Proposal for the development of a Strategic Research Plan for the IOTC Scientific Committee

Hilario Murua[1], Josu Santiago[2], Gorka Merino[1], Sarah Martin[3], Alejandro Anganuzzi[3]

Abstract

Considering the IOTC Recommendation on the Best Available Science [Rec. 2012-15] and the necessity for provision of appropriate advice to present and future requests from the Commission, strategic planning is proposed to develop a structured approach to guide the future work and research of the SC. This document intends to stimulate discussion around the definition of the components and the creation of a roadmap for the elaboration of the 2018-2022 SC Strategic Plan.

KEYWORDS: best science, strategic planning, transparency, independence, coordination, quality of scientific advice.

IOTC Science Process and Scientific Committee

Article XII.1 of the IOTC Agreement establishes the Scientific Committee, but the IOTC Agreement does not clearly give any guidance on the functions or tasks of the Scientific Committee. Article XII.1 of IOTC establishes that the Scientific Committee shall (i) be opened to Members of the Commission, (ii) keep under review and to gather information of the stocks concerned, (iii) assess and analyse the trends of the stock concerned, (iv) coordinate research of the stock concerned, (v) report the finding to the Commission, (vi) propose recommendations for actions by the Members of the Commission, and (vii) consider any matter requested by the Commission. Thus, in practice the Scientific Committee advises the Commission on research and data collection, on the status of stocks and on management issues. Participants in the Scientific Committee are associated with the delegations from the Contracting Parties and Cooperating Non-Contracting Parties (CPCs), observer organisations and invited experts. In additionto the permanent Scientific Committee, a range of permanent working parties to deal with one or more IOTC species/stocks are established to to provide advice to the Commission through the Scientific Committee (Figure 1).

[1] AZTI Tecnalia, Herrera Kaia Portualdea z/g, 20100 Pasaia, Basque Country, Spain
[2] AZTI Tecnalia, Txatxarramendi Ugartea z/g, 48395 Sukarrieta, Basque Country, Spain
[3] IOTC Secretariat, Victoria, Mahe, Seychelles

