



COMMISSION
SIXTEENTH REGULAR SESSION
Port Moresby, Papua New Guinea
5 - 11 December 2019

Defining Confidentiality Data and the Public Domain

WCPFC16-2019-OP14
04 December

Submitted by
ANCORS

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Preliminary Paper

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1. Introduction

The Australian National Centre for Ocean Resources and Security (ANCORS) is beginning a new study into the management of data in transboundary fisheries by regional fisheries management organisations (RFMO). The purpose of this project is to: identify current practice for determining whether data is defined as confidential or public domain; and analyse whether current practices are consistent, supportive or incompatible with the needs and goals of fisheries management and seafood traceability.

This preliminary paper is intended to support discussions and analyse by the research team on the sidelines of the WCPFC. It is draft review of the international definitions and standards for confidentiality of data, and attempts to identify what type of fisheries data should be confidential based on international standards.

The draft paper reviews the current practices of Pacific RFMOs that share boundaries and data interests: Western Central Pacific Fisheries Commission (**WCPFC**), Northern Pacific Fisheries Commission (**NPFC**), Inter-American Tropical Tuna Commission (**IATTC**) and the Southern Pacific Regional Fisheries Management Organisation (**SPRFMO**) and compares RFMO practice to the international standard. The paper then summarises RFMO practice and the application of confidentiality principles and raises further questions for discussion.

We invite delegates to provide feedback and comments on this preliminary paper and look forward to discussing the study. We intend to publish the comprehensive study in 2020 following feedback and further analysis. A/Prof Quentin Hanich will be attending the WCPFC and can provide further information on the study, or can be contacted at hanich@uow.edu.au

2. International definitions/ standards for confidentiality of fishery data

The United Nations Fish Stocks Agreement¹ (**UNFSA**) and the RFMO conventions promote requirements for the collation, analysis and dissemination of fisheries data between States and RFMOs. As such, data confidentiality procedures are required to define the framework in which the data may be disseminated. Typically, RFMOs have defined public domain data and non-public domain data, and have set up protocols for the release and access of both sets of data.²

Generally speaking, the following types of data are protected under claims for confidentiality:

- (1) data that identifies the provider of the data, individuals or legal identities;³ and
- (2) non-aggregated vessel data.⁴

¹ *Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea of 10 December 1982 relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks*, opened for signature 4 December 1995, 2167 UNTS 88; 34 ILM 1542 (1995) (entered into force 11 December 2001) ('UNFSA').

² MRAG Americas Inc, 'Review of Data Standards, Technical Capabilities and Data Sharing Policies for the Western and Central Pacific Region' (Interim advice to the Preparatory Conference for the Western and Central Pacific Fisheries Commission No WCPFC/PrepCon/WP.10, 6.

³ Coordinated Working Party on Fishery Statistics "Confidentiality" (2019) < <http://www.fao.org/cwp-on-fishery-statistics/handbook/introduction/confidentiality/en/>>.

⁴ Ibid.

Herein referred to as the **confidentiality principles**. The confidentiality principles can be seen to originate in international standards and agreements. In addition, a third claim for confidentiality can be seen based on commercial, political or personally sensitive data and tends to arise in practice rather than in any codified standards for confidentiality.

The founding legal basis for State and RFMO obligations concerning the collection and exchange of fisheries data can be found in:

- The *United Nations Convention on the Law of the Sea (LOSC)*;⁵ and
- The *Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea of 10 December 1982 relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks (UNFSA)*.

The following principles and standards assist in defining and identifying confidential data:

- The Coordinating Working Party Handbook on Fishery Statistical Standards (**CWP Statistics Standards**)⁶
- United Nations Fundamental Principles of Official Statistics
- International Organisation for Standardization standards

The following codes of conduct and standards also promote the gathering and exchange of fisheries data:

- FAO Agreement to Promote Compliance with International Conservation and Management Measures by Fishing Vessels on the High Seas (**FAO Compliance Agreement**);⁷
- FAO Code of conduct for Responsible Fisheries (**FAO Code of Conduct**);⁸ and,
- FAO International Guidelines for the Management of Deep-Sea Fisheries in the High Seas (**FAO International Guidelines**).⁹

The following section outlines the provisions under the above agreements and codes which promote the gathering, exchange and dissemination of fisheries data.

⁵ *United Nations Convention on the Law of the Sea*, opened for signature 10 December 1982, 1833 UNTS 3; 21 ILM 1261 (1982) (entered into force 16 November 1994) ('*LOSC*').

⁶ Coordinating Working Party on Fishery Statistics, *The CWP Handbook of Fishery Statistical Standards* (Food and Agricultural Organization of the United Nations, 2004).

⁷ *Agreement to Promote Compliance with International Conservation and Management Measures by Fishing Vessels on the High Seas*, opened for signature 24 November 1993, 2221 UNTS 91 (2003) (entered into force 24 April 2003) ('*FAO Compliance Agreement*').

⁸ *FAO Code of Conduct for Responsible Fisheries*, FAO Doc. 95/20/Rev/1; UN Sales No. E98.V.11 (1998); 1995 WTS 3 (entered into force 31 October 1995) ('*FAO Code of Conduct*').

⁹ 'FAO International Guidelines for the Management of Deep-Sea Fisheries in the High Seas', FAO, 25-29 August 2008). ('*FAO International Guidelines*').

2.1 United Nations Convention on the Law of the Sea

Within coastal States' EEZs, articles 61(2)¹⁰ and 61(5)¹¹ of LOSC oblige coastal States and regional organisations to conserve the marine living resources of the EEZ and ensure they are not over exploited by taking into account the best available scientific evidence whilst also contributing to the collation and exchange of fisheries data through competent international organisations. These obligations are extended to Flag States by virtue of Article 62(4)(e) and to States engaging in Joint-Venture and Co-operative arrangements under Article 62(4)(i).¹²

Similarly, on the High Seas, Article 119(2)¹³ of LOSC imposes an obligation on Flag States and "all States concerned" to take into account the best available scientific evidence; and contribute to the collation and exchange of fisheries data through competent international organisations toward the conservation of fish stocks.

The use of the words "best available" in relation to scientific evidence and the use of scientific information both in articles 61(2) and 119(2) assumes that States have access to data and the capacity to attain and synthesise such data into workable statistics. As such the obligation to provide data may be undermined where the State has limited capacity and/or motivation to collate and share data. The theme of "best available scientific evidence" is seen repeatedly in RFMO conventions and other international agreements and codes as discussed below. The requirement for confidentiality is not present in the LOSC provisions however it does arise under UNFSA.

2.2 United Nations Fish Stocks Agreement

Under Article 10(f) of UNFSA, RFMOs and their member States are required to compile and disseminate statistical data (as described in UNFSA Annex I) to ensure the best scientific information is available while maintaining confidentiality where appropriate. Specifically, UNFSA Annex I recommends the following verifiable¹⁴ fishery statistics be obtained by States:

¹⁰ LOSC Art 61(2): "The coastal State, taking into account the best scientific evidence available to it, shall ensure through proper conservation and management measures that the maintenance of the living resources in the exclusive economic zone is not endangered by over-exploitation. As appropriate, the coastal State and competent international organizations, whether subregional, regional or global, shall cooperate to this end."

