Commission for the Conservation of
Southern Bluefin Tuna

みなみまぐろ保存委員会

CCSBT-CC/2210/09

Operation of CCSBT MCS Measures
CCSBT MCS 措置の運用状況

1. INTRODUCTION
序論

This document provides a summary of the operation of some of CCSBT's main Monitoring, Control and Surveillance (MCS) measures which have either not been discussed in other papers, or for which additional supplementary information is available.
本文書では、CCSBT の主要な監視、管理及び取締り（MCS）措置のうち、他の会合文書の中で検討されていない措置、又は追加の補完的情報が利用可能となっている措置のいずれかにかかる運用状況を総括する。

The measures discussed here are:
本文書において検討した措置は以下のとおりである。

- The Catch Documentation Scheme (CDS),
  漁獲証明制度（CDS）
- The Transhipment Monitoring Program,
  転載監視計画
- Records of Authorised Vessels and Farms,
  許可船舶及び許可蓄養場記録
- The Vessel Monitoring System (VMS),
  船舶監視システム（VMS）
- CCSBT IUU Vessel List, and
  CCSBT IUU 船舶リスト
- Minimum Standards for Inspections in Port.
  港内検査に関する最低基準

2. CATCH DOCUMENTATION SCHEME (CDS)
漁獲証明制度（CDS）

CDS compliance issues have already been summarised in the Secretariat's Compliance with Measures report[1], and are generally not discussed in further detail here. This section of the report only includes information on Non-Cooperating Non-Members (NCNMs) that are voluntarily cooperating with the CDS.
CDS に関する遵守上の課題については事務局が作成した措置の遵守状況報告書で既

[1] Paper CCSBT-CC/2210/04

に総括したので、基本的にここでは議論しない。本セクションでは、CDS に自主的に協力している非協力的非メンバー（NCNM）に関する情報のみを報告する。

Cooperation with NCNMs: USA
NCNM との協力：米国
The USA is not a Member of the CCSBT but continues to cooperate voluntarily with the CDS with submissions being received quarterly. The Secretariat received its first import submission from the USA in late April 2016 (for the 2015 year). During 2017 the USA transitioned to a fully electronic trade data system and so expects that its trade reporting will have improved from 2018 onwards. As mentioned in paper CCSBT–CC/2210/14, the USA's voluntary cooperation with the CDS is becoming more important as there appear to be an increasing number of export Catch Monitoring Forms (CMFs) and Re-export/ Export after Landing Forms (REEFs) exported to the USA.
米国は CCSBT メンバーではないが、事務局が四半期に一度 CDS 情報の提出を受ける形で、引き続き自主的に CDS に協力している。米国からは、2016 年 4 月下旬に初めて輸出情報（2015 年の情報）の提供を受けた。米国は 2017 年に電子貿易データシステムへと全面的に移行したので、同国による 2018 年以降の貿易データの報告の改善が期待されている。文書 CCSBT-CC/2210/14 でも述べたとおり、米国に輸出された輸出漁獲モニタリング様式（CMF）及び再輸出／国産品水揚げ後の輸出様式（REEF）が増加傾向にあることから、CDS に対する米国の自主的な協力の重要性が高まっているところである。

3. TRANSHIPMENT MONITORING PROGRAM
転載監視計画

The CCSBT has a transhipment monitoring program for monitoring the at-sea and in-port transhipment of SBT by its Members. The program requires the CCSBT Secretariat to maintain an up-to-date Record of Authorised Carrier Vessels (CVs), as well as manage the supporting documentation such as deployment requests, transhipment declarations and observer reports.
CCSBT は、メンバーが洋上及び港内において行う SBT の転載を監視するための転載監視計画を有している。同計画は、CCSBT 事務局に対し、許可運搬船（CV）記録を最新の状態に維持しておくとともに、配乗要請、転載申告書及びオブザーバー報告書といった証拠書類を管理するよう求めている。

Operational Issues
運用上の課題
Pandemic-related Issues
パンデミックに関連する問題
One important recent operational issue with the at-sea transhipment monitoring program is that it has been adversely affected by the COVID-19 pandemic, commencing in 2020 and continuing through to at least the end of 2021. There were 65 unobserved at-sea transhipments that occurred during 2021 (2 from Japanese-flagged longliners and 63 from Taiwanese-flagged longliners)[2], with 3 of those occurring in late 2021 after CCSBT 28. No Compliance Policy Guideline 5 (CPG5)[3] notifications were received with respect to any of

[2] Refer to Table 1b of Attachment A 別紙 A の表 1b を参照
[3] CPG5: Guideline on principles for action and steps to be taken in relation to extraordinary circumstances

these 65 unobserved at-sea transhipments. To date the Secretariat has received no information to indicate that any unobserved at-sea transhipments have occurred during 2022.
最近の洋上転載監視計画における重要な運用上の問題点の一つは、2020 年に始まり、また少なくとも 2021 年末までは継続していた COVID-19 による悪影響である。2021 年には 65 回の洋上転載が転載オブザーバー無しで行われ（日本船籍はえ縄漁船で 2 回、台湾船籍はえ縄漁船で 63 回）、そのうち 3 回は CCSBT 28 以降の 2021 年末に行われた[2]。これら 65 回の転載オブザーバー無しでの洋上転載について、遵守政策ガイドライン 5（CPG5）[3]に基づく通知は全く行われていない。事務局は、現時点までにおいて、2022 年に転載オブザーバー無しでの洋上転載が行われたことを示す情報は何ら受領していない。

Indonesia's Lack of Implementation of the CCSBT's Transhipment Resolution
インドネシアによる CCSBT 転載決議の不履行

On 05/07/2022, Indonesia provided information to the Secretariat concerning an IOTC-agreed pilot project for monitoring transhipments at sea being undertaken within IOTC's area of competency which commenced during 2021. This information included copies of 6 at-sea transhipment observer reports (from national observers) for 32 at-sea transhipments that involved SBT from 15 different longline fishing vessels to 4 authorised Indonesian Carrier Vessels. However, at this time Indonesia did not also provide any information to the CCSBT Secretariat regarding whether any of the longliners involved had 'freezing capacity'[4] and so it could not be determined if these transhipments fell within the scope of CCSBT's Transhipment Resolution.
2022 年 7 月 5 日に、インドネシアは事務局に対し、IOTC が同委員会管轄水域において実施予定の洋上転載モニタリングに関するパイロットプロジェクトに同意したこと、及び同プロジェクトが 2021 年に開始されたことに関する情報を提供した。この情報には 32 回の洋上転載に関する（国内オブザーバーからの）洋上転載オブザーバー報告書の写しが 6 件含まれており、これらの報告書には 15 隻の異なるはえ縄漁船から 4 隻のインドネシア許可運搬船への SBT の転載が含まれていた。しかしながら、この情報提供の際、インドネシアは事務局に対して関与したはえ縄漁船が「冷凍能力」[4]を有していたのかどうかに関する情報を全く提供しなかったので、これらの転載活動が CCSBT の転載決議の対象となるものであったのかどうかを判断することができなかった。

On 06/09/2022, following further enquiries from the Secretariat, Indonesia confirmed that all of these at-sea transhipments involved tuna longline fishing vessels with sufficient freezing capacity[4],[5] to be classified as "LSTLVs"[6] according to CCSBT's Transhipment Resolution.
事務局からの追加的な質問を受け、インドネシアは 2022 年 9 月 6 日に、これらの洋

[4] According to CCSBT's Transhipment Resolution, 'A vessel is deemed to have Freezing Capacity if it has a freezer which is capable of storing more than 500 kilograms of SBT at -30C or below' CCSBT 転載決議によれば、「摂氏－30 度以下で 500 キログラム以上の保持能力を有する冷凍庫を備えている場合、当該漁船は冷凍能力を備えているものとみなされる。」

[5] Refer to the table under 2.4 ii. on pages 7 and 8 of Indonesia's 2022 National Report which includes a list of tuna longliners with freezing capacity which transhipped during 2021 インドネシアの 2022 年国別報告書 7－8 ページのセクション 2.4 ii. の表を参照。2021 年に転載を行った冷凍能力を備えたまぐろはえ縄漁船のリストが掲載されている。

[6] "LSTLV" means a tuna longline fishing vessel with Freezing Capacity 「LSTLV」とは、冷凍能力を備えたまぐろはえ縄漁船をいう。

上転載はいずれも、CCSBT 転載決議では「LSTLV[6]」に分類される十分な冷凍能力を備えたまぐろはえ縄漁船[4,5]が関与したものであったことを確認した。

Therefore, none of Indonesia's at-sea transhipments involving SBT conducted during 2021 met the requirements of the CCSBT's Transhipment Resolution for a variety of reasons including that:
このため、インドネシアが 2021 年に実施した SBT を含む洋上転載はいずれも、以下を含む種々の理由により、CCSBT 転載決議の要件を満たしていなかった。

- No deployment requests or other required notifications were provided to the CCSBT in advance of the transhipments occurring;
  転載が実施される前に、CCSBT に対して転載オブザーバーの配乗要請がなされず、又はその他の必要な通報も行われなかった。
- None of the Indonesia Carrier Vessels receiving at-sea transhipments of SBT had on board a CCSBT observer in accordance with the CCSBT Regional Observer Program in Annex II of the CCSBT Transhipment Resolution;
  SBT の洋上転載を受けるインドネシア運搬船は、いずれも CCSBT 転載決議付属書 II の CCSBT 地域オブザーバー計画に基づく CCSBT オブザーバーを乗船させていなかった。
- No transhipment declarations were provided; and
  転載申告書が全く提出されなかった。
- No transhipment information was provided on Indonesia's CMFs when first submitted to the Secretariat, although revised CMFs including transhipment information were submitted to the Secretariat on 06/09/2022 (upon request).
  インドネシアの CMF が最初に事務局に提出された時点では転載情報が全く提示されていなかった。転載情報を含む修正 CMF は、（事務局からの要請を受けた後の）2022 年 9 月 6 日に事務局に対して提出された。

General Issues
一般的な問題

In cases where transhipment observers were successfully deployed, the Secretariat observed the same main issues with operation of the Transhipment Resolution as in previous years which are difficulties with regard to:
事務局は、転載オブザーバーが正常に配乗された場合であっても、転載決議を運用する上での主な課題として、過去と同様に以下のような困難性を確認している。

- identifying SBT during multi-species transhipments, and
  複数種を含む転載の最中に SBT を特定すること
- ascertaining the species of tuna (specifically SBT) based solely on transhipment observer photographs. While it is essential to have observer photographs on record, it appears almost impossible to identify the species of tuna (especially when frozen, gilled and gutted) with absolute certainty based on photographs alone.
  転載オブザーバーが撮影した写真のみに基づいてまぐろの魚種（特に SBT）を判別すること。記録としてオブザーバーが撮影した写真を保持することは必要不可欠であるが、写真だけを以てまぐろの魚種を同定すること（特に冷凍され、かつえらはら抜きの場合）はほぼ不可能である。

To address these operational issues, it continues to be recommended that:
これらの運用上の課題に対応するため、引き続き以下を勧告する。

- SBT should be transhipped separate to other tuna-like species, in order to assist observers with identification, and
  オブザーバーによる種同定を支援するため、SBT は他のまぐろ類とは分けて転載されるべきである。
- Members and the Secretariat should monitor developments in the effectiveness and availability of practical on-site genetic testing kits (for tuna species identification) so that any such tools developed can be considered for use by transhipment observers in the future.
  メンバー及び事務局は、現場で利用可能な（まぐろ類の種同定のための）遺伝子検査キットが開発された場合には、将来的にこうしたツールを転載オブザーバーが使用することを検討することができるよう、その有効性及び現場での実用性を含む開発状況をモニタリングすべきである。

Authorised Carrier Vessels: IMO Number Requirement
許可運搬船：IMO ナンバー要件
IMO numbers have been provided for all Carrier Vessels CCSBT-authorised between 1 July 2021 and 30 June 2022.
2021 年 7 月 1 日から 2022 年 6 月 30 日までの間に許可された全ての CCSBT 許可運搬船に関して IMO ナンバーが発行されている。