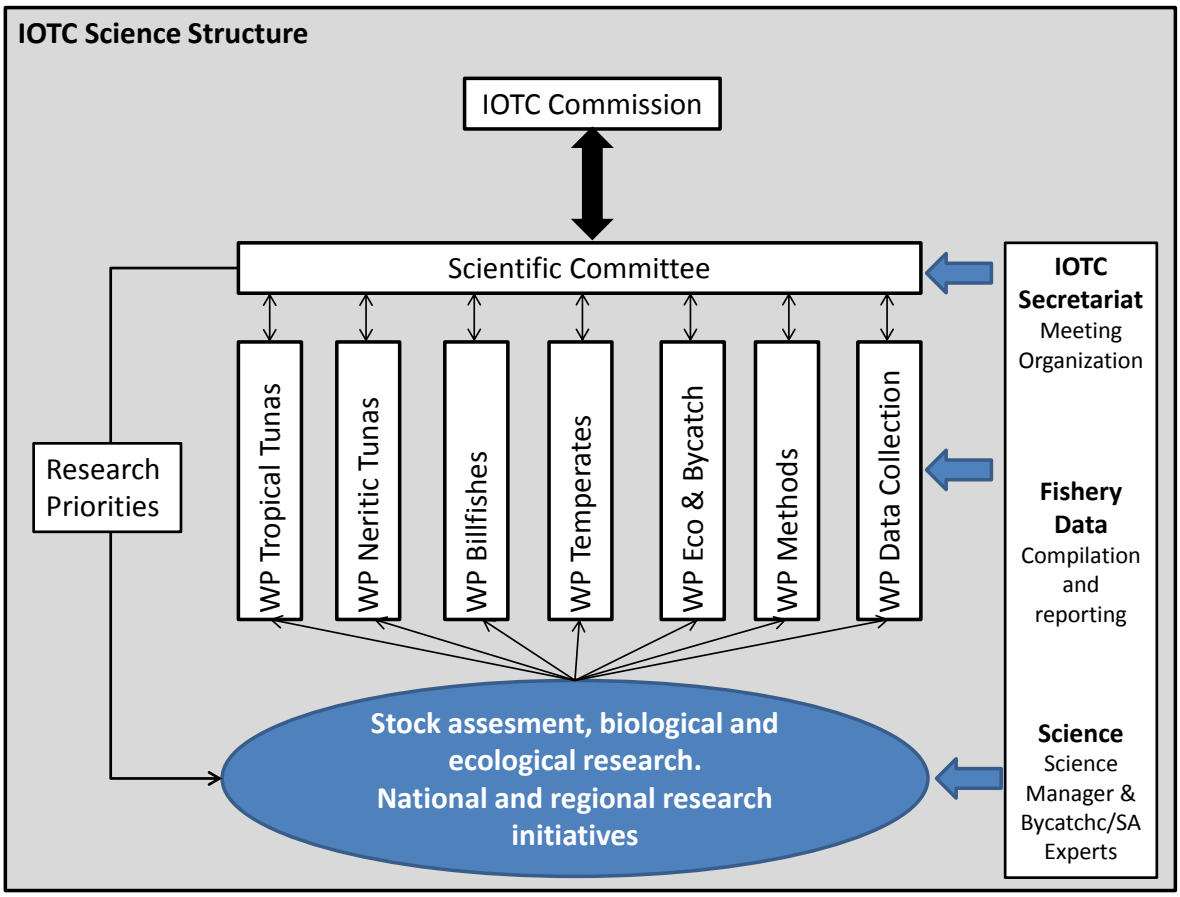

Figure 1.- IOTC Science Process.

Moreover, IOTC Commission's Rules of Procedure (2014) details the functions and mode of operation of the Scientific Committee as an advisory body to the Commission, "*on which each member of the Commission have the right to be represented, is responsible for recommending policies and procedures for the collection, processing, dissemination and analysis of fishery data, developing and coordinating cooperative research programmes among Member Countries, assessing and reporting to the Commission on the status of the stocks, formulating recommendations concerning conservation, fisheries management and research, including consensus, majority and minority views". It is the SC' task to ensure that the Commission has available at all times the most complete and current statistics concerning fishing activities in the Convention area as well as biological information on the stocks that are fished to carry out stock assessment and to provide the Commission on specific conservation and management measures. The SC also coordinates various national research activities, develops plans for special international cooperative research programs to assure that best sciences is used for the provision of scientific advice to the Commission*"

The report of the independent review panel (IOTC, 2016), stated that the SC has regularly reviewed its mode of operation and adapted to meet the new challenges and the needs of the Commission and improved its performance since the first IOTC Performance Review (Anon., 2009). The current arrangement has evolved to meet the needs and resources of IOTC (IOTC, 2016). As such, several

SC initiatives to address the increasing demands (in quantity and quality) of the Commission have been regularly put in place; but without a clear systematic development.

Considering the increase in demand for more scientific advice from the Commission, during the 2012 IOTC Commission meeting in Fremantle (Australia), reaffirming the necessity that any conservation and management measure shall be based on the best possible scientific advice, the Commission adopted the Recommendation on the Best Available Science [IOTC Rec 12-15]. Similar to ICCAT Recommendation on Best Available Science, the Recommendation proposes a set of actions affecting to the different links in the chain of the development of the scientific advice (Santiago et al., 2013, 2014). Most of the actions are related to preserving and promoting independence and excellence of the SC to assure the quality of the provision of scientific advice; including aspects of collection of data, research, participation and capacity building, peer-review, dialog with the Commission, and, very particularly, quality control, transparency, independence and avoiding conflict of interests, fully documentation of the work, peer review and use of best available science during stock assessments and advice (Figure 2).

