurpose operations is the IMS (Integrated Maritime System) service, an application that provides an integrated maritime picture based on the real-time fusion of VMS, Automatic Identification System (AIS) and other maritime related data.

b) 3. Member States annual Inspection plans

Under Article 53 of Regulation (EU) 2016/1627, each EU Member State concerned has developed and submitted a 2022 ICCAT Inspection plan as part of its National Control Action programme for Bluefin tuna. These are extensive programmes containing the resources and inspection strategies that Member States commit to implement within their jurisdiction. These programmes, as required under the Specific Control and Inspection Programme (see above), include a series of inspection 'benchmarks' consistent with:

- a) the full monitoring of caging operations taking place in EU waters;
- b) the full monitoring of transfer operations;
- c) the full monitoring of joint fishing operations;
- d) a minimum percentage of sea inspections on vessels depending on the risk identified for the sector.

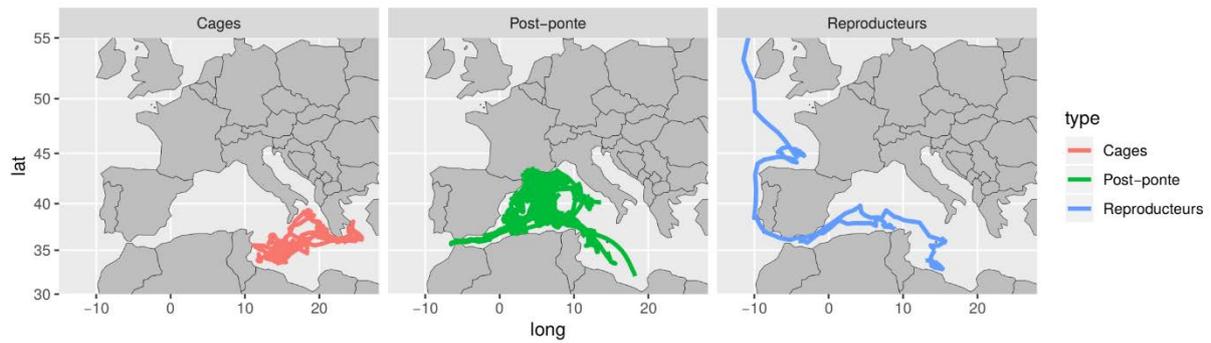
These National Programmes are in full accordance with the conservation and management measures adopted in Recommendation [21-08]. In line with Recommendation 21-08, the EU authorities will control 100% of caging operations, harvesting to processing vessels, intra-farm transfers and carry-over as well as to establish a level of random controls (with a minimum of 10% of the number of cages in each farm) based on risk assessment to ensure proper reporting and traceability of bluefin tuna in farms.

5. Others

Two main research activities are carried out by Ifremer on Bluefin Tuna in the Eastern Atlantic and the Mediterranean Sea.

The first activity is the aerial survey in the Gulf of Lions. This activity has been initiated in 2000 and provides a key fisheries-independent abundance index for young Bluefin tuna in the Mediterranean. This is the only index of this kind and it is therefore very valuable to ICCAT for management purpose. The index has been used for the 2017 assessment of the eastern stock. Current work focus on improving the observation through the development of a system for image acquisition and analysis and integrating the impacts of environmental effects on the vertical and horizontal movements of tuna and on the abundance index. The survey could also be used for marine mammals. Papers are presented every year at the SCRS.

The second activity, not independent from the first one, focuses on observing migrations of bluefin tuna in relation to its physiology. This is done through the development of a new electronic tag, embarking a sensor aiming at capturing fish growth and indirectly reproduction (POPSTAR project funded by Ifremer). The project aims also at tagging bluefin tuna caught by purse seiners. The Purse seiner fishery has been representing more than 50% of the Eastern BFT catch in the past 10 years, yet hardly any tagging has been done on this segment. A successful tagging operation was carried out from a purse-seiner in June 2018 and 2019, showing contrasting migration patterns to those obtained from fish tagged in the Northwest Mediterranean. These operations through different projects (POPSTAR, FISHNCHIP and PROMPT) are meant to be a key contribution to applied research and ICCAT, as it will help to document and understand migrations and how they are affected by the environment (e.g. for the MSE). Deployment campaigns for 2020 and 2021 were cancelled because of the pandemics, if the situation allows it, it is planned to be resumed in 2022.



Another project (PROMPT) is pursuing work on BFT migrations through tagging and experimental work. The tagging planned in the project aims at pursuing the work initiated by the POPSTAR and FishNchip projects described above and understand the effects of the physical environment on migrations. The experimental work will serve to estimate energetic requirement of BFT along its migrations.

A close working relationship has been set up between Ifremer, French purse seiners, scientists from a Maltese company (AquaBioTech Ltd, which has also been heavily involved in bluefin tuna research) and a Maltese fattening farm. This has created a unique and fruitful set-up to develop research and experiments on bluefin tuna.

INTERSESSIONAL MEETING OF PANEL 2 – ONLINE, MARCH 2022

<i>Tuna vessel fleet</i>	<i>Fishing fleet</i>					<i>Fishing Capacity</i>					
Type	Best catch rates defined by the SCRS in 2009 (t)	2008	2019	2020	2021	2022	2008	2019	2020	2021	2022
Purse seiner over 40m	70.7	38	43	28	30	31	2685	3040	1980	2121	2192
Purse seiner between 24 and 40m	49.78	91	18	34	34	33	4530	896	1693	1693	1643
Purse seiner less than 24m	33.68	112	4	5	5	5	3772	135	168	168	168
Purse seine total fleet		241	65	67	69	69	10987	4071	3841	3982	4003
Longliner over 40m	25		0	0	0	0		0	0	0	0
Longliner between 24 and 40m	5.68	7	12	1	1	4	40	68	6	6	23
Longliner less than 24m	5	329	164	85	108	192	1645	820	425	540	960
Total longline fleet		336	176	86	109	196	1685	888	431	546	983
Baitboat	19.8	68	106	56	59	74	1343	2099	1109	1168	1465
Handline	5	101	46	52	60	60	505	230	260	300	300
Trawler	10	160	57	49	57	57	1600	570	490	570	570
Trap	130	15	14	13	13	13	1950	1820	1690	1690	1690
Small coastal vessels and baitboats from the Azores, Canary Islands and Madeira	N/A		870	936	1025	1041		4350	4680	5125	5205
Other (please specify)	5	253	52	61	74	74	1265	260	305	370	370
Total fleet/fishing capacity		1174	1386	1320	1466	1584	19335	14288	12805	13751	14586
Quota							17044	17536	19460	19411,60	19411,60
Percentage allocated to by-catch¹⁴											3,26%
Adjusted quota (if applicable)							16211	17536	18657	18651	18642
Allowance for sports/recreational (if applicable)											136
Under/ overcapacity							3124	-3248	-5852	-4900	-4057

¹⁴ The quota allocated to by-catch by the EU will be 633.32 t in 2022.

ICELAND**Fishing Plan Year: 2022****1. Details of annual fishing plan for catching vessels and traps**

The eastern Atlantic bluefin tuna quota of Iceland for the year 2022 is 180 tonnes. According to Recs. 20-07/21-08 Iceland may catch beyond 180 t in 2022 by 25% while its total catch for 2020, 2021 and 2022 combined shall not exceed 540 t (180 t + 180 t + 180 t).

The revised quota of Iceland therefore is 225 tonnes, with 10 tonnes reserved for incidental bycatches. Two Icelandic longline vessels will be authorized to conduct directed fisheries for BFT in 2022. The longline season starts on August 1 and ends when the quota has been exhausted or at latest December 31. Eventual bycatches of BFT by other Icelandic fishing vessels will be reported to ICCAT.

The longliners will each be allocated an individual quota for 107.5 tonnes each, and 10 tonnes reserved for incidental bycatches by other Icelandic fishing vessels, if needed the quota reserved for incidental bycatches will be adjusted to cover all catches. Bycatches of BFT by Icelandic fishing vessels in 2021 were 541 kilos.

All Icelandic vessels are equipped with a VMS system and are required to transmit on an hourly basis. All fishing vessels are required to have electronic logbooks and landings are monitored and recorded in the database of the Directorate of Fisheries.

All Icelandic fishing vessels are required to register all catches and bycatches in electronic logbooks.

The Icelandic fisheries management system is based on ITQs and all fishing vessels need a general fishing permit and sufficient quota for the expected catch before leaving port for any fishing.

Iceland manages over a million tonnes of commercial fisheries every year with ITQs, electronic logbooks and mandatory weighing of all catches at landing. The Directorate keeps records of all allocated quota and all landings, quota uptake by each vessel is updated after landing in an online landing registration of the Directorate which is publicly available at ([Find ship | Individual vessels | Vefur Fiskistofu \(fiskistofa.is\)](#)). Discards of commercial species are not allowed. Undersized BFT is to be released alive or landed and registered if dead when taken on-board. No catches of individual fishes below 30 kg have been recorded by Icelandic vessels, neither directed catches or bycatches. The BFT quota of Iceland will be adjusted if needed between bycatches and longline catch. This will be managed by the Directorate like all other commercial catches in Iceland. All adjustments will be reported to ICCAT.

Inspectors from the Directorate of Fisheries in Iceland shall be present on board the BFT longliners for at least 20% of the fishing operations. The vessels need written permission from the Directorate before leaving port without an inspector.

The Marine and Freshwater Research Institute in Iceland will advise the Directorate on the relevant training and sampling methods for the inspectors to collect biological data. Biological data will also be collected at landing by the Directorate and MFRI.

The longline fishing season will start on 1 August and end on 31 December. The fishing area is south of Iceland in the NE-Atlantic West of 10°W and North of 42°N. The vessels are required to have a general fishing licence and sufficient quota for other species within the Icelandic EEZ to allow for incidental bycatches of other species. When the vessel intends to utilize the bluefin tuna quota it shall notify the Directorate of Fisheries in Iceland and thereby undergo the management regime of ICCAT. As soon as the individual quotas are fished the bluefin tuna fishing licence expires. The Icelandic authorities will close the fisheries when the quota is exhausted, or the vessels notify an end to fishing operations in 2022.

The list of authorized ports for 2022 is attached.

In 2015 the Directorate of Fisheries in Iceland implemented the eBCD system and intends to issue all certificates in 2022 electronically.

	<i>ICCAT requirement (per Rec. 21-08)</i>	<i>Explanation of CPC actions taken to implement</i>	<i>Relevant domestic laws or regulations (as applicable)</i>	<i>Note:</i>
1	Catch recording and reporting (paras 74-88)	All Icelandic fishing vessel have Electronic Logbooks, all landing recorded in online database of the Directorate. All catches are to be recorded in logbook. Dead discards of commercial species not allowed. All catches counted against quota.	Icelandic Fishery Act, Regulation on BTF Fisheries 2022.	
2	Fisheries openings (paras 28-32)	Longline fishing season 1 August and closing when the quota is fished or 31 December.	Icelandic Fisheries Act, Regulation on BFT Fisheries 2022.	
3	Minimum size (paras 33-35)	Undersized fish to be released alive, discards banned if dead to be landed and recorded.	Icelandic Fisheries Act, Regulation on BFT Fisheries 2022.	
4	By-catch (para 37, including %)	Discard of commercial species are banned by the Icelandic fleet and all commercial and non-commercial species must be landed. All catches of commercial and non-commercial species must be registered in logbooks, this also applies to all bycatches of BFT by Icelandic vessels (see table with bycatches).	Icelandic Fisheries Act, Act concerning the Treatment of Commercial Marine stocks 57/1996.	
5	Recreational and sports fisheries (paras 38-46)	No recreational or sport fisheries for eastern Atlantic BFT will be allowed in 2022.	Regulation on BTF Fisheries 2022.	
6	Transshipment (paras 89-94)	No transshipment is allowed.	Icelandic; Fishery act, Regulation on BTF fisheries 2022.	
7	VMS (paras 218-224)	All Icelandic fishing vessels are equipped with a VMS system and required to transmit on hourly basis.	Icelandic Fisheries Act.	

8	CPC observers programme (paras 95-100)	There are no observers in Iceland, only inspectors that are full time employees of the Directorate of Fisheries Inspectors shall be present on board for at least 20% of the fishing operation. The vessel needs written permission from the Directorate before leaving port without an inspector.	Icelandic Fisheries Act, Regulation on BFT Fisheries 2022.	
9	Regional observers programme (paras 101-107)	N.A. Only longline fishing by 2 vessels.		
10	List of designated ports (paras 80-84)	Reykjavik ISREY Hafnarfjordur ISHAF Hofn I Hornafirdi ISHFN Vestmannaeyjar ISVES Grindavik ISGRI Thorlakshofn ISTHH Sandgerdi ISSAN Keflavik ISKEF Akranes ISAKR Olafsvik ISOLV Grundarfjordur ISGRF Stykkisholmur ISSTY		

The plan should be accompanied by a list of designated ports for landing and transhipment through form CP24, unless third party ports are to be used in which case these should be listed here:

2. Annual fishing capacity management plan (paras 16-21)

See attached.

3. Annual farming management plan (paras 12; 22-26), as applicable

No farming – not applicable.

4. Monitoring, control and inspection plan

a) CPC's monitoring, control and inspection (para 12 c)

BFT longline vessels need written permission from the Directorate of Fisheries to leave port for bluefin tuna fishing without an inspector onboard from the Directorate. Required coverage is at least 20% of the fishing operations in days. Inspectors from the Directorate are present at all landings of BFT.

All Icelandic vessels are equipped with a VMS system and are required to transmit on an hourly basis.

All catches of commercial and non-commercial species must be registered in electronic logbooks, this also applies to all bycatches of BFT by Icelandic vessels.

The vessels are required to have a general fishing licence and sufficient quota for other species within the Icelandic EEZ to allow for incidental bycatches of other species. When the vessel intends to utilize the bluefin tuna quota it shall notify the Directorate of Fisheries in Iceland and thereby undergo the management regime of ICCAT.

b) Joint Scheme of International Inspection (paras 228-231)

Iceland only authorizes 2 longline vessels in the NE-Atlantic and is therefore not required to be part of an ICCAT International inspection plan. Not applicable.

5. Others reserved quota for bycatches and actual bycatches from 2013 (tonnes)

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Reserved quota for bycatches	2,97	3,36	2,57	5,71	7,48	4	7	10	10	10
Actual bycatches	3,8	7,366	10,46	2,747	0,42	0	0	0,839	0,541	

INTERSESSIONAL MEETING OF PANEL 2 – ONLINE, MARCH 2022

<i>Tuna vessel fleet</i>	<i>Fishing fleet</i>					<i>Fishing Capacity</i>					
Type	Best catch rates defined by the SCRS in 2009 (t)	2008	2019	2020	2021	2022	2008	2019	2020	2021	2022
Purse seiner over 40m	70.7										
Purse seiner between 24 and 40m	49.78										
Purse seiner less than 24m	33.68										
Total purse seine fleet											
Longliner over 40m	25		2	0	0	2		50.00	0	0	50
Longliner between 24 and 40m	5.68										
Longliner less than 24m	5										
Total longline fleet			2	0	0	2					
Baitboat	19.8										
Handline	5										
Trawler	10						10				
Trap	130										
Small coastal vessels and baitboats from the Azores, Canary Islands and Madeira	N/A										
Other (please specify)	5										
Total fleet/fishing capacity		1	2	0	0	2	10.00	50.00	0	0	50
Quota							51.53	147.00	180.00	225	225
Percentage allocated to by-catch									5.6%	4.4%	4.4%*
Adjusted quota (if applicable)									170	215.00	215.00
Allowance for sports/recreational (if applicable)									0	0	0
Under/ overcapacity							-41.53	-97.00	-170.00	-215	-165

*10 mt set aside as by-catch provisions for 2022.

JAPAN**Fishing Plan Year: 2022****1. Details of annual fishing plan for catching vessels and traps (paras 14-15)**

Japan's initial quota for the 2022 fishing season (from 1 August 2022 to 31 July 2023) is 2,819 t. The catch of E-BFT in 2021 was 2,779.99 t, which includes 0.68 t of dead discards, against 2,876.64 t (2021 catch quota). This gives an unused quota of 96.65 t, which Japan requests to transfer to the 2022 quota in accordance with paragraph 7 of Recommendation 21-08 (less than 5% of the initial quota). In addition, the reserved quota for dead discard (14 t) as well as bycatch quota for another fishery (1 t) are set aside. To conclude, the adjusted quota for 2022 in Capacity Table is 2,900.65 t accordingly (2,819 +96.65 – 15 =2,900.65).

All Japanese fishing vessels catching bluefin tuna (BFT) in the eastern Atlantic are large-scale tuna longline fishing vessels (LSTLVs). The Minister of Agriculture, Forestry and Fisheries, having been entrusted competence by the Fisheries Law, has introduced the Ministerial Ordinance to establish a legally binding management system including individual quotas. The Fisheries Agency of Japan (FAJ) is an extra-ministerial bureau of the Ministry of Agriculture, Forestry and Fisheries of Japan, which enforces the Fisheries Law and the Ministerial Ordinance on Japanese fishermen.

The Minister requires fishing operators to report a daily BFT catch (including zero catch report) by the end of next day in accordance with the Ordinance. Such report has to contain relevant information including the date, time, location (latitude and longitude), number of catches, type of product, individual BFT weights, tag numbers, and number of live releases and dead discards including those under the minimum size. The FAJ monitors the catch of individual vessels and sees if the total catch is within each vessel's quota.

Regarding by-catch, all Japanese catching vessels targeting fish other than BFT operate around the equator or further south: the possibility of by-catch of BFT is negligible. In fact, there was no by-catch reported or observed in 2021. Given the circumstances, the Minister sets aside 1 t for bycatch by other fisheries for the 2022 fishing season as a minimum figure.

Landings at overseas ports are prohibited by the Ministerial Ordinance. The Ministerial Ordinance only allows BFT fishermen to land at ten domestic ports designated by the Ordinance. At the ten ports, 100% of landings of BFT by both fishing vessels and carrier vessels will be inspected by FAJ official inspectors who will check the total weight and tags, count the number of BFT and compare the information collected with the data previously reported, including daily reports.

All fishing vessels operate in almost the same period from the end of September to early December every year without entering ports during this period. Therefore, the observers are on board the designated BFT vessels during their entire fishing trips for BFT. This means that temporal representation is secured. In addition, as the fishing ground of bluefin tuna is located in a very limited area off the coast of Iceland, there should be little concern about the spatial representation. For the 2022 fishing year, subject to the COVID-19 pandemic, FAJ will make every effort to achieve 20 % observer coverage. Several fishing vessels will install electronic monitoring system on a trial basis although to what extent this can be effective is not clear.

	<i>ICCAT requirement (per Rec. 21-08)</i>	<i>Explanation of CPC actions taken to implement</i>	<i>Relevant domestic laws or regulations (as applicable)</i>	<i>Note:</i>
1	Catch recording and reporting (paras 74-88)	The Minister requires fishing operators to communicate to the FAJ daily information from logbooks, including the date, time, location, the weight and number of BFT caught in eastern Atlantic Ocean (including releases and discards of dead fish under the minimum size) by the end of the next day. In addition, the Minister also requires the operators to maintain a bound or electronic fishing logbook of their operation.	Fisheries Law, Article 26. Ministerial Ordinance of the Minister of Agriculture, Forestry and Fisheries, Article 14 and 26.	
2	Fisheries openings (paras 28-32)	The Minister prohibits fishing operators from fishing for BFT in the area delimited by West of 10°W and North of 42°N during the period from 1 February to 31 July and in other areas during the period from 1 June to 31 December.	Ministerial Ordinance of the Minister of Agriculture, Forestry and Fisheries, Article 23.	
3	Minimum size (paras 33-35)	The Minister prohibits fishing operators from catching for BFT weighing less than 30kg. The fishing vessel shall stop operating and move from the fishing area when the number of BFTs which weigh 10 – 30 kg gets larger than 5% of the total number of BFTs caught on the day. The weight of dead discards of BFTs below minimum weight is counted against Japan's quota.	Ministerial Ordinance of the Minister of Agriculture, Forestry and Fisheries, Article 23.	
4	By-catch (para 37, including %)	The Minister prohibits the vessels without BFT quota from catching, transshipping or landing BFT. All Japanese catching vessels targeting other	Fisheries Law, Article 19 and 25.	

		than BFT operate around the equator or further south, thus the possibility of by-catch of BFT is negligible. Given the circumstances, the Minister sets aside 1 t (0.03%=1.00t/2,915.65t (Adjusted quota)) for bycatch by other fisheries as a minimum figure.		
5	Recreational and sports fisheries (paras 38-46)	No recreational or sport fishing vessels in the ICCAT area.	N/A	
6	Transshipment (paras 89-94)	The Minister prohibits transshipment of BFT at sea and only allows transshipment at ports registered on the ICCAT website with prior authorization.	Ministerial Ordinance of the Minister of Agriculture, Forestry and Fisheries, Article 59.	
7	VMS (paras 218-224)	The Minister will require fishing vessels to be equipped with a VMS able to automatically transmit a message and to transmit the data every two hours to the FAJ. The FAJ transmits the VMS data from the vessels fishing for BFT to the ICCAT Secretariat.	Ministerial Ordinance of the Minister of Agriculture, Forestry and Fisheries, Article 25.	
8	CPC observers programme (paras 95-100)	Subject to the COVID-19 pandemic, the FAJ will make every effort to achieve 20 % observer coverage of fishing effort of its LSTLVs, which are allowed to fish BFT. Several vessels will install electronic monitoring system (EMS) on a trial basis.	N/A	
9	Regional observers programme (paras 101-107)	Japanese fishing vessels catching BFT are not purse seiner and Japan has no registered farming facilities for BFT.	N/A	
	<i>Other requirements, such as: tagging programme (para 44), etc.</i>	N/A	N/A	

The list of domestic ports for landing:

1	Tokyo
2	Kawasaki
3	Yokohama
4	Yokosuka
5	Misaki
6	Shimizu
7	Oigawa
8	Yaizu
9	Kesenuma
10	Kushikino

The list of third party ports for transshipment:

	Country	Port
1	Cabo Verde	Mindelo
2	Iceland	Reykjavík
3	Panama	Cristóbal
4		Balboa
5	South Africa	Cape Town
6	Spain	Las Palmas

2. Annual fishing capacity management plan (paras 16-21)

The Minister will allocate to each LSTLV an individual quota, which is more than the recommended catch amount (i.e., 25 t per one LSTLV over 40 m) estimated by SCRS (see Capacity Table). Thus, Japan, having accomplished the obligation on capacity adjustment provided in Rec. 21-08, ensures that its fishing capacity be commensurate with its allocated quota.

3. Annual farming management plan (paras 12; 22-26), as applicable

N/A.

4. Monitoring, control and inspection plan**a) CPC's monitoring, control and inspection (para 12 c)****1. Characteristic of Japanese E-BFT Fishery**

The Northeast Atlantic Ocean off the west coast of Iceland is the only E-BFT fishing ground for the Japanese fleet. In recent years, the fishing season has usually started at the end of September and lasted until early December. The E-BFT fishing area is remote from fishing areas of bigeye tuna, which is another primary target fish for the Japanese fleet and caught around the equator. This means that LSTLVs targeting E-BFT are distinguishable from LSTLVs targeting other fish such as bigeye, by their position.

2. Monitoring the E-BFT fishery in accordance with Rec. 21-08 and other ICCAT measures

The FAJ constantly monitors LSTLVs' positions in the entire Atlantic Ocean through the VMS. The agency issues special licences to LSTLVs fishing actively for E-BFT and allocates quotas to those vessels. The FAJ ensures through the VMS that the LSTLVs without a license and quota do not operate in the E-BFT fishing ground. Also, the FAJ requires licensed vessels to transmit daily catch reports to the FAJ during the BFT fishing season. The FAJ closely monitors the accumulated catches to make sure that licensed vessels comply with their quotas.

The FAJ distributes official tags only to LSTLVs having E-BFT quotas. The Ministerial Ordinance requires Japanese fishermen to attach the tag to every BFT caught by them. Landings of any E-BFT without the tag are forbidden.

Reporting requirements regarding transshipment are also established by the Ministerial Ordinance. LSTLVs shall acquire authorization from the FAJ before transshipment at ports. The FAJ also receives transshipment declaration in accordance with the ICCAT Recommendation. The FAJ examines such information and checks the consistency with the accumulated catch amount. Such information will be verified through landing inspections by the FAJ inspectors when the BFT is landed in Japan.

3. *Additional measure adopted by the FAJ(1) - Very low capacity of Japanese LSTLVs*

Moreover, the FAJ limits the number of catching vessels fishing for BFT well below the limit articulated by the Recommendation 21-08. This diminishes the economic incentive of the fishermen to violate regulations since the allocated quota will be enough for each catching vessel to make a profit through BFT fishing. The Capacity Table shows that Japan's E-BFT fleet has very low capacity (40 vessels in 2022), compared to the limit calculated in accordance with the Rec. 21-08 (2900.65 t (quota)/25 t (per one LSTLVs over 40 m)= 116.03 vessels).

4. *Additional measure adopted by the FAJ(2) - 100% landing inspection by FAJ officials*

The Ministerial Ordinance prohibits landing of BFT at any foreign port. All of the BFT caught by Japanese fishermen including those brought by carrier vessels must be landed in 10 designated ports in Japan. Those ports are the final destination of BFT caught by Japanese fishermen; this scheme enables the FAJ to conduct direct landing inspections against the landed E-BFT. In fact, the FAJ has been implementing 100% landing inspections against the E-BFT caught by Japanese LSTLVs since 2009. A range of information collected through the MCS measures mentioned above (e.g., weight and number of E-BFT, attachment of plastic tags) are utilized at the landing inspections.

5. *Cooperation with port State and importing State*

Many of the E-BFT caught by Japanese LSTLVs are also subject to port inspection by coastal CPCs. When the LSTLVs exhaust their catch quotas, they usually make transshipments of E-BFT at other CPCs' ports, which may be subjected to inspections by the port State, in accordance with Recommendation 18-09. It is rare that a catching vessel carrying the E-BFT goes back to Japan after the end of the BFT fishing season because, in most cases, Japanese LSTLVs change their target fish to bigeye tuna (moving South) and continue their operation in the ICCAT area.

6. *Risk analysis for illegal BFT fishing*

In a hypothetical case that a Japanese LSTLV successfully poaches E-BFT despite the MCS measures described above, the vessel has to sell the fish somewhere in the world. However, since landing of BFT at foreign port is prohibited, all E-BFT, legally caught or illegally caught, have to go through 100% landing inspection at the designated domestic ports before being exported. Since official tags are attached to legally caught E-BFT, poached E-BFT, to which an official tag is not attached, are easily identified. The importing State, especially if an ICCAT member, shall require an eBCD to import the E-BFT. However, the FAJ will never validate an electronic Bluefin tuna Catch Document (eBCD) for the export of fish to market States.

In another hypothetical case, if a Japanese LSVTL successfully poaches E-BFT and attempts to bring the fish to Japan, as it is prohibited to land illegally caught E-BFT, it can easily be identified by the landing inspections of the FAJ or business operators in Japan because an official tag is not attached to the fish and the fish is not accompanied by an eBCD. Furthermore, business operators are prohibited from buying such illegal fish by the Ministerial Ordinance.

7. *Conclusion*

To conclude, Japan fully implements MCS measures and capacity control as required by the relevant Recommendation of ICCAT. In addition, Japan adopts some additional and very effective MCS measures, including 100% landing inspection. Moreover, compliance of Japanese LSTLVs is further ensured through the assistance of and cooperation with port States and possible market States. Those combined measures are expected to eliminate any possibility of IUU fishing of E-BFT by Japanese vessels. Given the effectiveness of the combined measures, the FAJ is not going to dispatch its inspection vessel for BFT fishing.

b) Joint Scheme of International Inspection (paras 228-231)

Japan will not be part of an ICCAT International Inspection plan, due to its alternative measures described in the previous sub-paragraph.

5. Others

N/A.

INTERSESSIONAL MEETING OF PANEL 2 – ONLINE, MARCH 2022

<i>Tuna vessel fleet</i>	<i>Fishing fleet</i>						<i>Fishing Capacity</i>				
Type	Best catch rates defined by the SCRS in 2009 (t)	2008	2019	2020	2021	2022	2008	2019	2020	2021	2022
Purse seiner over 40m	70.7										
Purse seiner between 24 and 40m	49.78										
Purse seiner less than 24m	33.68										
Purse seine total fleet											
Longliner over 40m	25	49	38	40*	40	40	1225	950	1000*	1000	1000
Longliner between 24 and 40m	5.68										
Longliner less than 24m	5										
Total longline fleet		49	38	40*	40	40	1225	950	1000*	1000	1000
Baitboat	19.8										
Handline	5										
Trawler	10										
Trap	130										
Small coastal vessels and baitboats from the Azores, Canary Islands and Madeira	N/A										
Other (please specify)	5										
Total fleet/fishing capacity		49	38	40*	40* ²	40* ³	1225	950	1000*	1000	1000
Quota							2430.5	2544	2819	2819	2819
Percentage allocated to by-catch							-	0.04% (1 t)	0.04% (1 t)	0.03% (1 t)	0.03% (1 t)
Adjusted quota (if applicable)							2430.5	2529	2,824.27	2,861.64	2,900.65* ⁴
Allowance for sports/recreational (if applicable)											
Under/ overcapacity							-1205.5	-1579	-1,824.27	-1,861.64	-1,900.65

* One of the 40 vessels cancelled its operation for EBFT in the 2020 fishing season.