Summary of Transhipment Data Received
受領した転載データの概要
A summary of transhipment data provided to the Secretariat with respect to Japan, Korea and Taiwan on transhipment declarations and/or observer reports/CDS forms for 2021 and the first half of 2022 (aggregated by flag and product type) is provided at **Attachment A** (Tables 1 - 5).
2021 年及び 2022 年前半に転載申告書及び／又はオブザーバー報告書／CDS 情報を通じて事務局に提出された日本、韓国及び台湾に関する転載データの概要（旗別、製品タイプ別に集計）は**別紙 A**（表 1－5）のとおりである。

Note: ***Confirmation that Indonesia's at-sea transhipments of SBT fall within the scope of CCSBT's Transhipment Resolution, including provision of revised CMFs, was not received until 06/09/2022. This was not early enough for Indonesia's at-sea transhipment information to be added into the CCSBT's database to be reported in this paper.***
注：CCSBT 転載決議の対象となるインドネシアの洋上転載にかかる確認（修正 CMF の提出を含む）は 2022 年 9 月 6 日まで行われなかった。このため、本文書で報告した CCSBT データベースへのインドネシアによる洋上転載情報の追加は間に合わなかった。

Tables 1a/b, 2a/b[7] and 3 of **Attachment A** provide information from ***at-sea*** transhipment declarations and observer reports received from relevant Members (except Indonesia). Tables 4 and 5 provide the same information for ***in-port*** transhipment/ CDS information received. Due to the continuing COVID-19 pandemic during 2021, not all deployments of transhipment observers that would usually be required under the Transhipment Resolution

[7] Table 2b is blank because no unobserved transhipments at sea have been recorded yet for the first half of the 2022 calendar year　2022 暦年上半期には転載オブザーバー無しでの洋上転載は記録されていないため、表 2b は空欄となっている。

could occur due to port and travel restrictions. Where observers were not present for some Japanese and Taiwanese at-sea transhipments, the Secretariat still received deployment requests and transhipment declarations, as well as 'unobserved' observer reports that summarised the transhipment at-sea activity involving SBT, including the dates, locations, vessels involved, declared weights and associated CDS documentation.
別紙 A の表 1a/b, 2a/b[7] 及び 3 は、関係するメンバー（インドネシアを除く）から受領した全ての***洋上***転載申告書及びオブザーバー報告書から得られた情報を提示したものである。表 4 及び 5 は、受領した***港内***転載／CDS 情報について同じ情報を提示したものである。2020 年及び 2021 年の COVID-19 パンデミックの影響による港内での活動制限及び旅行制限のため、転載決議の下に通常義務付けられている転載オブザーバーの配乗が完全には実施されなかった。事務局は、オブザーバーの配乗が不可能であった場合でも配乗要請書及び転載申告書は引き続き受領しており、また SBT を含む洋上転載活動を総括した「監視されなかった」オブザーバー報告書（日付、位置、関与した船舶、申告重量及び関連する CDS 文書を含む）も受領した。

Therefore, Table 1 is presented in two parts:
このため、表 1 では以下 2 つのパートに分けて提示した。

- Part a – for those Carrier Vessels which did have a transhipment observer on board, and
  パート a－転載オブザーバーが乗船していた運搬船に関する情報
- Part b – for those Carrier Vessels that didn't have a transhipment observer on board due to COVID-19 issues.
  パート b－COVID-19 の影響により転載オブザーバーが乗船していなかった運搬船に関する情報

In Table 1a of **Attachment A** there appear to be large discrepancies between transhipment declaration weights of SBT versus observer reported weights. The reason for these discrepancies is because many observer reports have often not included the weight of SBT transhipped for each individual vessel (it has been requested they do so), but only the overall weight of all SBT over a series of transhipments.
別紙 A の表 1a では、転載申告書における SBT の重量とオブザーバー報告書上の SBT の重量との間に大幅な不調和があることを示している。こうした不調和の原因は、オブザーバー報告書の多くにおいて各漁船から転載された SBT の重量が個別には記録されておらず（それを記録するよう要請されているにもかかわらず）、一連の転載を通した SBT の総重量が示されている場合が多いことによる。

The following points summarise the transhipment information received by the Secretariat with respect to Japan, Korea and Taiwan for 2021 and the first half of 2022:
2021 年及び 2022 年上半期に関して事務局が日本、韓国及び台湾から受領した転載情報の概要は以下のとおりである。

- Observer deployment requests specifying that SBT were to be transhipped were received for 97.7% of all reported SBT transhipments at sea during 2021;
  2021 年において、SBT の転載予定が明確な形で受領したオブザーバー配乗要請は、既知の SBT 洋上転載のうち 97.7 % であった。
- Observer deployment requests specifying that SBT were to be transhipped have been received for 100% of all reported SBT transhipments at sea during the first half of 2022;

2022 年上半期において、SBT の転載予定が明確な形で受領したオブザーバー配乗要請は、既知の SBT 洋上転載のうち 100 % であった。

- The Secretariat received 86 transhipment declarations for transhipments at sea totalling 1,871.7t during 2021 and has received 15 transhipment declarations totalling 112.4t for the first half of 2022;
  事務局は、2021 年においては 86 件の洋上転載申告書（総転載量 1,871.7 トン）を受領し、2022 年上半期においては 15 件の洋上転載申告書（総転載量 112.4 トン）を受領した。
- To date the Secretariat has received 14 transhipment declarations for in-port transhipments during 2021 totalling 819t and 6 transhipment declarations for in-port transhipments totalling approximately 6.3t that occurred during the first half of 2022. It is not yet possible to check whether any additional in-port transhipments occurred for this period, because CMFs for the 2nd quarter of 2022 are not due to be submitted to the Secretariat until 30 September 2022;
  現時点で、事務局は、2021 年においては 14 件の港内転載申告書（総転載量 819 トン）を受領し、2022 年上半期においては 6 件の港内転載申告書（総転載量 6.34 トン）を受領した。2022 年第 2 四半期の CMF の事務局への提出期限は 2022 年 9 月 30 日なので、追加的な港内転載が行われたのかどうかを確認することは現時点では不可能である。
- Observer reports[8] have been received for 100% of all reported 2021 at-sea transhipments. These included some 'unobserved' observer reports for declared at-sea transhipments of SBT. This resulted in there being only a low percentage of observer estimates of the weights of transhipped SBT available, *i.e.* of the observer reports received, 12.7% contained observer estimates of the weights of SBT transhipped, while the remaining 87.2% did not provide specific information on estimated SBT weights;
  2021 年に実施された既知の洋上転載のオブザーバー報告書[8]は 100 % 受領されている。これらには、申告された SBT 洋上転載に関して「監視されなかった」オブザーバー報告書も一部含まれる。このため、転載された SBT の重量に関して利用可能なオブザーバー推定値の割合は低くとどまっている。すなわち、受領したオブザーバー報告書のうち、転載された SBT の重量にかかるオブザーバー推定値を含む報告書は 12.7 % に留まった一方、残りの 87.2 % のオブザーバー報告書には SBT の推定重量に関する具体的な情報が提示されていなかった。
- To date, transhipment observers have observed 100% (15) at-sea transhipments that occurred during the first half of 2022. Therefore, to date, there have been no at-sea transhipments of SBT reported that were not observed due to COVID-19 issues in deploying transhipment observers to Carrier Vessels during the first half of 2022; and
  現時点で、2022 年上半期に実施された洋上転載（15 件）は 100 % 監視されている。このため、現時点では、2022 年上半期において COVID-19 の問題を理由に運搬船に転載オブザーバーが配乗されなかったために監視されなかった SBT の洋上転載は報告されていない。
- Table 3 of **Attachment A** provides a summary of transhipment weights recorded on transhipment declarations, observer reports, and CDS information for the 2021

[8] Both observed and 'unobserved' observer reports　監視されたオブザーバー報告書と「監視されなかった」オブザーバー報告書の両方

calendar year. To enable valid comparisons to be made, this table presents data for only those transhipments for which the Secretariat has received both transhipment declarations and observer reports and has been able to match these transhipments with CDS documents. When summed, the weights of transhipped SBT reported on transhipment declarations versus CDS documents differed from each other by 2.5%.
別紙 A の表 3 では、2021 暦年において転載申告書、オブザーバー報告書及び CDS 情報に記録された転載重量の概要を示している。有意な比較を行うことができるよう、この表では、事務局が転載申告書とオブザーバー報告書の両方を受領しており、かつこれらの転載が CDS 文書と合致している場合のデータのみを示している。合計値を比較した場合、転載申告書において報告された SBT 転載重量と CDS 文書における転載重量は差異は 2.5 % である。

Update on the Transhipment Memorandum of Cooperation (MoC) with WCPFC[9]
WCPFC[9] との転載協力覚書（MoC）に関するアップデート

A Transhipment Memorandum of Cooperation[10] (MoC) with WCPFC was signed by both the CCSBT and WCPFC Chairs during 2017 but has not yet been operationalised. There has been no progress towards operationalising this MoC since CCSBT 28. This is primarily because the Tuna Fishery Data Collection Committee (DCC), usually convened by the Pacific Community (SPC), generally leads any discussions on the development of Longline Electronic Monitoring Compliance Data and Transhipment Standards for use in the WCPFC Convention Area, and it has not been convened since CCSBT 28. There are currently no upcoming DCC meetings scheduled although it is likely that one will be held prior to CCSBT 30.

WCPFC との転載協力覚書 [10]（MoC）は 2017 年に両委員会の議長により署名されたが、まだ運用開始に至っていない。CCSBT 28 以降、本 MoC の運用開始に向けた進捗はなかった。これは主に WCPFC 条約水域で使用されるはえ縄電子モニタリング遵守データ及び転載基準の策定に関する一切の議論を全体的にリードしている、通常は太平洋共同体（SPC）によって招集されるまぐろ漁業データ収集委員会（DCC）が CCSBT 28 以降に開催されていないためである。現時点では DCC 会合の開催予定はないが、CCSBT 30 までには開催される可能性がある。

4. RECORDS OF AUTHORISED VESSELS AND FARMS
許可船舶及び許可蓄養場記録

Authorised Farm and Vessel Records/ CLAV
許可蓄養場及び許可船舶記録／CLAV

The Secretariat continues to receive authorised farm and vessel updates approximately twice a week, with vessel updates containing up to one hundred vessels. Upon receipt of this information, the Secretariat updates its authorised vessels/farms database as well as the CCSBT web site.

事務局は引き続き、2 週間に一回程度の頻度で許可蓄養場及び許可船舶に関するアップデートを受領しており、許可船舶のアップデートは 100 隻に及ぶ場合もある。

[9] Western and Central Pacific Fisheries Commission 中西部太平洋まぐろ類委員会
[10] Memorandum of Cooperation (MoC) on the Endorsement of WCPFC Regional Observer Programme Observers for Observing Transshipments of Southern Bluefin Tuna on the High Seas of the WCPFC Convention Area 中西部太平洋まぐろ類委員会とみなみまぐろ保存委員会との間の WCPFC 条約水域の公海におけるみなみまぐろの転載の監視に関する WCPFC 地域オブザーバー計画オブザーバーの承認の関する協力覚書

こうした情報の提出を受けて、事務局は許可船舶／蓄養場に関するデータベース並びに CCSBT ウェブサイトをアップデートしている。

Updated vessel information continues to be shared with the joint tuna Regional Fisheries Management Organisations' (RFMOs') Consolidated List of Authorised Vessels (CLAV) through automated updates between the CCSBT and the CLAV which occur daily. However, no maintenance of the CLAV has been conducted since funding ceased in October 2019.
更新された情報は、引き続きまぐろ類地域漁業管理機関（RFMO）合同の統合許可船舶リスト（CLAV）とも共有されており、CCSBT と CLAV との間で日常的に自動更新が行われている。しかしながら、2019 年 10 月に資金が停止されて以降、CLAV のメンテナンスは行われていない。

As mentioned in previous years, it is expected that the quality of the data in the CLAV and its usability will continue to decline in the absence of ongoing maintenance. The CCSBT Secretariat will maintain the quality of its own data and will cooperate in any discussions that may take place between the tuna RFMOs and FAO to find an effective solution for ongoing CLAV maintenance.
昨年も述べたとおり、継続的なメンテナンスが行われない中では、CLAV 上のデータの品質及びその有用性は低下し続けていくものと想定される。CCSBT 事務局は、引き続き保有するデータの品質を維持するとともに、継続的な CLAV メンテナンスのための効果的な解決策を見出すために今後行われる可能性があるまぐろ類 RFMO 及び FAO 間のあらゆる議論に協力していく所存である。