Considering the necessity for providing appropriate and best scientific advice on current and future requests, the development of a strategic research plan appears the best way to provide timely, appropriate and best responses in a structured manner. Moreover, Recommendation 2012-15 request IOTC SC to develop a strategic plan for the Scientific Committee to be adopted by the Commission which will assure the professional independence and excellence of the SC (point 2.3 in figure 2). The strategic plan should be the basis to guide the work and research priorities of the IOTC Scientific Committee, and Working Parties, in assisting the Commission to effectively achieve its mandate. An agreed research plan will also allow effectively adapting and adjusting the SC activities to funding sources, anticipating changes and necessities as well as preparing for them. Planning also should contribute towards a more efficient functioning and a better utilization of the always limited existing assets, resources and capabilities of the SC and the Secretariat.

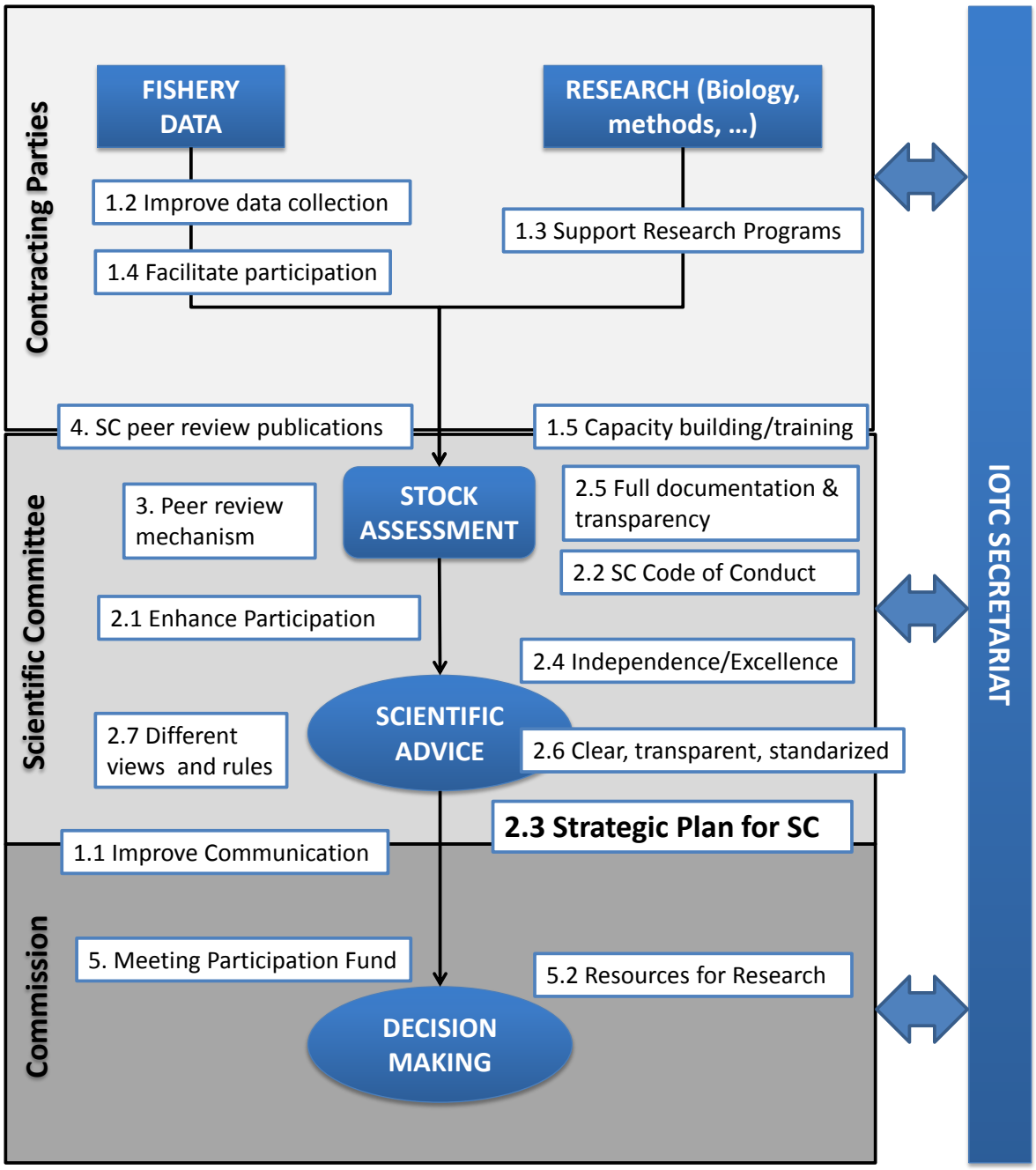

Figure 2. Diagram showing the main actions identified under [Recommenation 2012-15] IOTC Recommendation on the Best Available Science.

In addition, at the KOBE II Joint tuna-RFMO meeting held in Barcelona in 2010, during the presentation of point 9 of the agenda "Enhanced cooperation among tuna RFMOs" the presenter recommended that all tuna RFMOs develop strategic research plans in order to identify research priorities, joint collaborative effort and funding resources globally (Anon 2010). Similarly, according to the experts working group of the EU 7th framework project TXOTX, all Regional Fishery Regional Organization, and those using the results of fisheries research, should develop strategic research plans which will allow them prioritising research in line with clearly defined

objectives. Each objective should be listed alongside a responsible party and potential collaborators including specified deliverables with deadlines, levels of funding and resources needed, and where possible identifying funding sources (De Bruyn et al., 2011). The plan thus should identify objectives and provide the organization a management tool to prioritise research, focus the energy, resources, and to align all the efforts/time of the organization in the same direction.