*² One of the 40 vessels cancelled its operation for EBFT in the 2021 fishing season.

*³ the figures are provisional. Once the number of vessels is confirmed, these figures will be revised and be communicated to the Secretariat.

*⁴ 2,819.00 t (2022 initial quota) +96.65 t (2021 carry over (Para 7 of Rec. 21-08))-15t (*³) =2,900.65. t

*⁵ Japan sets aside 14 t for dead discards by the BFT fishery and allocates 1 t for bycatch by the other fishery.

REPUBLIC OF KOREA

Fishing Plan Year: 2022

1. Details of annual fishing plan for catching vessels and traps (para 14-15)

Korea's bluefin tuna quota for 2022 will be 260.0 t (200 t of initial quota + 50 t of quota transfer from Chinese Taipei+10 t of unused quota carried forward from 2021) subject to the endorsement by Panel 2. Korea hereby requests the carry-over of its unused quota 10 t to 2022 in accordance with para 7 of Rec. 21-08.

* 2021 adjusted quota (253.800 t) – 2021 final catch (242.243 t) = unused quota (11.557 t).

– *Quotas allocated to each gear group*

Longline is the only gear type that Korea uses for bluefin tuna fishery. Therefore, 259.5 t out of 260.0 t will be allocated to longline gear group. Korea will set aside 0.5 t of its quota for possible by-catch.

– *Method used to allocate and manage quotas, and measures to ensure the respect of the individual quotas*

Korea's bluefin tuna quota will be allocated to two to four longline vessels of certain fishing companies which have historical records of bluefin tuna fishing. The Ministry of Oceans and Fisheries (MOF) of Korea will decide the individual quota for each vessel in consultation with those companies. The details of quota allocation will be submitted to the Secretariat at the latest 15 days before the beginning of the fishing activities in accordance with paragraph 52 of the Recommendation 21-08. Authorized fishing vessels are required to report their daily catch (including zero catch report) to MOF by the end of the next day following their catch. Such report has to contain relevant information/data including the date, time, location (latitude and longitude), number of catch, individual bluefin tuna weight, number and weight of discarded/released fish (discards will be counted against the quota) and etc. Transfer of quotas among vessels is allowed but vessel operators must seek approval of MOF first. Any over-catch beyond individual quota will be dealt with in accordance with the relevant provisions of Distant Water Fisheries Development Act which governs Korea's distant water fisheries.

– *Open fishing seasons for each gear category*

Longline is the only gear type that Korea uses for bluefin tuna fishery. Open fishing season for longline gear group will be from 1 September to 30 November 2022.

– *Rules on by-catch*

The Korean government has instructed that Korean vessels that do not target bluefin tuna shall not retain bluefin tuna by-catches in accordance with paragraph 37 of the Recommendation 21-08. In practice, there is almost "zero" possibility that by-catch occurs because no Korean tuna fishing vessels other than bluefin tuna catching vessels are operating around or in the ICCAT temperate zones. Nevertheless, Korea will set aside 0.5 ton of its quota for possible by-catch. The amount of any by-catch will be deducted from the quota of Korea and these data will be reported to ICCAT. Korea has not experienced any by-catch of bluefin tuna so far.

– *VMS, Transshipment, Observer and Tagging Program*

Vessels shall be equipped with a full-time operational VMS which shall be tracked by and report to the Secretariat as well as Fisheries Monitoring Center (FMC) of the Republic of Korea every two hours. BFT fishing vessels shall only tranship bluefin tuna catches in ICCAT-registered ports with the prior authorization. MOF will achieve more than 20% observer coverage for 2022 fishing season. BFT catching vessels will affix a valid plastic tag to each BFT brought on board.

	<i>ICCAT requirement (per Rec. 21-08)</i>	<i>Explanation of CPC actions taken to implement</i>	<i>Relevant domestic laws or regulations (as applicable)</i>	<i>Note:</i>
1	Catch recording and reporting (paras 74-88)	The masters of authorized longline fishing vessels will keep a bound logbook as well as electronic logbook of their operation and record all necessary information. Weekly and monthly catch reports will be submitted.	Distant Water Fisheries Development Act, Article 13-1, 13-2, 16	
2	Fisheries openings (paras 28-32)	No more than four Korean longline vessels will catch BFT from 1 September 2022 to 30 November 2022 in the area delimited by west of 10°W and North of 42°N.	Distant Water Fisheries Development Act, Article 13-1, 13-2	
3	Minimum size (paras 33-35)	Korean BFT catching vessels are prohibited from catching bluefin tuna weighting less than 30kg or with fork length less than 115cm. Fish below these minimum sizes that are discarded dead shall be counted against Korea's BFT quota.	Distant Water Fisheries Development Act, Article 13-1, 13-2	
4	By-catch (para 37, including %)	By-catch is very unlikely and not allowed but it will be deducted from Korea's quota, if any. Korea will set aside 0.5t (0.2%=0.5t/260t [adjusted quota]) of quota for this purpose.	Distant Water Fisheries Development Act, Article 13-1, 13-2	
5	Recreational and sports fisheries (paras 38-46)	Not applicable. Korea does not have any recreational or sports fisheries.		
6	Transshipment (paras 89-94)	At-sea transshipment of bluefin tuna is prohibited. Transshipment of bluefin tuna shall take place in the designated ports only. In 2022 season, it is expected that Korean vessels will use the port of Cape Town, Dakar or Cabo Verde.	Distant Water Fisheries Development Act, Article 13-1, 13-2, 16	

7	VMS (paras 218-224)	Vessels shall be equipped with a full-time operational VMS which shall be tracked by and report to the Secretariat as well as Fisheries Monitoring Center (FMC) of the Republic of Korea every two hours.	Distant Water Fisheries Development Act, Article 13-1, 13-2, 15	
8	CPC observers programme (paras 95-100)	MOF will achieve more than 20% observer coverage for 2022 fishing season.	Distant Water Fisheries Development Act, Article 13-1,13-2, 21	
9	Regional observers programme (paras 101-107)	Not applicable.		
	<i>Other requirements, such as: tagging programme (para 44)</i>	Since 2017, Korea has been conducting tagging program with archival tags (Mini-PAT) by scientific observers as part of cooperation for GBYP.		

The list of third party ports for transshipment or landing (para 80-84).

	<i>Country</i>	<i>Port</i>
1	South Africa	Cape Town
2	Senegal	Dakar
3	Cabo Verde	Mindelo
4	Japan	Shimizu

2. Annual fishing capacity management plan (para 16-21)

Korea will operate no more than 4 longline vessels in 2022 although the maximum number of longline vessels (over 40m) it may operate is 10 according to the best catch rate defined by SCRS and the corresponding capacity. Please refer to the detailed information in the last page of this paper.

3. Annual farming management plan (paras 22-26), as applicable

Not Applicable (Korea is not a farming CPC).

4. Monitoring, control and inspection plan

a) CPC's monitoring, control and inspection (paras 85, 119-123, 195-217)

i) para 85

Masters of Korean longline vessels must provide the relevant authorities of the port, at least 4 hours before the estimated time of arrival, with the necessary information required by para 85. Also, after each trip, they must submit within 48 hours a landing declaration to the competent authorities of the CPC where the landing takes place and to the FMC of Korea. Korean fishing vessels are required to report their catch to the FMC of Korea on a daily basis and transshipment/landing activities must be reported, too, in accordance with the relevant provisions of Distant Water Fisheries Development Act. The FMC of Korea analyzes all the relevant information including VMS record and the MOF investigates any suspicious events identified by

the FMC. Any infringements or non-compliances will be dealt with in accordance with the relevant provisions of Distant Water Fisheries Development Act which governs Korea's distant water fisheries. At least 20% of landings will be inspected.

ii) paras 119-123

Not applicable (Korea is not a farming CPC).

iii) paras 195-217

Not applicable (Korea is not a farming CPC).

b) Joint Scheme of International Inspection (paras 228-231)

Korea does not have any plan to have an inspection vessel in the Convention area in 2022 for the purpose of Joint International Inspection but its fishing vessels will fully cooperate with the boarding and inspection activities.

5. Others

Since 2017, tagging experiments using satellite tags has been conducted on the Korean longline vessels by an observer to actively cooperate with the ICCAT GBYP tagging activities and biological studies. Related data is currently under analysis and will be submitted to the ICCAT Secretariat. Korea will continue the tagging research in 2022 in the same way as previous researches.

INTERSESSIONAL MEETING OF PANEL 2 – ONLINE, MARCH 2022

<i>Tuna vessel fleet</i>	<i>Fishing fleet</i>						<i>Fishing Capacity</i>				
Type	<i>Best catch rates defined by the SCRS in 2009 (t)</i>	<i>2018</i>	<i>2019</i>	<i>2020</i>	<i>2021</i>	<i>2022</i>	<i>2018</i>	<i>2019</i>	<i>2020</i>	<i>2021</i>	<i>2022</i>
Purse seiner over 40m	70.7										
Purse seiner between 24 and 40m	49.78										
Purse seiner less than 24m	33.68	0	0	0	0	0	0	0	0	0	0
Purse seine total fleet		0	0	0	0	0	0	0	0	0	0
Longliner over 40m	25	3	3	4	4	4	75	75	100	100	100
Longliner between 24 and 40m	5.68										
Longliner less than 24m	5										
Total longline fleet		3	3	4	4	4	75	75	100	100	100
Baitboat	19.8										
Handline	5										
Trawler	10										
Trap	130										
Small coastal vessels and baitboats from the Azores, Canary Islands and Madeira	N/A										
Other (please specify)	5										
Total fleet/fishing capacity		3	3	4	4	4¹	75	75	100	100	100
Quota		160	184	200	200	200	160	184	200	200	200
Percentage allocated to by-catch							2% (4.2t)	0.21% (0.5t)	0.2% (0.5t)	0.2% (0.5t)	0.2% (0.5t)
Adjusted quota (if applicable)		205.8	234	251.067	253.8	259.5	205.8	233.5	251.067	253.8	259.5 ²
Allowance for sports/recreational (if applicable)										-	-
Under/ overcapacity							-130.8	-158.5	-151.067	-153.8	-159.5

¹ Korea will operate no more than four longline vessels for BFT fishery in 2022.

² Korea will set aside 0.5t of its quota for possible by-catch. So, 259.5 t out of 260.0 t will be allocated to longline gear group.

LIBYA

Fishing Plan Year: 2022

Libya is hereby submitting its Fishing, Farming, Inspection and Capacity Management Plan for Mediterranean bluefin tuna 2022.

In accordance with the fishing allocations adopted by ICCAT (Rec. 19-04/21-08), the level of the 2022 quota for Libya was set at 2,255 t.

1. Details of Annual Fishing Plan Details for Catching Vessels and Traps (para 14-15)

In preparation for the 2022 bluefin tuna fishing season, Libya adjusted its fishing capacity in accordance with the methodology indicated by ICCAT Recommendations. Based on this methodology, Libya has adopted a Fishing Plan which will allocate an individual quota to 15 purse seine vessels to actively fish for bluefin tuna in 2022 in the Mediterranean.

All Libyan fishing vessels actively fishing for bluefin tuna in 2022 shall be tuna purse seiners.

The Libyan Administration (Ministry of Marine Wealth) will issue fishing authorizations for these vessels for 2022 and will be reported to ICCAT in due course.

The management of fishing activity will be governed in accordance with the provisions of the *Recommendation by ICCAT Amending the Recommendation 18-02 establishing a multiannual management plan for bluefin tuna in the Eastern Atlantic and the Mediterranean* (Rec. 19-04/21-08), Law #14/1989 which organizes the Fishery and Aquaculture in Libya and Ministerial Decree (issued by the Ministry of Agriculture, Livestock and Marine Wealth) #32/2021, amended by #32/2022 (issued by the Ministry of Marine Wealth) adopting Rec. 19-04/21-08 and amending Decree No. 205/2013, to establish a Multi-Annual Recovery Plan for BFT in the Eastern Atlantic and Mediterranean.

Rec. 19-04/21-08 has allocated a Total Allowable Catch of 2,255 t to Libya for 2022 (Rec. 19-04/21-08, para 5) for the current year (2022). 2,235 t shall be distributed to the 15 (fifteen) purse seiners over 24 m that shall be authorized to fish for BFT in 2022 and 20 t are to be kept as a reserve for any incidental or bycatch that might occur in the artisanal fleet or overruns of quota in the purse seine fleets. The level of 20 t was established based on past records of bycatch for the last few years, which was much lower than the reserved figure (20 t).

The list of vessels and their individual quotas will be notified to the ICCAT Secretariat within the required deadline (Rec. 19-04/21-08), and any changes to these vessels list will be transmitted to the ICCAT Secretariat immediately. Joint Fishing Operations (JFOs) between the authorized fishing vessels shall be allowed, and Joint Fishing Operations (JFOs) with vessels of other CPCs are envisaged for 2022.

	<i>ICCAT requirement (per Rec. 19-04/21-08)</i>	<i>Explanation of CPC actions taken to implement</i>	<i>Relevant domestic laws or regulations (as applicable)</i>	<i>Note:</i>
1	Catch recording and reporting (para 74-88)	Masters of vessels active in the BFT fishery shall maintain a bound logbook and observe procedures as set out in Annex 2 of Rec. 19-04/21-08. In accordance with para 74 of Rec. 19-04/21-08 weekly and monthly catch reports (including zero catch report) of all authorized Libyan vessels active in BFT catch shall be transmitted to ICCAT Secretariat.	Art. 16/ Decree #32/2022	
2	Fisheries openings (para 28-32)	Purse seiners are only authorized to catch E-BFT in eastern Atlantic and Med. Sea in period (26 May-1 July). - By derogation purse seiners fishing in FAO zones 37.3.1 and 37.3.2 shall be authorized to fish in the period 15 May – 1 July. This shall be applicable to a maximum of three vessels selling their catches to farms of CPCs in the abovementioned zones. In accordance with paragraph 30/29 of Rec. 19-04/21-08, Libya may possibly extend its fishing period for affected vessels for the equivalent number of lost days up to a maximum of ten days in the event of bad weather conditions during the authorized fishing period. The fishing period will be extended in the case of wind speeds reaching 4 or more on the Beaufort scale. Assessment of the length of the bad weather conditions for the purpose of the extension will be based on VMS reports evidencing the day/s on which the vessel/s have been inactive; in the case of JFOs evidence of concurrent inactivity of all the vessels members of the JFO is to be proven. Notification of close of season will be sent to the ICCAT Secretariat in accordance with of Rec. 19-04/21-08.	Art.13/ Decree #32/2022	
3	Minimum size (para 33-35)	Catching, retaining, landing, transshipping, transferring, selling, displaying for sale BFT weighing less than 30 kg or less than 115 cm fork length is prohibited as per para 33 of Rec. 19-04/21-08. Any incidental catch of max. 5% weighing between 8-30 kg and shall be counted against the Libyan quota.	Art. 31/ Decree#32/2022	
4	By-catch (para 37) including %	Libyan fishing vessels should, where possible release bluefin tuna caught as bycatch. For BFT in 2022, 20 t are to be kept as a reserve for any incidental or bycatch. Otherwise, the amount of bycatch discarded indicating alive or dead status should be reported to the authority immediately. All bycatch including dead fish will be deducted from the quota of Libya when it occurs.	Art. 36/ Decree #32/2022	

5	Recreational and sports fisheries (para 38-46)	No recreational and sport fisheries are allowed.	Art. 8 & 9/ Decree #32/2022	
6	Transshipment (para 89-94)	Transshipment at sea is prohibited. BFT fishing vessels shall only land BFT catches in ports designated by the Fishery Authority (Al-khoms, Tripoli, Misurata and Tobruk). All vessels entering any of these ports for landing shall seek a pre-entry permission from port authorities. All landings of BFT shall be inspected by port and fishery authorities and the fishing vessel flag State will be informed through a report.	Art. 32/ Decree#32/2022	
7	VMS (para 218-224)	All fishing vessels active in BFT fishing shall be equipped with a full active VMS; the transmission of data shall start 15 days before their period of authorization and continue 15 days after the authorization period. The fishery authority will regularly monitor the status of VMS transmission on the basis of at least every hour (1) and any interruption of transmission will be acted upon immediately to investigate and solve the problem; if said problem is not resolved within 24 hrs the vessel will be recalled to port.	Art 9, 34/ Decree #32/2022 (Transmission start 15 days before Authorization and continue 15 days after end of fishing campaign).	VMS canter shall regularly transmit the data to ICCAT and authority.
8	CPC observers programme (para 95-100)	National observers shall cover 100% of the activity of towing and auxiliary vessels (BFT - Other Vessels if any). No national observers on board of catching vessels. For research purposes local researchers may be appointed on board some of the catching vessels.	Art.14/ Decree #32/2022	
9	Regional observers programme (para 101-107)	Regional observers shall be placed on board all catching vessels authorized to fish BFT in season 2022 on a full deployment (100%) basis.	Art.14/ Decree #32/2022	

2. Annual fishing capacity management plan (para 16-21)

In accordance with SCRS recommendations CPC-Libya has endeavoured to keep its fishing capacity at a low level. CPC-Libya shall, in terms of para 21 of Rec. 19-04/21-08, adjust its fishing capacity in a manner commensurate with the 'best catch rates' indicated by the SCRS and the allocated quota to the particular fishing gear (Table 2).

3. Annual farming management plan (para 12:22-26), as applicable

In terms of para 22-26 of Rec. 19-04/21-08 Libya has communicated to the ICCAT Secretariat three farms with a total capacity of 1,800 t; no activity however will take place in 2022 due to the security situation.

4. Monitoring, control and inspection plan

a) CPC's monitoring, control and inspection (para 12c)

In accordance with the Fisheries and Aquaculture Act #14/1989, Decree #32/2021, amended by #32/2022 and the Coast Guard and Port Security Act #229/2005 as modified in 2019.

Prior to entry into any port, masters of catching vessels and auxiliary vessels or their representative shall provide the relevant port authorities, at least 4 hours before the estimated time of arrival, with the following:

- i) estimated time of arrival;
- ii) estimate of quantity of bluefin tuna retained on board;
- iii) the information on the geographic area where the catch was taken.

And Port State authorities shall keep a record of all prior notices for the current year.

Fishing Inspectors from the Fishing Authority/Coast Guard shall be trained to this effect.

Given that the larger part of the quota is caught by the purse seine fleet on the high seas and transferred into cages of farms situated in the areas of competence of other CPCs only a minimal percentage can be inspected on arrival/landing in Libyan ports which will not allow for a reliable risk assessment system involving quota, fleet size and fishing effort. However, CPC-Libya will seek cooperation with the farming CPCs receiving fish caught by Libyan catching vessels to obtain further statistics in this regard.

In case of landing in ports of other CPCs, masters of Libyan catching vessels shall submit within 48 hours a landing declaration to the competent authorities of the CPC where the landing takes place and to CPC-Libya. The master of the authorized catching vessel shall be responsible and shall certify the completeness and accuracy of the declaration, which shall indicate, as a minimum requirement, the quantities of bluefin tuna landed and the area where they were caught. All landed catches shall be weighed and not only estimated.

In the case of landings in Libya by catching vessels of other CPCs. CPC-Libya shall send a record of the landing to the flag CPC authority of the fishing vessel within 48 hours after the landing has ended.

a.1) Measures to compliance with quotas

The Fishery Authority will set up a Control Unit on a 24 x 7 basis during the fishing season.

Operators and masters of the authorized fishing vessels shall adhere to paras 63, 65 and 66 and Section A of Annex 2 of Rec. 19-04/21-08 as also paras 86-93 (including Annex 4 and Annex 8) where transfers of live fish are concerned.

Joint Fishing Operations (JFOs) and their respective allocation keys will be notified to ICCAT Secretariat within the stipulated time frame.

Respecting individual quota limits shall be monitored by fishery authorities and cross checked with ROPs on board fishing vessels.

All vessels or JFOs whose quota is exhausted shall be ordered back to port immediately.

All fishing vessels catching BFT shall adhere to the eBCD system.

Catching vessels shall be authorized to transfer their catches only to farming units in CPCs that can guarantee the utilization of stereoscopic systems for assessments of live fish on arrival of towing cages to their farms.

a.2) Enforcement of Fishing Plan

Regulations

Ministerial Decree (issued by the Ministry of Agriculture, Livestock and Marine Wealth) #33/2019, amended by Decree #32/2022 from the Ministry of Marine Wealth adopting Rec. 19-04/21-08 and amending Decree No. 205/2013 to establish a Multi-Annual Recovery Plan for BFT in the Eastern Atlantic and Mediterranean.

Law # 14/1989 which organizes the Fishery and Aquaculture in Libya.

Imposing sanction

Any non-compliance with the regulations regarding BFT fishing operations shall lead to penalties stated in Decree #32/2022/Art. 20 (confiscation of fishing gear, releasing catches, suspending or withdrawal of license, decrease or withdrawal of individual quota). This decree is in force in this year which will give more effective measures.

b) Joint Scheme of International Inspection (para 228-231)

Libya has no plan to participate in the international inspection program due to lack of potentials necessary for such program.

5. Others

Libya Observers Program

National Observers

In 2021 Libya had trained 20 national observers to cover its fishing fleet in accordance with ICCAT Recommendations, those observers will participate this season on board of towing vessels and auxiliary vessels (BFT - Other Vessels if any).

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<i>Tuna vessel fleet</i>	<i>Fishing fleet</i>					<i>Fishing Capacity</i>					
Type	Best catch rates defined by the SCRS in 2009 (t)	2008	2019	2020	2021	2022	2008	2019	2020	2021	2022
Purse seiner over 40m	70.7	1	0	0	0	0	71	0	0	0	0
Purse seiner between 24 and 40m	49.78	31	15	15	15	15	1543	697	747	747	747
Purse seiner less than 24m	33.68	1	0	0	0	0	34	0	0	0	0
Purse seine total fleet		33	15	15	15	15	1648	697	747	747	747
Longliner over 40m	25	5	0	0	0	0	125	0	0	0	0
Longliner between 24 and 40m	5.68	0	0	0	0	0	0	0	0	0	0
Longliner less than 24m	5	0	0	0	0	0	0	0	0	0	0
Total longline fleet		5	0	0	0	0	125	0	0	0	0
Baitboat	19.8	0	0	0	0	0	0	0	0	0	0
Handline	5	0	0	0	0	0	0	0	0	0	0
Trawler	10	0	0	0	0	0	0	0	0	0	0
Trap	130	0	0	0	0	0	0	0	0	0	0
Small coastal vessels and baitboats from the Azores, Canary Islands and Madeira	N/A										
Other (please specify)	5	0	0	0	0	0	0	0	0	0	0
Total fleet/fishing capacity		38	15	15	15	15	1773	697	747	747	747
Quota							1237	1846	2060	2255	2255
Percentage allocated to by-catch							N/A	0.8%	0.8%	0.8%	0.8%
Adjusted quota (if applicable)	Note: 20 t reserve for any incidental or bycatch that might occur in the artisanal fleet or overruns of quota in the purse seine fleets.							1797	2044	2235	2235
Allowance for sports/recreational (if applicable)							0	0	0	0	0
Under/ overcapacity							536	-1297	-1488	-1488	-1488

MOROCCO

Year of fishing plan: 2022

1. Details of annual fishing plan for catching vessels and traps (para 14-15)

a) Introduction

In accordance with the Recommendations and Resolutions adopted at the 27th Regular Meeting of ICCAT, held online, from 15-23 November, and under paragraph 5 of Rec. 21-08, Morocco's quota is fixed at 3,284 t, which will be distributed among the different operational segments: traps, purse seine tuna vessels targeting bluefin tuna, small coastal vessels and artisanal boats that take bluefin tuna as bycatch. The quota of each segment is established according to the catch history and the number of fishing vessels in the segment.

In accordance with paragraph 7 of Rec. 21-08, Morocco requests a transfer of a volume of 24.65 t (0.75% of the quota) of its unused quota in 2021 to 2022. Therefore, the national adjusted quota will be 3308.65 t.

b) Details of Fishing plan

In accordance with the provisions of the national fishing capacity management plan, as established in Article 16 to 21 of Rec. 21-08, as amended and supplemented, the maximum fishing capacity authorized to directly target bluefin tuna is distributed as follows:

- 18 traps
- 4 tuna purse seine vessels LOA > 40 m, and
- Small coastal vessels and artisanal boats with a fishing license for bycatch during its migration period, and their catches will be counted, as in the past, against the quota allocated to their segment. The fishing gears used by these small coastal vessels and artisanal boats are longline and line. The catches of these vessels are reported in the logbook as well as in the eBCD system.

The total adjusted bluefin tuna fishing quota for the 2022 fishing season is distributed as follows:

- Traps: 2424 t
- Tuna purse seine vessels LOA > 40 m: 440 t
- Bluefin tuna bycatch reserved by small coastal vessels and artisanal boats (longline and handline (HL and LL)): 424.65 t, calculated based on historical bycatch statistics. It should be noted that bycatch in 2021 was 410.26 t).
- A reserve is set aside for the case of potential dead discards of bluefin tuna: 20 t.

It should be noted that the gears used to catch bluefin tuna in Morocco have specific fishing periods.

Among the five bluefin tuna farming facilities authorised, three will be operational in 2022 in accordance with specific conditions and methods which will be determined by the administration on the basis of the regulatory provisions in force. These three farming facilities are linked to authorised traps and vessels.

Fishing conditions will be established within the framework of the annual management plan for the bluefin tuna fishery, which has been updated to take into account the new provisions of the eastern bluefin tuna management plan adopted by the International Commission for the Conservation of Atlantic Tunas.

Morocco undertakes to implement all provisions of Rec. 21-08 during the 2022 fishing campaign which will start in April for the traps segment, while overseeing compliance with the international provisions established within the framework of the Management Plan for Bluefin Tuna in the Eastern Atlantic and Mediterranean.

	<i>ICCAT requirement (per Rec. 21-08)</i>	<i>Explanation of CPC actions taken to implement</i>	<i>Relevant domestic laws or regulations (as applicable)</i>	<i>Note:</i>
1	Communication and reporting of catches (para 74-88)	<ul style="list-style-type: none"> - Tuna purse seine vessels have a bound logbook. - Catches of small coastal vessels and artisanal boats with a fishing license are recorded in the logbook and in the eBCD system. - Trap catches are included in fishing logbooks as well as in the eBCD system. - Implementation of the electronic bluefin tuna catch documentation programme/eBCD. - Transmission of bi-weekly bluefin tuna catches. - Dates of closure of the bluefin tuna fishery are reported to the ICCAT Secretariat. 	Ministerial Decision on bluefin tuna of February 2022.	
2	Fishery openings (para 28-32)	<ul style="list-style-type: none"> - Bluefin tuna fishing by traps is authorised from 1 April to 31 July. - Purse seine bluefin tuna fishing in the eastern Atlantic and Mediterranean (ICCAT Convention area) during the period from 26 May to 1 July will be authorised. <p>Morocco requests a derogation under para 28 of Rec. 21-08 to apply the following periods for purse seine bluefin tuna fishing:</p> <ul style="list-style-type: none"> - Fishing in the eastern Mediterranean within the framework of joint fishing from 15 May to 1 July; and/or - Fishing in the fishing areas of the eastern Atlantic and the Mediterranean Sea is limited to the waters subject to the sovereignty or jurisdiction of Morocco from 1 May to 15 June. 	Ministerial Decision on bluefin tuna of February 2022.	
3	Minimum size (para 33-35)	<p>It is prohibited to catch, retain onboard, tranship, transfer, land, store, sell, display or offer for sale bluefin tuna weighing less than 30 kg or with a fork length of less than 115 cm.</p> <p>A 5% maximum bycatch is authorised for bluefin tunas weighing between 8 and 30 kg or 75 cm to 115 cm.</p>	Order of the Ministry of Fishing and Merchant Marine No. 1154-88 of 20 safar 1409 (3 October 1988) which fixes the minimum trade size of individuals caught in Moroccan maritime waters as amended and supplemented by Order No. 4132-19	

		All bluefin tuna that is smaller than the minimum size would be recorded and deducted from the quota allocated to Morocco.	dated 26 December 2019. This order is also applicable to the high seas in the ICCAT Convention area.	
4	Bycatch (para 37, including %)	Vessels that take bluefin tuna as bycatch are authorised to retain, at any time, bluefin tuna representing less than 20% of the total annual catch in weight or number of specimens. Bycatch (20%) taken by small coastal boats and artisanal boats, using longline and handline are calculated on an annual basis, and are counted and deducted from the national quota allocated by ICCAT.	Ministerial Decision on bluefin tuna of February 2022.	
5	Recreational and sport fisheries (para 38-46)	Currently sport and recreational fishing is not authorised.		
6	Transshipment (para 89-94)	Prohibition on at-sea transshipment. Only transshipment in port is authorised. Transshipment is authorised only at the ports designated to this effect, in accordance with all the provisions of ICCAT Recommendations. In-port transshipment operations of bluefin tuna are subject to inspection.	Dahir No. 1-14-95 of 12 May 2014 concerned with the promulgation of Law No. 15-12 on the prevention and fight against illegal, unreported and unregulated fishing and amending and supplementing the dahir concerned with Law No. 1-73-255 of 27 chaoual 1393 (23 November 1973) forming the regulation on maritime fishing. Decree No. 455.17.2 of 26 April 2018 for the compliance of certain provisions of Law No. 15-12 on the prevention and fight against illegal, unreported and unregulated fishing published in the Official Bulletin dated 17 May. Decree No. 2.17.456 of 15 March 2018 for the compliance of certain provisions of Decree No. 1-73-255 dated 23 November 1973 forming the regulation on maritime fishing.	