Authorised Fishing Vessels: IMO Number Requirement
許可漁船：IMO ナンバーに関する要件

Paragraph 3 of the CCSBT's 'Resolution on a CCSBT Record of Vessels Authorised to Fish for Southern Bluefin Tuna', includes the following IMO numbering requirements:
CCSBT の「みなみまぐろ漁業許可船の CCSBT の記録に関する決議」のパラグラフ 3 は、IMO ナンバー要件に関して以下のとおり規定している。

3. Members and Cooperating Non-members shall ensure that the following categories of fishing vessels in the CCSBT Record of Authorised Vessels have IMO numbers issued to them:
メンバー及び協力的非加盟国は、許可漁船の CCSBT の記録における以下の区分の漁船に対して、IMO ナンバーの発行を受けさせるよう確保するものとする。

- *all fishing vessels (except wooden and fibreglass vessels) flying their flag that are authorised to catch SBT, and that are at least 100 gross tonnage in size, and*
  SBT を漁獲することを許可された当該国の旗を掲げる全ての漁船（ただし木造船及びファイバーグラス船を除く）であって、かつその大きさが総トン数 100 トン以上である全ての漁船
- *effective from 1 January 2021, wooden and fiberglass fishing vessels flying their flag that are authorised to catch SBT, and that are at least 100 gross tonnage in size, and*
  2021 年 1 月 1 日以降にあっては、SBT を漁獲することを許可された当該国の旗を掲げる木造船及びファイバーグラス船であって、かつその大きさが総トン数 100 トン以上である漁船
- *effective from 1 January 2022, all motorised inboard fishing vessels of less than 100 gross tonnage down to a size limit of 12 metres in length overall (LOA) authorised to operate outside waters under the national jurisdiction of the flag State.*

2022 年 1 月 1 日以降にあっては、総トン数 100 トン未満かつ全長（LOA）12 メートルを下限とする全ての船内機船であって、旗国の管轄外の水域において操業することを許可された漁船

It is time-consuming and not always possible to report on dot-point 3 above because the CCSBT does not currently collect information on whether CCSBT-authorised vessels are authorised to operate outside each Member's waters of national jurisdiction. Therefore, reporting on dot-point three requires that the Secretariat approach relevant Members directly to clarify this point:
現時点において CCSBT は CCSBT 許可漁船が各メンバーの管轄外の水域で操業する許可を有しているかどうかに関する情報を収集していないため、上記のうち三点目の報告には時間を要し、また常にこれが可能であるとは限らない。このため、上記のうち三点目にかかる報告には、以下の点を明確化するために事務局が関連するメンバーに直接確認する必要があった。

- Australia advised that if its vessels are fishing for SBT they are authorised to fish on the High Seas although it is unusual for them to do so;
  オーストラリアは、同メンバーの船舶が SBT を漁獲する場合、これらの船舶は公海で漁獲することを許可されているものの、実際にそうすることは稀であると述べた。
- Indonesia and New Zealand provided a list of vessels authorised to fish on the High Seas; and
  インドネシア及びニュージーランドは、公海で漁獲することを許可されている船舶のリストを提出した。
- South Africa has not yet responded to the Secretariat's queries about which, if any, of its CCSBT-authorised vessels may fish beyond areas of national jurisdiction.
  南アフリカは、CCSBT 許可漁船が同メンバーの管轄水域を超えて漁獲することができるのかに関する事務局からの問合せに回答していない。

For the period from 1 January 2022 onwards the Secretariat notes that:
2022 年 1 月 1 日以降の期間に関して、事務局は以下を指摘する。

- IMO numbers have been submitted to the Secretariat where required for the CCSBT-authorised fishing vessels of all distant water fishing Members (EU, Japan, Korea and Taiwan);
  全ての遠洋漁業メンバー（EU、日本、韓国及び台湾）の CCSBT 許可漁船に関して、必要に応じて IMO ナンバーが事務局に提出されている。
- Indonesia has submitted IMO numbers for its fishing vessels where required;
  インドネシアは、必要に応じて同メンバーの漁船の IMO ナンバーを提出している。
- There were 2 Australian vessels greater than 12m LOA and less than 100 gross tonnage which were CCSBT-authorised and did not have IMO numbers submitted to the Secretariat. One of these vessels is no longer CCSBT-authorised.
  (the Secretariat has not yet received final confirmation regarding if these 2 vessels are fishing for SBT during 2022);
  CCSBT の許可を受けているオーストラリア船籍の 2 隻は総トン数 100 トン未満かつ全長（LOA）12 m を超えているが、これらにかかる IMO ナンバーはまだ事務局に対して提出されていない。このうち一隻は CCSBT 許可船舶リ

ストから既に削除された。（事務局は、これら 2 隻の漁船が 2022 年に SBT を漁獲したかどうかに関する最終的な確認を得ていない）

- There were 9 New Zealand fishing vessels greater than 100 gross tonnage which were CCSBT-authorised until early September 2022 which had no IMO number[11]. All of these vessels except one (which by-caught SBT during 2022) are no longer CCSBT-authorised. NZ advised that this 1 remaining vessel will obtain an IMO number as soon as is practicable; and
  CCSBT の許可を受けているニュージーランド船籍の 9 隻は総トン数 100 トンを超えていたが、2022 年 9 月初旬まで IMO ナンバーを有していなかった [11]。これらの船舶のうち 1 隻（2022 年に SBT を混獲した船舶）を除く全ての船舶は、既に CCSBT 許可船舶リストから削除された。ニュージーランドは、残りの 1 隻は可能な限り速やかに IMO ナンバーを取得する予定であることを述べた。
- South Africa has not submitted tonnage information for 3 of its vessels which are greater than 12m LOA. Including these 3 vessels, South Africa has a total of 7 CCSBT-authorised vessels that have no IMO number which would require an IMO number if authorised to fish in areas beyond national jurisdiction (but the Secretariat currently has no information on where these 7 vessels are permitted to fish).
  南アフリカは、全長（LOA）12 m を超える同メンバーの船舶 3 隻にかかる総トン数の情報を提出していない。これら 3 隻を含め、南アフリカ船籍 CCSBT 許可漁船のうち合計 7 隻が IMO ナンバーを保有していない。これら 7 隻は、もしも国家管轄外の水域で操業する許可を有している場合は IMO ナンバーの取得が義務付けられている（しかしながら、現時点で事務局はこれら 7 隻の漁船が漁獲を許可されているのかどうかに関する情報を有していない）。

CC17 is requested to consider and recommend how to facilitate more efficient reporting on paragraph 3, dot-point 3 of the Authorised Vessel Resolution in future.
CC 17 は、将来的に許可船舶決議のパラグラフ 3（三点目）のより効率的な報告をどのように促進することができるかについて検討及び勧告するよう要請されている。

5. VESSEL MONITORING SYSTEM (VMS)
船舶監視システム（VMS）

In its National Report, Japan reported 3 vessels where the VMS was inactive for varying periods of time (3 weeks, 2 months or 5 months) during 2021 or 2022.
日本は、同メンバーの国別報告書の中で、3 隻の漁船の VMS が 2021 年又は 2022 年の様々な期間（3 週間、2 ヶ月又は 5 ヶ月）において稼働していなかったことを報告した。

[11] Due to its observation that unexpected SBT bycatch events appeared to be coming more common in its waters, in early 2022 New Zealand decided to CCSBT-authorise virtually its entire fleet in order to try and avoid future occurrences of vessels which are not CCSBT-authorised by-catching SBT. New Zealand advised that this decision contributed to some of its fishing vessels not having the required IMO numbers when initially CCSBT-authorised. ニュージーランド水域における想定外の SBT 混獲は今後より一般的になっていくとの観測から、ニュージーランドは、将来的に CCSBT の許可を有していない中で SBT を混獲してしまう船舶が出てくることを回避するべく、2022 年初頭にほぼ全ての船舶を CCSBT 許可漁船とすることを決定した。ニュージーランドは、この決定が、当初 CCSBT 許可船舶リストに掲載された漁船の一部が義務付けられている IMO ナンバーを有していないという状況の原因になったと説明した。

In its National Report, New Zealand reported that during its 2020/21 fishing season, New Zealand's Ministry for Primary Industries issued 10 direction notices for SBT vessels which had reported a VMS unit failure. These failures all occurred within New Zealand's Exclusive Economic Zone and the directives were issued by Fisheries Compliance Officers. New Zealand advised that a direction is issued for a specific period of time, and once back at port the vessel must have its Geospatial Position Reporting (GPR) unit fixed prior to any future trips. In some cases, Fisheries Compliance can corroborate vessel GPR through Automatic Identification System (AIS) data.
ニュージーランドは、同メンバーの国別報告書の中で、2020／21 年漁期において、ニュージーランド一次産業省は VMS 装置の故障を報告した SBT 漁船に対して 10 件の指示通知を発出したことを報告した。これらの故障はいずれもニュージーランド排他的経済水域内で発生したもので、指示通知は漁業コンプライアンス・オフィサーから発行されたものである。ニュージーランドは、指示は一定期間を対象に発行され、漁港に戻り次第、漁船は次の航海への出向前に地理空間位置報告（GPR）装置を修理しなければならないことを述べた。一部のケースでは、漁業のコンプライアンスは船舶自動識別装置（AIS）データを通じて漁船の GPR を裏付けることができる。

6. CCSBT IUU VESSEL LIST
CCSBT IUU 船舶リスト

In October 2019, CCSBT's IUU Vessel List was revised to include a provision to cross-list vessels from the IUU Lists of eight other organisations onto the CCSBT's IUU Vessel List, but only in cases where the RFMO concerned was the original IUU listing organisation.
CCSBT の IUU 船舶リストは、2019 年 10 月に、他の 8 機関の IUU 船舶リストから CCSBT の IUU 船舶リストに相互掲載を行う（ただしこれらの関連 RFMO が最初の IUU リスト掲載機関であった場合に限る）ための規定を追加する形で改正された。

The eight organisations the CCSBT agreed to cross-list vessels from are the Inter-American Tropical Tuna Commission (IATTC), the International Commission for the Conservation of Atlantic Tunas (ICCAT), the Indian Ocean Tuna Commission (IOTC), the Western and Central Pacific Fisheries Commission (WCPFC), the Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR), the South East Atlantic Fisheries Organisation (SEAFO), the Southern Indian Ocean Fisheries Agreement (SIOFA) and the South Pacific Regional Fisheries Management Organisation (SPRFMO).
CCSBT が相互掲載元とすることに合意した 8 機関とは、全米熱帯まぐろ委員会（IATTC）、大西洋まぐろ類保存国際委員会（ICCAT）、インド洋まぐろ類委員会（IOTC）、中西部太平洋まぐろ類委員会（WCPFC）、南極の海洋生物資源の保存に関する委員会（CCAMLR）、南東大西洋漁業機関（SEAFO）、南インド洋漁業協定（SIOFA）及び南太平洋漁業管理機関（SPRFMO）である。

In late 2019 and early 2020, the Secretariat collated an initial CCSBT IUU List consisting of all appropriate cross-listed vessels from the eight nominated organisations above. This initial CCSBT IUU List included 116 cross-listed vessels and was first posted on the CCSBT's website in February 2020. In August 2022, CCSBT's IUU List included 132 cross-listed vessels.
事務局は、2019 年末及び 2020 年初頭に上記 8 機関のリストから相互掲載すべき全

ての船舶で構成される CCSBT IUU 船舶リストをとりまとめた。この最初の CCSBT IUU 船舶リストには 116 隻の相互掲載船舶が含められ、2020 年 2 月に初めて CCSBT ウェブサイトに掲載された。2022 年 8 月時点において、CCSBT の IUU 船舶リストには 132 隻が相互掲載されている。

During 2021 and early 2022 the International Monitoring, Control and Surveillance Network (IMCSN) first gauged interest amongst RFMOs, and then proposed, funded and engaged a consultant to examine and report back on two aspects of the logistics associated with RFMOs' IUU listing processes, specifically to examine potential ways:
2021 年及び 2022 年初頭の国際監視・管理・取締ネットワーク（IMCSN）は、RFMO の IUU 掲載プロセスに伴うロジ上の二つの側面（特に以下の方法の精査）について精査及び報告するため、まず RFMO 間における関心を測定した上で、提案及び資金の拠出、コンサルタントとの契約を行った。

