2025 Quality Assurance Review (QAR) of Indonesia's At-Sea Transhipment Activities

Prepared for the Commission for the Conservation of Southern Bluefin Tuna

August 2025

About MRAG Asia Pacific

MRAG Asia Pacific is an independent fisheries and aquatic resource consulting company dedicated to the sustainable use of natural resources through sound, integrated management practices and policies. We are part of the global MRAG group with sister companies in Europe, North America and the Asia Pacific.

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Author's note:

Indonesia's arrangements to manage compliance with its CCSBT Transhipment Resolution obligations are complex, with multiple agencies and stakeholders involved. Much of the information to support the QAR was generated through discussions with MMAF and other stakeholders during the site visit to Indonesia in April, 2025. While participants gave their time generously, discussions were held across both English and Indonesian with frequent translation required on detailed technical matters. A draft of the QAR Report was provided to Indonesia to allow for the correction of any minor technical misunderstandings prior to finalisation, however no comments were provided. On that basis, we can't guarantee that some minor technical misunderstandings don't persist.

CONTENTS

EXECUTIVE SUMMARY

In 2023, the 30th Meeting of the Commission for the Conservation of Southern Bluefin Tuna (CCSBT) Extended Commission (EC) adopted a revised, strengthened Transhipment Resolution ('the Resolution'). The Resolution included provision for a trial allowing Indonesia to meet the requirement to ensure all carrier vessels (CVs) transhipping SBT at sea have on board a CCSBT Regional Observer Program (ROP) observer on specified wooden carrier vessels by using its own national observers. As a condition of the trial, the EC agreed that "*A Quality Assurance Review (QAR), whose aim will be to provide an independent assessment of the performance of the trial, will be conducted in 2025 and presented to CC 20*".

In that context, the CCSBT Secretariat contracted MRAG Asia Pacific to undertake the QAR. Broadly, the objectives of the QAR were to "*review the suitability of the Indonesia's systems and processes for ensuring compliance with CCSBT's Transhipment Resolution, in particular the two-year trial at-sea transhipment programme using its own national transhipment observers as described in paragraphs 13 – 16 of the Resolution*" and *"inform the Compliance Committee's assessment of whether Indonesia's systems and processes for at-sea transhipment using wooden vessels and national observers provides the same level of confidence and transparency as the processes required for other at-sea transhipment activities under the CCSBT resolution"*.

The QAR was undertaken in two phases: (i) the first phase primarily involved a desktop review of available information to support a preliminary assessment of the performance of Indonesia's systems and processes against the requirements of the Resolution; (ii) the second phase focused on reviewing the operation of Indonesia's systems and processes in practice. This was done through a site visit to Indonesia from 21st to 25th April, 2025.

To structure the review, a checklist was prepared capturing the relevant obligations from the Resolution and the associated Minimum Performance Requirements (MPRs) in the Compliance Policy Guidelines (CPG1). An assessment of compliance was ultimately made against 22 clauses (or groups of related clauses) in the Resolution.

In summary, Indonesia's existing systems appear compliant against eight clauses, partially compliant with seven clauses and non-compliant with seven clauses. Clauses for which compliance was demonstrated were mainly focused on vessel registration and authorisation, VMS, observer confidentiality and cooperation from large scale tuna longline vessels (LSTLVs) and CVs involved in the trial. Clauses for which partial compliance was observed include those relating to separation of cargo, CDS validation, annual reporting and the designation and obligations of observers. Those assessed as non-compliant mainly related to timeframes for submission of relevant reports (e.g. transhipment declarations, observer deployment requests), equivalence of data collection/reporting to the IOTC Regional Observer Program (ROP) and processes for prior authorisation of at-sea transhipments.

An unusual feature of the Indonesian observer program is the process of retrospectively changing reports. Both DGCF and the CCSBT Secretariat advised that revisions regularly occur across a number of report types, including observer deployment requests, 5-day reports, transhipment declarations and observer reports. For some trips, differences between originals and revised versions of transhipment declarations and observer reports can be substantial and not easily explained. Observers interviewed advised they had no knowledge of revised observer reports being submitted.

While the QAR showed that welcome progress has been made in some areas across the course of the trial (e.g. timeliness of some reports), the overall conclusion is that substantial strengthening across core areas of Indonesian transhipment monitoring arrangements is required to serve as an effective system to independently monitor compliance with the CCSBT Transhipment Resolution. At present:

- There is little independence in the process of SBT weight estimation by observers, with observer weights being exactly the same (to the kilo) as LSTLV/CV transhipment declaration weights in 94.7% of transhipments under the trial;

- Despite monitoring compliance with the Resolution being a core function of observers, no specific training has been undertaken on CCSBT CMMs. The current generic training provided to observers was developed in 2013 before the adoption of relevant amendments to the CCSBT Transhipment Resolution and makes no reference to other important Resolutions (e.g. the CDS Resolution);
- There is no formal Observer Manual (for example, equivalent to the IOTC ROP service provider manual), nor formal data collection protocols, for the Indonesian transhipment observer trial. Accordingly, there is a lack of understanding amongst observers on the function of some forms, with important sections not completed;
- Some important working forms used by the IOTC ROP (e.g. the T4 [Transhipment Details] form and T5 [Boarding Report] form) are not completed; and
- Observers are encouraged as part of training to participate in the work of the crew, and payments for sea days are reportedly made directly to observers by CV companies.

Overall, these limitations mean that the trial Indonesian transhipment observer program has not served as a robust independent mechanism to monitor compliance with the CCSBT Transhipment Resolution, nor offered the same level of confidence and transparency as the processes required for other at-sea transhipment activities under the CCSBT Resolution.

Strengthening the overall effectiveness of the program will require measures to strengthen the independence of observers in the monitoring process, as well as strengthening the technical capacity of observers. A number of practical measures are recommended to strengthen these areas. While progress in these areas is possible, our assessment is that Indonesia will require dedicated technical support and capacity building assistance to help make the necessary improvements.

1 INTRODUCTION

In 2023, following a recommendation from the 18th Meeting of the Compliance Committee (CC), the 30th Meeting of the Commission for the Conservation of Southern Bluefin Tuna (CCSBT) Extended Commission (EC) adopted a revised, strengthened Transhipment Resolution ('the Resolution'). The Resolution included provision for a trial allowing Indonesia to meet the requirements of paragraph 26 (i.e. the requirement to ensure all carrier vessels – CVs – transhipping SBT at sea have on board a CCSBT observer, in accordance with the CCSBT Regional Observer Program – ROP) on specified wooden vessels by using its own national observers. The trial recognised the challenges involved in the existing CCSBT/Indian Ocean Tuna Commission (IOTC) ROP service provider placing observers on these vessels and was scheduled to run from 1 November, 2023 to 31 October, 2025. As a condition to agreeing to the trial, the EC agreed that "*A Quality Assurance Review (QAR), whose aim will be to provide an independent assessment of the performance of the trial, will be conducted in 2025 and presented to CC 20*".

In that context, the CCSBT Secretariat contracted MRAG Asia Pacific to undertake the QAR. Broadly, the objectives of the QAR were to:

- "*review the suitability of the Indonesia's systems and processes for ensuring compliance with CCSBT's Transhipment Resolution, in particular the two-year trial at-sea transhipment programme using its own national transhipment observers as described in paragraphs 13 – 16 of the Resolution*"; and
- *"inform the Compliance Committee's assessment of whether Indonesia's systems and processes for at-sea transhipment using wooden vessels and national observers provides the same level of confidence and transparency as the processes required for other at-sea transhipment activities under the CCSBT resolution"*.

The full Terms of Reference are set out at Annex 1.

This report sets out the results of the QAR. The report is structured into four main sections:

- Section 2 sets out the approach used for the QAR, including documents/information reviewed and stakeholders consulted;
- Section 3 provides an overview of Indonesia's existing systems and processes to support compliance with the Resolution, focusing in particular on the at-sea transhipment monitoring trial;
- Section 4 provides a summary of Indonesia's compliance with the relevant provisions of the Resolution, based on evidence collected during the QAR; and
- Section 5 provides overall conclusions and recommendations.

2 APPROACH

The QAR was undertaken in two phases:

1. The first phase primarily involved a desktop review of available information to support a preliminary assessment of the performance of Indonesia's systems and processes against the requirements of the Resolution.

   To assist in structuring information requests as well as assessing performance against the Resolution, a checklist was prepared capturing the relevant obligations from the Resolution and the associated Minimum Performance Requirements (MPRs) in the Compliance Policy Guidelines (CPG1) (as agreed in October, 2024) (Annex 2). A draft of the checklist was provided for Indonesia's review and comment early in Phase 1. While the checklist captures both the obligations in the Resolution and the associated MPRs, in practice there was not always good alignment between the two. To that end,

with the agreement of the Secretariat, greater emphasis has been placed on the obligations in the Resolution.

Information helpfully provided by MMAF to support the Phase 1 desktop review included Indonesian legal instruments (e.g. relevant laws and regulations implementing transhipment requirements), internal Ministry of Marine Affairs and Fisheries (MMAF) Standard Operating Procedures (SOPs), observer training modules, observer certifications, Memoranda of Understanding (MOUs) with CV companies and documents from trips undertaken during the trial.

Relevant information was also provided by the CCSBT Secretariat including data submitted by Indonesia under the trial, as well as the dates of submission and subsequent revisions.

At the conclusion of Phase 1, a videoconference was held between MMAF, the CCSBT Secretariat and the reviewer to agree arrangements for the Phase 2 site visit.

2. The second phase focused on reviewing the operation of Indonesia's systems and processes in practice. This was done through a site visit to Indonesia from 21st to 25th April, 2025.

   From 21st to 23rd April, the reviewer met with MMAF staff in Jakarta (Figure 1). Primarily, this involved discussions with the MMAF Directorate General of Capture Fisheries (DGCF) Observer and RFMO teams on the systems and processes used to support the Indonesian transhipment observer program, though also included helpful presentations from:

   a. the Directorate General of Marine and Fisheries Resources Surveillance (DGS) on monitoring, control and surveillance (MCS) systems used to oversee Indonesian SBT large scale tuna longline vessels (LSTLVs) and CVs involved in transhipments; and
   b. the Jakarta and Benoa (Bali) DGCF Harbour Master's (HM) Offices on port management processes used to control and monitor SBT LSTLVs and CVs.

Figure 1: Jakarta site visit meetings.

On 24th and 25th April, the reviewer then held a number of informative meetings in Benoa (Figure 2). These included:

a. a group meeting with around 15 observers, DCGF HM staff (involved in validating CCSBT CDS documents), DCGF observer team staff and DGCF research staff. This meeting discussed issues including processes used for the recruitment and training of observers, processes used for data collection and completing of CCSBT-related forms and monitoring and control activities undertaken for LSTLVs and CVs pre-departure and post-landing (including arrangements to count and weigh SBT and complete CDS documentation);
b. a meeting with the executive and members of the Asosiasi Tuna Longline Indonesia (ATLI). This meeting discussed the operation of LSTLVs and CVs involved in SBT catch/transhipment, as well as industry processes for completing CCSBT-related documentation;
c. a smaller group meeting with around 14 observers and MMAF staff to clarify the details of some observer processes; and

d. a meeting with DGS Benoa Port staff to discuss arrangements for management and review of CCTV footage taken from authorised CVs involved in SBT transhipments.