¹¹ LOSC Art 61(5): "Available scientific information, catch and fishing effort statistics, and other data relevant to the conservation of fish stocks shall be contributed and exchanged on a regular basis through competent international organizations, whether subregional, regional or global, where appropriate and with participation by all States concerned, including States whose nationals are allowed to fish in the exclusive economic zone."

¹² LOSC Art 62(4): "Nationals of other States fishing in the exclusive economic zone shall comply with the conservation measures and with the other terms and conditions established in the laws and regulations of the coastal State. These laws and regulations shall be consistent with this Convention and may relate, *inter alia*, to the following: ...

(e) specifying information required of fishing vessels, including catch and effort statistics and vessel position reports; ...

(i) terms and conditions relating to joint ventures or other cooperative arrangements;"

¹³ LOSC Art 119(2): "Available scientific information, catch and fishing effort statistics, and other data relevant to the conservation of fish stocks shall be contributed and exchanged on a regular basis through competent international organizations, whether subregional, regional or global, where appropriate and with participation by all States concerned."

¹⁴ UNFSA Annex I Articles 1(1), 2(b) and 6

- Catch and fishing effort statistics and data on non-target, associated and dependent species.¹⁵ Including time series of catch and effort by fishery and fleet,¹⁶ total catch in number or nominal weight,¹⁷ fishing location¹⁸ and biological data¹⁹ to facilitate effective stock management.
- Fishery-related information and vessel-related data for standardising fishing effort.²⁰
- Fishing activities according to the operational characteristics of each fishing method in sufficient detail to facilitate effective stock assessment.²¹

The guiding principles for confidentiality of data under UNFSA are that confidentiality of non-aggregated data is to be maintained and that dissemination of data is subject to the terms on which the data has been provided.²²

2.3 FAO Coordinated Working Party on Fishery Statistics

By way of guidelines the CWP identifies two types of data for which confidentiality may be required: microdata and aggregated data.²³ The CWP defines microdata as data that refers directly to individuals or legal entities.²⁴ Aggregated data is data that may require the protection of confidentiality where there is a risk of revealing the origin of the data or where there may be a potential for misuse of the data by a third party.²⁵

2.4 UN Fundamental Principles of Official Statistics

The sixth United Nations Fundamental Principle of Official Statistics refers directly to statistical confidentiality, the principle states:

“Individual data collected by statistical agencies for statistical compilation, whether or not they refer to natural or legal persons, are to be strictly confidential and used exclusively for statistical purposes.”²⁶

The UN guidelines for Managing Statistical Confidentiality and Microdata Access provides further guidance in relation to accessing microdata in accordance with the above principle, it states:

“The following principles should be used for managing the confidentiality of microdata. Each is discussed in the following paragraphs.

¹⁵ UNFSA Annex I Art 1(1).

¹⁶ UNFSA Annex I Art (3)(1)(a)

¹⁷ UNFSA Annex I Art 3(1)(b)

¹⁸ UNFSA Annex I Art 3(1)(e)

¹⁹ UNFSA Annex I Art 3(2)

²⁰ UNFSA Annex I Art 1(1).

²¹ UNFSA Annex I Art (2)(a).

²² UNFSA Annex I Articles 1(1), 7(1).

²³ Coordinated Working Party on Fishery Statistics “Confidentiality” (2019) < <http://www.fao.org/cwp-on-fishery-statistics/handbook/introduction/confidentiality/en/>>.

²⁴ Ibid.

²⁵ Ibid.

²⁶ *Fundamental Principles of Official Statistics*, GA Res 68/261, UN GA 68th Sess, UN Doc A/Res/68/261 (3 March 2014).

Principle 1: It is appropriate for microdata collected for official statistical purposes to be used for statistical analysis to support research as long as confidentiality is protected.

Principle 2: Microdata should only be made available for statistical purposes.

Principle 3: Provision of microdata should be consistent with legal and other necessary arrangements that ensure that confidentiality of the released microdata is protected.

Principle 4: The procedures for researcher access to microdata, as well as the uses and users of microdata, should be transparent and publicly available.”²⁷

2.5 International Organisation for Standardisation (ISO)

The ISO is the international organisation responsible for setting standards and specifications for products, services and systems to ensure safety and efficiency and are essential for international trade.²⁸ Domestic standards and specifications are frequently based on the ISO standard. The ISO definition of confidentiality is the “*property that information is not made available or disclosed to unauthorized individuals, entities or processes.*”²⁹ Process being a “set of interrelated or interacting activities which transforms inputs into outputs.”³⁰

2.6 FAO Code of Conduct

The FAO Code of Conduct places obligations on States generally to collect and exchange fisheries data.³¹ The code also encourages RFMOs to compile data, make it consistent and timely whilst also abiding by relevant confidentiality requirements.³² In particular, “*States should ensure...complete and reliable statistics on catch and fishing effort are collected...to allow sound statistical analysis. Such data should be updated regularly and verified through an appropriate system. States should compile and disseminate such data in a manner consistent with any applicable confidentiality requirements.*”³³

2.7 FAO Compliance Agreement

Article VI of the FAO Compliance Agreement places a duty on flag States to provide data to the FAO on fishing vessels (rather than provide data on fishing activity) e.g name of the vessel, owner, type of vessel, gross tonnage etc.³⁴ Such information will be circulated regularly by

²⁷ United Nations Economic Commission For Europe Conference Of European Statisticians, *Managing Statistical Confidentiality and Microdata Access: Principles and Guidelines of Good Practice*, (United Nations, New York and Geneva 2007) 6
<http://www.unece.org/fileadmin/DAM/stats/publications/Managing_statistical_confidentiality_and_microdata_access.pdf>.

²⁸ ISO, “All about ISO” (2019) <<https://www.iso.org/about-us.html>>.

²⁹ ISO, “ISO/IEC 27000:2014” 2 Terms and definitions 2.12 confidentiality, (2014)
<<https://www.iso.org/obp/ui/#iso:std:iso-iec:27000:ed-3:v1:en:term>>.

³⁰ ISO, “ISO/IEC 27000:2014” 2 Terms and definitions, 2.61 process, (2014)
<<https://www.iso.org/obp/ui/#iso:std:iso-iec:27000:ed-3:v1:en:term>>.

³¹ *FAO Code of Conduct for Responsible Fisheries*, FAO Doc. 95/20/Rev/1; UN Sales No. E98.V.11 (1998); 1995 WTS 3 (entered into force 31 October 1995) Articles 7(7.4), 8(8.1.3) and 12 ('FAO Code of Conduct').

³² *FAO Code of Conduct* Art 7(7.3.4), (7.4.7).

³³ *FAO Code of Conduct* Art 7(7.4.3).

³⁴ *Agreement to Promote Compliance with International Conservation and Management Measures by Fishing Vessels on the High Seas*, opened for signature 24 November 1993, 2221 UNTS 91 (2003) (entered into force 24 April 2003) Art VI (1) - (7) ('FAO Compliance Agreement').

the FAO to all parties to the Compliance Agreement including relevant RFMOs.³⁵ There does not appear to be any confidentiality restriction on this type of information under the Compliance Agreement. Indeed, many RFMOs and States maintain vessel registers with some of the information recommended under Article VI and which is accessible to the public.