1. To reduce, or possibly even eliminate, time delays associated with updates, additions, or removals of vessels from RFMO IUU Vessel Lists (required due to updates in other relevant RFMOs' IUU Lists where these vessels are cross listed).
他の関連する RFMO の IUU 船舶リストにおける船舶のアップデート、追加又は削除にかかる遅延を低減し、又は可能であれば遅延を排除する。

2. To reduce the amount of manual intervention or "workload" on RFMO Secretariat staff to regularly, and comprehensively, review all other relevant RFMO IUU Vessel Lists for updates, additions and/or removals of vessels.
他の全ての関連する RFMO の IUU 船舶リストにおける船舶のアップデート、追加及び／又は削除を定期的かつ包括的にレビューするための RFMO 事務局スタッフの手作業による介入又は「作業量」を軽減する。

This initial study was supported by fourteen organisations[12] and the finalised report is provided for Members' information at **Attachment B**.
この初期的な作業は 14 の機関 [12] によりサポートされた。メンバーへの情報提供として、本件にかかる最終報告書を**別紙 B** に示した。

7. MINIMUM STANDARDS FOR INSPECTIONS IN PORT
港内検査に関する最低基準

The Resolution for a CCSBT Scheme for Minimum Standards for Inspection in Port was adopted in 2015 and came into effect from 1 January 2017 and includes a number of obligations for Port State Members.
港内検査の最低基準を定めた CCSBT 制度に関する決議は 2015 年に採択され、2017 年 1 月 1 日に発効した。本決議には、寄港国に対する多数の義務が規定されている。

Designated Points of Contact and Ports
指定連絡先及び指定港

The Resolution requires that each Member wishing to grant port access to 'foreign fishing vessels' (including carrier vessels other than container vessels) carrying SBT or fish products

[12] These organisations are listed on page 3 of the report and are CCAMLR, CCSBT, GFCM, IATTC, ICCAT, IOTC, NAFO, NEAFC, NPAFC, NPFC, SEAFO, SIOFA, SPRFMO and WCPFC. これらの機関については同報告書の 3 ページに掲載されており、CCAMLR、CCSBT、GFCM、IATTC、ICCAT、IOTC、NAFO、NEAFC、NPAFC、NPFC、SEAFO、SIOFA、SPRFMO 及び WCPFC である。

originating from SBT submits to the CCSBT Secretariat:
本決議では、SBT 又は SBT に由来する製品を運搬する「外国漁船」（コンテナ船以外の運搬船を含む）に対して寄港を許可しようとする各メンバーは、CCSBT 事務局に対して以下を提出するよう義務付けている。

- A designated point of contact for receiving inspection reports, and
  検査報告書を受領するための指定連絡先
- A list of designated ports to which 'foreign fishing vessels' may request entry.
  「外国漁船」が入港を要請することができる指定港のリスト

This information has been provided by all Members.
この情報は全メンバーから提供済である。

Port Inspection Reports
港内検査報告書

Paragraph 15 of the Resolution requires that:
決議パラグラフ 15 は以下のとおり規定している。

15. Each year Members shall inspect at least 5 % of landing and transshipment operations in their designated ports as are made by foreign fishing vessels.
メンバーは、毎年、指定港において外国漁船によって実施される陸揚げ及び転載作業のうち少なくとも 5 % について検査を実施するものとする。

Further, paragraph 20 specifies that:
さらにパラグラフ 20 では以下のとおり規定している。

20. The port Member shall transmit a copy of the inspection report to the CCSBT Secretariat no later than 14 days following the date of completion of the inspection. If the inspection report cannot be transmitted within 14 days, the port Member should notify the CCSBT Secretariat within the 14 day time period the reasons for the delay and when the report will be submitted.
寄港国であるメンバーは、検査の完了から 14 日以内に、CCSBT 事務局に対して検査報告書の写しを送付するものとする。検査報告書を 14 日以内に送付することができない場合、寄港国であるメンバーは、14 日の期間内において、CCSBT 事務局に対し、当該遅延の理由及び当該報告書を提出する時期について通知するものとする。

Table 1 outlines the Secretariat's interpretation of the number of inspections that need to be conducted to meet the 'at least 5%' port inspection requirement.
表 1 は、「少なくとも 5 %」の港内検査要件を履行するために実施する必要がある検査回数にかかる事務局の解釈をまとめたものである。

Table 1: Number of Required Inspections (to meet the 'at least 5%' inspection requirement)
表 1：必要な検査回数 -（「少なくとも 5 %」との検査要件を履行するための回数）

Number of landing/ transhipment operations occurring in designated ports 指定港で実施される陸揚げ／転載作業の回数	Number of inspections required by Members to meet the requirements of paragraph 15, "*at least 5% of landing and transhipment operations in their designated ports as are made by foreign fishing vessels*" パラグラフ 15 の要件*「指定港において外国漁船によって実施される陸揚げ及び転載作業のうち少なくとも 5 %」*を履行するためにメンバーが求められている検査回数
1 – 20	1[13]
21 – 40	2
41 – 60	3
61 – 80	4
81 – 100	5

For the 2021 calendar year only Japan, South Africa and Taiwan reported foreign fishing vessels/ carrier vessels with SBT/SBT products on board conducting landing/transhipment operations in their designated ports. Of these 3 Members, only South Africa and Taiwan submitted any relevant 2021 port inspection reports to the Secretariat. Table 2 provides a summary of the port inspection reports that were provided (or not), how many reports were submitted within the required 14-day period, whether appropriate notifications were received for any reports that were submitted late and/or have not yet been submitted, and whether the inspection requirement of 'at least 5%' was met.
2021 暦年においては、日本、南アフリカ及び台湾のみが、SBT／SBT 製品を船上に保持しておりそれぞれの指定港において陸揚げ／転載活動を行った外国漁船／運搬船について報告した。これらの三メンバーのうち、南アフリカ及び台湾のみが関連する 2021 年の港内検査報告書を事務局に提出した。表 2 では、港内検査報告書の提出の有無、14 日間の提出期限内に提出された報告書数、提出が遅れた又は未提出の報告書に関して適切な通知が受領されたかどうか、及び「少なくとも 5 %」という検査目標は履行されたかどうかについての概要を示した。

[13] Inspecting no (0) landing and transhipment operations out of 1-20 operations, would mean that 0% were inspected and the minimum threshold of 'at least 5%' would not be met 1－20 回の水揚げ及び転載作業に対して検査なし（回数が 0）である場合、検査率は 0 % であり、「少なくとも 5 %」との最低基準を履行しなかったことを意味する。

Table 2: Summary of 2021 Port Inspection Reports Required/Submitted
表 2：2020 年に事務局に対して提出された港内検査報告書数

Member メンバー	Total No. of Landing/ Transhipment Operations by 'Foreign Fishing Vessels' 「外国漁船」による陸揚げ／転載作業の総数[14]	Number of Inspection Reports Received for 'Foreign Fishing Vessels' (carrying SBT/SBT products) SBT／SBT 製品を運搬する「外国漁船」に関して受領した検査報告書数	Percentage of Inspection Reports Received within the Required 14-Day Timeframe 14 日間の提出期限内に受領した検査報告書のパーセンテージ	Number of Notifications Received that Inspection Reports would be Submitted Late 検査報告書の提出の遅延に関して受領した通知数	Was the 'at least 5%' inspection requirement met? 「少なくとも 5 %」の検査要件は履行されたか？[15]
Japan	10	0	Not applicable	Not applicable	No
South Africa	19	16[16]	0%	0	Yes
Taiwan	3	3	100%	Not applicable	Yes

In summary:
要約すれば、

- Japan recorded 10 relevant port visits and no inspections. Therefore, Japan did not meet the 'at least 5%' port inspection requirement for 2021;
  日本は 10 回の関連する入港を記録したが、検査を行わなかった。このため、日本は 2021 年における「少なくとも 5 %」との港内検査要件を履行しなかった。
- South Africa and Taiwan both exceeded the 'at least 5%' port inspection requirement in 2021;
  南アフリカ及び台湾はいずれも、2021 年の港内検査要件である「少なくとも 5 %」を超えた。
- Compliance with the 14-day timeframe for submitting port inspection reports was achieved by Taiwan.
  台湾は、港内検査報告書を 14 日以内に提出するとの要件を遵守した。
- Compliance with the 14-day timeframe for submitting port inspection reports was not achieved by South Africa. As in previous years, South Africa provided all of its 2021 port inspection reports late (or they were instead provided by IOTC – also late) and did not provide any notifications regarding the reason(s) for the delay(s) and when to expect the delayed reports as is required by the Resolution. It's also a possibility that some relevant port inspection reports have not yet been submitted to the Secretariat.[16] The Secretariat will check with South Africa.

[14] As provided in Members' annual reports to the CC/EC CC/EC に対するメンバーの国別報告書で提示された数字
[15] Based on the port inspection data received by the Secretariat 事務局が受領した港内検査データに基づく数字
[16] South Africa's annual report to CC/EC records that a total of 19 relevant port inspections occurred during the 2021 calendar year, however the Secretariat has only received 16 port inspection reports. 11 of the 16 inspection reports were submitted to the Secretariat directly by South Africa; the remaining 5 inspection reports were forwarded to the Secretariat by the IOTC Secretariat. Also submitted by South Africa were 3 Advanced Requests for Entry into Port (AREPs) with no associated inspection reports. 1 AREP indicated SBT was on board the vessel concerned. It it is not clear from the other 2 AREPs whether SBT was on board. The Secretariat will follow-up with S. Africa to check if any relevant port inspections were carried out and need to be submitted for these 3 port visits. CC/EC に対する南アフリカの年次報告書では 2021 暦年に合計 19 回の関連する港内検査が実施されたことを記録しているが、事務局が受領済の港内検査報告書は 16 件のみである。これら 16 件のうち 11 件は南アフリカから事務局に直接提出されたが、5 件は IOTC 事務局から転送されたものである。また、南アフリカから提出されたうちの 3 件は、入港のための事前要請（AREP）に関するもので、入港に伴う検査報告書ではなかった。AREP のうち 1 件は、関連した船舶が SBT を船上に保持していたことを示唆している。他 2 件の AREP については、SBT が船上に保持されていたかどうかが定かでない。事務局は、関連する港内検査が実施されたのかどうか、またこれら 3 件の入港に関する報告書の提出が必要なのかどうかについて南アフリカと確認する予定である。

南アフリカは、港内検査報告書を 14 日以内に提出するとの要件を遵守しなかった。昨年と同様、南アフリカは、2021 年における全ての港内検査報告書の提出が遅れ（又は提出期限後に IOTC から代わりに提出された）、またこれらの報告書提出が遅延する理由及び当該報告書を提出する時期に関する通知（決議により義務付けられている通知である）も行わなかった。また、関連する港内検査報告書の一部がまだ事務局に提出されていない可能性があり、事務局は南アフリカとこれを確認することとしている。

8. SUMMARY
総括

It is recommended that CC17 notes the:
CC 17 に対し、以下に留意するよう勧告する。

- USA's important voluntary cooperation with respect to providing quarterly CDS submissions to the Secretariat;
  四半期に一度の CDS 情報の事務局への提供に関する、米国による重要な自主的協力
- Transhipment summary information provided at **Attachment A**;
  別紙 A に示した転載の概要に関する情報
- High number (65) of non-observed at-sea transhipments involving SBT that occurred during 2021;
  2021 年において多数（65 件）の SBT を含む洋上転載が転載オブザーバー無しで実施されたこと
- VMS transmission issues noted by Japan and New Zealand;
  日本及びニュージーランドによる VMS 送信の問題
- Brief update on the cross-listing process and the current status of the CCSBT's IUU Vessel List;
  相互掲載プロセス及び CCSBT の IUU 船舶リストの現状に関する簡潔なアップデート
- Report included at **Attachment B**; and
  別紙 B に示した報告書
- Port inspection information submitted to the Secretariat.
  事務局に提出された港内検査に関する情報

CC17 is invited to consider the areas of compliance concern described in this paper and make any appropriate recommendations regarding these which include:
CC 17 は、本文書に記載した遵守上の懸念がある分野（以下を含む）について検討し、適切な勧告を行うよう招請されている。

- Indonesia's lack of implementation of CCSBT's Transhipment Resolution for at-sea transhipments involving SBT for its LSTLVs;
  インドネシアが、同メンバーの LSTLV による SBT を含む洋上転載に関して CCSBT 転載決議の措置を実施していないこと
- Lack of submission of IMO numbers as required by some Members for some vessels;
  一部のメンバーの一部船舶に対して義務付けられている IMO ナンバーが提出されていないこと

