

RCG LP 2020

Annual report

Regional Coordination Group on Large Pelagics

25-26 June 2020

Virtual meeting

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Executive summary

The RCG LP met online between the 25 and 26 of June 2020 to review the progress of inter-sessional work since 2019, discuss around the key areas of regional coordination in fisheries data collection: governance; regional sampling plans, identifying end-user needs and data quality.

Participants included scientist, experts and/or National Correspondents from Croatia, Cyprus, France, Greece, Italy, Portugal and Spain as well as DG MARE (European Commission), ICCAT, IOTC and ICES representatives

The meeting dealt with topics such as; data transmission failures to tuna RFMOs, regional data base, priorities in terms of data needs, feasibility for the collection of biological variables and the current structure of the RCG LP including the expansion to further sub-groups.

The Group approved by consensus that a common database should be used and agreed that the RDBES hosted by ICES will be the selected option, pending approval by the NCs.

The Group also agreed that one member of each sub-group will be appointed to the core RDBES group if the RDBES is approved by the NCs

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1. Introduction

1.1. General

In contrast with precedent meetings and due to the unfortunate context of the Covid-19 pandemic, the third annual meeting of the Regional Coordination Group on Large Pelagics (RCG LP) was held virtually, from the 25th to the 26th of June 2020. Participants included scientists, experts and/or National Correspondents from Croatia, Cyprus, France, Greece, Italy, Portugal, Spain as well as representatives from DG MARE (European Commission), ICCAT, IOCT and ICES (for this one in relation to the Regional Database and Estimation System topic). The list of confirmed participants is available in the Annex 1.

The meeting was chaired by Pedro Lino (Portugal, IPMA) and Mathieu Depetris (France, IRD). All sessional work was carried out by the whole group. The meeting agenda is available in the Annex 2.

RCG LP wishes to thank AZTI for hosting and organizing SharePoint through Microsoft Teams platform.

1.2. Terms of Reference

This year, 4 major Terms of Reference (ToRs) were identified:

- RCG LP structure, organisation and links. The aims of this section were to present and discuss the current structure approval of the RCG LP and of each subgroup, make a status check on each subgroup and promote the possibility of the group to express suggestions improvement or modifications in the structure/organisation.
- Available data, data transmissions and gaps. The section deals with RFMOs feedback and summaries of possible issues, like data transmission failures or potential collaboration in data calls.
- Regional database. This point is related to the development of a regional database for the RCG LP. Discussions and presentation were mainly focused on the presentation of the current status of the ICES Regional Database and Estimation System (already discussed during the previous two RCG LP annual meetings).
- Sampling and regional working plans. This last matter continues the work initiated during the last 2020 EU-ICCAT coordination meeting and aims to provide a global overview of observer coverage by country and métier. Furthermore, discussions about the consequences and the effect of the Covid-19 epidemic (for example in our survey and consequences on the assessment associated).

2. Brief review of progress since 2019 RCG LP annual meeting

Chairs met online and discussed plans to have each member state prepare organigram of Institutes and people involved in data collection by region, metier and/or by species.

Regarding the pending issue of permission for collection of samples from CITES listed species of interest to the tRFMOs, no progress has been achieved by ICCAT and RCG LP awaits progress at the ICCAT level to request similar exceptions for samples collected by the EU fleet in other waters.

3. Last update of the European Commission Multi-annual Plans

In line with the DCF recast regulation (2017/1004), the multiannual EU program for the collection and management of data in fisheries and aquaculture sectors (EU MAP) has been split in two legal acts:

- A COM delegated decision that contains the biological, environmental, technical and socio-economic data requirements.
- A COM implementing decision that contains thresholds for data collection and the list of mandatory research surveys at sea.

The latest EU MAP covering 2020-2021 was published in June 2019 ([link to the Eur-Lex publication](#)). The Work Plan (WP) and Annual Report (AR) templates remain unchanged for 2020-2021, and all national WPs 2020-2021 was adopted in October 2019.

In parallel to the renewal of 2020-2021, in 2018 COM began an EU MAP review. During 2019 the first round of consultations with stakeholders took place, including the end users (such as ICES, STECF, RFMOs) the Regional Coordination Groups (North Atlantic, North Sea and Eastern Arctic, Baltic, Mediterranean and Black Seas, Long-Distance Fisheries, and Large Pelagics), the PGECON (Planning Group for ECONomic issues), the RCG/PGECON Liaison Meeting and the DCF National Correspondent's meeting. Two dedicated STECF expert groups took place: on surveys at sea (EWG 19-05) and on the EU MAP (EWG 19-12), which provided the first draft of the EU MAP.

The list of surveys and thresholds, **2020 COM Implementing Decision**, will be consulted with the COM expert group for data collection: the DCF National Correspondents and RCG and PGECON chairs¹ on 1 July 2020, prior to voting in written procedure in the Committee of Fisheries and Aquaculture².

The set of data requirements and variables, the **2020 COM Delegated Decision**, is under a final round of internal consultations and will be consulted with the COM experts for data collection on 1 July 2020. A formal inter-service consultation and a public consultation will follow, before the adoption by the Commission. Finally, after two months of the EP and the Council scrutiny, it will be published.

New work plan and annual report templates in line with this new EU MAP will be then developed. The dedicated STECF EWG 20-18 will take place at the beginning of 2021, but major drafting should take place beforehand, also under ad hoc contracts before the end of 2020.

The new EU MAP draft focuses even more on the regionalisation and leaves more space for RCG decisions and recommendations (e.g. COM list of species for recreational fisheries can be extended, waterbodies for data on eels are to be agreed within the regions, new methodologies can be introduced if agreed on regional level). No more structural pilot studies are mentioned in the EU MAP draft, and current ones have been integrated into regular data collection requirements³. In one case⁴, the EU MAP draft contains a clause that data collected under other frameworks shall be accessible for DCF implementing authorities. The new EU MAP will enter into force in 2022, which means it should be published in late 2020 or early 2021, followed by the templates and guidance for WP and AR.

¹ Commission Expert Group number E02750: Expert Group of Fisheries Data Collection.

² Commission Expert Group number C16100: Committee of Fisheries and Aquaculture.

³ Pilot Study 1: Relative share of catches of recreational fisheries compared to commercial fisheries. Pilot Study 2: Level of fishing and impact of fisheries on biological resources and marine ecosystems. Pilot Study 3: Data on employment by education levels and nationality.

⁴ Pilot Study 4: Environmental data on aquaculture.

4. Progress report on ToRs

4.1. RCG LP structure, organisation and links

4.1.1. RCG LP global structure

The overall objective of the RCG LP is to strengthen regional cooperation in the area of biological data collection for fisheries on highly migratory species. In the current context where regional cooperation has evolved from a single annual meeting to a continuous process that will have greater responsibilities (RCG), it is foreseen that this structure and functioning of the group (RCG LP) will be valuable to improve the coordination among EU Member States in the fisheries data collection field in support of data transmission to tuna RFMOs, stock assessment and fisheries advice. RCG-LP is currently composed by the following Member States; Croatia, Cyprus, France, Greece, Italy, Malta, Portugal and Spain (any MS that has a large pelagic fishery can become a member)

This structure is based on the output of RECOLAPE (MARE 2016/22⁵) project and was approved last year by the RCG LP 2019 and includes different meetings/subgroups, which are organized in three stages. The first stage has the objective of identifying data gaps and data needs. The second stage oversees designing Regional Sampling Plans (RSP), and the third stage is for decision-making. It is expected that this proposal will foster the implementation of RCG-LP so it can become fully operational soon.

Thus, the objective of Stage 1 (subgroup for data requirements and data gaps) is to address the data collection issues of common interest to tuna scientists. The research priorities for data collection should be identified based on data gaps and data needs presented by the end users (stock assessment groups within the tuna RFMOs). The group would also be in charge of improving coordination between data collection scientists and stock assessment scientists.

Stage 2 (subgroup on data analysis and regional sampling design) has the aim of standardisation and coordination of the sampling at the fleet level, both for the target and bycatch species. Thus, the participation of the institutes involved in the monitoring of these specific fleets is expected. These organisations should share tools for data acquisition (including the database), data collection protocols (including codes) and data-quality checks. Additionally, these groups could prepare tuna RFMO participation including data analysis and data calls. The structure includes four/five parallel groups based on stocks/gears.

- a. Tropical Tuna Treatment (T3): focus on PS fleet and yellowfin tuna (YFT)/skipjack tuna (SKJ)/bigeye tuna (BET),
- b. Focus on longline fisheries outside the Mediterranean,
- c. Mediterranean LP fisheries: focus on Longline,
- d. Bluefin tuna sampling,
- e. Focus on small boat fisheries.

Stage 3 (RCG-LP main meeting). In addition to the two stages mentioned above, it is necessary to hold a main RCG-LP meeting, where decisions will be made based on the output from the previous

⁵ [Strengthening regional cooperation in the area of large pelagic fishery data collection \(acronym: RECOLAPE\)](#)

stages. It is not necessary for the participants to have the same technical profile as for stages 1 and 2, but they must have the capacity to make decisions

Currently EU LP fisheries present different levels of coordination among MSs. Starting from a situation where there is hardly any coordination, to quite a coordinated joint data collection. So now, for the different fisheries/metiers, RCG should first define where we are (which is the level of cooperation), and then where we want to be in the future. It is important to consider that not all metiers should necessarily have the same goals. After a little discussion, it became clear that although the structure is defined, many protocols and processes must be formalised and executed.

The following sections discuss the details of each of these 3 stages, including their objectives, desired participants, and chronogram.

After the presentation Stamatis Varsamos (EU, DG MARE) asked why the current structure presented seems to be only focus on the Atlantic and the Indian Ocean Fisheries and not the other, like the Pacific Ocean. The explication provided was that the current RCG LP structure was early adopted (in 2019 from the outputs and recommendations of the RECOLAPE project) and reflect only the needs express by the actual RCG LP members. This structure should be updated with time and feedback related to his own experience and maturity. It is very likely, in the next years to see an increase in the radiance of the RCG LP on large pelagic fisheries problems and issues. In any case, in fisheries where only one MS operates in one region (e.g. PS fishery in the Pacific only affects to Spain) there is not too much room for coordination. If more than one MS operates in the area (LL for instance), there is one specific group that could take that responsibility (LL subgroup).

In addition, Mauricio Ortiz (ICCAT) asked explanations about the integration of RFMOs feedback in the presented structure. His main concern was about the potential overlaps which could happen on processes, projects and samplings for example with there don't have a good communication between the RCG LP and the RFMOs. The same kinds of preoccupations were raised by Tristan Rouyer (France, Ifremer) and Francisco Abascal (Spain, IEO) highlighting the importance of formalising the coordination inside the RCG LP (between the different stages) and outside with partners (like the RFMOs). No specific answer was provided, especially due to the younger nature of the RCG LP structure and the need to test and improve it accordingly. Furthermore, the group is aware of this recommendation, which will have to be considered if necessary, in the future evolution of the RCG LP structure and his coordination.