2.8 FAO International Guidelines

The FAO International Guidelines focus particularly on deep sea fisheries (**DSFs**) and vulnerable marine ecosystems (**VMEs**) on the High Seas. Section 5.1 of the FAO International Guidelines refers specifically to data reporting and assessment. In particular it calls for States to develop rules and procedures in relation to:

- Collection of fine-scaled historical data to assess stock status and impacts on VMEs;³⁶
- Socio-economic surveys on catches, value of landings and employment;³⁷
- Submission of data to RFMOs and subsequent submission of aggregated data to the FAO by the RFMOs;³⁸
- Collation of biogeographic information (including oceanographic parameters) for the management of DSFs;³⁹ and
- Transparency of data reporting and analysis.⁴⁰

All such data gathering procedures are to be implemented in accordance with State and RFMO's relevant protocols governing data confidentiality.⁴¹

2.9 Summary, analysis and discussion

According to LOSC, UNFSA, FAO Codes and Agreements and the FAO CWP there is an overarching requirement on States and RFMOs to formulate fisheries conservation management measures (**CMMs**) based on the best available scientific evidence. To this end, States and RFMOs are under an ongoing obligation to collect raw data and collate and transform it into statistical data so that it can be shared with RFMOs, RFMO Members (and co-operating non-members) and scientists whilst maintaining confidentiality of the raw data.

Below is a proposed definition of Confidential Data which summarises the criteria for confidentiality expressed in the above-mentioned international documents and as applied in the context of fisheries management.

³⁵ Ibid Art VI.

³⁶ 'FAO International Guidelines for the Management of Deep-Sea Fisheries in the High Seas', FAO, 25-29 August 2008). *FAO International Guidelines*, Section 5.1 para 32.

³⁷ *FAO International Guidelines*, Section 5.1 para 33.

³⁸ *FAO International Guidelines*, Section 5.1 para 34.

³⁹ *FAO International Guidelines*, Section 5.1 para 37.

⁴⁰ *FAO International Guidelines*, Section 5.1 para 39.

⁴¹ *FAO International Guidelines*, Section 5.1 para 30.

Confidential data is data that is:

- (a) Non-aggregated data; and/or*
- (b) Microdata that identifies individuals or legal persons.*

Confidential data can be used by authorised agencies for official statistical purposes to support research as long as confidentiality⁴² of the data is protected. Procedures for accessibility, release and use of the confidential data must be transparent and publicly available.

Confidential data must not be disclosed to unauthorised individuals, entities or processes. The release of confidential data is subject to the rules and procedures for confidentiality as set by the State, RFMO or entity who has provided the data.

Commercial, political and personally sensitive data

As can be seen from the above analysis, “commercial interest”, “political interest” or “personal interest” does not appear as criterion for confidentiality in any of the above-mentioned documents. What can be protected under such claims for confidentiality is the identity of the commercially/politically or personally interested party.

Whilst the CWP acknowledges that confidentiality of certain data may be required to protect personal and commercial interests. It should be remembered that a requirement or preference to protect commercial, political or personal interests does not in and of itself render data confidential and as such data should not be precluded from being transformed into useable statistical data for fisheries management on the basis of commercial, political or personal interest. Claims for confidentiality based on commercial, political or personal sensitivity should be requested, assessed and justified according to the circumstances and the criteria for confidentiality as set by the RFMO and the party who provided the data.

Under the Compliance Agreement restrictions on information can occur where States are required to provide the FAO with reports on vessels engaged in activities which undermine international conservation and management measures; the FAO acknowledges that in this context confidentiality may apply if State national legislation requires confidentiality in relation to *measures or anticipated measures* that it will take against the offending vessels.⁴³ It seems that the basis for this would be to minimise breaches of security and compliance. Once again, the raw data is not to be precluded from transformation into useable statistical data, but it is the measures to be taken against the offending vessel/party that are considered confidential.

Importantly, in the context of regional fisheries management, State parties and RFMOs acknowledge that they are agreeing to the conservation and management of the fisheries resources in convention areas utilising a *shared* regional and global resource. In this context the argument that commercial, political or personal interest justifies a claim for confidentiality is inconsistent with the State parties’ intentions under RFMO Conventions.

⁴² The definition of confidentiality is the ISO definition of confidentiality.

⁴³ *FAO Compliance Agreement* Art VI 8(b).

3. RFMO Practice

The next section of this paper reviews the rules and procedures for confidentiality as set by the Pacific RFMOs: WCPFC, NPFC, IATTC, SPRFMO.

3.1 WCPFC

The WCPFC Convention⁴⁴ incorporates UNFSA and its Annex I as an integral part of the convention.⁴⁵ WCPFC Convention provisions in relation to data closely mirror the wording UNFSA provisions including: Article 5 which sets out general principles and in particular the collection and sharing of data in a complete, accurate and timely manner;⁴⁶ Article 10 (d) and (e) which encourage coastal States to adopt standards for collection, compilation, exchange and dissemination of data while maintaining confidentiality where appropriate; and Article 13(3)(a) in relation to scientific information and data which permits scientific experts to collect, compile, disseminate and publicise fisheries data in accordance with WCPFC policies, procedures and confidentiality requirements. Furthermore, under the WCPFC Convention:

- The Technical and Compliance Committee may provide a forum for exchange of information;⁴⁷
- The Secretariat may also facilitate the compilation and dissemination of data;⁴⁸
- Transparency between the WCPFC and intergovernmental and non-governmental organisations is encouraged, and such organisations may be given timely access to pertinent information in the promotion of transparency of the commission's decision-making processes and other activities;⁴⁹
- Co-operation and collaboration between the WCPFC and other organisations including FAO, CCAMLR, CCSBT, IOTC, IATTC, SPC and FFA is to be arranged in the fulfilment of the commissions objectives to conserve and manage the highly migratory fish stocks of the western and central Pacific Ocean.⁵⁰
- Recognition for developing States is acknowledged with regard to improving conservation and management of fish stocks through the collection, reporting, verification and exchange of fisheries related data.⁵¹
- Regional observer programs must include guidelines to ensure the confidentiality of non-aggregated and confidential data⁵² as well as guidelines for the dissemination of data and information collected by observers to members of the commission.⁵³
- Terms and conditions of fishing include a requirement on fishing operators to record and report vessel position, catch of target and non-target species, fishing effort and other fisheries data as required under Annex I of UNFSA.⁵⁴

⁴⁴ *Convention on the Conservation and Management of High Migratory Fish Stocks in the Western and Central Pacific Ocean*, opened for signature 5 September 2000, (entered into force 19 June 2004) ('WCPFC Convention').

⁴⁵ WCPFC Convention Art 1(b), 10(1)(d).

⁴⁶ WCPFC Convention Art 5(i).

⁴⁷ WCPFC Convention Art 14(2)(a).

⁴⁸ WCPFC Convention Art 15(4)(b)

⁴⁹ WCPFC Convention Art 21.

⁵⁰ WCPFC Convention Art 2, 22.

⁵¹ WCPFC Convention Art 30(4)(a), this provision also closely mirrors UNFSA Art 25(3)(a).

⁵² WCPFC Convention Art 28(7)(a)

⁵³ WCPFC Convention Art 28(7)(b)

⁵⁴ WCPFC Convention Annex III Art 5.

The WCPFC Convention can be seen to adequately promote transparency, exchange of data and collation of data in accordance with international standards and best practice.

