



TECHNICAL AND COMPLIANCE COMMITTEE
Nineteenth Regular Session
20-26 September 2023
Pohnpei, Federated States of Micronesia

ANNUAL REPORT ON WCPFC TRANSHIPMENT REPORTING

WCPFC-TCC19-2023-RP03_rev1

18 September 2023

Prepared by the WCPFC Secretariat

Revision 1

This revision includes an amendment to the *Tracking species and product transshipment* text correcting product flow between vessels.

Contents

1 Purpose	1
2 Introduction	1
3 Overview of vessels on the RFV authorised to tranship on the high seas	1
3.1 Authority to tranship on RFV	1
3.2 Determination of impracticality	1
4 The effect of COVID-19 related Commission decisions	2
4.1 In-port transhipment by purse seine vessels	2
5 Review of high seas transhipment notifications and declarations	2
5.1 Transhipment events	2
5.2 Location and volumes of species transhipped	3
5.3 Observer coverage and reporting of transhipments	3
6 Review of Transhipment Cases in the Compliance Case File System (CCFS)	4
7 Managing high seas transhipment reporting, monitoring and verification	4
7.1 Managing reported transhipment notifications and declarations	4
7.2 Monitoring transhipments	5
8 Verification of Transhipments	5
8.1 Transhipment Analysis Tool	5
8.2 Proximity alert	6
8.3 Location discrepancies	6
9 Implementation of Transhipment related CCMs (2009-06 and 2010-02 06)	6
9.1 Reporting through Annual Report Part 2 and Annual Report Part 1 covering 2022 activities	6
9.2 Review of final transhipment implementation under the Compliance Monitoring Scheme .	6
9.3 Transhipment reporting	7
9.4 Tracking species and product transhipment	7
9.5 Comparisons with Annual Report Part 1	8
10 Recommendations	8
Tables	9
Figures	11
Annex I	49
Annex II	51
Annex III	52
Annex IV	54

1 Purpose

This paper summarises transshipment activities for 2022 and part of 2023. The management and reporting arrangements relate mostly to high seas transshipment activities.

2 Introduction

The management and reporting arrangements for transshipments in the WCPFC Convention Area are established through the Convention and CMM 2009-06.

The Convention defines transshipments and sets out the scope and management of transshipments. To support accurate reporting of catches, members are to encourage their fishing vessels to tranship in port to the extent practicable. Processes for exemptions to this prohibition are provided for as well as the ability to develop procedures to obtain and verify data on the quantity and species transhipped both in port and at sea¹.

CMM 2009-06 sets out the different requirements for transshipments for purse seine vessels and for other vessels (longline, troll and pole and line) and the processes for exemptions² to the prohibition on at sea transshipments. The CMM also operationalizes several of the Convention's Article 29 requirements including the reporting procedures for submitting data on the quantity and species transhipped in port and at sea and requirements for observer coverage to monitor and verify transshipments.

The Transshipment Intersessional Working Group was established in 2019 to review CMM 2009-06. COVID-19 affected the ability to progress the review significantly during 2020.

3 Overview of vessels on the RFV authorised to tranship on the high seas

3.1 Authority to tranship on RFV

In 2022, there were 1,126 high seas transshipment events reported to WCPFC (Figure 1) with 59% of vessels on the Record of Fishing Vessels (RFV) authorised for this activity (Figure 2). Of these, 85% were longliners, 10% carriers and 3% pole and line vessels with the remainder 1% or less. These figures are similar to previous years for example in 2021, 62% of vessels were authorised for high seas transshipments; 85% of longliners, 9% carriers and 3% pole and line vessels. The number of vessels on the RFV that are authorised for transshipment has declined slightly since 2019 although the proportion of vessel types has remained relatively stable.

Albacore and yellowfin tuna make up the bulk of species transhipped representing respectively, 34% and 28% of the 2021 provisional longline catch (Figure 2). Information on the location and species mix of transshipments shows distinct changes over the last six years with transshipments now more focused in the central and east Pacific (Figure 3).

Details of vessels authorised for transshipments are in the Annual Report on the RFV (WCPFC-TCC19-2023-RP05) and available on the RFV (<https://vessels.wcpfc.int/>).

3.2 Determination of impracticality

Where CCMs involved in transshipments have determined it is not practical for fishing vessels other than purse seiners to tranship in port, they must submit a plan to the Commission detailing the steps being taken to encourage transshipments to occur in port in the future.

To date, transshipments on the high seas for vessels other than purse seiners has been the norm based on historical practices and the prohibitive costs of transshipping in port. TCC's consideration of submissions of impracticality has been through Secretariat papers:

- reviewing CCMs responses to CMM 2009-06 34 - Ban on high seas transshipment, unless a CCM has determined impracticability in accordance with para 37 guidelines and has advised the Commission of such.
- reviewing CCMs responses to CMM 2009-06 35(a)(ii) - Flag State's notification to the Secretariat on its flag vessels that are authorised to tranship on the high seas; and

¹Articles 1 (h) and Article 29

²Paragraphs 25 and 34 of CMM 2009-06

- considering draft guidelines for determination of circumstances where it is impracticable for certain vessels to tranship in port or in waters under national jurisdiction pursuant to paragraph 37 of CMM 2009-06³.

4 The effect of COVID-19 related Commission decisions

4.1 In-port transhipment by purse seine vessels

Due to the emergence of COVID-19, the Commission suspended observer coverage requirements for transhipments between 27 May 2020 and 15 June 2022 and temporarily enabled purse seine vessel transhipments at sea in an area under the jurisdiction of a Port State, with notifications to the Executive Director, between 20 April and 15 March 2022.

During these periods:

1. forty-six purse seiners flagged to 2 CCMs were authorised for at-sea transhipment and notifications of individual out of port transhipments were received from another 3 CCMs. This different approach to notifications to the Executive Director was due to differing interpretations of the COVID-19 decisions;
2. one CCM retained its own observers on their flagged vessels; and
3. two responses to Annual Report Part 1 (ARPt1) specific to COVID-19 related questions indicated that, in practice, most flag and port states had retained the prohibition on at-sea transhipments for their purse seiners although some had required transhipments to take place in designated areas such as territorial or archipelagic waters or within port boundaries (refer Annex A1 - 2 to 3).

While there was some impact on in port transhipments, there was a more significant impact on monitoring of longline transhipments on the high seas as observer deployments declined from mid-2020 and slowly resumed in late 2022 as national restrictions on port entry and crew changes were lifted and protocols for crew and observer health could be fully implemented. This effect can be seen in the following figures:

1. In 2020, between January and June 99% of transhipments were observed but between July and December 2020 only 65% were observed;
2. in 2021, 12% of offloading vessels and 35% of carriers were observed and
3. in 2022, 20% of transhipments were observed between January and September, 84% in October with 100% coverage resuming from November 2022.

5 Review of high seas transhipment notifications and declarations

5.1 Transhipment events

The annual count of transhipments since June 2010 when CMM 2009-06 took effect is shown in Table 1. More detailed information on the reporting CCM for 2016-2022 is shown in Table Annex II - 1 and Table Annex II - 2.

CCM reporting in ARPt1 indicates the total number of transhipment events in 2022 involving catch taken in the WCPO as well as the split between the in-port, in EEZ and on the high seas (Annex II and Figure 27 to Figure 32).

The Secretariat compares ARPt1 reporting with the submitted transhipment declarations as part of the analysis for the Compliance Monitoring Report (CMR). The Secretariat worked with CCMs to address the deadlines issues and missing reports, and all have been resolved for 2022.

The number of reported high seas transhipments peaked in 2018-2019 at more than 1,400 events. However, since that time the number of transhipments has reduced by around 25% to 1,160 in 2020, 1,007 in 2021 and 1,126 in 2022. Figure 3 and Figure 5 to Figure 10 show the locations of transhipments and species transhipped. During 2020 and 2021, COVID-19 affected how vessels operated and interacted with others.

The transhipment declarations and notifications are presented in Figure 11 to Figure 14. These data show that both the fishing vessel and the receiving vessel correctly submitted their reports. The volumes transhipped are shown in Figure 15 to Figure 18.

³WCPFC-TCC12-2016-15_rev2 and WCPFC-TCC9-2013-17

The relationship between the flag States of offloading and receiving vessels for 2018 to 2022 is shown in Figure 19 with Figure 20 to Figure 24 showing the breakdown of this for flow of product for the main species transhipped. Information on the flow of products transhipped by product type and flag State in 2022 can be seen in Figure 25 and Figure 27.

5.2 Location and volumes of species transhipped

The species and volumes reported as transhipped by purse seiners and longliners in port, in EEZ's, and within and outside of the Convention Area are reported in ARPT1. The information for 2022 can be seen in Table 3 and Table Annex IV - 1 to Table Annex IV - 3. Transshipment reporting in ARPT1 in recent years for all CCMs and individual CCMs by volume, species and location of the transshipment is shown in Figure 28 to Figure 32. The reported volumes of species in ARPT1 and those reported to the Commission in fishing vessel declarations are shown in Table Annex IV - 4.

The following information relates solely to catch offloaded on the high seas to carriers from longliners. The Commission receives self-reported information through reported notifications and declarations.

The main species transhipped on the high seas in 2022 were albacore and bigeye which represented 35% and 29% of the provisional longline total catch estimates for that year. In 2021, these species represented 36% and 33% of the total catch respectively. Information for 2019 has been included as a comparison, as it is a time before there was any effect from COVID-19. (Table 2) and the relative volumes transhipped within a year (Figure 2).

Monthly reported figures for the species transhipped during 2022 and 2021 are shown in Table Annex III - 1 and Table Annex III - 2.

Details of the location and relative catch by species is shown in Figure 3 to Figure 10 for 2020 to 2016. This information shows the shift west and east in the locations changes in volumes for species transhipped over this period as well as the reduced number of transhipments that occurred in 2020 to 2022 compared to 2018 and 2019.

The 2022 transshipment location and species information (Figure 3) can be compared with Figure 35 to Figure 38 which show the catch rate as expressed as catch per unit effort (CPUE) for albacore, bigeye, yellowfin tuna and swordfish. The locations of transhipments appear to have a stronger relationship with the areas of the highest catch rates of bigeye and to a lesser extent yellowfin tuna and do not appear to be impacted by the catch rates of albacore and swordfish. An analysis of the historical data and more detailed evaluations at the flag level or more regular analysis would be required to identify if this was typical behaviour.

No information is available on landings, and catch is not easily able to be linked to transshipment reporting at this time. Proposals are being considered for improving the ability to better link catch and transshipment related information through the Transshipment Intersessional Working Group (TS-IWG). A related Secretariat tasking by WCPFC19 will also assist this work. That tasking is to identify those obligations that do not have independently verifiable data to support compliance review and on potential data sources that could support independent verification.

5.3 Observer coverage and reporting of transhipments

The percentage of the longline catch of albacore (29-33%) and bigeye (35-36%) and other species from the WCPFC Convention area that are transhipped emphasises the need for effective monitoring to support CCM verification of catch estimates and Commission decisions on optimal harvest strategies and management obligations.

The observer coverage of transhipments was significantly affected by COVID-19. Information on the level of observer coverage for high seas transhipments at that time (2020-2022) are provided in Section 4.

While ROP observers are required to monitor transhipments, they have not been required to submit transshipment reports. In 2022, WCPFC19 agreed to implement reporting by observers and agreed to initial data fields that are to be reported. Work to refine these data fields and to consider how to improve the ability to verify reporting will continue through the TS-IWG and the reactivated Regional Observer Programme IWG (IWG-ROP). The observer reporting that was already occurring through other national programmes in Kiribati and Vanuatu as well as the four other tuna RFMOs is a useful basis for initial ROP protocols for reporting. SPC and FFA have also considered a set of minimum data fields for Pacific

Island observer programmes to collect whilst deployed on carriers operating in the Convention Area, including when involved in high seas and in-port transshipments.

SPC is supporting observer programmes with their implementation. Consideration of current observer deployments for high seas longline to carrier transshipment monitoring will be needed in relation to the requirements of 2009-06 paragraphs 13 b. and particularly 13 c. A brief review of information available to the Secretariat and anecdotal information indicates observers may make independent observations but at times merely rely on the vessels record of transhipped fish and that the observer from the receiving vessel may act as the carrier observer during a transshipment.

Once initial data has been received by the Commission, the IWG-ROP will have a basis for their review of the data fields and data protocols to assist in their tasking to review the WCPFC19 decision in discussion with the TS-IWG. It is anticipated that the first data may be available sometime in the last quarter of 2023.

SPC and FFA have also considered a set of minimum data fields for Pacific Island observer programmes to collect whilst deployed on carriers operating in the Conventions Area, including when involved in high seas and in-port transshipments. Once initial data has been received by the Commission, the IWG-ROP will have information to assist in their tasking to review the WCPFC19 decision on data fields.

6 Review of Transshipment Cases in the Compliance Case File System (CCFS)

Since 2016, there have been 21 cases in the CCFS relating to CMM 2009-06 (Table 4). All except one of these cases have been completed, the remaining case is a 'New Case' awaiting further action from the flag State. Most of the 21 cases relate to. Most cases relate to paragraphs 13, and 35 a. iii. and 35 a. iv. which are respectively, a requirement that vessels are responsible for carrying ROP observers to observe transshipments, and the timeframe within which transshipment notifications and declarations must be notified to the Executive Director. Completed investigations in 11 of the 21 cases have been designated as "No infraction" by the investigating CCM with a further 6 listed as "Infraction - Sanction".

7 Managing high seas transshipment reporting, monitoring and verification

The suspension of the requirements for observers to monitor transshipments due to COVID-19 and the lack of requirement for observers to provide reports and independent information on transshipments to the Commission means there are limited monitoring or cross-verification processes by the Secretariat.

7.1 Managing reported transshipment notifications and declarations

Current Secretariat transshipment processes relating to individual notifications and declarations are:

1. receive and store the reports for those CCMs that email copies;
2. data enter emailed reports where the CCM does not directly enter the reported data into WCPFC High Seas Transshipment E-Reporting System APP (TSER);
3. maintain a TSER system that allows CCMs and the Secretariat to enter reported data and which has a TEST setting to allow CCMs, their vessel operators or masters to practice entering their own data directly into the system. This system meets the E-reporting requirements for transshipment data;
4. provide access to SPC to support their scientific data analysis; and
5. the data selection and release of transshipments reports for approved data requests.

The Secretariat does not consider the completeness of forms or whether there are any obvious errors in information or data provided.

Work is underway through SPC on the collection and transfer of observer data based on the initial data fields adopted at WCPFC19 for observer transshipment reporting. Once implemented with data protocols clarified, the data will be available to the Commission. These data fields are to be refined and further data fields considered by the TS-IWG and IWG-ROP. While there are established E-reporting standards for observers, these do not yet cover the recently adopted data fields. Similarly there are no electronic

monitoring programmes established in the region at this time but this work is underway through the ER and EM-IWG.

7.2 Monitoring transhipments

The Secretariat undertakes a range of checks when a transhipment notification is received particularly to check the VMS reporting status of the two vessels notifying of their intent to tranship. If a vessel is not providing position reports an MTU issue is raised with the flag State to ensure the vessel is reporting prior to the transhipment. It is now rare for a vessel notifying of a transhipment to not be reporting correctly to the Commission VMS.

Each year the Secretariat works with CCMs to ensure receipt of the four reports are received for each transhipment. The only exceptions are how a CCM that operates in the overlap area with IATTC has chosen to solely recognise IATTC requirements.

Since April 2020, an E-reporting tool gives authorised flag CCM users online access to routinely review the transhipment reports received by WCPFC for their vessels. This system allows the flag CMM to routinely identify and address issues of missing reports for their vessels and where amended reports are required. It is anticipated over time, that this will reduce the need for the Secretariat's annual review of gaps in reports.

The Secretariat has noted there has been continual improvement in the reporting of transhipments with a significant reduction in the reporting gaps. Any gaps are being resolved quickly, improving the WCPFC holdings of reported transhipment events. This may be due to several factors including the assessment of this CMM under the Compliance Monitoring Scheme, the work that the Secretariat does with CCMs to inform of any reporting gaps early in the year, and CCM familiarity with the reporting requirement. The Republic of Korea and Chinese Taipei have been voluntarily using TSER since February 2020 and September 2019 respectively. In 2021 and 2022, the Secretariat demonstrated and gave TEST access to the TSER E-reporting system to three other flag State CCMs. Two of these are working through internal processes that will result in more data flowing directly into TSER reporting with the need for double handling and data entry by the Secretariat.

As noted in the Annual Report on the Administration of the WCPFC Data Access Rules and Procedures (WCPFC-TCC19-2023-RP08, pages 2 and 3), the higher number of data requests for non-public domain data to support MCS operations in 2021 has continued into 2022. A web-based user interface and a tool to support Secretariat internal workflows to review and record decisions on each request will be considered for development in 2024. Advances have been made in 2022 to provide transhipment data that has been approved for release through an API to begin to reduce the largely manual process to extract relevant data.

8 Verification of Transhipments

8.1 Transhipment Analysis Tool

In 2019, the Secretariat developed Transhipment Analysis Tools that use VMS data to detect indicators of potential transhipment related issues of:

1. close proximity - identifying where VMS positions for two vessels indicated they were within 100m of each other for at least 4 hours; and
2. location discrepancies - identifying significant differences between the VMS position report closest in time to locations reported through TSER.

The addition of analytical expertise to the Secretariat particularly in 2022, has allowed refinement of these tools. These tools now automate and extend analyses to support improved data quality. They can also support monitoring and verification of VMS and transhipment issues through the identification of potential errors/gaps in reported data and by showing trends in activity in the WCPFC for flag CCM's and for the Commission. These tools have been designed as a starting platform that can incorporate new or amended data fields where this would assist CCMs to view their vessel's transhipment activity.

This approach reflects the importance of validating reported data on transhipments as a critical part of monitoring the flow of catch within the WCPFC area and improving the quality of information used to support Commission management decisions. It will also allow the Secretariat to better support Commission

decisions and an understand of how well the objectives of relevant conservation and management measures are being achieved.

8.2 Proximity alert

The proximity alert tool analyses different vessel combinations to detect where they have been in close proximity. The tool is being designed to automatically remove those situations where other information indicates there was not a potentially unreported transshipment or where the risk of transshipment is likely to be low. Examples of this information is where a TSER record exists and where the proximity relates to the Philippines group seining activities which are not considered transshipments. The tool can also identify potential spatial issues such as in the Eastern High Seas Pocket -Special Management Area where transshipments are prohibited. This would support the Secretariat's annual reporting on activity in this area (Figure 33).

The main interactions seen are between carriers and longliners which have had no history of transshipments. It should be noted that the number of records is doubled as there are two vessels involved in any identified transshipment. The Secretariat will consider where additional data sources and refinement of analyses could better target analyses to assist CCMs awareness of their vessel activities based on the data provided to the Commission. This information could be the basis for future workflows between the Secretariat and CCM's that builds on the current work in support of annual reporting.

8.3 Location discrepancies

Location analyses report on vessels with VMS derived locations that were more than 100km from the reported transshipment location. At this time analyses has included data for 2017 and 2022.

The Secretariat can consider further refinements to take account of known reporting issues such as where MTUs have been swapped to another vessel but the Secretariat is not aware or has not yet completed the deletion/reactivation process. This tool will enhance the Secretariat MTU related workflow with CCMs to assist in resolving reporting issues.

Preliminary information indicates that, in 2022 around 8% of carriers involved in high seas transshipments had disparate location reports. Once this tool has been more fully reviewed, this information will add to the Commission's understanding of particular VMS issues for their further consideration.

Work to progress these analytical tools has previously been constrained by other priorities and a lack of monitoring-focused analytical expertise; the added analytical capacity during 2023 has significantly advanced this work. The analyses of existing data sources that has been possible from these tools already provides more insights into transshipment trends and activities. The analytical products will support the TS-IWG review of CMM 2009-06 and provide a source of information to assist CCMs and the Secretariat monitoring of data quality to ensure complete high seas transshipment reporting.

9 Implementation of Transshipment related CCMs (2009-06 and 2010-02 06)

9.1 Reporting through Annual Report Part 2 and Annual Report Part 1 covering 2022 activities

CCMs continue to report on their implementation of CMM 2009-06 in the 2023 Annual Report Part 2 (ARPt2) covering 2022 activities which are summarised in **Annex 1**.

As per previous years, CCMs were required to report against all transshipment activities covered by CMM 2009-06 (including transshipment activities that occur in ports and in EEZs) in the 2023 ARPt1 covering 2022 activities.

Table 3 and **Annex 4** summarise CCMs responses from their 2023 ARPt1 in relation to all transshipment activities covered by CMM 2009-06.

9.2 Review of final transshipment implementation under the Compliance Monitoring Scheme

Figure 34 provides an overview of the outcome of the evaluation of CMM 2009-06 under the Compliance Monitoring Scheme (CMS) over recent years. CMM 2009-06 was evaluated annually from 2014 to 2021. Evaluations for RY2021 and 2022 will be completed in 2023. There has been a marked improvement in implementation of most requirements by applicable CCMs in response to required reporting. However,

meeting deadlines for CMM 2009-06 reporting requirements (section vii for CMM 2009-06 paragraph 11 relating to transshipment reporting in ARPt1) remained an implementation challenge for some CCMs until recently.

9.3 Transshipment reporting

The transshipment declarations and notifications are presented in Figure 11 to Figure 14. These data show that both the fishing vessel and the receiving vessel submit reports. High numbers of declarations from receiving vessels from China, Korea, Liberia, Panama and Chinese Taipei (Figure 11) and from the fishing vessels of Chinese Taipei (Figure 12). High numbers of fishing vessel (offloading vessels) notifications are also received from China, Korea and Chinese Taipei (Figure 13) with similar trends are also apparent for the offloading vessels (Figure 14).

9.4 Tracking species and product transshipment

The movements of transhipped fish among flag CCMs capture vessels and flag CCMs carriers for transhipped albacore, bigeye, yellowfin, swordfish and blue sharks are shown in Figure 15 to Figure 24. This information reflects more clearly, the importance of high seas transshipments to those CCMs.

Similarly, Figure 25 to Figure 26 show the product state of fish that are transhipped between flag CCMs with some difference in the preferred product importance apparent. Albacore is predominantly transhipped whole, bigeye gilled and gutted/tailed, yellowfin gilled and gutted/tailed and swordfish dressed.

Transshipments were tracked between capture and carrier vessels (Figure 15 and Figure 19). These data indicate that about half the albacore caught in vessels from China were transhipped to Chinese carrier vessels with the bulk of the remainder going to vessels from Panama, with bigeye tuna being transhipped to vessels from China, Korea and Panama. Korean vessels transhipped mostly bigeye and yellowfin tuna to other Korean flagged vessels with a smaller proportion of fish going to Panamanian vessels. Chinese Taipei vessels receive fish almost exclusively from their own flagged vessels but Chinese Taipei fishing vessels transhipped to a number of other flagged carrier vessels. In most years albacore, bigeye and yellowfin tuna are transhipped in the highest volumes, with smaller volumes of swordfish blue marlin and sharks transhipped (Figure 18).

In 2021, carriers from China receive mostly albacore, whereas carriers from Japan and Chinese Taipei receive mostly yellowfin and bigeye tuna (Figure 16). Vessels from Korea, Panama and Vanuatu receive mostly bigeye tuna. Vessels from Korea, Panama and Chinese Taipei receive the widest range of species.

For the fishing vessels, China, Chinese Taipei and Vanuatu vessels transhipped mostly albacore and bigeye tuna, with vessels from Japan and Korea transhipping mostly bigeye tuna (Figure 17).

Transshipments are not consistent for species and probably reflect the seasonality of the catch. Overall for albacore the highest volume of transshipments was in the first quarter, with about half of those from Chinese Taipei fishing vessels transferring fish to Vessels from Panama (Figure 20). In most quarters Chinese fishing vessels moved fish to carriers from China, with the exception of the fourth quarter when more than half of the transshipments were to vessels from Panama. Chinese Taipei vessels mostly transhipped to carriers from Panama but in the fourth quarter there was an almost even split between Korea, Chinese Taipei and Panama carriers. Vanuatu also differed in the fourth quarter when they changed from transhipping from Panama vessels to Korean.