4.1.2. RCG LP first stage meeting

The specific objective of this first stage is to address issues of common interest for tuna scientists regarding data collections issues. Identify research priorities in terms of data collection, based on data gaps and data needs identified by the end users (stock assessment groups within the tuna RFMOs), and finally to improve coordination between data collection scientists and stock assessment scientists. Thus, it is expected the participation of experts in stock assessment and tuna RFMO species groups, as well as experts participating in data collection Participation and input from end users (tuna RFMOs) is also desirable. Being a meeting that must be held before the subsequent stages, it must be held during the first quarter.

Since 2011, DG MARE has been organizing, early in the year, a parallel meeting, with the overarching objective of improving the coordination between DG MARE and UE scientists working in different RFMOs. LP Data collection issues (such as data transmission failures and priorities) are also discussed. However, even if some synergies between both groups exist, both meetings should be independent.

The first is driven by DG Mare (by invitation), while the second should be driven by the RCG (through the National Correspondents who should appoint national experts for stage 1).

Finally, it was also stressed by the group the possibility of opting for a virtual meeting (Teams, WebEx...), in order to facilitate the participation as far too many meetings (subgroups) can hinder the participation of experts.

4.1.3. RCG LP subgroup tropical tunas sampling

Estimation of the species catch composition is a common challenge for every fishery. Among them, the tropical purse seine fishery is characterised by multi-specificity of the catches variation in space and time. The Tropical Tuna Treatment (T3) processing was built about 30 years ago in order to correct biases of the logbook data on species composition and to provide more accurate catch estimates per species for the European purse seine fleet. However, the evolution of fishing practices and the extension of the fishing grounds have challenged the T3 methodology in some parts of it processing. The aim of the presentation is to give the key elements to understand how the T3 approach deals with the complexity of the fishery data and how the new development opens the way toward a better meet to the current needs.

A brief presentation was made, addressing the most important issues relating to T3-statistics method used to estimate the catch composition in tropical purse seine fisheries. This method used in the first years of the SCRS exists in ICCAT. The main characteristic regards this methodology was presented. The PS fishery is a plural-specific fishery with species y size patterns depending on the school type (FSH or FOB), or fishing grounds (spatial variation) or season (temporal variation).

Two historical meetings supported this methodology, a first technical meeting such as a workshop on technical issues and the exchange of sampling data between member states, and a second meeting called “T3-restitution meeting”, where the results obtained and future strategies were discussed.

Additionally, according to the group, this method has three critical points for accurate estimation that must be considered:

1. **Estimate *total catch*:**
The landing part of the catch: several data sources available
 - *logbook (set level)*
 - *Landing reports (trip level)*
 - *Sale note (trip level)*
 - *Local market flow (Faux-poisson-trip level)*
2. **Estimate *species composition* of the catch, it is the most difficult thing:**
 - *Species miss-identification of small fish (Yellowfin vs Bigeye tuna)*
 - *Bias on catch by species: overestimation of dominant species*
 - *Bias on detection for the less frequent species: i.e. by-catch*
3. ***Spatialise* catch by species:**
 - *Allocate catch to the set location*

This method was created at the end of the nineties (Pallares et Petit⁶). A general approach of the T3-methodology is a rely on scientific sampling according to the Regional sampling plan (RSP), take account of the spatial and temporal variability of the PS fishery, is validated by scientific groups

⁶ Pallarés, P., Petit, Ch., 1998. Tropical tunas: new sampling and data processing strategy for estimating the composition of catches by species and sizes. Collect. Vol. Sci. Pap. ICCAT, SCRS/97/28 48, 230–246.

(RFMOs) and is comparable across similar fishing gears/fleets : shared sampling and processes among EU state members and several CPCs.

As an improvement to this methodology is developed recently and new processes are provided in three steps (Duparc et al. 2018⁷):

- *Standardisation of the logbook data: adjust report catches to landing weight and standardisation of weight categories.*
- *Standardisation of the sample data: extrapolation of the sample species composition to the set level and use of the Weight-Length relationship (WLR).*

And helping the last one's steps, the last one step it is "Modelling and prediction of the species composition and catches". The T3 method obtains the total weight of the catch landed based on a statistical model based on sampling during landing and spatialise catch for each species.

Finally, during the presentation, it was noted the improvements made in T3 method. A new recoding of the old T3 codes and the development by means of the R package are discussed, for a new version and which are summarised in these following points:

- *To better account for the spatial and temporal variability (at a finer scale).*
- *To account for vessel specificity (e.g.: size, engine power, company effect).*
- *To conserve the set variation: deal with particular sets due to natural contingencies.*
- *To associate confidence intervals to any estimates.*
- *Process transparency: the code is fully documented and the documentation of how works the program will be available.*
- *Open access and Open source: the code source is hosted on a github repository (<https://github.com/OB7-IRD/t3>) under a GPL version 3 license.*
- *Referencing of the software: enable result reproducibility and versioning (Depetris et al., 2020): version 0.9.0 - DOI: 10.5281/zenodo.3878125.*

Before starting the discussion, it was recognized by the Chairman of the meeting, the great scientific value is to use open software, and all software regards stock assessments specially.

ICCAT asked for the by-catch and faux-poisson and especially, for the estimation of small tuna catches, if it is included in the new version of T3. It was clarified that now only target species such as large tunas are included in the process. Most catches of small tuna species are reported as faux-poisson separately at ICCAT and so their catch estimates require a different statistical approach than for the target species. But keep in mind that the sampling required to cover faux-poisson catches is different and relatively new in the Indian Ocean.

ICCAT makes a recommendation and highlights the importance of conducting a global analysis of the entire data series since 1991, especially with regard to the amounts of TASK I and TASKII, the overall of these quantities are not the same as a consequence of historical methodological differences. These amounts must be verified for the global historical series of this PS fishery. It is announced that a historical review between TASKI and TASKII will be possible to use the improvements of the T3 method.

⁷ Duparc, A., Cauquil, P., Depetris, M., Dewals, P., Gaertner, D., Hervé, A., Lebranchu, J., Marsac, F., Bach, P., 2018. Assessment of accuracy in processing purse seine tropical tuna catches with the T3 methodology using French fleet data. Case of the French fleet in Indian Ocean., in: Report of the 20th Session of the IOTC Working Party on Tropical Tunas, IOTC-2018-WPTT20-16. Presented at the 20th session of the IOTC Working Party on Tropical Tunas, IOTC, Victoria, Seychelles, pp. 1–19

It was asked by AZTI, considering that there is currently at sea sampling coverage in the PS fleet of almost 100% coverage (electronic and human observation included), what possibilities and advantages would there be for its use as well sampling data. It was clarified the well plans will be more strictly followed in the future, but the information from a scientific observer will not be used for the total estimation of the specific composition of catches, although it will be used for by-catch estimation. Sampling on board cannot be carried out properly due to different factors such as the long-time needed to sample or the speed at which the catch enters the tanks, etc. AZTI highlights that the information from observers has a very high potential utility for obtaining the specific composition of the set and using this information, together with the biomass obtained through the buoy indices (echo sounder buoy) could be obtained the biomass by species of the catch.

There was also a comment from DG-MARE, considering how difficult it is to distinguish small specimens after freezing, working on the use of these data by observers to improve estimates should be a priority. And explained that the samplings of the human observers on board for the calculation of the specific composition are carried out in other oceans. It was clarified observer data in the Atlantic have different objectives and are designed to get by-catch or FAD information and they don't have much time, and on the other hand, you need more than one person to make a good useful sample to obtain the composition of catch. They are very different from those made in the Pacific Ocean. Therefore, human observer data cannot currently give an accurate estimate of the species composition for target species.

DG-MARE asked about the main differences in calculating the composition of the catches between the T3 method and the "Sales notes" methodology carried out by Spain. No presentation of the "Sales notes" method was done despite its schedule by the RCG-LP in the agenda.

The Spanish Administration clarified that the method of "sales notes" is based on the European regulation of inspection and control (Regulation EC 1224/2009). The Member States Fisheries Authorities must cross-check the following data: weight and species of the catches registered electronically in the logbook, the catches landed and their respective sales notes, together with information of the Vessel Tracking System. These data are always referred to the specific fishing trip. There is a valid methodology which has been established in accordance with the said Regulation EC 1224/2009 in order to have this cross-checking.

Between catches and landing, the Control Regulation allows a +/- 10% difference since the former is an estimation done during the fishing trip and the landing data are weight data. The rationale of this is to reinforce the control aspect and to avoid that a captain could just wait till the vessel arrives at the port and register different species and quantities depending on if there is an inspector waiting at the port – who can check if the fish on board are all accurately registered or not. There is cross-checking between landing and "Sales Notes" catches of each fishing trip.

There is also an extra cross-checking possibility thanks to the information available by the catch certificate procedure, as all catch certificates of fishing products of Spanish-flagged vessels are issued by the said Spanish SG of Fisheries. The sales slip of the tuna processing factories is an example of the documents provided by the vessels when requesting a catch certificate, the control activities also include on-board inspections during landing, which also contribute to the validation of the specific composition and total catch of each species.

DG-MARE asked, why the value of what was obtained from "Sales Notes" method is very different from that obtained by T3-method, making a consideration that these issues should be discussed at the T3-regional coordination meeting. There should be a debate about comparing these two estimates and where and why these differences and what are the advantages and disadvantages of

each method. It was also clarified that due to issues of confidentiality and variable prices in sales, there are many conditions for its use. The RCG LP asked to Spanish administration to provide documents on the “sales notes” method that gives supports for further discussions.

The Spanish Administration explained that what the DGMARE qualify as “sales notes method is simply the system established by the said Control Regulation, and as such it is obligatory for all EU Member States. It is not based on estimates as the T3, but on real data validated by the already explained procedure. Therefore, it is a very important contribution and enriches the information available through T3 and therefore should be used by all Member States, especially for the species that are under the quota system, such as Yellowfin tuna in the Indian Ocean. France should also use the sales notes information, as it is information available and it is compulsory to have this already explained cross-checking procedures in place. For the Spanish Administration, T3-method is only an estimation and it is not referred to concrete vessels and it is not available when the fishing activity takes place but only months afterwards.

DG-MARE also noted regard on the methodology based on “Sales notes” in the Pacific Ocean, there is a very correct direct relationship between observer information and the sales notes by trips. However, sales notes are not used in the Pacific Ocean either. It discussed over the use of data sampling for the control of landing in different countries.

4.1.4. RCG LP subgroup longline fisheries outside Mediterranean Sea

A brief presentation was made of what would be the subgroup of longline fisheries outside the Mediterranean Sea. The sub-group's objective will be to promote regional coordination in the EU longline fleet outside the Mediterranean Sea. The longline fleet along with tropical purse seiners, the bait boat and trolling fleets are the main gears in catching large pelagic species. The EU longline fishery that targeting swordfish also catches other large pelagic species as bycatch. This fleet are working in the Atlantic, Indian and Pacific oceans all year around.

France (only in the Indian Ocean), Portugal, and Spain are the Member States that have longline fisheries working outside the Mediterranean Sea.