***The WCPFC Rules and Procedures for the Protection, Access to, and Dissemination of Data compiled by the Commission*⁵⁵ (WCPFC Data Rules)**

The WCPFC Data Rules set out the procedures for the release and dissemination of data⁵⁶ as follows:

- The CCM (i.e. Commission members, cooperating non-members or participating territories of the Commission) must authorise its release.
- The persons authorised to receive the data must read and sign the Commission's confidentiality protocol.
- Generally, CCMs shall have access to the data to perform their WCPFC duties. In this regard the following data is to be made available to CCMs:
 - Data regarding vessels flying their flag in the convention area;
 - Data regarding any vessels fishing in waters under their jurisdiction;
 - Data regarding vessels applying to fish in their national waters, unload in their ports or tranship in their waters;
 - Data for the purpose of compliance and enforcement on the high seas;
 - Data for the purpose of scientific or other research as per any agreed authorisation to release such data by the CCM.
- Data is allocated a risk classification and classified as public domain or non-public domain data according to the WCPFC Information Security Policy (detailed below).⁵⁷
- Public domain data can be downloaded from the Commission's website or provided upon written request subject to the terms and conditions of the Commission.⁵⁸
- Non-Public Domain Data may be released to authorised persons and CCMs subject to the WCPFC ISP and the WCPFC Framework for Access to Non-Public Domain Data.⁵⁹ Persons receiving such information are required to sign a Confidentiality Agreement.⁶⁰
- Data that may be disseminated to other regional fisheries management organisations includes operational level data; aggregated data; monitoring, control and surveillance data; vessels of interest; and transhipment verification reports.⁶¹

***WCPFC Information Security Policy*⁶²**

The WCPFC ISP defines confidentiality as: "the property that information is not made available or disclosed to unauthorized individuals, entities or processes."⁶³ Additionally, the term

⁵⁵ WCPFC, 'Rules and Procedures for the Protection, Access to, and Dissemination of Data compiled by the Commission' No WCPFC4 2007. (*WCPFC Data Rules*)

⁵⁶ *WCPFC Data Rules* Section 1: Basic principles relating to the dissemination of data by the WCPFC.

⁵⁷ *WCPFC Data Rules* Section 2: Risk classification and definition of confidentiality. Refer to Appendix 1 *WCPFC Data Rules* for a list of Public Domain Data and Appendix 2 *WCPFC Data Rules* for a list of examples of Non-Public Domain Data.

⁵⁸ *WCPFC Data Rules* Section 3: Dissemination of Public Domain Data.

⁵⁹ *WCPFC Data Rules* Appendix 3: Framework for Access to Non-Public Domain Data.

⁶⁰ *WCPFC Data Rules* Section 4: Dissemination of Non-Public Domain Data.

⁶¹ *WCPFC Data Rules* Appendix 4.

⁶² WCPFC, *Information Security Policy* (11-15 December 2007) < <https://www.wcpfc.int/doc/data-03/information-security-policy>> (*WCPFC ISP*).

⁶³ *WCPFC ISP* Appendix B: Glossary of relevant Information Security Terms, 33.

“vulnerability” includes a threat to confidentiality;⁶⁴ and the confidentiality principle states: “There shall be adequate protective controls and safeguards to ensure that information is disclosed only to authorized users...”⁶⁵

Appendix C of the *WCPFC ISP Policy* classifies data according to confidentiality risk - see below.

Information type	Confidentiality classification	Continuity classification
Operational level Catch Effort data	Medium	High
Operational level Observer Catch data	Medium	High
Records of vessels unloading	Medium	High
Biological data	Low	High
Tagging data	Low	High
Vessel and gear attributes	Low	Medium
Oceanographic and meteorological data	Public	Medium
Authorization to fish	Public	Medium
Transshipment	High	Medium
VMS Register/Vessel Record	Public	Medium
VMS Vessel position, direction and speed	High	High
Boarding and Inspection	High	High
Certified observer personnel	Low	Low
Certified inspection personnel	Low	Low
Catch documentation scheme	High	High
Port State measures and procedures	Public	Low
Violations and infringements	High	High

3.2 NPFC

Article 16 of the NPFC Convention⁶⁶ refers specifically to data collection, compilation and exchange. Under Article 16 the Commission is required to have full regard to Annex I of UNFSA and the functions of the Scientific Committee and Technical Committee to develop standards, rules and procedures on:

- security, access and dissemination of data;⁶⁷
- the collection, verification and timely reporting of data by Members to the Commission;
- compilation of data to facilitate effective stock assessment;
- exchange data among members of the commission and with other RFMOs “and arrangements” with an aim to consolidating that information;
- facilitate coordinated document and data sharing between RFMOs “and arrangements;” and
- carry out regular audits of Commission Members’ compliance with data collection requirements.⁶⁸

Additionally, the Commission is required to make the following information publicly available:

- the number of fishing vessels in the Conventional Area; and

⁶⁴ Ibid 35.

⁶⁵ Ibid 27.

⁶⁶ *Convention on the Conservation and Management of High Seas Fisheries Resources in the North Pacific Ocean*, (entered into force 19 July 2015) ('NPFC Convention').

⁶⁷ NPFC Convention, Art 16(4).

⁶⁸ NPFC Convention, Art 16(1)(a) – (e).

- Information regarding fisheries resources including status, assessments, research programs and cooperative initiatives with regional and global organisations in relation to fisheries resources.⁶⁹

Each member is required to submit an annual report to the Commission in a standard format set by the Commission.⁷⁰

Transparency in decision making processes of the Commission is promoted under the convention and this includes the provision of pertinent information to inter-governmental and non-governmental organisations in a timely manner subject to the rules and procedures of the Commission.⁷¹

NPFC Rules of Procedure

The Convention entered into force on 9 July 2015 and the Commission was established on 5 September 2015.⁷² As such, the Commission is yet to develop a comprehensive set of rules, procedures and specifications governing the exchange, security and dissemination of data as required under Article 16.⁷³ Apparently this is also the case in relation to the rules of procedure required to be set by the Technical Compliance Committee and the Scientific Committee (although the Scientific Committee has interim regulations discussed below).

On the NPFC website a compendium of NPFC Administrative Documents is available and within those documents are “Rules of Procedure.” These procedural rules deal mostly with the administrative functions of the Commission and are not specific to the management of data. They make reference to “Confidentiality Rules.” However, it is not clear what are the Confidentiality Rules; a copy of the Confidentiality Rules does not appear to be publicly available or perhaps no such rules have yet been created by the Commission. The Rules of Procedure state that the Confidentiality Rules apply in the following circumstances:

- Reports of the Commission are not to include information that is subject to the Confidentiality Rules;⁷⁴
- Observers permitted to attend meetings of the Commission may have timely access to documents subject to the Confidentiality Rules;⁷⁵ and observers to the Commission meetings are not permitted to disclose any information subject to the Confidentiality Rules.⁷⁶
- In relation to release of meeting details following the conclusion of meetings, Members are to abide by the Confidentiality Rules.⁷⁷

⁶⁹ NPFC Convention, Art 16(2).

⁷⁰ NPFC Convention, Art 16(3).

⁷¹ NPFC Convention, Art 18.

⁷² NPFC, “About NPFC” (2019) <https://www.npfc.int/about_npfc>.

⁷³ NPFC, *Interim regulations for management of scientific data and information* (2019) <<https://www.npfc.int/interim-regulations-management-scientific-data-and-information>>.

⁷⁴ NPFC Rules of Procedures, Rule 8.3.

⁷⁵ NPFC Rules of Procedures, Rule 9.6(c).