Bigeye tuna transshipments are relatively consistent through the year both in volume transhipped and the pattern of transshipments (Figure 21). The notable exception in the pattern is that in the first quarter of the year the Chinese Taipei vessels tranship a higher proportion of their catch to Vanuatu vessels.

Similarly yellowfin tuna transshipments are consistent in pattern through the year but have higher volumes in the first quarter (Figure 22). For yellowfin in the third quarter the pattern differs slightly with a higher proportion of the fishing vessels from China transhipping to carriers from Panama and Korea.

Swordfish transshipments vary in pattern and volume through the year (Figure 23). The biggest volume is transhipped in the first quarter and most from Chinese Taipei vessels to Vanuatu vessels with about a quarter of vessels transhipping to Panama carriers. In the second quarter, swordfish transshipments are dominated by fishing vessel from China transhipping to carriers from Panama. In the third quarter, about half the catch is transhipped from Chinese Taipei and Vanuatu fishing vessels to Panama carriers, with

the Korean fish being split evenly between Panama and Korean carriers. Whereas in the fourth quarter almost all of the catch is taken by carriers from Panama and Korean.

Blue sharks are all transhipped from Chinese Taipei and Vanuatu flagged vessels and mostly to Chinese Taipei and Panama carriers (Figure 24). Most of the blue shark catch is transhipped in the second half of the year.

In terms of the product state, almost all albacore are transhipped in the whole round state, with bigeye and yellowfin in a gilled and gutted state for most flags (Figure 25 and Figure 26). However, Chinese Taipei fishing vessels also tranship bigeye and yellowfin as gilled, gutted and tailed of gutted, headed and tailed. Swordfish are almost all gutted, headed and tailed but with some Japanese vessels filleting them. Blue sharks are all gutted, headed and tailed. Most of the catch is transhipped frozen (Figure 25).

No information is available on landings, and catch is not easily able to be linked to transshipment reporting at this time. Proposals are being considered for improving the ability to better link catch and transshipment related information through the TS-IWG process. They will also be informed by CCM discussions on the Secretariat tasking by WCPFC19 to identify those obligations that do not have independently verifiable data to support compliance review and on potential data sources that could support independent verification.

9.5 Comparisons with Annual Report Part 1

Data from the ARPt1 are shown by CCM in as total volume transhipped (Figure 27); by species (Figure 28); total number of events (Figure 29); and by location as in port transhipments (Figure 30); within EEZs (Figure 31); and within the high seas (Figure 32).

This annual report data was also compared to the data held by WCPFC for total transhipments by fishing vessel and by receiving vessel. These data show that since 2019, WCPFC data and data reported in ARPT1 are fairly close. The notable exceptions are Chinese carrier vessels in 2021 where the report had more events than the database and there lack of reports in the Liberia annual report after 2018.

10 Recommendations

TCC19 is invited to note the information contained in the Annual Report on WCPFC Transshipment Reporting including:

1. the slow increase in transshipment events in the last part of 2022 and the resumption of observer monitoring;
2. the process is underway to implement observer reporting;;
3. ongoing work of the TS-IWG and IWG-ROP to complete their respective reviews; and
4. the consideration of data fields to improve the quality transshipment reporting; and
5. the progress made on refining analytical tools to improve data quality and inform CCM's and Commission understanding of transshipment activities.

Tables

Table 1: Summary of High Seas Transhipments Reported to the WCPFC from June 2010 including all data submitted before 18th May 2023. Data for 2010 and 2011 may include transhipment events that occurred within EEZ areas.

Year	Number of reported transhipment events (including events in IATTC waters)	Number of receiving vessels	Number of offloading vessels
2010	229	17	159
2011	656	22	288
2012	526	19	237
2013	593	20	296
2014	554	25	301
2015	756	28	304
2016	1,020	25	353
2017	1,108	27	450
2018	211	16	185
2019	1,463	44	670
2020	1,160	39	578
2021	1,006	36	489
2022	1,109	38	499

Table 2: Summary comparison of the reported quantities of highly migratory fish stocks reported to have been transhipped in 2019-2021 (including events reported to WCPFC that took place in IATTC area) with the raised longline catch estimates for the WCPFC Statistical Area.

	Year	ALB	BET	YFT	BUM	MLS	SWO
Reported transhipped	2021	18,311.00	17,005.00	14,119.00	1,441.000	347.000	2,137.00
Raised catch estimated		56,256.40	47,963.30	68,576.71	6,645.000	2,097.000	11,529.00
Percent transhipped		32.50	35.50	20.60	21.700	16.500	18.50
Reported transhipped	2020	25,034.00	19,003.00	12,338.00	2,254.000	471.000	2,435.00
Raised catch estimated		77,698.21	58,936.63	75,260.95	8,209.887	2,887.998	13,659.86
Percent transhipped		32.20	32.20	16.40	27.500	16.300	17.80
Reported transhipped	2019	25,064.00	23,455.00	15,707.00	2,364.000	15,707.000	2,899.00
Raised catch estimated		89,312.83	70,350.49	106,698.00	12,079.424	106,698.003	14,456.30
Percent transhipped		28.10	33.30	14.70	19.600	14.700	20.10

Table 3: Provisional summary of transhipments events reported to WCPFC in ARPt1 for RY2022 which is taken as CMM reporting for the dCMR for notifications and dclarations in accord with CMM 2009-06 35 a (iii) and CMM 2009-06 35 a (iv).

	AR1 receiving vessels	AR1 offloading vessels	DB receiving vessels	DB offloading vessels	Advance notifications	Declarations
China	2		106		106	106
		125		232	232	232
Japan	1		1		1	1
		6		7	7	7
Korea	5		86		86	86
		77		1,202	120	120
Panama	10		555		550	555
Chinese Taipei	3		242		242	242
		171		572	572	572
Vanuatu	1		15		15	15
		40		76	76	76
Receiving vessels	22		1,005		1,000	1,005
Offloading vessels		419		1,007	1,007	1,007

Table 4: Article 25 (2) Compliance Case File System records relating to CMM 2009-06.

Activity related requirement	Event year	Investigation ststus	Investigation outcome	Number of events
CMM 2009-06 13	2016	Investigation COMPLETED	No infraction	1
			Infraction - no sanction	1
			Infraction - sanction	2
CMM 2009-06 25	2017	Investigation COMPLETED	No infraction	1
	2018	Investigation COMPLETED	No infraction	2
CMM 2009-06 35 a (iii)	2016	Investigation COMPLETED	No infraction	1
			Infraction - no sanction	1
			Infraction - sanction	2
	2019		No infraction	1
CMM 2009-06 35 a (iv)	2016	Investigation COMPLETED	Infraction - warning	1
			No infraction	2
			No infraction	2
	2018		Infraction - sanction	1
CMM 2009-06 35 a (v)	2018	Investigation COMPLETED	Infraction - sanction	1
CMM 2009-09 01-05	2016	Investigation COMPLETED	Infraction - warning	1
CMM 2009-09 01-05	2017	Investigation COMPLETED	No infraction	4
CMM 2009-09 01-05	2017	Investigation COMPLETED	Infraction - warning	3
CMM 2009-09 01-05	2019	Investigation COMPLETED	No infraction	2
CMM 2009-09 01-05	2019	Investigation COMPLETED	Infraction - no sanction	1
CMM 2009-09 01-05	2019	Investigation COMPLETED	Infraction - warning	1
CMM 2009-09 01-05	2022	Investigation COMPLETED	No infraction	1

Figures

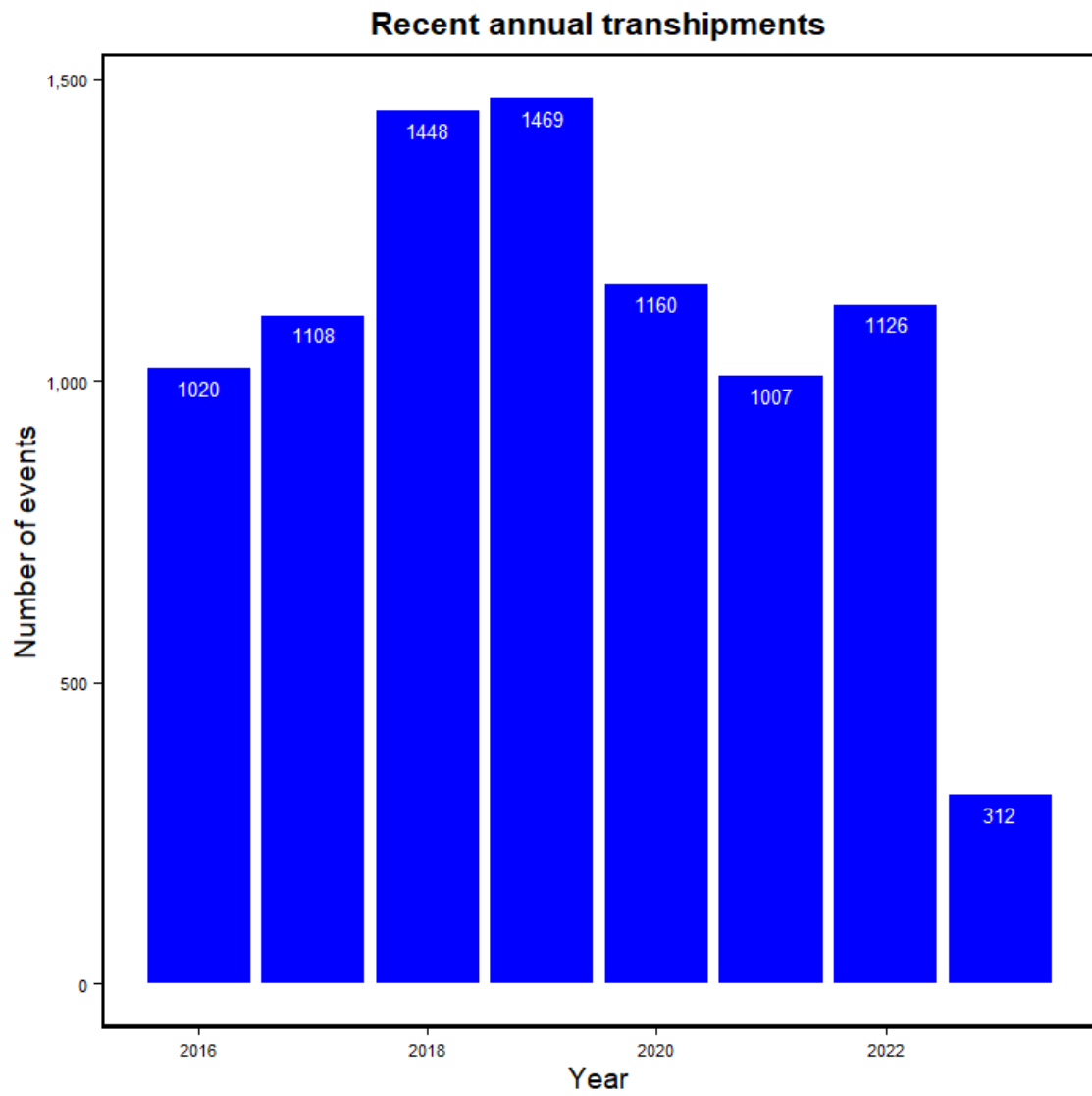
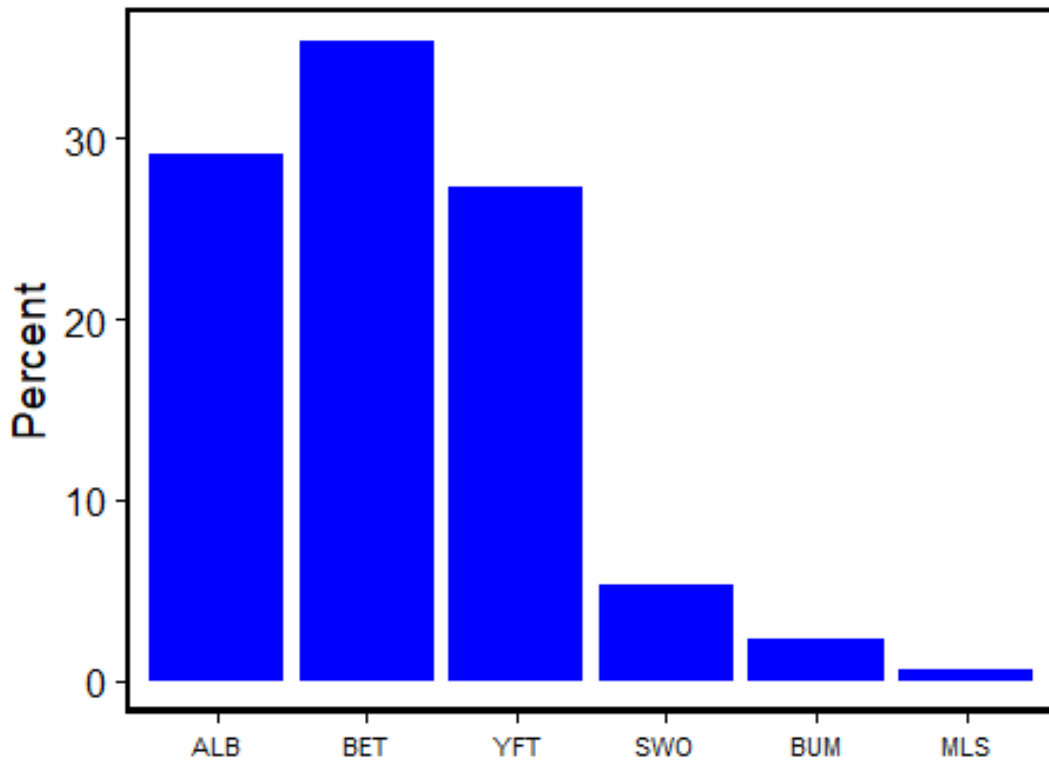


Figure 1: The number of annual transhipments events from 2016-2022 within the WCPFC.

Transshipment volumes 2022



Year	ALB	BET	YFT	SWO	BUM	MLS
2016	29.77	42.94	16.05	5.99	4.35	0.91
2017	30.82	42.10	16.48	6.36	3.68	0.56
2018	33.10	38.26	17.35	6.89	3.74	0.67
2019	35.81	33.48	22.43	4.23	3.42	0.63
2020	40.58	30.81	20.03	4.02	3.71	0.85
2021	34.22	31.79	26.40	4.08	2.74	0.77
2022	29.16	35.40	27.29	5.29	2.24	0.62
2023	34.68	31.44	24.13	6.56	2.55	0.64

Figure 2: The longline transshipment volumes by species as a percent from 2016-2022 within the WCPFC.

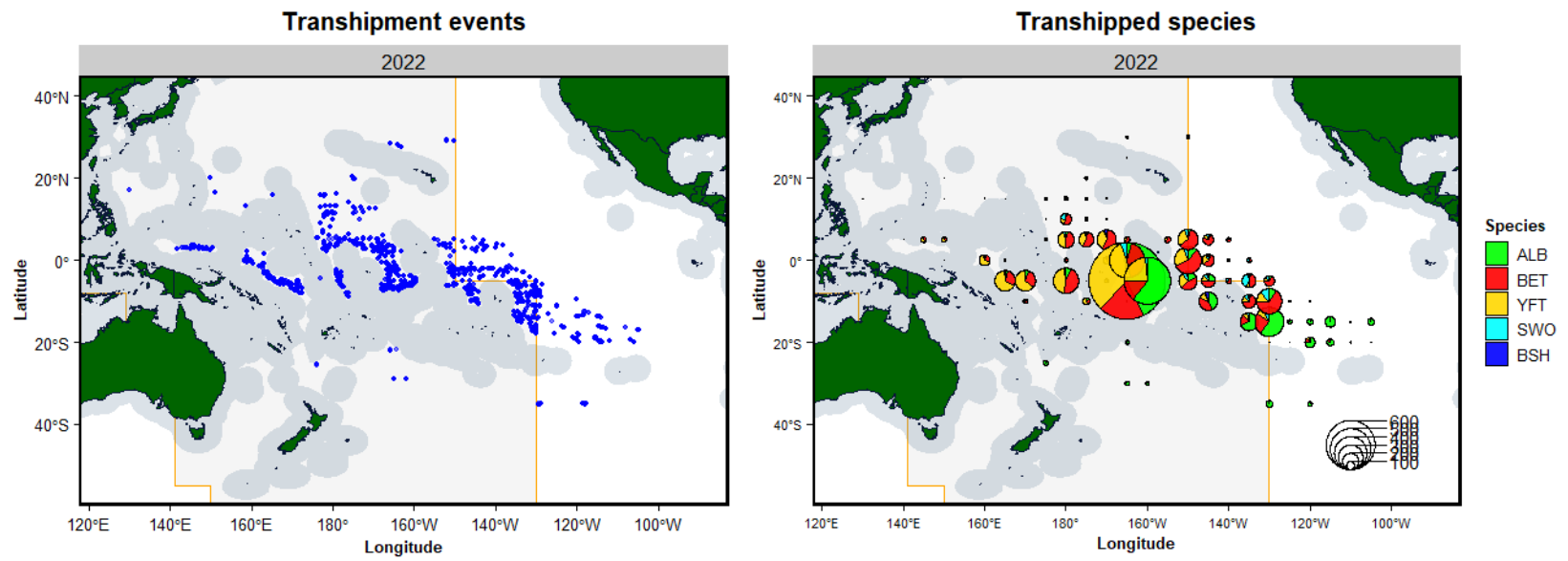


Figure 3: The transshipment events (left) and species transhipped (right) within the WCPFC.

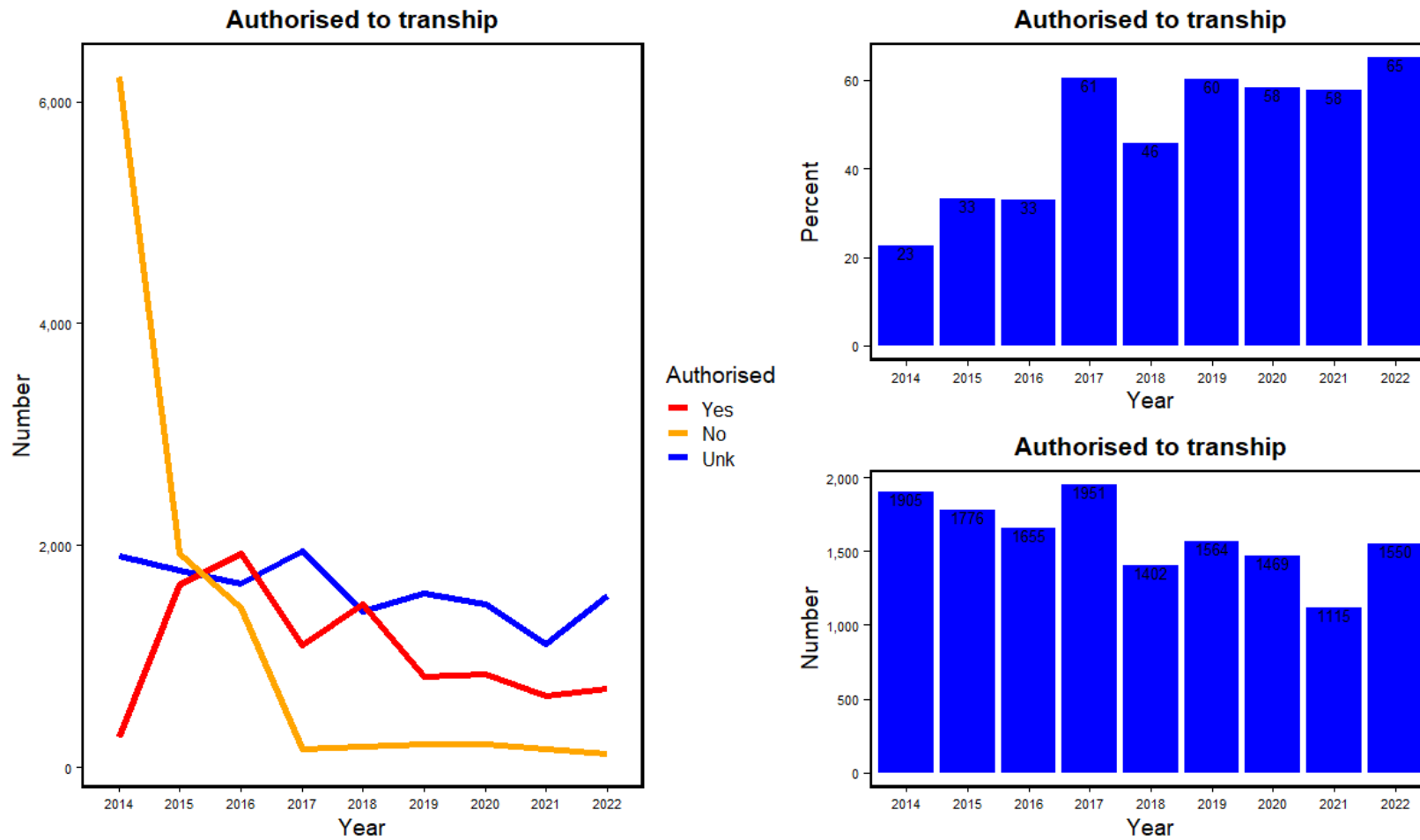


Figure 4: The vessels authorised to tranship within the WCPFC showing the authorisation status (left), the percent of vessels in the vessel record that have an authorisation (top right) and the overall number of authorised vessels (bottom right).

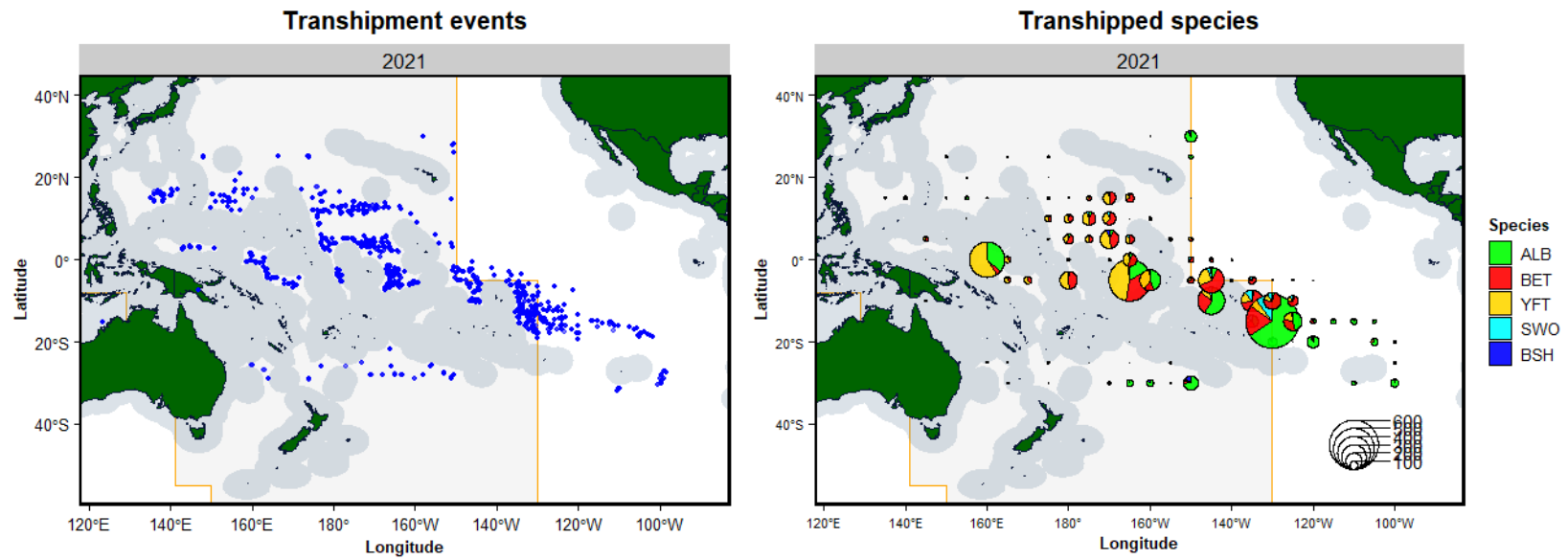


Figure 5: The transshipment events (left) and species transhipped (right) within the WCPFC.