7	VMS (para 218-224)	<p>Obligation to have onboard a functional positioning and tracking device.</p> <p>The transmission of VMS data of fishing vessels of 15 m or more registered in the ICCAT record start at least 5 days before the authorised period and continue 5 days after this period, unless the vessel is deregistered from the list of authorised vessels.</p> <p>The transmission of this VMS data is guaranteed:</p> <p>-Every hour for purse seiners and tow vessels;</p> <p>-Every two hours for other vessels.</p>	<p>Decree No. 2.18.104 dated 2 rabbi II 1440 (10 December 2018) amending and supplementing Decree No. 2-09-674 of 30 rabbi I 1431 (17 March 2010) establishing the conditions and methods for installation and use onboard of fishing vessels of a positioning and tracking system which continues to use satellite communications to transmit data.</p> <p>Decree No. 574-19 of 29 joumada II 1440 (7 March 2019) on the fishing vessel positioning and ongoing tracking device.</p>	
8	CPC Observer programme (para 95-100)	<p>Presence of onboard observers.</p> <p>-Towing vessel: 100%</p> <p>-Trap: harvest 100%</p>		
9	Regional Observer programme (para 101-107)	<p>Presence of onboard observers:</p> <p>-Transfer of live bluefin tuna from the trap to the farming facilities: 100%.</p> <p>-Caging and harvesting in farms: 100%.</p> <p>-Tuna purse seiners: 100%.</p>		

List of designated port for landing and transhipment of bluefin tuna for the 2022 season: Agadir, Casablanca, Dakhla, Kenitra, Laayoune, Larache and Tanger Ville.

List of ports designated only for landing bluefin tuna for the 2022 season: Al Hoceima, Asilah, Boujdour, Eljadida, Essaouira, Jebha, Jorf Lasfar, Ksar Sghir, Mdiq, Mohammedia, Nador, Safi, Sidi Ifni, Tarfaya, Ras kebdana and TanTan.

List of ports designated only for transhipment of bluefin tuna for the 2022 season: Tanger-Med.

The details of these lists of ports is provided in CP47 annexed to this plan.

2. Annual Fishing Capacity Management Plan (para 16-21)

The number of fishing vessels and the corresponding fishing capacity are reported in the attached table.

3. Annual farming management plan (para 12 and 22-26), if applicable

Morocco hereby reserves the right to submit, if applicable, revised farming management plans to the Secretariat by 1 June 2022, in accordance with paragraph 24 of the ICCAT Recommendation 19-04 establishing a multi-annual management plan for bluefin tuna in the eastern Atlantic and the Mediterranean.

In addition, it should be signaled that no carryover of caged live bluefin tuna is authorised.

Morocco's farming capacity management plan for 2022 is as follows:

- Farming facilities authorized to be operational: 3 farms;
- These three farms are associated to traps and authorised vessels (as indicated in the first page).

Farm name	N° FFB ICCAT	Geographic coordinates	Wild input (t) *	Capacity (t)
BLUE FARM	AT001MAR00002	Point A: Lat: 35°18'17,00"N Long: 006°11'19,00"W Point B: Lat: 35°19'17,00"N Long: 006°11'19,00"W Point C: Lat: 35°19'17,00"N Long: 006°10'47,20"W Point D: Lat: 35°18'17,00"N Long: 006°10'47,20"W	1,461	3,000
LA LEVANTADA	AT001MAR00003	Point A: Lat: 35°18'10,00"N Long: 006°10'31,00"W Point B: Lat: 35°19'10,00"N Long: 006°10'31,00"W Point C: Lat: 35°19'10,00"N Long: 006°10'01,50"W Point D: Lat: 35°18'10,00"N Long: 006°10'01,50"W	597	1,500
PESBAK FISH	AT001MAR00004	Point A: Lat: 35°19',23"N Long: 06°10'35"W Point B: Lat: 35°20',27"N Long: 06°10',30"W Point C: Lat: 35°20',24"N Long: 06°09,28"W Point D: Lat: 35°19',21"N Long: 06°09',33"W	826	1,500
Total			2,884	6,000

* Approximate and provisional estimation.

- Total amount per farm carried over from previous year: 0

This farming capacity management plan may be revised and communicated to the ICCAT Secretariat at least one working day before exercise of the activity corresponding to that modification, in compliance with the provisions of para 15, Rec. 21-08.

4. Monitoring, control and inspection plan

a) CPC's monitoring, control and inspection (para 12c)

Competent control authority of Morocco, attached to the Department of Maritime Fisheries, responsible for implementation of this monitoring, control and inspection plan	
Directorate of Control of Maritime Fisheries Activities	
List of contacts	
Surname and first name	E-mail address
CHAFAI ELALAOUI NADIR	CHAFAI.ELALAOUI@mpm.gov.ma
BOUAAMRI MOUNIR	bouaamri@mpm.gov.ma
KECHA YOUSSEF	youssef.kecha@mpm.gov.ma

Fishery monitoring, control and observation will be carried out in accordance with the national regulation and ICCAT Recommendations in force through the use of the control and surveillance methodology for bluefin tuna fishery activities in 2022.

This methodology is part of the framework for implementation of national maritime fishery control activities. It includes measures for compliance with ICCAT provisions on control and inspection, in particular, those of Rec. 21-08 amending Rec. 19-04 amending Rec. 18-02. This methodology therefore includes measures related to the following actions:

Prior notification of landings

- Maintain records for monitoring prior notifications to port entry transmitted by all catch, transformation and support vessels that carry onboard catches equivalent or superior to three fishes or a ton;

Monitoring and control of landings

- Systematic monitoring and control of landings of the coastal and artisanal fleet which must be effectively weighed before first sale. Compliance with the catch documentation system, which is implemented nationally, is also mandatory. This national documentation system enables control through direct systematic cross-checking between the catch declaration on landing and data from first sale, and is an additional tool for verifying validation of documents of the eBCD process;

Monitoring and control of harvesting operations in traps and farming facilities

- Monitoring and control of harvesting operations in traps and farming facilities, in particular in the presence of regional and/or national observers in accordance with the provisions of Recommendation 21-08;

Monitoring and control of live bluefin tuna transfer and caging operations

- Monitoring and control of bluefin tuna transfer operations and caging operations in farming facilities are supported in particular by the presence of regional and/or national observers in accordance with the provisions of Recommendation 21-08, recording of transfer operations using conventional cameras and recording of caging operations using conventional cameras and stereoscopic cameras in accordance with the conditions established in Rec. 21-08;

Random controls in farming facilities

- Random control of at least 10% of number of cages on each farm after the conclusion of caging operations. These controls are carried out on the internal traceability system implemented by the fattening farm and also by transfer operation followed by a control camera for verification of the number of bluefin tuna transferred;

VMS

- VMS surveillance of relevant fishing vessels carried out by the FMC of the Fisheries Department with online real time availability of position data for the regional maritime fisheries administration (Maritime Fisheries Delegations);

Bluefin tuna catch documentation

- Establishment of a procedure to report and record information regarding catch, transfer and caging, in particular, through implementation of the catch documentation programme (eBCD);

Port inspection

- Compliance with provisions on port inspection measures for foreign vessels, and fulfilment of international commitments by the Kingdom of Morocco with the International Commission for the Conservation of Atlantic Tunas.

At-sea surveillance

- At-sea surveillance is also performed by other authorities to which powers have been conferred by the national regulation.

Measures for sealing cages

- Morocco will implement measures for sealing bluefin tuna cages as soon as Recommendation 21-08 enters into force and when the ICCAT sealing model (in accordance with Annex 14) is adopted.

b) Joint International inspection Plan (plan 228-231)

The Kingdom of Morocco has four vessels that could operate outside the national EEZ. There will not be an inspection vessel.

It should be noted that these four vessels will embark ICCAT observers, in accordance with the provisions of ICCAT recommendations.

5. Others

Regarding research and in accordance with paragraph 27 of Rec. 21-08, the Kingdom of Morocco intends to continue with its study on growth rate of fattened bluefin tuna in 2022, based on measures of stereoscopic cameras and size sampling both at caging and at the end of the fattening season.

Moreover, it is foreseen that this study on growth rate be supplemented by a pilot study based on automated size measurements and fish weights using artificial intelligence, capitalising on the expertise of two international companies specialising in this area, and with the financial support of the ICCAT/JCAP project. This project will be coordinated jointly by the National Institute of Fisheries Research and ICCAT/JCAP project.

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Tuna vessel fleet	Fishing fleet						Fishing capacity				
	Best catch rates defined by the SCRS in 2009 (t)	2008	2019	2020	2021	2022	2008	2019	2020	2021	2022
Purse seiner over 40 m	70.7	1	2	4	4	4	70.7	141.4	282.8	282.8	282.8
Purse seiner between 24 and 40 m	49.78	3	0	0	0	0	14.4	0	0	0	0
Purse seiner less than 24 m	33.68	0	0	0	0	0	0	0	0	0	0
Total purse seine fleet		4	2	4	4	4	220.1	141.4	282.8	282.8	282.8
Longliner over 40 m	25	0	0	0	0	0	0	0	0	0	0
Longliner between 24 and 40 m	5.68	0	0	0	0	0	0	0	0	0	0
Longliner less than 24 m	5	0	0	0	0	0	0	0	0	0	0
Total longline fleet		0	0	0	0	0	0	0	0	0	0
Baitboat	19.8	0	0	0	0	0	0	0	0	0	0
Handline	5	0	0	0	0	0	0	0	0	0	0
Trawler	10	0	0	0	0	0	0	0	0	0	0
Trap	130	15	17	18	18	18	1950	2210	2340	2340	2340
Small coastal vessels and baitboats from Azores, Canary Islands and Madeira	Not applicable		0	0	0	0		0	0	0	0
Other (please specify) Bycatch by small coastal vessels and artisanal boats and potential dead discards of bluefin tuna	5	*	*	*	*	*	80*	359*	420*	454.91*	444.65*
Total fleet / fishing capacity		19	19	22	22	22	2250.1	2710	3042.8	3077.71	3067.45
Quota		2729	2948	3284	3284	3284	2729	2948	3284	3284	3284
Percentage allocated to bycatch							3	12.18	12.04	13.71	13.44
Adjusted quota (if necessary)		2729	2948	3488.62	3318.91	3308.65	2729	2948	3488.62	3318.91	3308.65
Allowance for sports/recreational (if applicable)		0	0	0	0	0	0	0	0	0	0
Under/overcapacity							-478.9	-238	-445.82	-241.2	-241.2

* This amount corresponds to bycatch taken by small coastal vessels and artisanal boats (as indicated on page 1) (434.91 t) and 20 t is set aside for potential dead discards of bluefin tuna. The latter amount will be deduced from the national quota. It should be noted that there are specific fishing periods for the fishing gears used to fish for bluefin tuna in Morocco.

NORWAY**Fishing Plan Year: 2022****1. Details of annual fishing plan for catching vessels and traps (paras 14-15)**

According to Recommendation 21-08 paragraph 5, Norway has initially been allocated a quota of 300 t in 2022. Regarding Recommendation 21-08 paragraph 7, Norway requests to transfer a maximum of 5% of its 2021 quota to 2022. A total of 154 t of the Norwegian catch quota (315 t including 15 t transferred from 2020) was utilised in 2021, and 15 t (5% of 300 t) may, according to paragraph 7, be transferred to 2022.

Norway requests a transfer of 15 t from 2021 to 2022.

If the request is endorsed, the adjusted quota for 2022 in the table will be 315 t, hence the allocation of the Norwegian quota in this fishing plan is calculated on the basis of a quota of 315 t, i.e. the Norwegian quota in 2022 including a transfer of 15 t from 2021.

Norway has set aside a group quota of 254 t for purse seiners, a group quota of 18 t for small-scale coastal vessels and a group quota of 7 t for the recreational fishery. Furthermore, 3 t will be set aside for the purpose of tag and release. Norway will also allocate a quota of 15 t for bycatch, and 18 t for research activities.

The Norwegian fishery for bluefin tuna will be regulated through the Regulations on Fishery for Bluefin Tuna in 2022, which will be adopted when the Norwegian fishing, farming, inspection and capacity management plan has been approved by ICCAT. In addition to national requirements, these Regulations will cover the requirements specified in ICCAT Recommendation 21-08 and include a general requirement to comply with the relevant ICCAT recommendations.

Norway intends to authorise eight purse seiners and 25 small-scale coastal vessels to fish for bluefin tuna in 2022. This is the same number of purse seine vessels which was authorised to fish for bluefin tuna in 2021. Seven of the eight purse seiners will have an overall length between 24 and 40 meters, and one purse seiner will have an overall length over 40 meters. The small-scale vessels will have an overall length under 15 meters. However, up to three longliners with an overall length between 14.99 meters and 24 meters might be authorized, provided that they comply with the provisions in Recommendation 21-08 paragraph 3 dd).

Norway will also authorise a number of vessels/teams for a tag and release fishery, and for a recreational fishery, however, it has not yet been decided how many vessels/teams will be allowed to participate in this fishery. Further details are specified in Section 2 below. In accordance with ICCAT Recommendation 21-08 paragraph 52, Norway will submit information concerning the vessels authorised to conduct this fishery to the ICCAT Executive Secretary at the latest 15 days before the beginning of the fishing season.

Any subsequent modification to the annual fishing plan will be transmitted to the ICCAT Executive Secretary in accordance with ICCAT Recommendation 21-08 paragraph 15.

The Norwegian purse seine and longliners fishing for bluefin tuna will be required to communicate information from their electronic logbook to the Norwegian FMC on a daily basis, including information on date, time, location (latitude and longitude) and weight and number of bluefin tuna taken. The vessels participating in the recreational fishery and in tag and release are required to communicate the same information as the purse seine and longline vessels, as well as to stay in close contact with the Institute of Marine Research. The tag and release fishery will only take place if the masters of the vessels can document that they are able to tag the bluefin tuna with spaghetti marks, and that they have received the necessary licences to do so.

From 1 July 2022, all Norwegian catching vessels with an overall length exceeding 11 meters are required to send position reports (VMS) and daily catch reports to the FMC. Catching vessels with an overall length under 11 meters, which do not have an electronic logbook on board, are required to send information on catch from a phone application developed for coastal fisheries. The catch report shall be sent at least two hours before landing. All catching vessels are required to submit a landing or sales note at the time of landing.

15 t of the Norwegian quota are set aside for unintentional bycatch of bluefin tuna. This is the same quantity as in 2021. Bycatch of bluefin tuna in the Norwegian fishery is taking place in relation to non-ICCAT regulated fisheries, such as the mackerel and blue whiting fishery. Annual variations in these fisheries are reflected in the number of bycatch. The highest level of bycatch of bluefin tuna registered in the Norwegian economic zone in the past few years is 8.4 t in 2015. In comparison, the level of bycatch in 2019 was 0.73 t of bluefin tuna. 2 t in 2020 and 8 t in 2021. 15 t for bycatch should therefore be more than sufficient to cover bycatch in 2022.

If a vessel has not been allocated a quota, or if the allocated quota has been exhausted, the master of the vessel shall take the necessary measures to ensure the release of bycatch of live bluefin tuna. If such bluefin tuna is dead, it shall be landed and deducted from the Norwegian quota.

All bycatch of bluefin tuna shall immediately be reported to the Norwegian FMC. The FMC will alert inspectors from the Directorate of Fisheries who will initiate appropriate follow-up action.

The FMC is open 24 hours a day, 7 days a week, and any interruption in the transmission of the electronic logbooks will immediately be followed up by the FMC.

The Norwegian Coastguard has access to the electronic logbooks in real time.

Further information regarding the monitoring and control of the Norwegian quota is included in the table below.

	<i>ICCAT requirement (per Rec. 21-08)</i>	<i>Explanation of CPC actions taken to implement</i>	<i>Relevant domestic laws or regulations (as applicable)</i>	<i>Note:</i>
1	Catch recording and reporting (paras 74-88)	<p>74. The vessels authorised to target bluefin tuna will be required to keep an electronic logbook.</p> <p>75. Not applicable. There are no Norwegian towing, auxiliary or processing vessels participating in the BFT fishery.</p> <p>76. The Norwegian vessels fishing for bluefin tuna will be required to communicate information from their electronic logbook to the Norwegian FMC on a daily basis, including information on date, time, location (latitude and longitude) and weight and number of bluefin tuna taken.</p>	<p>Regulations on Fishery for Bluefin Tuna in 2022 § 15 and Regulations on an Electronic Reporting System (logbook requirements).</p> <p>Regulations on Fishery for Bluefin Tuna in 2022 § 15 and Regulations on an Electronic Reporting System (logbook requirements).</p> <p>Regulations on an Electronic Reporting System (logbook requirements).</p>	

		<p>The Norwegian legislation requires that all dead fish, including fish under the minimum size, shall be landed and deducted from the vessel quota.</p> <p>The FMC is open 24 hours a day, 7 days a week, and any interruption in the transmission of the electronic logbooks will immediately be followed up by the FMC.</p> <p>The Norwegian Coastguard will have access to the electronic logbooks in real time.</p> <p>77. The purse seiners will be required to communicate the daily reports on a fishing operation by fishing operation basis, including when the catch is zero. The reports shall be transmitted by the operator to the Norwegian FMC by 9.00 GMT for the preceding day.</p> <p>78. Not applicable. There are no Norwegian traps fishing for bluefin tuna.</p> <p>79. Catching vessels other than purse seiners will be required to transmit to the Norwegian FMC by the latest Tuesday at noon for the preceding week ending Sunday. From 1 July 2022, all Norwegian catching vessels with an overall length exceeding 11 meters</p>	<p>Regulations on an Electronic Reporting System (logbook requirements).</p> <p>Regulations on an Electronic Reporting System (logbook requirements).</p> <p>Regulations on Coastal fisheries phone application.</p> <p>Regulations on landing of catch.</p>	
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		<p>are required to send position reports (VMS) and daily catch reports to the FMC. Catching vessels with an overall length under 11 meters, which do not have an electronic logbook on board, are required to send information on catch from a phone application developed for coastal fisheries. The catch report shall be sent at least two hours before landing. All catching vessels are required to submit a landing or sales note at the time of landing.</p>		
2	Fisheries openings (paras 28-32)	<p>28. Purse seine fishing for bluefin tuna is permitted in the Norwegian Economic Zone from 25 June to 15 November, in accordance with Rec. 21-08 paragraph 28.</p> <p>29. If weather conditions prevent purse seine fishing operations during the authorised fishing period, Norway may, in accordance with Rec. 21-08 paragraph 29, extend the fishing period for the affected vessels for the equivalent number of lost days up to a maximum of ten days. Weather conditions which may lead to an extension of the fishing period shall correspond to wind speeds reaching 4 or more on the Beaufort scale.</p> <p>30. Bluefin tuna fishing with longline catching vessels over 24 m is permitted in the Norwegian</p>	<p>Regulations on Fishery for Bluefin Tuna in 2022 § 3.</p> <p>Regulations on Fishery for Bluefin Tuna in 2022 § 4.</p>	

		<p>Economic Zone from 1 August to 31 December in accordance with Rec 21-08 paragraph 30.</p> <p>31. Norway intends to establish a fishing season for longliners under 24 meters and small-scale coastal vessels in the Norwegian Economic Zone from 13 May to 31 December 2022.</p> <p>The fishing season for the recreational fishery will be from 13 May to 31 December 2022.</p>	<p>Regulations on Fishery for Bluefin Tuna in 2022 § 4.</p> <p>Regulations on Fishery for Bluefin Tuna in 2022 § 5.</p>	
3	<p>Minimum size (paras 33-35)</p>	<p>33. The Norwegian vessels authorised to fish for bluefin tuna will only be authorised to fish in Norwegian waters. No bluefin tuna at such low individual size has been registered in Norwegian fisheries. Nevertheless, a minimum size of 30 kilos or 115 cm applies.</p> <p>For catching vessels fishing actively for bluefin tuna an incidental catch of maximum 5% of bluefin tuna weighing between 8 and 30 kg or with fork length between 75-115 cm may be authorised according to Rec. 21-08 paragraph 36.</p> <p>34. Not applicable. There are no Norwegian baitboats or trolling boats authorised to fish for bluefin tuna in the eastern Atlantic and no Norwegian vessels are authorised to fish for bluefin tuna in the</p>	<p>Regulation on harvesting § 47 and Regulations on Fishery for Bluefin Tuna in 2022 § 2.</p>	

		<p>Mediterranean Sea or the Adriatic Sea.</p> <p>35. Not applicable. Reference is made to paragraph 34 above.</p>		
4	<p>By-catch (para 37, including %)</p>	<p>37. Norway has allocated a quota of 15 tonnes for bycatch of bluefin tuna in other fisheries in 2022. The level of bycatch in 2019 was 0.73 t, 2 t in 2020 and 8 t in 2021.</p> <p>Bycatch of bluefin tuna in Norwegian fishery is taking place in relation to non-ICCAT regulated fisheries, such as the mackerel and blue whiting fishery. Annual variations in these fisheries are reflected in the number of bycatch.</p> <p>All bycatches of dead bluefin tuna shall be landed and deducted from the Norwegian quota and reported on an annual basis to ICCAT.</p> <p>If no quota has been allocated to the fishing vessel concerned, or if the quota has already been exhausted, the catching vessel shall take the necessary measures to ensure the release of live bluefin tuna. If the bluefin tuna is dead, it shall be landed and the appropriate follow-up action shall be taken in accordance with domestic law.</p> <p>For vessels not actively fishing for bluefin tuna, any quantity of bluefin</p>	<p>Regulation on Fishery for Bluefin Tuna in 2022 §§ 2 and 7.</p>	

		tuna kept on board shall be clearly separated from other fish species to allow control authorities to monitor the respect of this rule.		
5	Recreational and sports fisheries (paras 38-46)	<p>38. Norway will be issuing fishing authorisations to a number of vessels/teams participating in a tag-release and recreational fishery. The number of vessels/teams has not yet been decided.</p> <p>39. The Norwegian legislation requires that all dead fish, including those caught by recreational and tag and release fishery, shall be landed. The Norwegian Regulation on Fishery for Bluefin Tuna contains measures which prohibit recreational and tag and release vessels to land more than one bluefin tuna per vessel per day.</p> <p>40. Norway has prohibited the marketing of bluefin tuna caught in recreational and tag and release fishery.</p> <p>41. Data, including weight of each bluefin tuna caught during recreational and tag and release fishery, will be communicated to the ICCAT Secretariat for the preceding year by 31 July each year.</p>	<p>Regulation on Fishery for Bluefin Tuna in 2022 § 5.</p> <p>Regulation on harvesting § 47, Regulations on Fishery for Bluefin Tuna in 2022 § 13.</p> <p>Regulations on Fishery for Bluefin Tuna in 2022 § 13.</p> <p>Regulations on Fishery for Bluefin Tuna in 2022 § 13.</p>	

		<p>42. Dead catches from recreational and tag and release fishery will be counted against the Norwegian quota. 7 t of the Norwegian quota is set aside to cover dead catches from a recreational fishery, and 3 t of the Norwegian quota is set aside to cover any bluefin tuna which might die during the tag and release fishery.</p> <p>43. Norway will take measures to ensure, to the greatest extent possible, the release of bluefin tuna caught alive in recreational fisheries if no quota has been allocated to the vessel or if the quota has been exhausted.</p> <p>44. Norway will open up for a tag and release fishery. Norway will follow the requirements in Rec 21-08 paragraph 44.</p> <p>Only vessels with a license issued by the Norwegian Directorate of Fisheries are allowed to participate in the tag and release fishery. The vessels must also be authorised by the competent authorities to perform the tagging process. The license to participate in the tag and release fishery, and the authorisation to perform the tagging process, will be withdrawn if the vessel does not</p>	<p>Regulations on Fishery for Bluefin Tuna in 2022 § 2.</p> <p>Regulations on Fishery for Bluefin Tuna in 2022 § 2.</p>	
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		<p>comply with the terms of the license/authorisation.</p> <p>All vessels participating in the tag and release fishery will be closely monitored by the Directorate of Fisheries.</p> <p>Norway will in 2023 submit a report on the scientific activities conducted in 2021. The report will be submitted at least 60 days before the SCRS meeting in 2022. Any bluefin tuna that die during tag and release activities will be reported and deducted from the Norwegian quota.</p> <p>45. Norway will, upon request from ICCAT, make available the list of sport and recreational vessels which have received an authorisation.</p> <p>46. The list of sport and recreational vessels will include the information specified in Rec. 21-08 paragraph 46.</p>		
6	Transshipment (paras 89-94)	Not applicable. All transshipments of bluefin tuna in the Norwegian Economic Zone are prohibited.	Regulations on Fishery for Bluefin Tuna in 2022 § 16.	
7	VMS (paras 218-224)	The purse seine and longline vessels authorised to target bluefin tuna will be required to send position reports (VMS) every ten minutes to the FMC at the Directorate of Fisheries. The FMC is open 24 hours a day, 7 days a week, and any interruption in the	<p>Regulations on Fishery for Bluefin Tuna in 2022 § 15.</p> <p>Regulations on an Electronic Reporting System (logbook requirements).</p>	

		<p>transmission of VMS signals will immediately be followed up by the FMC.</p> <p>VMS will be transmitted to the ICCAT Secretariat, every two hours for longline vessels, and every hour for purse seine vessels.</p> <p>From 1 July 2022, all Norwegian catching vessels with an overall length exceeding 11 meters are required to send position reports (VMS) and daily catch reports to the FMC. Catching vessels with an overall length under 11 meters, which do not have an electronic logbook on board, are required to send information on catch from a phone application developed for coastal fisheries. The catch report shall be sent at least two hours before landing. All catching vessels are required to submit a landing or sales note at the time of landing.</p> <p>Norway does not use towing vessels. Should it be necessary to use towing vessels during the research on short-term live storage of bluefin tuna, the towing vessel(s) will be required to install and operate a VMS in accordance with Rec 18-10, and transmit messages at least once every hour.</p>		
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		<p>The Norwegian Coastguard will have access to both VMS signals and electronic logbooks in real time.</p> <p>The VMS signals will be forwarded to the ICCAT Secretariat at least 5 days before the vessel's period of authorisation and shall continue at least 5 days after its period of authorisation.</p>		
<p>8</p>	<p>CPC observers programme (paras 95-100)</p>	<p>95. The longline vessels authorised to fish for bluefin tuna will be required to have a national observer on board during 20% of the time the vessels are targeting bluefin tuna.</p> <p>The Norwegian fishing vessels will only be authorised to fish for bluefin tuna in the Norwegian Economic Zone.</p> <p>The observer tasks will be carried out by inspectors from the Norwegian Surveillance Services, which are part of the Directorate of Fisheries.</p> <p>Collecting scientific data are among the main tasks of these inspectors, and they are trained to carry out scientific work as well as monitoring, control and surveillance activities.</p> <p>The Institute of Marine Research will have an observer coverage of the authorised purse seine vessels of at least 5% measured in number of trips.</p>	<p>Regulations on Fishery for Bluefin Tuna in 2022 § 14.</p>	

		<p>Well in advance of the start of the fishing season, the small-scale coastal vessels and the purse seine vessels will be required to submit a plan including information regarding the scheduled start-up date, area and period for the bluefin tuna fishery. Based on this plan, the Norwegian Surveillance Services and the Institute of Marine Research will organize their observer coverage ensuring representative temporal and spatial coverage to collect adequate and appropriate data and information on catch, effort and other scientific and management aspects, in line with Rec. 21-08 and Rec. 16-14.</p> <p>All the Norwegian vessels will be required to keep close contact with the Norwegian Surveillance Services when fishing for bluefin tuna to ensure that the requirements relating to observer coverage are fulfilled.</p> <p>The vessels authorised to target bluefin tuna will be required to send position reports (VMS) every ten minutes as well as daily reports from the electronic logbooks to the FMC at the Directorate of Fisheries. The Surveillance Services have access to this</p>		
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		<p>information in real time.</p> <p>The Institute of Marine Research will provide the Norwegian Surveillance Services with relevant training and inform them of which sampling methods that must be used to collect biological data in accordance with Rec. 21-08.</p> <p>In addition, the longliners authorised to fish for bluefin tuna, can be instructed to carry an observer from the Institute of Marine Research or to collect biological data.</p>		
9	Regional observers programme (paras 101-107)	<p>The purse seine vessels will be required to have 100% observer coverage under the Regional Observer Programme (ROP). The vessels will be closely monitored by the FMC, and the Directorate of Fisheries will carry out landing inspections. The Institute of Marine Research will, if the situation allows it, have scientists on board several of the vessels.</p>	Regulations on Fishery for Bluefin Tuna in 2022 § 14.	
	<i>Other requirements, such as: tagging programme (para 44) etc.</i>	<p>The vessels will be closely monitored by the FMC, and the Directorate of Fisheries will carry out landing inspections. The Institute of Marine Research will, if the situation allows it, have scientists on board several of the vessels.</p>	Regulations on Fishery for Bluefin Tuna in 2022 § 13.	