Some of the topics that could be coordinated in the group were pointed out, such as species identification guides, age reading and calibration workshops, exchange and standardise maturity scales, data validation and quality scripts, sampling effort by area, etc.

Nevertheless, nothing in concrete has been achieved in terms of coordination of this subgroup to present. The difficulties seem to lie in the lack of time/availability of participants and therefore in the selection of a coordinator and organization of subgroup meeting.

It was asked to the Group which was our point of view about the observer coverage that currently exists for the tuna RFMOs. The first comment was that from a scientific point of view the more data you have the better.

The data needs to assess the status of fish stocks will depend on whether the species is the target or bycatch. To know our data needs would allow define what would be a suitable level of coverage. In the case of bycatch species, it was pointed out that the main data source comes from on-board observer programs and that to getting a good data coverage it would not come out economically.

It was commented other alternative methodologies to monitoring the status of the stocks. The electronic monitoring would be a complement to the information collected by human observers on board. It was pointed out that several tuna RFMOs are working on the minimum standards.

4.1.5. RCG LP subgroup Mediterranean large pelagic fisheries

Regarding the presentation of this topic, several majors' points were highlight:

- Two stocks will be considered Mediterranean Swordfish and Albacore. Bluefin Tuna is considered in another subgroup.
- Member states are the main producers for these species in the area.
- According to ICCAT, these stocks are ranked among the poor ones in terms of data although situation somehow improved recently.
- The goal of this subgroup will be to provide regional cooperation which will lead to harmonization regarding sampling approaches, effort, biological parameters collection (ageing, maturity etc).
- Some progress has been achieved regarding SWO under ICCAT and EU cooperation projects.
- There were no meetings so far and the group is at initial conception stage.

Franco Biagi (DG MARE, EU) noted that even if this subgroup is younger, it's important to involve EU scientists to work on the sampling strategy and more precisely to identify where and why problems occur and propose solutions. In addition, EU can provide more active view and understanding to facilitate the talks among MS to improve quality of data. George Tserpes (HCMR, Greece) agreed with this comment and in general with the necessity to organise and structured this subgroup through people involve in this thematic.

Pierluigi Carbonara (COISPA, Italy) mentioned that regarding biological parameters there are several initiatives (like the RECOLAPE project cited by Pedro Lino, IPMA Portugal, regarding ageing and George Tserpes regarding initiatives in ICCAT) but the regional coordination group will be important to harmonize and establish a common approach.

In addition, Franco Biagi, asked who is foreseen the mechanism to set up the group? How people are going to be commit and who is going to announce the next steps. Pedro Lino added to this point that we cannot force people to get involved and it's a voluntary approach. This is the same issues for the subgroup focusing on bluefin tuna sampling say Tristan Rouyer (IFREMER, France), who is going to be the leader? who is supposed to gather the people and organise agendas activities? etc. For now, the group don't express concrete solution for solve this issue.

4.1.6. RCG LP subgroup bluefin tuna sampling

In 2019 RCG LP has been proposed to add a BFT subgroup to the RCG-LP, which would be in charge of coordinating sampling activities with the ICCAT Species Group and GBYP to ensure that data collection is both useful to the stock assessment and complementary to the activities already in place.

Although preliminary discussions among ICCAT SG EU scientists took place no meeting could be set up, the main reason being that it proved complex for EU scientists involved in BFT to find time to be used efficiently for that matter.

2020 being a BFT stock assessment year and the COVID context did not help in that respect.

Tristan Rouyer (Ifremer, France) provided a presentation on the objectives of the RCG LP subgroup for bluefin tuna sampling, mainly associated with the research activities of the GBYP program. ICCAT/GBYP has provided in 2019 a summary of the sampling of bluefin tuna, indicating that an

update will be made available to the RCG group. It was noted that because the early stage of this subgroup, in 2019/20 little actions have been completed. However, there have been preliminary discussions among scientists at the margin of other scientific meetings. It was noted the importance to define a coordinator for this subgroup and plan a meeting to advance in the objectives. The Chair noted that the designation and meeting schedules for each subgroup would be discussed later at this meeting.

In addition, it was noted that current sampling needs to be reviewed in lieu of the requirements for the stock evaluation or assessment, and that likely available sampling is insufficient in the case of Eastern Bluefin tuna. It was highlighted the importance of the interaction with the users, in this case the SCRS to coordinate an effective sampling and data provision to support the scientific evaluations of the stock.

4.1.7. RCG LP subgroup bait boat/pole and line

Some important topics related to fishing live bait using poles and lines in the Atlantic Ocean are presented as a summary. The group mentions other live bait and /or trolling fisheries, which have not been included in this presentation, due to various factors conditioned by the current situation of COVID-19 where researchers have had to work in poor conditions and with little time.

Four important areas of tropical tuna fishing carried out by European boats that fish by live bait using rods and lines are presented. There are three important areas, corresponding to the archipelagos of the Azores, Madeira and the Canary Islands, which have an artisanal character. And, there is another very important area, in the Dakar area (Senegal), made by European ships of greater draft with a semi-industrial character. The artisanal nature of these fisheries should be positively discriminated and must not be compared with other industrial fisheries. These fisheries are very important for our regions in socioeconomic terms and the artisanal nature should be highlighted because it is not fair for them to compete with the industrial ones.

The main characteristics of these tropical tuna fisheries are summarised in the following text box:

- It is artisanal fishing or semi-industrial character.
- Use of a live bait to fish.
- The number of crew members is variable and depends on the size of the vessels and the period of seasonal fishing. From two or three fishermen on smaller boats to around 25 people on the larger ones. The level of technology on board depends on the vessel size and fishing ground they used. It is bigger in the big one's vessels normally.
- The fishing ground, around and between islands, for smaller vessels and fishing ground in offshore for bigger vessels.
- There are different fishing strategies, depending on the size of the vessels and the target species.
- For tropical tunas, "free school" fishing is the main fishery strategy especially on the smaller vessels. Using the vessel as a FAD on the medium-sized vessels, fishing in groups made by two or three vessels ("pesca a manchas") or sharing the FAD between groups of vessels in Dakar area on larger vessels (semi-industrial fishery).
- The duration of the fishing trip is from one day to about ten or fifteen days for the longest. Use ice to conserve the fish and land fresh fish normally.

In terms of the number of vessels existing in the different components of the fleet that make up these fisheries, table 1 presents the figures by GT and by area in the last three years.

Year	Madeira		Azores	Year	Canarias		Year	Dakar	
	GT	NºBoats	NºBoats		GT	NºBoats		GT	NºBoats
2015	<50	60	3	2016	<50	262			
2015	50-150	5	16	2016	50-100	6	2016	100-200	3
2015	>150	3	3	2016	>100	12	2016	200-300	4
2016	<50	57	2	2017	<50	285			
2016	50-150	6	17	2017	50-100	7	2017	100-200	3
2016	>150	3	3	2017	>100	12	2017	200-300	4
2017	<50	62	5	2018	<50	256			
2017	50-150	6	19	2018	50-100	7	2018	100-200	3
2017	>150	1	3	2018	>100	12	2018	200-300	4

Table 1: Number of existing vessels and GT associated with the bait boat and line fisheries for the last three years.

In terms of catches, table 2 shows the landing of catches for each component of the fleet and area in the last three years.

Species	Fleet	2016	2017	2018
BET	EU.ESP-ES-DAKAR	873	983	582
BET	EU.ESP-ES-CANARY	2747	3171	2407
BET	EU.PRT-PT-AZORES	1297	2041	3147
BET	EU.PRT-PT-MADEIRA	610	778	973
SKJ	EU.ESP-ES-DAKAR	8148	7314	8840
SKJ	EU.ESP-ES-CANARY	2846	3356	4245
SKJ	EU.PRT-PT-AZORES	649	1312	5140
SKJ	EU.PRT-PT-MADEIRA	59	451	2306
YFT	EU.ESP-ES-DAKAR	1172	1143	661
YFT	EU.ESP-ES-CANARY	222	275	95
YFT	EU.PRT-PT-AZORES	5	3	35
YFT	EU.PRT-PT-MADEIRA	5	5	

Table 2: Catches related to BET, YFT and SKJ for the bait boat and line fisheries during the last three years.

The main fishing grounds for the live bait fleets in the Azores and Madeira are located between and around the islands. There is a very significant relationship in the fishing pattern of the two fleets between the two areas. In the figure 2, the distribution pattern of these fleets' fishing locations is shown.

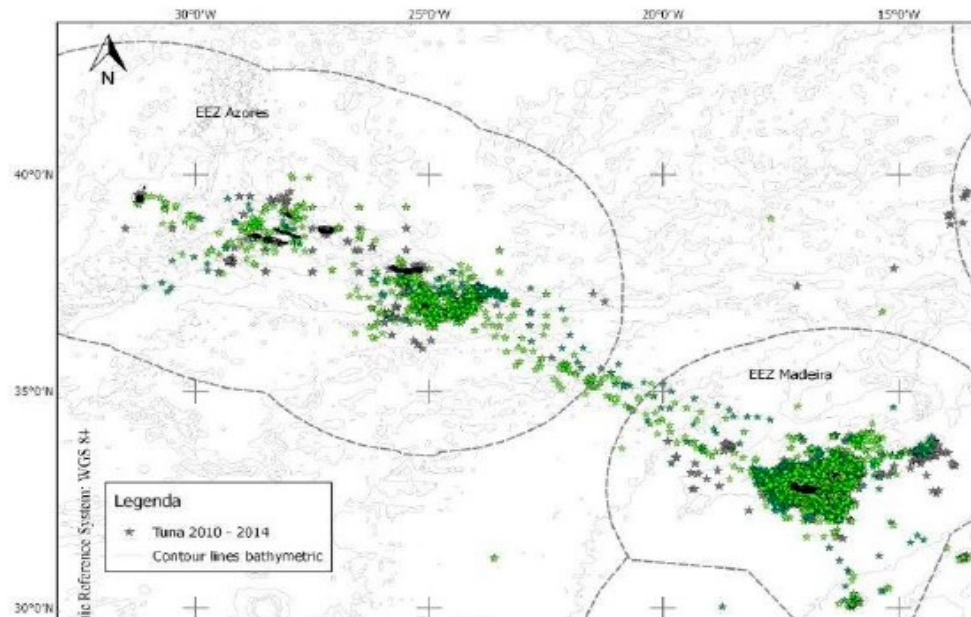


Figure 2: Activities distribution pattern of bait boat and line fisheries

The Canary fishing ground in 2016 for the big one's vessels (>100 t) in the figure 3 is presented. In some years some vessels arrive around Madeira or Azores islands for fishing. Also, in some years, when there is fishing agreement, the fleet also reaches the fishing areas of Mauritania, Morocco or Senegal.