Figure 2: Benoa site visit meetings.

In addition, the reviewer was helpfully provided the opportunity to board and inspect a CCSBT-authorised CV (KM Mutiara 36) at Benoa wharf. The CV is actively involved in SBT transhipments.

A key underlying aim of the QAR was to examine whether monitoring and verification arrangements in place through the Indonesian trial are equivalent in standard to the existing IOTC/CCSBT ROP service provider. To that end, consultation was also undertaken with the existing IOTC/CCSBT ROP service provider to understand the systems and processes underpinning that program.

3 OVERVIEW OF INDONESIA'S SBT FLEET STRUCTURE AND OPERATION

The Indonesian fleet catching and transhipping SBT operates has a number of unique characteristics (relative to other CCSBT Member fleets), which provides important context in assessing compliance with the CCSBT Transhipment Resolution and associated risks involved.

As at 1 April, 2025, Indonesia had 285 LSTLVs and 20 CVs authorised on the CCSBT RAV. The 20 CVs are owned by 11 different companies. Eighteen CVs are based in Benoa, Bali, with 2 based at the Nizam Zachman fishing port in Jakarta. All vessels are of wooden construction, albeit with a fibreglass skin. All LSTLVs are authorised to tranship at sea, with 126 reporting transhipments in 2023[1].

Under Indonesian arrangements, we understand that 95% of the national SBT quota is passed on to the two main longline fishing industry associations (ATLI, based in Benoa, Bali and Astuin [Asosiasi Tuna Indonesia], based in Jakarta) to allocate amongst their members (with 5% retained as cover for artisanal catch). Of these, ATLI is the most important in the context of SBT, with 96% of Indonesia's commercial SBT quota allocation reserved for ATLI members. Allocations made by the associations are advised to DGCF and recorded. Quota

[1] https://www.ccsbt.org/system/files/2024-09/CC19_SBTFisheries_ID.pdf

allocations are typically made to companies rather than vessels. Companies receiving quota advise the names of their associated vessels to DGCF for authorisation on the CCSBT RAV.

Under the terms of their licenses, all LSTLVs and CVs must nominate a home port (or 'base port'). Vessels are only allowed to depart from, and return to, the same base port (as opposed to vessels from many other flag States, which may use multiple ports in multiple countries). The base port is important because many of the reporting requirements oblige vessels to submit information to the DGCF Harbour Master (HM) of the base port (as opposed to DCGF in Jakarta). The HM's office in the base port also plays an important role in providing clearances for port exit and entry, monitoring (and weighing) SBT landings upon CV/LSTLV return to port, as well as validating SBT CDS documents.

Authorised CVs are only permitted to tranship from Indonesian LSTLVs listed on their license. This is generally confined to vessels within their own company, or cooperating group of companies. In practice, this means that LSTLVs and CVs are well-known to each other, with operations typically coordinated by the same head office staff.

Fishers reported that SBT is typically a bycatch for Indonesian LSTLVs (albeit an important and attractive one), with most vessels generally targeting bigeye and yellowfin tuna (and to a lesser extent albacore). The majority of fishing effort is undertaken in the high seas off Australia's west coast, with some also in the southern part of Indonesia's EEZ (Figure 3). Fishing vessels smaller than 24m typically store fish fresh and fish closer to Benoa, although reportedly don't regularly tranship. Vessels larger than 24m are generally freezer vessels and fish over a wider area. Transhipments mainly occur in the high seas, but some also occur in the southern part of the EEZ.

LSTLVs may remain at sea for up to 12 months, although need to return to port at least once annually for inspection/documentation purposes (and often refit). Most trips are reportedly 6-10 months long. CVs play an essential role in the business model of LSTLVs, both for carrying fish to market as well as resupplying food, bait, spare parts and facilitating crew exchanges. Industry advised there are no transfers of fish between LSTLVs at sea.

CV trips are shorter, typically between 2 weeks and 2 months. Most CVs can reportedly hold between 180t to 240t, with capacity to tranship from 10-12 LSTLVs.

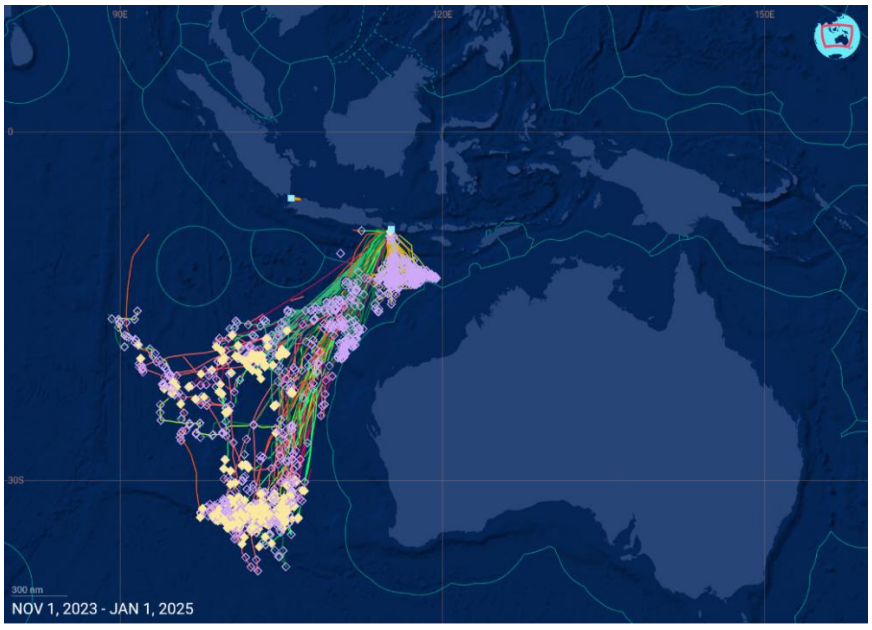


Figure 3: Automatic Identification System (AIS) tracks of CCSBT-authorised Indonesian carrier vessels, 1 November 2023 to 1 January 2025. (Source: Global Fishing Watch). Yellow diamonds are 'encounters' with other vessels; purple diamonds are 'loitering events'.

Weather permitting, transhipments are effected by vessels tying up to each other at sea with fish being craned from the LSTLV to the CV. Where weather prevents vessels tying up, fish are transferred between vessels using smaller vessels or rafts (Figure 4). In either case, fish are transferred individually (not in strings or cargo nets typically used by larger LSTLVs). The duration of the transhipment event depends on the volume of fish and other provisions to be transferred, as well as weather conditions, but typically lasts around 1-2hrs.

Figure 4: Small rafts used to transfer from LSTLVs to CVs during transhipment when vessels are unable to tie up.

Indonesian LSTLVs reportedly have freezing capability down to around -25°C, which is less than the ultra-low temperature (ULT) (<-50°C) freezing capability typically seen in most Japanese and Taiwanese high seas LSTLVs. In practice, this means that fish being transhipped exhibit less frosting than those from ULT freezers, making identification easier.

Transhipments amongst the Indonesian fleet are both more frequent and lower volume than those of other members. In the period between 1 November 2023 and 31 December 2024, the CCSBT Secretariat received transhipment declarations for a total of 628 transhipments involving transfer of SBT[2]. Of these, 575 (91.6%) were from Indonesian flagged vessels, while 53 were from other members (50 in the IOTC area and 3 in the ICCAT area). Average SBT volume per transhipment for Indonesian LSTLVs was 1,097kg versus 23,515kg for other members. Importantly, for many Indonesian LSTLVs transhipments it does not appear to be well-known in advance whether SBT will be transferred. To that end, the CCSBT Secretariat enters the details of all transhipments which totalled 1,046 across the same period (with proportionate increase in workload).

Notably, Indonesia also has an additional 110 LSTLVs and 42 handliners authorised on the IOTC RAV and not on the CCSBT RAV (as at 1 April, 2025). Interviews with both DGCF and industry indicated that these vessels are likely to fish in more northerly latitudes to the west of Indonesia or in the Indonesian EEZ (and therefore less likely to catch SBT), although the extent to which monitoring for incidental SBT catches occurs on these vessels is not known.

[2] CCSBT Secretariat data

4 OVERVIEW OF INDONESIA'S SBT TRANSHIPMENT MONITORING ARRANGEMENTS

4.1 Legal and policy framework

Under Indonesia's legal system, Laws create the enabling legal architecture, with more operational level requirements typically delivered through Ministerial Regulations or agency level Decisions.

Three current Laws set out the main legal architecture for fisheries:

- Fisheries Law 31/2004 sets out the general framework for the management and regulation of fisheries and aquaculture, establishes MMAF to oversee management and regulation, and defines the functions of the main Directorates of MMAF;
- Fisheries Law 45/2009 was the first revision of Law 31/2004, with the main changes around surveillance powers; and
- Omnibus Law 6/2023 was enacted in the wake of COVID and intended to simplify the fisheries licensing structure with the aim of job creation. The law provided for a single license application covering multiple previous requirements.

Underneath these Laws sit a relatively complex framework of Ministerial Regulations which establish more operational level requirements. For example:

- Ministerial Regulation 58/2020 regarding Capture Fisheries Businesses regulates licensing, registration of fishing and/or carrier vessel which operate in the high seas and RFMO areas;
- Ministerial Regulation 10/2021 regarding Standards for Business Activities and Products in the Implementation of Risk-Based Business License Maritime and Fisheries Sector creates the framework for 'one stop shop' licensing in the fisheries sector;
- Ministerial Regulation 33/2021 sets out requirements for fishing logbooks, monitoring on board fishing vessels and carrier vessels, inspection and marking of fishing vessels, and fishing vessel crew requirements; and
- Ministerial Regulation 28/2023 regarding Implementation of Government Regulation Number 11 of 2023 concerning Measured Fishing requires (amongst other things) that fishing vessels and carrier vessels undertaking transhipment in RFMO areas must be monitored by a regional observer (or national observer who meet RFMO standards), placed on carrier vessel.

At the agency level, Directors General are authorised to issue technical Decisions to assist in the implementation of fisheries management commitments. For example, Decision of the Director General of Capture Fisheries 08/2014 on Guidelines for Implementation of Catch Documentation Scheme Southern Bluefin Tuna sets out arrangements for the implementation of the CDS including inspections, forms, procedures for completing forms and validation processes.

Indonesia's fisheries policy environment is guided by 'blue economy' reforms, including a shift towards quota-based management arrangements and the implementation of an ecosystem approach to fisheries management[3].