		Norway will conduct a tag and release fishery in accordance with Rec. 21-08 paragraph 44.		
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A list of designated ports for landing and transhipment through form CP24 are attached to the fishing plan.

2. Annual fishing capacity management plan (paras 16-21)

According to Recommendation 21-08 paragraph 5, the bluefin tuna quota allocated to Norway in 2022 is 300 t. In addition to this Norway requests a transfer of 15 t from the 2021 quota, which will increase the Norwegian quota for 2022 to 315 t. In light of the increase of the Norwegian quota, the fishery in 2022 is planned to take place with eight purse seiners and 25 small-scale coastal vessels.

The best catch rates defined by the SCRS in 2009 are based on catches from the Mediterranean Sea. These catch rates do not reflect the catch rates in the feeding areas in Norwegian waters. When bluefin tunas are feeding in Norwegian waters, they are much less aggregated than when they are spawning in the Mediterranean Sea. In addition to this, the weather along the Norwegian coast in September and October often prevents the fishermen from going out to fish for bluefin tuna. As requested by the Chair of Panel 2 at the annual Commission meeting in 2019, Norway provided a paper to the SCRS in 2020 on catch rates for the Norwegian purse seine vessels fishing in the Norwegian Economic Zone. Norway also presented this paper in the intersessional meeting of Panel 2 in 2020. For further detail see SCRS/2020/017.

In accordance with Recommendation 21-08 paragraph 20 b the adjustment of fishing capacity in paragraph 18 does not apply to Norway.

As the vessels have not been selected, information on their length is not yet available. Each purse seine vessel will be allocated an individual vessel quota up to maximum of 31,75 t within the group quota of 254 t and the small-scale coastal vessels will be allocated a specific sectorial quota of 18 t. 15 t of bluefin tuna will be set aside to cover incidental bycatches in fisheries not targeting bluefin tuna, 18 t will be set aside for research, 3 t will be set aside for tag and release fishery, and 8 t will be set aside for the recreational fishery. Only vessels licenced for a tag and release fishery will be allowed to participate in the recreational fishery.

Any subsequent modification of these quotas will, in accordance with Recommendation 21-08 paragraph 15, be notified to the ICCAT Secretariat.

3. Annual farming management plan (paras 12; 22-26), as applicable

Not applicable. Norway does not have any bluefin tuna farms.

4. Monitoring, control and inspection plan

a) CPC's monitoring, control and inspection (para 12 c)

Norway has established a system of real-time monitoring of all its fisheries, and is committed to taking the measures necessary to ensure full compliance with ICCAT Recommendation 21-08. The purse seine vessels will be required to have 100% observer coverage under the Regional Observer Programme (ROP). Small-scale coastal vessels and longliners will be monitored closely and the coverage requirement of a CPC observer will be in line with Rec. 21-08 paragraphs 95 and 96. The vessels will be closely monitored by the FMC, and the Directorate of Fisheries will carry out landing inspections. The Institute of Marine Research will, if the situation allows it, have scientists on board several of the vessels.

All Norwegian vessels having catches of bluefin tuna, including as bycatch, are required to inform the Norwegian FMC. Furthermore, a minimum of 5% of the landings of bluefin tuna by the vessels targeting this species will be inspected by inspectors from the Norwegian Directorate of Fisheries. These inspections will be carried out as full inspections, i.e. the inspectors will monitor the entire landing. This includes monitoring

the entire weighing of the fish, cross-checking this against the prior notice of port entry, the VMS, the electronic logbook as well as the landing and sales notes. Furthermore, the inspectors shall ensure that there is no fish left on board once the landing is completed and the landing or sales notes are signed.

The Norwegian fishery for bluefin tuna is limited to the Norwegian fisheries jurisdiction, and the requirement of an inspection vessel in paragraph 111 does not apply.

Furthermore, the vessels authorised to target bluefin tuna and the vessels with incidental bycatch of dead bluefin tuna can be instructed to collect biological samples for the Norwegian Institute of Marine Research.

In accordance with ICCAT Recommendation 21-08 paragraph 47, searching for bluefin tuna with airplanes, helicopters or any type of unmanned aerial vehicles will be prohibited.

Furthermore, Bluefin Tuna Catch Documents will be issued in accordance with Recommendation 21-19 on an ICCAT Bluefin Tuna Catch Documentation Program and Recommendation 20-08 amending Recommendation 15-10 on the application of the eBCD system, as well as other relevant recommendations. Norway has issued electronic Bluefin Tuna Catch Documents in the eBCD system since 2015 and intends to continue this practice in 2021 in accordance with the recommendations mentioned above.

b) Joint Scheme of International Inspection (paras 228-231)

Not applicable. Norway does not participate in any international inspections in accordance with paragraphs 228-231 of Rec. 21-08 and annex 7.

5. Others

Eighteen tonnes of bluefin tuna are in 2022 allocated to a scientific pilot study aimed at possible future short-term live storage of bluefin tuna in cages in Norway, as well as at maintaining the high quality of the fish during and after purse seine catch operations. Norway presented the reasoning behind this research project in document PA2-605 at the annual Commission meeting in 2019. In the 2021 annual Commission meeting, the Chair requested Norway to submit a paper on short-term live storage to the 2022 Annual Meeting for further consideration.

Norway will report on the results of this study to the SCRS in 2022.

INTERSESSIONAL MEETING OF PANEL 2 – ONLINE, MARCH 2022

<i>Tuna vessel fleet</i>	<i>Fishing fleet</i>					<i>Fishing Capacity</i>					
Type	Best catch rates defined by the SCRS in 2009 (t) ¹	2008	2019	2020	2021	2022	2008	2019	2020	2021	2022
Purse seiner over 40m	70.7		1	1	1	1		70.7	70.7	70.7	70.7
Purse seiner between 24 and 40m	49.78		3	7	7	7		149.34	348.46	348.46	348.46
Purse seiner less than 24m	33.68										
Purse seine total fleet			4	8	8	8		220.04	419.16	419.16	419.16
Longliner over 40m	25										
Longliner between 24 and 40m	5.68										
Longliner less than 24m	5		4	3	3			20	15	15	
Total longline fleet			4	3	3			20	15	15	
Baitboat	19.8										
Handline	5										
Trawler	10										
Trap	130										
Small coastal vessels and baitboats from the Azores, Canary Islands and Madeira	N/A					25					18
Other (please specify)	5										
Total fleet/fishing capacity			8	11	11	33		240.04	434.16	434.16	437.16
Quota			239	300	300	300		239	300	300	300
Percentage allocated to by-catch			4.6%	8.3%	5.0%	5.0%		4.6 %	8.3%	5.0%	5.0%
Adjusted quota (if applicable)			212	300.95	282	282		212	300.95	282	282²
Allowance for sports/recreational (if applicable)			1	6	10	10		1	6	10	10
Under/ overcapacity								29.04	139.21	162.16	165.16

¹ The figures for purse seine capacity correspond to the calculations made by the SCRS for the Mediterranean Sea. Norway provided a paper to the SCRS in 2020 (SCRS/2020/017) on catch rates for the Norwegian purse seine vessels fishing in the Norwegian Economic Zone. The paper demonstrates that the catch rates in the Norwegian EEZ are a lot lower than the catch rates in the Mediterranean Sea. The paper was also presented at the panel 2 meeting in 2020.

² 15 t are set aside for bycatch, and 18 t are set aside for research in 2022. 15 t are transferred from the 2021 quota.

List of ports contained in CP24

ANDENES	RYPEFJORD
ATLØY	SANDØY
AUSTEVOLL	SELJE
BODØ	SENJAHOPEN
BORG	SIREVÅG
BREIVIKA	SKUDENESHAVN
BREMANGER	SKUTVIK
BULANDET	SMØLA
BÅTSFJORD	SOLSTRAND
BØVÅGEN	SORTLAND
EGERSUND	STAVANGER
ELLINGSØY	STAVERN
FISKARSTRAND	STOREBØ
FLEKKERØY	TROLLEBØ
FLEM	TROMSØ
FLORØ	TRONDHEIM HØVRINGEN
FOSNAVÅG	TRÆNA
GLESVAER	UTHAUG
GOTTEBERG	VADSØ
GUNHILDVÅGEN	WARDØ
HAMMERFEST	VEDDE
HARSTAD	VÆRØY
HARØYSUND	ÅLESUND
HESTØYA	
HJØRUNGAVÅG	
HONNINGSVÅG	
HUSØY KARMØY	
HVALER	
KALVÅG	
KARMSUND	
KARMØY	
KIRKENES	
KJØLLEFJORD	
KRISTIANDSUND	
KRISTIANSAND	
KÅRVIK/KÅRVIKHAMN	
KÅRVIKHAMN	
LARVIK	
LEIRVIK	
LEKNES (LOFOTTERMINALEN)	
LIAVÅGEN	
LØDINGEN	
MELBU	
MÅLØY	
OSLO	
RAUDEBERG	

TUNISIA

Fishing Plan Year: 2022

Tunisia hereby presents its fishing, inspection and capacity management plan for Mediterranean bluefin tuna.

In accordance with the fishing allocations adopted by ICCAT, Tunisia's quota for 2022 was established at 2,655 t.

Tunisia requests a carryover of 24,72 t from 2021 to 2022, in accordance with paragraph 7 of Rec. 19-04/21-08. If this request is approved, the available total quota for the 2022 fishing campaign will be 2,679.72 t.

1. Details of annual fishing plan for catching vessels (para 16-17)

In preparation for the 2022 bluefin tuna fishing campaign, Tunisia adjusted its fishing capacity in accordance with the methodology adopted by ICCAT. On the basis of this methodology, Tunisia established a fishing plan and will allocate individual quotas to 54 purse seiners to actively fish for bluefin tuna in 2022.

All Tunisian fishing vessels actively fishing for bluefin tuna use purse seine nets i.e. tuna purse seiners.

The Tunisian administration will issue fishing authorisations for these vessels for 2022 and these will be reported to ICCAT in a timely manner.

Management of fishing activity will be regulated in accordance with the provisions of the *Recommendation by ICCAT establishing a multi-annual management plan for bluefin tuna in the eastern Atlantic and the Mediterranean Sea* (Recs. 19-04/21-08), and the national regulation (Law No. 94-13 of 31 January 1994 on fishing, as amended and/or supplemented, in particular by Laws No. 2013-34 and No. 2018-30 and their implementing texts, in particular, the Decision of the Minister of Agriculture of 21 May 2008 on organisation of the bluefin tuna fishery, as amended by the Decision of 10 June 2013 and the Decision of 28 May 2019).

Tunisia's total fishing adjusted quota, which is set at 2,679.72 t for 2022, will be distributed as follows:

- a. 2,653.17 t for tuna purse seiners. The list of vessels and their individual quotas will be reported to ICCAT by the deadlines for submission set out in paragraph 50 of Rec. 19-04/21-08.
- b. 26.55 t for bycatch in accordance with the provisions of paragraph 38 of Rec. 19-04/Rec. 21-08, paragraph 37.

Table 1 below summarizes the actions taken to implement the requirements of the ICCAT Recommendation.

	<i>ICCAT Requirement (per Rec. 21-08)</i>	<i>Explanation of CPC actions taken to implement</i>	<i>Relevant domestic laws or regulations (as applicable)</i>	<i>Note:</i>
1	Catch recording and reporting (para 74-88)	<p>Catch recording and reporting will comply with the provisions of Rec. 19-04/21-08.</p> <p>Catching vessel masters will maintain all the onboard documents required including a bound logbook or in electronic format in which the operations performed will be recorded in accordance with the provisions of Rec. 19-04/21-08 (Annex 2).</p>	<p>Law No 94-13 of 31 January 1994, on fishing.</p> <p>Decision of the Minister of Agriculture of 21 May 2008 on organisation of the bluefin tuna fishery, as amended by the Decision of 10 June 2013 and the Decision of 28 May 2019.</p>	
2	Fisheries openings (para 28-32)	<p>The purse seine fishing season is from 26 May to 1 July 2022.</p> <p>In accordance with Rec. 19-04/21-08, Tunisia may possibly extend its fishing period for affected vessels for the equivalent number of lost days up to a maximum of ten days in the event of bad weather conditions during the authorised fishing period. The fishing period will be extended in the case of wind speeds reaching 4 or more on the Beaufort scale. Assessment of the length of the bad weather conditions for the purpose of the extension will be based on VMS reports evidencing the day/s on which the vessel/s have been inactive; in the case of JFOs evidence of concurrent inactivity of all the vessels members of the JFO is to be proven.</p>	<p>Law No 94-13 of 31 January 1994, on fishing.</p> <p>Decision of the Minister of Agriculture of 21 May 2008 on organisation of the bluefin tuna fishery, as amended by Decision of 10 June 2013 and the Decision of 28 May 2019.</p>	
3	Minimum size (para 33-35)	<p>It is prohibited to catch bluefin tuna with a unit weight less than 30 kg or measuring less than 115 cm calculated from the tip of the snout to the base of the tail.</p> <p>However, exceptionally, bycatch of up to a maximum of 5% of bluefin tuna weighing between 8 and 30 kg or with a fork length of 75 to 115 cm may be authorised.</p> <p>Bycatch of bluefin tuna under the tolerated size and weight or over the limit referred to above are released. Dead and undersized specimens are discarded at sea and deducted from Tunisia's quota.</p>	<p>Law No 94-13 of 31 January 1994, on fishing.</p> <p>Decision of the Minister of Agriculture of 21 May 2008 on organisation of the bluefin tuna fishery, as amended by the Decision of 10 June 2013 and the Decision of 28 May 2019.</p>	
4	Bycatch (para 37, incl %)	<p>26.55 t will be set aside for bycatch (1%).</p>	<p>Law No 94-13 of 31 January 1994, on fishing.</p>	

		<p>As a precautionary measure, this estimate, which is based on recorded bycatch from previous years, has been increased.</p> <p>If bycatch exceeds the 20% limit tolerated for vessels that do not actively fish for bluefin tuna or if the total level of bycatch is surpassed, these are discarded and deducted from Tunisia's quota.</p>	<p>Decision of the Minister of Agriculture of 21 May 2008 on organisation of the bluefin tuna fishery as amended by the Decision of 10 June 2013 and the Decision of 28 May 2019.</p>	
5	Recreational and sports fisheries (para 38-46)	Sports and recreational fishing will not be authorised.		
6	Transshipment (para 89-94)	Bluefin tuna fishing vessels can only tranship bluefin tuna catches in the ports registered with ICCAT with prior authorisation in accordance with Rec. 19-04/21-08.	<p>Law No 94-13 of 31 January 1994, on fishing.</p> <p>Decision of the Minister of Agriculture of 21 May 2008 on organisation of the bluefin tuna fishery, as amended by the Decision of 10 June 2013 and the Decision of 28 May 2019.</p>	
7.	VMS (para 218-224)	<p>All vessels participating in the bluefin tuna campaign with a length of more than 15 m are equipped with a VMS system, in accordance with Recommendation 19-04/21-08 and current domestic legislation.</p> <p>Transmission of positions of catching, towing and support vessels starts 5 days before the authorisation period of each vessel and continues until 5 days after the end of the authorisation. The positions will be communicated instantaneously to the ICCAT Secretariat every hour by the purse seiners and towing vessels in accordance with Recommendation 18-10.</p>	<p>Law No. 94-13 of 31 January 1994 on fishing, as supplemented by Law 2013-34 of 21 September 2013 and Law 2018-30 of 23 May 2018.</p> <p>Decision of the Ministry of Agriculture, Hydraulic Resources and Fisheries of 26 June 2015 establishing the type of instruments for gathering instantaneous information on the positions of vessels fishing at sea and the type of vessels that must be equipped with them.</p>	
8	CPC observer programmes (para 95-100)	The Tunisian administration will provide national observer coverage, carrying official identification documents on board all towing vessels i.e. 100%, in accordance with the provisions of Recommendation 19-04/21-08.	<p>Law No 94-13 of 31 January 1994, on fishing.</p> <p>Decision of the Minister of Agriculture of 21 May 2008 on organisation of the bluefin tuna fishery, as amended by the Decision of 28 May 2019.</p>	
9	Regional observers programme (para 101-107)	The Tunisian administration will ensure implementation of the ICCAT regional observers programme to guarantee observer coverage of all the purse seiners authorised to fish for bluefin tuna, during all bluefin tuna transfers from purse seiners, during all transfers from one farming facility to another, during all bluefin tuna caging in farming facilities, throughout harvesting of bluefin tuna in farming		

		facilities and during release of bluefin tuna from farming cages in accordance with the provisions of Rec. 19-04/21-08.		
10	<i>Other requirements, such as: Scientific programme</i>	Tunisia has implemented an onboard scientific observer programme, covering more than 10% of purse seiners fishing for bluefin tuna. In addition, a periodic sampling and scientific monitoring programme is implemented in fattening farms.		

2. Annual fishing capacity management plan (para 16-21)

Tunisia's adjusted quota for 2022 will be 2,679,72 t. As Tunisia allocates 26.55 t for bycatches, the total quota available for this fishery (for purse seiners only) will be 2,653.17 t. As total fishing capacity is 2,366.12 t, Tunisia has an undercapacity of 287,05 t (see **Table 2**).

3. Annual farming management plan (para 12; 22-26), if appropriate

In accordance with paragraphs 24 to 27 of Rec. 19-04/paragraphs 22-26 of Rec. 21-08, the input volume for 2022 of bluefin tuna will be adjusted to 2655 t, i.e. proportional to the quota allocated to Tunisia for 2022.

Seven (7) farms envisage engaging in operations in 2022 (**Table 3**). Any potential modifications to the farming plan will be notified to ICCAT within the required timeframe.

On the basis of the follow-up of bluefin fattening activities in Tunisia, there be no carry-over from the 2021 season to the 2022 season.

4. Monitoring, control and inspection plan

a) Monitoring, control and inspection by CPC (para 12c)

In accordance with the domestic legislation in force, at-sea inspections in the fishing areas during the campaign will be carried out by agents authorised to police the fisheries from different corps that operate at sea. They are responsible for monitoring and assessment of compliance with ICCAT management measures.

Requests for entry and use of Tunisian ports by foreign-flagged vessels will be reviewed and granted, if appropriate, by the relevant port and maritime authorities.

In case of authorisation for port entry and use, in-port inspections will be carried out by government officials of the relevant authority.

In addition, control measures are provided for in Rec. 19-04 (paras 83 and 84)/Rec. 21-08 (paras 95 and 96) for regional and national observers programmes which ensure coverage of:

- 100% of purse seiners authorised to actively fish for bluefin tuna,
- 100% of authorised towing vessels,
- 100% of bluefin tuna transfer operations from purse seiners, from caging on farms, from one farm to another,
- 100% of harvesting operations.

Measures regarding sealing of bluefin tuna cages stated in paras 128, 159, 164, 216, Annexes 4, 6 and 14 of Rec. 21-08 will be applied in the 2022 season.

Random control operations will be carried out in active farms by government officials of the relevant authority after the end of caging and in accordance with para 208 of Rec. 21-08. These control operations will be carried out for at least 10% of the quantity of caged bluefin tuna in each fattening farm.

In accordance with paragraph 102 of Recommendation 21-08. Tunisia will authorise, if appropriate, harvesting operations on its farms of up to 1,000 kg per day and up to a maximum of 50 t per farm per year to supply the market with fresh bluefin tuna and will ensure coverage and validation of all its operations through deployment of national inspectors throughout the entirety of these operations.

b) Scheme of Joint International Inspection (para 228-231)

In accordance with the provisions of Annex 7 of Rec. 19-04/21-08, it is envisaged that the vessel AMILCAR MA 878 will participate in the Scheme of Joint International Inspection. Onboard inspectors will ensure implementation of inspection and boarding activities for all authorised Tunisian and foreign vessels. The operations period will last for 2 months (15 May – 15 July 2022) and concerns in particular bluefin tuna fishing, towing and caging activities, in accordance with the relevant provisions of international law of the sea.

Inspection activities will cover in particular:

- Onboard documents;
- Catch and transfer activities into towing and farming cages;
- Video recordings of catch transfer operations;
- Potential infringements of the conservation and management measures of Rec. 19-04/21-08.

5. Others

– ***Designated ports***

12 ports have been designated in accordance with the ICCAT Recommendation.

Bizerte
Gabès
Kélibia
La Chebba
La Goulette
Mahdia
Monastir
Sfax
Sousse
Tabarka
Teboulba
Zarzis

Scientific programme

A periodic sampling and scientific monitoring programme is implemented in Tunisian fattening farms. The main data collected concern demographic structures and size weight relations.

In addition, an onboard scientific observers programme, covering more than 10% of purse seiners fishing for bluefin tuna is in place. This programme aims to collect fishery data (place, catch, composition...) and bycatch (cetaceans, turtles, sea birds, sharks...).

It should be noted that Tunisia also participates in the GBYP programme (tagging, species biology...) and provision of scientific data to the SCRS. These programme are implemented by the National Institute of Sea Sciences and Technologies (INSTM) in cooperation with the General Directorate of Fisheries and Aquaculture (DGPA) and the profession.

Table 2.

<i>Tuna vessel fleet</i>	<i>Fishing fleet</i>						<i>Fishing capacity</i>				
Type	Best catch rates defined by the SCRS in 2009 (t)	2008	2019	2020	2021	2022	2008	2019	2020	2021	2022
Purse seiner over 40 m	70.7	1	0	0	0	0	70.7	0	0	0	0
Purse seiner between 24 and 40 m	49.78	24	31	32	32	34	1194.72	1543.18	1592.96	1592.96	1692.52
Purse seiner less than 24 m	33.68	16	13	17	15	20	538.88	437.84	572.56	505.2	673.6
Purse seine total fleet		41	44	49	47	54	0	0	0	0	0
Longliner over 40 m	25	0	0	0	0		0	0	0	0	0
Longliner between 24 and 40 m	5.68	0	0	0	0		0	0	0	0	0
Longliner less than 24 m	5	1	0	0	0		5	0	0	0	0
Total longline fleet		1	0	0	0		0	0	0	0	0
Baitboat	19.8	0	0	0	0		0	0	0	0	0
Handline	5	0	0	0	0		0	0	0	0	0
Trawler	10	0	0	0	0		0	0	0	0	0
Trap	130	0	0	0	0		0	0	0	0	0
Small coastal vessels and baitboats from Azores, Canary Islands and Madeira	Not applicable										
Other (please specify)	5	0	0	0	0		0	0	0	0	0
Total fleet/fishing capacity		41	44	49	47	54	1809.3	1981.02	2165.52	2098.16	2366.12
Quota							2254.48	2400.00	2655.00	2655.00	2655.00
Percentage allocated for bycatch								1%	1%	1%	1% (26.55 t)
Adjusted quota (if applicable) *							2364.48	2400.00	2675.40	2676.55	2653.17
Under/overcapacity							-555.18	-418.98	-509.88	-578.39	-287.050

* Adjusted quota (2,653.17 t) = initial quota (2,655 t) + unused quota from 2021 (24.72 t), of which 26.55 t are set aside for bycatch and 2,653.17 t remain available for vessels.

Table 3.

<i>Farm name</i>	<i>ICCAT No.</i>	<i>Management establishment</i>	<i>Farm coordinates</i>	<i>Wild input (t)</i>	<i>Farming capacity (t)</i>
VMT	AT001TUN00001	VMT Sahbi sallem	36°00'18"N - 10°34' 36" E	400	750
			36°00'18"N - 10°34' 55" E		
			36°00'15"N - 10°34' 0" E		
			36°00'15"N - 10°34' 37" E		
TT	AT001TUN00002	TT Abdelwaheb Ben Ramdhane	35°25'0"N - 11°04' 40" E	500	1000
			35°25'00"N - 11°05' 04" E		
			35°24'38"N - 11°04' 40" E		
			35°24'38"N - 11°05' 04" E		
SMT	AT001TUN00003	SMT Etat	35°19'00"N - 11°09' 10" E	500	1000
			35°19'00"N - 11°08' 10" E		
			35°18'42"N - 11°09' 10" E		
			35°18'42"N - 11°08' 45" E		
TFT	AT001TUN00004	TFT Ridha Sallem	36°01'49"N - 10°34' 0" E	400	750
			36°01'38"N - 10°34' 0" E		
			36°01'49"N - 10°34' 37" E		
			36°01'38"N - 10°34' 37" E		
SNB	AT001TUN00005	SNB Jaouher ben Hmida and Sami Neifer	35°18'10"N - 11°08' 26" E	300	500
			35°18'10"N - 11°08' 10" E		
			35°17'53"N - 11°08' 26" E		
			35°17'53"N - 11°08' 10" E		
THC	AT001TUN00006	THC Taher Hajji and mohamed Chiha	35°18'10"N - 11°08' 56" E	300	500
			35°18'10"N - 11°08' 40" E		
			35°17'53"N - 11°08' 56" E		
			35°17'53"N - 11°08' 40" E		
Farm 7	TBD	TBD		255	500
TOTAL				2655	5000

TURKEY

Fishing Plan Year: 2022

1. Details of annual fishing plan for catching vessels and traps (paras 14-15)

Turkey will implement a total of 2,305 t catch limit for bluefin tuna in the Eastern Atlantic and Mediterranean for 2022 (as allocated for Turkey for the year 2021).

The rules established by ICCAT Rec. 21-08, will be transposed into Turkish domestic regulation through “Ministerial Communiqué on Bluefin tuna Fishing, Farming and Trading”.

Fisheries and farming activities for the eastern Atlantic and Mediterranean Bluefin tuna (E-BFT) will be conducted in the context of Turkey’s national quota and individual quotas shall be allocated for each E-BFT catching vessel.

Ministry of Agriculture and Forestry (MoAF) shall announce the above-mentioned decision to all sector stakeholders in accordance with the Ministerial Notifications and the Communiqué on E-BFT.

MoAF shall issue fishing permits for all E-BFT fishing vessels to be authorized for 2022. All fishing vessels authorized by MoAF shall be reported to ICCAT in a timely manner. All vessels shall be equipped and monitored with an operational Vessel Monitoring System in line with the obligation stipulated in para 218 of Rec. 21-08.

The authorized E-BFT fishing season for purse seiners shall be implemented from 15 May to 1 July in accordance with Para 28 of Rec. 21-08.

Fishing permits issued by MoAF shall be mandatory for E-BFT fishing vessels to operate for the 2022 fishing season. Leaving a margin for a potential change in total number and length distribution of vessels to be authorized until the reporting deadline, with a view to fulfil the relevant capacity adjustment provisions of Rec. 21-08 and taking into account domestic process applied by the Ministry; fishing permits are expected to be granted to maximum 30 purse seiners as BFT catching vessels for 2022 BFT fishing season. Similarly, around 70 E-BFT other vessels (towing, support and auxiliary) are planned to be authorized by MoAF.

MoAF plans to allocate the total quota for each authorized vessel based on a national criteria on activities and track records of the fishing vessels involved. Carry-over of unused quotas shall not be authorized.

Taking into account the catch trends pertinent to previous seasons, it is decided to allocate a specific quota level as 13 t for artisanal, coastal, recreational and sport fisheries and 35 t for by-catch in 2022. All by-catches shall be deducted from the total quota.