⁷⁶ NPFC Rules of Procedures, Rule 9.7(d).

⁷⁷ NPFC Rules of Procedures, Rule 11.8.

NPFC Interim Regulations for Management of Scientific Data and Information

The *Interim Regulations for Management of Scientific Data and Information (Interim Regulations)* were put together to combine regulations and suggestions for data management under one interim policy while the NPFC develops comprehensive rules and procedures for the exchange, access and dissemination of data.⁷⁸ The Interim Regulations refer specifically to data which is used for scientific purposes.⁷⁹ Under the Interim Regulations only Members Annual Reports which detail “catch amount, number of vessels, number of fishing days and so on” are available to the public.⁸⁰ Any other scientific data submitted by Members that is not publicly available and any use of such data by another Member or Non-Member must be made through the Secretariat who will communicate the request to the Member who provided the data.⁸¹

Working papers, meeting information papers, reference documents/papers and observer papers are to be made available to the public 45 days after the closure of any meeting where the papers were submitted unless the Member providing them does not authorise their release.⁸² There does not appear to be any requirement for the Member to provide a reason for not authorising the release of such documents.⁸³

Scientific Committee meeting reports, scientific committee subsidiary body reports and other scientific reports are also to be released to the public 45 days after the acceptance by Commission Members.⁸⁴ However, if sections or the whole of scientific committee subsidiary reports are deemed “too sensitive” they may be redacted. Sensitivity is determined at the subsidiary body meetings.⁸⁵ The Interim Regulations do not set out the criteria for sensitive information.

Redactions on documents and withdrawal of documents that have already been made available to the public is not permitted unless the Member requiring the redaction or withdrawal has notified all Members and provided the reason for the redaction.⁸⁶ If an error is identified in a publicly available report the Member can submit a letter identifying the error and a resolution will be made to prepend the original document.⁸⁷

The Interim Regulations also make reference to an intersessional communication tool is available to Members through the NPFC website to facilitate discussions on a specific project or topic.⁸⁸

⁷⁸ NPFC, *Interim Regulations for Management of Scientific Data and Information*, NPFC-2019-SC04-WP01 (Rev. 2), 1 (*‘NPFC Interim Regulations’*).

⁷⁹ *NPFC Interim Regulations*, Section I (1).

⁸⁰ *NPFC Interim Regulations*, Section I (2).

⁸¹ *NPFC Interim Regulations*, Section I(3).

⁸² *NPFC Interim Regulations*, Section II(4).

⁸³ *Ibid.*

⁸⁴ *NPFC Interim Rules*, Section II(5).

⁸⁵ *Ibid.*

⁸⁶ *NPFC Interim Rules*, Section II(7).

⁸⁷ *Ibid.*

⁸⁸ *NPFC Interim Rules*, Section II(6).

Comments regarding the NPFC practice

Whilst the NPFC Convention embodies and indeed refers to international principles, agreements and guidelines for the collection, collation and dissemination of data the Commission is yet to set clear guidelines, rules and procedures on the manner in which the data is collected and shared and set rules on the confidentiality of such data.

At this stage, at best, the Commission can be seen to have a legally binding obligation to collect data and its Members are obliged to provide some data (e.g. vessel information) to the Commission. However, the Commission's obligation to share data is weak as it is not clear from the available NPFC legal instruments who is entitled to receive the data and what the procedures are for dissemination of such data whilst ensuring its confidentiality. As such, the NPFC and its subsidiary bodies is yet to complete the following tasks.

1. Set standards, specifications and procedures for Members to report vessel information and coordinate timely dissemination of data (NPFC Convention Art 7(2)(e)). Noting that vessel information is publicly available on the NPFC website if such rules exist then they should be made publicly available in accordance with international standards.
2. Whilst the NPFC Scientific Committee has developed Interim Regulations it is yet to finalise rules and standards for the adoption by the Commission for collection verification, reporting and security of exchange of access to and dissemination of data on fisheries resources (NPFC Convention Art 10(4)(i)).
3. The NPFC Technical Compliance Committee must develop rules and procedures governing the use of data and other information for monitoring, control and surveillance purposes (NPFC Convention Art 11(4)(f)).
4. The Commission must develop standards, rules and procedures for:
 - a. The collection, verification and timely reporting to the Commission of all relevant data (Art 16(1)(a));
 - b. The compilation and management by the Commission of accurate and complete data for stock assessment (Art 16(1)(b));
 - c. The exchange of data among members of the omission, other RFMOs and arrangements so as to consolidate and disseminate data (Art 16(1)(c));
 - d. Facilitating the coordinated documentation and data-sharing between RFMOs and arrangements on vessel registers and market-related measures (Art 16(1)(d)); and
 - e. Regular audits of Commission member compliance with data collection and exchange requirements (Art 16(1)(e)).

3.3 IATTC

The IATTC Convention⁸⁹ Preamble acknowledges LOSC, Agenda 21 Chapter 17, FAO Code of Conduct, FAO Compliance Agreement, FAO IPOA- IUU and UNFSA. The objective of the convention is to ensure the long-term conservation and sustainable use of the fish stocks covered by the Convention⁹⁰ and the convention establishes the Commission to fulfil this objective.⁹¹

The functions of the Commission include adopting conservation and sustainability measures based on the best scientific evidence available.⁹² To this end the Commission is required to set standards for collection verification and timely exchange and reporting of data concerning fisheries for fish stocks covered by the Convention;⁹³ and establish a comprehensive program for data collection and monitoring.⁹⁴

Additionally, the Commission is to set up two committees: the Committee for the Review of Implementation of Measures Adopted by the Commission (**the Review Committee**)⁹⁵ which reviews and monitors compliance with conservation and management measures adopted by the Commission⁹⁶ and the Scientific Advisory Committee (**Scientific Committee**).⁹⁷

The Commission is required to provide to the Review Committee:

- The information necessary for it to develop a data base;
- Statistical analyses;
- Reports of the Commission; and
- Distribute pertinent information to the Committee.⁹⁸

The Review Committee then proceeds to analyse the information provided to it (either by flag or by vessel) to carry out its review functions and then provide the Commission with information, advice and recommendations.⁹⁹ The scope of the Review Committee's functions includes reviewing the Commission's program for data collection and monitoring and assess and evaluate the results of that program in consultation with the Scientific Committee.¹⁰⁰

Additionally, scientific staff are appointed to the commission. Among their many duties includes, providing the Commission with proposed standards for collection, verification and timely exchange and reporting of data concerning the fisheries for fish stocks governed by the

⁸⁹ *Convention for the Strengthening of the Inter-American Tropical Tuna Commission established by the 1949 Convention between the United States of America and The Republic of Costa Rica*, (entered into force June 2003) ('IATTC Convention').

⁹⁰ IATTC Convention Art II.

⁹¹ IATTC Convention Art VI.

⁹² IATTC Convention Art VII(1)(c).

⁹³ IATTC Convention Art VII(1)(b).

⁹⁴ IATTC Convention Art VII(1)(i).

⁹⁵ IATTC Convention Art X.

⁹⁶ IATTC Convention Annex 3(a).

⁹⁷ IATTC Convention Art XI.

⁹⁸ IATTC Convention Art X 8(a)-(c).

⁹⁹ *IATTC Convention* Ann 3(b) – (c).

¹⁰⁰ *IATTC Convention* Annex 3(f).