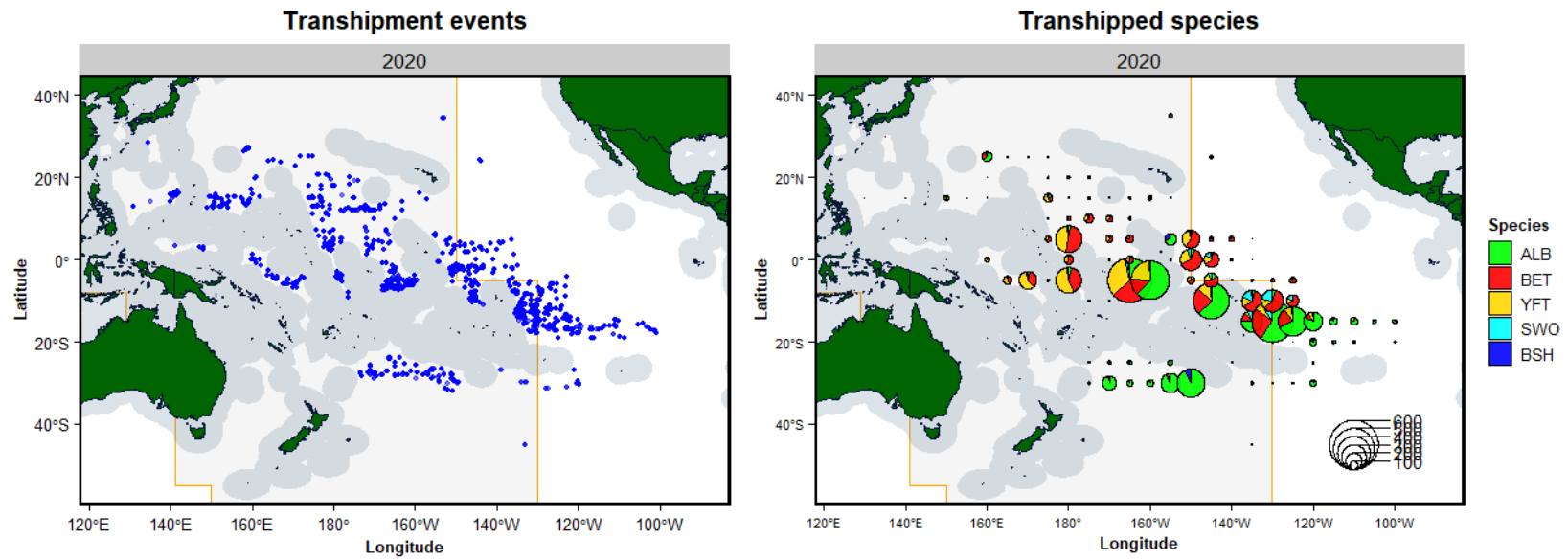


Figure 6: The transshipment events (left) and species transhipped (right) in 2020 within the WCPFC.

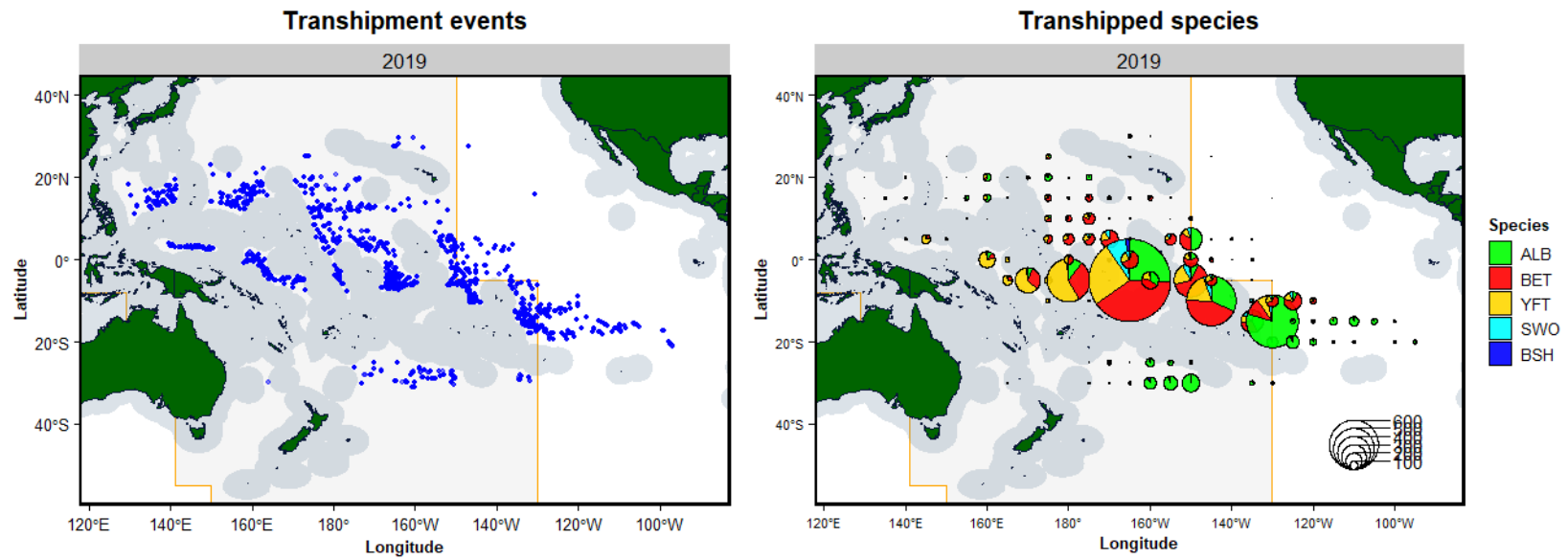


Figure 7: The transshipment events (left) and species transhipped (right) in 2019 within the WCPFC.

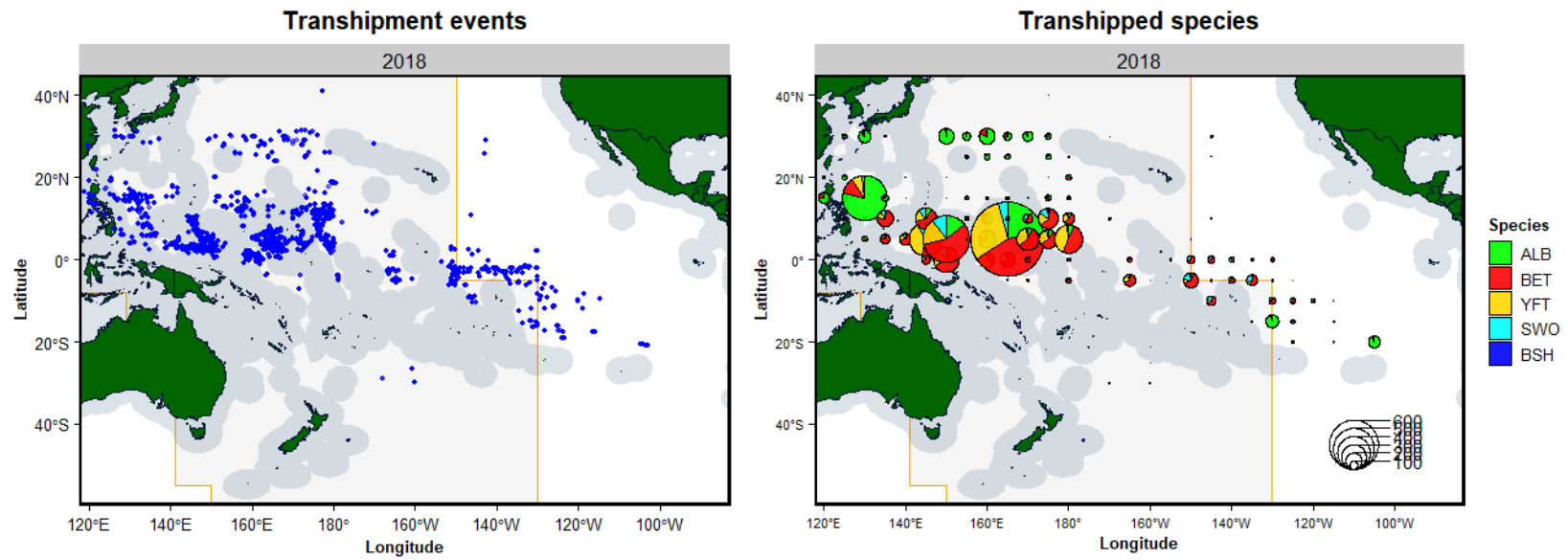


Figure 8: The transshipment events (left) and species transhipped (right) in 2018 within the WCPFC.

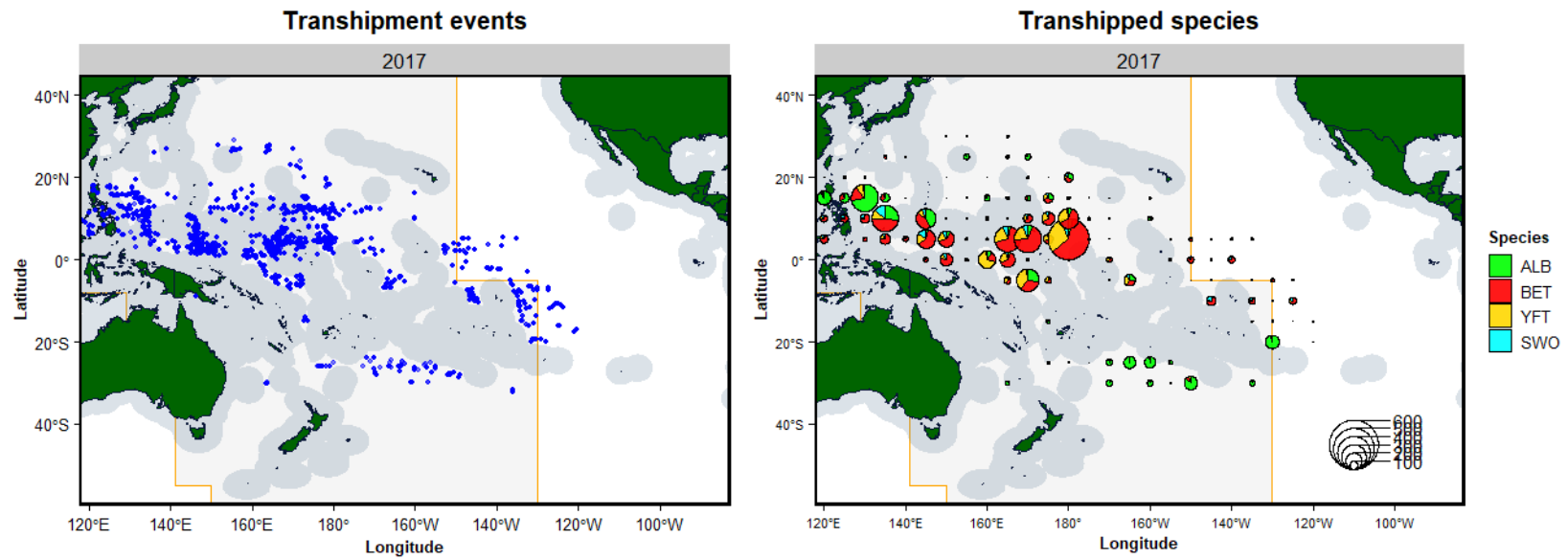


Figure 9: The transshipment events (left) and species transhipped (right) in 2017 within the WCPFC.

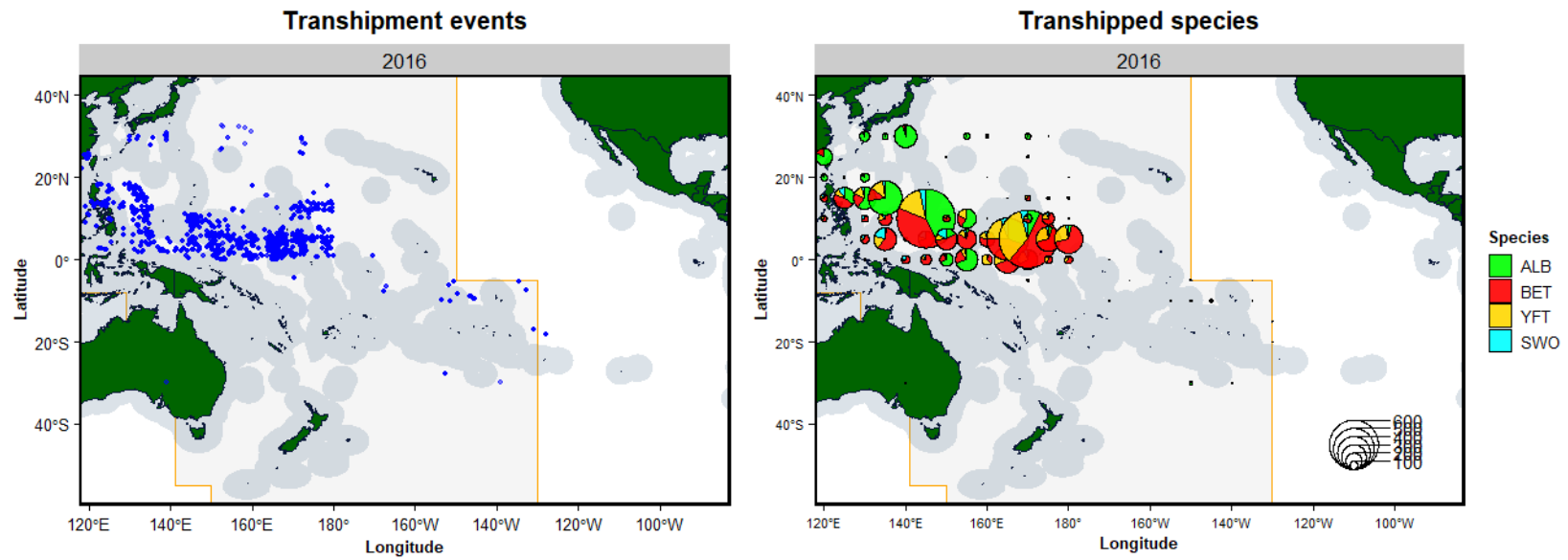


Figure 10: The transshipment events (left) and species transhipped (right) in 2016 within the WCPFC.

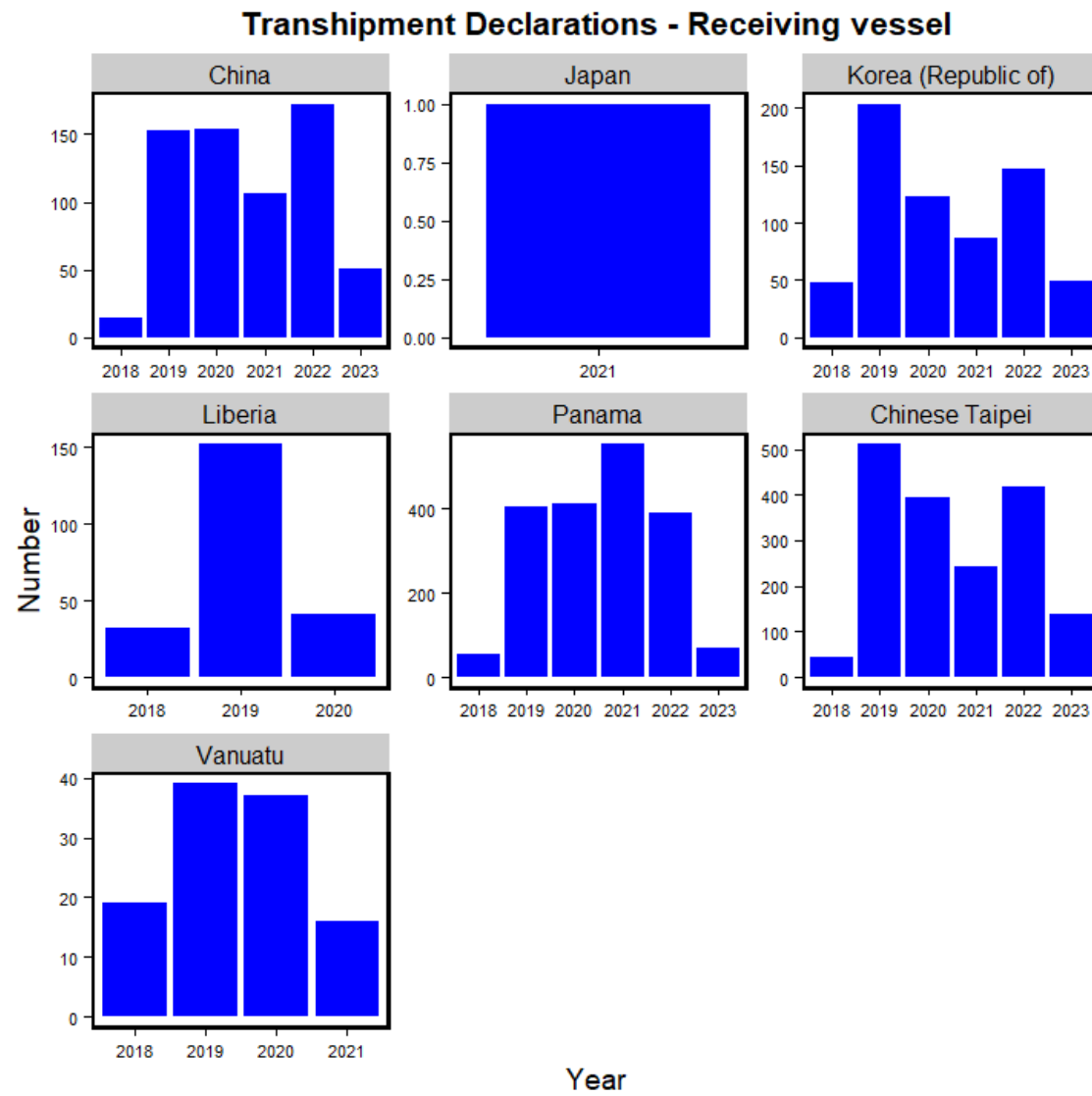


Figure 11: Transshipment declarations from the receiving vessels from 2018-2023 by receiving vessel flag.

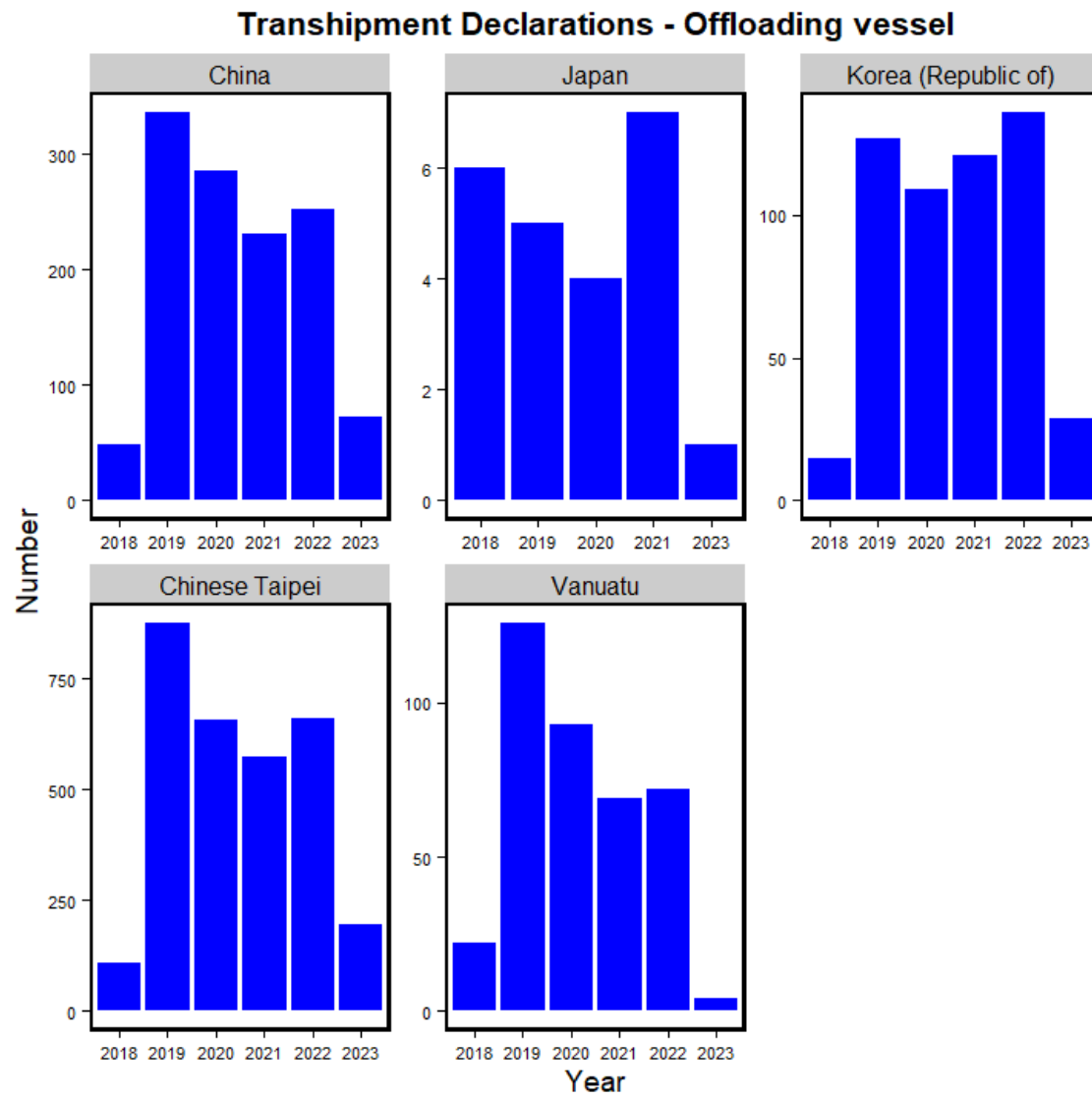


Figure 12: Transshipment declarations from the offloading vessels from 2018-2023 by receiving vessel flag.

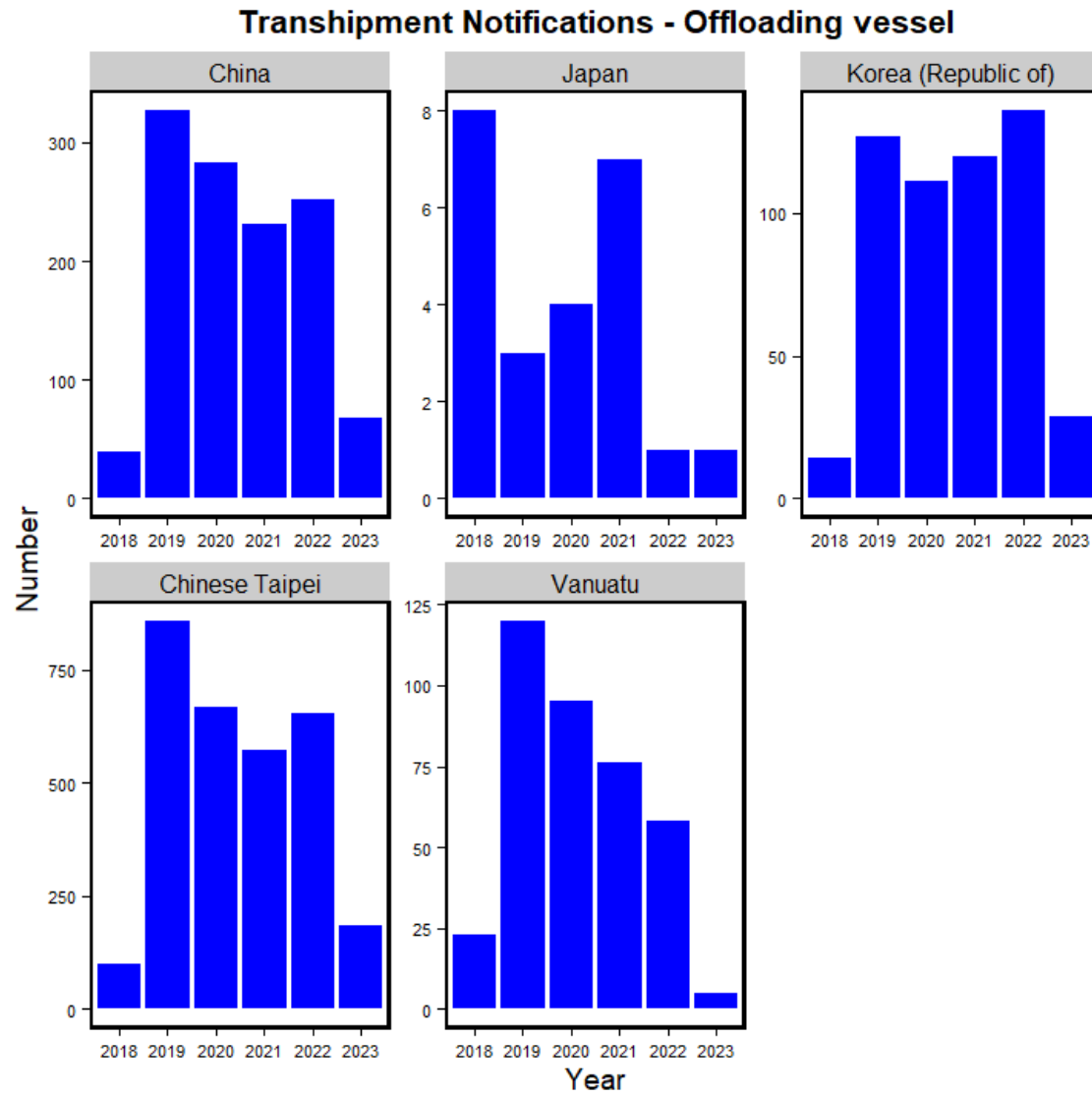


Figure 13: Transshipment notifications from the offloading vessels from 2018-2023 by vessel flag.