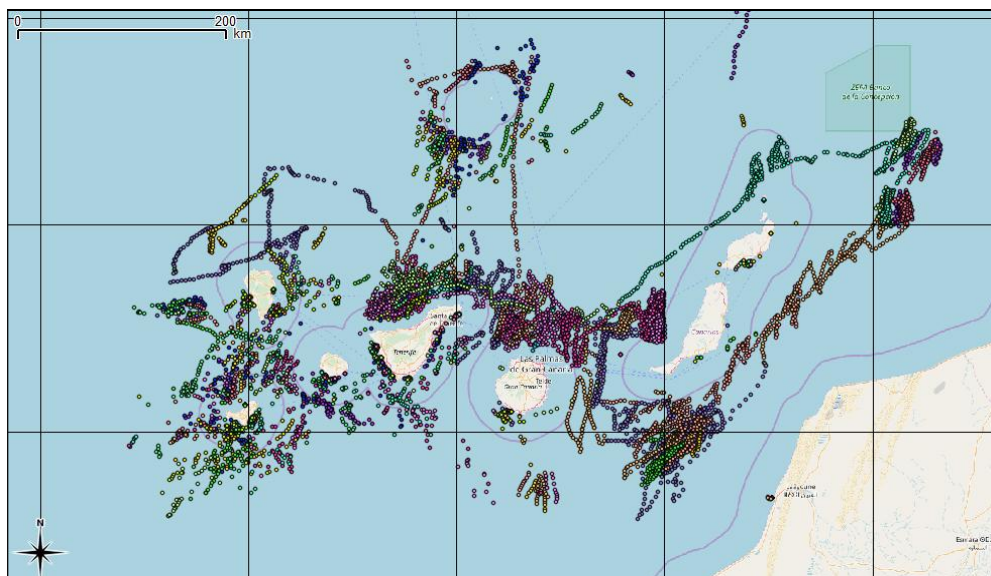


Figure 3: Canary fishing ground in 2016 for vessels > 100 tonnes of the bait boat and line fisheries.

In the figure 4 the fishing ground of the European BB fleet in Dakar Zone is presented. From around 2007 the fishing strategy of this fishery changed to use FADs to support the fishing activity. Before this year the fishing strategy was supported by the vessels only fishing on free schools or using the vessel like a FAD.

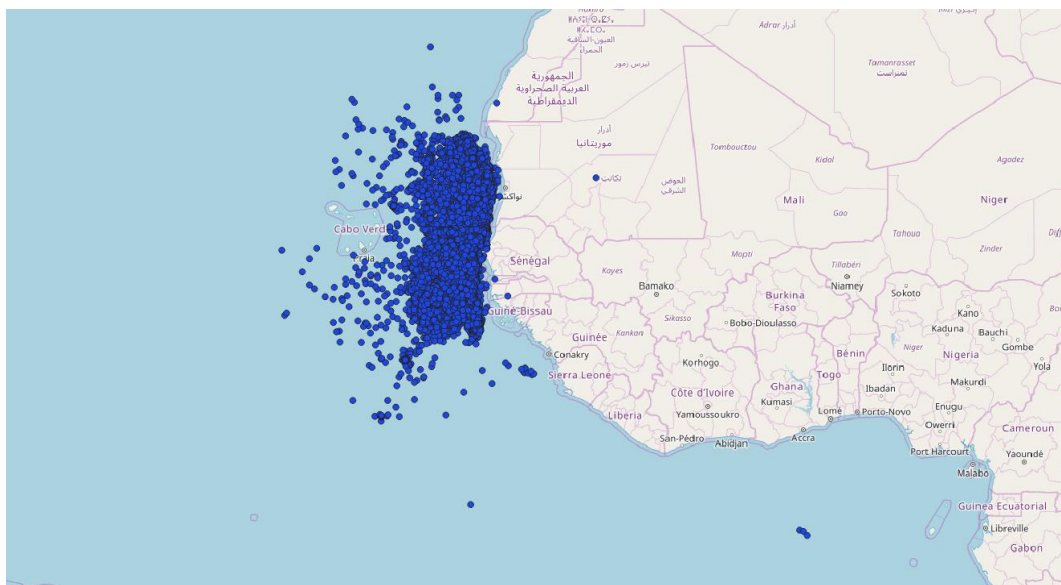


Figure 4: Fishing ground of the European bait boat fleet in Dakar from 2006 to 2017.

In relation to future coordination actions, there are various situations that would require dedication and cooperative work among the member states. One of the most urgent aspects to be developed would be the development of joint analyses on the different levels of effort according to fleet segments. There is a very high complexity in the effort of these artisanal fleets and an in-depth analysis of this topic is needed.

Effort levels need to be very well defined to obtain standardised abundance indices. Abundance indices are urgently needed for the different components of these artisanal fleets and would be of great use for future assessments of tropical tuna species.

On the other hand, the need to coordinate biological studies of tropical tunas in these latitudes is identified, combining synergies and sample exchanges between member states would be very useful.

The use of FAD begins to be an increasingly used option in the artisanal fisheries from BB to line and pole, as it is beginning to resolve in the Canary Islands, this is a clear export of the exploitation models of the equatorial zones. The group believes that coordinated and collaborative work is needed between member states to test current and future changes in the fishing strategies of these artisanal fisheries.

4.1.8. RCG LP other subgroups

This section brings some information related to RCG LP subgroups administration and their integration in the actual structure of the RCG LP.

The creation of new subgroups only makes sense if it involves a group of scientific specialists from more than one MS, reduces overlap between meetings and increases the overall RCG.LP efficiency.

This section has two majors' objective:

- Find among discussion the best way (during the RCG LP first stage meeting, through the RCG chairs, on a future website, ...) to raising up the necessity to modify or create a new subgroup,
- Let the opportunity to the group to express himself on the need in terms of subgroup.

After the presentation, no-one from the group express some comments of requests related to the creation of a new subgroup or the modification of an existing one.

4.1.9. RCG LP third stage meeting

The Group discussed the need for a third stage as there was some confusion on the order of the Decision Meeting and the Liaison Meeting.

It was clarified that RCGs issue non-binding recommendations (even if the NCs are present)

The NCs do not have the authority to make decisions with financial/human resources implications

Recommendations are approved at each MS and then taken to the NC meeting where if approved by all MS affected by the Decisions/Recommendations, they become binding.

It was not clear for the Group that there was the need to have a third annual meeting and that having the Co-chairs present in both the Decision and Liaison meeting (as in the previous year) would be sufficient.

4.1.10. RCG LP administration

The section deals with some issues related to the administration of the RCG LP. So far, the meetings of the RCGs are presently prepared, run and reported by the elected chairs. Otherwise, these chairs could have a different time available for this work. All that makes to the very “powerful tool” that is the RCG a vulnerable system. Furthermore, the situation is the same for other RCG, like the RCG NANSEA (Nord Atlantic, North Sea & Eastern Arctic) and the RCG Baltic Sea Region.

In that context, the grant project MARE 2020 08, through the Annex 2, aims to provide support to the RCGs. For now, the Annex 2 proposal was divided in 3 work packages:

- WP1 for delivering administrative support to RCGs, which means for example support the RCGs chairs to prepare, set up, run the RCG meeting (venue, participants, observers, agenda, ...), report production and subgroups work monitoring.
- WP2 for developing and operating a pan-RCG website, for internal needs (communication with subgroups for example) and external needs (like increased the visibility of the RCG work).
- WP3 for ensuring future operation and funding.

The proposal and work behind it must be done with the collaboration of all RCGs. During the last RCG NANSEA and Baltic Sea Region (hold 8th to 12th of June), the Chairs of the RCG-LP - Pedro Lino (Portugal, IPMA) and Mathieu Depetris (France, IRD) - have been invited as observers to discuss that point. The section aims to open discussion of this subject, to find the best way to involve the RCG LP in this dynamic. Furthermore, participation of several RCG LP members to an online meeting next 2nd of July 2020 (held by Joël Vigneau, chair of the RCG NANSEA intersessional subgroup of Regional Work Plan) should be discussed if we decide to move forward in this collaboration.

A last matter will be discussed about the necessity of the RCG LP to have its own logo, associated for example to presentations and reports templates.

4.2. Available data, data transmissions and gaps

4.2.1. Fisheries overview

This section deals with the work done initially by the pan-regional subgroup “fisheries overview” where northern RCGs participate ; RCG NANSEA (Nord Atlantic, North Sea & Eastern Arctic) and the RCG Baltic. The aim was to present the output of this pan-regional group and see how the RCG LP could benefit from it.

Regional fisheries and sampling overviews are important background documents for decision-making at RCGs. There are very useful for reports or presentations and produce a summary of data at a moment. But the development of the processes associated means the necessity to have a common format. For the storage and/or data preparation. This kind of process could make the link with a regional database. Finally, for now the goal is to have efficient, helpful and understandable overview of the large pelagic data at least 2-4 weeks before the RCG to support and enable professional decision-making during the meeting. Examples of productions were available through the following GitHub links:

- Regional DataBase Catch and effort overview of North Atlantic:
https://docs.google.com/document/d/1qg6WFWU3CF_nbQjhAyUtoLV52_8cKd56IOewxM_o6fU/edit?usp=sharing
- Regional DataBase Catch and effort overview of North Sea:
<https://docs.google.com/document/d/1z0jKBNz6AzaQwbTI1Z7OEPiCugSv4jX3CrWdmK6NvJg/edit?usp=sharing>
- Regional Database Catch and effort overview of Baltic Sea Region:
<https://docs.google.com/document/d/1jVvntCeWJ0pIP3EFrf6YLVHKIkIjLj5bQNNkK8kKBqY/edit?usp=sharing>
- Sampling overview draft:
https://docs.google.com/document/d/1KodNmAfimvrG_AQiKW1eLGh4v-AN2I2TTandb1gKm-l/edit?usp=sharing

Furthermore, some questions are still pending:

- The confidentiality of the data provided through this kind of documents,
- what do we do if we find errors in these documents? May we imagine something like feedback loops?
- Even if the initial purpose is just an overview, can we or do we want to use this production for data quality control?
- If this process is interesting for the RCG LP, it may be difficult to apply it without a regional database?

During the discussion, the group agreed about the benefits of this “kind of tool” but also recognized its prematurity. To be efficient this production needs to be in direct relation with a regional database (or at least we must use a common data format). On this matter, the RCG LP is still pending, for example we must decide what kind of system we will use (an existing system like the RDBES of the ICES to develop a new one) and nothing is operational yet (in contrast for example with some RCG

more advanced on this subject). To summarise, this kind of production is something that might be very useful for our RCG but not a priority for now. We should keep aware of improvement and update from the other RCGs on this topic to get ready and efficient if we decide to use it in the future.

4.2.2. RFMO feedback

ICCAT feedback

The ICCAT (International Commission for the Conservation Atlantic Tuna) manages the information of about 30 species of tuna and tuna-like species (*Scombriformes* with the exception of the families *Trichiuridae* and *Gempylidae* and the genus *Scomber*), including pelagic/coastal shark species, exploited in the ICCAT convention area (Atlantic Ocean and adjacent seas). A total of 53 Contracting Parties and 6 Parties with cooperating status (hereafter CPCs) are the major ICCAT data providers. There are two other important sources of information managed by ICCAT. The first one is associated with the ICCAT Special Research Programs (detailed in: www.iccat.int/en/ResProgs.html), namely the GBYP programme on bluefin tuna, the AOTTP programme on tropical tunas, the EPBR programme on billfish species, the SMTYP on small tuna species, and, the SRDCP programme on shark species. The second one is associated with special ICCAT data recovery projects.