Therefore it is recommended that SC considers, starting in 2017, to develop a draft Strategic Science Plan and to include this issue as a high priority in the research workplan of the SC. which will be considered at an *ad hoc* meeting of the SC during 2018. This will be peer reviewed before approval by SC and adoption by the Commission. The main goal of this document is to stimulate discussion around the definition of the components and the creation of a roadmap for the elaboration of the 2018-2022 SC Strategic Plan.

What is Strategic Planning?

There are several definitions of Strategic Planning. According to Wikipedia, Strategic Planning is *an organization's process of defining its strategy, or direction, and making decisions on allocating its resources to pursue this strategy*. A Strategic Planning *is a systematic process of envisioning a desired future, and translating this vision into broadly defined goals or objectives and a sequence of steps to achieve them*. This generally involves setting the goals, determining actions to achieve these objectives, and mobilizing resources to execute the actions. In contrast to long-term planning (which begins with the current situation and describes a path to meet desired future needs), strategic planning starts with the desired-end and works backward to the current status. Also, in contrast to tactical planning (which focuses at achieving narrowly defined interim objectives with predetermined means), strategic planning looks at the wider picture and is flexible in choice of its means.

The key components of 'strategic planning' include an understanding of the organization's vision (the organization’s future direction), mission (the organization’s purpose), values, goals and strategies. A strategic plan identifies the long-term or overall objective and outlines the steps to achieve the desired future outcomes of the organization. In order to determine the direction of the organization, it is necessary to understand its current position (ie where we are) and the possible avenues through which it can pursue a particular course of action (ie where we are going to go).

Generally, strategic planning deals with at least one of three key questions:

1."What do we do or Where we are?"

2."For whom and why we do it?"

3."What we excel at?"

Components of the SC Strategic Plan

The purpose of the SC Strategic Plan is to provide the overall framework and goals for development and coordination of science and science-related activities needed to support provision of sound scientific advice as the centrepiece for the conservation and management of tuna and tuna-like species in the Indian Ocean.