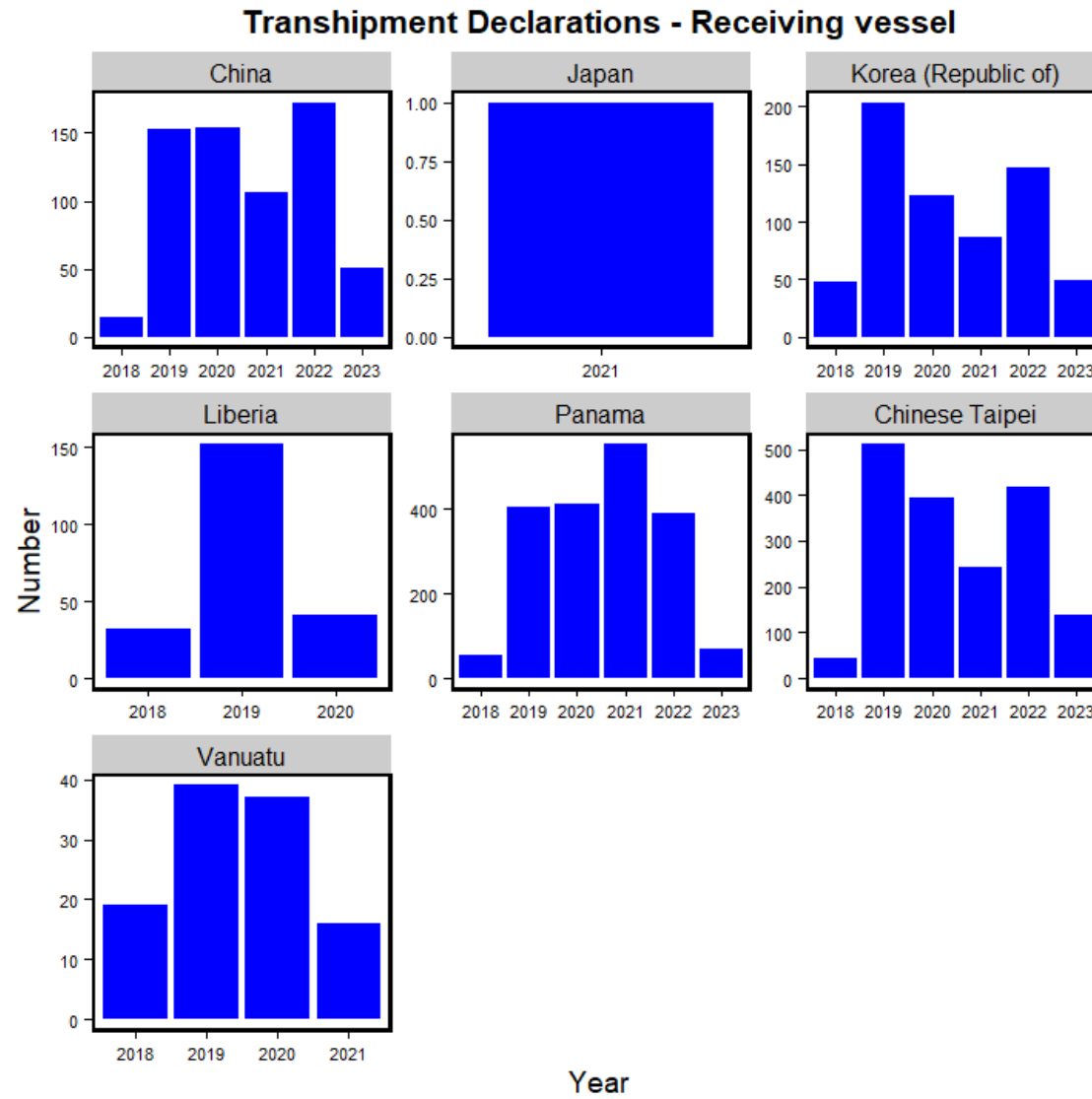


Figure 14: Transshipment declarations from the receiving vessels from 2018-2023 by receiving vessel flag.

Transshipment products 2022 - carrier

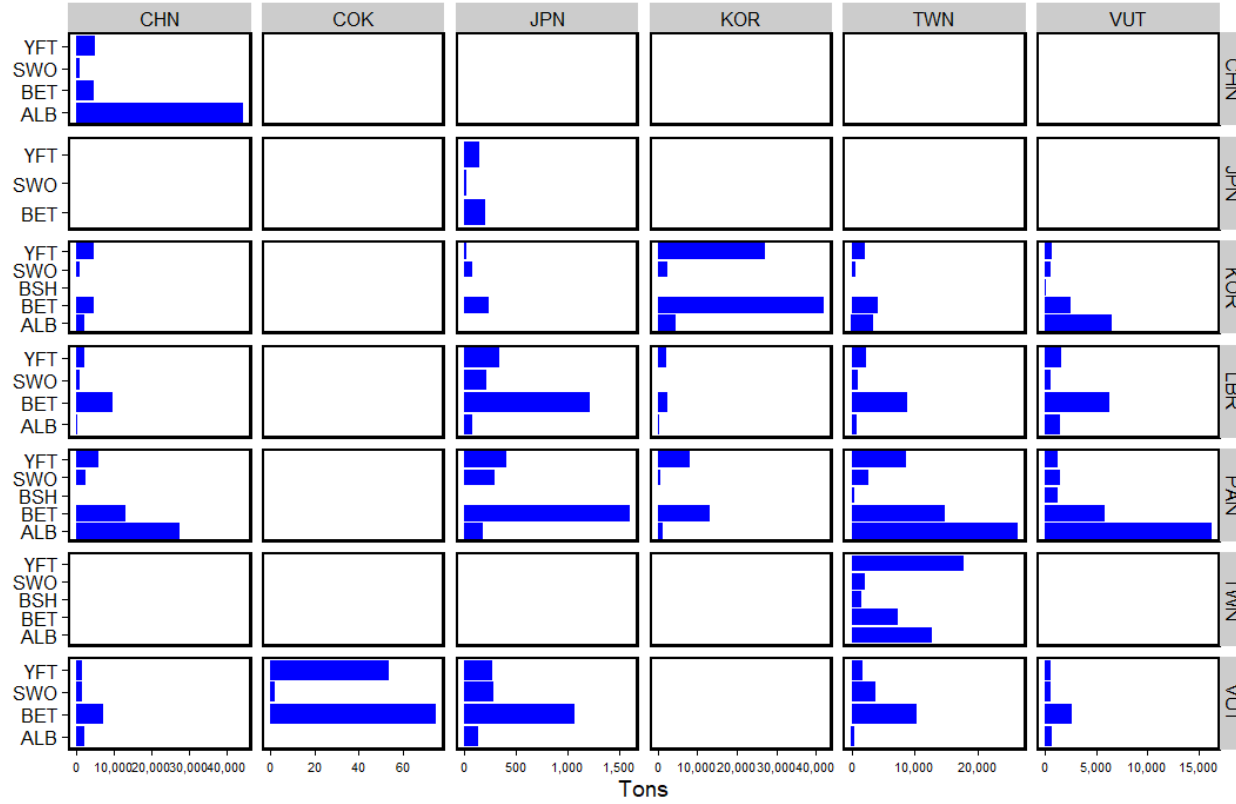


Figure 15: Transshipment volumes transhiped between vessels, showing the receiving vessels (vertical axis) and the offloading vessels (horizontal axis).

Transshipment volumes 2022 - Carriers

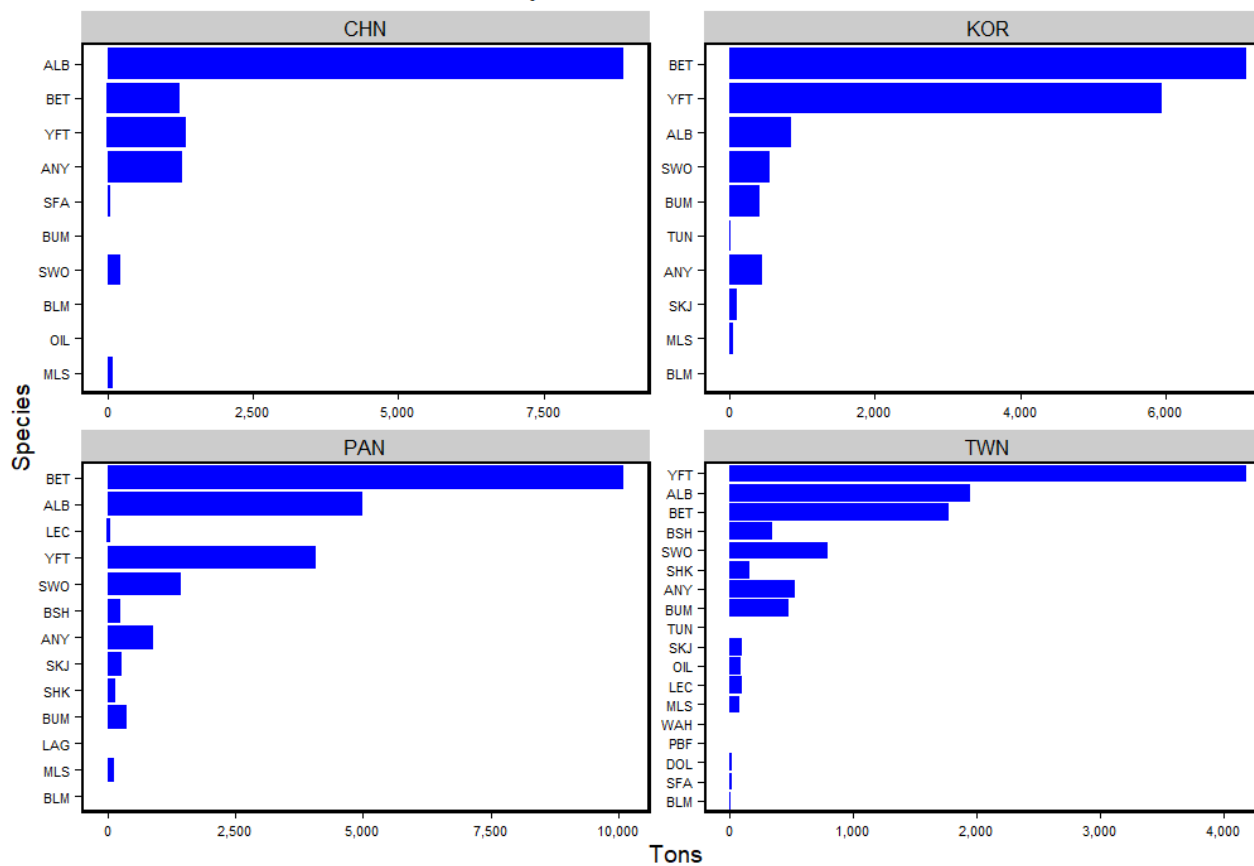


Figure 16: Volumes of fish transhipped to carrier vessels by carrier vessel flag.

Transshipment volumes 2022

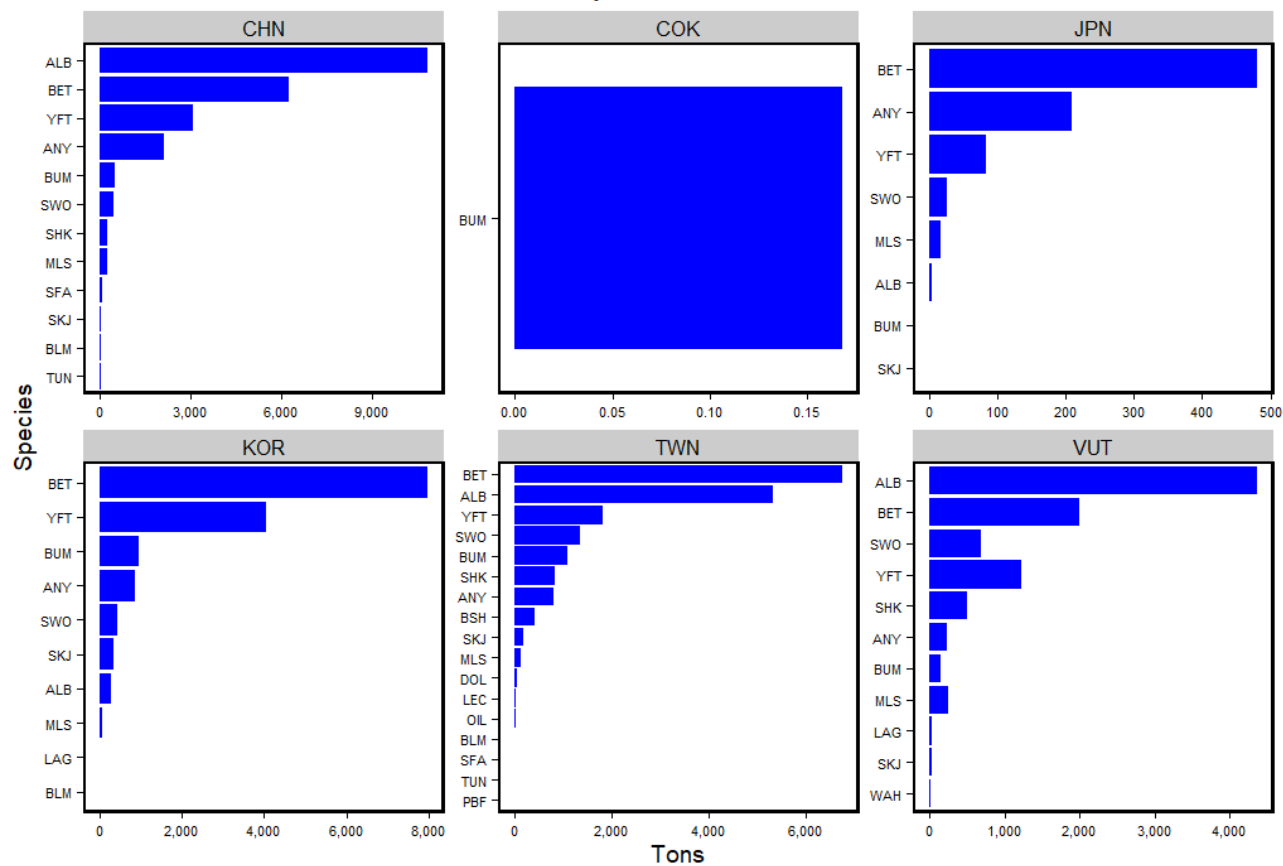


Figure 17: Overall volumes transhiped in 2021 by fishing vessel flag.

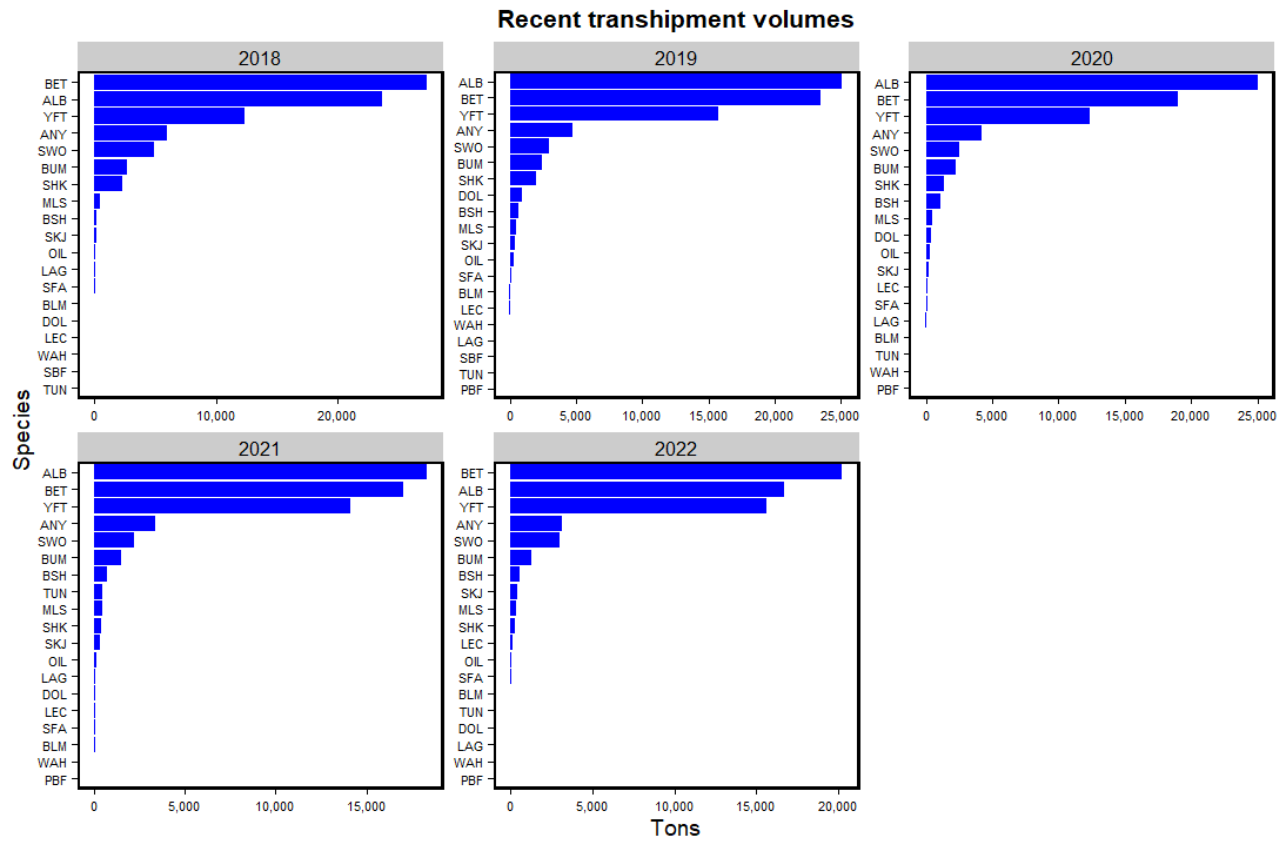


Figure 18: Overall transhipment volumes by year, all flags combined from 2018-2021.

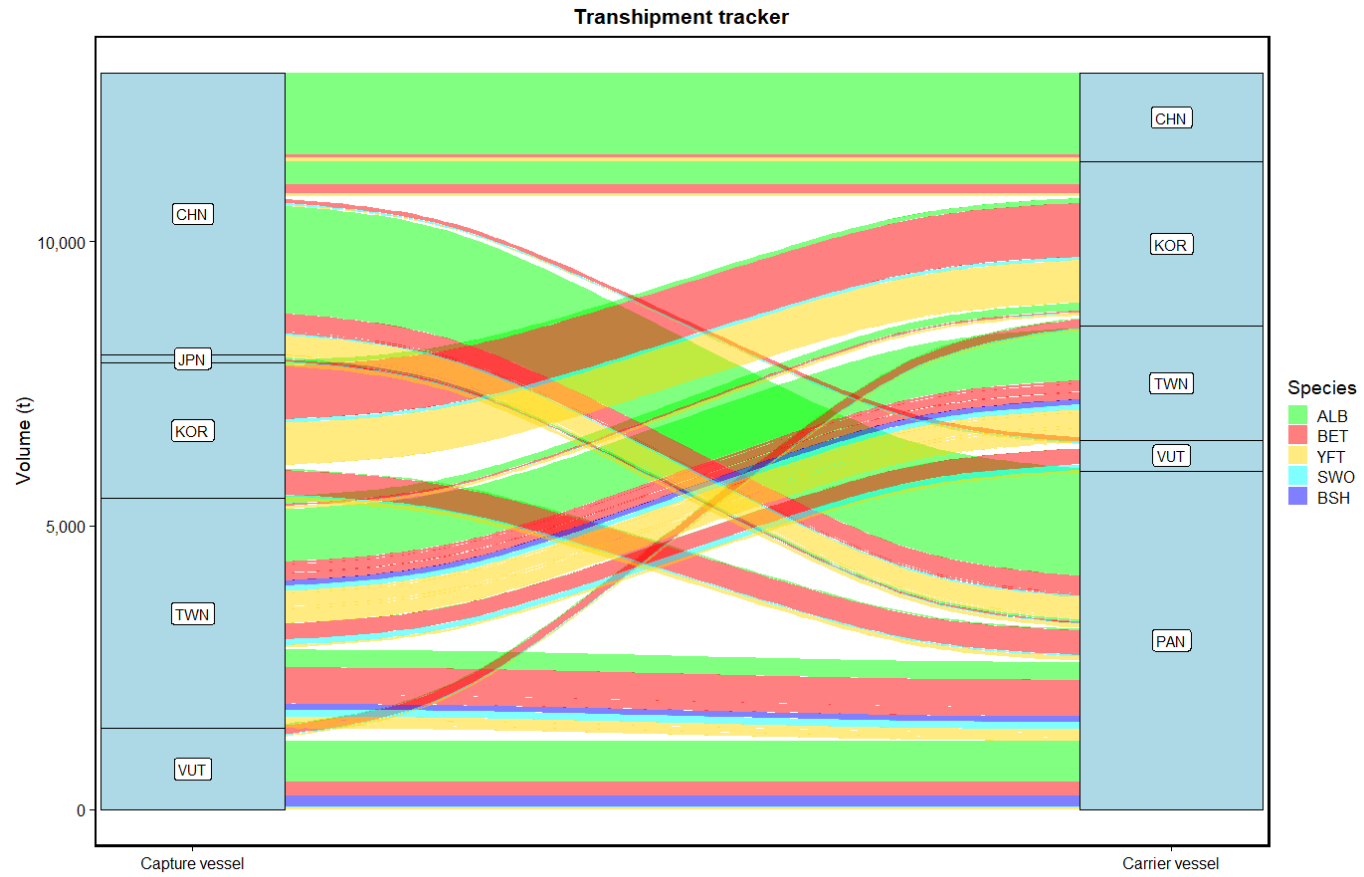


Figure 19: Transshipment from capture to carrier vessels by species for all years combined (2018-2022).