- Japan not meeting the 5% minimum port inspection requirement of landing and transhipment operations for foreign 'fishing' vessels with SBT/SBT products on board in its designated ports during 2021;
  日本が、2021 年の同メンバーの指定港における SBT／SBT 製品を船上に保持する外国「漁船」による陸揚げ及び転載活動の少なくとも 5 % に対する港内検査要件を履行していないこと
- South Africa's continued late submission of port inspection reports without the required notification of delay or the reasons for the delays being provided within the required 14-day time period (refer to paragraph 20 of the, '*Resolution for a CCSBT Scheme for Minimum Standards for Inspection in* Port'). South Africa has not provided any port inspection reports within the required 14-day timeframe since the Resolution came into effect in 2017.
  南アフリカが、引き続き、14 日間の提出期限よりも提出が遅延する又は当該遅延の理由を通知する要件（「*港内検査の最低基準を定めた CCSBT 制度に関する決議*」のパラグラフ 20 を参照）を履行することなく、港内検査報告書の提出が遅延していること。南アフリカは、2017 年に同決議が発効して以降、14 日の提出期限内に港内検査報告書を提出したことがない。

In addition, CC17 is invited to consider:
さらに、CC 17 は以下を検討するよう招請されている。

- If it would be beneficial to request the Secretariat to propose a potential amendment to the CCSBT's Authorised Vessel Resolution to collect information on whether each CCSBT-authorised vessel is authorised to operate outside the waters of national jurisdiction of the Member flag, or propose an alternative way this information might be more routinely collected.
  各 CCSBT 許可漁船が船籍メンバーの国家管轄外の水域で操業することを許可されているかどうかに関する情報を収集するべく CCSBT 許可船舶決議の改正案を作成するか、又は当該情報がより定期的に収集され得るような代替的な方法を提案するよう事務局に要請することを有益と考えるかどうか。

  This information is necessary for the Secretariat to be able to report back on whether the following requirement has been met by Members:
  当該情報は、メンバーが以下の要件を履行したかどうかに関して事務局が報告できるようにするために必要である。

- "*effective from 1 January 2022, all motorised inboard fishing vessels of less than 100 gross tonnage down to a size limit of 12 metres in length overall (LOA) authorised to operate outside waters under the national jurisdiction of the flag State."*[17]
  「2022 年 1 月 1 日以降にあっては、総トン数 100 トン未満かつ全長（LOA）12 メートルを下限とする全ての船内機船であって、旗国の管轄外の水域において操業することを許可された漁船」

Prepared by the Secretariat
事務局作成文書

[17] Refer to paragraph 3 of the CCSBT's Authorised Vessel Resolution CCSBT 許可船舶決議パラグラフ 3 を参照

Table 1a: Summary of Transhipments at sea during the 2021 Calendar Year (transhipment observer on board)

表 1a：2021 暦年における洋上転載の概要（転載オブザーバーが乗船していた洋上転載）

	From Transhipment Declarations			From Observer Reports	
Fishing Vessel Flag	Number of Transhipments	Total Net Weight (kg) of SBT	Product Type	Number of Transhipments	Total Net Weight (kg) of SBT
Japan	7	217,807	GGT	7	61,632[18]
Japan	9	533,423	GG	9	393,574[18]
Taiwan	4	48,543	GG	4	0[18]
Taiwan	1	330	GGT	1	0[18]
TOTAL	**21**	**800,103**		**21**	**455,206**[18]

Table 1b: Summary of Transhipments at sea during the 2021 Calendar Year (no transhipment observer aboard due to COVID-19 circumstances)

表 1b：2021 暦年における洋上転載の概要（COVID-19 の影響によりオブザーバーが乗船していなかった洋上転載）

	From Transhipment Declarations			From 'Unobserved' Observer Reports	
Fishing Vessel Flag	Number of Transhipments	Total Net Weight (kg) of SBT	Product Type	Number of Transhipments	Total Net Weight (kg) of SBT[19]
Japan	2	139,307	GG	2	NA
Taiwan	62	931,306	GG	62	NA
Taiwan	1	974	RD	1	NA
TOTAL	**65**	**1,071,587**		**65**	**NA**

[18] The reason for the large discrepancies between the Transhipment Declaration and observed weights is because not all observer reports include the estimated weight of SBT for each transhipment 転載申告書と観察された重量が大幅に乖離しているのは、転載オブザーバー報告書に転載ごとの SBT の推定重量が示されていない場合があるためである。

[19] NA (Not Applicable) - these transhipments were unobserved and so no observer estimated weight of SBT is available NA（該当なし）：これらの転載は監視がされておらず、従ってオブザーバーによる SBT の推定重量に関する情報が利用可能でないものである。

Table 2a: Summary of Transhipments at sea during the first half of the 2022 Calendar Year (transhipment observer on board and transhipment declarations already received)[20]

表 2a：2022 暦年上半期における洋上転載の概要
（転載オブザーバーが乗船しており、既に転載申告書を受領済の洋上転載）

	From Transhipment Declarations			From Observer Reports[21]	
Fishing Vessel Flag	Number of Transhipments	Total Net Weight (kg) of SBT	Product Type	Number of Transhipments	Total Net Weight (kg) of SBT
Taiwan	15	112,411	GG	*Not yet available*	
TOTAL	**15**	**112,411**		***Not yet available***	

Table 2b: Summary of Transhipments at sea during the first half of the 2022 Calendar Year (no transhipment observer aboard and transhipment declarations already received)[20]

表 2b：2022 暦年上半期における洋上転載の概要
（転載オブザーバーが乗船しておらず、かつ転載申告書を受領済の洋上転載）

None: No unobserved transhipments at sea have been recorded yet for the first half of the 2022 calendar year.
なし：2022 暦年上半期については、転載オブザーバー無しでの洋上転載はまだ記録されていない。

Table 3: Summary of Transhipments at sea versus CDS Forms versus Observer Reports for the 2021 Calendar Year[22]
表 3：2021 暦年における洋上転載・CDS 様式・オブザーバー報告書の比較の概要

Fishing Vessel Flag	Comment	Number of Transhipments	Total Net Weight (kg) from Transhipment Declaration	Total Net Weight (kg) from CDS	Total Net Weight (kg) from Observer Report
Japan	Observer provided SBT weights	11	455,341	455,338	455,206
Japan	Observer provided no SBT weights	7	435,196	435,198	
Taiwan	Observer provided no SBT weights	68	981,153	1,029,202	
TOTAL		**86**	**1,871,690**	**1,919,738**	**455,206**

[20] The Secretariat has also received deployment requests indicating that an additional 4 at-sea transhipments from Japan-flagged fishing vessels and an additional 7 at-sea transhipments for Taiwan-flagged fishing vessels were expected to occur during the first half of 2022. No transhipment declarations nor observer reports have been received for these to date. また事務局は、日本船籍漁船から追加的な 4 件の洋上転載について、及び台湾船籍漁船から追加的な 7 件の洋上転載について、2022 年上半期の実施が想定されることを示唆したオブザーバー配乗要請を受領している。現時点において、転載申告書又はオブザーバー報告書はまだ受領していない。

[21] None of the relevant observer reports have been received yet for the first half of 2022 - they are generally not received until some time after the Observer has disembarked from the Carrier Vessel　2022 年上半期に関してはまだ関連するオブザーバー報告書を受領していない。一般的に、これらの報告書はオブザーバーが運搬船からの下船後しばらくは提出されない。

[22] This report is limited to transhipments where observer reports have been provided, and where the Secretariat has been able to match CDS information　本報告は、オブザーバー報告書が提出されており、かつ事務局が当該報告書と CDS 情報とを突合できた転載に限定している。

Table 4: Summary of Transhipments that occurred in port during the 2021 Calendar Year[23]
表 4：2021 暦年に港内で行われた転載の概要

	From Transhipment Declarations			From CDS		
Fishing Vessel Flag	Number of Transhipments	Total Net Weight (kg) of SBT	Product Type	Number of Transhipments	Total Net Weight (kg) of SBT	Product Type
Japan	1	75,585	GG	1	75,585	GGT
Korea	7	721,828	GG	7	721,828	GGT
Taiwan	6	21,631	GGT	6	21,631	GGT
TOTAL	**14**	**819,044**		**14**	**819,044**	

Table 5: Summary of Transhipments that occurred in port during the first half of the 2022 Calendar Year[23]
表 5：2022 暦年上半期に港内で行われた転載の概要

	From Transhipment Declarations			From CDS		
Fishing Vessel Flag	Number of Transhipments	Total Net Weight (kg) of SBT	Product Type	Number of Transhipments	Total Net Weight (kg) of SBT	Product Type
Taiwan	5	4,819	GG			
Taiwan	1	1,486	GGT	6	6,305	GGT
TOTAL	**6**	**6,305**		**6**	**6,305**	

[23] Transhipments conducted in port are not part of the CCSBT Transhipment Regional Observer Program, and therefore no observer deployment requests nor observer reports are required to be submitted for these transhipments. Only Transhipment Declarations are required to be submitted.
港内で実施された転載については CCSBT 転載地域オブザーバー計画の一部とはされておらず、したがってこれらの転載に関してはオブザーバー配乗要請やオブザーバー報告書の提出が義務付けられていない。転載申告書の提出のみが義務付けられている。

ADVANCING RFMO IUU VESSEL LIST UTILITY

Ole Petter Lindstad

DEFINITION OF DONE Asperudveien 34, N-1258 OSLO NORWAY

Contents

Funded and supported by the International MCS Network. Technical input and review provided by Mark Young, Executive Director, International MCS Network

Background

The International MCS (IMCS) Network, through its work to support and facilitate the Tuna Compliance Network (TCN) and Pan Pacific Fisheries Compliance Network (PPFCN), identified that there is potential to coordinate and increase the overall utility of RFMO IUU Vessel Lists by improving the ability of RFMOs to receive near real-time information regarding updates, additions and/or removals of IUU vessels from other the IUU Vessel Lists of other RFMOs. The overall purpose of this work is envisaged to be twofold:

1. To reduce, or possibly even eliminate, time delays associated with updates, additions, or removals of vessels from RFMO IUU Vessel Lists (required due to updates in other relevant RFMOs' IUU Lists where these vessels are cross listed).
2. Reduce the amount of manual intervention or "workload" on RFMO Secretariat staff to regularly, and comprehensively, review all other relevant RFMO IUU Vessel Lists for updates, additions and/or removals of vessels.

The outcome of this initiative may also be beneficial to other organizations, entities, or institutions that utilize, publicize, and/or reference RFMO IUU Vessel Lists in the course of their work.

The tasks specified in the Terms of Reference for this work are as follows:

1. *Document the technical format of each participating RFMO's website IUU Vessel List (for a total of 14 RFMOs involved in the project[1]).*
2. *Communicate with the IT/Data Manager (or equivalent) of each RFMO Secretariat to determine and document what capacity the RFMO's website or other IMS/online systems have to support a machine-readable API feed of their IUU Vessel List.*
3. *Develop and document, with input from each RFMO Secretariat and considering the output from (1) above, a set of minimum required data fields necessary to be shared as part of cross-listing arrangements for an RFMO's IUU Vessel List.*
4. *Document any "would also be preferable data fields" and notes about the RFMOs to which these "nice to have" data fields (or additional essential data fields) would be applicable; and*
5. *Develop a proposal, including ballpark estimate of potential cost (resourcing and expertise) for each participating RFMO Secretariat to create an API capability for each participating RFMO. In addition, consider if there are other possibilities than APIs that could fulfill the original purpose of the project.*

In addition, when considering proposals of how to change the way RFMOs work together, it is important that the solutions suggested are primarily technical in nature and workable within a realistic timeframe. Therefore, this project aims to involve little to no changes to RFMO measures and decision-making at the RFMO member level. However, it is recognized that it is necessary for RFMOs to inform their Commissions as to Secretariat involvement in this initiative as a matter of transparency as well engage with their members as if there are any potential RFMO funding implications associated with this project which will require concurrence of RFMO members as appropriate.