The Plan will contemplate the period 2018-2022 and will include the following components:

- **Vision**: A statement describing where the SC desires to be in 2022; the target around which we pursue to focus the attention and energies of the SC.

- **Mission**: Outline the purpose of the SC, in line with the Rules of Procedure defined in the IOTC Rules of Procedures, its values and the necessities of the Commission. In other words, define "what do we do*?"*

- **Values**: The guiding principles of the SC, including the elaboration of a code of conduct. Some examples of values to promote and defend include: independence, objectivity, transparency, honesty, and cooperation.

- **Goals**: The goals are broad priorities for the SC. Most strategic plans include few carefully selected goals relevant to the Commission and stakeholder needs and available resources. Goals should be "SMART": Specific, Measurable, Attainable, Realistic, and Timely. Goals are not likely to change from year to year if they are correctly identified in the strategic plan (but the strategies to achieve goals will change with new ideas and initiatives).

  Goals could be classified within Thematic Areas: examples are Data Collection, Research Priorities, Stock Assessments and Advice, Participation and Capacity Building, and Dialog and Communication. For example, a goal for the SC within the Theme "Participation and Capacity Building" could be defined as "Improving the science capabilities of the SC"

- **Strategies**: Within each goal should be strategies, initiatives, projects and priorities that will progress to the goal. For example, the goal "Improving the science capabilities of the SC" may include strategies such as "Supporting visiting opportunities for developing economy scientists at national laboratories creating grants to support 4-5 pre- or post-doctoral stays", "elaborating 3 curricula designs of stock assessment modeling approaches for different levels of knowledge",... Strategies will of course influence the allocation of resources, but also reflect available resources.

- **Tactics, Performance measures**: To accomplish the goals applying strategies identified the plan should include accountability and performance measures. Identify who (i.e. SCS, Secretariat, CPCs and Commission) is responsible for which elements, how success will be measured and when (interim dates and deadlines).

Theory of Change

To link all those components mentioned above, there is a need for a long-term, holistic strategy to address these issues. This section therefore intents for discussion to outline a broader plan of action based around a theory of change highlighting the progressive chain of outcomes and associated mechanisms to achieve the desired goal by explicitly defining the underlying steps backwards so that they can be systematically worked to move on to upper level (Figure 3). The overall goal of the strategic planning of SC through the theory of change could be defined as "A Scientific Committee with broad participation of competent scientists all the CPCs, working cooperatively in an effective, transparent and independent way, with a solid scientific and technical support of the Secretariat, to provide objective, reliable and robust scientific advice to the Commission in support of the Convention objectives".