Transshipment tracker - ALB

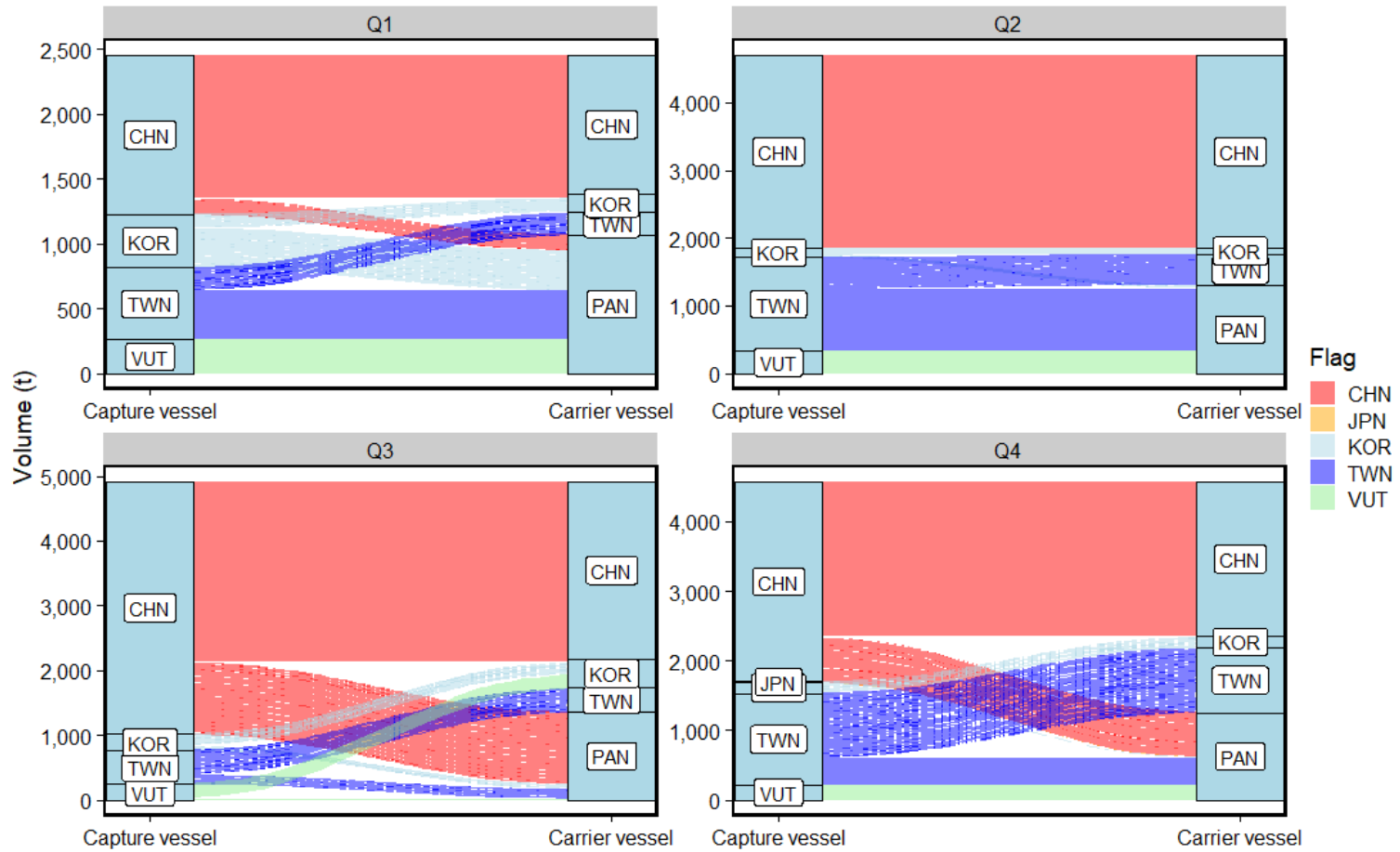


Figure 20: Transshipment from capture to carrier vessels for albacore for all years combined (2018-2022) by quarter of the year.

Transshipment tracker - BET

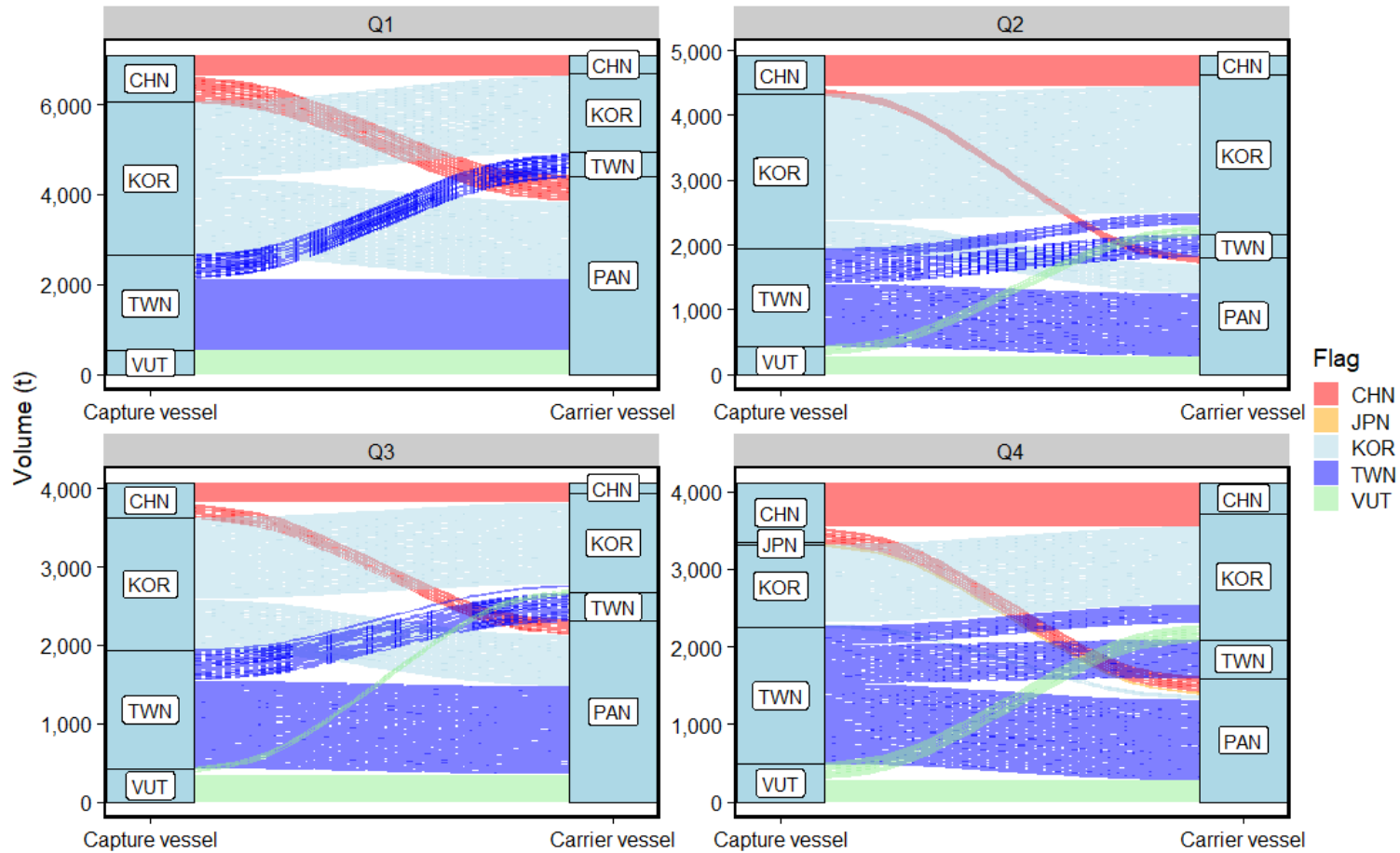


Figure 21: Transshipment from capture to carrier vessels for bigeye tuna for all years combined (2018-2022) by quarter of the year.

Transshipment tracker - YFT

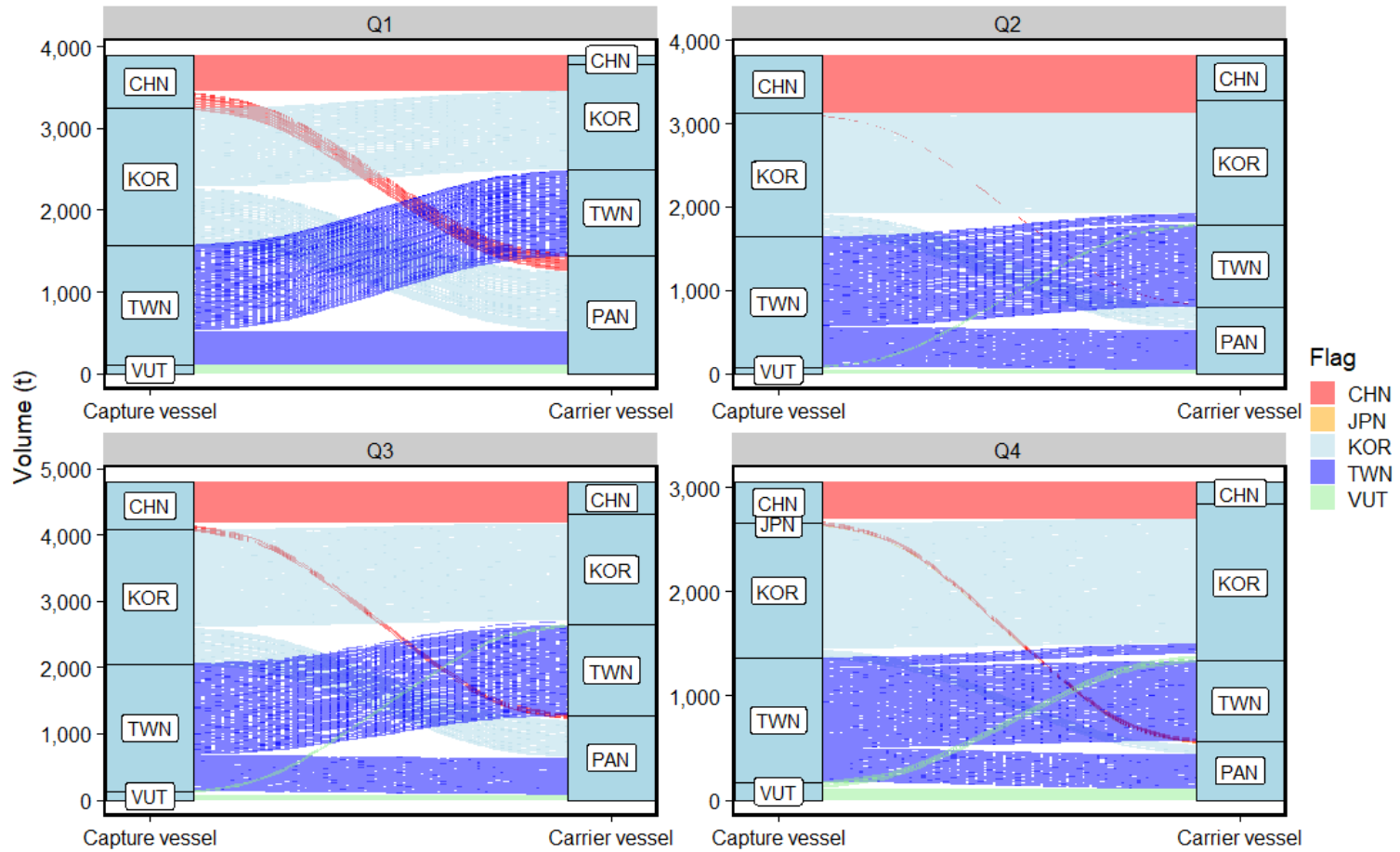


Figure 22: Transshipment from capture to carrier vessels for yellowfin for all years combined (2018-2022) by quarter of the year.

Transshipment tracker - SWO

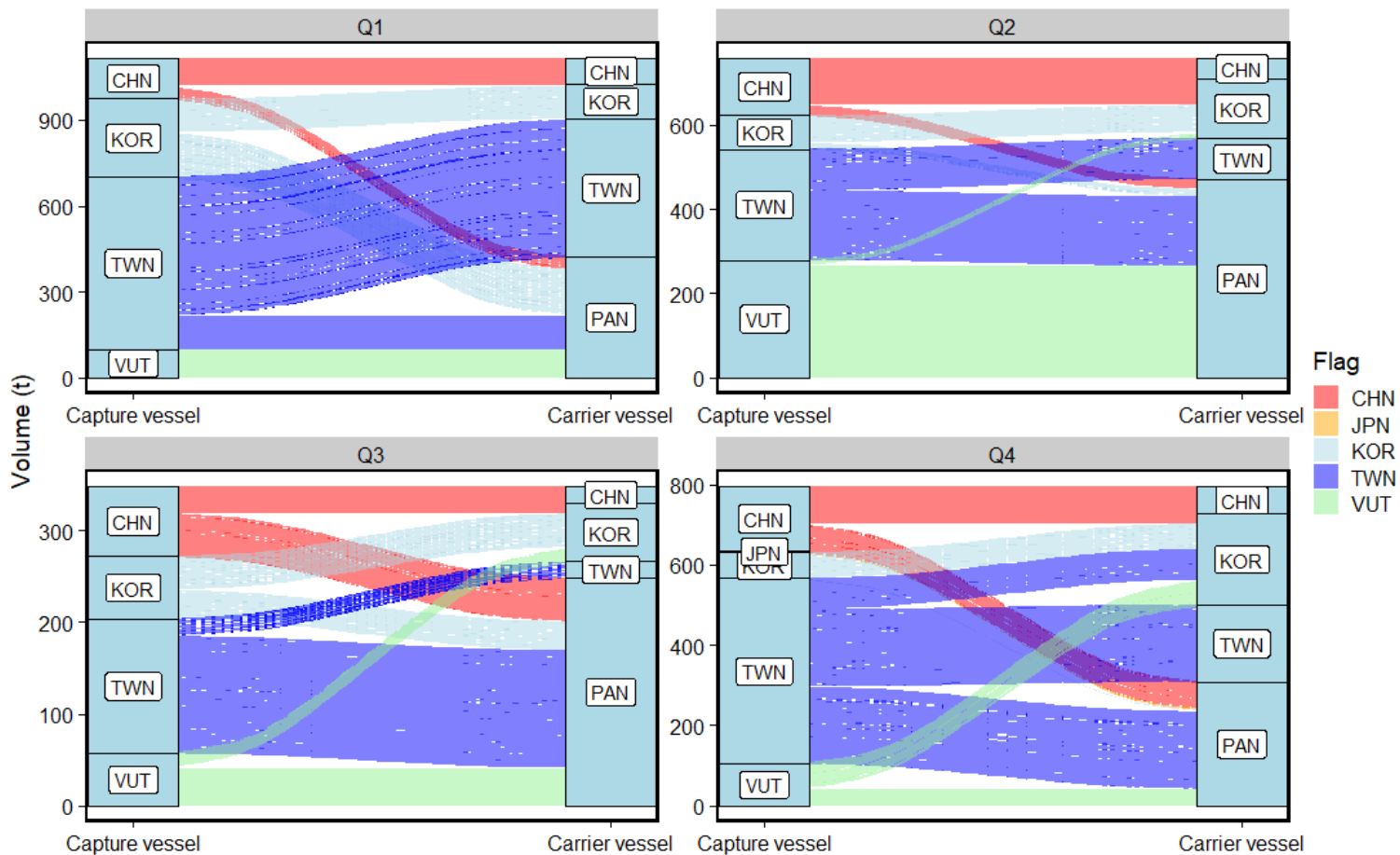


Figure 23: Transshipment from capture to carrier vessels for swordfish for all years combined (2018-2022) by quarter of the year.

Transshipment tracker - BSH

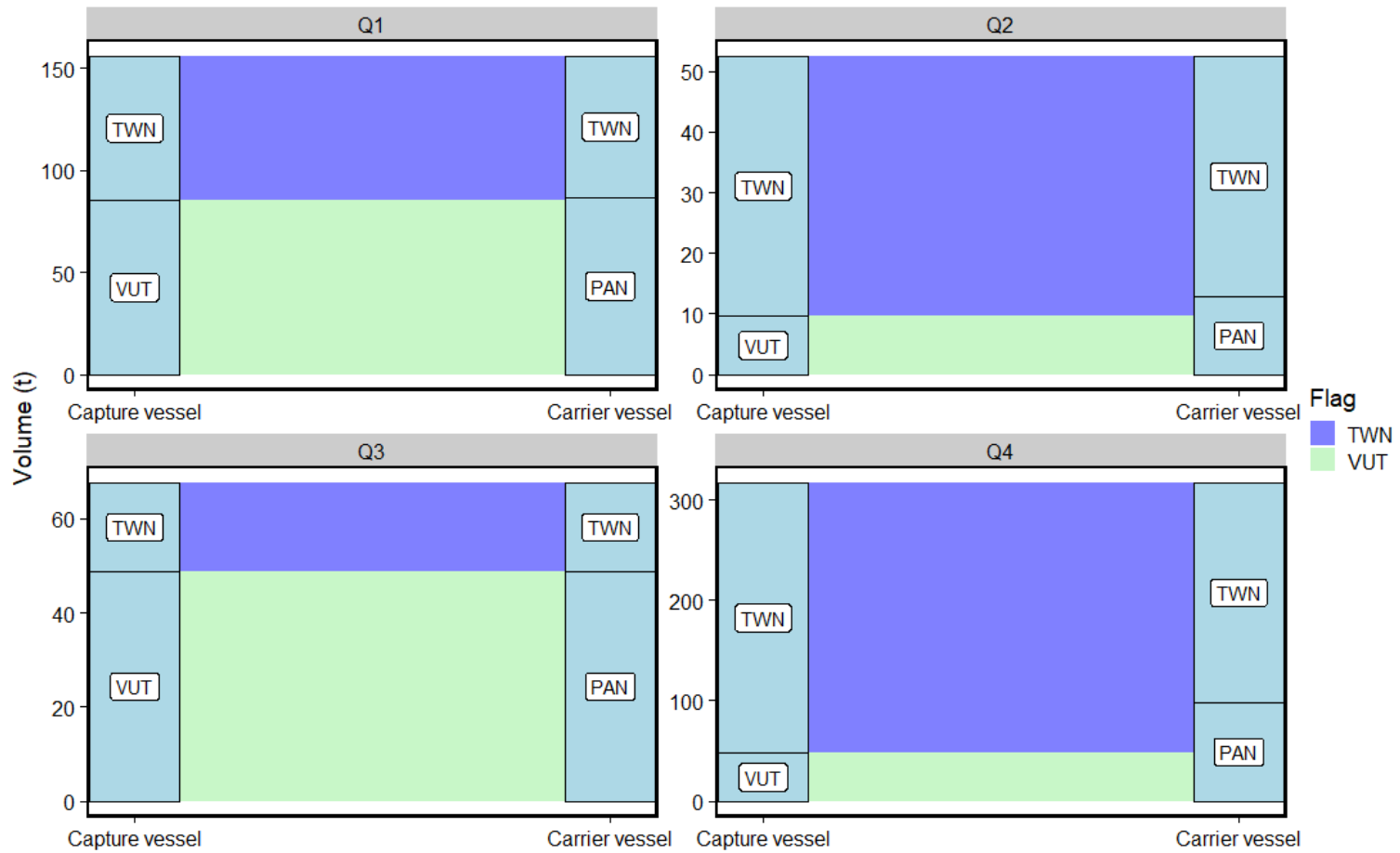


Figure 24: Transshipment from capture to carrier vessels for blue shark for all years combined (2018-2022) by quarter of the year.

Transshipment products 2022 - fishing vessel

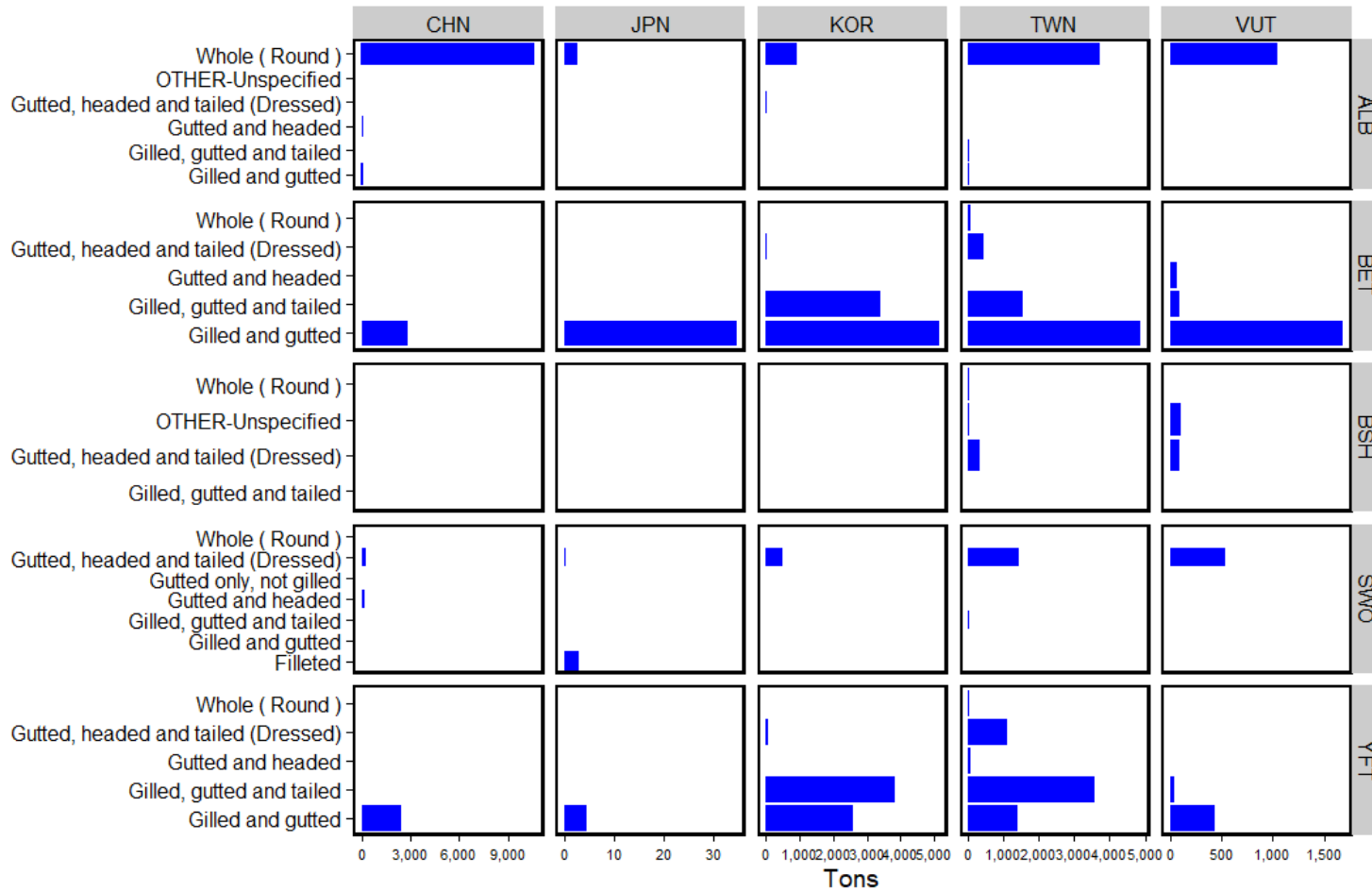


Figure 25: Transhipped species by fishing vessel flag and by product state.