[1] Listed on page 3

Project

Survey of RFMO websites

Description

The IMCS Network provided a list of RFMOs expressing a desire to taking part in this initiative. These included:

- CCAMLR: Commission for the Conservation of Antarctic Marine Living Resources
- CCSBT: Commission for the Conservation of Southern Bluefin Tuna
- GFCM: General Fisheries Commission for the Mediterranean
- IATTC: Inter-American Tropical Tuna Commission
- ICCAT: International Commission for the Conservation of Atlantic Tunas
- IOTC: Indian Ocean Tuna Commission
- NAFO: Northwest Atlantic Fisheries Organization
- NEAFC: North-East Atlantic Fisheries Commission
- NPAFC: North Pacific Anadromous Fish Commission *(although currently operating without an IUU Vessel List measure in place)*
- NPFC: North Pacific Fisheries Commission
- SEAFO: South-East Atlantic Fisheries Organization
- SIOFA: Southern Indian Ocean Fisheries Agreement
- SPRFMO: South Pacific Regional Fisheries Management Organization
- WCPFC: Western and Central Pacific Fisheries Commission

The consultant performed an initial survey of the RFMO websites, as the formats of the IUU Vessel Lists and the code behind a website often provides hints to the data sources behind the data. Also, the survey provided background information as to the number of current listings of RFMO-listed IUU Vessels, both globally and at the individual RFMO level.

Findings

Figure 1 provides a snapshot of the number of IUU Vessels each RFMO was the original lister of. These vessels were listed without reference to other RFMOs and listed according to the originating RFMO's own processes (e.g., cross listed vessels are not counted which accounts for NAFO and CCSBT both not included in the pie chart as all vessels on their IUU Vessel lists are cross listed from other RFMOs).

The 161 vessels can still not be assumed to be unique, as the RFMOs may have listed the same vessels due to separate incidents or overlapping concerns. This is rare, however, so the total number of unique vessels listed by the concerned RFMOs is close to 161, but not necessarily definitive. A full and complete reconciliation of the vessels that have been listed as IUU Vessels by all the RFMOs has not taken place as part of this project. Many RFMOs have more vessels listed, but these vessels are cross listings from other RFMO IUU Vessel Lists.

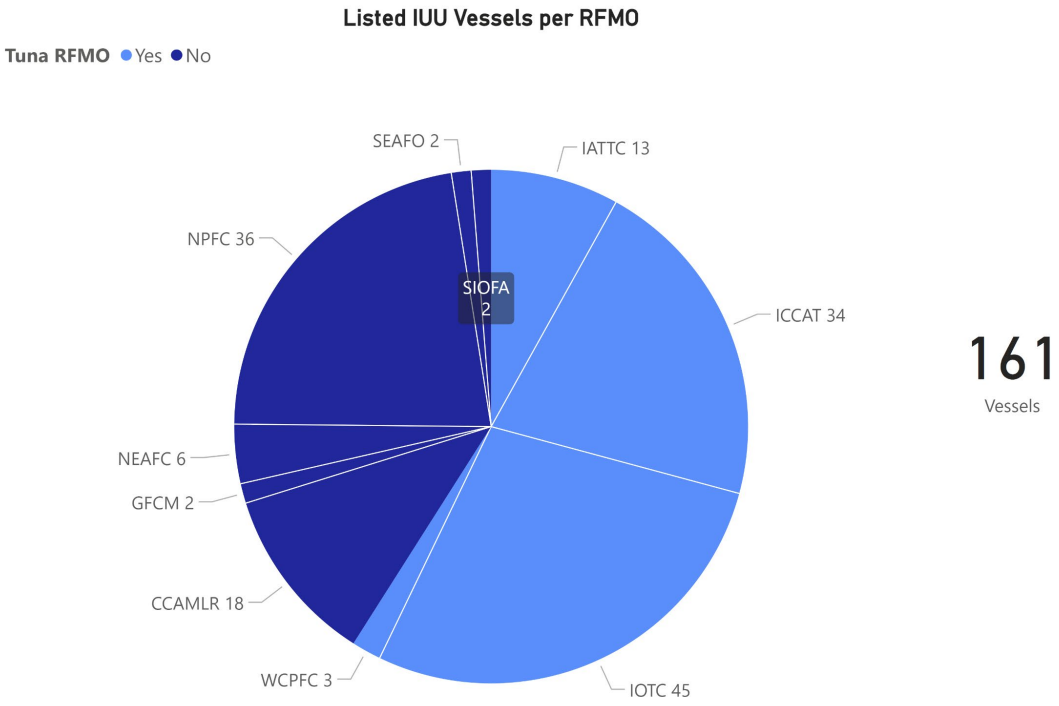

Figure 1: Listed IUU Vessels per RFMO

Note:

NAFO currently have no own listings, but they have adopted all vessels originally listed by NEAFC into their IUU Vessel List. The process is not referred to as cross listing in their conservation measures but works in much the same way through a close cooperation with NEAFC. NAFO is therefore not shown in the chart.

Currently, all vessels on the CCSBT IUU Vessel List have been cross listed from other organisations. CCSBT is therefore not shown either, although they maintain a long list of vessels.

Depending on the structure of the public RFMO IUU Vessel Lists, it was sometimes difficult or even impossible to separate an RFMO's own IUU listed vessels from cross listed IUU vessels. Figure 1, therefore, represents a best effort, current snapshot based on the displayed IUU Vessels Lists as of July 2022, making corrections after RFMO interviews were conducted.

Many current IUU vessel listings have no new observations of the vessels listed that may have occurred and been documented over the last five years, with some vessels having had no new information stretching back more than ten years.

Many RFMO IUU Vessel Lists are maintained by the respective Secretariats primarily using Excel spreadsheets or MS Word documents. Some are maintained directly on the RFMO webpage itself, with only a few IUU lists being stored in a database structure behind the webpage (outlined in Figure 2, p8).

The data fields displayed were largely consistent between the RFMOs, but not all IUU Vessel Lists corresponded directly to the RFMO's respective authorized vessel Measures or Resolutions when it came to displaying vessel information in all required data fields. The IUU Vessel Lists themselves often contained *"Unknown"* as data field content. This is natural considering the challenging nature of typical operational situations involving observation and documentation of illicit activity occurring at sea by the specific vessels listed. At times, it was sometimes clarified through footnotes in the IUU Vessel List itself that at the time of the observation, a particular vessel had been conducting fishing activities

under false credentials, either as duplicates of legal fishing vessels or displaying a false vessel name, flag, or other information. A high degree of uncertainty is therefore inherent to the observations of vessels involved in an observed illicit activity due to inability of a relevant enforcement authority to interdict the vessel and conduct a follow-on physical compliance boarding and inspection.

As a result, it became clear that Task (3) from the Terms of Reference, the *"minimum required fields"* for an IUU Vessel List, would be difficult to establish. One would believe that *"minimum required"* in many cases would mean that these vessel data fields would also be the same data fields required for a vessel to be registered and authorized to fly a specific flag or be included as an authorized vessel in an RFMO. However, considering the sparse information about each IUU vessel listed that is available, this requirement would exclude many of the vessels currently listed.

A different approach is therefore needed. From a data perspective the data fields for IUU listed vessels would therefore need to be considered "optional" rather than "required", on a best-effort basis. A suggested baseline for these data fields has been included for consideration in *Appendix A – Data Fields*, but this baseline should be considered extendable, to always convey the most robust information possible to enable positive vessel identification.

RFMO Interviews

Description

Representatives of all the participating RFMO Secretariats were interviewed, except for NPAFC, as they do not currently have an IUU Vessel List. However, the NPAFC Executive Director expressed a desire to follow this process, as NPAFC made a recent decision to implement their own IUU Vessel List.

The focus for the RFMO interviews was on developing an understanding of the processes that each RFMO Secretariat followed for maintaining their own IUU Vessel List. This included trying to identify the challenges associated with potential time delays associated with changes or modifications to vessels included on the various IUU Vessel Lists, as well as the specific workloads on Secretariat staff associated with maintaining their own IUU Vessel List.

For the most part, the respective RFMO Measure or Resolution concerning IUU Vessel Lists, any cross-listing procedures, and the workflows associated with listing vessels on an IUU Vessel List, were publicly and readily available on the websites of each RFMO.

To increase the understanding of potential technical changes or updates that could be implemented relevant to the maintenance of these RFMO IUU Vessel Lists so that they collectively and consistently displayed near real-time and up-to-date information, which would be meaningful in nature and positively impact RFMO Secretariat processes, different scenarios and ideas were suggested by the consultant and discussed with the RFMO representatives as part of the interviews. In addition, as a component of the interviews, the technical capabilities and IT resources of each RFMO Secretariat were also noted.

Findings

IUU Vessel Listings

The RFMOs had very similar Measures or Resolutions outlining the procedures for adding vessels to their IUU Vessel List when considering illicit vessel activity observed and documented in waters under

the competence of the RFMO. Ending up on an IUU Vessel List has major consequences for vessels and their owners. As such, IUU Vessel listing must therefore be a very thorough process.

For the RFMOs generally, each year a draft IUU Vessel List is created, distributed, and discussed by Commission members as a component of the agenda of the respective RFMO Compliance Committee. The Compliance Committee typically agrees by consensus on a provisional IUU Vessel List which then goes before the Commission at the Annual Commission Meeting of each RFMO where a final IUU Vessel List may then be agreed and adopted. Any adopted list then becomes the official IUU Vessel List for the RFMO and is made publicly available on the RFMO website.

Some slight variations were observed around whether an IUU Vessel List would contain vessels flagged to Members, Cooperating Non-Members as well as non-Members of the specific RFMO. For instance, sometimes, where IUU fishing activity was conducted by vessels flagged to an RFMO Member, these vessels would be sanctioned by the flag State Members themselves and the vessels would then not be subject to IUU Vessel listing. In some cases, unique processes were established. For instance, NEAFC established a procedure involving "A and B listing", which is consistent with the provisional (A) and final public (B) IUU Vessel listing processes of other RFMOs. Both A and B IUU Vessel Lists are public and sanctioning actions can occur against vessels still at the A listing (or provisional) stage.

Procedures for de-listing a vessel from an IUU Vessel List depends on the RFMO and could take place either in the intersessional period between Annual Commission Meetings, or only at the next scheduled Compliance Committee and Annual Commission meeting. De-listing occurs when the criteria for IUU vessel listing no longer applies (e.g., due to a change of ownership of an IUU-listed vessel, the IUU vessel has been sunk, scrapped, or permanently reassigned for purposes other than fishing activities, or an IUU vessel having been sanctioned appropriately and the incident(s) in question fully adjudicated).

All RFMOs (except NPAFC) had Measures or Resolutions that outlined requirements for the Secretariat to distribute updated IUU Vessel Lists to all other interested parties, including other RFMOs, when vessels are listed or delisted or other information regarding the listed vessels change.

Cross listing of IUU listed vessels involves a separate set of procedures, and these processes varied amongst those RFMOs that had implemented these procedures.

Cross Listing

Four out of the 13 RFMOs do not cross list IUU Vessels because the relevant Measure or Resolution does not include such procedures. These RFMO Secretariats acknowledged that their IUU Vessel Lists are routinely shared and recognised their IUU vessel list may be cross listed by other RFMOs.

For one specific cross-listing example, according to NAFO rules, IUU Vessels listed on the NEAFC IUU Vessel List, and only from the NEAFC IUU list, are cross listed on the NAFO IUU Vessel List. Recently NEAFC updated their listing processes to cross list IUU vessels from other RFMO IUU Vessel lists. However, some NAFO Contracting Parties objected to automatically listing all the NEAFC IUU Vessel List onto NAFO's IUU Vessel List, because of the potential lack of due process. This is also partly because NAFO also maintains a 'provisional' IUU list, so that NAFO Contracting Parties can consider whether the vessel in question should be listed in the 'definitive' list.

The maintenance of IUU Vessel Lists can also be particularly cumbersome due to the manual work involved. In general, this was a problem for all RFMOs that cross listed vessels. Different processes often guided IUU vessel cross-listing processes. In these cases, the addition of a vessel to an RFMO IUU Vessel List was either:

- Automatically accepted as a cross listed IUU vessel (SPRFMO).
- Placement on an "A" IUU Vessel List upon notification by the originating RFMO (NEAFC).
- Subject to acceptance following a 30 day "fast-track" objection[2] process by Commission members (most other RFMOs); or
- Subject to agreement by the respective RFMO Compliance Committee (which typically only meets in yearly or bi-yearly meetings).