[3] https://perpustakaan.bappenas.go.id/e-library/file_upload/koleksi/migrasi-data-publikasi/file/Unit_Kerja/Dir%20Industri%2C%20Ekonomi%20dan%20Kreatif/Dummy_Indonesia%20Blue%20Economy%20Roadmap_Ebook.pdf

4.2 Institutional arrangements

At the government level, Indonesia's obligations under the CCSBT Transhipment Resolution are overseen by Directorates General within the MMAF, primarily DGCF and DGS (Figure 5). Within these Directorates General:

- the Observer Team within the DGCF Directorate of Fisheries Resources Management (DFRM) oversees the coordination of RFMO observer programs including recruitment, training, development of data collection forms and protocols, briefing/debriefing and coordination on observer issues with RFMO Secretariats;
- the RFMO Team within DFRM oversees Indonesia's involvement in RFMO-managed fisheries including the coordination of reporting and management of compliance obligations;
- the Directorate of Fishing Ports within DGCF (and associated Harbour Masters) oversees operations across all of Indonesia's registered fishing ports. Of particular relevance to SBT, the HM (often referred to as the 'port authority') grants clearances for CCSBT authorised vessels to leave and enter port, receives observer deployment requests, oversees the process of counting and weighing landed SBT through enumerators and validates CCSBT CDS documents. They also review LSTLV logbooks and CV transhipment records, as well as handling port State inspections and crew Seaman's Books;
- DGS oversee MCS arrangements for CCSBT authorised vessels including monitoring through VMS and AIS, as well as undertaking port inspections.

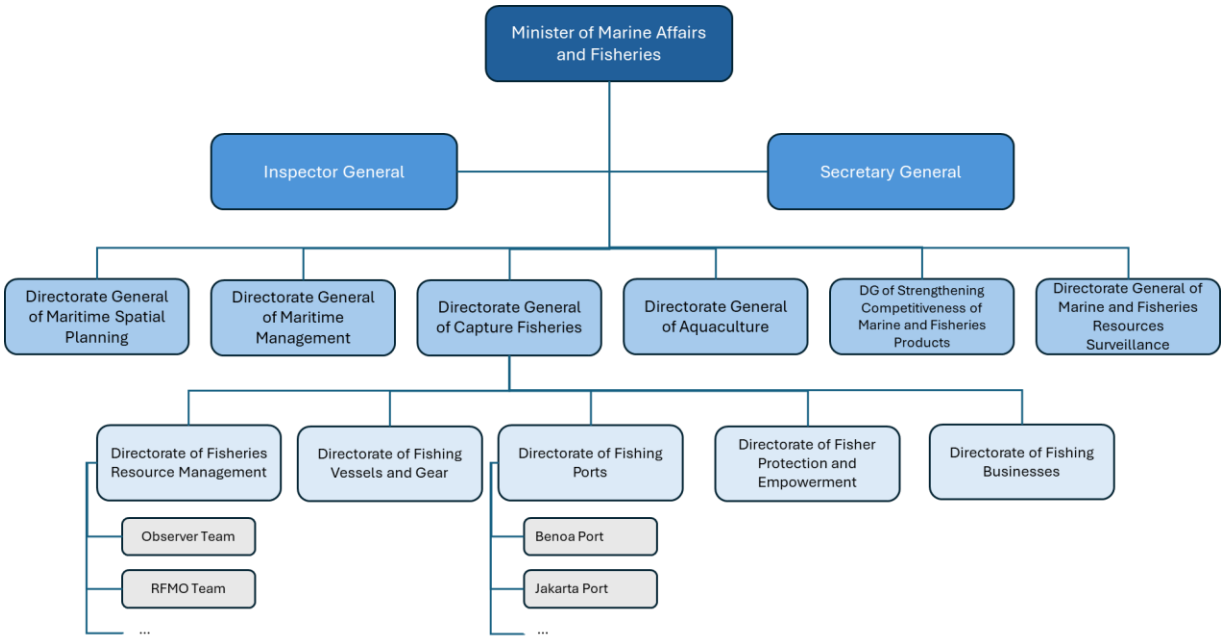


Figure 5: MMAF organisational structure.

Outside of government, tuna industry associations play an important role in allocating and managing SBT quota usage amongst their members. There are currently two associations – ATLI, based in Benoa, and Astuin (Asosiasi Tuna Indonesia), based in Jakarta. At present, ATLI members account for around 96% of Indonesia's SBT quota allocation to the commercial sector.

DGCF has a formal cooperative agreement (MOU) with each of the CV companies involved in the Indonesian IOTC/CCSBT transhipment trial setting out the roles and obligations of both parties[4].

[4] It was not clear that MOUs covering CVs Bandar Nelayan 2009, Golden Tuna 668, Mutiara 89 and Nusantara Jaya 32 had been finalized.

4.3 Operational arrangements

4.3.1 Vessel registration/authorisation

Processes for vessel registration and authorisation to fish in RFMO areas are governed by Ministerial Regulation 58/2020 regarding Capture Fisheries Businesses and Ministerial Regulation 10/2021 regarding Standards for Business Activities and Products in the Implementation of Risk-Based Business License Maritime and Fisheries Sector. The former sets out requirements for vessel licensing and registration, while the latter establishes a 'one stop shop' licensing application process.

In practice, two separate Directorates within DGCF are involved in the process of registering and authorising SBT vessels – the Directorate of Fishing Businesses issues the business license and registers the vessel; the Directorate of Fishing Vessels and Fishing Gear issues the fishing license based on the type of gear used and target species nominated. This Directorate also issues the authorisation to harvest SBT. Both LSTLVs and CVs are required to nominate a base port.

Following the vessel registration and issue of the fishing license, vessels are required to seek the approval of the base port HM before going to sea. As part of the approval process, we understand inspectors from the HM's office check compliance with fishing license conditions (gear, VMS, logbook, etc).

Authorisations to tranship are covered under Ministerial Regulation 28/2023 regarding Implementation Government Regulation Number 11 of 2023 concerning Measured Fishing. Article 85 prohibits transhipment within RFMO areas unless each vessel is listed on the relevant RFMO authorised vessel list.

4.3.2 Vessel Monitoring Systems

Under Ministerial Regulation 28/2023, VMS is mandatory for all fishing vessels licensed by the central government (Minister). In practice, this means that all fishing vessels that operate >12nm from shore must install and operate a VMS.

Indonesia's VMS system is overseen by DGS, although access is granted to other Directorates as required (e.g. DGCF). VMS registration is undertaken directly by vessel operators through the MMAF SALMON app, which also allows companies to monitor the position and polling status of their own vessels.

Both fishing vessels and carrier vessels are polled hourly.

DG Surveillance also report using other technologies (e.g. Automatic Identification System – AIS; satellite imagery – e.g. CosmoSkymed (Italy) and Radarsat-2 (Canada)) to monitor licensed vessels, with risk profiling through an 'Integrated Maritime Intelligent' platform. DGS also reportedly use an algorithm that results in an immediate fine if a CV comes together at sea with a vessel that is not a member of relevant tuna associations.

4.3.3 Observer program

4.3.3.1 Recruitment and contracting

Recruitment of observers is handled by the DGCF Observer team. Candidates are required to have some form of academic qualification, including a Bachelor's degree or Diploma III or IV in fisheries or marine biology or graduation from a vocational fisheries high school. Recent graduates are generally preferred over ex-fishers. DGCF advised that observer technical capacity remains a challenge.

DGCF advised there are 89 observers currently on the MMAF payroll, with 44 on the IOTC/CCSBT authorised list. 34 observers are reportedly based in Benoa. DGCF advise they have trained around 400 observers since 2013, with attrition rates relatively high.

Observers are contracted by MMAF effectively as full time staff. Observers receive a monthly salary plus an additional fee per day they are at sea. Monthly salaries are paid by MMAF; DGCF advised that sea day fees are paid directly to the observer by the CV company. Many of the observers at Benoa port live on site at a DGCF dormitory facility. Observers are expected to contribute to other MMAF tasks when not at sea.

4.3.3.2 Training

Training is undertaken by DGCF according to generic fisheries observer training modules prepared in 2013, with no updates since. The course consists of three modules:

1. Module 1 covers planning for monitoring on fishing vessels and carrier vessels;
2. Module 2 covers data collection, including general descriptions of different gear types, processes for checking logbooks, recording of target, bycatch and ecologically-related species (ERS), sampling rates etc;
3. Module 3 covers the collection and preservation of scientific samples.

At least some components of the course are reportedly undertaken at sea, although limited detail was available.

There is no specific training provided on CCSBT CMMs, with substantial updates made to many of the main relevant CMMs (e.g. CDS, Transhipment) after the training course was developed. Likewise, DGCF advised that no dedicated species ID training is provided, although observers are provided with a tuna and related species ID guide.

Notably, the training modules actively encourage the observer to assist with crew activities including processing and freezing of catches, 'culling' of bycatches and cleaning up fish rooms.

Certificates provided to the CCSBT Secretariat as evidence of training often appear to be focused on issue-specific things unrelated to duties and skills required as a transhipment observer (e.g. data collection for endangered, threatened and protected [ETP] species; Figure 6). Basic training certificates are not provided for some observers.

Materi Kurikulum Pelatihan Pengumpulan Data dan Penanganan ETP bagi Pemantau (*Observer*) di atas Kapal Penangkap Ikan dan Kapal Pengangkut Ikan, tanggal 27 s.d 30 November 2023

No.	Mata Diklat	Jam Pelatihan (@ 45 Menit)		
		Teori	Praktek	Jumlah
1.	Menjelaskan profil ETP dan Tata Cara Implementasi Pengumpulan Data ETP melalui Implementasi Logbook Penangkapan Ikan	1	3	4
2.	Menjelaskan Regulasi ETP	1	3	4
3.	Menjelaskan Cara Identifikasi ETP dalam Penangkapan Ikan	2	6	8
4.	Menjelaskan Tata Cara Mitigasi dan Penanganan Spesies ETP	2	6	8
	J u m l a h	**6**	**18**	**24**

Figure 6: Details of training course content provided as evidence of observer training.

4.3.3.3 Briefing

Observers are requested for upcoming trips by CV companies through submission of an Observer Deployment Request (DR) form, usually in the IOTC format. Forms are submitted to the base port HM's office.

After a suitable, available observer is identified, we understand a pre-trip briefing is undertaken between the HM's office, the CV captain and the observer. During the briefing, the HM's office explains the roles and responsibilities of the observer, ensures arrangements are in place for them to be able to do their job without obstruction, as well as checking the sleeping quarters. It's not clear whether a formal written record of the briefing/placement meeting is kept.

4.3.3.4 Deployment

Prior to departure, we understand the HM's office undertakes a safety inspection of the CV, checking the status of life rafts, life jackets and other safety equipment. The Pre-Sea Boarding Inspection form is completed and sent to the DGCF Observer Team in Jakarta. Clearance to depart port is reportedly not given unless observer paperwork, including the Pre-Sea Boarding Inspection, is completed.

Prior to deployment, observers are provided with data collection forms, personal gear (e.g. uniform, boots, helmet, sleeping bag) and measuring equipment (e.g. measuring tape). Other equipment issued by the IOTC ROP provider (as well as many other RFMO observer programs), including a satellite Personal Locator Beacon (PLB), two-way satellite communication device (e.g. InReach) and an immersion suit, are not provided.

DGCF advised that observers may be asked to help with normal crew work while on board. Their position is this is acceptable as long as it doesn't interfere with observer duties.

4.3.3.5 Data collection protocols/forms

The Indonesian observer program uses some, but not all, of the forms used by the IOTC ROP provider. A summary of overlap is provided in Table 1.

Table 1: Comparison of forms used by the Indonesian transhipment observer program vs the IOTC ROP provider.