Product state tracker- 2022

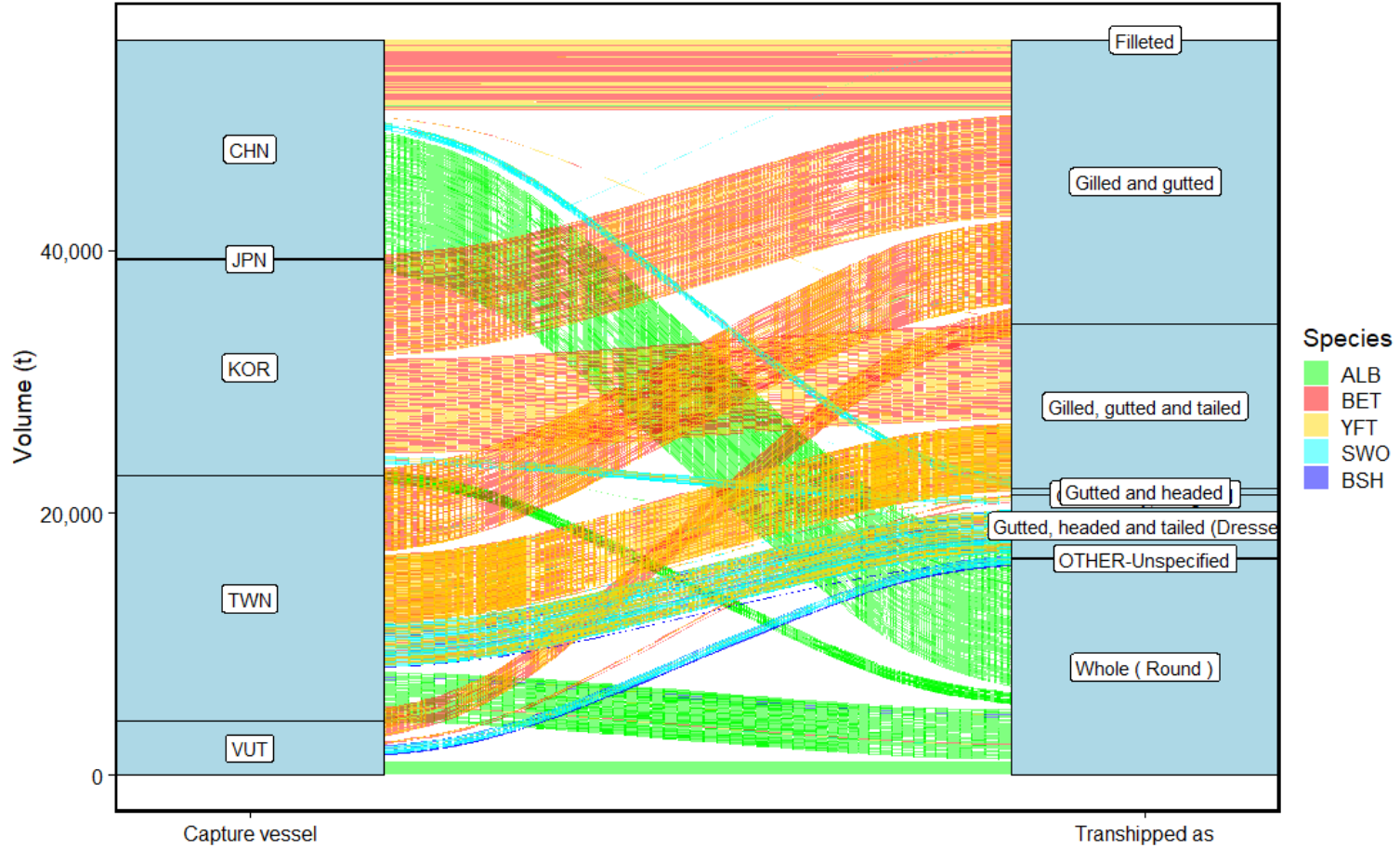


Figure 26: Overall transhipped product state by flag.

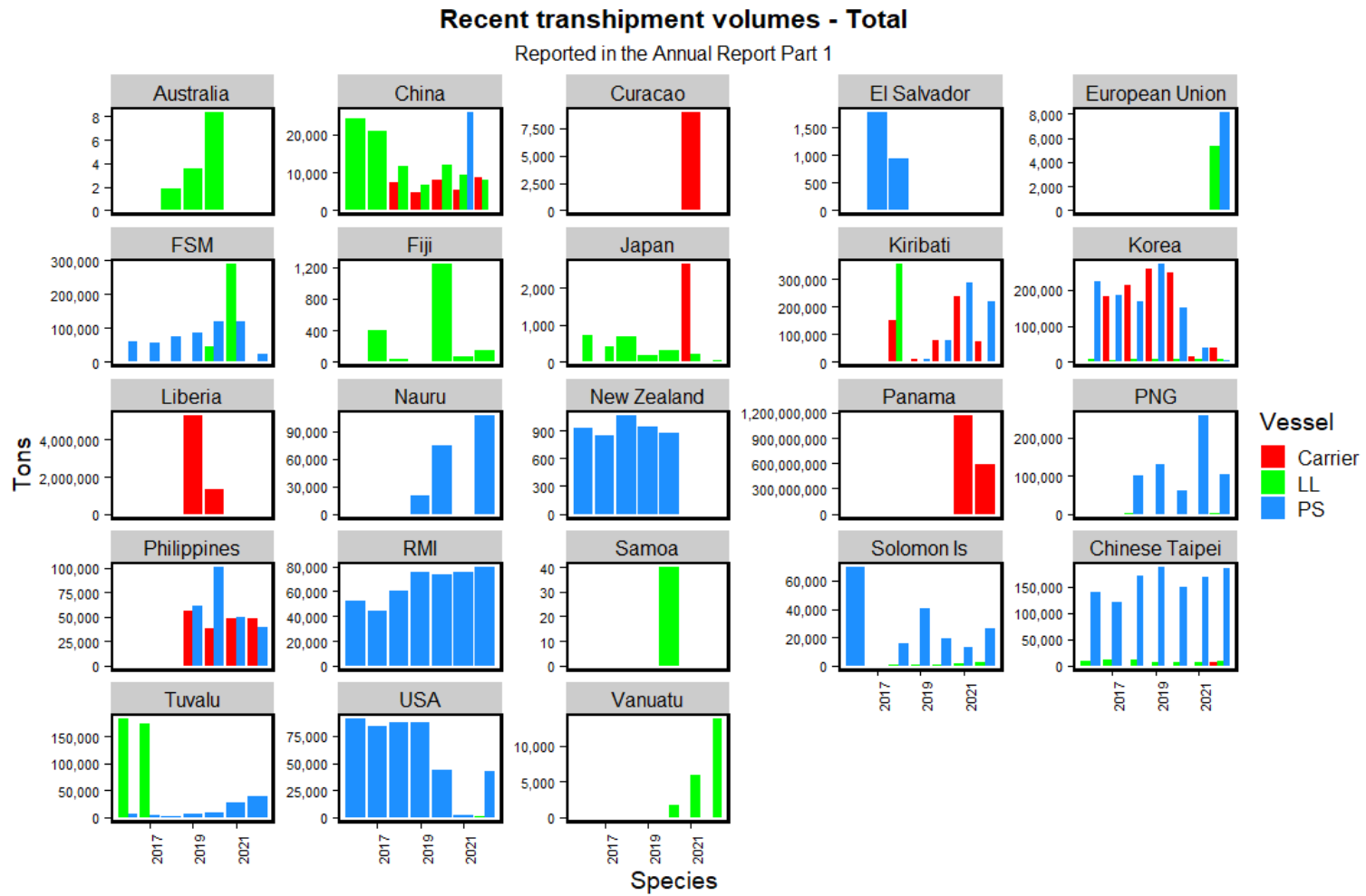


Figure 27: Reported transshipment volumes in the WCPFC Annual Report Part 1.



Figure 28: Reported species proportions transshipment in the WCPFC Annual Report Part 1.



Figure 29: Total volume transshipment by vessel type reported in the WCPFC Annual Report Part 1.

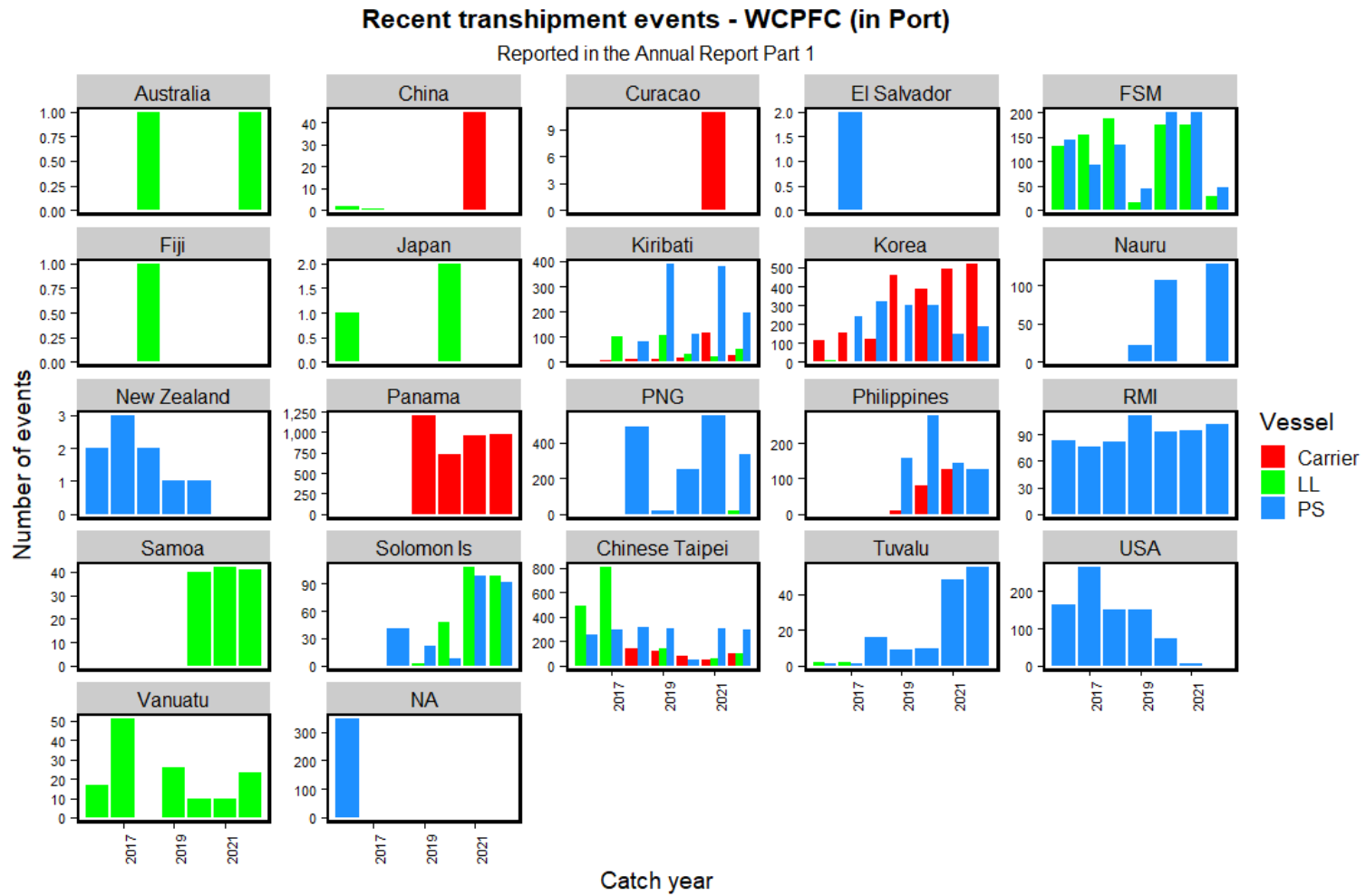


Figure 30: Volumes transshipment in port by vessel type reported in the WCPFC Annual Report Part 1.

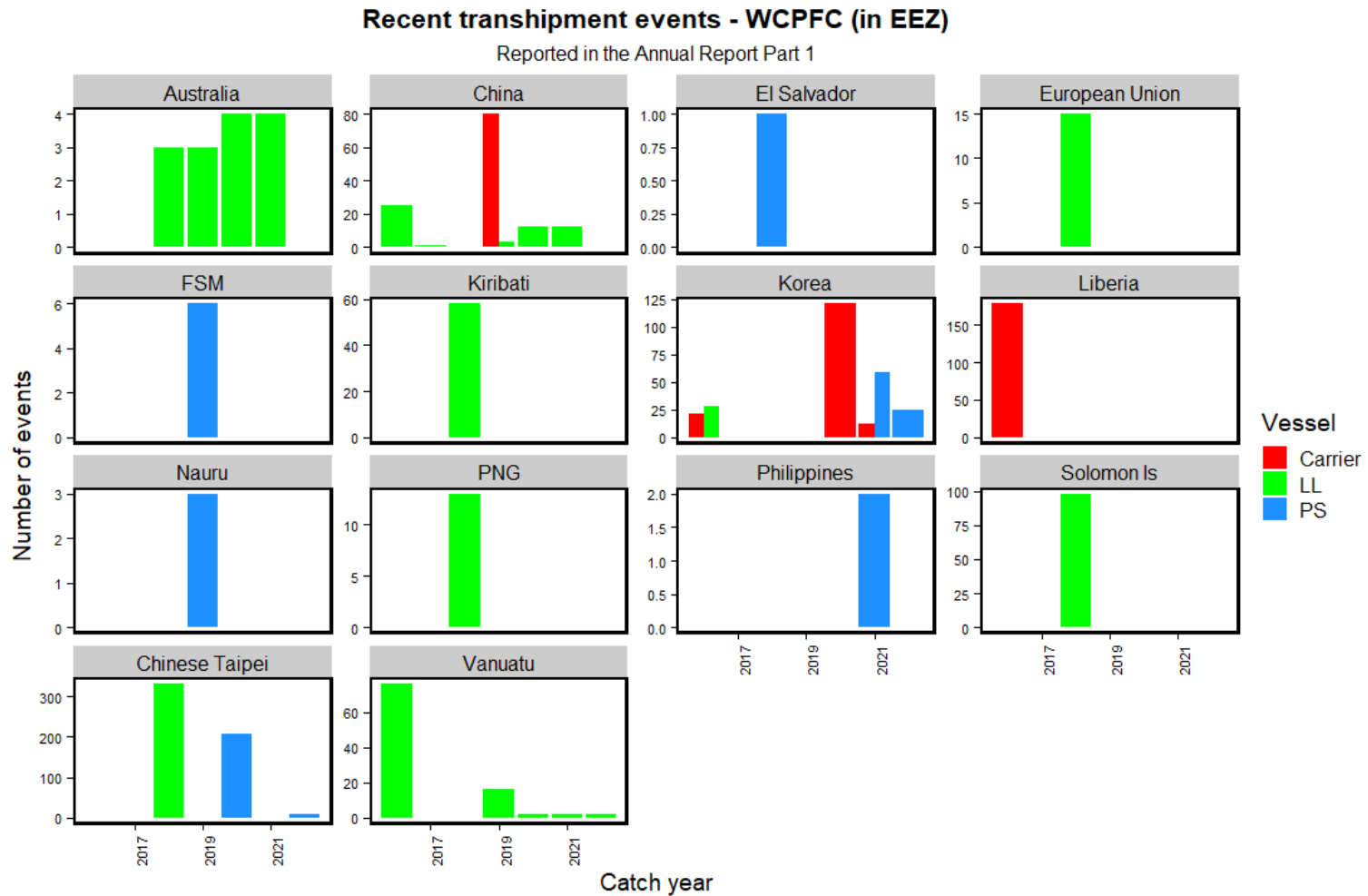


Figure 31: Volumes transshipment in EEZs by vessel type reported in the WCPFC Annual Report Part 1.

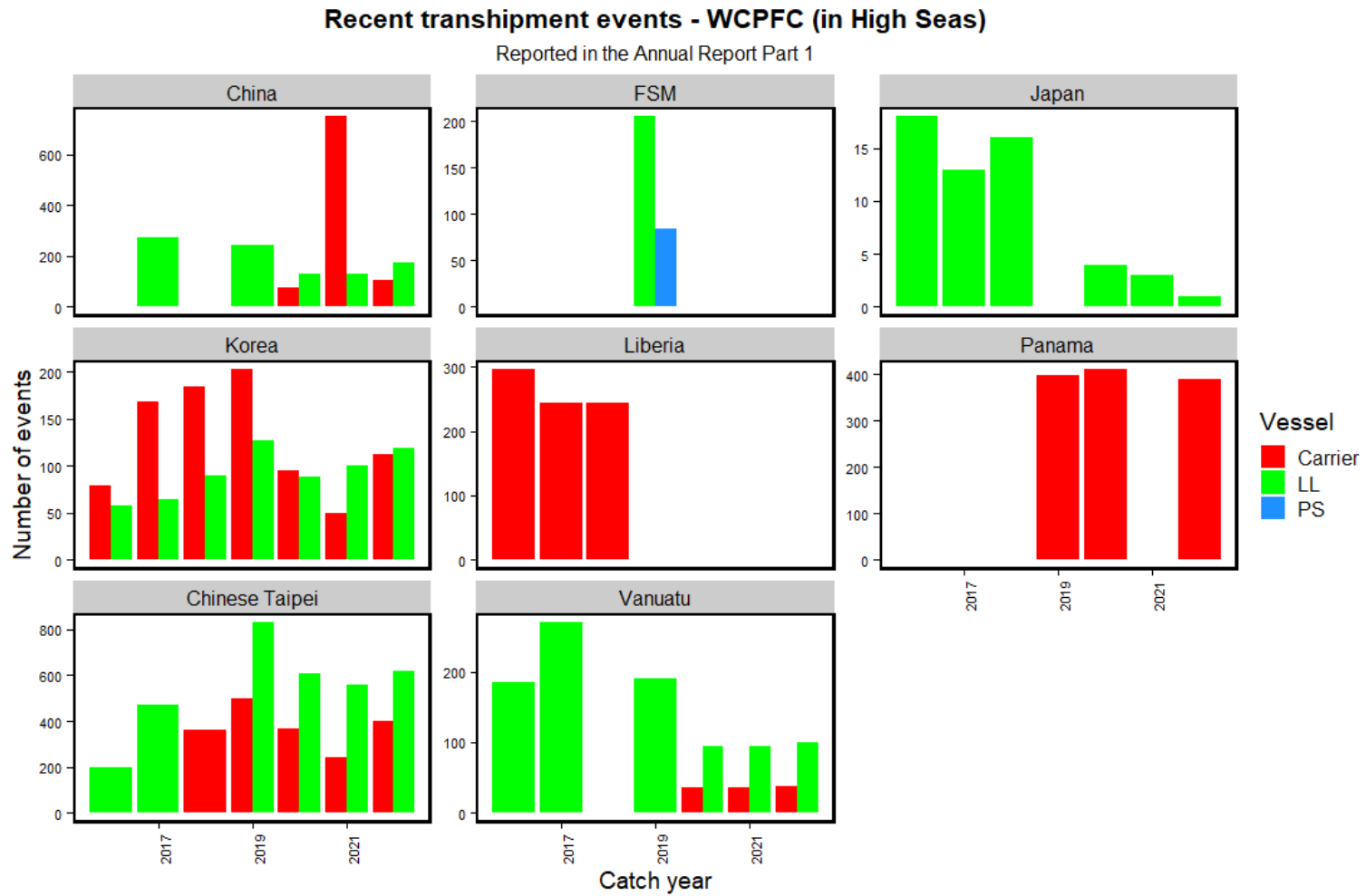
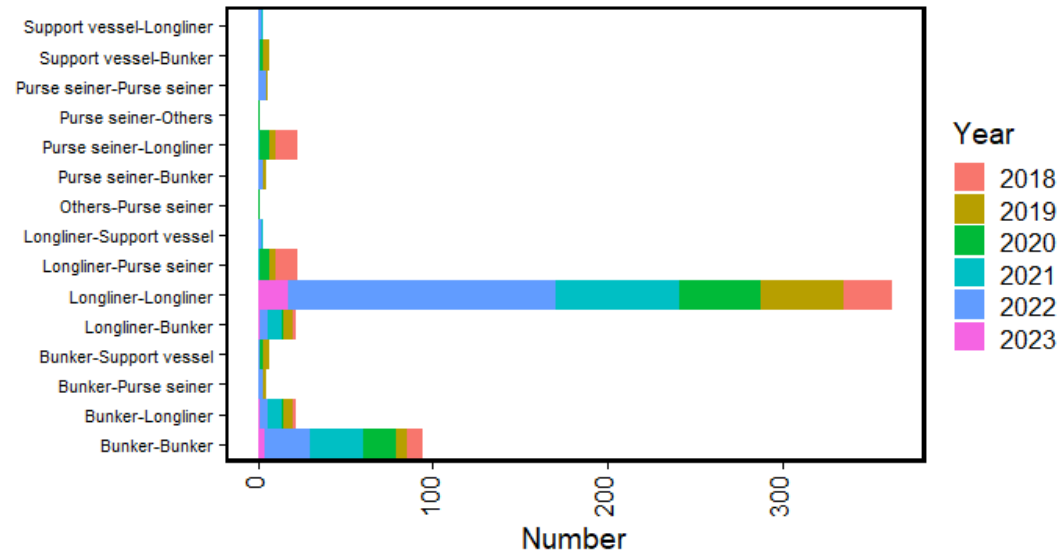


Figure 32: Volumes transshipment in in the high seas by vessel type reported in the WCPFC Annual Report Part 1.

Potential transshipment events



Category	Vessel 1	Vessel 2	2018	2019	2020	2021	2022	2023
No Record / No Past Link - Fish Carrier - BUNKER			3	3	1	4	1	
No Record / No Past Link - Fish Carrier - FISH CARRIER			2	1	1			
No Record / No Past Link - Fish Carrier - Longliner							1	1
No Record / No Past Transshipment Link / Never Received Fish	Bunker	Bunker	9	6	19	30	26	4
		Longliner	2	5	1	8	5	1
		Purse seiner		2			3	
		Support vessel		4	2		1	
	Longliner	Bunker	2	5	1	8	5	1
		Longliner	28	47	47	71	153	17
		Purse seiner	13	3	6	1		
		Support vessel				1	2	
	Others	Purse seiner			1			
		Bunker		2				3
Purse seiner	Longliner	13	3	6	1			
	Others			1				
	Purse seiner		1			5		
Support vessel	Bunker		4	2			1	
	Longliner				1	2		
Past Transshipment Link			9	9	1	6	17	8
Grand Total			66	81	79	121	214	31

Figure 33: Potential transshipments between 2018-2023 by vessel category. Note that the number of records is doubled as there are two vessels in any one identified transshipment.

Compliance monitoring report outcome - TSHIP

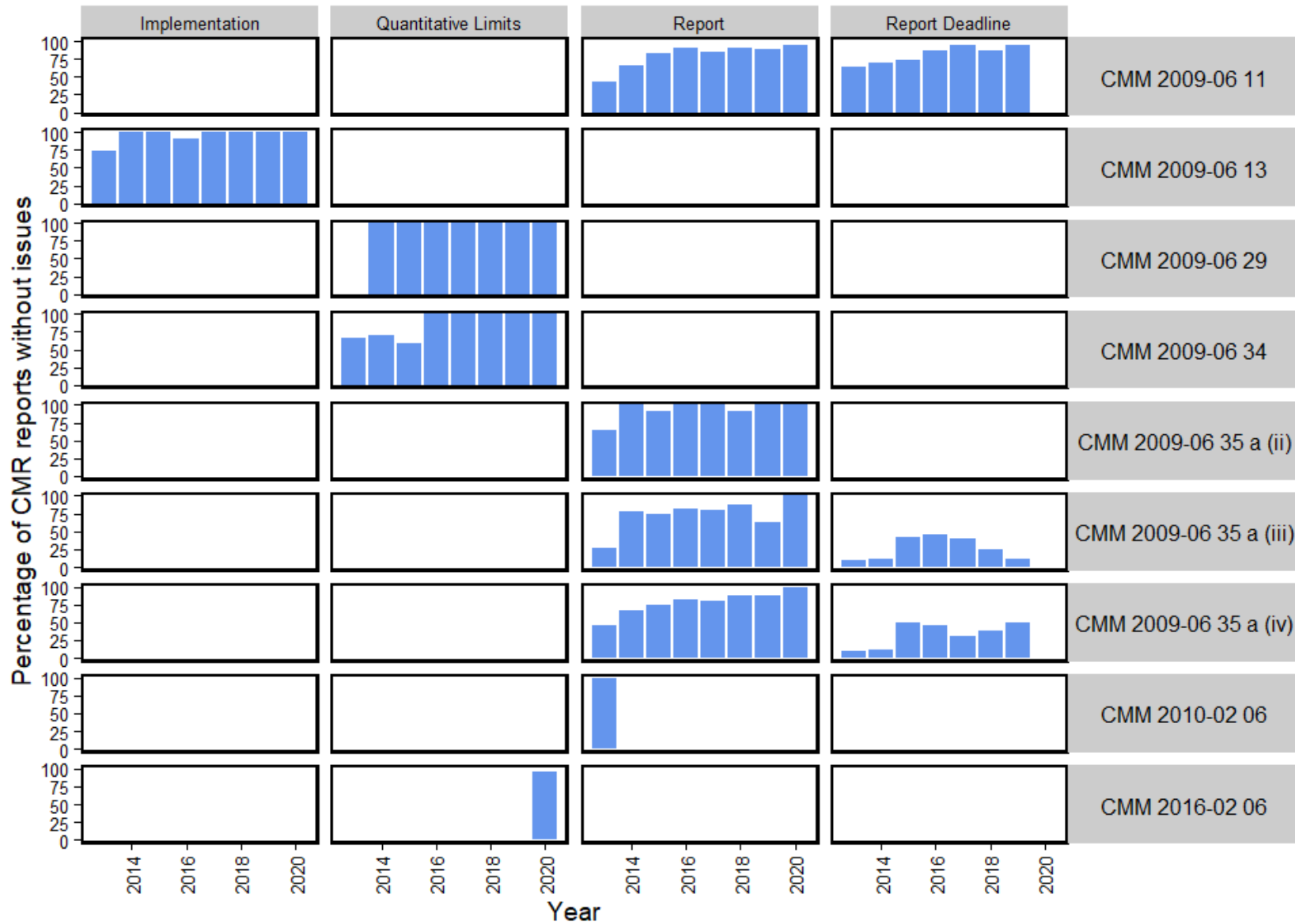


Figure 34: Summary of final WCPFC Compliance Monitoring Report Outcomes for Transshipment (2014 - 2021. RY2021 data included in 2023 once final decisions on the CMR are made at WCPFC20).