Convention¹⁰¹ and collect statistical data and all kinds of reports concerning catches of fish stocks and the operations of vessels in the convention area and any other relevant information including social and economic information.¹⁰² When disseminating or publishing such data or reports the staff are to ensure “confidentiality in conformity with the provisions of Article XXII.”¹⁰³ Uniquely, IATTC Convention's Article XXII specifically requires the Commission to establish rules of confidentiality for all bodies and individuals who are given access to information pursuant to the Convention.¹⁰⁴

IATTC Resolutions

At the IATTC 2nd Meeting on 1 February 1951, a resolution on confidentiality was adopted as follows:

*“A resolution was adopted requiring that catch statistics of individual boats, records of individual company operations, and all other records obtained by the staff of the Commission regarding individual persons, companies or enterprises shall be kept completely confidential and shall be available only to those members of the staff requiring access to them in the course of the scientific investigations.”*¹⁰⁵

The above resolution is reiterated in the current and active IATTC Rules of Procedure as amended by *Resolution C-12-03* at Paragraph 50 which states:

*“Reports and statistics of individual fisheries production and details of the operations that companies individually provide to the Commission or its staff shall be considered as confidential and treated in accordance with rules on confidentiality established by the Commission.”*¹⁰⁶

¹⁰¹ IATTC Convention Art XIII(f).

¹⁰² IATTC Convention Art XIII(g).

¹⁰³ IATTC Convention Art XIII(i).

¹⁰⁴ IATTC Convention Art XXII: "1. The Commission shall establish rules of confidentiality for all bodies and individuals given access to information pursuant to this Convention. 2. Notwithstanding any confidentiality rules which may be adopted in accordance with paragraph 1 of this Article, any persons with access to such confidential information may disclose such information in connection with legal or administrative proceedings, if requested by the competent authority concerned."

¹⁰⁵ IATTC, *Resolution on Confidentiality C-51-01* (1 February 1951)

<https://www.iattc.org/PDFFiles/Resolutions/IATTC/_English/C-51-01-Active_Resolution%20on%20Confidentiality.pdf>.

¹⁰⁶ IATTC, *Rules of Procedure as amended by Resolution C-12-03* (25-29 June 2012)

<https://www.iattc.org/PDFFiles/Resolutions/IATTC/_English/C-12-03-Active_IATTC%20Rules%20of%20procedure%20as%20amended%20by%20Resoluton%20C-14-08%20and%20C-17-04.pdf>.

In addition, and specifically, IATTC *Resolution C-15-07 on Data Confidentiality Policy and Procedures* provides the following parameters for Public Domain and Non-public domain data:

IATTC	
Accessibility	Description of Data
Public Domain	Catch, effort and length-frequency grouped by: 5° longitude by 5° latitude by month for longline; and 1° longitude by 1° latitude by month for surface fisheries; and stratified by fishing nation. <i>Resolution C-15-07, Para. 1</i>
Confidential	Catch of an individual, vessel, company or person identified within a time/area stratum. <i>Resolution C-15-07, Para. 1.</i>
Accessible upon written request and specific permission from the Director	Finer level of time-area stratification of catch effort and length frequency. <i>Resolution C-15-07, Para. 2(a) – (c)</i>
Accessible upon written request and specific permission from the Director and the Flag State	Identity of individual vessels <i>Resolution C-15-07, Para. 2(d)</i>
Public Domain	Detailed tagging and tag recovery data <i>Resolution C-15-07, Para. 3</i>
Confidential	Logbook and Observer Records. Restricted access to IATTC staff only. <i>Resolution C-15-07, Para. 3(a) – (b)</i>
Commission Members	Annual catches of species by flag and gear, before 1 June of the following year, except that categories containing two or less vessels or companies shall be pooled. <i>Resolution C-04-10</i>
Public Domain	Register of vessels authorised to tranship at-sea in the Convention Area <i>Resolution C-12-07 Section 3, Para.9¹⁰⁷</i>
Public Domain	The IATTC Website makes publications and reports; catch reports data, tagging and other reports (including bycatch, buoys, transhipment, VMS, longline vessel and compliance reports); and vessel data reports readily available to download. ¹⁰⁸

IATTC *Resolution C-03-05 on Data Provision* sets out minimum requirements for “pertinent catch information” to be provided by Flag States to the Director of the Commission;¹⁰⁹ *Resolution C-03-05* sets out requirements for at-sea data reporting by vessels;¹¹⁰ and transhipment notification obligations by vessels are set out in *Resolution C-12-07*.¹¹¹

¹⁰⁷IATTC *Resolution on Data Confidentiality Policy and Procedures C-15-07* (25-29 June 2012)

<https://www.iattc.org/PDFFiles/Resolutions/IATTC/_English/C-12-07-Active_Amends%20and%20replaces%20C-11-09%20Transhipments.pdf>.

¹⁰⁸ Refer to: Publications: <https://www.iattc.org/PublicationsENG.htm>; Catch Reports Data, Tagging and Other Reports: <https://www.iattc.org/CatchReportsDataENG.htm>; Vessel Data Base: <https://www.iattc.org/VesselDataBaseENG.htm>

¹⁰⁹IATTC, *Resolution on Data Provision C-03-05* (24-27 June 2003)

<https://www.iattc.org/PDFFiles/Resolutions/IATTC/_English/C-03-05-Active_Provision%20of%20data.pdf>.

¹¹⁰IATTC, *Resolution on at Sea Reporting C-03-04* (24-27 June 2003)

https://www.iattc.org/PDFFiles/Resolutions/IATTC/_English/C-03-04-Active_At-sea%20reporting.pdf

¹¹¹ IATTC, *Resolution C-12-07* Section 4 para 13-17 <

https://www.iattc.org/PDFFiles/Resolutions/IATTC/_English/C-12-07-Active_Amends%20and%20replaces%20C-11-09%20Transhipments.pdf>.

Transparency of the Commission's decision-making processes is also promoted and affected through public dissemination of pertinent non-confidential information.¹¹²

3.4 SPRFMO

The objective of the SPRFMO Convention¹¹³ is to “ensure the long-term conservation and sustainable use of fishery resources” through the application of the precautionary approach and ecosystem-based fisheries management approach.¹¹⁴ In order to fulfil its objective the SPRFMO Commission, its subsidiary bodies and Contracting Parties shall collect, verify, report and share in a timely manner, full and accurate data on fishing including information relating to marine ecosystem impacts.¹¹⁵ In so doing, the Commission is to “develop rules for the collection, verification, reporting, storing and dissemination of data”¹¹⁶ and “cooperate and exchange data with members of the Commission and with relevant organisations, coastal States, territories and possessions.”¹¹⁷ Additionally, the Commission is to promote transparency “through the public dissemination of non-commercially sensitive information.”¹¹⁸

Of particular importance is Article 23 of the SPRFMO Convention in relation to data collection, compilation and exchange. Article 23 acknowledges the requirements under UNFSA and reiterates its obligation to develop standards, rules and procedures for the collection, verification and timely reporting of data to the Commission by members; compilation and management of data to provide the best available scientific advice; security and maintenance of confidentiality of data; exchange of data in relation to IUU fishing with a view to consolidating such data for central dissemination; data sharing between RFMOs; and conducting audits on members in relation to the data collection and sharing obligations.¹¹⁹

Additionally, the Commission will ensure that data is made publicly available with regard to number of vessels fishing in the Convention Area, status of fishery resources, fishery resource assessments, research programmes and co-operative initiatives with regional and global organisations.¹²⁰

Under Article 24, members are required to “collect, verify and report scientific, technical and statistical data pertaining to fishery resources and marine ecosystems in the Convention Area in conformity with the standards, rules and procedures established by the Commission.”