	<i>ICCAT requirement (per Rec. 21-08)</i>	<i>Explanation of CPC actions taken to implement</i>	<i>Relevant domestic laws or regulations (as applicable)</i>	<i>Note:</i>
1	Catch recording and reporting (paras 74-88)	<p>Recording/reporting requirements shall be implemented in line with paras 74-88 of Rec. 21-08.</p> <p>Both electronic and bound logbook shall be used for the recording of catch data. Dead fish (retained or discarded) will be counted against the quota.</p>	Ministerial Communiqué on E-BFT Fishing, Farming and Trading	
2	Fisheries openings (paras 28-32)	<p>Paras 28-32 of Rec. 21-08 shall be implemented as required.</p> <p>Turkey requests the application of the derogation in para 28 of Rec. 21-08 for open season in the eastern Mediterranean Sea, as follows.</p> <p>Fishing for E-BFT by purse-seiners shall be allowed for the period 15 May - 01 July in the eastern Mediterranean Sea (for fishing areas 37.3.1. and 37.3.2).</p> <p>It is expected that some E-BFT fishing operators may prefer to carry-out fisheries activities in line with Rec. 21-08 in the high seas of the Mediterranean Sea (possibly within area 37.2) within the period 26 May - 1 July.</p>	Ministerial Communiqué on E-BFT Fishing, Farming and Trading	
3	Minimum size (paras 33-35)	Paras 33-35 of Rec. 21-08 shall be implemented as required.	Ministerial Notification Regulating Commercial Fisheries /	

		<p>It is prohibited to catch, retain on board, transfer, land, transport, store, sell, display or offer for sale of E-BFT less than 30 kg or with fork length of less than 115 cm.</p> <p>By-catch of bluefin tuna under the tolerated size and weight or over the limit referred to above are released. Dead and undersized specimens are discarded at sea and deducted from Turkey's quota.</p>	<p>Communiqué on E-BFT Fishing, Farming and Trading</p>	
4	<p>By-catch (para 37, including %)</p>	<p>Para 37 of Rec. 21-08 shall be implemented as required.</p> <p>A 35t (1,5%) specific quota shall be allocated for by-catch in 2022.</p> <p>Level of by-catch in 2021= 35 tons, 1,5% 2020 = 05 tons, 0,2% 2019 = 50 tons, 2,7%</p> <p>The level of by-catch shall not exceed 20% of the total catch on board at the end of each fishing trip and shall be calculated in relation with the total catches on-board as "in weight" (or "in number of species" in case of tuna and tuna like species fishery).</p> <p>All by-catches including discards shall be deducted from the total quota.</p>	<p>Ministerial Notification Regulating Commercial Fisheries / Communiqué on E-BFT Fishing, Farming and Trading</p>	
5	<p>Recreational and sports fisheries (paras 38-46)</p>	<p>Paras 38-46 of Rec. 21-08 shall be implemented as required.</p>	<p>Ministerial Notification Regulating Amateur & Recreational Fisheries /</p>	

		<p>Recreational and sport fisheries on E-BFT is subject to authorization for each vessel. Catch and retention on board, transshipment or landing of more than one E-BFT individual per vessel per day is prohibited.</p> <p>The marketing of E-BFT caught in recreational and sport fishing is prohibited.</p> <p>Catch data obtained from the recreational fishery shall be submitted to the Ministry, all recreational catches shall be counted against Turkey's total quota dedicated for recreational and sports fisheries.</p>	<p>Communiqué on E-BFT Fishing, Farming and Trading</p>	
6	<p>Transshipment (paras 89-94)</p>	<p>Paras 89-94 of Rec. 21-08 shall be implemented as required.</p> <p>Transshipment at sea operations of E-BFT shall be prohibited.</p> <p>E-BFT fishing vessels shall only transship/land E-BFT catches in the ports designated for that purposes.</p> <p>List of designated E-BFT Landing and Transshipment Ports:</p> <ol style="list-style-type: none"> 1. Adana Province: Karatas fishing port 2. Antalya Province: Antalya fishing port Gazipasa fishing port 3. Mersin Province: Erdemli fishing port 4. Hatay Province: Iskenderun fishing port 	<p>Ministerial Communiqué on E-BFT Fishing, Farming and Trading</p>	

		<p>5.Canakkale Province: Kabatepe fishing port Gulpınar fishing port</p> <p>6. Istanbul Province: Gurpinar fishing port Tuzla fishing port</p> <p>7. Izmir Province: Karaburun fishing port</p>		
7	VMS (paras 218-224)	<p>Paras 218-224 of Rec. 21-08 shall be implemented as required.</p> <p>Fishing vessels requesting any of the E-BFT fishing vessel permits for the 2022 fishing season shall be equipped with a full-time operational satellite-based vessel monitoring system (VMS) onboard, as required by MoAF.</p> <p>The transmission of VMS data to ICCAT shall be started at least 5 days before their period of authorisation and shall be continued at least 5 days after their period of authorisation.</p> <p>Position reporting in every one hour shall be required from the authorized E-BFT fishing vessels, including E-BFT towing vessels.</p>	<p>Ministerial Notification Regulating Commercial Fisheries / Communiqué on E-BFT Fishing, Farming and Trading</p>	
8	CPC observers programme (paras 95-100)	<p>Paras 95-100 of Rec. 21-08 shall be implemented as required.</p> <p>Presence of “CPC Observers” on all E-BFT Towing Vessels shall be ensured during the whole E-BFT catching, transferring and</p>	<p>Ministerial Notification Regulating Commercial Fisheries / Communiqué on E-BFT Fishing, Farming and Trading</p>	

		caging operations at sea and at farm sites in 2022.		
9	Regional observers programme (paras 101-107)	<p>Paras 101-107 of Rec. 21-08 shall be implemented as required.</p> <p>100% Coverage of “ICCAT Regional Observers” on E-BFT Catching Vessels and at E-BFT Farming Facilities (at the time of caging and harvest operations) shall be mandatory.</p>	<p>Ministerial Notification Regulating Commercial Fisheries / Communiqué on E-BFT Fishing, Farming and Trading</p> <p>As a derogation to the provisions of para 101, harvesting from farms up to 1000 kg per day and up to a maximum of 50 tons per farm per year to supply the fresh bluefin tuna market may be authorized by the Ministry without ICCAT regional observer coverage. In such cases, ministerial inspector(s) shall be present in the related farming facility for 100% of such harvests, control the entire operation and validate the harvested quantities in the eBCD system.</p>	
	<i>Other requirements, such as: tagging programme (para 44) etc.</i>	<p>In line with para 238 of Rec. 21-08: To ensure a proper implementation of the measures related to the sealing of bluefin tuna cages (paras 128, 159, 164, 216, Annex 4, Annex 6 and Annex 14); a transitional period will be implemented by Turkey until January 2023; upon the need to find and implement the most convenient tools and methods to ensure a good compliance to the measure.</p>	<p>Ministerial notification regulating commercial fisheries / Communiqué on E-BFT Fishing, Farming and Trading</p>	

A list of designated ports for landing and transhipment through form CP24 is attached as **Annex 1** to this Plan.

2. Annual fishing capacity management plan (paras 16-21)

Fishing permits are planned to be granted to a maximum of 30 purse seine vessels as BFT catching vessels by MoAF. This figure is the ceiling for BFT Catching Vessels that can be authorized in 2022. A total of 70 E-BFT other vessels (towing, support and auxiliary) are planned to be authorized by MoAF. A viable amount of quota shall be allocated to the authorized E-BFT catching vessels acquiring valid fishing permits for the 2022 E-BFT fishing season).

3. Annual farming management plan (paras 12; 22-26), as applicable

Information on the farm CPC competent authority and the list of contact points nominated as responsible for the implementation national caging activities and their control are provided as follows:

Farm CPC Competent Authority: Ministry of Agriculture and Forestry / General Directorate of Fisheries and Aquaculture.

List of Contact Points:

Mr. Melih ER, Head of Department, melih.er@tarimorman.gov.tr

Mr. Huseyin KARCI, Coordinator, huseyin.karci@tarimorman.gov.tr

Mr. Fazli GUNGOR, Engineer, fazli.gungor@tarimorman.gov.tr

All farm activities shall be subject to regular monitoring, control and inspections by MoAF in 2022. These will be conducted on a quarterly basis in general or on caging operation, transfer operation, harvesting operation basis, whichever is applied in the context of Rec. 21-08. The inspections to be carried out by the Ministry throughout the year are planned on a farm basis and taking into account risk-based prioritization. Results of conventional and stereoscopic camera systems will be utilized by MoAF to estimate quota uptake.

Random controls will be carried-out on the basis of risk assessment and in line with paras 207-217 of Rec. 21-08. A 10% of the number of cages in each farm shall be covered in 2022 and documented data/information (cage content declared, farm schematic plans in the inventory of MoAF, related ITD(s), ICD(s), BCD, etc) will be cross-checked.

Without prejudice to the provisions of paragraph 238 of Rec. 21-08, with an intent to identify the most convenient tools/methods for proper implementation in 2023; MoAF will establish protocols for the sealing of transport cages and farm cages, and require that the farm cages containing bluefin tuna will be sealed at all times in 2022.

With reference to paras 12; 22-26, annual farming management plan for the year 2022 is provided below:

Farming Capacity for the year 2022					
Country	FFB*	Active/ Inactive	Capacity (t)*	Input Capacity(t)*	FFB Coordinates
Turkey	Akua Group Orkinos Besiciligi Projesi	Active	800	352,299	38 29 16,73 N, 26 23 23,12 E 38 29 22,41 N, 26 23 23,08 E 38 29 22,37 N, 26 23 15,88 E 38 29 16,69 N, 26 23 15,90 E
Turkey	Akua Group Orkinos Besiciligi Projesi	Active	800	352,299	38 27 24,00 N, 26 27 18,00 E 38 27 12,00 N, 26 27 18,00 E 38 27 12,00 N, 26 27 09,00 E 38 27 24,00 N, 26 27 09,00 E
Turkey	BASARANLAR ORKINOS BESICILIGI PROJESI	Active	900	396,336	38 10 42,97 N, 26 42 18,41 E 38 10 48,53 N, 26 42 24,72 E 38 10 45,27 N, 26 42 29,32 E 38 10 39,72 N, 26 42 23,02 E
Turkey	KILIÇ Orkinos Besiciligi Projesi	Active	1840	810,287	38 24 40,00 N, 26 23 14,00 E 38 24 40,00 N, 26 23 20,00 E 38 24 34,00 N, 26 23 20,00 E 38 24 34,00 N, 26 23 14,00 E
Turkey	Sagun Orkinos Besiciligi Projesi	Active	1000	440,373	38 24 59,00 N, 26 24 44,00 E 38 24 59,00 N, 26 24 52,00 E 38 24 46,00 N, 26 24 52,00 E 38 24 46,00 N, 26 24 44,00 E
Turkey	AK-TUNA ORKINOS BESICILIGI PROJESI	Active	1000	440,373	38 23 29,00 N, 26 26 10,00 E 38 23 23,00 N, 26 26 10,00 E 38 23 23,00 N, 26 26 31,00 E 38 23 29,00 N, 26 26 31,00 E
Turkey		Inactive	500 ⁽¹⁾		
TOTAL			6,840	2,792	

* In case of any changes, final version of farming capacity plan shall be reported by 1 June.

(1) The total farm capacity of Turkey pertinent to the reference period is 6,840 metric tons. Without any prejudice to the right of utilization at any time, the farm capacity of 500 metric tons shown in the table above that belongs to Turkey will not be used for the year 2022.

Based on the results of carryover transfers from the 2021 season to the 2022 season, and data obtained from the Ministry's Fisheries and Aquaculture Information System (SUBIS); the estimated total amount of bluefin tuna available for farming is around 1.225,142 metric tons as of 25 February 2022. An annual carry-over declaration report for all farms will be submitted as an annex to the revised farming management plan, when all carryover assessment transfers are completed.

4. Monitoring, control and inspection plan

a) CPC's monitoring, control and inspection (para 12 c)

The CPC control competent authority and the list of contact points nominated as responsible for the implementation of this monitoring, control and inspection plan are provided as follows:

CPC Competent Authority: Ministry of Agriculture and Forestry / General Directorate of Fisheries and Aquaculture

List of Contact Points:

Mr. Melih ER, Head of Department, melih.er@tarimorman.gov.tr
Mr. Huseyin KARCI, Coordinator, huseyin.karci@tarimorman.gov.tr
Mr. Fazli GUNGOR, Engineer, fazli.gungor@tarimorman.gov.tr

Monitoring, control and inspection of E-BFT fishing and transfer operations

All vessels shall be equipped and monitored with an operational Vessel Monitoring System. The Fisheries Monitoring Center (FMC) operated by the Ministry shall continue to be utilized during the whole fishing campaign.

In collaboration with Turkish Coast Guard Command (TCGC), comprehensive at-sea inspection coverage shall be ensured by MoAF during 2022 E-BFT fishing season. To that end, an autodyne research vessel - namely AKDENİZ ARAŞTIRMA 1- will be commissioned by MoAF to carry out inspections at sea.

A continuous monitoring, control and inspection shall be ensured at potentially active landing ports through the assignment of MoAF inspectors. Additionally, random inspections by MoAF shall continue even before/after the fishing season at the landing ports, transport vehicles and fish markets to check and record any landing, transport or storing of E-BFT. Artisanal, coastal fisheries, recreational and sportive fisheries shall be inspected in scope of the scheduled annual inspections to be undertaken by MoAF and TCGC in territorial waters.

If the video footage does not meet the minimum standards, the donor operator will conduct voluntary transfer(s), and MoAF shall order a control transfer in case determination of the number of fish being transferred cannot be estimated through voluntary transfers.

Monitoring, control and inspection of E-BFT caging operations

MoAF inspectors shall control proper implementation of caging programmes at farming facilities on a regular basis. All transfers from towing vessels to farm cages shall be monitored by stereoscopic cameras as well as conventional cameras and the records of each transfer shall be provided to MoAF for assessment. Farm operator shall communicate the results of the caging programme to ministerial inspector and ICCAT Regional Observer. Those results shall also be communicated to the catching CPC, when applicable.

In accordance with the related provisions of Rec. 21-08; farm operators shall be allowed to carry-over of non-harvested bluefin tuna prior to the beginning of the 2022 purse seiner fishing season through carry over assessment transfers of non-harvested bluefin tunas to another empty cage(s) by using stereoscopic control cameras. The carry-over assessment shall be made under the presence of ministerial inspectors and reported to ICCAT. Carry-over declaration will be transmitted as an annex to the revised farming management plan within 15 days after the end of the assessment operation.

As provided in Section 3 above, MoAF shall carry out random controls at each of the farms before the first caging of 2022 in line with the procedures set out in paras 207-214 of Rec. 21-08.

b) Joint Scheme of International Inspection (paras 228-231)

Turkey plans to continue its longstanding voluntary contribution to the ICCAT Joint Scheme of International Inspection in 2022. In this respect, Turkish Coast Guard Command schedules to designate 77 inspection boats, 17 air control assets (helicopters / planes) and 534 inspectors on the field during the 2022 E-BFT fishing campaign. Additionally, Turkish Naval Forces Command intends to join the inspection scheme of 2022 through assigning a 54 inspection vessels during the 2022 E-BFT fishing campaign.

Furthermore, an additional inspection vessel - namely AKDENİZ ARAŞTIRMA 1- that has been assigned by MoAF will also contribute to the activities under the ICCAT Scheme of Joint International Inspections in the region.

Based on a risk analysis approach, the locations where the fishing vessels were mostly concentrated during previous seasons is planned to be focused on 2022. In this context, E-BFT fishing and transferring activities, as well as, Med-SWO fishing activities will continue to be inspected on a regular throughout the upcoming fishing campaign.

The records of the VMS signals will regularly be monitored at the premises of MoAF and at Coast Guard Main Operation Centre in Ankara, as well as, at regional operation centres of TCGC.

TCGC shall take into account the probable position data of the fishing vessels which will be obtained from the VMS during the ICCAT inspections.

The inspections shall be conducted in territorial waters of Turkey, high seas of Mediterranean and high seas of the Aegean Sea. ICCAT inspections by the TCGC assets shall be carried out during the whole period of E-BFT Fishing Season.

The means of at-sea inspections shall be deployed mainly at E-BFT and Med-SWO fishing grounds which are determined based on 2021's risk assessment data.

5. Others

Turkey is one of the Contracting Parties who financially contributes and supports ICCAT GBYP programme.

INTERSESSIONAL MEETING OF PANEL 2 – ONLINE, MARCH 2022

<i>Tuna vessel fleet</i>	<i>Fishing fleet</i>						<i>Fishing Capacity</i>				
Type	Best catch rates defined by the SCRS in 2009 (t)	2008	2019	2020	2021	2022	2008	2019	2020	2021	2022(*)
Purse seiner over 40m	70.7	41	11	20	26	26	2899	777	1414	1838,2	1838,2
Purse seiner between 24 and 40m	49.78	49	18	7	5	4	2439	896	348	248,9	199,12
Purse seiner less than 24m	33.68	3	0	0	0	0	101	0	0	0	0
Purse seine total fleet		93	29	27	31	30	5439	1673	1762	2087,1	2037,32
Longliner over 40m	25										
Longliner between 24 and 40m	5.68										
Longliner less than 24m	5										
Total longline fleet											
Baitboat	19.8										
Handline	5										
Trawler	10										
Trap	130										
Small coastal vessels and baitboats from the Azores, Canary Islands and Madeira	N/A										
Other (please specify)	5	-	-	-	-	-			48	13	13(**)
Total fleet/fishing capacity		93	29	27	31	30	5439	1861	1810	2100,1	2050,32
Quota							887	1880	2305	2305	2305
Percentage allocated to by-catch								50 (2.7%)	5 (0.2%)	35 (1.5%)	35(***) (1.5%)
Adjusted quota (if applicable)								1830	2300	2270	2270
Allowance for sports/recreational (if applicable)											
Under/ overcapacity							4552	-31	-495	-169,9	-219,68

(*) Numbers of vessels to be authorized and their length distributions are provisional based on presumptions. Definite number and breakdown of vessels will be added up by April 30.

(**) Allocated for the purposes of artisanal and coastal, recreational and sport fisheries.

(***) 35 t of which has been set aside for by-catch.

UNITED KINGDOM**Fishing Plan Year: 2022****1. Details of annual fishing plan for catching vessels and traps (paras 14-15)**

Under the Trade and Cooperation Agreement (TCA) between the UK and the EU, a split of the previous EU share of Eastern Atlantic Bluefin Tuna (EBFT) has been agreed, resulting in i) a UK share equal to 0.25% of the old EU share or 0.13% of the global TAC, and ii) a commensurate reduction in the EU share. This agreement will not affect the current allocations to any other CPC or otherwise impact the global TAC.

For 2022, the EU has transferred quota to the UK commensurate with the agreement reached (48.40 t).

The UK is taking a cautious and measured approach to managing bluefin tuna in UK waters. Our plan sets out our approach to managing bycatch and our intention to continue to run a tag and release programme building on a successful first year in 2021. The UK will not authorise any commercial fishing vessels to target BFT in 2022. Our management approach will be kept under close review during the course of the year. Any refinements to that approach that require adjustments to our Fishing Plan will be notified to ICCAT in line with Paragraph 15 of Recommendation 21-08.

Bycatch coverage

Bluefin tuna is becoming increasingly prevalent in UK waters, which is increasing the potential for interactions between the UK fishing fleet and EBFT. Prior to 2021 UK vessels which caught EBFT were required to release the fish alive, with dead catches reported to the relevant authorities and the catch surrendered for scientific sampling. In 2021, the UK reserved a proportion of quota (20 tonnes) to account for accidental bycatch in commercial fisheries targeting other species. In 2021 the total bycatch by UK commercial industry was 1.6 t of tuna. In 2022, the UK will again reserve 20 t for accidental bycatch. The UK considers this to be a sufficient tonnage to ensure we can properly account for all EBFT bycatch. We will keep this under close review as the year progresses and consider whether further quota should be used to cover bycatch.

To avoid incentivising the targeting of the species, commercial UK vessels will be permitted to land, and sell, a maximum of one bycaught fish per trip. This is in order to ensure they do not exceed the 20% maximum set out in paragraph 38 of Recommendation 21-08. Any further EBFT caught will be required to be released alive if possible. If dead the vessel will be required to notify the relevant authorities and may be required to retain the specimen for scientific sampling, but they cannot be offered for sale. All bycatches of dead EBFT will be deducted from UK quota.

If UK quota is exhausted, all vessels will be required to release live EBFT. Vessels, will (if it is safe to do so) following notification of the relevant authorities, still be required to retain dead EBFT under the UK Landing Obligation, which again may be sent for scientific sampling but cannot be offered for sale.

All bycaught EBFT will be subject to the requirements of the ICCAT bluefin tuna catch document programme (BCD).

Designated ports

The designated ports list is provided as an annex to this fishing plan.

Catch and Release Tag Programmes

A 'Catch And Release Tag' (CHART) programme for EBFT in UK waters is planned for 2022 and will be carried out in accordance with paragraph 44 of Recommendation 21-08. A small number of recreational fishing vessels will participate in the programme. Skippers will have to successfully apply and undergo the necessary training to participate. In 2022, 10 tonnes of the UK EBFT quota will be used to account for any at-boat incidental mortality associated with the CHART programme. The figure was established taking into consideration envisaged programme duration and number of vessels alongside our estimates of average days fished per month, Catch Per Unit Effort, weight, and at-vessel mortality. The quota will not be allocated

on a vessel-by-vessel basis but will instead cover the whole CHART programme. This figure is unchanged from 2021 and is considered suitably precautionary and more than sufficient to cover the envisaged activity, noting that in 2021 the UK tagged 704 fish and there were ten mortalities (totaling 1.365 t). An additional 48 specimens were tagged with electronic tags under the *Thunnus* UK project.

Vessels operating within the programme will be licensed or authorised by the relevant UK Fisheries Administrations and will carry out fishing under strict monitoring and reporting conditions. Observer coverage of the CHART programme will be at least 5% of all fishing trips and efforts will be made to capture a proportion of catch and tagging events via camera monitoring. Mechanisms will be in operation to pause, refine and if necessary close the programme in the face of incidental mortalities to ensure that the allocated quota is not exceeded.

Any incidental mortalities will not be offered for sale and may instead be used to support Atlantic bluefin tuna research. Data from the CHART programme will be reported to the scientific coordinator of the programme within 24 hours so that catches and incidental mortalities can be evaluated in near real-time.

Any dead catches by vessels not capable of bringing the specimen on board will be discarded, but the catches will still be recorded appropriately and counted against national quota. Dead discards are permitted in circumstances where the health and safety of the crew is likely to be endangered.

The fishing season for the CHART programme is envisaged to be mid-July to mid-December 2022.

Any additional fishing activities will be reflected in expedient amendments to the plan in line with ICCAT requirements.

Electronic tagging programmes

The UK also expects to continue its electronic tagging programmes supporting GBYP (Grand bluefin year Programme) with mortality covered by the Research Mortality Allowance rather than national quota.

	<i>ICCAT requirement (per Rec. 21-08)</i>	<i>Explanation of CPC actions taken to implement</i>	<i>Relevant domestic laws or regulations (as applicable)</i>	<i>Note:</i>
1	Catch recording and reporting (paras 74-88)	<p>Commercial bycatch</p> <p>UK vessels will be required to submit information in accordance with the requirements set out in ANNEX 2. UK vessels will utilise electronic reporting systems to do so. Any vessel which catches an EBFT will be required to alert the relevant authority 4 hours prior to arrival into port (where fishing ground distance is more than 4 hours away).</p> <p>Whilst the UK does have purse seine vessels, none target EBFT.</p>	Retained Regulations 1224/2009, 404/2011 and 2016/1627	

		<p>Daily reporting will be required by CHART skippers, to the relevant authorities, as outlined below.</p> <p>Recreational Tagging programme As a minimum, the CHART programme will require licensed/authorised skippers to record specified fishing and capture data on datasheets or via electronic means within 24 hours. Data will include (among other things) date, time, location of effort and capture, number of bluefin tuna caught and tagged, their lengths, along with any incidental mortalities. Any vessel which has an incidental EBFT mortality will be required to alert the relevant authority 4 hours prior to arrival into port (where fishing ground distance is more than 4 hours away).</p>		
2	Fisheries openings (paras 28-32)	<p>Commercial bycatch No active fishing season for UK vessels has been defined as no vessels are permitted to target the stock in 2022.</p> <p>Recreational Tagging programme The CHART programme is envisaged to be open for recreational fishing between mid-July and mid-December 2022.</p>		
3	Minimum size (paras 33-35)	<p>Commercial bycatch UK commercial fishing vessels will be required to release any accidentally-</p>	Retained Regulation 2016/1627	

		<p>caught undersized live EBFT (i.e. those below 30kg or with a fork length of less than 115cm).</p> <p>Undersized fish will not be allowed to be marketed or retained. All retained and dead EBFT will be deducted from UK quota and reported to ICCAT.</p> <p>Recreational Tagging programme As no EBFT will be landed as part of the CHART programme, no minimum sizes will be required.</p>	<p>Landing obligation regulation 2013/1380 article 15.</p>	
4	<p>By-catch (para 37, including %)</p>	<p>Commercial fisheries for other species All UK landings of EBFT will be deducted from UK quota. A proportion (20 tonnes) of UK quota will be set aside to account for accidental bycatch by commercial fishing vessels targeting other species.</p> <p>Calculations of bycatch will be based on the proportion of EBFT as compared to live weight of all other species on board. Any bycaught EBFT will be subject to eBCD requirements.</p> <p>Only commercial fishing vessels likely to interact with EBFT will be permitted to sell EBFT and they will be limited to a maximum of one EBFT per trip.</p>	<p>S.23 of Fisheries Act 2020</p>	

		<p>If more than one fish is caught, additional fish will be released if alive. If dead, the fish will be retained but will not be allowed to be sold. All retained fish will count towards against UK quota.</p> <p>If UK quota is exhausted, vessels will still be required to retain dead EBFT but they will be sent for sampling and not sold.</p> <p>All catch data will be provided to ICCAT.</p> <p>Recreational Tagging programme A proportion (10 tonnes) will be allocated to account for incidental mortality in the CHART programme.</p>		
5	Recreational and sports fisheries (paras 38-46)	<p>Non-tagging related recreational and sports fishing There are currently no plans to allow recreational fishing of EBFT outside of the CHART tagging programme in 2022. Enforcement of this will be conducted by relevant authorities within the different fisheries administrations of the UK.</p> <p>Recreational Tagging programme A CHART programme for EBFT in UK waters is planned for 2022 and will be carried out in accordance with paragraph 44 of Recommendation 21-08.</p>	<p>Skippers of vessels participating in the programme will be licenced or authorised by the relevant UK Fisheries Administration. Licences/authorisations will be applied for from April 2022 so vessel names cannot currently be specified.</p>	

		A maximum of 50 ¹ vessels will be permitted to participate in the CHART programme. Any incidental mortalities which occur during this activity will be taken from the 10 tonnes quota allocated to this activity. All obligations stated under para 44 will be complied with.		
6	Transshipment (paras 89-94)	UK vessels are prohibited from transshipping at sea.	Article 20 of retained Regulation 1224/2009 (Commercial vessels)	
7	VMS (paras 218-224)	<p>Commercial bycatch UK Commercial fishing vessels of over 12m in length must have an operational VMS system to operate in UK waters, third country and/or international waters.</p> <p>It is the UK's intention that all commercial fishing vessels will be fitted with VMS but a date is not set for this to be complete.</p> <p>Recreational tagging programme Vessels will be required to keep a record of their activity for each tuna fishing day and submit those to the relevant fisheries authorities or nominated scientific bodies responsible for the CHART programme (e.g., in England the Centre for Environment, Fisheries and Aquaculture Science (Cefas)).</p>	Article 9 of retained Regulation 1224/2009	

¹ Final number to be confirmed.

8	CPC observers programme (paras 95-100)	<p>Commercial bycatch As the UK does not intend to permit any directed commercial fishing for EBFT in 2022, it does not intend to deploy observers in line with the requirements of the CPC observers programme. However, there is utilisation of cameras in some parts of the UK fleet.</p> <p>Recreational Tagging programme The CHART programme will implement an observer coverage of at least 5% of all trips to ensure best practice catch, tag and release protocols are observed.</p>		
9	Regional observers programme (paras 101-107)	N/A – The UK currently has no targeted EBFT fishery, and no purse seiners are authorised to catch EBFT.		
	<i>Other requirements, such as: tagging programme (para 44) etc.</i>	<p>Recreational Tagging programme Conventional floy tagging will be undertaken in the CHART programme by suitably trained skippers. For England this training will be documented and overseen by the Animal Welfare and Ethical Review Body (AWERB) of Cefas, or the equivalent bodies in the UK's Devolved Administrations. The UK is also planning to undertake continued scientific research to improve understanding of bluefin tuna movements and behaviour. This will</p>	UK electronic tagging activities carried out under Cefas' <i>Thunnus</i> UK project will be conducted in accordance with UK Home Office regulations by trained and licensed individuals operating under an establishment and project licence (see section 5, below).	

		be under the auspices of ICCAT GBYP; the UK will apply for RMA on that basis.		
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2. Annual fishing capacity management plan (paras 16-21)

The UK does not intend to authorise any commercial fishing vessels to operate a directed fishery for EBFT in 2022.