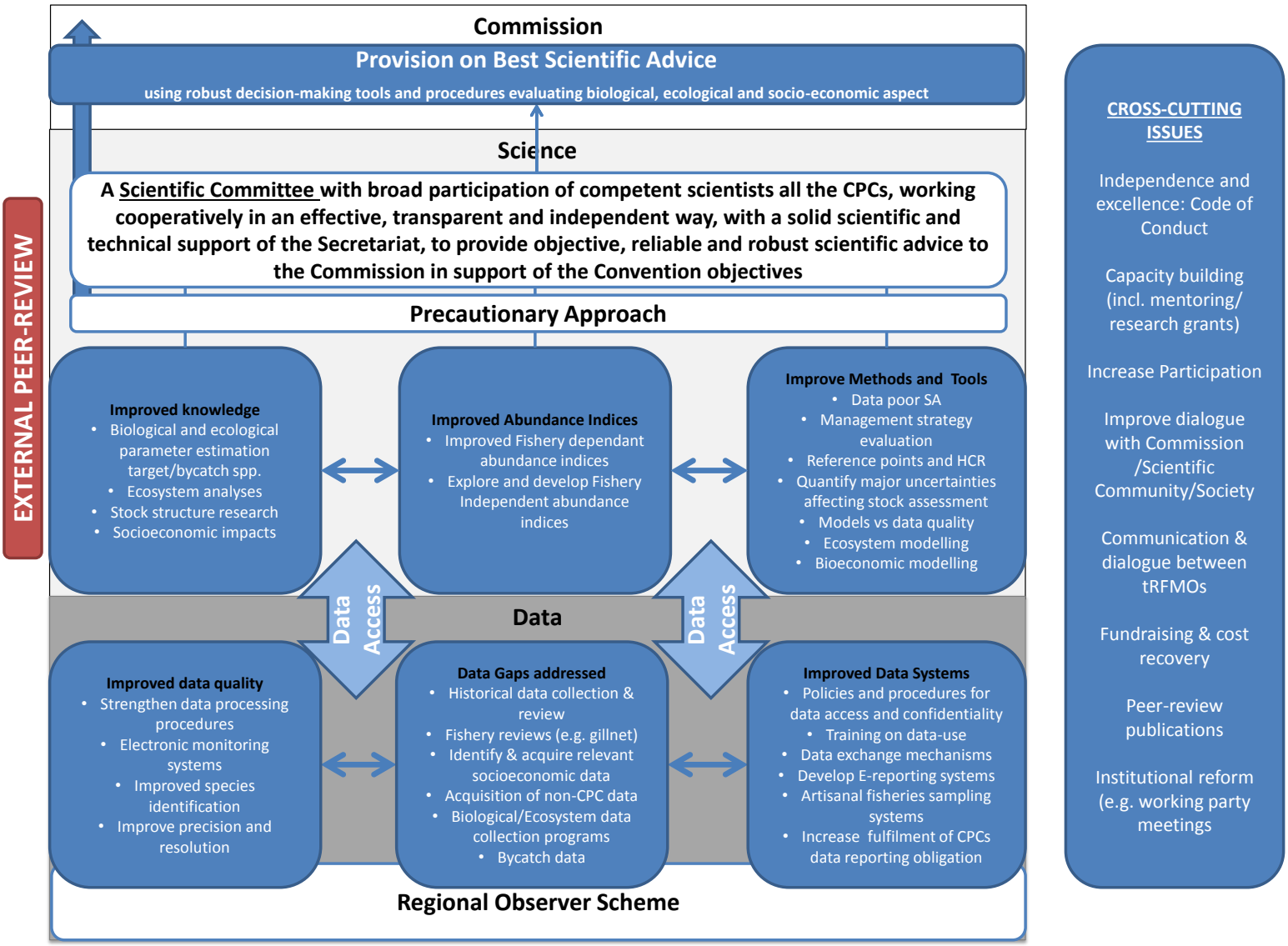

Figure 3.- Strategic Planning of IOTC Scientific Committee.

Roadmap for Elaboration of the 2018-2022 SC Strategic Plan

The 2018-2022 SCRS Strategic Plan will be coordinated by the SC chair in conjunction with the Secretariat and with the help of the external consultancy. The following chronogram of activities is foreseen for the development of the SC Strategic Plan:

Phase	What	Who	When
1	Assess the situation: gaps and needs, SWOT analysis, identify goals and strategies	SC (Chair, WP chairs), Secretariat & External Consultancy	02-08/2017
2	Validate goals and strategies; agree on mission, vision and values	SC meeting	11/2017
3	Elaborate 1st draft	SC (Chair, WP chairs), Secretariat & External Consultancy	11/2017 – 02/2018
4	Completion of the Plan	SC (ad-hoc meeting)	02/2018???
5	External peer-review	External experts	04/2018
6	Approval of the Plan	IOTC Commission	05/2018

As part of the first three planning phases, external specialized technical consultancy will be hired to help identifying and adapting the necessary methodology of strategic planning to IOTC specificities. Based on the specific method agreed, they will stimulate and advise the SC in the development of the Strategic Plan. The first and third phase will be conducted mainly electronically.

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