¹¹² IATTC Convention Art XVI(1)(a).

¹¹³ *Convention on the Conservation and Management of High Seas Fishery Resources in the South Pacific Ocean*, entered into force 24 August 2012 ('SPRFMO Convention').

¹¹⁴ SPRFMO Convention Art 2.

¹¹⁵ SPRFMO Convention Art 3(1)(a)(iv).

¹¹⁶ SPRFMO Convention Art 8(c).

¹¹⁷ SPRFMO Convention Art 8(e).

¹¹⁸ SPRFMO Convention, Art 18(3).

¹¹⁹ SPRFMO Convention, Art 23(1)(a)-(f).

¹²⁰ SPRFMO Convention, Art 23(2).

SPRFMO CMM 02-2018: Standards for the Collection, Reporting, Verification and Exchange of Data¹²¹

CMM 02-2018 is a comprehensive policy for the collection of data. It sets out procedures for Members, co-operating and non-contracting parties to collect data on fishing activities, landings, transhipments, annual catch totals based on “live” weight and by-catch and dependent species; historical data; data verification via VMS, observer programmes, trip reports and port sampling; data exchange; and confidentiality. The policy contains annexes for the type of data to be collected for each fishing activity (i.e. trawl, purse seine, bottom long lining, squid jigging, potting methods, drop/dahn lining (Annexes 1-6). Additionally there is a standard for Observer Data (Annex 7); Specifications for Data Exchange (Annex 8); International standard statistical classification of fishing gear codes (Annex 9); International standard statistical classification of fishing vessel codes (Annex 10); Standards for Landing data for fishing and reefer vessels (Annex 11); Standard for Transhipment Data (Annex 12); Standard for Annual Catch Data (Annex 13); and Definitions of “other species of concern” (Annex 14).

Section 6 of the CMM refers to the Secretariat’s requirement to “compile and disseminate accurate and complete statistical data to ensure that the best scientific evidence is available while maintaining confidentiality.” It identifies public domain data as:

- Data on fishing activities aggregated by Flag State and month by 1° longitude and 1° latitude, except where areas contain less than 3 vessels;¹²²
- Data for vessels authorised to fish in the Convention area;¹²³
- The occurrence of bottom fishing with in a 20-minute block without identifying flag, vessel identification or fishing effort.¹²⁴

Any data that is not public domain data as described is considered to be non-public domain data.¹²⁵ The SPRFMO standard for confidentiality is based on the ISO standard for Information Security Management.¹²⁶ Dissemination of non-public domain data to members or co-operating non-contracting parties may occur through written request to the Commission and subject to the authorisation of the participant who provided the data.¹²⁷

3.5 Summary of RFMO Practice

Of the RFMOs reviewed above, SPRFMO appears to have the most transparent rules and procedures in relation to what type of data is collected and how it is used, followed by IATTC and WCPFC, and then NPFC. For some RFMOs, investigative web searches are required to ascertain exactly what types of data are considered in the public domain and which are not and still it is not entirely clear. If RFMOs could be more transparent and make publicly available the procedures they adopt for "*access to microdata, as well as the uses and users of*

¹²¹ SPRFMO, *CMM 02-2018: Standards for the Collection, Reporting, Verification and Exchange of Data* <<https://www.sprfmo.int/assets/Fisheries/Conservation-and-Management-Measures/2019-CMMs/CMM-02-2018-Data-Standards-FormattedMay2019.pdf>>.

¹²² *SPRFMO CMM 02-2018* Section 6(a)(i).

¹²³ *SPRFMO CMM 02-2018* Section 6(a)(ii).

¹²⁴ *SPRFMO CMM 02-2018* Section 6(a)(iii).

¹²⁵ *SPRFMO CMM 02-2018* Section 6(c).

¹²⁶ *SPRFMO CMM 02-2018* Section 6(b).

¹²⁷ *SPRFMO CMM 02-2018* Section 6(c).

microdata" this could assist RFMO Members, scientists and the public in being better informed and making informed management decisions.

The following tables summarise the definitions of confidentiality and what types of information are considered public domain and non-public domain data. With regards to Figure 2, it is noted that further investigation is required and the table may not accurately capture RFMO practice.

Figure 1: RFMO definitions of Confidentiality

WCPFC	The property that information is not made available or disclosed to unauthorized individuals, entities or processes."
NPFC	Not available
IATTC (1951)	Resolution on Confidentiality: "... catch statistics of individual boats, records of individual company operations, and all other records obtained by the staff of the Commission regarding individual persons, companies or enterprises shall be kept completely confidential and shall be available only to those members of the staff requiring access to them in the course of the scientific investigations." ¹²⁸
IATTC (2014)	"Reports and statistics of individual fisheries production and details of the operations that companies individually provide to the Commission or its staff shall be considered as confidential and treated in accordance with rules on confidentiality established by the Commission." ¹²⁹
SPRFMO	Adopts the ISO definition.

¹²⁸IATTC 2nd Meeting on 1 February 1951 https://www.iattc.org/PDFFiles/Resolutions/IATTC/_English/C-51-01-Active_Resolution%20on%20Confidentiality.pdf

¹²⁹ IATTC, *Rules of Procedure as amended by Resolution C-12-03* (25-29 June 2012)

<https://www.iattc.org/PDFFiles/Resolutions/IATTC/_English/C-12-03-Active_IATTC%20Rules%20of%20procedure%20as%20amended%20by%20Resoluton%20C-14-08%20and%20C-17-04.pdf>.

Figure 2: RFMO categorisation of Public Domain and Non-Public Domain data

Information/data type	Public Domain	Non-Public Domain
Aggregated data of less than three vessels	IATTC: data less than two is pooled	WCPFC SPRFMO
Non-aggregated data		WCPFC IATTC SPRFMO
Data that reveals the individual activities of any vessel, company or person	IATTC: <i>mor</i>	WCPFC IATTC SPRFMO
Annual catch estimates stratified by gear/flag/species	WCPFC NPFC IATTC	
Annual number of vessels in Convention Area	WCPFC NPFC	
Catch and effort data: aggregated	WCPFC IATTC: annual and monthly	
Operational level Catch Effort data/ log books		WCPFC IATTC
Operational level Observer Catch data/Observer reports		WCPFC IATTC
Records of vessels unloading		
Biological data	WCPFC IATTC	
Tagging data	IATTC	
Vessel and gear attributes	WCPFC: <i>cfos</i> IATTC	
Oceanographic and meteorological data	WCPFC IATTC	
Authorization to fish	WCPFC IATTC	
Transshipment	IATTC	WCPFC
VMS Register/Vessel Record	WCPFC NPFC IATTC SPRFMO	
VMS Vessel position, direction and speed		WCPFC
Boarding and Inspection reports		WCPFC
Certified observer personnel		
Certified inspection personnel		WCPFC
Catch documentation scheme		WCPFC: raw data
Port State measures and procedures	WCPFC	
Port State Inspection Reports		WCPFC
Violations and infringements	IATTC: compliance reports	WCPFC
Social data	WCPFC: <i>cfos</i>	
Economic data		WCPFC
Fisheries intelligence sharing information		WCPFC
Commission/Work Group/ Committee Meeting Reports	WCPFC NPFC: after 45 days	
Fishery status reports	WCPFC NPFC IATTC	

Key: *cfos* = compiled from other sources: *mor* = may be available on request

4. Discussion

The founding Conventions for the WCPFC, NPFC, IATTC and SPRFMO are similar in terms of their objectives and requirements for data collation and dissemination and reflect many of the terms proposed under UNFSA. This analysis shows that the confidentiality principles described in the introduction of this paper are well-accepted amongst them.