The ICCAT Article IX of the Convention jointly with the ICCAT regulatory measures in place has behind about 160 data reporting requirements for management and scientific purposes. Accordingly, each ICCAT CPCs must provide every year on July 31st, any new or revised datasets, ranging from annual fishing fleet activity, annual catches by species/gear, monthly catch and effort, monthly biological data (observed size/weight frequencies, and extrapolated catch-at-size), port sampling data, tropical fisheries data on FAD-buoy activities, to domestic scientific observer data, and tagging (conventional and electronic) data. These datasets mostly used in stock assessments are compiled using 13 standard forms. The ICCAT Scientific Committee (SCRS) and the Secretariat had developed a set of instruments (filtering criteria, integration, validation and reporting tools) which allows faster data treatments and more efficient identification of datasets requiring revisions. At the global level (all ICCAT CPCs) reporting tools like the SCRS report cards (yearly and by dataset type), the SCRS catalogues (last 30 years of species/stock), and the SCRS scorecard (scores of each species/stock catalogue), have proved to be great tools to easily identify data completeness problems, and have a broader view of the data richness aspects of a given species/stock. The ICCAT integrated online management system (IOMS), currently under implementation, will improve all the data provision and validation process.

The European Union (EU) fishing fleets accounts for 35% to 40% of the total yearly biomass of all ICCAT species. In general terms, the 2018 information reported to ICCAT in 2019, had improved slightly when compared with the two previous reporting periods (2018 with 2017 data, and 2017 with 2016 data). The major issues identified were similar to the ones found in the previous years, and in its majority associated with incomplete forms, wrong codes used, and lower resolution of some datasets. When a given dataset doesn't arrive or doesn't meet the minimum SCRS validation criteria, the ICCAT Secretariat informs the corresponding CPCs about that reporting situation. For the EU, the request is generally made (complex cases can be treated differently) directly to DGMARE through email, with a copy of the corresponding EU Member State Statistical Correspondent. The internal - "EU reporting status on statistics in ICCAT" annual report - prepared by the ICCAT Secretariat in October each year, detailing each EU Member State reporting status of each statistical dataset, has proved to be an important tool to solve and follow the data issues identified every year.

IOTC feedback

The IOTC (Indian Ocean Tuna Commission) manages 16 tuna and tuna-like species in the Indian Ocean area (corresponding to FAO areas F51 and F57). Several data collection and reporting requirement exists in IOTC, dictating the information that has to be collected and reported on a regular basis to the secretariat. These requirements are expressed through IOTC Conservation and Management Measures (IOTC Resolutions) and deal with the collection of several scientific indicators ranging from total captures by species and gears, time-area catches, biometric data (length and weight frequencies), FADs/buoy activities, buoy positions and scientific observer data. The level of quality and accuracy of the information received by the secretariat is strongly affected by the artisanal nature of several fisheries under the IOTC area of competence and varies widely with the CPCs involved. Furthermore, the lack of mandatory data reporting formats requires the secretariat to perform additional data clean-up and sanitisation tasks that increases the time-to-market of all received information.

Several initiatives are in place to ensure that the submission of statistical data is as accurate and regular as possible: the secretariat is engaged in daily feedback cycles with its data providers, plus it delivers capacity building to its member states to ensure local capacity is adequate enough to independently produce the information required. The e-MARIS initiative (to be rolled out in 2021) will aim at further increasing the CPCs' ability to autonomously provide data to the secretariat, collect automated feedback as soon as the data is submitted and eventually see the information incorporated in the IOTC databases with little to no human intervention. In terms of data submissions from the European Union fleets operating in the Indian Ocean, the situation for 2019 (reference data 2018) is comparable to previous years: some of the detected non-compliance are related to artisanal and coastal fisheries from Mayotte and La Reunion, although several industrial fisheries do also continue reporting information in suboptimal ways compared to the requirements.

4.2.3. Data needs

Stamatis (MARE) recommends a metric assessment of the units used for effort

IOTC asks for data recovery from Spain and Italy

Tristan Rouyer (IRD, France) requested from ICCAT representatives to provide document specifying data needs for stock assessment ICCAT confirmed they would send the document to the co-chairs for dissemination and future discussion.

4.2.4. Data transmission failures

France will provide data from Mayote

Italy did not have access to data during the meeting but will send missing data

Spain reported that has already sent the data reported as missing for 2019.

Co-chair of RCG-LP suggests that part of the problem can be solved by moving to generic email addresses instead of the use of personal addresses because people move between jobs/responsibilities

4.2.5. Data calls

There were no data calls from RCG LP and all Data Calls were answered (though some not within the deadlines) by MS

4.3. Regional database

4.3.1. RCG LP regional database ICES Regional Database & Estimation System

During the previous two RCG LP annual meetings, the question of the ICES Regional DataBase & Estimation System (RDBES) was on the floor. In the 2019 annual meeting, a lot of discussions raised within the group and no clear consensus was established to decide if RCG LP should be implicated in the RDBES process. This indecision was directly related to the several pending questions around this subject:

- Regarding the management and the administration of the RDBES. Who will manage the database? A group? Composed by whom? One man?
- What is the schedule or the timeline of the RDBES?
- Is aim being only focus on the stock assessment?
- Does this process not complexify our current flow of processes?
- Who will pay for the development and the maintenance?
- What is the data policy for confidentiality? Do we push raw data? Anonymous raw data?

In addition, last year the group propose to initiate an RDBES training class.

Since this last meeting, many discussions were established with ICES with the purpose to answer all pending questions and bring all the information necessary to decide if the RDBES could be interesting for the RCG LP.

The last overview of the RDBES system is described in the next two figures (figures 1 and 2).

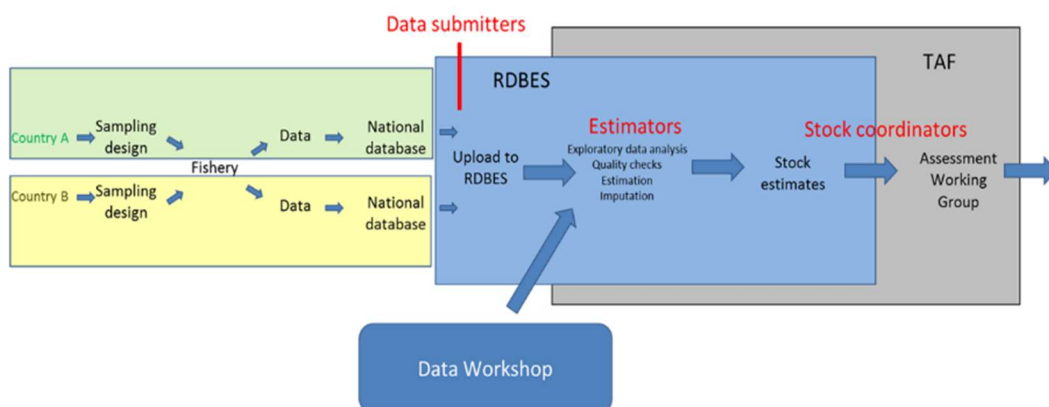


Figure 1: Global overview of the RDBES structure and process (view 1)

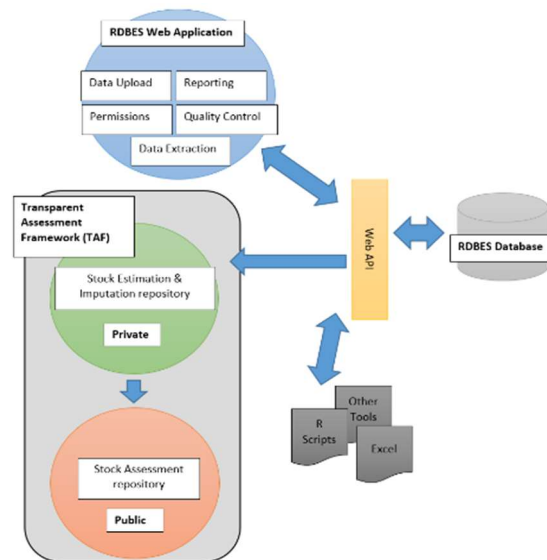


Figure 2: Global overview of the RDBES structure and process (view 2)

All the system was created under the TAF (Transparent Assessment Framework), which is a framework or guideline already applying on the database and ensure the transparency of all the processes, without any black boxes.

All the answers to the pending RCG LP questions are available in the document “cr_2019_12_0305_rdb_steering_committee.pdf” which is the personal report of Mathieu Depetris (France, IRD), from the 2019 Regional Database steering committee. In addition to this information, two hot points should be discussed during the meeting:

- development of the specifications of the RDBES was driven by the RDBES Core Group. This is the best place to be active in the RDBES’ development. If the RCG LP decides to move forward in the RDBES process, we must include some RCG LP members in this group.
- We must be clear about what we want really. We have all the information to make our decision and it could be more difficult for us to integrate large pelagic in the RDBES after the development phase.

The chair of the ICES steering committee on the RDBES, David Currie, was present for this topic and placed himself available to answer questions or bring complementary information.

The co-chairs of RCG LP reminds that is an obligation for the RCG LP to join, or create if necessary, some regional database, whether this is the RDBES or another system. There will always be costs and man hours associated but we must choose our path.

They specify that in the agenda there are also a requested to the European Commission to be explicit the other options we have if we choose not to move towards RDBES. We must be clear if we choose not to go with the RDBES what will be next. We can also make a plain system that connects with current national databases. However, this solution will not be less demanding that the RDBES solution, regarding development or financial costs. In any way, to have a common database there will be costs.

Carlos Palma (ICCAT) say that is not clear with this kind of database will store new or old data. Pedro Lino responds that this is a good question, but we must test it into the future. Mathieu Depetris added on this issue that the kind of data store in the database should be depending on what we

expect for the “estimation system”. For example, if we want to add processes (like the Tropical Tunas Treatment) we need data at a very low scale, but for an answer to the FDI datacall we need data at a higher scale.

Ioannis Thasitis (DFMR, Cyprus), say that Cyprus follow closely the RDBES development and for them is a clear “yes” towards that direction. Even for the RCG MED & BS there was this discussion on what to do and how to proceed regarding a regional database system. Cyprus proposed RDBES and in any case they will follow it as there is a process already running and there is no reason to develop something from scratch. All the costs and human resource-consuming burden will be considerably less with RDBES as development has passed from “child disease” and it is at a fruitful stage as it is being tested with data. If we do not go towards that end, we really start from nothing and everything will be much harder to secure funding and get specialised people involved. Personally, Ioannis see a really dark area if we choose not to go towards RDBES.