As referenced above, it is planned to allow up to 50 recreational fishing vessels to participate in a CHART programme for Atlantic bluefin tuna in UK waters. The UK quota will be used to account for any incidental mortality associated with the CHART programme. The quota will not be allocated on a vessel-by-vessel basis but will cover the whole CHART programme.

3. Annual farming management plan (paras 12; 22-26), as applicable

N/A: the UK does not farm EBFT.

4. Monitoring, control and inspection plan

a) CPC's monitoring, control and inspection (para 12 c)

UK enforcement authorities - the MMO, Marine Scotland Compliance, the Northern Irish Sea Fisheries Inspectorate and Welsh Government's Control and Enforcement team – have inspection teams at commercial ports and carry out regulatory inspections of landings and seagoing enforcement.

Such inspection teams are based in or near to all commercial ports and carry out inspections of at least 5% of landings or transshipments into UK ports each year. Inspections are risk-based and intelligence-led, and annual target rates will be kept under review. This includes recreational and commercial activity and downstream market activity. Control activity will focus on ensuring that no unauthorised marketing takes place and that catches are fully documented. This will apply in respect of any accidental bycatch of EBFT.

Any incidental mortality associated with the CHART programme would be notified to the relevant national Fisheries Administration immediately and any dead EBFT and may be required to be brought to shore for biological sampling in support of research. It will not be permissible to offer any such fish for sale. A suite of monitoring measures would be in operation as part of the programme, including observer coverage of at least 5% and where possible video of the capture event. Mechanisms are in operation to pause, refine and if necessary close the programme in the face of incidental mortalities which may result in exceeding the allocated quota. Data from the CHART programme are to be reported within 24 hours so catches and incidental mortalities can be evaluated in near real-time.

b) Joint Scheme of International Inspection (paras 228-231)

N/A – no EBFT will be landed for sale as part of the planned CHART programme.

5. Others

The UK is planning to continue the 'Thunnus UK' bluefin tuna research programme this year, which is focussed on generating information and understanding of the residency, migrations and behaviour of bluefin tuna found in UK waters. Any tagging and sampling work under this programme will be conducted in accordance, and consistent with, ICCAT GBYP protocols and techniques, and contributes to the GBYP's research goals. Any mortality associated with this project is to be covered by RMA.

INTERSESSIONAL MEETING OF PANEL 2 – ONLINE, MARCH 2022

<i>Tuna vessel fleet</i>	<i>Fishing fleet</i>					<i>Fishing Capacity</i>					
Type	Best catch rates defined by the SCRS in 2009 (t)	2008	2019	2020	2021	2022	2008	2019	2020	2021	2022
Purse seiner over 40m	70.7										
Purse seiner between 24 and 40m	49.78										
Purse seiner less than 24m	33.68										
Purse seine total fleet											
Longliner over 40m	25										
Longliner between 24 and 40m	5.68										
Longliner less than 24m	5										
Total longline fleet											
Baitboat	19.8										
Handline	5										
Trawler	10										
Trap	130										
Small coastal vessels and baitboats from the Azores, Canary Islands and Madeira	N/A										
Other (please specify)	5										
Total fleet/fishing capacity											
Quota						48.4 tonnes					
Percentage allocated to by-catch						41%					
Adjusted quota (if applicable)											
Allowance for sports/recreational (if applicable)						10 -tagging programme					
Under/ overcapacity						N/A					

Designated Ports

Brixham	England	GBBRX
Falmouth	England	GBFAL
Fleetwood	England	GBFLE
Grimsby	England	GBGSY
Harwich	England	GBHRW
Hull	England	GBHUL
Immingham	England	GBIMM
Liverpool	England	GBLIV
Lowestoft	England	GBLOW
Newlyn	England	GBNYL
North Shields	England	GBNSH
Padstow	England	GBPAD
Plymouth	England	GBPLY
Portsmouth	England	GBPME
Scarborough	England	GBSCA
Shoreham	England	GBSHO
Whitby	England	GBWTB
Whitehaven	England	GBWHV
Holyhead	Wales	GBHLY
Milford Haven	Wales	GBMLF
Ardglass	Northern Ireland	GBAGL
Bangor	Northern Ireland	GBBNG
Belfast	Northern Ireland	GBBEL
Kilkeel	Northern Ireland	GBKLK
Londonderry	Northern Ireland	GBLDY
Portavogie	Northern Ireland	GBPVG
Warrenpoint	Northern Ireland	GBWPT
Aberdeen	Scotland	GBABD
Buckie	Scotland	GBBUC
Campbeltown	Scotland	GBCBT
Cullivoe	Scotland	GBCUV
Eyemouth	Scotland	GBEYM
Fraserburgh	Scotland	GBFRB
Kinlochbervie	Scotland	GBKBE
Kirkwall	Scotland	GBKWL
Lerwick	Scotland	GBLER
Lochinver	Scotland	GBLOV
Mallaig	Scotland	GBMLG
Oban	Scotland	GBOBA

INTERSESSIONAL MEETING OF PANEL 2 – ONLINE, MARCH 2022

Peterhead	Scotland	GBPHD
Pittenweem	Scotland	GBPWM
Portree	Scotland	GBPRT
Scalloway	Scotland	GBSWY
Scrabster	Scotland	GBSCR
Stornoway	Scotland	GBSTO
Troon	Scotland	GBTRN
Ullapool	Scotland	GBULL
Dundee	Scotland	GBDUN
Grangemouth	Scotland	GBGRG
Greenock	Scotland	GBGRK
Invergordon	Scotland	GBIVG
Leith	Scotland	GBLEI
Methil	Scotland	GBMTH

CHINESE TAIPEI

Fishing Plan Year: 2022

1. Details of annual fishing plan for catching vessels and traps (paras 14-15)

The initial eastern Atlantic and Mediterranean bluefin tuna (E-BFT) quota allocated to Chinese Taipei in 2022 is 90 t, of which 50 t will be transferred to Korea pursuant to paragraph 5 of Rec. 21-08. Hence, the adjusted quota is 40 t.

Chinese Taipei has established regulations to prohibit its fishing vessels from engaging in any kind of E-BFT fishery since 2009, and such regulations still remain in force. As a result, no fishing vessel flagged to Chinese Taipei is permitted to catch and retain E-BFT in the ICCAT Convention area in 2022. In addition, the domestic regulations have also required fishermen to discard E-BFT bycatch, record such bycatch information on the logbook or e-logbook, and report to the Fisheries Agency of Chinese Taipei. The bycatch amount in 2021 is 0. In any event, Chinese Taipei will deduct the bycatch amount from the 40 t of adjusted quota.

It should be noted that the E-BFT quota is granted to Chinese Taipei based on its previous catch records, and thus should be deemed the historical right of Chinese Taipei. The prohibition to such a fishery is implemented on voluntary basis, and Chinese Taipei reserves the right to resume the E-BFT fishery at any time considered appropriate by the Fisheries Agency.

	<i>ICCAT requirement (per Rec. 21-08)</i>	<i>Explanation of CPC actions taken to implement</i>	<i>Relevant domestic laws or regulations (as applicable)</i>	<i>Note:</i>
1	Catch recording and reporting (paras 74-88)	1. Chinese Taipei has prohibited its fishing vessels from engaging in any kind of E-BFT fishery since 2009. 2. Any bycatch of E-BFT is required to be immediately discarded, and the amount of discard shall be recorded on the catch logbook or E-logbook for submission to the Fisheries Agency of Chinese Taipei.	Article 41 of the <i>Regulations for Tuna Longline Fishing Vessels Proceeding to the Atlantic Ocean for Fishing Operation.</i>	
2	Fisheries openings (paras 28-32)	Chinese Taipei has prohibited its fishing vessels from engaging in any kind of E-BFT fishery since 2009. No fishing vessel flagged to Chinese Taipei is permitted to catch and retain E-BFT in the ICCAT Convention area in 2022.	Article 41 of the <i>Regulations for Tuna Longline Fishing Vessels Proceeding to the Atlantic Ocean for Fishing Operation.</i>	

3	Minimum size (paras 33-35)	Chinese Taipei has prohibited its fishing vessels from engaging in any kind of E-BFT fishery since 2009. Hence, this requirement is not applicable.	Not applicable.	
4	By-catch (para 37, including %)	Fishermen are required to discard E-BFT bycatch, record such bycatch information on the logbook or e-logbook, and report to the Fisheries Agency of Chinese Taipei. In case of by-catch, Chinese Taipei will deduct the amount from the 40 t of adjusted quota.	Article 41 of the <i>Regulations for Tuna Longline Fishing Vessels Proceeding to the Atlantic Ocean for Fishing Operation</i> .	
5	Recreational and sports fisheries (paras 38-46)	Not applicable. Chinese Taipei does not have recreational and sports fisheries in the ICCAT Convention Area.	Not applicable.	
6	Transshipment (paras 89-94)	Chinese Taipei has prohibited its fishing vessels from engaging in any kind of E-BFT fishery since 2009. Hence, this requirement is not applicable.	Not applicable.	
7	VMS (paras 218-224)	All Chinese Taipei's vessels operating in the ICCAT Convention area are installed with the VMS, report vessels positions hourly, and are monitored by the Fisheries Monitoring Centre.	Article 33 of the <i>Regulations for Tuna Longline Fishing Vessels Proceeding to the Atlantic Ocean for Fishing Operation</i> .	
8	CPC observers programme (paras 95-100)	Chinese Taipei has prohibited its fishing vessels from engaging in any kind of E-BFT fishery since 2009. Hence, this requirement is not applicable.	Not applicable.	
9	Regional observers programme (paras 101-107)	Chinese Taipei has prohibited its fishing vessels from engaging in any kind of E-BFT fishery since 2009.	Not applicable.	

		Hence, this requirement is not applicable.		
	<i>Other requirements, such as: tagging programme (para 44) etc.</i>	Chinese Taipei has prohibited its fishing vessels from engaging in any kind of E-BFT fishery since 2009. Hence, this requirement is not applicable.	Not applicable.	

2. Annual fishing capacity management plan (paras 16-21)

Chinese Taipei has prohibited its fishing vessels from engaging in any kind of E-BFT fishery since 2009. The attached table is filled in accordingly.

3. Annual farming management plan (paras 12; 22-26), as applicable

Not applicable.

4. Monitoring, control and inspection plan

a) CPC's monitoring, control and inspection (para 12 c)

Chinese Taipei has prohibited its fishing vessels from engaging in any kind of E-BFT fishery since 2009. In case of bycatch, fishermen are required to discard the E-BFT, record such bycatch on the logbook or e-logbook, and report to the Fisheries Agency of Chinese Taipei.

b) Joint Scheme of International Inspection (paras 228-231)

Since Chinese Taipei has prohibited its fishing vessels from engaging in any kind of E-BFT fishery, the ICCAT Scheme of Joint International Inspection is thus not applicable.

5. Others

None

INTERSESSIONAL MEETING OF PANEL 2 – ONLINE, MARCH 2022

<i>Tuna vessel fleet</i>	<i>Fishing fleet</i>					<i>Fishing Capacity</i>					
Type	Best catch rates defined by the SCRS in 2009 (t)	2008	2019	2020	2021	2022	2008	2019	2020	2021	2022
Purse seiner over 40m	70.7	0	0	0	0	0	0	0	0	0	0
Purse seiner between 24 and 40m	49.78	0	0	0	0	0	0	0	0	0	0
Purse seiner less than 24m	33.68	0	0	0	0	0	0	0	0	0	0
Purse seine total fleet		0	0	0	0	0	0	0	0	0	0
Longliner over 40m	25	0	0	0	0	0	0	0	0	0	0
Longliner between 24 and 40m	5.68	0	0	0	0	0	0	0	0	0	0
Longliner less than 24m	5	0	0	0	0	0	0	0	0	0	0
Total longline fleet		0	0	0	0	0	0	0	0	0	0
Baitboat	19.8	0	0	0	0	0	0	0	0	0	0
Handline	5	0	0	0	0	0	0	0	0	0	0
Trawler	10	0	0	0	0	0	0	0	0	0	0
Trap	130	0	0	0	0	0	0	0	0	0	0
Small coastal vessels and baitboats from the Azores, Canary Islands and Madeira	N/A	0	0	0	0	0	0	0	0	0	0
Other (please specify)	5	0	0	0	0	0	0	0	0	0	0
Total fleet/fishing capacity		0	0	0	0	0	0	0	0	0	0
Quota		68.71	84	90	90	90					
Percentage allocated to by-catch											
Adjusted quota (if applicable)		68.71	34	40	40	40*					
Allowance for sports/recreational (if applicable)											
Under/ overcapacity		-68.71	-34	-40	-40	-40					

*Chinese Taipei has prohibited its fishing vessels from engaging in E-BFT fishery since 2009. In case of bycatch, fishermen are required to discard the E-BFT, record such bycatch on the logbook or e-logbook, and report to the Fisheries Agency of Chinese Taipei.

**Revised proposal on growth rates observed in
bluefin tuna farms in the Eastern Atlantic and the Mediterranean**

(Submitted by Japan)

Explanatory note

This is a revised proposal of “PA2-606/2021” which Japan submitted to the Annual Commission meeting in November 2021. Background (Section 1) is same as the original proposal, and Section 2 and thereafter are added.

1. Background

Paragraph 28 of ICCAT Recommendation 19-04 (paragraph 27 of Rec. 21-08), which says, “*Farm CPCs shall endeavor to ensure that the growth rates derived from the eBCDs are coherent with the growth rates published by the SCRS.*”

Japan has a serious concern on the recurring high growth rates in farmed BFT because this might be caused by the underestimation of the weight of fish caught and caged for farming purposes. In other words, there is a risk that more BFT are actually caught than reported, thereby undermining the conservation efforts by ICCAT.

In the paper submitted by Japan to the 2019 Annual meeting (PA2-607/2019), Japan identified three potential causes of this problem: i) SCRS Growth table established in 2009 does not take into account regional differences in the growth rates, ii) the current length-weight relationship recommended by the SCRS (SCRS 2016) tends to underestimate the weight of fish in some regions, and iii) the sampling bias in length measurements from stereoscopic cameras video footage.

In order to resolve these scientific and technical difficulties, Japan requested the SCRS to update the growth table and length-weight relationship and explained the possibility of introducing AI systems to analyze stereoscopic camera footage without human bias.

Though the 2009 growth table needs to be updated, it is still the only and best available information on the maximum weight gain of Atlantic bluefin tuna. Therefore, Japan monitored the growth rates of BFT to be imported to Japan using 110% of the SCRS 2009 table as a benchmark for the fish caged since 2019. When a growth rate higher than the benchmark level is observed, Japan suspended the import and engaged in a dialogue with the farming CPC until reasonable explanation for such high growth rate would be provided.

Since such ad-hock dialogue could be time consuming, Japan asked farming CPCs to provide the caging/harvesting data using an excel spreadsheet named “Growth Calculation Sheet” (“GCS”, hereinafter) and update them periodically (every two weeks) so that exchanges of information can be commenced, where necessary, well before the fish products would arrive in Japan.

This cooperation with farming CPCs has been working well to enable smooth import process and we believed that it also contributed to better management of the catch and caging of BFT.

As a part of this cooperative effort, Japan analyzed the growth rates of BFT caged in 2019 and shared the result with each farming CPC. High growth rates were observed in some CPCs, and one of such CPCs explained that because bigger fishes were harvested first for economic reasons, the observed growth ratios do not necessarily represent the actual growth rates. It also explained that the growth rates in 2019 could not be comprehensively analyzed because of the huge loss of BFT caused by a storm. In those cases, Japan faced with the difficulties in its examination because Japan has no access to eBCDs destined to other markets than Japan whereas the analysis requires the whole data of the farming cage concerned.

One of farm CPCs offered scientific cooperation with Japan, including invitation of Japanese scientists to caging and harvesting operations, which was helpful for Japan to understand scientific efforts of the CPC. Since the fishes in that CPC's water were fatter than those caught in other waters, the CPC voluntarily used the length-weight conversion formula from Rodriguez Marin (i.e., $RWT = 3.50801 \times 10^{-5} \times SFL^2.88691388$ ("Formula B")) in calculating the weight of the caged fish in the 2020 fishing season. Formula B gives bigger weight than Formula A, which is the standard length-weight relationship recommended by the SCRS. As Formula B gives bigger weight than Formula A at the time of caging, growth rates are supposed to be smaller than Formula A. On the condition that the CPC would use Formula B in the 2020 fishing season, Japan accepted the import of bluefin from that CPC without the case-by-case monitoring of growth rates upon import applications as a one-year arrangement in 2020.

However, in a retrospective analysis of the 2020 caging/harvesting data, remarkably high growth rates were observed even though formula B was applied. This suggested that the fish which migrate to the CPC's water are fatter than assumed or the analysis by stereoscopic cameras is biased. Japan will continue discussion with the CPC in a constructive manner.

Those experiences, however, made it clear that what Japan can do on the growth rate is limited, because Japan (and its importers) has no control on BFT to be exported to other CPCs nor on farming operation. Consistent efforts by all the importing CPCs and valid control on farmed BFT by farming CPCs using appropriate growth rates are essential to rectify the current situation.

2. Japan's proposal at the 2021 Annual meeting and consideration of other CPC's comments thereon (New Section)

Against this backdrop, at the annual Commission meeting in November 2021, Japan submitted a proposal (PA2-606/2021) that farming CPCs, which have the responsibility in managing and controlling farmed BFT, shall monitor the growth rates for each of their farms, and submit the result of the monitoring, including the reason of higher growth rates, where appropriate, to the ICCAT Secretariat for review by Panel 2.

CPCs provided comments as follows:

- adding a requirement on farming CPCs could create duplication of and potentially conflicting processes given the bilateral cooperation already underway between farming CPCs and Japan.
- development of a functionality in the e-BCD to automatically calculate growth rate of farmed fish would be useful.

Taking into account these comments, we summarized the existing and proposed framework in monitoring the growth rate as follows:

	<i>Farming CPC</i>	<i>Importing CPC</i>	<i>ICCAT</i>
Basic Role/Responsibility	Farm CPCs shall endeavor to ensure that the growth rates derived from the eBCDs are coherent with the growth rates published by the SCRS (Rec. 19-04 para28 (Rec. 21-08 para27))	Importing CPCs monitor growth rates of BFTs to be imported in order to double-check whether farming CPCs manage farming activities properly, thereby contribute to more robust and transparent management and control of farmed BFT.	Discuss and decide necessary action where potential non-compliance is identified.
Current Monitoring Framework	Farm CPCs provide comprehensive data of their farming to Japan upon request.	Japan monitors the growth rates of BFT to be imported to Japan. When significant high growth rate is identified, the import is suspended, and Japan engages in a dialogue with the farming CPC until reasonable explanation for such high growth rate would be provided. Importing CPCs other than Japan do not implement such growth rate monitoring	No formal/regular involvement
Short-term proposal	Farm CPCs shall monitor the growth rates for each of their farms and submit the result of the monitoring to Panel 2. If higher growth rates than the maximum growth rate table established by the SCRS are found, the farming CPC shall explain the reason. (Rec. 21-08 para 27 ter).	Import CPCs should monitor the growth rate (comprehensive data covering not only BFT to be imported into the CPC but also BFT exported to other CPCs shall be provided by farming CPCs. Alternatively, importing CPCs shall be granted the access rights to the necessary data in eBCD system). If higher growth rates than the maximum growth rate table established by the SCRS is found, import CPCs should report to relevant farming CPC and Panel 2 (Rec. 21-08 para 27).	Panel 2 reviews the result of growth rates monitoring, and discuss actions, where necessary.

<p>Mid-term proposal</p> <p>(A functionality in the e-BCD to automatically calculate growth rate is developed and anomalies from the growth rate established by the SCRS would be shown in eBCD)</p>	<p>If higher growth rates than the maximum growth rate table established by the SCRS are found, the farming CPC should report the reason to Panel 2.</p>		<p>ICCAT Secretariat reports the observed growth rates, as well as their anomalies from the figures established by SCRS, to Panel 2.</p> <p>Panel 2 reviews the result of grow rates monitoring, as well as explanations from farming CPCs, where appropriate, and discuss actions, where necessary.</p>
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When the growth rate table established by SCRS will be updated in 2023, it shall be applied to the above Monitoring framework.

3. Proposed text for amending Recommendation 21-08 (New)

27. The SCRS, on the basis of a standardized protocol to be established by the SCRS for the monitoring of recognizable individual fish, shall undertake trials to identify growth rates including in weight and size gains during the fattening period. Based on the result of the trials and other scientific information available, the SCRS shall review and update the growth table published in 2009, and the growth rates utilized for farming the fish referred to under paragraph 34 (c), and present those results to the 2023 annual meeting of the Commission. In updating the growth table, the SCRS should invite independent scientists who have appropriate expertise to review the analysis. The SCRS shall also consider the difference among geographic areas (including Atlantic and Mediterranean) in updating the table. Farm CPCs shall ensure that the scientists tasked by the SCRS for the trials can have access to and, as required by the protocol, assistance to carry out the trials.

27. bis Farm CPCs shall endeavor to ensure that the growth rates derived from the eBCDs are coherent with the growth rates published by the SCRS. If significant discrepancies are found between the SCRS tables and growth rates observed, that information should be sent to the SCRS for analysis. Imports CPCs shall also endeavor to monitor the growth rates and send the information of significant discrepancies to related farm CPCs and Panel 2. [For this purpose, farm CPCs shall provide all the relevant data to imports CPCs to monitor the growth rates in a comprehensive manner.]

27. ter Farm CPCs shall monitor the growth rates for each of their farm using the information of eBCD, and submit the result of the monitoring, including the reason of higher growth rates than the maximum growth rate table established by the SCRS, where appropriate, to the ICCAT Secretariat by February 15 each year for review by Panel 2 at its intersessional meetings. A functionality within eBCD to automatically calculate growth rate shall be considered by eBCD TWG in 2023.

Procedure to monitor the growth rate and submit the result to Panel 2

1. Extract raw data by Flag CPC from eBCD system

Download necessary caging and harvesting data from eBCD system. This information is available from “Reports/Section’s Raw Data/Flag’s Raw Data”.

2. Exporting the data to the growth calculation sheet (GCS)

GCS files should be produced for each farm, in which one sheet is used for each cage. Please see attachment for the detail on how GCS works.

3. Report to Panel 2

When the necessary information for each cage is filled, the growth rates by cages are automatically calculated and summarized in a sheet named “Summary List”, in which the calculated growth rates are compared to the benchmark growth rates based on the SCRS table. Farm CPCs should submit the Summary list to the ICCAT Secretariat for review and discussion by Panel 2.

4. Monitoring the high growth rate

If higher growth rates than the maximum growth rate table established by the SCRS would be found in a cage in which all caged fishes has been harvested, Farm CPC shall report the expected reason of them to Panel 2.

Template proposal to report random controls

Paragraph 214 of Rec. 21-08

(Submitted by EU)

1. Benchmark: Percentage of fish controlled

<i>Farm name</i>	<i>ICCAT Register No.</i>	<i>Total No. of cages after completion of caging operations</i>	<i>No. of cages controlled⁽¹⁾</i>	<i>Percentage of cages controlled</i>

2. Results random controls

<i>Farm name</i>	<i>Date of the control</i>	<i>No. of the controlled cage</i>	<i>eBCD(s) concerned</i>	<i>Expected number of individuals⁽²⁾</i>	<i>No. of individuals verified</i>	<i>Difference (No. of individuals)</i>	<i>Difference (%)⁽³⁾</i>	<i>Follow up/ Actions taken⁽⁴⁾</i>

¹ The number of random controls shall cover at least 10% of the number of cages in each farm after completion of caging operations, always involving at least one control per farm, and rounded up where needed.

² Caged pieces – mortalities (in farm) – harvested pieces

³ $[(\text{expected number of individuals} - \text{number individual verified}) / \text{expected number of individuals}] * 100$

⁴ In case of detected discrepancies

Specifications for ICCAT Seals
(ICCAT Secretariat)

Annex 14 of the *Recommendation by ICCAT amending the Recommendation 19-04 establishing a multi-annual management plan for bluefin tuna in the eastern Atlantic and the Mediterranean* (Rec. 21-08) requires that, prior to their deployment on a purse seine vessel, a trap, or a towing vessel, the provider responsible for the ROP and national competent authorities shall provide a minimum of 25 ICCAT seals to each ICCAT regional [and national observers] under their responsibility and maintain a record of the seals provided and used.

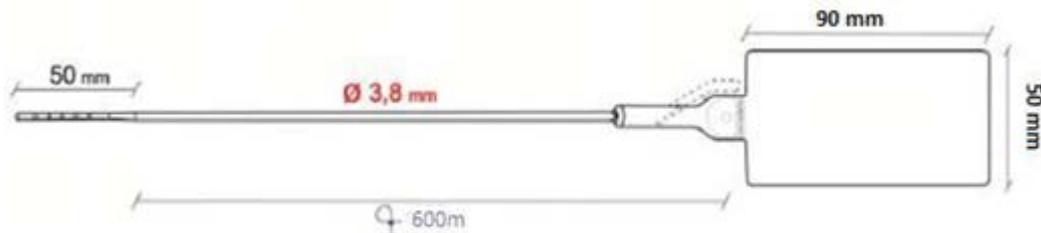
Notwithstanding, at present “ICCAT seals” do not exist, nor does the Recommendation give any specifications or guidance on these. The Secretariat will work with the consortium on availability and design, but request guidance from Panel 2 on the following, presuming that the seals can be designed to order.

As discussed by Panel 2, the Secretariat understands that ICCAT seals should be provided by the consortium to Regional Observers only with the following specifications.

Colour? Yellow

Content? ICCAT logo. ICCAT/CICTA/CICAA and number AT000000X

Standard size?



Possible example of content:

ICCAT/CICTA/CICAA
BFT SEAL No. AT000000X



The seals should be tamper-proof and if possible, laser printed to avoid corrosion.

Responses to requests for clarification on provisions of Rec. 21-08

<i>Topic</i>	<i>Clarification sought</i>	<i>Panel 2 response</i>
Minimum size	<p>Rec. 19-04, Para. 34 and Rec. 21-08, Para 33 requires CPCs take the necessary measures to prohibit catching, retaining on board, transhipping, transferring, landing, transporting, storing, selling, displaying or offering for sale bluefin tuna weighing less than 30 kg or with fork length of less than 115 cm.</p> <p>Our understanding is that observers shall not sign eBCDs following harvest if any of the tuna within the eBCD include tuna are less than 30kg or 115cm fork length, indicating the reason for not doing so in the same eBCD. Is this correct?</p> <p>Do these derogations apply also to harvest or only to point of capture?</p> <p>If undersized fish are harvested at farms, should observers sign the eBCD?</p>	<p>The derogations apply in both instances for Regional Observers. If undersized fish are found at the time of harvest, then the observer should sign the eBCD, but may issue a PNC to alert authorities.</p>
Recording requirements of bycatch / Annex 2	<p>Rec. 19-04, Para 63 and 65 / Annex 2 and Rec. 21-08, Para 74 and 76 / Annex 2 do not explicitly require that bycatch is recorded but does require logbook includes the record of catches including FAO code. The consortium also wishes to note that several electronic logbooks do not allow entry of bycatch species.</p> <p>Is the consortium correct in assuming that bycatch should be recorded in the logbook?</p>	<p>Yes, bycatch should be recorded whether retained or discarded. If no space in electronic logbook this should be included on a separate sheet.</p>
ICCAT Regional Observer Programme	<p>Rec. 21-08 Paragraphs 101-107, Para 187 and Annex 6 - no longer explicitly state that observers shall sign the eBCD following harvest operations.</p> <p>Noting that Rec. 18-13 has not been amended and the section for observer signature in section 6 and 7 of the eBCD remain, does signing the eBCD following harvest remain an ROP role with Rec. 21-08, or is this to be supplanted by verification and validation of the processing and harvesting declarations?</p>	<p>Observers should continue to sign the eBCD.</p>
ICCAT Regional Observer Programme	<p>Rec. 19-04, Para 84 and Rec. 21-08, Para 104 states that one ROP observer shall be assigned to each farm for the whole period of caging operations except for situations of force majeure.</p>	<p>The observer can be shared as long as it is within a single farm.</p>

Topic	Clarification sought	Panel 2 response
	Can the consortium have clarification on the definition of an individual farm as there continue to be examples of separate farms within the ICCAT record sharing one observer for caging operations?	
Prior transfer notification and transfer authorization	<p>Rec. 19-04, Para 112 requires a prior transfer notification to be sent before the start of a transfer operation including voluntary.</p> <p>However, voluntary and control transfers in line with 116 do not require a new transfer authorization.</p> <p>Can we confirm that a prior transfer notification needs to be sent for each separate transfer, voluntary transfer and control transfer?</p>	Separate or voluntary transfer do need prior notification, but not control transfers.
Release from purse seiner / Annex 10	<p>In line with Rec. 19-04, Para 88 and Rec. 21-08, Para 118, when a transfer operation is not authorised, tuna is to be released into the sea in accordance with Annex 10. Rec. 21-08, Annex 6 (XXI) also requires releases to be in accordance with Annex 10.</p> <p>However, Rec. 19-04, Annex 10 states: The release of bluefin tuna from farming cages into the sea shall be recorded by video camera and observed by an ICCAT regional observer, who shall draft and submit a report together with the video records to the Secretariat.</p> <p>While Rec. 21-08, Annex 10 states: The release of bluefin tuna from transport or farm cages into the sea shall be recorded by control camera. All release operations into the sea shall be observed by an ICCAT regional observer.</p> <p>As such there is no explicit protocol for release from the purse seine net.</p> <p>In the case transfer is not authorised and tuna are to be released from the net, should be the release from the purse seine net be videoed as well as monitored by the observer?</p>	Recording is only required for transport and farming cage, but not release from PS, but observer should observe all releases including those from PS.
Monitoring of transfer operations by video camera Voluntary / control transfers	Based on clarifications from Panel 2 intersessional meeting in March 2021, situations such as no transfer authorisation shown at the beginning of video, non-continuous video record, time and date not displayed, are to be considered as of insufficient clarity or quality to make estimates and, therefore a voluntary transfer may be carried out by the operator.	Yes, the understanding of the consortium is correct.