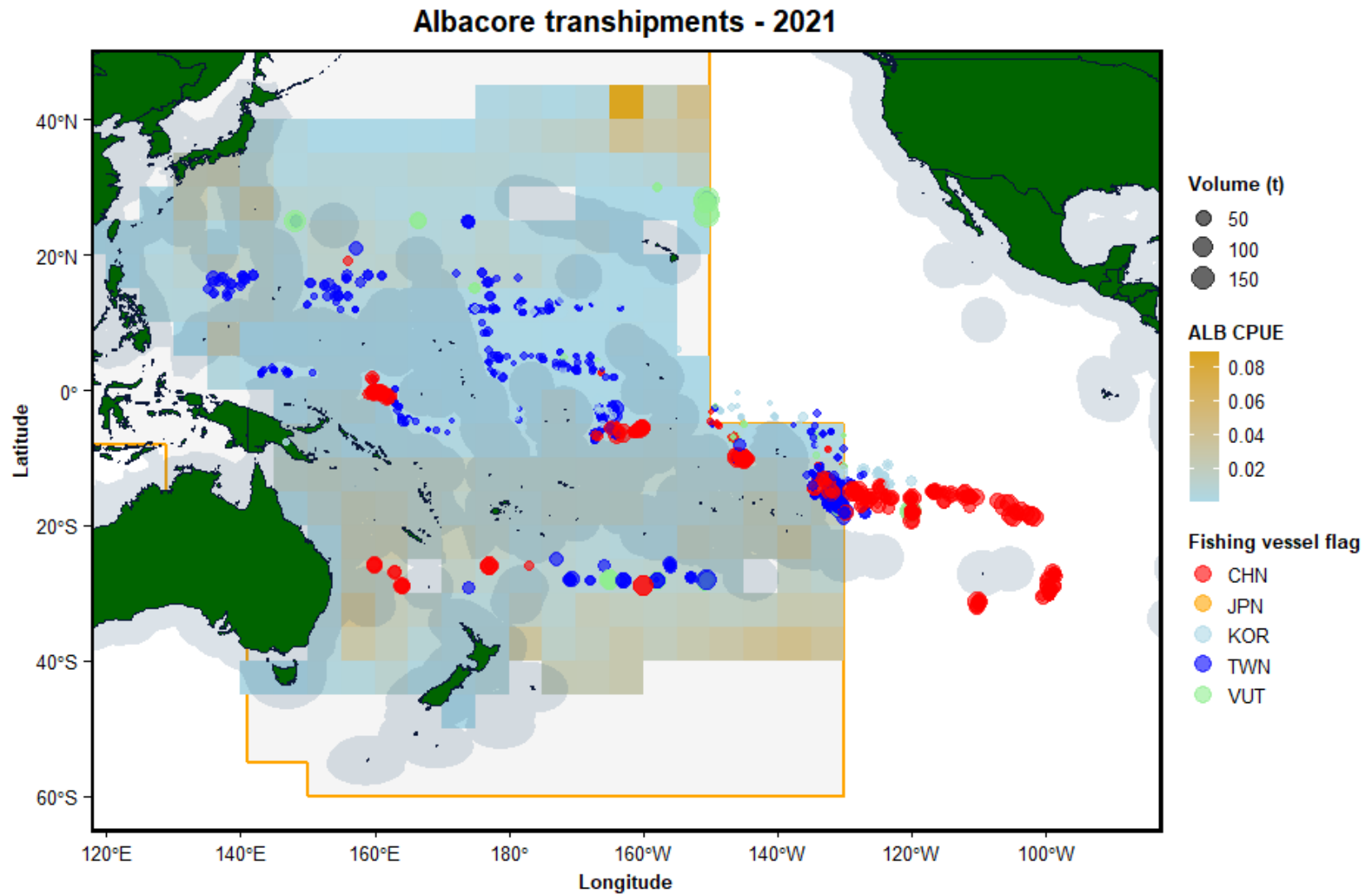


Figure 35: Catch per unit effort (CPUE) of albacore tuna at a 5° x 5° scale for longline fishing (represented by squares) and albacore tuna transhipments by flag in 2021.

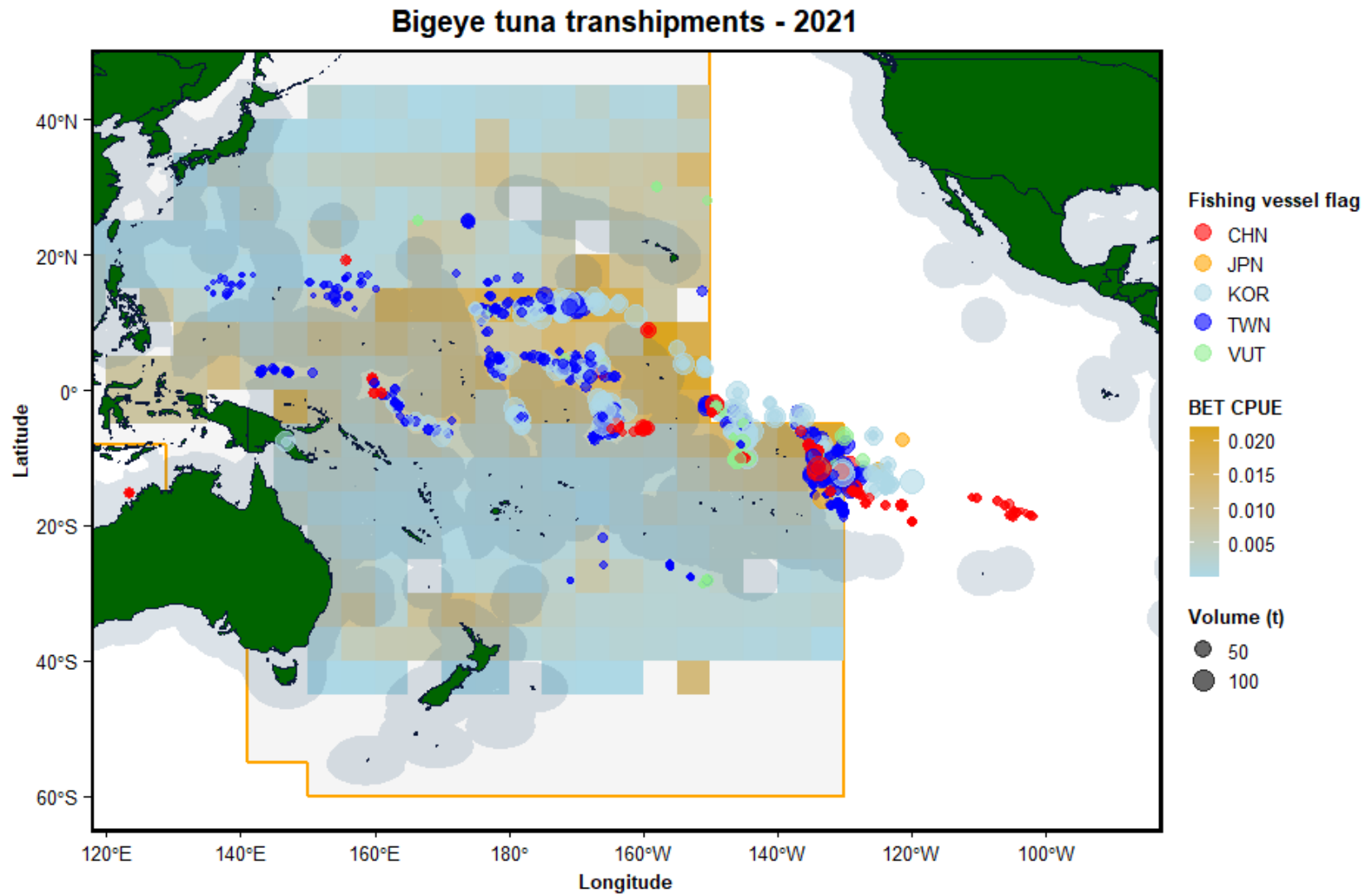


Figure 36: Catch per unit effort (CPUE) of bigeye tuna at a 5° x 5° scale for longline fishing (represented by squares) and bigeye transshipments tuna by flag in 2021.

Yellowfin tuna transhipments - 2021

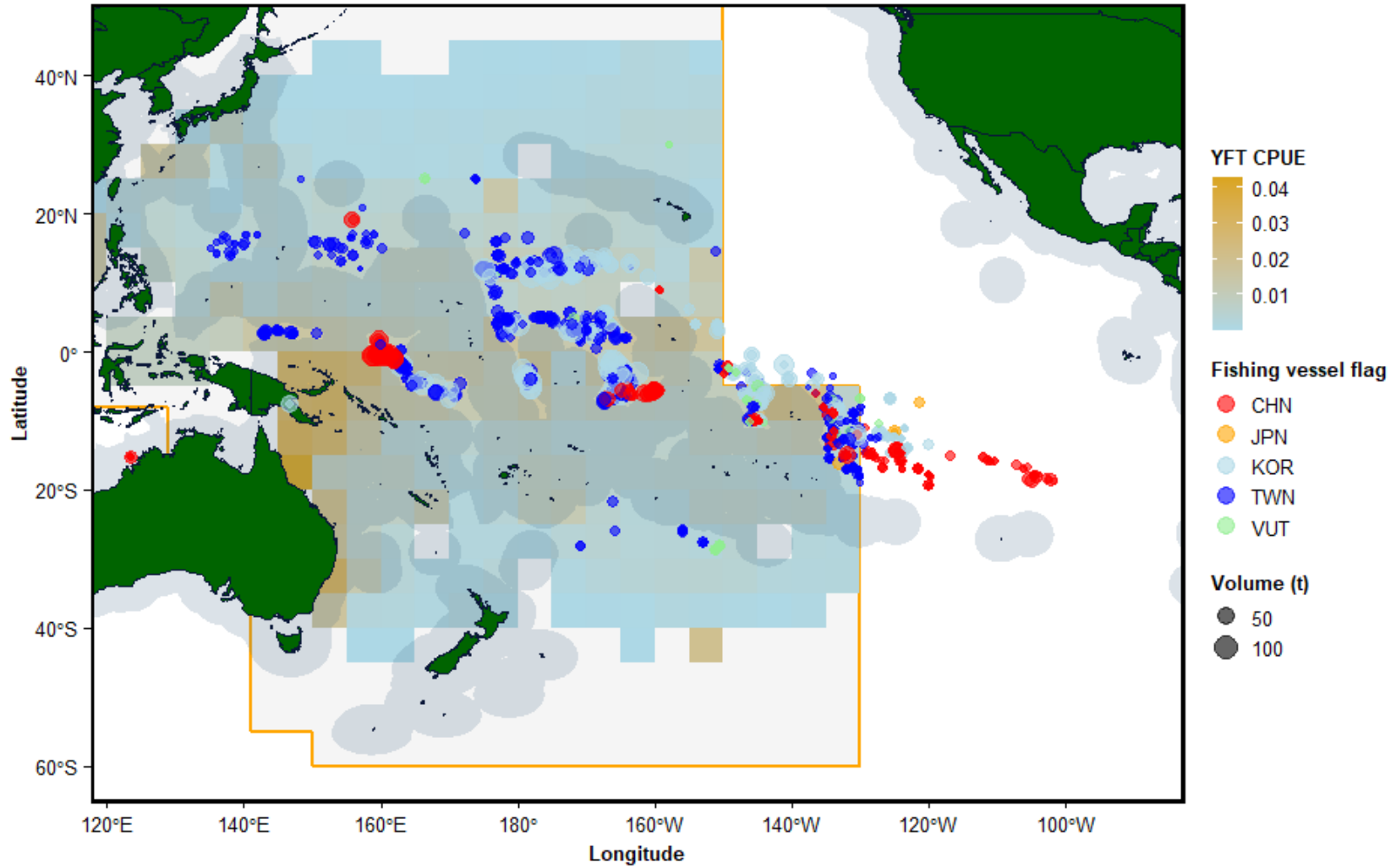


Figure 37: Catch per unit effort (CPUE) of yellowfin tuna at a 5° x 5° scale for longline fishing (represented by squares) and yellowfin tuna transhipments by flag in 2021.

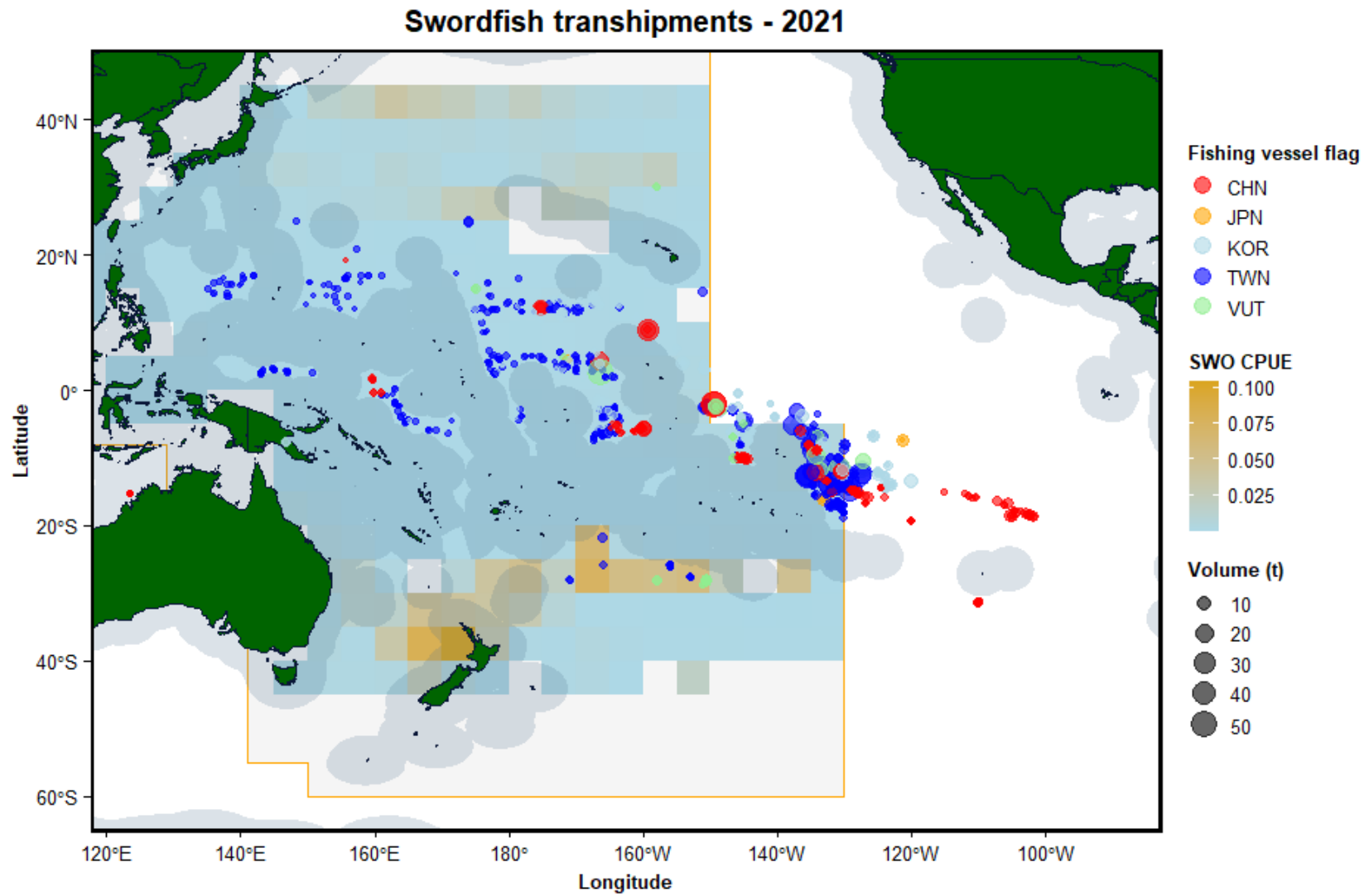


Figure 38: Catch per unit effort (CPUE) of swordfish at a 5° x 5° scale for longline fishing (represented by squares) and swordfish transshipments by flag in 2021.

Annex I

Table Annex I - 1: Summary of CCMs responses in Annual Report Part 2 covering 2022 activities

CMM	CMM implemented	Summary from AR Pt2
CMM 2009-06 11 (Annual report on all transshipment activities covered by this Measure (including transshipment activities in ports or EEZs) in accordance with the specified guidelines (Annex II))	21 Yes	Refer to Annual Report Part 1 for information on transshipments carried out/ transshipments occurred in port or designated area
	17 N/A	No flagged vessels/No flagged vessels fished in 2020/Had flagged vessels in 2020 but none were authorised or did tranship in high seas in 2020.
CMM 2009-06 13 (CCM shall ensure that vessels they are responsible for carry observers from the WCPFC ROP to observe transshipments at sea)	20 Yes	Implemented through national legislation/regulation/license terms and conditions / No flagged vessels transhipped in 2020/100% observer coverage
	18 N/A	No flagged vessels/No flagged vessels fished in 2020/Had flagged vessels in 2019 but none were authorised or did tranship in high seas in 2020.
CMM 2009-06 29 (only authorise those purse seine vessels that that have received an exemption by the Commission to engage in transshipment outside of port. Where applicable, flag CCM authorisation should be vessel-specific and address any specific conditions identified by the Commission.	9 Yes	Implemented through national legislation/regulation/license terms and conditions / All transshipments happened in port except those approved for at sea during the COVID-19 period / Do not permit transshipment for purse seine
	28 N/A	No flagged purse seiners fished in 2020 / Had flagged purse seine vessels in 2020 but none granted an exemption to tranship out of port.
	1 NO	
CMM 2009-06 34 & 35 a. (ii) (Ban on high seas transshipment, unless a CCM has determined impracticability in accordance with para 37 guidelines and has advised the Commission of such.)	13 Yes	Have notified the Secretariat that it is impracticable for flagged longliners to operate without being able to tranship on the high seas; Vessels authorised to tranship in the high seas is indicated in the RFV One CCM provided a detailed response on the basis for their determination of impracticability
	27 N/A	No flagged vessels in 2020/No flagged vessels fished in 2020/Had flagged vessels in 2020 but none were authorised or did tranship in high seas in 2020
	1 NO	
CMM 2009-06 35 a(iii) & a (iv) (reporting prior to high seas transshipment and declaration after transshipment event)	10 Yes	Required reports submitted to the Secretariat or activities were not allowed/CCM does not allow high seas transshipment/No transshipment activities occurred/Regulated under national legislation
	28 N/A	No flagged vessels/No flagged vessels fished in 2020/Had flagged vessels in 2020 but none were authorised to, or did, tranship in high seas in 2020
	1 NO	

Table Annex I - 2: Summary of CCMs COVID-19 responses in Annual Report Part 2 covering 2022 activities

Summary of CCMs responses in Annual Report Part 2 covering 2020 activities (No COVID-19 related reporting was required in 2021)		
<p>COVID-19 B. 01 (1) and 01 (2) (commencing 20 April 2020, suspend obligation to prohibit transshipment at sea by purse seine vessels and clarify that vessels are still expected to follow Port State requirements and other WCPFC requirements for monitoring and verification)</p>	15 Yes	<p>Fully implemented Prohibited from transshipment at sea by licensing condition or other form of legal mechanism Additional MCS measures eg electronic clearing of online with all port control requirements/ conducted verification of catch and effort and logbooks and VMS data; Temporary measures for transshipment within a designated area of national jurisdiction/within archipelagic waters Observers deployed and health protocols followed Port state monitoring of transshipments/seeking members to ratify port state measures agreement for efficient port related operations</p>
	22 N/A	<p>No purse seine vessels or no purse seine activity in 2020 Vessels not authorised or permitted to tranship</p>
<p>COVID-19 B. 02 (3) (notification requirements for purse seine vessels authorised to tranship at sea under the COVID-19 decision)</p>	14 Yes	<p>Fully implemented/implemented through specific legal mechanism stated in member responses Approved vessels to temporarily suspend obligation/notified vessels authorised for at-sea transshipment</p>
	24 N/A	<p>No purse seine vessels or no purse seine activity in 2020 Vessels not authorised to tranship</p>
<p>COVID-19 B. 02 (encouragement to implement additional MCS measures and follow-up applicable transshipments through inspection or observation or electronic monitoring during the period that the prohibition on at-sea transshipments by purse seine vessels was suspended)</p>	12 Yes	<p>Not permitted to tranship outside port IATTC observers on board/continued to deploy own observers Implemented through specific legal mechanism stated in member responses/physical monitoring suspended Electronic clearing within specific area of territorial sea Monitor through VMS, logbook data, transshipment reports, landing data, catch and effort and logbook</p>
	25 N/A	<p>No purse seine vessels or no purse seine activity in 2020 Vessels not authorised to tranship</p>

Annex II

Table Annex II - 1: Number of Transshipment Events Reported by CCMs during 2016 - 5 Sep 2022 by Offloading Vessels.

Reporting CMM	2016	2017	2018	2019	2020	2021	2022
CHN	343	282	355	336	283	232	171
COK	1	0	0	0	0	0	0
JPN	29	28	38	5	4	7	0
KOR	87	90	115	127	111	120	114
PAN	0	0	0	0	0	0	1
TWN	306	534	800	873	667	572	443
VUT	254	174	140	128	95	76	51

Table Annex II - 2: Number of Transshipment Events Reported by CCMs during 2016 - 5 Sep 2022 by Receiving Vessels.

Reporting CMM	2016	2017	2018	2019	2020	2021	2022
CHN	0	29	93	153	154	106	118
JPN	0	1	0	0	0	1	0
KOR	102	202	231	203	123	86	105
LBR	239	253	144	156	41	0	0
PAN	275	284	532	407	411	557	291
TWN	113	204	360	511	395	242	265
VUT	291	135	88	39	36	15	1

Annex III

Table Annex III - 1: A. Reported quantities (kgs) of high seas transshipments of highly migratory fish stocks by species by month by year, based on reports received by WCPFC Secretariat from 2019 - 2020 under CMM 2009-06 para 35 a iv), including events reported to WCPFC that took place in IATTC area.