Pedro Lino is agreed with that and would like to point out that these databases have different implications for different member states. Some countries fish in their own area but for instance Spain, Portugal, Italy operate fleets all over the world and I think it makes sense to join a database that already exists, and where data are already uploading. Of course, this is the group decision and member states have to give their opinion but for instance in Portugal it will make sense to join this database as we are already testing data there.

David Currie add that it might be challenges to incorporate past data due missing information on sampling design the format and information collected. The important thing is to make sure that whichever direction we got all these databases are compatible and they talk together. He thinks that it will be a real failure if we end up with 3 or 4 different regional databases that do not talk with each other. Will end up not really progressing things forward.

Carlos Palma, remind that integration of historical information given to the different type of sampling schemes over the years sometimes creates incompatibility and we must be very strict on how to integrate this type of information. When you move backwards in times to 80s or 90s, it can change not only the costs but also the architecture and complexity. We all expect very difficult situations when we go backwards in time but it’s worthy. David Currie was agreed that there are lots of challenges there when you work backwards in time. Definitions change, aggregation levels change and then the further back you go the more difficult is gone to be. It’s on the table that I do not expect to incorporate all past data from day 1.

Furthermore, Mathieu Depetris say that we continuously talk about the regional database, but we must not overlook the estimation system and the quality control aspect and coordination that this system provides to RCG. This system brings more than just a database but deals with many of the things that RCG will have to work with. It will also help in getting a clear view on the actual regional sampling scheme and assess its effectiveness. Pedro Lino added that data in a common database will allow us to coordinate better among ourselves’s. In addition, Ioannis explain that the system will ensure quality produced arithmetic values as processing will be common to all member states. Another important new thing compared to what we have used to have so far is the development of a quality indicator to accompany each dataset. This will be very important in a stock assessment context where there can be multiple sources of data without being able to discriminate quality and weighting regarding them. Having a quality indicator (whether this will be a traffic light approach or scoring system) is very critical aspect and these are very new and good attributes to have.

Regarding the financial issue, Mathieu Depetris asked DG MARE if some funding could be finding form the EU for the development of a regional database, like what is proposed for the RCG MED & BS

through the annex 3 of the project proposal MARE/2020/08. Franco Biagi (DG MARE, EU) explain that the EU does not provide direct funds to RCGs for a regional database. As far as understood in previous Liaison meeting the RCG LP had the intention to move to RDBES. This is your responsibility to the RCG LP to decide what to do. The Commission is there to support but is not intended to finance RCG directly to develop the regional database. Pedro Lino answer that during the last RCG LP annual meeting some people did not agree to go into the RDBES. Major scientists were positive, but we cannot force things (not many NC were present). Jon Ruiz (AZTI, Spain), added that 3 years ago during the annual meeting, it was recommended to go through the RDBES. Last year most people were supporting the idea. The decision is there, and it's fundamental to think about the next steps. This is just a recommended, and the real problem is the financial part and the lack of human resources.

Emilia Baptista (DGRM, Portugal) are agreed with what Franco Biagi and say that there are two phases. Firstly, the decision for joining or not the RDBES. She advice to make a recommendation and if the answer is yes, the question is on NC to accept it in September Liaison Meeting which will be difficult if we do not have the calendar of developments and the costs associated. Ivana Vukov (NC Croatia and RCG Med and BS co-chair) fully agree with Emilia regards dates and funds. Transferring what has been done in RCG MED & BS regarding an RDB, we concluded that GFCM will be the host and the format of it will be RDBES. Then we have a pause due to financial and human capital issues. Things have started to roll again and a consortium have started to form regarding the MARE call. Stefanos Kavadas from HCMR is leading this endeavour. A meeting next week will be about it.

Link to the last comment, Mathieu Depetris asked why the RDB choice wasn't ICES RDBES. Ivana says that was not the final answer but hosting to GFCM was favoured for management reasons as it is the dedicated RFMO. Discussion will come on the table next week.

Victoria Ortiz de Zarate (IEO, Spain) thinking that RDBES driven by ICES with ICES particularities are different from other organisations. For her I think that there was not enough discussion and the financial aspect is not secured. She thinks that we are at a premature state. Ioannis added on that point that coming from a small organisation and being involved in all fronts of our work from data collection to stock assessment and everything in between he would like to highlight that this single platform will be able to address all end users calls from one point. Having the global picture or national requirements FDI, ICCAT, ICES, GFCM calls will be possible to answer from RDBES extractions. Of course, we deal with LP within this group, but this aspect should not be overlooked.

After this long discussion and exchanges, the group decide to recommend the RCG LP to join the RDBES process. In addition, it's important to keep in mind that we must evaluate the costs of the RDBES development (related to our fisheries specificities) and the timeline associated and move forward regarding the implication of the RCG LP in the RDBES core group.

4.4. Sampling and regional working plans

4.4.1. RCG LP Regional Work Plan

This RCG LP section deals with coordination around the development of a Regional Work Plan (RWP) for large pelagic data. In 2019, outputs of the WP2 of the RECOLAPE project made a proposal and define the RWP for two LP case studies (Mediterranean swordfish and tropical tunas in the Atlantic Ocean). In addition, several data needs, priorities, sharing mechanisms, sampling and simulation protocols, storage and management structures were defined. Now, the future challenges are to move forward in the last step remain to apply this RWP.

In this context, the grant project MARE 2020 08 aims to answer this need, through the Annex 1. Initially, one proposal is expected for each RCG (with a potential aggregation with a strong justification) divided in 4 work packages:

- WP1: compiling information and identifying gaps (outputs and lessons learned from previous grants, pilot studies, ...)
- WP2: filling information gaps (generation of necessary inputs from the perspective of applying the RWP)
- WP3: establishing decision-making structures/processes
- WP4: drafting the work plan which have to be realistic, practicable and ready for approval by the Commission. The draft should be finalised by October 2021 and covering the period from 2022 onwards.

Now, the aim of this section is to discuss our possibilities for answers to these proposals. For example, do we have a consortium or emerging collaboration among us? In addition, a modification of the proposal was submitted by the RCG NANSEA (Nord Atlantic, North Sea & Eastern Arctic) and Baltic Sea Region of the Commission to see if a collaboration among all the RCGs (like this one expected for the Annex 2 of the same project) should be considered. All the proposals are available in the document “mail_rwp_project_preparation_meeting”.

Mathieu Depetris (IRD, France) presents the call of Annex 1, dedicated to each Regional Coordination Group and/or a Consortium of Institutes. On the base of the RECOLAPE project, the call is focused on two aspects:

- sampling plan for Mediterranean swordfish with longlines
- the tropical tuna purse seine fisheries in the Atlantic Ocean.

The deadline for proposals submission is 31/07/2020, so it is important to identify a Consortium/Focal person to lead the project. It is possible to create a subgroup (or not) dedicated to work on Regional Work Plan matter.

The Co-chairs of the RCG LP have participated in the discussion to represent the Large Pelagic topics in the last RCG NANSEA & Baltic (8th to 12th of June) and there it has emerged the request to DG MARE of another proposal. There will be an online meeting next 2 of July with the chair of the subgroup dealing with Regional Work Plan for the “North” RCGs, Joël Vigneau, and the other RCG NANSEA & Baltic members to make a point.

Due to the risk of having no respondent due to the serious pandemic context, the tight agenda to finalise a proposal, and the difficulty to identify a leader to drive the project, there is also the possibility to support only the Annex 2 of the proposal.

George Tserpes (HCMR, Greece) underlines that responding to the new proposal is a very complicated job, the requests of the call, although interesting, do not seem easy to deal with. Fulvio Garibaldi (Università di Genova, Italy) as well underlines the difficulty of this moment in answering the call, even if the call is specific to the RCG-LP activity.

Ioannis Thasitis (DFMR, Cyprus) considers that the proposal involves mostly the national correspondents. Moreover, he underlines the difficulty to answer the call also because of the deadline of the DCF.

Jon Ruiz (AZTI, Spain) emphasises that in comparison to the previous call (RECOLAPE) this DG-MARE call seems different both in terms of structure and in terms of objectives. The previous grant dealt with transversal RCG issues (General structure, data quality checks, new sampling methods, etc). However this time the grant is very focused in developing RSPs, so whatever case studies are selected (e.j. Tropical tunas, bluefin tuna or swordfish were mentioned as possible candidates), it is imperative that major players in data collection for these cases studies participate. Furthermore, case studies (and the project) should be lead by these major players involved in DCF.

No clear consortium could be identified, nor any partner capable of leading a proposal from the RCG. However, the group expressed the need for the RCG to be somehow involved in this grant. Thus, the Co-chairs of RCG LP will participate in meetings organized by a group of scientists from all RCGs and PGECON to build a common proposal to participate in the DG-MARE call

Mathieu Depetris (IRD, France) recaps the general position and based on the comments/suggestions the group decides not to answer directly to Annex 1 of the call but integrate and support the synergy process to answer with the collaboration of the other RCG and if this process doesn't succeed, to follow and support only the Annex 2 of the call.

4.4.2. Global overview of sampling programs

The RCG presented a table which summarise all the sea observer programs dealing with LP fisheries (Annex 3). At the time of the meeting, 58 EU observer programs were included (46 ICCAT, 10 IOTC, 1 IATTC and 1 WCPFC). The goal of this exercise was:

- To have a global and updated picture of the EU observer coverage by program. This document, driven by the RCG-LP, should be updated every year and serve as a reference or source to know the real achieved observer coverage, since different reports show different figures on certain occasions. It was not possible to update data for all observer programs during the meeting. Thus, the RCG will contact NCs in order to fill in the missing information.
- To standardise the units used by fishery to estimate coverage. A huge variety of units are currently used to define the sampling coverage among fisheries. This makes difficult comparison and the understanding of the effort values. Thus, there is a need for harmonisation of these units among MSs and RFMOs.
- The RCG group acknowledged the value to have the coverage in number of hooks for the longline fisheries and wonder about the use of the trip cover. IOTC secretariat justified, for several fisheries, the used of the fishing days instead of sets, which should be better, by the lack of reporting. The group concluded to a need for coordination between RFMOs to decide the best common unit for cover among fisheries.
- Data reporting: This table enables to check for data reporting to RFMOs or data call by others end users. By summarising the availability of the data, RCG will also be able to identify missing information and support projects that fill up these gaps. DG MARE pointed out the lack of data mainly for the swordfish, the by-catch and global discards.
- The impact of the covid-19 pandemic on the sampling program: The exceptional situation, derived from covid19 pandemic, should have strongly impacted several sampling programs. This table will enable to evaluate the amount of data loss and so the potential implication for the stock assessments. This information also opens the way to the thinking of the solution to reduce deleterious effects in case of a similar situation in the future. At the meeting, almost

no information was available as the pandemic continued to impact the fisheries. However, the assessment will be done when the situation comes back to normal.

Related to questions and comments on the table, several improvements have been requested by the RCG participants. The group asked to add the coverage not only in the percentage but also in count to fully account for the sampling effort. RCG noted for a request, from Stamatios Varsamos (DG MARE, EU) for an information paper dealing with the need of unit standardisation. Finally, the RCG recommended expanding the scope of the table to all datasets concerned by the RCG-LP, particularly the biological data, which is more challenging, considering their huge type variability.