De-listing of a cross listed IUU vessel from an IUU Vessel List was either:

- Immediate on notice from original RFMO IUU vessel lister.
- Subject to acceptance by Commission members within 30 days; or
- Subject to agreement by the respective RFMO Compliance Committee (which typically only meets in yearly or bi-yearly meetings).

When information about the vessels themselves was updated, the IUU Vessel List Measures or Resolutions did not always describe the due processes involved which would leave some Secretariats to determine for themselves when and how to update the information. Mostly, the Secretariats would update their own displayed information about cross listed vessels as soon as possible. Again, since this involved manual processes, it would lead to some delays in complete and updated information in the IUU Vessel Lists of the RFMOs that cross listed the vessel(s) involved.

The following tasks and issues associated with RFMO IUU Vessel Lists were expressed to be time consuming or problematic:

- Following up with all RFMO IUU Vessel Lists published on the web. For those RFMOs that cross list vessels from other RFMO IUU Vessel Lists, there are potentially 12 different websites that must be checked periodically.
    - For example, in current SPRFMO processes, to avoid authorizing a vessel that may be found on an IUU Vessel List of another RFMO, the SPRFMO Secretariat, in conducting their own due diligence, manually checks all individual RFMO IUU Vessel Lists before any new vessel is added to the SPRFMO authorized Record of Vessels.
- When changes to IUU Vessel Lists occur, Secretariats send out updates by e-mail to all interested parties, including other RFMOs. The main information source however is the published public IUU Vessel List, so all information must be cross-checked against this.
- Information usually needs to be sent out to all Commission members for them to accept any new vessel up for IUU Vessel listing via the cross listing process.
- Delisting a vessel from an IUU Vessel List may involve circulating the originating RFMO's delisting notice to all Commission members for acceptance to occur.
- Keeping track of the originating RFMO of a cross listed IUU vessel, so that appropriate and timely delisting can occur when the originating RFMO delists the vessel.
- Updating IUU vessel data based on new information.
- Complicated cases have occurred when vessel information was updated during the IUU Vessel cross listing process. A recent example involved the cross listing RFMO (non-originating RFMO) displaying different (and in this case more up to date information on the flag State of the

[2] Vessels are automatically cross listed if no objection is received within 30 days

vessel) than the original RFMO lister, because of objections raised at an annual meeting by one of the cross listing RFMO members to the information to be displayed during the listing process. The source RFMO of the IUU vessel listing thus became increasingly unclear.

- 'Chained' cross listing occurs where an RFMO ends up listing vessels that are originally listed by RFMOs beyond the group of RFMOs their measures specify as eligible for cross listing.
    - For example, IOTC cross-lists vessels on SIOFA's IUU List; SIOFA cross lists vessels on NPFC's IUU List; thus, IOTC ends up cross listing vessels on NPFC's list although NPFC is not officially followed by IOTC.
- Identifying whether a vessel observed or documented as being engaged in suspicious or illicit activity has already been listed as an IUU vessel by other RFMOs.

APIs and storage formats

The original Terms of Reference for this initiative outlined a deliverable[3] to *"create an API capability for each participating RFMO"*. Five out of 14 RFMOs stored, or had current developments in progress, to store the IUU Vessel List in a database, as shown in Figure 2.

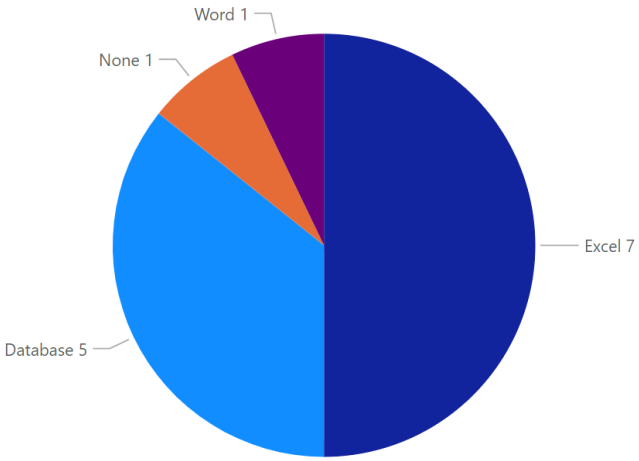

Figure 2: Storage Means of RFMO IUU Vessel Lists

If an RFMO is to provide an API, an underlying queryable data source (e.g., a database) is required. There is no point in providing an API which only returns a manually edited semi-structured spreadsheet. As such, this deliverable could not be accomplished by considering existing processes of some of the RFMOs.

Importantly, it was easy to understand why manually edited spreadsheets and documents (MS Excel and Word) were being used to maintain some of the RFMO IUU Vessel Lists. For instance:

- There are relatively few vessels listed per RFMO.
- The vessels listed and their associated data fields change very infrequently, with very few changes per year even for the largest RFMOs; and
- Relational databases are costly to maintain, have strict schemas, and are difficult to change or be modified once created. As such, this gives little freedom for comments and annotations.

[3] Objective 5 on p2

Instead of helping RFMOs connect their systems associated with IUU Vessel Lists, the first challenge therefore seemed to be to ensure that appropriate systems exist. Most RFMOs would each need their own system for registering and maintaining their IUU Vessel Lists; as such, the concept of developing an IUU Vessel Hub (described later in this document) arose.

Fields

In addition to the fields described in Appendix A, two important dimensions were identified.

First, as IUU vessel information is updated, the history with respect to changes is of interest. This was usually solved by putting historic values in parenthesis or inserting a comma to separate data fields. This process however does not provide transparency on when these changes were observed. It would be useful to know the time intervals the data field values were observed, so that a recent change (for instance a name change) could be displayed with "from – to" dates. These would obviously need to be approximate, especially when it comes to changes not immediately reported to, or documented by, authorities.

Second is the veracity of the data field values. Some RFMOs (especially as noted by NPFC) observe high numbers of vessels clearly conducting fishing activity under false credentials, sometimes impersonating (or duplicating) other vessels. It is therefore essential to convey information about the veracity of the vessel data field values, to avoid confusion and mistaken identities of IUU vessels from other vessels. Typically, this type of information was made public through comments and footnotes within an IUU Vessel List which was provided beyond the scope of the specific data fields agreed to by members and found in an IUU Vessel List.

However, vessel history and the veracity of information add to the complexity of storing data in a sensible fashion. Although far from a trivial accomplishment, relational databases can handle this if modelled correctly. However, it has not been verified to what extent RFMOs utilizing database storage of IUU Vessel Lists have catered for such a requirement. Some questions RFMOs may wish to consider regarding data captured in a potential Hub include whether there is a need to transmit historical information on IUU vessels to the central Hub? Or would it be more efficient to only transmit the latest known information captured in IUU Vessel Lists and have the rest available on request? Is historical information (e.g., more than ten years old) especially useful to RFMOs? Or only the latest information?

The Concept of an IUU Vessel Hub

Discussion of the IUU Vessel Hub concept refers to the following two objectives initially identified on page 2:

1. *Reduce, or possibly even eliminate, time delays associated with updates, additions, or removals of vessels from RFMO IUU Vessel Lists (required due to updates in other relevant RFMOs' IUU Lists); and*
2. *Reduce the amount of manual intervention or "workload" on RFMO Secretariat staff to regularly, and comprehensively, review all other relevant RFMO IUU Vessel Lists for updates.*

For automated information sharing between RFMOs, with all the benefits and flexibility that information sharing provides, MS Excel or Word are clearly inadequate mechanisms or means for facilitating effective sharing of this information.

In addition, to have each of the participating RFMOs initiate their own respective database modelling, which may involve having to hire expensive consultants that may -or may not - succeed during the time allocated to such a project, would likely require lengthy processes and timeframes before a general level could be achieved where the RFMOs would be able to "communicate" with one another regarding IUU vessel listings with a certain degree of automation. The risk of overall failure with this approach is high.

A concept that arose from the initial interview process of this initiative, and further discussed during subsequent interviews, was the idea of establishing an IUU Vessel Hub which contained the public IUU Vessel Lists from each RFMO. This Hub could provide the means for RFMOs to create and maintain their own IUU Vessel Lists, storing these lists in a well modelled unified database, and thereby create the possibility of automated information exchange. Each participating RFMO would be responsible only for maintaining their own IUU Vessel List within the Hub. However, automatic notifications would be distributed via the Hub to all other RFMOs whenever an IUU vessel was listed, modified or delisted.

This means that a central Hub could be the mechanism that maintains the current state of all the RFMO IUU Vessel Lists, the information of which would be automatically shared amongst all the RFMOs. The intention would be to improve upon current Secretariat processes with only minimum effort by staff strictly limited to the manual maintenance of their own respective IUU Vessel List. The Hub itself would be the mechanism by which any updated information would automatically be distributed to all other RFMOs without any further manual effort. A list of IUU cross listed vessels could also be downloaded or otherwise included through an API to provide the basis for the display of all cross listed IUU vessels.

A concept that may be worth considering by the RFMOs is also whether the Hub should incorporate an advanced search page for compliance assistance purposes to allow Secretariat staff to conduct their own additional due diligence via the Hub in checking and investigating specific background information on a vessel that may be either already IUU listed by another RFMO, or a vessel being considered by their own respective RFMO for IUU Vessel listing. However, this concept may expand the Hub concept beyond the original intent of primarily advancing the overall utility of RFMO IUU Vessel Lists and may be out of scope or interest for some/all RFMOs.

Please see below for an initial outline of more detailed requirements for the Hub concept, based on the information gained during the interviews. A key point is not making this process overly complicated or technically cumbersome.

Hub - Requirements

The following requirements have been separated into *"Must"*, *"Should"* and *"Can"*, to try to differentiate the essential features for a baseline Hub with an Initial Operating Capacity, to the "nice-to-have" features a Hub could incorporate to achieve Full Operating Capacity.

Must

<u>Separate logins for each RFMO</u>

To manually maintain their own IUU Vessel List, subscriptions to other RFMOs changes, and other RFMO specific settings, each RFMO would be provided with the means to log in to the Hub. Personal logins would be recommended for tracing and verification of changes. An administrator role would be required to maintain and assign logins to each RFMO.

IUU Vessel List maintenance pages

The maintenance pages need to be as user friendly as possible, so that no time is wasted during maintenance processes. To avoid typos and unintended changes or edits, draft changes should be supported, enabling timely internal verification, before being made public.

Automatic notification generation

Whenever information on an IUU Vessel List is changed, automatic notifications need to be generated to all interested RFMOs. In the first version these near real-time notifications would be automatically generated e-mails with automated content, displaying the changes in detail.

Subscription page

It should be possible to set up subscriptions for notifications for specific subsets of RFMOs as well as all other RFMOs.

Cross list page

To support the IUU vessel cross listing function, there should be a page displaying all the potential cross listed IUU vessels, based on the subscribed RFMOs. A setting “listed / not-listed” based on the decisions of each RFMO to cross list or not should be added, to maintain the status. Based on this status, a readily downloadable up-to-date list of currently cross listed IUU vessels in a human or application (Excel) readable format should be available.

Should

Search page

There should be a search page where all IUU listed vessels with all data fields could be searchable. The search page should also support “fuzzy” searches, searches with more than exact matches, and possibly also non-western character sets.

Cross-list data source

A readily available data source for automated updating of the displayed cross listed vessels on each RFMO IUU Vessel List should be available. This would be provided in a standardized machine-readable format. This would enable the direct use of the IUU Vessel List on an RFMOs own website.

Can

Advanced cross list page

To support all cross listing processes, a complete history of the updates to each IUU vessel listing must be provided. It is then up to each subscribing RFMO to adopt each update, ensuring that they are following their own procedures, and noting the updates as they happen. Updates to be processed should be provided as a to-do list.

Integrate hub with structured IUU Lists (some RFMOs only)

If IUU vessel data is already stored within an RFMO in a structured and compatible way, a specific data transfer mechanism from the source RFMO can be considered. However, updates are often small and infrequent so this type of automated exchange mechanism may not be cost-effective.

Additional formats to simplify distribution of information

While much of the emphasis has been on cross listing, each RFMO's own IUU Vessel listings could also be downloaded or accessed through an API for publishing.

Additional data sources

There exist other IUU Vessel data sources beyond RFMOs, such as the TM-Tracking Combined IUU Vessel List, that may provide additional updated information regarding vessels that have been IUU Vessel listed. It could be possible to notify RFMOs about vessels they have listed as IUU, whenever new information is available from these external data sources, for RFMOs to consider and make appropriate decisions on updating an IUU vessel listing.