IOTC ROP Form	Used by ID Trial?	Notes
T1: Observer/ Vessel Details	No	This form simply sets out the observer and vessel details. The form is not used specifically, but the relevant details are captured elsewhere.
T2: Deployment form	No	This form is only completed if the observer uses a transfer vessel (other than pilot vessels in port) for the beginning of the deployment or for the end of deployment from the CV. May not be relevant for Indonesian trial program circumstances.
T3: Pre-sea safety check	Yes	The form used in the ID program is broadly the same as the IOTC form, although there is no space for an officer of the vessel to sign (as there is on the IOTC form). Forms from the early period of the ID trial do not appear to have been signed by either the observer or the vessel agent/operator, although this appears to have been rectified from around mid-2024 onwards. In practice, it would be more valuable if someone independent (e.g. the HM) assisted with the safety check and also signed the form.
T4: Transhipment details form	No	The T4 form is essentially the 'working' form used by IOTC ROP observers to tally the numbers of fish of each species/product type transferred. The form provides an important record to understand how total weights for each species have been estimated. No equivalent form is used by Indonesian trial observers.
T5: Boarding report	No	The T5 form records the outcomes of compliance inspections undertaken by the observer on LSTLVs. In the IOTC ROP, the form is signed by the observer and LSTLV master to verify that the inspection has been completed and the details are as reported. A T5 type form has not been completed by Indonesian trial observers.
R1: Observer deployment report	No	This form largely summarises information in the T1, T2 and T3 forms and is required to be provided by the observer to the IOTC ROP provider within 24hr of deployment. Given the dockside nature deployments, this form is probably not necessary in the Indonesian trial program.
R2: Observer 5-day report	Yes	This form sets out activity in the previous 5-day period, including the details of any transhipments. The form used by the ID trial is in the same format as the IOTC ROP program.

R4: End of trip report (Observer Report)	Yes	The Observer Report completed by Indonesian observers is very similar in format to the IOTC ROP program.

There is no formal Observer Manual (for example, equivalent to the IOTC ROP service provider manual[5]), nor formal data collection protocols, for the Indonesian transhipment observer trial.

On the essential question of how weights of SBT are estimated by the observer (in order to verify "*that the transhipped quantities of SBT are reasonably consistent with the reported catch in the CCSBT transhipment declaration*", as per clause 26 of the Resolution), answers were varied and not straightforward. Initially, the suggestion was that observers measured the length of all SBT and then calculated weights using a standard length-weight formula, however no evidence was provided of any calculations and no interviewee could point to the formula used. Moreover, if weights were genuinely estimated independently of the LSTLV/CV using a length-weight formula, this would not explain why around 95% of weight estimates produced by observers are identical, to the kilo, to those reported by the LSTLV/CV in the transhipment declaration[6].

During discussions with observers in Benoa, there was again initially some suggestion that weights were estimated using a length-weight formula, although after further discussion (including around the fact that observer estimates were almost always exactly the same as the LSTLV/CV's), observers advised that weights are agreed with LSTLV/CV. Broadly, observers advised that SBT are measured and then they make their own visual estimate of the weight based on the length; they then discuss their estimate with CV/LSTLV master (i.e. 'I think that fish is 80kg - do you agree?') and agree a weight. Observers considered their own visual estimates to be fairly accurate (and advised there was often very little difference between their estimates and the LSTLV's), although they would defer to the LSTLV/CV master's estimate if the master had more experience. Observers also advised that, given the high price of SBT, they were under pressure to complete tasks quickly to maintain the cold chain.

The fact that weights are agreed between the observer and LSTLV/CV masters explains, firstly, why the observer's estimate is exactly the same to the kilo as the TD for around 95% of transhipments (and those which are different appear to be simple typos in most cases) and, secondly, why observers, until very recently, have not completed the fishing vessel estimate in Table 3 in the observer report (OR), nor undertaken any analysis of differences between the transhipment declaration (TD) weight and the observer weight.

Table 2: Example of Observer Report summary of observer vs vessel estimated weights (from Trip 150). Vessel weights are routinely not completed, with no analysis of differences between the observer and vessel estimated weights.

	ALB		BET		SKJ		SBF		YFT		OTH		Total		Difference	
No	Obs.	Vessel	Obs.	Vessel	Obs.	Vessel	Obs.	Vessel	Obs.	Vessel	Obs.	Vessel	Obs.	Vessel	Weight	%
1	130	0	2,780	0	0	0	480	0	830	0	270	0	4,490	0	0	0
2	370	0	450	0	0	0	0	0	35	0	0	0	855	0	0	0
3	110	0	470	0	0	0	120	0	60	0	120	0	880	0	0	0
4	0	0	110	0	0	0	70	0	220	0	0	0	400	0	0	0
5	0	0	550	0	0	0	460	0	150	0	0	0	1,160	0	0	0
6	0	0	1,450	0	0	0	1,480	0	220	0	0	0	3,150	0	0	0
7	0	0	230	0	0	0	120	0	105	0	0	0	455	0	0	0

[5] Note this is the most recent publicly available version of the Manual, although the document was most recently updated in January 2025.

[6] As at 16 February, 2025, the Secretariat had received reports for 599 transhipments during the trial period where SBT were transhipped and weight estimates for both the TD and observer were available. Of these, observer estimates of weight for 567 (94.7%) were exactly the same as the TD, to the kilo. Of those that differed, many appeared to be simple typos (e.g. identical weights reported against the wrong transhipment). While many transhipments involved relatively small quantities, 231 involved volumes >1,000kgs for which some variation might be expected between the TD and an independent estimate made by the observer.

This is a very different process to that used by the IOTC ROP provider. Under that program, observers estimate weights independently and are specifically advised against making simple visual estimates of weight. Rather, observers are provided with a clear hierarchy of estimation approaches, based on the transhipment circumstances and the tools available (albeit noting that the estimation approaches are designed for transhipment volumes generally far higher than that seen in the Indonesian trial). For example, if the CV uses hook scales, the observer may use total measured weight together with their own independent estimate of the species/product tally and the average weight by species declared by the fishing vessel to proportion total weight into species/product weights. If no hook scales are used, the observer may use the # fish/weight declared by the LSTLV to calculate average weight for each species/product type. The observer then independently tallies the number of each species transferred during the transhipment, with the observer's tally then multiplied by the average weight to estimate total weight for each species. If no scale or average weight per species/product type is available, the observer can measure (or sample) lengths, converting these to weight using a standard formula for each species.

In their ORs, IOTC ROP observers complete their own estimate of weight in Table 3 as well as the LSTLV reported weight (from the TD). They make an assessment of whether the weights in the TD are reasonably consistent with their own, and analyse the possible reasons for any differences. Because weights are estimated independently, differences between the observer estimate and TD weight are expected (indeed it would be unusual if there was not).

Since weights do not appear to be estimated independently of the vessel in the Indonesian trial program, no T4 form or equivalent is completed (albeit observers noted that individual SBT weight estimates are sometimes recorded in a personal notebook, with total weights calculated from that). Under the IOTC ROP, the T4 form is used to record the number of fish of each species transferred between vessels in each string (or net), and serves as a detailed record of each transhipment (and to understand how total weights of each species were estimated). In the Indonesian program, while the nature of transhipment is different given fish are transferred individually, a 'T4' form equivalent providing a record of the observer's independent weight estimate of each SBT would provide additional confidence that the process verifying LSTLV weight estimates was being undertaken independently.

The other type of 'working' form that does not appear to be used by the Indonesian program is the T5 (Boarding Report) form. In the IOTC ROP, the T5 form serves as a record of independent checks undertaken by the observer of LSTLV compliance (e.g. of VMS, logbook, authorisations to fish [ATF], etc). At the conclusion of the boarding and inspection, the T5 is signed by both the LSTLV master and observer to confirm that the compliance checks were completed and the outcomes were as reported. In the Indonesian program, no T5 type form is used. Rather, the outcomes of compliance checks are included in the OR. However, importantly (a) there is no sign-off by LSTLV master and observer that the checks were completed, (b) the details of all reports reviewed were exactly the same (minus vessel specific differences in marking and ATF details) and (c) the date of last logbook entry is never completed (Table 3). Although observers interviewed indicated that they were able to board LSTLVs in the vast majority of transhipment events (80%+) and assistance was always provided by the LSTLV crew, collectively these issues undermine confidence in the thoroughness with which compliance checks are carried out. DGCF advised that they only became aware of the T5 form during the recent IOTC independent review.

Table 3: Example of Observer Report (Trip 93) with date of last logbook entry not filled out.

					Markings correct		ATF					VMS		Logbooks					
No	Name	flag_state	Boarded	Date	Name	IRCS	Shown	In date	Expires	IOTC Area	Reg N. as per	Shown	Power	Shown	Type	Match flag	Bound	Pages	Last entry
1	PERINTIS JAYA - 69	IDN	Y	2024-08-19	PERINTIS JAYA - 69	YEB5471	PERINTIS JAYA - 69	2024-01-01	2024-12-31	HIS	75 No.2497/Pd	Y	Y	Y	e-Logbook	Y	-	-	
2	SURYA NELAYAN	IDN	Y	2024-08-21	SURYA NELAYAN	YEB5598	SURYA NELAYAN	2024-01-01	2024-12-31	HIS	70 No.2556/Pd	Y	Y	Y	e-Logbook	Y	-	-	

Notwithstanding the absence of formal species ID training, observers advised that it is relatively straightforward to identify SBT given fish are tagged and the LSTLV also advises them when SBT are being transferred. Observers also reportedly use the morphological structure of the fish (a distinctive bulge in the body cavity just to the tailward side of the gill plates) to confirm species identification (albeit they note the Indonesian LSTLVs tend not to make a slit down the full length of the body cavity – instead, crew make a small cut in the neck region, with guts extracted through that, so sometimes this is difficult to access).

4.3.3.6 Communications and safety

While on deployment, observers submit 5-day (R2) reports in the same format as the IOTC program. Given the limited communications capability on board, in practice, observers either (a) use the CV's radio to call in the details to the CV company or (b) text the details to the CV company using the CV's satellite phone (Figure 7), if available. The CV company then transcribes the information into the R2 format and submits the form to DGCF. The reason details are provided first to the CV company, rather than directly to DGCF, is not clear.

DGCF noted that the 5-day reporting process was difficult in the early period of the transhipment trial because CV captains were not aware of the requirement, but had become easier since around December 2023.

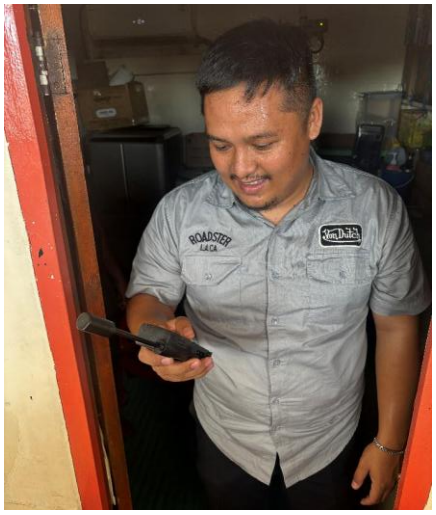


Figure 7: Observer demonstrating use of CV satellite phone to text 5-day report details to CV company.

DGCF advised that they purchased and trialled two Starlink devices on Indonesian CVs with some success, although industry are reportedly reluctant to pay the costs of ongoing access (so the units are no longer in operation).