5. Next venue and Chairs

Due to the actual Covid-19 epidemic context and the incertitude to his evolution in the future, it's difficult to plan exactly where the next annual meeting will be held (due to potential restriction in the next travels and movements). Furthermore, in 2020 the annual meeting should have been held in Horta, Açores, Portugal, hosted by Dália Reis (DRP, Açores). If this solution will be still available in 2021, it could be a good proposal. Nevertheless, if the situation doesn't change, a virtual meeting like this one could also be a solution.

Josip Males (IZOR, Croatia) has confirmed is availability to be co-chair of RCG-LP for the next 2 years, replacing Pedro Lino (IPMA, Portugal). His mandate will start on the 1st of January 2021. For the next year, the annual meeting will be chaired by Mathieu Depetris (IRD, France) and Josip Males (IZOR, Croatia).

6. Any other issues

No further items were discussed in this section.

7. Recommendations

Recommendation n°1 RCG LP: Use RDBES as database	
RCM LP 2020 recommendation	Use the database hosted by ICES (RDBES) as a common regional database for RCG-LP
Justification	RCG LP has approved by consensus that a common database will be used
Follow-up actions needed	NC need to approve the use of RDBES
Responsible persons for follow-up actions	NCs
Time frame (deadline)	4Q 2020

Recommendation n°2 RCG LP: Appoint core group members	
RCM LP 2020 recommendation	Appoint core group members
Justification	RCG LP has approved by consensus that a common database will be used and has selected RDBES. If this recommendation is accepted and validated during the next Decision meeting in September 2020, the RCG LP will be proposing one person of each Subgroup to be a part of the RDBES Core group, to represent each specificity of LP fisheries.
Follow-up actions needed	RCG-LP propose one person of each Subgroup
Responsible persons for follow-up actions	This group will be a bridge between RFMOs and ICES (developers of the database)
Time frame (deadline)	RCG-LP, NC

Annexes

Annex 1 - List of confirmed participants

name, first name	Country	Email	Institution	Role
Pappalardo, Luigi	italy	gistec86@hotmail.com	OCEANIS S.r.l.	expert
Mariani, Adriano	italy	a.mariani@unimar.it	UNIMAR	expert
Carbonara, Pierluigi	italy	carbonara@coispa.it	COISPA	expert
Garibaldi, Fulvio	italy	fulvio.garibaldi@unige.it	Università di Genova	expert
Lino, Pedro	portugal	plino@ipma.pt	IPMA	expert
Baptista, Emilia	portugal	ebatista@dgrm.mm.gov.pt	DGRM	NC
Alcoforado, Bernardo	portugal	balcoforado@dgrm.mm.gov.pt	DGRM	expert
Ferreira de Gouveia, Maria Lidia	portugal	lidia.gouveia@madeira.gov.pt	DRP Madeira	expert
Ruiz, Jon	spain	jruiz@azti.es	AZTI	expert
Santiago, Josu	spain	jsantiago@azti.es	AZTI	expert
Fernández Costa, Jose	spain	jose.costa@ieo.es	IEO	expert
Pascual, Pedro	spain	pedro.pascual@ieo.es	IEO	expert
Baez, Jose Carlos	spain	josecarlos.baez@ieo.es	IEO	expert
Ortiz de Zarate, Victoria	spain	victoria.zarate@ieo.es	IEO	expert
Abascal, Francisco	spain	francisco.abascal@ieo.es	IEO	expert
Poza Poza, Juana	spain	jpoza@mapama.es	MAPA	expert
Buxó de la Peña, Ricard	spain	rbuxo@mapa.es	MAPA	expert
Schmid, Teresa Molina	spain	tmolina@mapa.es	MAPA	expert
Depetris, Mathieu	france	mathieu.depetris@ird.fr	IRD	expert
Rouyer, Tristan	france	tristan.rouyer@ifremer.fr	Ifremer	expert
Bonhommeau, Sylvain	france	sylvain.bonhommeau@ifremer.fr	Ifremer	expert
Billet, Norbert	france	norbert.billet@ifremer.fr	Ifremer	expert
Duparc, Antoine	france	antoine.duparc@ird.fr	IRD	expert
Lebranchu, Julien	france	julien@lebranchu.eu	IRD	expert
Biagi, Franco	eu	franco.Biagi@ec.europa.eu	DG MARE	expert
Garcia-Alvarez, Blanca	eu	blanca.garcia-alvarez@ec.europa.eu	DG MARE	expert
Kostopoulou, Venetia	eu	venetia.kostopoulou@ec.europa.eu	DG MARE	expert
Varsamos, Stamatios	eu	stamatios.varsamos@ec.europa.eu	DG MARE	expert
Sterczewska, Monika	eu	monika.sterczewska@ec.europa.eu	DG MARE	expert
Tserpes, George	greece	gtserpes@hcmr.gr	HCMR	expert
Thasitis, Ioannis	cyprus	ithasitis@dfmr.moa.gov.cy	DFMR	expert
Fiorellato, Fabio	iotc	fabio.fiorellato@fao.org	IOTC	expert
Chassot, Emmanuel	iotc	emmanuel.Chassot@fao.org	IOTC	expert
Grubišić, Leon	croatia	leon@izor.hr	IZOR	expert
Santos, Miguel	iccat	miguel.santos@iccat.int	ICCAT	expert
Aleman, Francisco	iccat	francisco.alemany@iccat.int	ICCAT	expert
Palma, Carlos	iccat	carlos.palma@iccat.int	ICCAT	expert
Ortiz, Mauricio	iccat	mauricio.ortiz@iccat.int	ICCAT	expert
Currie, David	ices	david.Currie@Marine.ie	ICES	expert

Annex 2 - Meeting agenda

Date	Time in UTC+1	ToR	Item	Subject
First day (25/06/2020)	08:30 - 09:00			Open session for identify and solve potential problems with the connection of the participants
	09:00 - 09:15			Welcome and adoption of agenda/report format, rapporteurs and logistic organisation
	09:15 - 09:30			Last outcomes and major points of the 2019 RCG LP annual meeting
	9:30 - 10:00			European Commission Multi-Annual Plans
	10:00 - 10:45	1	1.01	RCG LP global structure
	10:45 - 11:00	Coffee break		
	11:00 - 11:30	1	1.02	RCG LP first stage meeting
	11:30 - 13:00	1	1.03	RCG LP subgroup tropical tunas sampling
		1	1.04	RCG LP subgroup longline fisheries outside Mediterranean Sea
		1	1.05	RCG LP subgroup Mediterranean large pelagic fisheries
		1	1.06	RCG LP subgroup bluefin tuna sampling
		1	1.07	RCG LP subgroup bait boat/pole and line
		1	1.08	RCG LP other subgroups
	13:00 - 13:30	1	1.09	RCG LP third stage meeting
	13:30 - 14:30	Lunch break		
	14:30 - 15:30	2	2.02	RFMO feedback
	15:30 - 16:15	2	2.03	Data needs
	16:15 - 16:30	Coffee break		
	16:30 - 17:30	2	2.05	Data calls
	17:30 - 18:00	2	2.04	Data transmission failures
Second day (26/06/2020)	09:00 - 10:00	1	1.10	RCG LP administration
	10:00 - 10:30	2	2.01	Fisheries overview
	10:30 - 10:45	Coffee break		
	10:45 - 12:00	3	3.01	RCG LP regional database ICES Regional Database & Estimation System
	12:00 - 13:00	Lunch break		
	13:00 - 14:00	4	4.01	RCG LP Regional Work Plan
	14:00 - 15:00	4	4.02	Global overview of sampling programs
	15:00 - 15:15			Next venue and chair
	15:15 - 15:45			Any other issues
	15:45 - 16:30			Conclude meeting

Annex 3 – Summary of all the sea observer programs dealing with LP fisheries

item	rfmo	country	area	institute_in_charge	programme	gear	fishery_target_species	monitoring_objective	type	first_year	last_year
1	ICCAT	france	south_atlantic	ird	dcf	purse_seine	SKJ/YFT/BET	Discards, Bycatch	human_observer	2005	ongoing
2	ICCAT	france	south_atlantic	orthongel	ocup	purse_seine	SKJ/YFT/BET	Discards, Bycatch	human_observer	2013	ongoing
3	ICCAT	france	south_atlantic	orthongel	ocup	purse_seine	SKJ/YFT/BET	Discards, Bycatch	ems	2014	ongoing
4	IOTC	france	western_indian_ocean	ird	dcf	purse_seine	SKJ/YFT/BET	Discards, Bycatch	human_observer	2005	ongoing
5	IOTC	france	western_indian_ocean	orthongel	ocup	purse_seine	SKJ/YFT/BET	Discards, Bycatch	human_observer	2013	ongoing
6	IOTC	france	western_indian_ocean	orthongel	ocup	purse_seine	SKJ/YFT/BET	Discards, Bycatch	ems	2014	ongoing
7	IOTC	france	western_indian_ocean	ird	recolape	longline			ems	2019	2019
8	IOTC	france	western_indian_ocean	ird	dcf	longline			human_observer	2007	ongoing
9	IOTC	france	western_indian_ocean	ird	dcf	longline			self_reporting	2011	ongoing
10	ICCAT	portugal_mainland	atlantic_ICCAT_area	ipma	dcf_pnab	longline	SWO	All catches	human_observer	2008	ongoing
11	IOTC	portugal_mainland	indian_ocean_IOTC_area	ipma	dcf_pnab	longline	SWO	All catches	human_observer	2011	ongoing
12	ICCAT	portugal_mainland	atlantic_ICCAT_east_atlantic	dgrm_ipma	dcf_pnab	trap	BFT	BFT	human_observer	1998	ongoing
13	ICCAT	greece	mediterranean	hcmr	dcf	longline	sws		human_observer	2014	ongoing
14	ICCAT	italy	ionian_sea_adriatic_sea	university_of_bari	university_of_bari	longline, gillnet	SWO/BFT/ALB		human_observer	seventies	eighties
15	ICCAT	italy	tyrrhenian_sea	espi	mmm_np	purse_seine	BFT		human_observer	1982	1989
16	ICCAT	italy	sicily	pelagos	mmm_np	longline, gillnet, trap	SWO/BFT/ALB		human_observer	1985	1989
17	ICCAT	italy	italian_seas	aquastudio	mmm_np	longline, gillnet	SWO/BFT/ALB		human_observer	1990	1991
18	ICCAT	italy	italian_seas	aquastudio_university_of_ge noa_university_of_messina_ university_of_cagliari_univer sity_of_bari_lab_of_marine_ biology_of_bari_lab_of_fishe ry_biology_fano	mmm_np	longline, gillnet, harpoon, handline, trap	SWO/BFT/ALB		human_observer	1990	2006
19	ICCAT	italy	italian_seas	aquastudio_university_of_ge noa_university_of_messina_ university_of_cagliari_univer sity_of_bari_lab_of_marine_ biology_of_bari_lab_of_fishe ry_biology_fano	mipaff_np_eu_projects	longline, gillnet, harpoon, handline, trap	SWO/BFT/ALB		human_observer	1993	1998
20	ICCAT	italy	italian_seas	aquastudio_university_of_ge noa_university_of_messina_ university_of_cagliari_univer sity_of_bari_lab_of_marine_ biology_of_bari_lab_of_fishe ry_biology_fano	mipaff_np_eu_projects	longline, gillnet, harpoon, handline, trap	SWO/BFT/ALB		human_observer	1998	2000
21	ICCAT	italy	italian_seas	aquastudio_university_of_ge noa_university_of_messina_ university_of_cagliari_univer sity_of_bari_lab_of_marine_ biology_of_bari_lab_of_fishe ry_biology_fano	mipaff_np_eu_projects	longline, gillnet, harpoon, handline, trap	SWO/BFT/ALB		human_observer	2000	2002