<i>Topic</i>	<i>Clarification sought</i>	<i>Panel 2 response</i>
	Can we confirm this is correct?	
Voluntary / control transfers	<p>Based on clarifications from Panel 2 intersessional meeting in March 2021, the consortium understands that only the final transfer of any series of original, voluntary and control transfers is required to be recorded in the ITD. Furthermore, the template of the ITD in of both Rec. 19-04 and 21-08, Annex 4 does not include sections where voluntary and/or control transfers may be included and identified as such.</p> <p>Can we confirm that there is no requirement to record prior unsuccessful transfers, voluntary transfers and control transfers and only the final definitive transfer is required to be recorded in the ITD section 2 First transfer information?</p>	<p>Yes, the understanding of the consortium is correct.</p>
Voluntary / control transfers	<p>Rec. 21-08, Para 125 states that if the video footage does not meet the minimum standards, the operator may conduct voluntary transfer(s). The consortium notes that this is different to voluntary transfer guidance in Rec. 19-04 which specifically states in Para 92 that states that the donor operator may carry out “a” voluntary control transfer (i.e., singular) after which if no satisfactory results are produced, the CPC authorities shall order a control transfer.</p> <p>In line with Rec. 21-08, does this mean that the donor operator may carry out as many voluntary transfers as it wishes or is this limited to one voluntary transfer per each control operation?</p> <p>Can the consortium also have confirmation on how observers are to determine if the transfer is a voluntary of control transfer (or indeed if this is necessary)?</p>	<p>Yes, the operator may repeat voluntary transfers until satisfactory results are obtained.</p> <p>The observers should be able to distinguish the types of transfers by checking who decided to do that:</p> <ul style="list-style-type: none"> • If it is the CPC, it is a control transfer. • If it is the operator, it is a voluntary transfer.
Voluntary / control transfers	<p>Rec. 21-08, Para 127 requires that “the separation of the transport cage from a purse seine, a trap, or a farm cage shall not occur before the ICCAT regional observer on board the purse seine, or present on the farm or trap, has carried out its tasks”.</p> <p>Are we correct to assume that until the observer has signed (or not signed and entered the corresponding PNC code) the ITD, the observers’ tasks are not complete and the transport cage must remain next to the purse seine vessel, farm or trap?</p>	<p>Yes, the transport cage must remain within a visible distance.</p>

Topic	Clarification sought	Panel 2 response
Voluntary / control transfers	<p>Rec. 21-08, Para 127 requires that “the separation of the transport cage from a purse seine, a trap, or a farm cage shall not occur before the ICCAT regional observer on board the purse seine, or present on the farm or trap, has carried out its tasks”.</p> <p>The consortium also note that realities of transfers mean nets will be disconnected and hauled in following a transfer. Can the consortium obtain clarification on what is to be defined as separation from the transport cage?</p> <p>The consortium suggests that if the purse seine vessels remain alongside the transport cage and within sight, this fulfils requirements of Para 127 and is not separated.</p>	Yes, the understanding of the consortium is correct.
Voluntary / control transfers	<p>Rec. 21-08, Para 128 states that if after the voluntary transfer the video still does not allow an estimation, the competent authority may seal the transport cage to carry out a control transfer at a determined place and time.</p> <p>Are we correct to assume that in such a case, the observer onboard the purse seiner will not monitor this control transfer and the observer’s tasks with respect to this transfer are complete? Instead, this will be monitored by a regional observer deployed at the destination farm in line with Rec. 21-08, Para 129?</p>	Yes, on the first question, the understanding of the consortium is correct, the observer does not need to monitor the control transfer but should observe the sealing of the cage, after which his task is complete. Regarding the second question, the answer is no, as such monitoring may be done by CPC authority, but the regional observer shall monitor it if the competent authority cannot be present at the control transfer.
Rec. 21-08, Annex 4: ITD	Will the ITD template outlined in Rec. 21-08 Annex 4 be used throughout the season, considering that Rec. 21-08 comes into force on 17 of June.	It is up to each CPC to use whichever format they choose until such time as Rec. 21-08 enters into force.
Annex 8: Caging authorization	<p>Rec. 19-04 and Rec. 21-08, Annex 8 requires the caging authorization to be shown at the beginning and/or end of the caging video. Unlike the transfer authorization no specific format for caging authorization is established.</p> <p>Our understanding is that the authorization is a means to uniquely identify the video record. As such, can a single caging authorization be used for different caging operations?</p>	No, one authorisation for each caging operation is required
Annex 8: Recording caging operation	<p>Rec. 21-08, Para 162 states that stereoscopic camera footage does not need to comply with point 1d of Annex 8. Rec. 21-08, Para 165 states that stereoscopic camera footage (and conventional) shall be made available to the observer.</p>	No, if the opening and closing of the case door is not shown, the stereo video record cannot be used.

Topic	Clarification sought	Panel 2 response
	In the case that the only compliant video record available is the stereoscopic video record, is the observer able to use this record to estimate number of tuna caged if the opening and closing of the cage door is not shown?	
Recording caging operation	<p>Rec. 21-08, Para 165 requires that access to stereoscopic and conventional camera videos are provided to the ROP.</p> <p>Does this indicate that the ROP may be required to estimate weight of tuna caged using stereoscopic footage?</p> <p>The consortium is willing to engage in this but note that this will require additional training and access to software.</p>	No, this is not required. The observer is required to estimate the number only.
Annex 11: Fish that die during caging	<p>Rec. 21-08, Para 167 and Annex 11 require that fish that die during caging operations shall be reported in the relevant field in section 6 of the eBCD. However, section 6 does not have a relevant field for reporting dead fish, only live fish caged.</p> <p>Where will dead fish following caging be recorded in the eBCD?</p>	The eBCD system needs to be revised to record this information, but the comment box can be used meanwhile until such time the system is updated. This issue should be referred to the eBCD Working Group.
Annex 6: Harvesting	<p>ROP are required, in line with Rec. 21-08, Annex 6, to verify harvesting authorisation.</p> <p>Can the consortium have clarification on what information the harvest authorisation this should contain and what format it should be in? Should it contain all the information outlined in Rec. 21-08, Para 188?</p>	The authorisation should contain the information in para 188, but this is not clearly specified. Observers should take the word of the farm operator that the authorisation is valid.
Harvesting authorisation	<p>In line with Rec. 21-08, any harvest is subject to an authorisation.</p> <p>Is a new harvesting authorisation required for each harvest operation? If so, can the consortium have clarification on what constitutes an individual harvesting operation and therefore subject to a specific harvest authorisation?</p>	The authorisation can cover more than one operation if indicated in the authorisation issued. If no period specified, observer may need to check with the authorities.
Harvesting authorisation	<p>In line with Rec. 21-08, any harvest is subject to an authorisation.</p> <p>If the observer has no evidence of a harvest authorisation being issued, should they not sign the eBCD and/or harvest declaration?</p>	The understanding of the consortium is correct, the observers should not sign in this case.

Topic	Clarification sought	Panel 2 response
Processing and harvesting declaration	<p>Rec. 21-08, Paras 192 and 193 and Annex 6 requires validation of the harvest / processing declaration by the ROP.</p> <p>Are there any circumstances, as is the case with the eBCD, when the ROP would not validate the harvest / processing declaration, for example if not in agreement with the information contained, or undersized fish are included?</p>	Observers should not sign if they do not agree with the information contained and should issue a PNC if appropriate.
Annex 8: Release operations	<p>Rec. 21-08, Annex 8 establishes minimum standards for video recordings for transfer, caging and/or release operations. Annex 10 only explicitly requires that release of bluefin tuna from transport or farm cages be recorded by camera.</p> <p>As such, can the consortium assume that releases from the purse seine net do not have to comply with Annex 8 minimum requirements?</p>	There is no recording required so Annex 8 would not apply.
Annex 10: ICCAT Release Report	<p>Rec. 21-08, Annex 10 requires that a release report shall be completed for each release operation by the donor or farm operator. The release report template includes catching vessel as possibly carrying out the release.</p> <p>Is a release report required to be produced following releases from purse seine nets?</p>	Yes, a release report is required for each release, including those from purse seiners.
Annex 10: ICCAT Release Report	<p>Rec. 21-08, Annex 10 requires that the ICCAT ROP validate the information in the release report.</p> <p>Noting that there is no section whereby the ICCAT ROP may indicate the reasons for not signing, are there instances when a ROP may not sign a release report?</p>	The Regional Observer should not sign if they do not agree with the content. The reason for not signing may be indicated in the box allocated for observer signature
Annex 10: Farm releases	<p>Release operations from farms must be carried out, in line with Rec. 21-08, Para 9 of Annex 10, within 3 months of the last caging operation of the fish concerned.</p> <p>Can the consortium regard the date listed in the corresponding eBCD(s) for the caging, section 6, be the corresponding date of last operation for the fish concerned?</p>	Yes, the understanding of the consortium is correct.
Annex 11: Treatment of dead fish during first transfer	<p>There is some inconsistent interpretation of treatment of dead fish following first transfer. In some cases, section 3 of the eBCD includes all fish sold to the trader (which occurs prior to the transfer). As such, this number also includes the dead fish that may eventually occur following the transfer. However, Annex 11 of both Rec. 19-04 and Rec. 21-08 state that the</p>	Although the provision only pertains to live fish, the inclusion of dead fish in this section would not be sufficient in itself to warrant issuing a PNC.

Topic	Clarification sought	Panel 2 response
	<p>totals from section 3 and 4 are equal to the total of section 2, while the number of bluefin tuna transferred live as reported in the ITD must equal section 3.</p> <p>Can the consortium obtain clarification that if dead fish are included in the figure for section 3 that this is a PNC?</p>	
<p>Rec. 21-08, Annex 12: ICCAT Caging declaration</p>	<p>In line with definitions of Rec. 21-08, cagings mean any relocation from transport cage or trap to the farm. However, the caging declaration template does not include a section to include a trap in the case the caging is directly from the trap to the farm cage.</p> <p>Can the consortium have confirmation on how trap details shall be recorded in the caging declaration?</p>	<p>In the case the caging of fish coming from a trap is carried out without the use of a towing vessel (directly from the trap to the farm cage), in the caging declaration template the field "Towing vessel name" could be manually replaced by "Trap name".</p>
<p>Rec. 21-08, Annex 14 Para. 128: Sealing operations</p>	<p>Can the consortium confirm that only those cages whereby the competent authority requires a control transfer to be carried out at a determined place and time require a seal to be placed in accordance with Annex 14?</p>	<p>Yes, the understanding of the consortium is correct</p>
<p>Rec. 21-08, Annex 14: Sealing operations</p>	<p>In line with Annex 14, the consortium is required to provide a minimum of 25 ICCAT seals to each ROP prior to their deployment.</p> <p>Can the consortium obtain clarification on how these seals are to be delivered to the consortium for later delivery to the ROPs?</p> <p>The consortium would like to suggest that these seals are delivered to catching vessels by the respective CPC authorities, with a list of these seals provided to the consortium. Upon embarkation the observer takes possession of these seals, corroborating that their identification matches the list provided.</p>	<p>No, as discussed by Panel 2, the consortium is to source the seals and deliver them with equipment to Regional Observers. The cost of these will be charged to the owners/operators as part of the ROP fees.</p>
<p>Transitional period for sealing cages</p>	<p>Can the consortium obtain an early indication of which fleets / CPCs are likely to implement sealing of bluefin cages for the 2022 fishing season?</p>	<p>Please refer to the information contained in the individual fishing plans. Turkey indicated that they will be implementing this provision on a trial basis.</p>

Updated algorithms for estimating bluefin tuna weight at catch for fish destined for farming operations

(Submitted by the ICCAT Secretariat)

Introduction

Length-weight relationships have several diverse applications, namely to fish biology, physiology, ecology, stock assessment and conversion from numbers to biomass estimates. In biological studies, weight-length relationships enable following seasonal variations in fish growth (Santos *et al.* 2002, Freon, 1979, Jones *et al.*, 1999, Richter *et al.*, 2000). In the case of Atlantic bluefin tuna, a comprehensive analysis of the wild fish size and weight measurements was conducted by Rodriguez-Marin *et al.* (2016), based on the collection of data from different fisheries, gears, and covering a wide spatial-temporal distribution. This research provided the SCRS with a set of size, weight, and size-weight conversion functions for both East and West bluefin tuna stocks (Rodriguez-Marin *et al.* 2016). In 2016 and 2017, the SCRS reviewed and adopted the Deguara *et al.* (2017) and Katavic *et al.* (2018) conversion functions (length to weight) to be used in stereoscopic-camera systems that allow size measurements of bluefin tuna during farming operations and for the estimation of the total weight at catch for fish destined for farming operations in the Mediterranean Sea and Adriatic, respectively.

In 2018 the Commission requested an update to the expected growth rates for farmed bluefin tuna provided by the SCRS in 2010. Due to the logistics of farming operations, the estimation of the initial weight of fish caught destined to farming from size measurements normally taken by stereoscopic camera systems is required. These weight estimates use current SCRS adopted weight-at-size relationships (Rodriguez-Marin *et al.*, 2016; Deguara *et al.*, 2017; Katavic *et al.*, 2018). However, significant differences in fish weight at caging have been noted when compared to the predicted weights from the latter algorithms in specific seasons and geographical areas. These are attributed to the changes in the fish condition throughout the year.

Updated algorithms

Therefore, in 2021 the SCRS revised the length-weight relationships in use for estimating the catch weight for bluefin tuna destined farming for two eastern Atlantic areas (Atlantic coast of Morocco and southern Portuguese coasts), for which there were new data/studies, and concluded:

1. *Morocco Atlantic coast* – The equation by Rodriguez-Marin *et al.* (2016) provided the best fit to the Moroccan Atlantic catch transferred to cages during the May-June period.
2. *Southern Portuguese coast (Algarve)* – The commonly used Rodriguez-Marin *et al.* (2016) and Deguara *et al.* (2017) equations overestimate the weight at caging. Instead, the new equation by Lino *et al.* (2021) provides more accurate estimations of weight for fish caught off the southern Portuguese coast during the exit migration (June - August period) from the Mediterranean Sea to the Atlantic Ocean. However, for fish caught in April-May, when moving into the spawning grounds in the Mediterranean Sea, the observed weights were within the expected confidence bounds of the predicted equation by Rodriguez-Marin *et al.* (2016) for these months.

Accordingly, the estimation of the weight of the eastern Atlantic and Mediterranean bluefin catch that will go to farming operations should be done using the individual length measurements at caging operations, the length-weight equation $RWT = \alpha * SFL^\beta$ and the specific alpha (α) and beta (β) parameters for the following areas and time/period of the catch operation:

<i>Area of catch</i>	<i>Time/ period of catch</i>	<i>Alpha</i>	<i>Beta</i>	<i>Reference</i>
Adriatic Sea	May-July	3.77278E-05	2.86308	Katavic <i>et al.</i> (2018)
Mediterranean Sea	May-June	2.8684E-05	2.9076	Deguara <i>et al.</i> (2017)
Morocco Atlantic coast	May	3.50801E-05	2.886913883	Rodriguez-Marin <i>et al.</i> (2016)
	June	3.50801E-05	2.883091788	
Portuguese coast	April	3.50801E-05	2.879610235	Rodriguez-Marin <i>et al.</i> (2016)
	May	3.50801E-05	2.886913883	
	June-August	6.1160E-05	2.7494	Lino <i>et al.</i> (2021)

where, RWT corresponds to the total weight (in kg) and SFL the Straight Fork Length (in cm).

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Atlantic Bluefin Tuna MSE – Background & Structure

Executive Summary

This document describes core concepts of the Atlantic bluefin tuna management strategy evaluation (MSE). The intention is to provide sufficient knowledge about the structure of the MSE to facilitate understanding and discussion among scientists, fishery managers and other stakeholders in the lead up to scheduled adoption of a management procedure (MP) in November 2022.

Background

The SCRS's Bluefin Tuna Species Group has been developing a management strategy evaluation (MSE) framework for Atlantic bluefin tuna (BFT) since 2014 with support from the Atlantic-Wide Research Programme for Bluefin Tuna (GBYP). In 2015, the Commission called for adoption of a management procedure (MP) based on the MSE (Rec. 15-07), and preliminary work was first presented to the Commission in 2016. Since then, an MSE expert has been contracted to develop and coordinate the MSE. There have been multiple meetings in which the SCRS interacted with the Commission on MSE, and this included apprising the Commission of progress for the purpose of soliciting feedback. The Commission adopted conceptual management objectives for BFT in 2018 (Res. 18-03) to help guide MSE development. The MSE work is on track for ICCAT to adopt an MP in 2022, in accordance with the Commission's MSE workplan. Further discussion on the need for and rationale behind MSE is provided in **Addendum A to Appendix 11**.

MSE Overview

Mixing of East and West Stocks

The Atlantic bluefin tuna MSE framework assumes that there are two genetically distinct *stocks* (western and eastern) that migrate and mix throughout the North Atlantic. The 45°W management boundary is used to divide the East and West *management areas*, but unlike the current stock assessment, the MSE takes account of the reality that bluefin from the eastern stock migrate into the West management area, and *vice versa*. Only western fish are assumed to be found in the Gulf of Mexico, and only eastern fish are assumed to be found in the Mediterranean Sea, but stock mixing takes place in the other 5 spatial strata, with stock composition varying by calendar quarter and age class (i.e., 1-4, 5-8, and 9+ year olds). Stock movements are projected based on data from electronic tagging, as well as genetic and otolith analyses (GBYP-supported research). Importantly, conservation targets are (appropriately) by *stock*, not by *area*.

Indices of Abundance

Data from 26 different indices, both fishery dependent and independent, are used to condition the MSE. The MSE's historical period is from 1965 through to 2019 (with an additional data-poor historical period of 1864-1965), and analysis of projections focuses on the next 30 years. The MSE computer code was independently reviewed in 2021, and no substantive problems were found.

Operating Models

Each operating model (OM) in the MSE represents a plausible scenario/a potential truth for the dynamics of the stocks and the fishery. The BFT MSE includes 48 main operating models (i.e., the “reference set or grid of OMs”) based on four major sources of uncertainty:

1. Recruitment: the number of age 1 fish; reflects stock productivity over time (3 options)¹
2. Spawning fraction/Natural mortality: the percent of individuals who reproduce/die of natural causes at a given age (2 options)
3. Scale: Rough abundances of fish in the West and East management areas (4 options)
4. Length composition weighting: a gauge of the confidence in the size data (2 options)

The 48 OMs allow for all combinations of these options ($3 \times 2 \times 4 \times 2 = 48$). The relative plausibility of each assumption has been ranked by the SCRS according to a schema, referred to as “weighting,” so that the results reflect more importance given to the more plausible OMs. The recruitment and scale options have been weighted based upon expert opinion, and the other two uncertainties are weighted equally. There are 44 additional “robustness” OMs to evaluate less likely but still possible scenarios, similar to more extreme “sensitivity runs” in a stock assessment.

Management Objectives

Based in part on suggestions from the [March 2019 Panel 2 intersessional meeting](#), the BFT MSE includes seven key performance statistics as an initial benchmark for evaluation of the Commission’s selected management objectives (see **Addendum B to Appendix 11**). Additional performance statistics are being evaluated to provide supplemental information, and full results are available elsewhere.

Management Procedure in Practice

Figure 1 illustrates how a management procedure will work. Two years of index data will be used to calculate the TACs for both the eastern and western areas for the subsequent 2-year period. In brief, as the population grows, the indices will increase, and the TACs will then increase. Similarly, if the population decreases, the indices will decrease, and the TACs will then decrease. Depending on the MP adopted, TAC changes could be limited by maximum or minimum TACs, or stability clauses restricting the percent change in TAC from one management cycle to the next.

Other Resources

[Atlantic Bluefin Tuna MSE splash page, including interactive Shiny App](#) (English only)

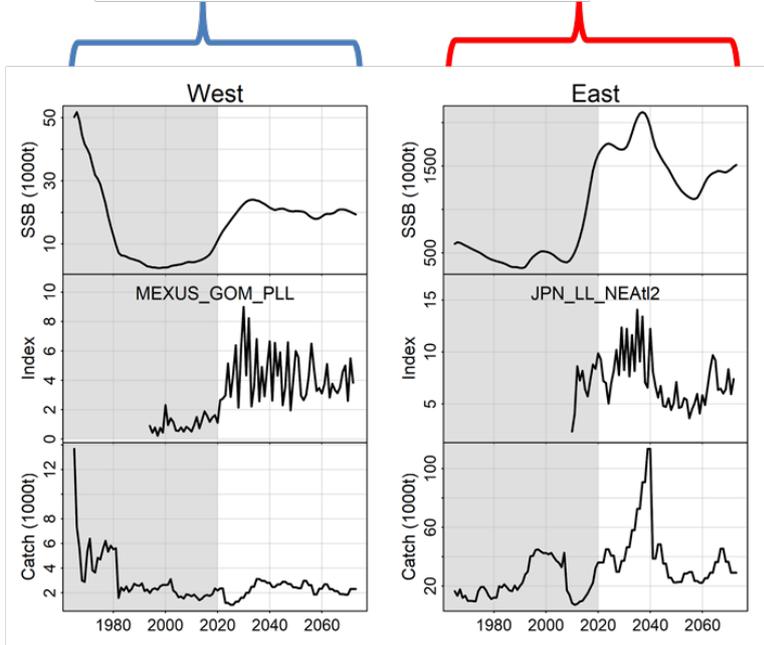
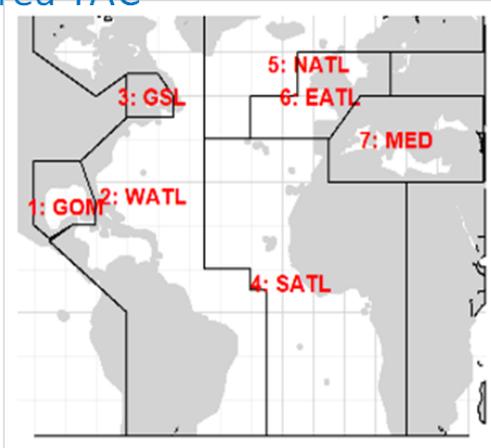
[Harveststrategies.org MSE outreach materials](#) (multiple languages)

Key terminology used in this document is available as **Addendum C to Appendix 11**.

¹ The first two recruitment scenarios in the OMs mimic the still unresolved debate between the low and high recruitment scenarios for the west Atlantic bluefin assessment. For the first of these two scenarios, the western stock switches from a high to a low productivity regime in the mid-1970s, while the eastern stock switches in the opposite direction in the mid-1980s. For the second recruitment scenario, there is no regime shift for either stock (this corresponds to the high recruitment scenario for the west Atlantic bluefin assessment). The third recruitment scenario in the OMs is identical to the first historically, but sees a reversal of the earlier regime shifts in the near future. The three options are weighted 40/40/20%.

Rule for West
area TAC

Rule for East
area TAC



Status & Safety
statistics apply to
“Biological” Stock

Yield & Catch
Stability statistics
apply to Area

Figure 1. Illustration of how a management procedure would operate. Any CMP would consist of two catch rules, one for each area. The top panel shows the 7 geographic strata used in the MSE. Strata 1-3 are part of the western management area, and strata 4-7 are part of the eastern management area. The time series plots in the bottom panel show the historical period starting in 1965 and projections through 2073 for the West (left) and East (right). The top time series shows spawning stock biomass (SSB), the middle shows the values for one index used in the catch rule (Mexico-US Gulf of Mexico longline index for the West and Japanese longline index for the East, in this example), and the bottom shows the total allowable catch. Values are for one potential outcome from one example CMP, and based on one operating model. In essence, any increase or decrease in the SSB leads to an increase or decrease, respectively, in the abundance index, which in turn modifies the TAC to similarly increase or decrease, based on the CMP. This is why the three time-series have roughly similar, but slightly offset, trends. Note that performance statistics related to status and safety are reported by biological stock, whereas statistics related to yield magnitude and stability apply to management area.

Addendum A to Appendix 11**Motivation for and advantages of MSE**

The move towards Management Strategy Evaluation (MSE) as the basis for managing fisheries had its origins in the “Precautionary Principle” enunciated at UNCED in Rio de Janeiro in 1992. The 1995 FAO Technical Consultation on the Precautionary Approach (PA) to Capture Fisheries, held in Lysekil, effectively endorsed the MSE approach (as developed shortly before then in Australia and in the Scientific Committee of the IWC) as the way for fisheries management to take the PA into account. Decision rules for setting catch limits needed to be adopted, where these had been shown through using simulation testing to be very likely to avoid undesirable outcomes.

A meeting of all the tuna RFMOs (i.e., Kobe III) in 2011 decided on a general move towards this approach for setting catch limits. This was reconfirmed by ICCAT for eight priority stocks, including the two stocks of Atlantic bluefin tuna, in 2015 (Rec. 15-07), both to follow the Kobe III agreement and as a way to implement ICCAT’s principles of decision making practically (Rec. 11-13).

A further motivation for moving away from the conventional “best assessment” approach to setting catch limits was to be able to introduce greater stability into fisheries management decisions in the interests of the industry. The often-poor precision of fisheries assessments, clearly evidenced by the differences between the 2020 and 2021 WBFT assessments, and changes made over time to attempt to improve the associated methodology, frequently leads to catch limit recommendations that can be highly variable from year to year. MSE allows this to be avoided by providing a basis that allows limits to be set on the extent of this variability without placing the resource at undue risk. MSE can also be used to evaluate - and account for - the main sources of uncertainty in both biological and fishery dynamics, as well as natural variability. Critically, in the case of Atlantic bluefin tuna, the MSE accounts for mixing between two distinct stocks, an influential complexity that the current stock assessment has been unable to address. Furthermore, time spent by scientists attempting to explain changes in models from one year to the next and in perennial negotiations over minor changes to catch limit recommendations (which will have only very limited impact on the resource) can be put to better use.

Responsible fisheries management requires an appropriate choice between maximising the catches to be achieved in the longer term, while at the same time avoiding serious risk of the stock unintentionally resulting in the stock being reduced to a dangerously low level. MSE provides the basis to quantify the trade-offs involved and make them clearly understood by decision makers. It also allows for more holistic consideration of socioeconomic objectives. Importantly, MSE provides a structured feedback approach to incorporating new index information, with the progress of time.

Addendum B to Appendix 11

Management objectives (from Res. 18-03), 2019 guidance from Panel 2 on how to operationalize the management objectives and the proposed corresponding performance statistics

<i>Management Objectives (Res. 18-03)</i>	<i>Guidance from PA2 (2019)</i>	<i>Corresponding Performance Statistics</i>
The stock should have a greater than []% probability of occurring in the green quadrant of the Kobe matrix	“There should be a 60% or greater probability of being in the green zone of the Kobe plot. The SCRS will present results of the simulation in plots with a trajectory so that managers can evaluate the status of the stock (F relative to FMSY and B relative to BMSY) at intermediate points between zero and 30 years, and at the end of the 30-year period.”	AvgBr – Average Br [i.e., biomass ratio, or spawning stock biomass (SSB) relative to dynamic SSB _{MSY} ¹] over projection years 11-30 Br30 – Br after 30 years OFT – Overfished Trend, SSB trend if Br30<1.
There should be a less than []% probability of the stock falling below B _{LIM} (to be defined)	“There should be no more than a 15% chance of the stock falling below B _{LIM} at any point during the 30-year evaluation period. A definition of B _{LIM} should be recommended by SCRS.”	LD – Lowest depletion (i.e., SSB relative to dynamic SSB _{MSY}) over 30-year projection period
Maximize overall catch levels	“Evaluate outcomes related to maximizing mean catch levels with respect to each management area over the short, medium, and long-term.”	AvC10 – Median catches (t) over first 10 years AvC30 – Median catches (t) over 30 years
Any increase or decrease in TAC between management periods should be less than []%	“Evaluate outcomes of 20%, 30%, and 40% as well as no limitation on the change in TAC between management periods.”	VarC –Variation in catches (%) between management cycles

¹ Dynamic SSB_{MSY} is a set fraction of dynamic SSB₀, which is the spawning stock biomass that would occur in the absence of fishing, historically and in the future. The value can change over time since it is based on current recruitment levels, which typically fluctuate.