DGCF advised that no cases of observer assault, obstruction or attempted bribery had been reported.

4.3.3.7 Trip return/debriefing

After return to port, the observer reportedly prepares a draft Observer Report using computer facilities available at the DGCF office. We understand reports are originally completed in Indonesian and later translated into English by DGCF. SBT weights are based on the figures agreed in the TDs (although observers noted that they had access to the final landed weights and did refer to them when preparing reports). The draft report is submitted to DGCF (usually within 3-4 days after landing) and reviewed by the observer team (the draft is not shown to the CV master, as is the case in the IOTC ROP). Some graphs are added by the DGCF Observer team (e.g. Figures 1 and 2 in ORs), based on data submitted by the observer. A remote debriefing session is held via Zoom. The observer then makes any necessary revisions to the draft Report, which is then returned to DGCF and submitted to the CCSBT Secretariat.

4.3.3.8 Data management and storage

All forms and data associated with each observer trip are stored in DGCF Google Drive folders. An MS Access database was reportedly developed in 2024 to house pilot observer program data[7], although this was not shown during the site visit and the extent of use is not clear.

DGCF have also reportedly developed an observer app (e-OBOR), although the extent of use is uncertain. Dedicated apps have been developed by MMAF for other functions – e.g. a CDS app to facilitate submission and validation of CDS documents; a PIPP app to house port management information (including landings data collected by enumerators at each port).

4.3.3.9 Reporting/changes in reporting

An unusual feature of the Indonesian observer program (relative to other observer programs that the reviewer has experience with) is the process of retrospectively changing reports. Both DGCF and the CCSBT Secretariat advised that revisions regularly occur across a number of report types, including DRs, R2s, TDs and ORs, with most revisions occurring after the trip has been completed.

For DRs, industry advised that CV trips are often dynamic, with changes often occurring in the list of LSTLVs to be transhipped. Where a change occurs (e.g. a need to tranship from a LSTLV not on the original list), industry advised that DGCF approval is required, which is sought through the completion of a revised DR. We understand updated versions of DRs are sent to the CCSBT Secretariat with the final data package at the completion of the CV trip. It is not clear whether additional changes (e.g. to reflect actual departure and return dates etc) are made by DGCF prior to submission.

For R2s (5-day reports), DGCF advised that the observer (through the LSTLV) may radio through that no SBT were transhipped in a particular transhipment, but subsequently SBT were found upon landing. In that case, the R2 report may be retrospectively revised to reflect actual landings.

For TDs, two versions of the declaration are regularly submitted to the CCSBT Secretariat by DGCF – (i) the initial version completed at sea, signed by the LSTLV/CV masters and the observer and retained by the observer (referred to as 'TDA' by DGCF), and (ii) a separate version (referred to as 'TDB') sent in the package of documents with the final trip data. TDA is usually a PDF scan of the original signed TD, while TDB is usually an unsigned Word document in IOTC TD format only (albeit e-signatures of LSTLV/CV masters and the observer

[7] https://iotc.org/sites/default/files/documents/2025/02/IOTC-2025-CoC22-05_-_Report_on_Indonesias_Pilot_Project_to_monitor_transhipment_-_Indonesias_report.pdf

have appeared in some recent versions). The purpose of submitting a second TD is not completely clear, although we assume it's completed to reflect final weights following landing. While there is limited or no change between SBT weights in TDAs/TDBs for some trips (e.g. Trip 35), for others there is substantial change. For example, in Trip 133, TDAs signed by the LSTLV/CV masters and observer declared a total weight of SBT of 13,950kg across transhipments. TDBs submitted for the same trip declared a total SBT weight of 9,500kg – a difference of over 4t. Notably, all transhipments on this trip happened at the very close of the SBT quota year (between 26th Dec and 31st Dec), with the reported date of TDB submission (30/12/24) listed as being before some transhipments had actually occurred (31/12/24).

For ORs, observers advised that they complete a draft OR in the 2-3 days following their return to port. Weights and numbers are based on those counted at sea and agreed on the TDs. Draft reports are submitted to the DGCF Observer Team, with a debrief completed remotely via Zoom. After making any revisions necessary following debrief, observers complete final ORs which are submitted to DGCF who forward these to the CCSBT Secretariat. Nevertheless, DGCF advised that after fish are counted and weighed post landing, and details entered by CV companies into the MMAF CDS app, the details in the original OR are reviewed against the details in the CDS app. If the details are different, DGCF may prepare an updated version of the OR, with numbers and weights changed to reflect those in the CDS app. This second version of the OR is subsequently forwarded to the CCSBT Secretariat. Observers advised that they had no knowledge of revised versions of their reports being submitted to the CCSBT Secretariat. We understand the CCSBT Secretariat has received revised versions of observer reports for at least 15 trips.

As with TDs, for some trips the differences between original and revised observer reports can be substantial (and not easily explained). For example, in Trip 129, the original OR reported a total of 20,550kg of SBT across 411 fish. The revised OR reported a total of 19,750kg of SBT across 234 fish (Table 4). While some difference between the weights estimated at sea by the observer and the final landed weights should be expected, differences in the number of SBT reported are more concerning. The reason for the substantial reduction in the number of fish reported for many transhipments despite no change in weights is not clear.

Table 4: Changes in weights and number of SBT between original and revised observer reports submitted to the CCSBT Secretariat for Trip 129.

FV	Original OR		Revised OR		Change	
	Weight	Number	Weight	Number	Change in weight	Change in #
BANDAR NELAYAN-176	1400	28	1300	16	-100	-12
BANDAR NELAYAN-236	1200	24	1200	14	0	-10
BANDAR NELAYAN-50	1000	20	1000	12	0	-8
BANDAR NELAYAN-VI	1250	25	1250	14	0	-11
BANDAR NELAYAN-191	1350	27	1350	15	0	-12
BANDAR NELAYAN-XI	1200	24	1100	14	-100	-10
BANDAR NELAYAN-581	1300	26	1000	15	-300	-11
BANDAR NELAYAN-223	1200	24	1200	12	0	-12
BANDAR NELAYAN-167	1150	23	1150	14	0	-9
BANDAR NELAYAN-80	1150	25	1150	14	0	-11
BANDAR NELAYAN-127	1250	20	1250	13	0	-7
BANDAR NELAYAN-158	1000	23	1000	12	0	-11
BANDAR NELAYAN-590	950	19	850	11	-100	-8
BANDAR NELAYAN-528	850	17	850	10	0	-7
BANDAR NELAYAN-582	1150	23	1050	13	-100	-10
BANDAR NELAYAN-585	1000	20	1000	11	0	-9
BANDAR NELAYAN-280	950	19	950	11	0	-8
BANDAR NELAYAN-35	1200	24	1100	13	-100	-11

Regular changes in reporting raises uncertainties around the rigour and robustness of the existing observer arrangements, or at least the understanding of the purpose of particular reports. For example:

- In the case of DRs, it is perfectly understandable that the circumstances around some observer deployments and trips may change – dates of departure may shift, LSTLVs that are expected to tranship may not, and vice versa. The DR should serve as a record of the best understanding of the trip at the time the observer was requested. There is no need to retrospectively change the DR based on changes in events (the final record of the trip should be available through the OR, CMFs, etc). If internal processes are required to approve transhipments from vessels not on the original DR, these should be developed separately;
- In the case of R2s if, as advised by DGCF and observers that SBT are easy to identify and they're all tagged, why would it be that SBT are detected upon landing, but not by the observer on board?
- For trips where there is considerable change in TDs between TDA and TDB, why would this be so if weights and number on board are estimated well? Equally, if there are small differences between the TD and the final landing weights this should be expected and need not require a change to the original TD;
- For ORs, it is not good practice for ORs to be revised based on final landed weights and numbers (irrespective of whether these may be more accurate), and particularly so if the OR is changed without the observer's knowledge. The OR should stand alone as the observer's independent record of the trip. It is not necessary that their estimates match final landed weight and numbers, including those in CDS documents – rather their job is simply to verify that the transhipped quantities of SBT are *"reasonably consistent"* with that reported catch in the CCSBT transhipment declaration, logbook and CDS documents. Minor differences between observer estimates and TDs/landed weights are to be expected. Large differences should prompt some review of the trip with the observer involved (and additional training if necessary), but not a revision of the original report.

4.3.4 CCTV monitoring

In addition to observer monitoring, it is worth noting that DGS also operates independent CCTV monitoring of all CVs. All vessels are fitted with a two-camera system observing the forward port and starboard sections of the vessel, including the front fish holds (Figure 8). Cameras are operational 24/7. Older CCTV models recorded full footage, while newer models are time lapse cameras to reduce file sizes. Footage is stored on a locked computer in the wheelhouse of each vessel, accessible only to DGS.

Footage is downloaded by DGS at the end of each trip. Given the file sizes, this can take 2-3 days. In practice, DGS advised they only review a small percentage of the footage due to resourcing constraints, although could review incidents that were considered suspicious (e.g. the CV came together at sea with a LSTLV it did not have authority to tranship from).

DGS noted that current camera angles aren't good for confirming the names of other vessels coming alongside the CV (these can be worked out if they're licensed and have VMS, but not if they're not) and there is no visibility of the rear of the vessel. Nevertheless, there is some potential to use CCTV footage to verify some aspects of CV, LSTLV and observer activity and reporting.

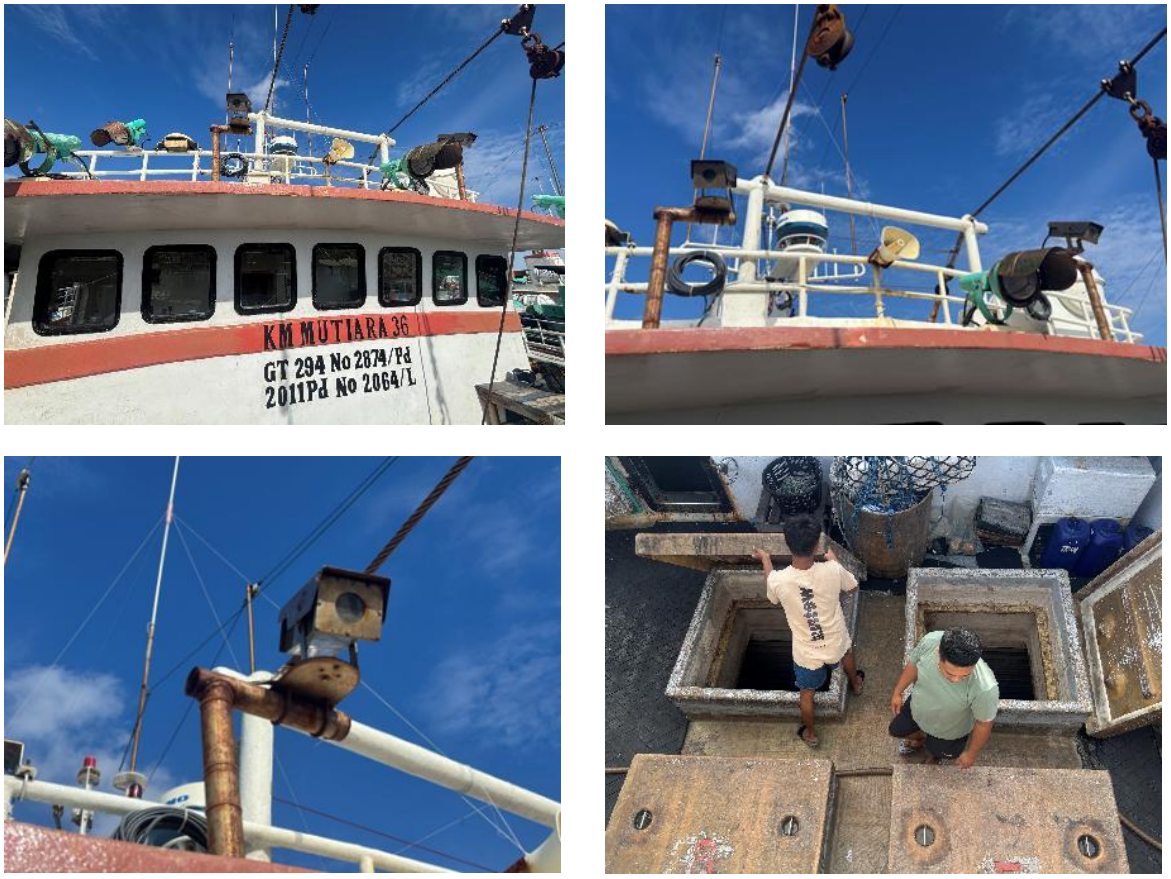


Figure 8: DG Surveillance CCTV system on CV Mutiara 36, Benoa.