Accordingly, RFMOs have two primary convention responsibilities when it comes to data. Firstly, to aggregate data for statistical purposes to produce the “best available scientific evidence” upon which meaningful management decisions are made. Secondly, to share aggregated data with member States, other RFMOs and other relevant entities.

If States/RFMOs fail to aggregate data or fail to share aggregated data on the basis of confidentiality, then this contradicts accepted definitions of confidentiality and fails to meet convention objectives.

Aggregated data is essential to fulfilling UNFSA and RFMO Convention objectives, as such every effort should be made by RFMOs to obtain data from contracting and non-contracting parties and collate, synthesize and distribute it into workable statistical data.

Commercial, political or personal interests do not justify a failure to aggregate data or a failure to disseminate aggregated data. Notwithstanding that RFMOs have an obligation to protect the identity of commercially, politically or personally interested parties; making a claim for confidentiality on the basis of commercial, political or personal interest or sensitivity requires a review and analysis of the circumstances and motivation for the claim.

This preliminary paper raises the following questions for further discussion.

- Are RFMOs meeting their convention obligations in respect of data sharing?
- When do commercial, political or personal interests justify confidentiality of fisheries data?
- When does confidentiality of data lapse?
- If fisheries data is already in the public domain (e.g vessel data via Global Fishing Watch) does this render certain RFMO practices for labelling similar data confidential - in effect, void?

And finally, how does current practice support or undermine the needs and goals of fisheries management and seafood traceability?

REFERENCES

A. Articles/ Books/ Reports

Coordinating Working Party on Fishery Statistics, *The CWP Handbook of Fishery Statistical Standards* (Food and Agricultural Organization of the United Nations, 2004)

MRAG Americas Inc, 'Review of Data Standards, Technical Capabilities and Data Sharing Policies for the Western and Central Pacific Region' (Interim advice to the Preparatory Conference for the Western and Central Pacific Fisheries Commission No WCPFC/PrepCon/WP.10)

United Nations Economic Commission for Europe Conference of European Statisticians, *Managing Statistical Confidentiality and Microdata Access: Principles and Guidelines of Good Practice*, (United Nations, New York and Geneva 2007)

<<http://www.unece.org/fileadmin/DAM/stats/publications/Managing.statistical.confidentiality.and.microdata.access.pdf>>

B. Treaties/ Agreements/ Codes of Conduct

Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea of 10 December 1982 relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks, opened for signature 4 December 1995, 2167 UNTS 88; 34 ILM 1542 (1995) (entered into force 11 December 2001)

Agreement to Promote Compliance with International Conservation and Management Measures by Fishing Vessels on the High Seas, opened for signature 24 November 1993, 2221 UNTS 91 (2003) (entered into force 24 April 2003)

Convention for the Strengthening of the Inter-American Tropical Tuna Commission established by the 1949 Convention between the United States of America and The Republic of Costa Rica, (entered into force June 2003)

Convention on the Conservation and Management of High Migratory Fish Stocks in the Western and Central Pacific Ocean, opened for signature 5 September 2000, (entered into force 19 June 2004)

Convention on the Conservation and Management of High Seas Fisheries Resources in the North Pacific Ocean, (entered into force 19 July 2015)

FAO Code of Conduct for Responsible Fisheries, FAO Doc. 95/20/Rev/1; UN Sales No. E98.V.11 (1998); 1995 WTS 3 (entered into force 31 October 1995)

FAO International Guidelines for the Management of Deep-Sea Fisheries in the High Seas, FAO, 25-29 August 2008).

United Nations Convention on the Law of the Sea, opened for signature 10 December 1982, 1833 UNTS 3; 21 ILM 1261 (1982) (entered into force 16 November 1994)

C. Other

Coordinated Working Party on Fishery Statistics “Confidentiality” (2019) <<http://www.fao.org/cwp-on-fishery-statistics/handbook/introduction/confidentiality/en/>>

IATTC, *Resolution C-12-07* Section 4 para 13-17 <https://www.iattc.org/PDFFiles/Resolutions/IATTC/_English/C-12-07-Active_Amends%20and%20replaces%20C-11-09%20Transhipments.pdf>

IATTC, *Resolution on at Sea Reporting C-03-04* (24-27 June 2003) <https://www.iattc.org/PDFFiles/Resolutions/IATTC/_English/C-03-04-Active_At-sea%20reporting.pdf>

IATTC, *Resolution on Confidentiality C-51-01* (1 February 1951) <https://www.iattc.org/PDFFiles/Resolutions/IATTC/_English/C-51-01-Active_Resolution%20on%20Confidentiality.pdf>

IATTC, *Resolution on Data Confidentiality Policy and Procedures C-15-07* (25-29 June 2012) <https://www.iattc.org/PDFFiles/Resolutions/IATTC/_English/C-12-07-Active_Amends%20and%20replaces%20C-11-09%20Transhipments.pdf>

IATTC, *Resolution on Data Provision C-03-05* (24-27 June 2003) <https://www.iattc.org/PDFFiles/Resolutions/IATTC/_English/C-03-05-Active_Provision%20of%20data.pdf>

IATTC, *Rules of Procedure as amended by Resolution C-12-03* (25-29 June 2012) <https://www.iattc.org/PDFFiles/Resolutions/IATTC/_English/C-12-03-Active_IATTC%20Rules%20of%20procedure%20as%20amended%20by%20Resoluton%20C-14-08%20and%20C-17-04.pdf>

ISO, “All about ISO” (2019) <<https://www.iso.org/about-us.html>>

ISO, “ISO/IEC 27000:2014” 2 Terms and definitions, (2014) <<https://www.iso.org/obp/ui/#iso:std:iso-iec:27000:ed-3:v1:en:term>>

NPFC, “About NPFC” (2019) <https://www.npfc.int/about_npfc>

NPFC, *Interim regulations for management of scientific data and information* (2019) <<https://www.npfc.int/interim-regulations-management-scientific-data-and-information>>

NPFC, *Interim Regulations for Management of Scientific Data and Information*, NPFC-2019-SC04-WP01 (Rev. 2)

SPRFMO, *CMM 02-2018: Standards for the Collection, Reporting, Verification and Exchange of Data* < <https://www.sprfmo.int/assets/Fisheries/Conservation-and-Management-Measures/2019-CMMs/CMM-02-2018-Data-Standards-FormattedMay2019.pdf>>

United Nations, *Fundamental Principles of Official Statistics*, GA Res 68/261, UN GA 68th Sess, UN Doc A/Res/68/261 (3 March 2014).

WCPFC, 'Rules and Procedures for the Protection, Access to, and Dissemination of Data compiled by the Commission' No WCPFC4 2007
WCPFC, *Information Security Policy* (11-15 December 2007) < <https://www.wcpfc.int/doc/data-03/information-security-policy>>