Year/Month	ALB	BET	YFT	SWO	Other	Total
Total - 2019	25,106	23,474	15,726	2,962	11,891	79,157
01	1,368	1,965	721	385	1,129	5,567
02	2,427	1,490	847	164	864	5,792
03	714	2,902	1,173	152	762	5,703
04	416	2,346	1,303	621	995	5,681
05	1,984	2,403	1,480	252	882	7,001
06	2,846	1,008	1,408	149	826	6,237
07	1,496	1,198	953	116	570	4,333
08	3,848	3,236	2,877	166	937	11,064
09	2,911	1,643	1,333	92	549	6,528
10	3,194	2,024	1,790	333	2,077	9,418
11	2,611	1,483	1,046	242	1,368	6,749
12	1,291	1,776	795	290	932	5,084
Total - 2020	25,043	19,016	12,362	2,484	10,742	69,648
01	2,086	1,955	1,145	205	1,095	6,486
02	1,996	1,689	941	172	1,312	6,111
03	1,641	2,721	1,237	640	991	7,231
04	421	1,867	1,170	107	965	4,530
05	777	1,966	1,476	154	501	4,873
06	3,071	871	807	60	456	5,265
07	3,764	1,558	1,352	64	708	7,446
08	3,249	235	602	29	1,302	5,416
09	2,063	2,436	1,291	514	798	7,101
10	2,154	1,538	900	227	632	5,452
11	2,899	302	483	63	1,153	4,901
12	922	1,878	958	249	829	4,836
Grand Total	50,149	42,490	28,088	5,446	22,633	148,805

Table Annex III - 2: A. Reported quantities (kgs) of high seas transshipments of highly migratory fish stocks by species by month by year, based on reports received by WCPFC Secretariat from 2021 - August 2022 under CMM 2009-06 para 35 a iv), including events reported to WCPFC that took place in IATTC area.

Year/Month	ALB	BET	YFT	SWO	Other	Total
Total - 2021	18,314	17,016	14,133	2,184	7,334	58,983
01	3,302	1,450	433	451	790	6,426
02	1,504	1,989	1,619	262	634	6,008
03	1,431	1,073	811	101	472	3,888
04	624	412	696	28	370	2,131
05	1,644	1,763	1,271	313	801	5,793
06	655	1,798	1,350	92	430	4,325
07	1,899	956	1,553	113	423	4,944
08	1,720	807	1,462	39	413	4,441
09	1,710	1,900	1,771	110	971	6,463
10	2,269	1,190	1,489	70	833	5,851
11	559	1,774	681	114	354	3,481
12	997	1,904	997	491	843	5,232
Total - 2022	16,652	20,217	15,583	3,023	6,591	62,064
01	1,187	1,550	1,259	205	618	4,819
02	865	2,908	1,441	622	663	6,498
03	401	2,638	1,198	290	630	5,158
04	1,004	1,552	601	200	290	3,647
05	1,723	2,045	1,532	431	792	6,523
06	1,976	1,331	1,689	129	407	5,531
07	2,445	1,417	1,348	189	455	5,853
08	1,810	2,186	2,785	113	449	7,343
09	664	474	672	47	214	2,072
10	2,229	1,278	1,348	164	584	5,602
11	1,137	1,334	922	313	884	4,590
12	1,211	1,504	788	320	605	4,428
Grand Total	34,966	37,233	29,716	5,207	13,925	121,047

Annex IV

Table Annex IV - 1: Summary of CCM reporting of 2022 on the number of annual transhipments events as reported in Annual Report Part 1 2022 covering the 2021 calendar year based on reports submitted to WCPFC. Note may not include CCM replies in 2022 through feedback on the dCMR.

CCM	Vessel	Transhipments in WCPFC	Transhipments outside WCPFC	Total	WCPFC Archipelagic	WCPFC in port	WCPFC in EEZ	WCPFC High Seas	Port Outside WCPFC	Outside WCPFC
China	Carrier	107	65	172	0	0	0	107	0	65
Curacao	Carrier	0	0	0	0	0	0	0	0	0
Kiribati	Carrier	25	0	25	0	25	0	0	0	0
Korea	Carrier	634	17	651	0	521	0	113	0	17
Liberia	Carrier	0	0	0	0	0	0	0	0	0
Chinese Taipei	Carrier	507	15	522	0	104	0	403	0	15
Panama	Carrier	1,365	0	1,365	0	976	0	389	0	0
Philippines	Carrier	0	0	0	0	0	0	0	0	0
Vanuatu	Carrier	38	37	75	0	0	0	38	0	37
Australia	LL	1	0	1	0	1	0	0	0	0
China	LL	176	75	251	0	0	0	176	0	75
FSM	LL	29	0	29	0	29	0	0	0	0
Fiji	LL	12	0	12	12	0	0	0	0	0
Japan	LL	1	0	1	0	0	0	1	0	0
Kiribati	LL	54	0	54	0	54	0	0	0	0
Korea	LL	119	18	137	0	0	0	119	0	18
PNG	LL	17	0	17	0	17	0	0	0	0
Samoa	LL	41	0	41	0	41	0	0	0	0
Solomon Is	LL	99	0	99	0	99	0	0	0	0
Chinese Taipei	LL	725	42	767	0	104	0	621	0	42
Vanuatu	LL	125	0	125	0	23	2	100	0	0
European Union	LL	0	0	0	0	0	0	0	0	0
European Union	PS	0	0	0	0	0	0	0	0	0
El Salvador	PS	0	0	0	0	0	0	0	0	0
FSM	PS	47	0	47	0	47	0	0	0	0
Kiribati	PS	194	0	194	0	194	0	0	0	0
Korea	PS	213	0	213	0	188	25	0	0	0
Nauru	PS	129	0	129	0	129	0	0	0	0
New Zealand	PS	0	0	0	0	0	0	0	0	0
Philippines	PS	128	0	128	0	128	0	0	0	0
PNG	PS	332	0	332	0	332	0	0	0	0
RMI	PS	102	0	102	0	102	0	0	0	0
Solomon Is	PS	92	0	92	0	92	0	0	0	0
Chinese Taipei	PS	301	0	301	0	294	7	0	0	0
Tuvalu	PS	55	0	55	0	55	0	0	0	0

Table Annex IV - 2: Summary of CCM reporting of the quantity of fish from annual transshipments offloaded from longline vessels as reported in 2022 Annual Report Part 1 covering the 2021 calendar year based on reports submitted to WCPFC as at 12 August 2022. Note may not include CCM replies in 2022 through feedback on the dCMR.

CCM	Vessel	Species	Catch in WCPFC	Catch outside WCPFC	Total	WCPFC Archipelagic	WCPFC in port	WCPFC in EEZ	WCPFC High Seas	Port Outside WCPFC	Outside WCPFC
Australia	LL	ALB	0.00	0.000	0.00000	0.00	0.01800	0	0.000	0	0
Australia	LL	BET	0.00	0.000	0.00000	0.00	0.95000	0	0.000	0	0
Australia	LL	MLS	0.00	0.000	0.00000	0.00	0.51500	0	0.000	0	0
Australia	LL	OTH	0.00	0.000	0.00000	0.00	0.11000	0	0.000	0	0
Australia	LL	SHK	0.00	0.000	0.00000	0.00	0.00000	0	0.000	0	0
Australia	LL	SWO	0.00	0.000	0.00000	0.00	0.12000	0	0.000	0	0
Australia	LL	WAH	0.00	0.000	0.00000	0.00	0.00000	0	0.000	0	0
Australia	LL	YFT	0.00	0.000	0.00000	0.00	0.77000	0	0.000	0	0
China	LL	ALB	4,999.00	3,203.000	8,202.00000	0.00	0.00000	0	3,924.000	0	4,278
China	LL	BET	564.00	565.000	1,129.00000	0.00	0.00000	0	418.000	0	711
China	LL	BUM	2.00	2.000	4.00000	0.00	0.00000	0	2.000	0	2
China	LL	MLS	40.00	55.000	95.00000	0.00	0.00000	0	37.000	0	58
China	LL	OTH	559.00	576.000	1,135.00000	0.00	0.00000	0	582.000	0	553
China	LL	SHK	0.00	0.000	0.00000	0.00	0.00000	0	0.000	0	0
China	LL	SKJ	0.00	0.000	0.00000	0.00	0.00000	0	0.000	0	0
China	LL	SWO	90.00	117.000	207.00000	0.00	0.00000	0	61.000	0	146
China	LL	YFT	1,003.00	132.000	1,135.00000	0.00	0.00000	0	907.000	0	228
European Union	LL	ALB	0.00	0.000	21.32200	0.00	21.32200	0	0.000	0	0
European Union	LL	BET	0.00	0.000	94.46238	0.00	94.46238	0	0.000	0	0
European Union	LL	BLM	0.00	0.000	27.85120	0.00	27.85120	0	0.000	0	0
European Union	LL	BSH	0.00	0.000	5,310.27080	0.00	5,310.27080	0	0.000	0	0
European Union	LL	BUM	0.00	0.000	23.81470	0.00	23.81470	0	0.000	0	0
European Union	LL	DOL	0.00	0.000	16.71420	0.00	16.71420	0	0.000	0	0
European Union	LL	LAG	0.00	0.000	1.60515	0.00	1.60515	0	0.000	0	0
European Union	LL	LEC	0.00	0.000	82.54560	0.00	82.54560	0	0.000	0	0
European Union	LL	MLS	0.00	0.000	22.91900	0.00	22.91900	0	0.000	0	0
European Union	LL	OIL	0.00	0.000	0.33830	0.00	0.33830	0	0.000	0	0
European Union	LL	SHK	0.00	0.000	2,133.46550	0.00	2,133.46550	0	0.000	0	0
European Union	LL	SWO	0.00	0.000	32.94676	0.00	32.94676	0	0.000	0	0
European Union	LL	YFT	0.00	0.000	37.72787	0.00	37.72787	0	0.000	0	0
FSM	LL	ALB	230.00	0.000	230.00000	0.00	230.00000	0	0.000	0	0
FSM	LL	BET	585.00	0.000	585.00000	0.00	585.00000	0	0.000	0	0
FSM	LL	SKJ	30.00	0.000	30.00000	0.00	30.00000	0	0.000	0	0
FSM	LL	YFT	1,091.00	0.000	1,091.00000	0.00	1,091.00000	0	0.000	0	0
Fiji	LL	ALB	144.10	0.000	144.10000	144.10	0.00000	0	0.000	0	0
Fiji	LL	BUM	0.40	0.000	0.40000	0.40	0.00000	0	0.000	0	0
Fiji	LL	OTH	8.30	0.000	8.30000	8.30	0.00000	0	0.000	0	0
Fiji	LL	SKJ	3.07	0.000	3.07000	3.07	0.00000	0	0.000	0	0
Fiji	LL	YFT	72.48	0.000	72.48000	72.48	0.00000	0	0.000	0	0
Japan	LL	BET	0.00	0.000	34.52300	0.00	0.00000	0	0.000	0	0
Japan	LL	OTH	0.00	11.932	11.93200	0.00	0.00000	0	11.932	0	0
Japan	LL	SWO	0.00	3.544	3.54400	0.00	0.00000	0	3.544	0	0
Japan	LL	YFT	0.00	4.626	4.62600	0.00	0.00000	0	4.626	0	0

Table AIV - 2: Continued:

CCM	Vessel	Species	Catch in WCPFC	Catch outside WCPFC	Total	WCPFC Archipelagic	WCPFC in port	WCPFC in EEZ	WCPFC High Seas	Port Outside WCPFC	Outside WCPFC
Kiribati	LL	BET	260.49	0	260.490	0	260.49	0	0	0	0
Kiribati	LL	MLS	0.00	0	0.000	0	0.00	0	0	0	0
Kiribati	LL	OTH	0.00	0	0.000	0	0.00	0	0	0	0
Kiribati	LL	SKJ	0.00	0	0.000	0	0.00	0	0	0	0
Kiribati	LL	YFT	138.35	0	138.350	0	138.35	0	0	0	0
Korea	LL	ALB	0.00	0	961.984	0	0.00	0	0	0	0
Korea	LL	BET	0.00	0	8,684.345	0	0.00	0	0	0	0
Korea	LL	BUM	0.00	0	496.389	0	0.00	0	0	0	0
Korea	LL	MLS	0.00	0	59.185	0	0.00	0	0	0	0
Korea	LL	OTH	0.00	0	326.173	0	0.00	0	0	0	0
Korea	LL	SHK	0.00	0	112.000	0	0.00	0	0	0	0
Korea	LL	SKJ	0.00	0	301.271	0	0.00	0	0	0	0
Korea	LL	SWO	0.00	0	442.619	0	0.00	0	0	0	0
Korea	LL	YFT	0.00	0	6,429.214	0	0.00	0	0	0	0
PNG	LL	BET	128.00	0	128.000	0	128.00	0	0	0	0
PNG	LL	SKJ	5.00	0	5.000	0	5.00	0	0	0	0
PNG	LL	YFT	1,112.00	0	1,112.000	0	1,112.00	0	0	0	0
Solomon Is	LL	ALB	1,716.00	0	1,716.000	0	1,716.00	0	0	0	0
Solomon Is	LL	BET	478.00	0	478.000	0	478.00	0	0	0	0
Solomon Is	LL	SKJ	0.00	0	0.000	0	0.00	0	0	0	0
Solomon Is	LL	YFT	2,737.00	0	2,737.000	0	2,737.00	0	0	0	0
Chinese Taipei	LL	ALB	3,803.00	16	3,819.000	0	10.00	0	3,756	0	53
Chinese Taipei	LL	BET	7,530.00	9	7,539.000	0	596.00	0	6,056	0	887
Chinese Taipei	LL	BUM	832.00	0	832.000	0	198.00	0	602	0	32
Chinese Taipei	LL	MLS	109.00	0	109.000	0	2.00	0	87	0	20
Chinese Taipei	LL	OTH	1,342.00	1	1,343.000	0	257.00	0	965	0	121
Chinese Taipei	LL	SHK	766.00	0	766.000	0	24.00	0	681	0	61
Chinese Taipei	LL	SKJ	137.00	0	137.000	0	0.00	0	132	0	5
Chinese Taipei	LL	SWO	1,538.00	0	1,538.000	0	33.00	0	917	0	588
Chinese Taipei	LL	YFT	9,427.00	0	9,427.000	0	3,264.00	0	5,973	0	190
USA	LL	BUM	450.00	0	450.000	0	450.00	0	0	0	0
USA	LL	OTH	2.00	0	2.000	0	2.00	0	0	0	0
USA	LL	SHK	3.00	0	3.000	0	3.00	0	0	0	0
USA	LL	SKJ	133.00	0	133.000	0	133.00	0	0	0	0
USA	LL	SWO	763.00	0	763.000	0	763.00	0	0	0	0
Vanuatu	LL	ALB	0.00	0	3,639.400	0	0.00	0	0	0	0
Vanuatu	LL	BET	0.00	0	2,209.000	0	0.00	0	0	0	0
Vanuatu	LL	BSH	0.00	0	455.100	0	0.00	0	0	0	0
Vanuatu	LL	BUM	0.00	0	30.200	0	0.00	0	0	0	0
Vanuatu	LL	LAG	0.00	0	31.200	0	0.00	0	0	0	0

Table Annex IV - 3: Summary of CCM reporting of the quantity of fish from annual transshipments offloaded from purse seine vessels as reported in Annual Report Part 1 2022 covering the 2021 calendar year based on reports submitted to WCPFC as at August 2022. Note may not include CCM replies in 2022 through feedback on the dCMR.

CCM	Vessel	Species	Catch in WCPFC	Catch outside WCPFC	Total	WCPFC Archipelagic	WCPFC in port	WCPFC in EEZ	WCPFC High Seas	Port Outside WCPFC	Outside WCPFC
China	PS	BET	0.00	0	0.000	0	0.000	0	0	0	0
China	PS	SKJ	0.00	0	0.000	0	0.000	0	0	0	0
China	PS	YFT	0.00	0	0.000	0	0.000	0	0	0	0
El Salvador	PS	BET	0.00	0	0.000	0	0.000	0	0	0	0
El Salvador	PS	SKJ	0.00	0	0.000	0	0.000	0	0	0	0
El Salvador	PS	YFT	0.00	0	0.000	0	0.000	0	0	0	0
European Union	PS	BET	0.00	0	311.905	0	311.905	0	0	0	0
European Union	PS	SKJ	0.00	0	8,190.707	0	8,190.707	0	0	0	0
European Union	PS	YFT	0.00	0	1,073.134	0	1,073.134	0	0	0	0
FSM	PS	BET	407.00	0	407.000	0	407.000	0	0	0	0
FSM	PS	SKJ	23,893.00	0	23,893.000	0	23,893.000	0	0	0	0
FSM	PS	YFT	4,136.00	0	4,136.000	0	4,136.000	0	0	0	0
Kiribati	PS	BET	2,854.36	0	2,854.360	0	2,854.360	0	0	0	0
Kiribati	PS	OTH	35.15	0	35.150	0	35.150	0	0	0	0
Kiribati	PS	SKJ	217,792.00	0	217,792.000	0	217,792.000	0	0	0	0
Kiribati	PS	YFT	13,530.68	0	13,530.680	0	13,530.680	0	0	0	0
Korea	PS	ALB	0.00	0	0.000	0	0.000	0	0	0	0
Korea	PS	BET	0.00	0	1,624.000	0	0.000	0	0	0	0
Korea	PS	BUM	0.00	0	0.000	0	0.000	0	0	0	0
Korea	PS	MLS	0.00	0	0.000	0	0.000	0	0	0	0
Korea	PS	SKJ	0.00	0	181.972	0	0.000	0	0	0	0
Korea	PS	SWO	0.00	0	0.000	0	0.000	0	0	0	0
Korea	PS	YFT	0.00	0	6,192.400	0	0.000	0	0	0	0
Nauru	PS	BET	2,373.00	0	2,373.000	0	2,373.000	0	0	0	0
Nauru	PS	SKJ	107,485.00	0	107,485.000	0	107,485.000	0	0	0	0
Nauru	PS	YFT	8,815.00	0	8,815.000	0	8,815.000	0	0	0	0
New Zealand	PS	BET	0.00	0	0.000	0	0.000	0	0	0	0
New Zealand	PS	SKJ	0.00	0	0.000	0	0.000	0	0	0	0
New Zealand	PS	YFT	0.00	0	0.000	0	0.000	0	0	0	0
PNG	PS	ALB	0.00	0	0.000	0	0.000	0	0	0	0
PNG	PS	BET	798.00	0	798.000	0	798.000	0	0	0	0
PNG	PS	SKJ	102,524.00	0	102,524.000	0	102,524.000	0	0	0	0
PNG	PS	YFT	51,987.00	0	51,987.000	0	51,987.000	0	0	0	0
Philippines	PS	ALB	0.00	0	0.000	0	0.000	0	0	0	0
Philippines	PS	BET	335.61	0	335.610	0	335.610	0	0	0	0
Philippines	PS	OTH	1.50	0	1.500	0	1.500	0	0	0	0
Philippines	PS	SKJ	40,043.58	0	40,043.580	0	40,043.580	0	0	0	0
Philippines	PS	YFT	20,193.33	0	20,193.330	0	20,193.330	0	0	0	0
RMI	PS	BET	421.00	0	421.000	0	421.000	0	0	0	0
RMI	PS	OTH	7,050.00	0	7,050.000	0	7,050.000	0	0	0	0
RMI	PS	SKJ	79,541.00	0	79,541.000	0	79,541.000	0	0	0	0
RMI	PS	YFT	4,011.00	0	4,011.000	0	4,011.000	0	0	0	0
Solomon Is	PS	BET	429.00	0	429.000	0	429.000	0	0	0	0
Solomon Is	PS	SKJ	26,314.00	0	26,314.000	0	26,314.000	0	0	0	0
Solomon Is	PS	YFT	9,335.00	0	9,335.000	0	9,335.000	0	0	0	0
Chinese Taipei	PS	BET	3,878.00	0	3,878.000	0	3,878.000	0	0	0	0
Chinese Taipei	PS	SKJ	185,236.00	0	185,236.000	0	179,679.000	5,539	0	0	0
Chinese Taipei	PS	YFT	25,236.00	0	25,236.000	0	25,001.000	235	0	0	0
Tuvalu	PS	BET	394.00	0	394.000	0	394.000	0	0	0	0
Tuvalu	PS	SKJ	39,589.00	0	39,589.000	0	39,589.000	0	0	0	0
Tuvalu	PS	YFT	5,339.00	0	5,339.000	0	5,339.000	0	0	0	0
USA	PS	BET	8,457.00	0	8,457.000	0	8,457.000	0	0	0	0
USA	PS	SKJ	42,793.00	0	42,793.000	0	42,793.000	0	0	0	0
USA	PS	YFT	4,449.00	0	4,449.000	0	4,449.000	0	0	0	0

Table Annex IV - 4: The transshipment volumes by species reported in the Annual Report Part 1 (APR1) for each CCM reporting transshipments in 2022 and the volumes (t) reported to the Commission as fishing vessel declarations. Note the values reported in the ARP1 could include catch from outside the WCPFC-CA.

CCM	Species	Annual report part 1	WCPFC database
China	ALB	17,028	10,852
China	BET	2,379	2,849
China	YFT	2,494	2,474
China	BIL	534	815
China	OTH	2,450	1,668
Chinese Taipei	ALB	5,815	3,774
Chinese Taipei	BET	13,808	6,915
Chinese Taipei	SKJ	185,472	134
Chinese Taipei	YFT	42,120	6,158
Chinese Taipei	BIL	4,083	2,243
Chinese Taipei	SHK	1,326	712
Chinese Taipei	OTH	2,382	1,039
European Union	ALB	21	0
European Union	BET	406	0
European Union	SKJ	8,191	0
European Union	YFT	1,111	0
European Union	BIL	108	0
European Union	SHK	7,443	0
European Union	OTH	102	0
European Union		39	0
Federated States of Micronesia	ALB	230	0
Federated States of Micronesia	BET	992	0
Federated States of Micronesia	SKJ	23,923	0
Federated States of Micronesia	YFT	5,227	0
Fiji	ALB	144	0
Fiji	SKJ	3	0
Fiji	YFT	72	0
Fiji	BIL	0	0
Fiji	OTH	8	0
Japan	ALB	0	3
Japan	BET	35	35
Japan	YFT	5	5
Japan	BIL	4	5
Japan	OTH	12	7
Kiribati	BET	5,621	0
Kiribati	SKJ	291,567	0
Kiribati	YFT	20,166	0
Kiribati	OTH	35	0
Korea (Republic of)	ALB	1,503	975
Korea (Republic of)	BET	19,406	8,569
Korea (Republic of)	SKJ	27,971	329
Korea (Republic of)	YFT	50,934	6,477
Korea (Republic of)	BIL 58	2,235	1,049
Korea (Republic of)	SHK	112	0
Korea (Republic of)	OTH	775	464

Table AIV - 5: Continued:

CCM	Species	Annual report part 1	WCPFC database
Marshall Islands	BET	421	0
Marshall Islands	SKJ	79,541	0
Marshall Islands	YFT	4,011	0
Marshall Islands	OTH	7,050	0
Nauru	BET	2,373	0
Nauru	SKJ	107,485	0
Nauru	YFT	8,815	0
Panama	ALB	264,059	0
Panama	BET	14,830,362	0
Panama	SKJ	587,943,348	0
Panama	YFT	84,710,586	0
Panama	BIL	84,726,889	0
Panama	OTH	26,941	0
Papua New Guinea	BET	926	0
Papua New Guinea	SKJ	102,529	0
Papua New Guinea	YFT	53,099	0
Philippines	BET	9,108	0
Philippines	SKJ	89,229	0
Philippines	YFT	37,537	0
Philippines	OTH	2	0
Solomon Islands	ALB	1,716	0
Solomon Islands	BET	907	0
Solomon Islands	SKJ	26,314	0
Solomon Islands	YFT	12,072	0
Tuvalu	BET	394	0
Tuvalu	SKJ	39,589	0
Tuvalu	YFT	5,339	0
United States of America	BET	8,457	0
United States of America	SKJ	42,926	0
United States of America	YFT	4,449	0
United States of America	BIL	1,213	0
United States of America	SHK	3	0
United States of America	OTH	2	0
Vanuatu	ALB	3,639	1,049
Vanuatu	BET	2,209	1,849
Vanuatu	SKJ	13,729	9
Vanuatu	YFT	2,196	468
Vanuatu	BIL	1,364	648
Vanuatu	SHK	529	209
Vanuatu	OTH	426	279