4.3.5 CDS validation

Arrangements for the validation of CDS documents are set out in the Order of the Director General of Capture Fisheries No. KEP.08/KEP-DJPT/2014 on the Guidelines for the Implementation of the Catch Documentation Scheme for Southern Bluefin Tuna.

After final count and weight details are available (see post-landing operational processes below), CDS documents are completed by the fishing company and submitted for validation through the MMAF CDS app. Validation is undertaken by the DGCF HM's office. Validators reportedly check the details of the fishing license (SIPI), as well as vessel logbooks, transhipment declarations and VMS records. The extent to which details are checked against observer reports, or discussed with observers, is not clear.

Validators noted that the CCSBT Area is occasionally wrong on the CTF/CMFs, which is detected both through VMS data but also often by the size of the fish (fish from the more southerly Area 2 tend to be smaller). If this is the case, validators will confirm the catching area in the logbook (if available) and discuss with the CV captain/fishing company and correct.

4.4 Operational processes/workflow

An important component of the TORs for the QAR was to develop a process map of the systems and workflows Indonesia uses to monitor transhipments at sea and meet the obligations in the Transhipment Resolution. Our best understanding of the operational processes used by DGCF, observers, CVs and other entities involved in the coordination and monitoring of CV trips involving transhipment of SBT are set out in Figure 9, Figure 10 and Figure 11. Given the number of entities involved and the complexity of the processes, workflows have been split into:

- Pre-departure processes;
- At-sea processes; and
- Post-landing processes.

Importantly, the workflows have been pieced together by the reviewer based on interviews with multiple stakeholders, and with some language challenges involved and conflicting information occasionally provided by different entities. To that end, the workflows should be considered generalised, with the potential that actual processes may vary across different trips.

A text description of the workflows is provided at Annex 3.

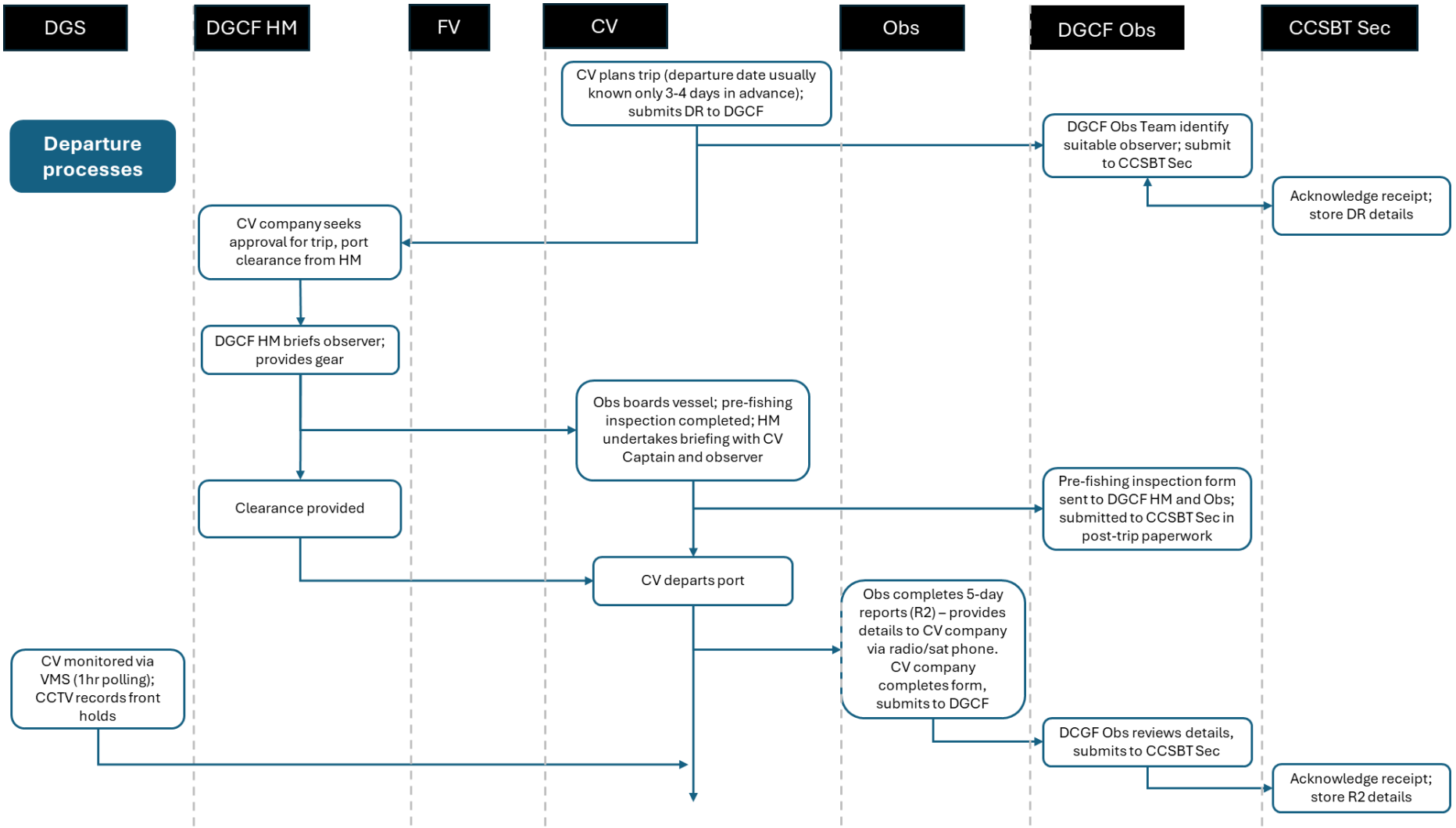


*Figure 9: **Pre-departure and departure processes** used by entities involved in the Indonesian CCSBT transhipment observer program. DGS = DG Surveillance; DGCF HM = DG Capture Fisheries Harbour Master; FV = LSTLV; CV = carrier vessel; Obs = observer; DGCF Obs = DGCF Observer/RFMO team; CCSBT Sec = CCSBT Secretariat.*

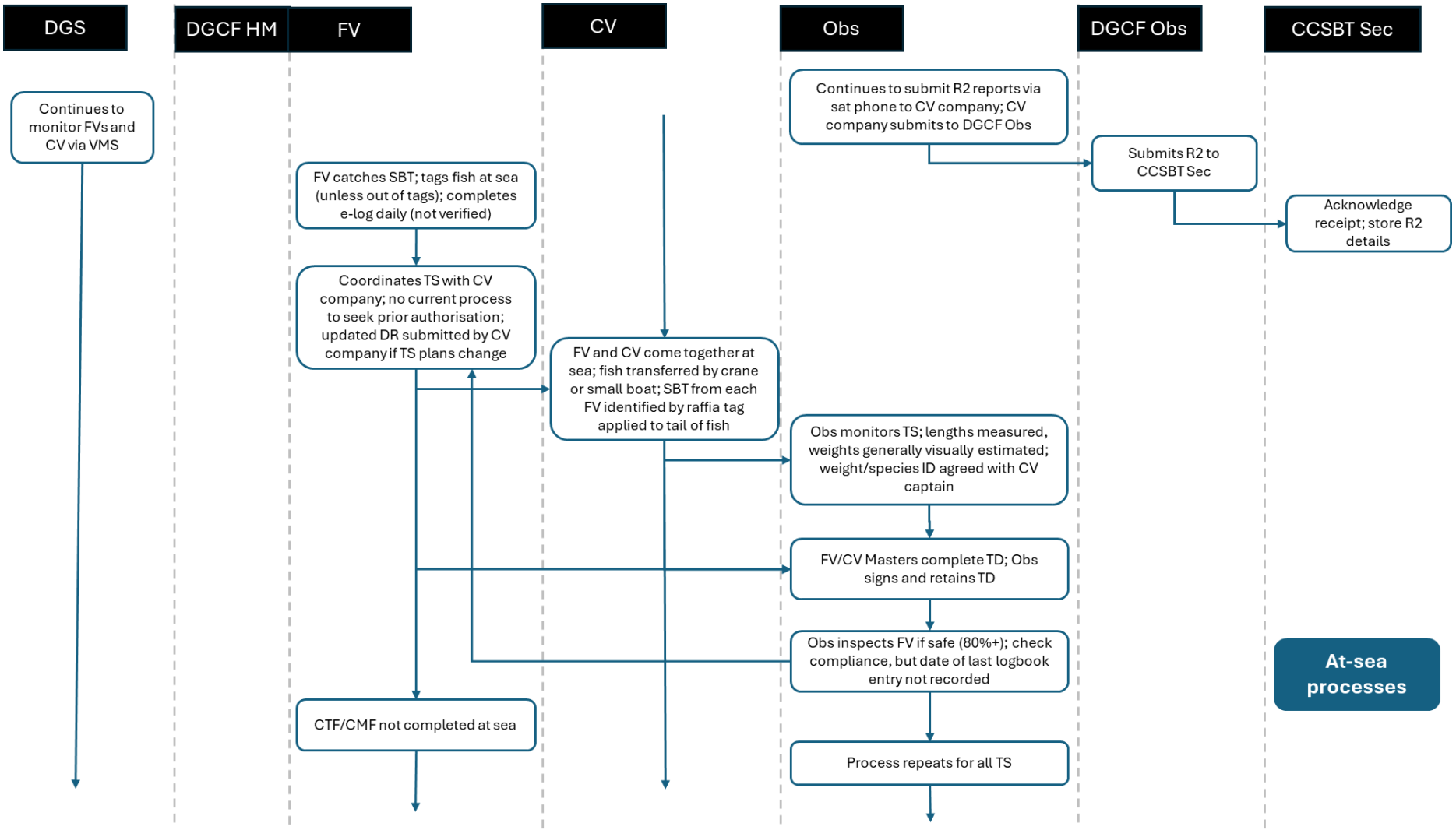


*Figure 10: **At-sea processes** used by entities involved in the Indonesian CCSBT transhipment observer program.*