item	rfmo	country	area	institute_in_charge	programme	gear	fishery_target_species	monitoring_objective	type	first_year	last_year
22	ICCAT	italy	italian_seas	aquastudio_university_of_genoa_university_of_messina_university_of_cagliari_university_of_bari_lab_of_marine_biology_of_bari_lab_of_fishery_biology_fano	mipaaf_dcr	longline	SWO/BFT/ALB/		human_observer	2003	2006
23	ICCAT	italy	tyrrhenian_sea	unimar_aquastudio	mipaaf_dcr	longline			human_observer	2007	2008
24	ICCAT	italy	ligurian_sea	university_of_genoa	university_of_genoa	longline	SWO/BFT/ALB/		human_observer	2007	2008
25	ICCAT	italy	tyrrhenian_sea	unimar_aquastudio	mipaaf_dcr	longline			human_observer	2009	2009
26	ICCAT	italy	sardinia	university_of_cagliari	europa_uni_unfp6_2005_global_4_project_sesame	trap	BFT		human_observer	2006	2011
27	ICCAT	italy	sardinia	university_of_cagliari	ministry_for_university_and_research_italy_funding_scheme_prin	trap	BFT		human_observer	2009	2011
28	ICCAT	italy	sardinia	university_of_cagliari	ministerio_de_ciencia_e_innovación_espana_proyecto_paratun	trap	BFT		human_observer	2011	2012
29	ICCAT	italy	ligurian_sea	university_of_genoa	ligurian_regional_government	longline	SWO/BFT/ALB		human_observer	2009	2016
30	ICCAT	italy	ligurian_sea	university_of_genoa	university_of_genoa	longline	SWO/BFT/ALB		human_observer	2017	ongoing
31	ICCAT	italy	mediterranean_tyrrhenian_south_adriatic_ionian_sea	unimar	mipaaf_dcf	longline			human_observer	2007	ongoing
32	ICCAT	italy	Sardinia	oceanis	mipaaf_NOP	trap	BFT		human_observer	2014	ongoing
33	ICCAT	italy	italian_seas	oceanis	mipaaf_NOP	longline	BFT		human_observer	2014	ongoing
34	ICCAT	italy	tyrrhenian_sea	oceanis	mipaaf_NOP	purse_seiner	BFT		human_observer	2017	ongoing
35	ICCAT	italy	Sardinia	oceanis	mipaaf_NOP	trap	SWO		human_observer	2017	ongoing
36	ICCAT	italy	italian_seas	oceanis	mipaaf_NOP	longline	SWO		human_observer	2017	ongoing
37	ICCAT	spain	central_east_atlantic	ieo_azti	dcf	purse_seiner	SKJ/YFT/BET	Discards, Bycatch	human_observer	2003	ongoing
38	ICCAT	spain	central_east_atlantic	ieo_azti	private_programs	purse_seiner	SKJ/YFT/BET	Discards, Bycatch	human_observer_ems	2012	ongoing
39	IOTC	spain	western_indian_ocean	ieo_azti	private_programs	purse_seiner	SKJ/YFT/BET	Discards, Bycatch	human_observer_ems	2012	ongoing
40	IOTC	spain	western_indian_ocean	ieo_azti	dcf	purse_seiner	SKJ/YFT/BET	Discards, Bycatch	human_observer	2003	ongoing
41	ICCAT	spain	bay_of_biscay	azti	private_programs	baitboat	ALB/BFT	Target sps, discards, Bycatch	human_observer	2017	2019
42	ICCAT	spain	bay_of_biscay	azti	private_programs	trolling	ALB	Target sps, discards, Bycatch	human_observer	2017	2019
43	ICCAT	spain	bay_of_biscay	azti	private_programs	baitboat	ALB/BFT	Target sps, discards, Bycatch	ems	2019	ongoing
44	ICCAT	spain	bay_of_biscay	azti	private_programs	trolling	ALB	Target sps, discards, Bycatch	ems	2019	ongoing
45	ICCAT	spain	atlantic_ocean	sgp_ieo	dcf_national_program	longline			human_observer		ongoing
46	IOTC	spain	indian_ocean	sgp_ieo	dcf_national_program	longline			human_observer		ongoing

item	RFMO	country	area	institute_in_charge	programme	gear	fishery_target_species	monitoring_objective	type	first_year	last_year
47	IATTC	spain	east_pacific	sgp_ieo	dcf_national_program	longline			human_observer		ongoing
48	WCPFC	spain	west_and_central_pacific	sgp_ieo	dcf_national_program	longline			human_observer		ongoing
49	ICCAT	spain	north_east_atlantic	ieo	dcf	baitboat			human_observer		
50	ICCAT	spain	north_east_atlantic	ieo	dcf	trolling			human_observer		
51	ICCAT	croatia	adriatic_sea	izor	dcf	purse_seiner	BFT		human_observer	2013	ongoing
52	ICCAT	croatia	adriatic_sea	izor	put	purse_seiner	BFT		human_observer	2005	ongoing
53	ICCAT	croatia	adriatic_sea	izor	dcf	longline	BFT		human_observer	2013	ongoing
54	ICCAT	croatia	adriatic_sea	izor	dcf	longline	SWO		human_observer	2013	ongoing
55	ICCAT	croatia	adriatic_sea	izor	dcf	handline	BFT		human_observer	2013	ongoing
56	ICCAT	croatia	adriatic_sea	izor	dcf	handline	BFT		human_observer	2013	ongoing
57	ICCAT	croatia	adriatic_sea	izor	dcf	handline	ALB		human_observer	2013	ongoing
58	ICCAT	Cyprus	east_mediterranean	DFMR	dcf_national_program	Longline	BFT/SWO/ALB		human_observer	2006	Ongoing

item	coverage_last_year	coverage_unit	reported_to_rfmo	data_use	stopeed_during_covid19	observations
1	20%	set	yes			
2	80%	set	yes			
3	2	vessel	no			
4	20%	set	yes			
5	25%	set	yes			
6	8	vessel	no			
7	2	vessel	no			
8	5%	hook	yes			
9	7%	hook	yes			
10	4,30%	set	yes	All uses	Completely stopped	
11	15,40%	set	yes	All uses	Completely stopped	
12	100%	day	yes	All uses	Not affected	
13	3%	set	yes		Completely stopped	There are temporal gaps
14	opportunistic	hook	no			At landing and onboard observations
15	opportunistic	hook	yes			the coverage included also the aerial spotting for the full fishing season and one or two PS, with landing information for the full fleet and size samples. Reported to the Ministry, most of the data are published.
16	opportunistic	hook	yes			Data, including landigs, were reported to the Ministry, GFCM and to ICCAT
17	opportunistic	hook	yes			Data, including landings and economic data, were reported to the Ministry, FAO and to ICCAT
18	opportunistic	hook	yes			Data, including landings, were reported to the Ministry and to ICCAT
19	opportunistic	hook	yes			Data, including landings, were reported to the Ministry, EU and to ICCAT
20	opportunistic	hook	yes			Data, including landings, were reported to the Ministry, EU and to ICCAT
21	opportunistic	hook	yes			Data, including landings, were reported to the Ministry, EU and to ICCAT

item	coverage_last_year	coverage_unit	reported_to_rfmo	data_use	stopeed_during_covid19	observations
22	opportunistic	hook	yes			Data, including landings, were reported to the Ministry, EU and to ICCAT
23	opportunistic	hook	yes			Data, including landings, were reported to the Ministry and to ICCAT
24	opportunistic	hook	scrs_papers			At landing and onboard observations
25	opportunistic	hook	yes			Data, including landings, were reported to the Ministry and to ICCAT
26	opportunistic	day	scientific_journals			Time series data, including landings, were reported in EU reports
27	opportunistic	day	scrs_papers_scientific_journals			Data, including landings, were reported to Ministry reports
28	opportunistic	day	scrs_papers			Time series data
29	opportunistic	hook	scrs_papers			At landing and onboard observations
30	opportunistic	hook	scrs_papers		NO	At landing and onboard observations
31	opportunistic	trip/set	yes			Data reported through Mipaaf to Iccat, according to the requested format. General data, including sampling at landing sites, collected since 2007: more consistent on board sampling since 2017. Beside swordfish, sampling include as well the other large pelagic species requested by DCF
32	100%	day	scrs_papers			Data was submitted to the Mipaaf within the framework of the National Observer Program
33	30%	trip/set/vessel	scrs_papers			Data was submitted to the Mipaaf within the framework of the National Observer Program. At landing and onboard observations.
34	20%	vessel	scrs_papers			Data was submitted to the Mipaaf within the framework of the National Observer Program. During landing activities.
35	100%	day	scrs_papers			Data was submitted to the Mipaaf within the framework of the National Observer Program
36	opportunistic	trip/set/vessel	scrs_papers			Data was submitted to the Mipaaf within the framework of the National Observer Program. At landing and onboard observations.
37	10%	set	yes		Partially stopped	
38	90%	set	partially_obs_only		not affected	
39	90%	set	partially_obs_only		not affected	
40	10%	set	yes		Partially stopped	
41	219	day	no		NA	
42	89	day	no		NA	
43	1	vessel	no		not affected	
44	1	vessel	no		not affected	
45	5,15%	days ?	no			
46	4,90%	days ?	no			

item	coverage_last_year	coverage_unit	reported_to_rfmo	data_use	stopeed_during_covid19	observations
47	6,71%	days ?	yes			
48	14,91%	days ?	no			
49	0%					
50	0%					
51	100%	trip	yes			Data was reported to the Ministry and to ICCAT
52	10%	trip	yes			Data was reported to the Ministry and to ICCAT
53	opportunistic	trip	yes			Data was reported to the Ministry and to ICCAT, rare catch
54	opportunistic	trip	yes			Data was reported to the Ministry and to ICCAT
55	opportunistic	trip	yes			Data was reported to the Ministry and to ICCAT
56	100%	trip	yes			Coverage of recreational BGF competitions, data was reported to the Ministry and to ICCAT
57	opportunistic	trip	yes			Data was reported to the Ministry and to ICCAT, rare catch
58	1%	trip	Yes		partially stopped	

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