Design Considerations

Double Maintenance

Considering that a list of IUU cross listed vessels could be downloaded or otherwise included through an API to provide the basis for the display of all cross listed IUU vessels (outlined under "Must" requirements), this assumption presumes that once the Hub is finished and operative, the IUU Vessel List of each RFMO would be stored and maintained through the Hub, and each RFMO webpage will have a link/connection to the Hub in order to show its own IUU Vessel List. If the RFMOs use an Excel Spreadsheet or MS Word document, they could link directly to the Hub for making an automatic extraction from it (assuming this functionality is developed) or just use a document exported from it (a more feasible functionality). However, in the case of RFMOs which store their IUU Vessel data already in an existing database structure, RFMOs should consider the possibility that their RFMO Members may want, at least at the early stages of this project, to keep their own RFMO data managed/stored in house. In this case the Hub would be just a tool to achieve a final IUU Vessel List that would be transposed to the RFMO database and displayed on its webpage. For this assumption, the design process may imply the need for incorporating two steps:

- Managing the Hub to make cross listings, validations, etc. and achieve a final IUU Vessel List in compliance with its own appropriate recommendations.
- In some manner, transposing the data in the Hub to the RFMO's own database.

Data Integration Functionality

Regarding the potential for the Hub to save RFMOs time and effort in maintaining their IUU Vessel Lists, but not as much as initially thought with diminished impact, data integration functionality could be also implemented into the system in one of two ways:

- Simple approach: The system can be developed to export/import from/to the Hub database via a form of fixed-format document/spreadsheet that allows an easy exchange of data between the Hub and the RFMO database. This way an update in either environment could be easily replicated in the other. This functionality could be useful for a first load of the IUU Vessel data of every RFMO into the Hub.
- More costly but optimal approach: The system can be developed to facilitate automated information sharing between the Hub and those RFMOs that use databases. Once a definitive IUU Vessel List is set in the Hub by an RFMO, the data is automatically synchronized with the RFMO database.

Hosting

For any Hub solution to be sustainably maintained, it needs clear ownership. The following two potential "owners" outlined below provide a starting point for follow-on discussions, not excluding partnering with others to achieve desired outcomes of this initiative.

The IMCS Network

As the initiative has been brought forward by the IMCS Network to the participating Officers responsible for Compliance in the RFMO Secretariats, it may be natural to assume that the IMCS Network could be responsible for hosting and maintaining an IUU Vessel Hub. However, the IMCS Network would need to partner with others to ensure they have the technical capabilities to develop, host, and maintain such a solution. The construct of the IMCS Network as a voluntary and primarily technical MCS organization (not an advocacy organization) not bound by treaty or legal constraints allows for the IMCS Network Secretariat to often be nimbler in approach with its activities, thereby facilitating the ability to conduct agile projects, enabling speed and rapid decisions. Often, smaller prototype driven projects, with continuous testing and feedback from the users involved (in this case, the RFMO Secretariats), can at times be easier to implement via smaller organizations such as the IMCS Network.

FAO

FAO and the GFCM have commenced some of their own initiatives in this direction which is laudable. However, up till now these efforts have been focused on more advanced IT solutions and APIs with a view to establish a solid interoperability layer that might be leverages by other RFMOs' systems or consumed by widespread clients like Microsoft Excel. However, these advanced efforts may not quite align with the current IT system situations of all RFMOs, especially the smaller RFMOs with more limited IT capacity. For this reason, GFCM has informed about the modular stack of tools envisaged to also address simpler usage scenarios, such as dynamic public data consultation dashboards (for the general audience) and password-protected portals to provide features aimed at updating the IUU vessel list records.

FAO could be a potential choice for hosting an IUU Vessel Hub and is highly capable of developing, hosting, and maintaining such a solution for advancing the utility of RFMO IUU Vessel Lists. However, consideration may wish to be given that that this specific initiative involves a global list of less than 200 vessels. With such a small global "footprint" of vessels, a pilot hosting solution in this case may be better suited and geared towards a smaller hosting organization, especially where in this case a technical solution need not be overly robust and where the information involved is strictly public domain data for a relatively small number of vessels not considering, among others, the benefit of historical records. A stepwise, modular approach could be envisaged to progressively implement required features and revisions based on the common needs and desires identified by the participating RFMOs. It may also be worth further investigation whether FAO may be interested in possibly incorporating the Hub concept as an amendment to the technical specifications of the Port State Measures Global Information Exchange System (GIES) currently being implemented by FAO.

Conclusion

This report suggests there are benefits to consider development of an IUU Vessel List Hub concept that contains the aggregated RFMO IUU Vessel Lists based on voluntary participation by the RFMOs. However, for a solution like this to work, there are some aspects that are essential:

- To be truly effective, all RFMOs should participate in the project.

- There must be enough benefits to the RFMOs participating in a Hub for all to agree with voluntarily sharing public information on their IUU-listed vessels via this mechanism.
- Clear ownership of IUU vessel listings must be present, so that one RFMO – the originating RFMO - controls the IUU listing of each specific vessel (with the proviso that sometimes more than one RFMO independently IUU lists the same vessel so occasionally there may be more than one "owner" of a specific vessel listing).
- The development of a Hub must be done in a manner that accounts for agreed Measure or Resolution processes of each RFMO to accommodate changes in IUU vessel listings based upon the specific procedures of each originating RFMO; and
- To avoid lengthy or convoluted processes concerning data privacy and security, only publicly available information already published in RFMO IUU Vessel Lists currently available should be included in the Hub and shared. With the approval of the RFMO participants, this could be changed or modified in the future.

It would also be beneficial to clarify and harmonize IUU Vessel List cross listing processes, but it is recognized this would involve further Commission member involvement, consideration, and consensus. This initiative as it stands is envisaged to be purely a technical solution that advances and improves Secretariat processes and procedures for implementing a "tool" already agreed upon by Commission members. As such, no new changes or modifications to current RFMO decisions involving Measures or Resolutions on IUU Vessel Lists are required, although there may be budgetary implications that will require member consideration.

Further work

Sometimes a vessel is IUU listed by two different RFMOs, without cross listing processes having taken place. This could be the result of historical listings before cross listing procedures were agreed to and implemented, or listings based on different incidents, leading up to the eventual individual IUU listings. This should of course be possible, but there is a need to avoid double cross listing of the same vessel. Should the development of an IUU Vessel Hub be viewed favourably, the requirements outlined in this document should be further extended and discussed amongst relevant RFMO staff including both officers responsible for compliance as well as respective IT/Data managers, preferably with sketches of a potential user interface and to outline the overall functionality of the IUU Vessel Hub. Based on potential positive responses and interest from the RFMOs, this work could be conducted in a future phase of this initiative.

Most importantly, a potential IUU Vessel Hub needs to find an appropriate "owner" and be developed with a sustainable funding mechanism. Preferably, the solution could be financed outside of the regular budgets of the RFMOs, as providing funding through individual decisions for each RFMO may be time-consuming and potentially lead to instances where consensus is not achieved for funding support. There could also be an issue in finding the correct formula for sharing operational and maintenance costs between larger and smaller RFMOs. Potential funding options would need to be further discussed and investigated as a component of a future phase of this initiative.

One possible option could involve the IMCS Network potentially funding development of the Hub with an advance commitment for a pre-specified funding amount from each RFMO involved in the Project on a long-term basis. However, this is not a firm commitment by the IMCS Network at this point in time as further exploration of the required budget to develop the technical specifications and implement the baseline Hub to Initial Operating Capacity is needed.

Project methodology

It is strongly recommended that a potential IUU Vessel Hub be developed according to best practices within software development. This means software development should be conducted according to "lean" principles. Instead of developing a large and complicated solution over a long period of time with many "nice-to-have" features that may potentially fail to be technologically adopted, it is recommended an IUU Vessel Hub be implemented as a simple IT solution initially with strictly only the key important features to gain experience and ensure adoption at the earliest possible stage. Referring to the requirements specified, a potential solution could be operationalized after the *"Must"* section in this document has been implemented, although there are clear benefits to making more features available. Further discussions must also occur to establish consensus on which features belong to the different sections ("Must", "Should", "Can") of the requirements, so that a baseline model can be agreed upon.

Outcomes of these baseline discussions would also have consequences on financing, where not all features need to be part of the first development phase. An interesting approach could be to create a "beta" prototype, confirming viability, and following agile processes which are implemented with a restricted number of RFMO users consistent with current RFMO processes.

Based on discussions and RFMO desires, a project managed and hosted by the IMCS Network may very well be an easier alternative in terms of hosting.

Recommendations

- RFMO Secretariats verify the initial assumptions outlined within this report with the IMCS Network via a feedback process.
- RFMO Secretariats consider reviewing ICCAT's IUU Vessel database structure/knowledge and electronic form as; (1) a potential option if there is a desire by some RFMOs to migrate away from the use of MS Word and Excel spreadsheets to maintain their IUU Vessel Lists, and (2) to help inform their thinking as to technical aspects related to the concept of an IUU Vessel Hub.
- The IMCS Network facilitate development of IUU Vessel Hub "user stories" that can be used to reinforce and confirm RFMO user needs and visualize outputs and usefulness of al Hub. These user stories, a standard process in software development, would capture the "who", "what" and "why" of Hub requirements.
- The IMCS Network facilitate informal discussions with RFMO Secretariats to discuss the report, its recommendations, any unidentified challenges or obstacles, options, development of user stories, and potential interest in further work on the initiative, for example through:
    - Dedicated agenda items during TCN and PPFCN virtual meetings.
    - Virtual meetings for RFMOs that are not part of TCN/PPFCN as required.
    - In-person meetings in the margins of COFI (depending on in-person RFMO participation).
    - In the margins of other international meetings such as the IMCS Network Global Fisheries Enforcement Training Workshop or others; and/or
    - Direct one-on-one discussions as needed.
- Based on these discussions, determine RFMO interest in furthering the development of a potential IUU Vessel Hub solution.

- Ensure RFMO Secretariats are given ample opportunity to engage their respective Commission Members as appropriate to provide transparency on the initiative and gather initial external feedback and input, to help them determine the expression of interest to proceed.
- Pending collective RFMO interest and available budget, the IMCS Network facilitate creation of a simple, independent Hub prototype based on the “Must” requirements outlined within this report to further verify assumptions, provide a working beta model for RFMOs users, and obtain feedback on the prototype’s workability and usefulness.
- Pending continued RFMO interest, identify the most appropriate organization to host and sustainably maintain the Hub solution and determine overall budget availability and commitment.
- Based on available funding, agree upon a set of more robust technical specifications for an initial Version of an IUU Vessel Hub that would involve iterative development through user input and feedback.

Appendix A – Data Fields

The following data fields and media were common for almost all RFMOs relevant to their IUU Vessel Lists.

Data Field	Required		Optional
	Key Information*	Date Information First Received and/or Updated	Veracity (where available)
Name	*	✓	✓
Call Sign	*	✓	✓
IMO Number / UVI	*	✓	✓
Owner		✓	✓
Operator		✓	✓
Vessel Master			✓
Flag		✓	✓
Photographs		(Display date taken)	
Date first included on an IUU Vessel List	✓		
Summary of activities	✓		

*All Key Information should be provided if available, but at least one of the * Data Fields is required along with Date First Included and Summary of Activities.

NOTES:

(1) In addition, Data Fields such as vessel length and weight were included by some RFMOs, which is important to simplify identification when vessels were known to be displaying false credentials. These Data Fields can be included if needed.

(2) The complete view of a vessel is often put together by fragments of information; as such, it is recommended a potential IUU Vessel Hub be developed to allow for IUU Vessel List data fields and listings to accept sparse records. This means that all Data Fields containing Key Information should be considered "optional" with the only "required" Data Fields being at least one of the three * listed Data Fields (Name, Call Sign, IMO Number) as well as the first date the vessel was included on an RFMO IUU Vessel List and the summary of activities that provided the basis by which the vessel was IUU listed. The development of these data fields should allow for them to be extended to include additional fields (such as vessel length and weight) based upon the needs and desires of the RFMO users.

(3) In terms of the IUU Vessel Hub, the source, or originating RFMO, should also be prominently displayed.

(4) A link could be included to "more information" displayed on an RFMO's website if any additional relevant information on an IUU listed vessel is added after its initial listing.