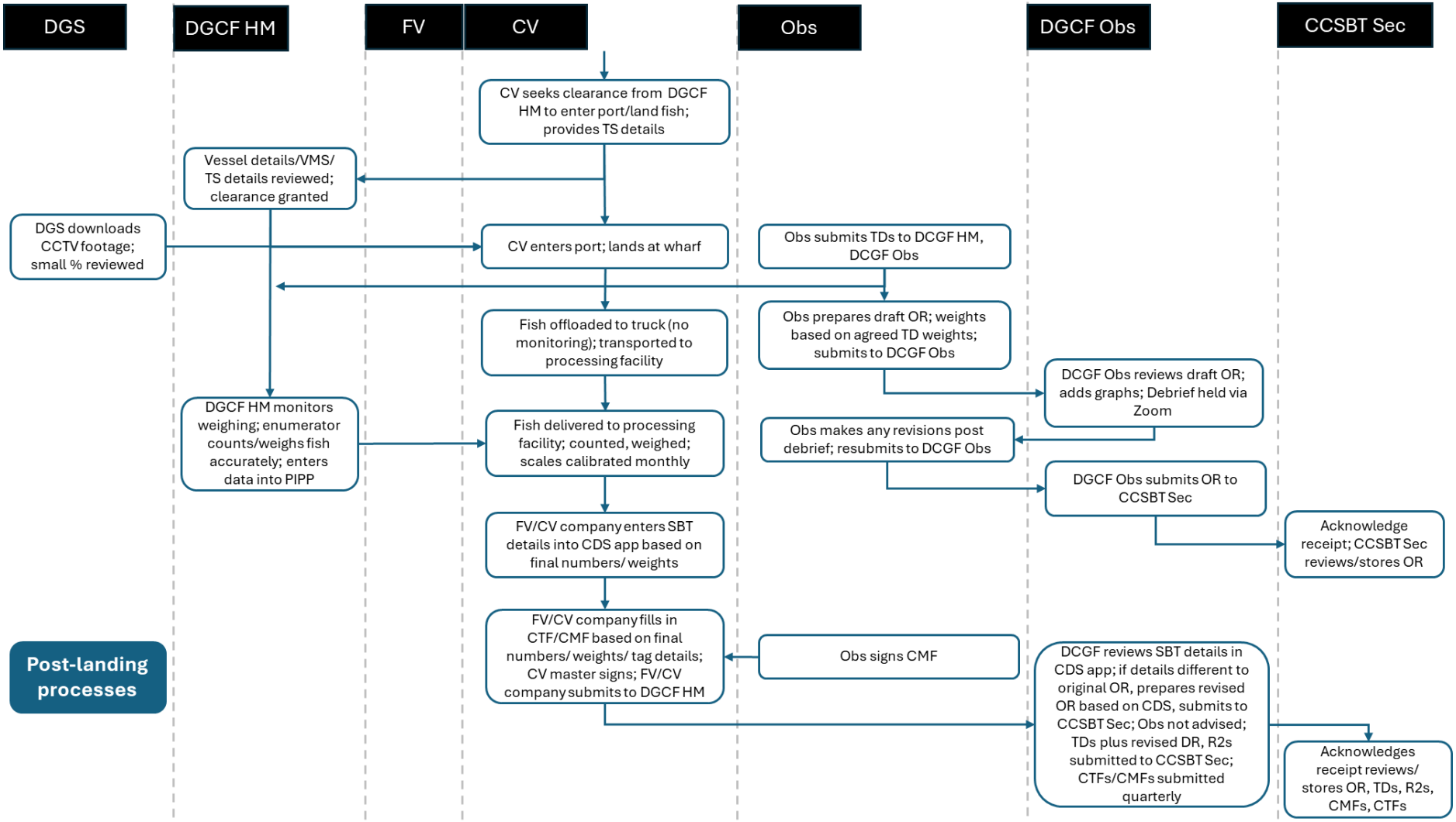


Figure 11: ***Post-landing processes*** *used by entities involved in the Indonesian CCSBT transhipment observer program*

5 COMPLIANCE WITH CCSBT TRANSHIPMENT RESOLUTION OBLIGATIONS

This section provides an overview of Indonesia's compliance with the main obligations in the CCSBT Transhipment Resolution, particularly those relating to observer monitoring of at-sea transhipments. Relevant clauses from the Resolution are extracted in boxes, with colour-coding indicating the level of compliance (Green = compliant; yellow = partially compliant; red = not compliant). While the focus is primarily on the obligations in the Resolution, in some cases the wording of the associated MPRs have been added for context.

5.1 Section 2 – Record of Carrier Vessels Authorised to Receive Transhipments Involving SBT

5.1.1 Carrier vessel authorisation

5. Each Member and CNM shall submit, electronically where possible, to the CCSBT Executive Secretary the list of the Carrier Vessels that are authorised to receive transhipments from its LSTLVs without delay. Each Member shall promptly notify the Executive Secretary of any addition to, deletion from, and/or any modification to the list of Carrier Vessels at any time such changes occur without delay. This list shall include the following information:

1 Flag of the vessel
2 CCSBT Record Number (if any)
3 IMO Number
4 Name of vessel, vessel registration number
5 Previous name (if any)
6 Previous flag (if any)
7 Previous details of deletion from other registries (if any)
8 International radio call sign
9 Type of vessels, length, gross tonnage (GT) and carrying capacity
10 Name and address of owner(s) and operator(s)
11 Time period authorised for transhipping.

Indonesia has systems and processes in place to authorise CVs to receive transhipments (set out under Ministerial Regulation 58/2020, 10/2021 and 28/2023) and has provided the details of authorised CVs to the Executive Secretary. Clause 85 of Ministerial Regulation 28/2023 prohibits transhipment within RFMO areas unless the vessel is listed on the relevant RFMO authorised vessel list.

One change to the list of authorised CVs has occurred through the course of the trial (as a result of a vessel fire), with the new vessel details being submitted promptly to the Secretariat.

Consistent with clause 4 of the Resolution, no CVs not already authorised by other RFMOs or on RFMO IUU Lists are authorised by Indonesia.

5.1.2 Vessel Monitoring Systems

7. Carrier vessels authorised by Members and CNMs to conduct at-sea or in-port transhipments shall be required to have an operational Vessel Monitoring System (VMS) that is operating in accordance with all applicable CCSBT Resolutions and decisions, including the Resolution on the CCSBT Vessel Monitoring System (2017), and any successor Resolution, including any future revisions thereto.

8. LSTLVs which tranship at sea or in-port shall be required to install and operate a VMS in accordance with CCSBT's Resolution on the CCSBT Vessel Monitoring System (2017), and any successor Resolution, including any future revisions thereto.

MPR 2.3 iii and 3.3 C. xiii.

Operating systems and processes to ensure that Carrier Vessels are only to be authorised to carry out transhipments if:

a. The Carrier Vessel already has an operational VMS installed, or the Carrier Vessel undertakes to install an operational VMS before any authorisation and transhipments of SBT take place, and

b. The VMS transmits at frequency sufficient to show transhipping operations, and

c. The VMS will function effectively in the expected operating conditions.

Indonesia, through DGS, appears to operate an effective VMS. All CVs and LSTLVs are fitted with VMS units, with both polled hourly. Given the small volumes involved, transhipment events are brief (at 1-2hrs), although the current frequency of polling is expected to detect transhipments (particularly when combined with other forms of monitoring through the 'Integrated Maritime Intelligent' platform – AIS, satellite imagery). Moreover, DGS reportedly operates alerts that identify if a CV comes together at sea with a vessel from which it is not authorised to tranship.

DGS advised that VMS 'uptime' was very good (although no specific statistics were provided).

5.1.3 Separation of cargo

10. Carrier Vessels authorised to receive transhipments of SBT shall be required to separate and stow transhipped SBT by fishing vessel and develop a stowage plan to show the locations in the hold of the quantities of SBT by fishing vessel. The Carrier Vessel master shall submit the stowage plan to inspectors, if requested.

In practice, there is no physical separation of SBT by LSTLV in the CV. Instead, LSTLVs affix a coloured raffia tag to the tail of the fish (Figure 12), with each LSTLV having a different coloured tag, or combination of colours. The CV keeps a record of each LSTLV's colour, with the record available to the observer. The observer also keeps a record which is passed to port inspectors upon landing. Observers and industry representatives advised that tags rarely, if ever, dislodged.

Figure 12: Raffia tags applied to the tails of SBT to identify the catching LSTLV (photos supplied by observers).

We have scored this requirement 'partially compliant' because the strict letter of the clause is not met, although in practice the raffia tag system is probably sufficient to meet the intent of the Resolution which, in essence, requires all SBT to be traceable back to the LSTLV. Given LSTLVs are paid based on the tag system (with bonuses etc paid to captains), there is a clear commercial incentive for fish to be traceable (and there would likely be considerable conflict if the system wasn't effective).

5.2 Section 3 – Program to Monitor Transhipments at Sea Involving SBT

5.2.1 Indonesian trial transhipment program

13. Where SBT is transhipped at-sea to a wooden Indonesian-flagged Carrier Vessels listed in Annex IV, Indonesia may fulfill the requirements of paragraph 26 through the use of its own national observers.

14. Indonesia shall provide directly to both the CCSBT and IOTC Secretariats, copies of all data and documentation required by and within the timeframes set out in the respective CCSBT and IOTC Transhipment Resolutions. The information provided shall include transhipment observer information, notifications and reports (reports should include reports equivalent to – in standard and content - those currently prepared and provided by IOTC's independent ROP Contractor).

MPR 3.3 A vi

Operating systems and processes to ensure:

a. Submission to the CCSBT Secretariat of all required transhipment observer programme information relating to:
   i. Observer designation: including the observer details and evidence to demonstrate sufficient experience and knowledge of CCSBT conservation and management measures, species identification and fishing gear and the ability to observe, record, report and verify carrier and fishing vessel transfers and SBT onboard; and
   ii. Observer deployment: including 5-day reports, transhipment declarations and observer reports, and any other required notifications, reports and revisions thereof.

b. The items listed in a. above are submitted within the required timeframes.

While there is clear evidence that Indonesia has placed its own national observers on wooden CVs authorised to receive transhipments, there is less evidence that copies of all data and documentation required by the CCSBT and IOTC Transhipment Resolutions has been provided to the Secretariat in the timeframes required, and with standard and content equivalent to the IOTC ROP service provider.

Analyses of performance in meeting reporting timeframes is provided for relevant reports below (TDs, R2s, DRs, ORs). Broadly, the timeliness of reporting has improved over time, albeit deadlines for many reports are still not met.

As noted above, the types of reports and forms used by the Indonesian trial program are not yet equivalent in standard and content to the IOTC ROP. Of particular note, ORs contain no record of the LSTLV estimated weight of catch, nor analysis of differences with the observer estimated weight. Moreover, there is no T4 form equivalent which sets out how weight estimates were arrived at. This is broadly because observers use weights agreed with the LSTLV and/or CV masters. In addition, there is no T5 form (Boarding Inspection) or equivalent signed off by the LSTLV master to verify the outcomes of the inspection, nor is the date of last logbook entry completed.