Addendum C to Appendix 11**Key terminology used in this document**

AvC10: Average catch years 1-10, measures short term yield.

AvC30: Average catch years 1-30, measures long term yield.

Br30: Spawning biomass relative to dynamic SSB_{MSY} in projection year 30.

Limit reference point (LRP): A benchmark for an indicator that defines an undesirable biological state of the stock such as the B_{LIM} or the biomass limit which is undesirable to be below. To keep the stock safe, the probability of violating an LRP should be very low.

LD: Lowest depletion (spawning biomass relative to dynamic SSB_{MSY}).

Management objectives: Formally adopted social, economic, biological, ecosystem, and political (or other) goals for a stock and fishery. They include high-level or conceptual objectives often expressed in legislation, conventions or similar documents. They must also include operational objectives that are specific and measurable, with associated timelines. When management objectives are referenced in the context of management procedures, the latter, more specific definition applies, but sometimes conceptual objectives are adopted first (e.g., Rec. 18-03 for ABFT).

Management procedure (MP): Some combination of monitoring, assessment, harvest control rule and management action designed to meet the stated objectives of a fishery, and which has been simulation tested for performance and adequate robustness to uncertainties. Also known as a harvest strategy.

Management strategy evaluation (MSE): A simulation-based, analytical framework used to evaluate the performance of multiple management procedures relative to the pre-specified management objectives.

Operating model (OM): A model representing a plausible scenario for stock and fishery dynamics that is used to simulation test the management performance of CMPs. Multiple models will usually be considered to reflect the uncertainties about the dynamics of the resource and fishery, thereby testing the robustness of management procedures.

Performance statistic: A quantitative expression of a management objective used to evaluate how well an objective is being achieved by determining the proximity of the current value of the statistic to the objective. Also known as a performance metric or performance indicator.

Reference Grid: The operating models that represent the most important uncertainties in stock and fishing dynamics, which are used as the principal basis for evaluating CMP performance. The reference operating models are specified according to factors (e.g., natural mortality rate) that have multiple levels (possible scenarios for each factor, e.g., high / low natural mortality rate). Reference operating models are organized in a usually fully crossed orthogonal 'grid' of all factors and levels.

Robustness Set: Other potentially important uncertainties in stock and fishing dynamics may be included in a Robustness Set of operating models that provide additional tests of CMP performance robustness. They can be used to further discriminate between CMPs. Compared to the Reference Grid operating models, the Robustness Set models will be typically less plausible and/or influential on performance.

VarC: Average % variation in TAC between management periods.

Atlantic Bluefin Tuna MSE – Preliminary Results & Next Steps

Executive Summary

This document presents updated results of the Atlantic bluefin tuna management strategy evaluation (MSE). The intention is to provide sufficient knowledge to facilitate discussion among scientists, fishery managers and other stakeholders at the 4 March 2022 meeting of Panel 2. This document summarizes some preliminary results and highlights key areas for Panel 2 input.

Candidate Management Procedures

There are currently 9 candidate management procedures (CMPs)¹ under development by 6 different international teams of scientists (**Table 1**). All currently assume a 2-year management cycle and calculate a separate total allowable catch (TAC) for the West and East management areas.

Key information

The SCRS proposes a two-step process for facilitating CMP selection.

Development tuning for CMP comparison (Step 1)

- CMPs are being tested on a common Br30² performance level (currently 1.0, 1.25 or 1.5, for each stock)
- SCRS will then rank CMPs across the remaining performance statistics corresponding to yield, status, safety and stability objectives
- Panel 2 will then be able to evaluate relative performance of the CMPs to select one or several top CMPs

Performance tuning of culled list of CMPs to determine the final CMP specifications (Step 2)

- All CMPs include at least one tuning parameter for each area that can be adjusted to determine how heavily or lightly it applies fishing pressure.
- These tuning parameters can be altered to achieve desired performance on the risk-reward tradeoff (i.e., catch vs. biomass) for each of the East area/eastern stock and West area/western stock.
- Once top performing CMPs are selected in step 1 they will be *performance tuned* to best achieve Commission objectives. This dial setting will be fixed for the adopted MP.

Preliminary Results

We present preliminary results from anonymous CMPs selected to show key performance tradeoffs for competing management objectives. All CMPs will be refined and improved over the coming months. **Figures 1-6** depict preliminary results and key material. As requested by Panel 2 we have added a table of the percentage of biomass in each area that is of Eastern Stock origin by decade and by region, overall operating models in the reference grid (**Table 2**).

¹ While 9 CMPs are under development, not all will be deemed effective enough to be eligible candidates for MP adoption. Only 2 or 3 CMPs will be presented to the final Panel meeting before the Commission meeting for selection of one to present to the Commission.

² Br30 is the biomass ratio, or spawning stock biomass (SSB) relative to dynamic SSB_{MSY}, after 30 years.

Next Steps

Three Panel 2 meetings are scheduled in 2022 for the exchange of information among the SCRS, Panel 2, and stakeholders in advance of the 2022 Commission meeting. The Bluefin Species Group has also appointed ambassadors to help improve understanding of the MSE and answer questions and will continue with the Ambassador meetings. These experts include English, French and Spanish speakers.

At the 4 March 2022 Panel 2 meeting, feedback will be requested on:

- The % TAC change and retention of the default of no caps
- Performance statistics, noting that we currently have 17 but have elevated 8 to be the most useful for distinguishing performance differences across CMPs: **AvgBr, Br30, OFT, LD (5% and 15%iles), AvC10, AvC30, VarC** (See PA2_24 for descriptions) and still have a statistic for fishing mortality in development
- Initial operational management objectives
- The process of CMP selection and CMP performance tuning.
- What additional information PA-2 needs to facilitate the decision points (Noted below) for the 9 May Panel 2 meeting.

At the 9 May 2022 Panel 2 meeting, feedback will be requested on:

- Decisions on final operational management objectives (e.g., Blim) and associated performance statistics
- Decisions on the process for final CMP selection- culling the 9 down to 3 or fewer
 - Development tuning
 - Performance tuning
- Decisions on certain CMP specifications
 - Final agreement on TAC change interval
 - Final agreement regarding limitations on % TAC change up and down
- Feedback on the culled list of CMPs

Other Resources

[Atlantic Bluefin Tuna MSE splash page, including interactive Shiny App](#) (English only)

[Harveststrategies.org MSE outreach materials](#) (multiple languages)

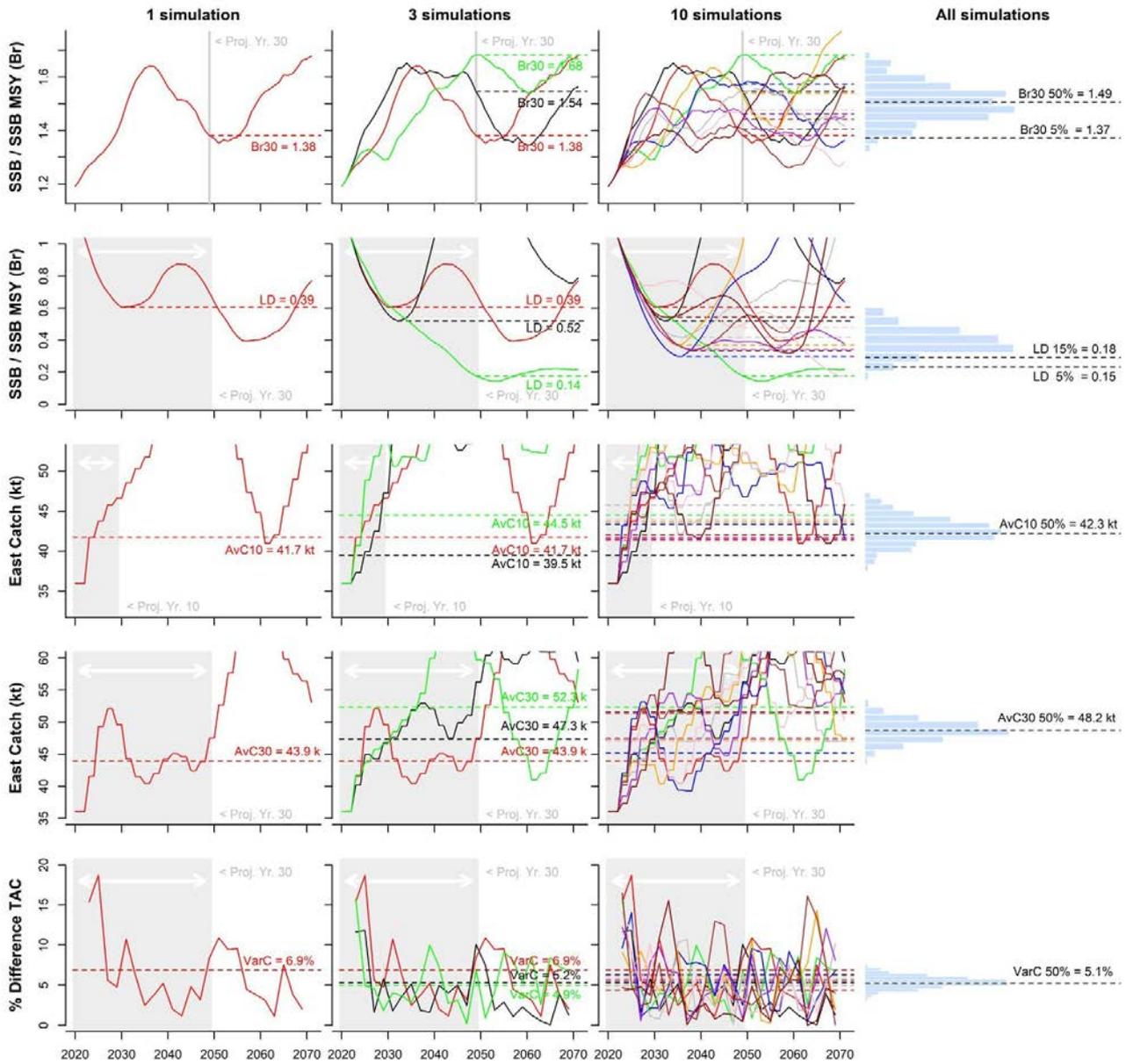


Figure 1. Visual descriptions of the calculation of five key performance statistics illustrating one simulation (first column), three simulations (second column) and ten simulations (third column) for one operating model (OM) and one CMP. The fourth column shows a histogram of values across all simulations (100 in this case) over the relevant time period (shaded area), providing an example of how the statistic is calculated (black text).

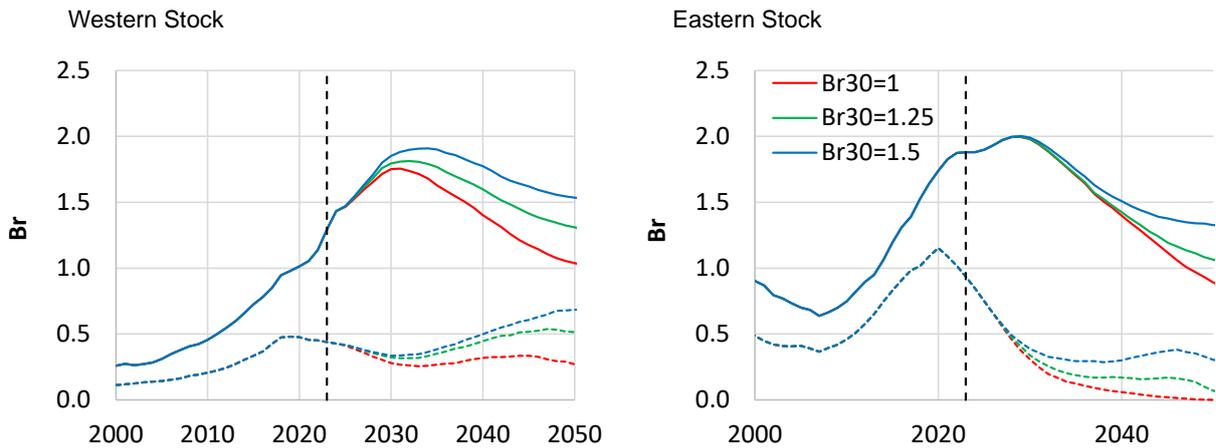


Figure 2. Western (left) and Eastern (right) stock time series of SSB/SSB_{MSY} (median and lower 5 percentile across all OMs) for three different $Br30$ tuning targets for the CMPs shown in previous Figure (CMP1-red, CMP2-green, CMP3-blue). These three CMPs are one actual CMP tuned to three different $Br30$ values. The solid lines show the median, and the dashed lines show the lower 5th percentile (i.e., meaning that 5% of biomass values across all OMs and all simulations fall below the dashed lines). The red dashed line in the right panel illustrates the risk of eastern stock collapse with a development tuning target of $Br30=1$.

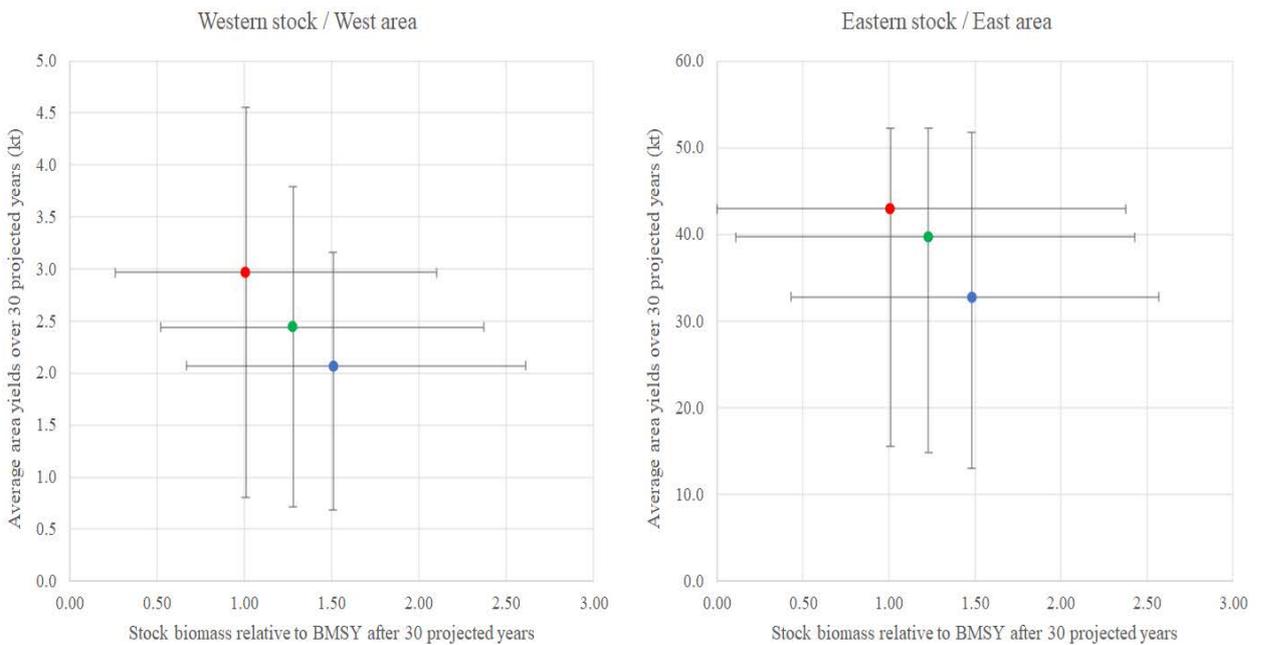


Figure 3. Western (left) and Eastern (right) Area Yields (what is taken by fishing over 30 years, expressed as annual average) vs spawning stock biomass (how much of the resource remains after those 30 years) for three CMPs (CMP1 – red, CMP2 – green, CMP3 – blue), with three different median $Br30$ tunings. The 90% probability intervals are also shown (by the error bars), again illustrating the danger of stock collapse with a development tuning target of $Br30=1$.

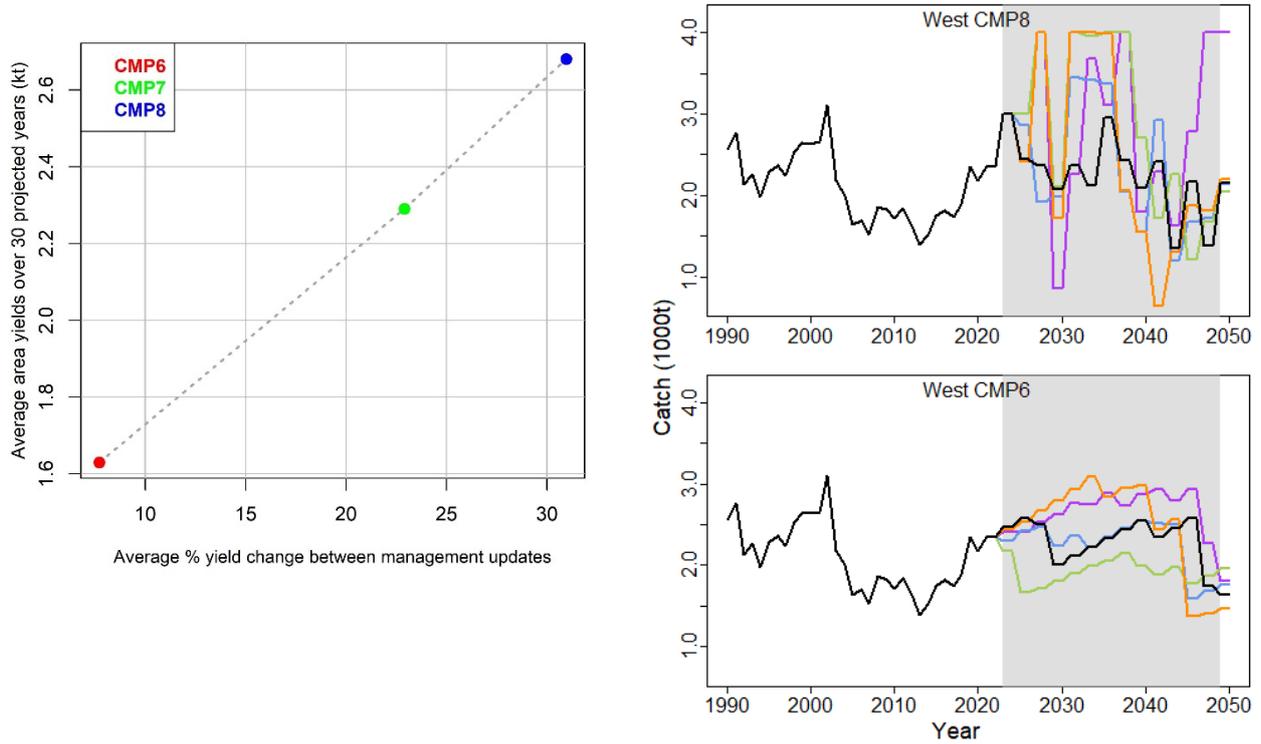


Figure 4. Performance trade-off between West area yields and yield variability. The left panel shows the tradeoff on average over the 30-year projection period across three CMPs (CMP6 – red, CMP7 – green, CMP8 – blue) with comparable biomass performance. Higher catches of CMP8 (upper right blue point) result in higher variability (>30%) of the extent of TAC changes whereas CMP6 (lower right red point) has lower but more stable catches (<10% average annual change in TAC). The right panel shows the time series of annual catches for CMP6 (bottom right) and CMP8 (top right) for the 30-year projection period (shaded), as well as the historical period. The four colored lines depict projections from four different possible future simulations (possible realities, arising mainly from differences in future recruitments) generated from one operating model to display the potential variability, with the median shown in black. The tighter cluster of catch trajectories for CMP6 illustrates the greater stability in catches compared to CMP8 with its higher average yield, demonstrating the trade-off between yield and yield variability.

West	Br30 target	VarC (median)	AvC10 (median)	AvC30 (median)	LD (5th percentile)	LD (15th percentile)
CMP1	1.25	13.79	3.09	2.87	0.22	0.43
CMP2	1.25	11.36	2.05	2.21	0.26	0.48
CMP3	1.25	15.97	2.96	2.53	0.02	0.25
East	Br30 target	VarC (median)	AvC10 (median)	AvC30 (median)	LD (5th percentile)	LD (15th percentile)
CMP1	1.50	16.72	39.06	37.65	0.30	0.55
CMP2	1.50	11.41	34.74	28.50	0.33	0.52
CMP3	1.50	13.95	41.48	30.29	0.07	0.29

Figure 5. Demonstration of the ‘Quilt’ plot, which illustrates an approach for summarizing the performance of candidate management procedures from development tuning. All CMPs are tuned to meet the same median Br30 value (in this case, 1.25 for the western stock and 1.5 for the eastern stock) to elucidate relative performance across other statistics. This ‘levels’ the field to facilitate evaluating choices amongst top performing CMPs. Six key performance statistics are shown, which are illustrated above. The absolute value of the statistic is shown, and the CMPs are ranked, and color coded within a column. The colors are simply for visual representation of best (green), intermediate (yellow) and worst (red) within a column. Note that while red highlights the worst performing CMP for that statistic, it does not necessarily indicate unacceptable performance.

	VarC (50%)	AvC10 (50%)	AvC30 (50%)	AvgBr (5%)	LD (5%)
CMP1 +20 / - 20% on TAC change	11.3	35.9	31.1	0.40	0.07
CMP2 +20 / -30% on TAC change	12.3	36.6	30.9	0.61	0.11
% change in performance	9%	2%	-1%	51%	51%

Higher percentage TAC reduction allows for faster stock recovery with little loss in yield over time

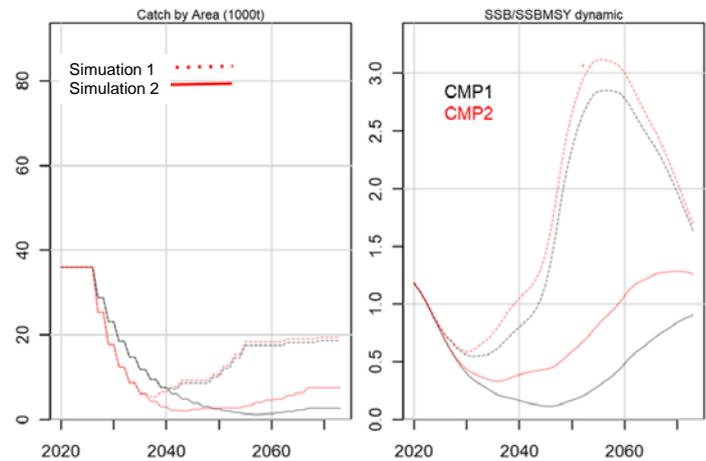


Figure 6. Rationale for allowing asymmetrical catch stability restrictions, using 20% for TAC increases but greater than 20% percent for TAC decreases. Allowing greater than 20% reductions in TAC leads to limited loss in total catch and substantial improvement in safety. The table on the left shows performance and percent change in performance for five performance statistics for two CMPs. CMP1 uses a maximum change of 20% for both TAC increases and decreases. CMP2 limits TAC increases to 20% but with up to a 30% limit on TAC decreases. Higher percentage TAC reduction allows for faster resource recovery with minimal loss in yield and minimal change in variability in catch. The Figures on the right show the catch (for the Eastern area, middle right) and SSB/SSB_{MSY} (for the Eastern stock, far right) for two simulations of each CMP.

Table 1. Table of candidate management procedures (CMPs), indicating in red where changes have occurred since the November Panel 2 meeting.

CMP	Indices used		Formulae for calculating TACs	References
	EAST	WEST		
FZ	FR AER SUV2 JPN LL NEAtI2 W-MED LAR SUV	US RR 66-144, CAN SWNS RR US-MEX GOM PLL	TACs are product of stock-specific F0.1 estimates and estimate of US-MEX GOM PLL for the West and W-MED LAR SUV for the East.	SCRS/2020/144 SCRS/2021/122
AI	All	All	Artificial intelligence MP that fishes regional biomass at a fixed harvest rate.	SCRS/2021/028
BR	FR AER SUV2 W-MED LAR SUV MOR POR TRAP JPN LL NEAtI2	GOM LAR SUV US RR 66-144 US-MEX GOM PLL JPN LL West2 CAN SWNS RR	TACs set using a relative harvest rate for a reference year (2018) applied to the 2-year moving average of a combined master abundance index. In recent refinement, the weighting range across individual indices on the east area master index has been reduced, given, resulting in improved resource conservation performance.	SCRS/2021/121 SCRS/2021/152
EA	FR AER SUV2 W-MED LAR SUV MOR POR TRAP JPN LL NEAtI2	GOM LAR SUV JPN LL West2 US RR 66-144 US-MEX GOM PLL	Adjust TAC based on ratio of current and target abundance index.	SCRS/2021/032 SCRS/2021/P/046
LW	W-MED LAR SUV JPN LL NEAtI	GOM LAR SUV MEXUS_LL	TAC is adjusted based on comparing current relative harvest rate to reference period (2019) relative harvest rate.	SCRS/2021/127
NC	MOR POR TRAP	US-MEX GOM PLL	TAC is updated using an average of an index in recent years compared to and average in previous years. The scale of TAC increase/decrease is controlled based on the trend in catches and indices	SCRS/2021/122
PW	JPN LL NEAtI2 GOM LAR SUV	US-MEX GOM PLL GOM LAR SUV	TAC is adjusted based on comparing current relative harvest rate to reference period (2019) relative harvest rate.	SCRS/2021/155
TC	MOR POR TRAP JPN LL NEAtI2 W-MED LAR SUV GBYP AER SUV BAR	US RR 66-144	TAC is adjusted based on F/F_{MSY} and B/B_{MSY} .	SCRS/2020/150 SCRS/2020/165
TN	JPN LL NEAtI2	US RR 66-144 JPN LL West2	Both area TACs calculated based on their respective JPN LL moving averages.	SCRS/2020/151 SCRS/2021/041

East indices: FR AER SUV2 – French aerial survey in the Mediterranean; JPN LL NEAtI2 – Japanese longline index in the Northeast Atlantic; W-MED LAR SUV – Larval survey in the western Mediterranean; MOR POR Trap – Moroccan-Portuguese trap index; GBYP AER SUV BAR – GBYP aerial survey in the Balearics

West indices: US RR 66-144 – U.S. recreational rod & reel index for fish 66-144 cm; CAN SWNS RR – Canadian Southwest Nova Scotia handline index; US-MEX GOM PLL – U.S. & Mexico combined longline index for the Gulf of Mexico; GOM LAR SUV – U.S. larval survey in the Gulf of Mexico; JPN LL West2 - Japanese longline index for the West Atlantic

Table 2. Percentage of biomass in each area that is of Eastern Stock origin by decade and by region, over all 24 operating models (noting that for recruitment level 3 the historical time period is the same as for recruitment level 1) in the reference grid. The six areas are WATL: Western Atlantic, GSL: Gulf of St Lawrence, SATL: South Atlantic, NATL: North Atlantic, EATL: East Atlantic are described in more detail in the Trials Specification Document. The 5th and 95th percentiles are shown to illustrate the range of variability across the 24 operating models.

Eastern Biomass %		Year					
Area	Percentile	1970	1980	1990	2000	2010	2019
WATL	5%	29.3%	24.7%	28.8%	33.8%	32.6%	46.5%
	Median	40.8%	55.3%	68.6%	80.0%	75.6%	79.8%
	95%	58.4%	63.3%	82.4%	87.7%	84.1%	84.7%
GSL	5%	7.3%	15.8%	20.5%	17.5%	15.5%	24.5%
	Median	22.0%	36.4%	47.2%	60.1%	56.8%	59.7%
	95%	45.3%	49.7%	78.4%	81.1%	86.4%	79.3%
SATL	5%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%
	Median	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	95%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
NATL	5%	96.6%	96.9%	98.9%	99.0%	98.7%	98.4%
	Median	98.6%	99.3%	99.7%	99.8%	99.8%	99.8%
	95%	99.7%	99.8%	99.9%	99.9%	99.9%	99.9%
EATL	5%	99.7%	99.8%	99.9%	99.9%	99.8%	99.9%
	Median	99.9%	99.9%	100.0%	100.0%	100.0%	100.0%
	95%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%