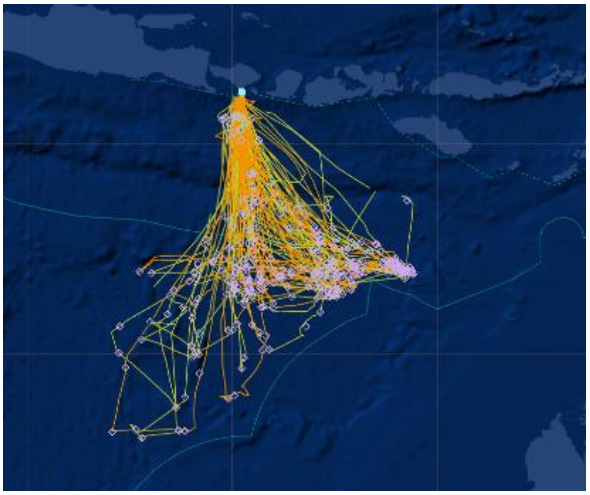
16. Replacement of any wooden carrier vessels in Annex IV is only permitted if the material of the substitute vessel shall remain wooden and the carrying capacity or fish hold volume is not larger than the vessel(s) being replaced. In such case, the authorisation of the replaced wooden vessel shall be immediately revoked.

One replacement to the list of authorised CVs occurred during the course of the trial (Bandar Nelayan 2009 replaced Bandar Nelayan 271 as a result of a fire on the original vessel). The replacement vessel complied with the requirement of clause 16.

17. Transhipments by LSTLVs in waters under the jurisdiction of Members and CNMs are subject to prior authorisation from the Coastal State / Fishing Entity concerned. An original or copy of the documentation of Coastal State/ Fishing Entity prior authorisation must be retained on the LSTLV and made available to the CCSBT observer when requested.

Although the majority of transhipments under the trial have occurred in the high seas, some also occur in the southern part of the EEZ (Figure 13). For transhipments occurring in the EEZ, Indonesia is both the flag State and coastal State. As discussed in 5.2.2, DGCF advised that no formal process for issuing prior approvals for each

individual transhipment event for its flagged vessels currently exists and there is no documentation approving individual transhipments available to the observer. Rather, we understand the process of the CV company submitting DRs prior to departure, which set out expected transhipments and are reviewed by DGCF prior to issuing port clearance, is considered to constitute approval for the planned transhipments.



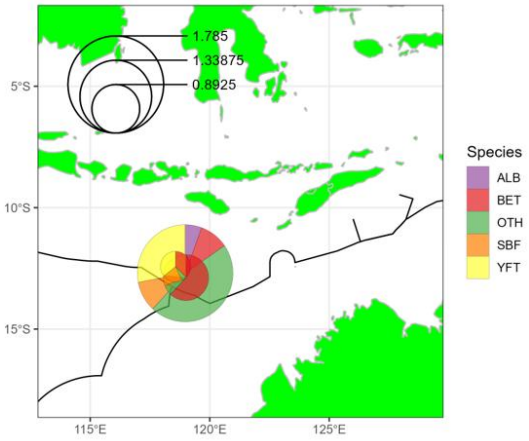


Figure 1. Location of transshipments

Figure 13: (left panel) AIS-based vessel tracks for Bahari Nusantara and Naga Mas Perkasa 89 between 1 November, 2023 and 1 June 2025. Purple diamonds are 'loitering' events (Source: Global Fishing Watch). (right panel) Location of three transhipments, each involving SBT, inside the Indonesian EEZ on Trip 53.

5.2.2 Flag State authorisation

19. LSTLVs shall not be authorised to tranship at sea, unless they have obtained prior authorisation from their Flag State / Fishing Entity. An original or copy of the documentation of prior authorisation must be retained on the LSTLV and made available to the CCSBT observer when requested.

20. To receive the prior authorisation mentioned in paragraph 19 above, the master and/or owner of the LSTLV must notify the following information to its Flag State / Fishing Entity authorities at least 24 hours in advance of an intended transhipment:

- *a) Name of the LSTLV, its number in the CCSBT Authorised Vessel List and its IMO number,*
- *b) Name of the Carrier Vessel and its number in the CCSBT Record of Carrier Vessels authorised to receive transhipments at sea and its IMO number,*
- *c) Tonnage and product type to be transhipped (by species where known),*
- *d) Date and location of transhipment,*
- *e) Geographic location of the SBT catches.*

While a legal requirement exists (under Ministerial Regulation 28/2023, Article 85) for the captain or owner of a fishing vessel to notify the Director General and base port HM of a transhipment plan at least 48 prior to transhipment, interviews with DGCF staff confirmed this is not done and there are no internal processes to satisfy this obligation.

Moreover, discussions with ATLI members confirmed approval is not sought from the flag State prior to each transhipment. They noted that the list of vessels expected to undertake transhipment is included in the DR, although (a) this tends to be submitted by the CV company, not the FV captain/owner and (b) it doesn't contain operational details required in the Resolution (e.g. quantity of SBT, location of catch) that could be verified by the observer (or port inspector).

To that end, no copy of the approval is kept on board the LSTLV, nor made available to the observer, consistent with clause 19 of the Resolution.

5.2.3 Notification obligations – fishing vessel

21. The master and/or owner of the LSTLV concerned shall complete and transmit to its Flag State / Fishing Entity, and, where applicable, the Coastal State / Fishing Entity, not later than 5 working days after the transhipment, the CCSBT transhipment declaration, in accordance with the format set out in Annex I.

As above, while a legal requirement exists (under Article 85 (2)(c) of Ministerial Regulation 28/2023) for the captain or owner of the fishing vessel to submit the TD electronically to DGCF HM at the base port no later than 5 days after implementation of transhipment, in practice this is not done.

Rather, the LSTLV and CV masters complete the TD at sea, which is then signed and retained by the observer. The observer then delivers all TDs to the DCGF HM upon return to port. In most cases, this is likely to be well after the 5-day deadline.

5.2.4 Notification obligations – carrier vessel

22. Before starting transhipment, the master of the receiving Carrier Vessel shall confirm that the LSTLV concerned is participating in the CCSBT programme to monitor transhipment at sea (which includes payment of the fee in paragraph 14 of Annex II), and has obtained the prior authorisation from their Flag State / Fishing Entity referred to in paragraph 19. The master of the receiving Carrier Vessel shall not start transhipment without such confirmation.

Under the terms of their license from MMAF, we understand CVs are only allowed to tranship from LSTLVs from within their 'group' (and listed on the license). To that end, there is a good internal knowledge amongst the group on which LSTLVs are on the CCSBT RAV and have SBT quota.

Nevertheless, given LSTLVs do not seek prior authorisation from the flag State, CV captains do not check whether authorisation has been granted for each transhipment and are therefore non-compliant with the requirement to not commence transhipment unless prior authorisation exists.

23. The master of the receiving Carrier Vessel shall complete and transmit the CCSBT transhipment declaration to the CCSBT Secretariat and the Flag Member/CNM of the LSTLV, along with its number in the CCSBT Record of Carrier Vessels authorised to receive transhipment at sea, within 24 hours of the completion of the transhipment. The Secretariat will forward all received Transhipment Declarations to the Flag Member/ CNM of LSTLVs on a quarterly basis, and the Flag Member/CNM will reconcile these against Transhipment Declarations they have received.

While Article 85 (3)(b) of Ministerial Regulation 28/2023 requires the captain of the CV to report electronically to the DGCF HM at the base port and the RFMO Secretariat no later than 24 hours after the execution of the transhipment, in practice this is not done. Indeed, there appeared to be only limited awareness of the requirement amongst interviewees (although some noted that the limited communications facilities on board CVs meant it was not possible to submit the TD electronically).

As above, the TD is completed and signed by the LSTLV and CV masters and the observer at sea at the time of transhipment. The observer then retains the TD for submission to the HM upon return to port.

CCSBT Secretariat records indicate that, of the 871 TDs received under the Indonesian trial by 16th February 2025, only 18 (2.1%) were received on or before the 24hr deadline. On average, TDs were received 71.8 days after the deadline. On time performance was particularly weak in the early period of the trial with many submissions over 200 days late, although performance has improved in recent months (Figure 14). Amongst TDs received between September 2024 and February 2025, submissions averaged 27.5 days late.

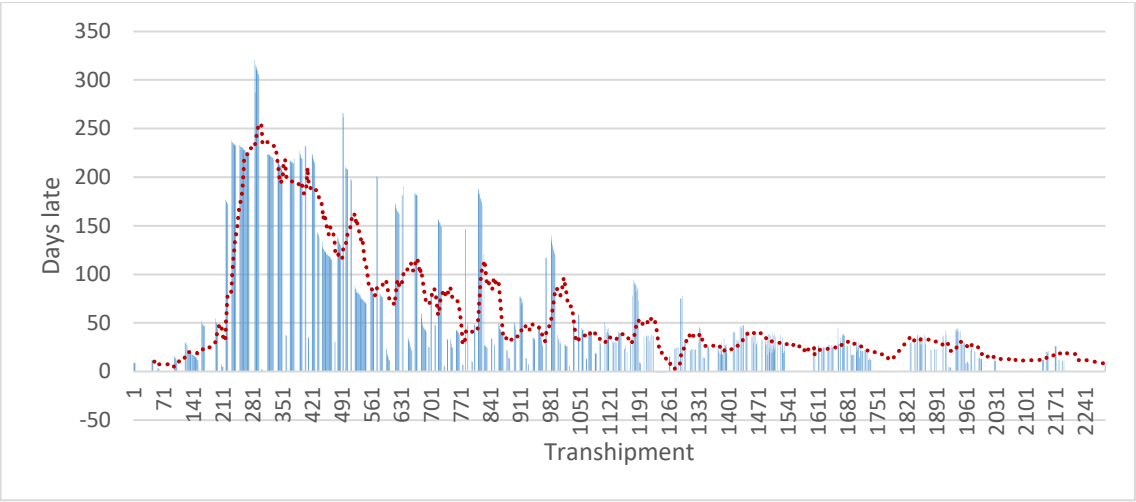


Figure 14: Number of days after the 24hr submission deadline that transhipment declarations have been received by the CCSBT Secretariat for transhipments under the Indonesian transhipment trial. The red dotted line shows the moving average across the most recent 50 reports.

Notably, TDs are not submitted by the master of the CV, but submitted by the observer to DGCF and then on to the CCSBT Secretariat. We understand that most CVs have no current capacity to transmit TDs electronically from sea.

The final part of clause 23 requires the flag State to reconcile TDs received from LSTLVs vs those submitted by CVs and provided quarterly by the CCSBT Secretariat. However, in Indonesia's case given a single TD is submitted through the observer, these will be one and the same (i.e. no reconciliation is required, or possible).

Clause 24 of the Resolution also requires the master of the CV to submit the TD to the competent authorities of the State where the landing takes place no later than 48 hours before the first point of landing. Given TDs are submitted to the HM only after landing this requirement is not met.

5.2.5 Regional Observer Program

26. Each Member and CNM shall ensure that all Carrier Vessels transhipping at sea have on board a CCSBT observer, in accordance with the CCSBT Regional Observer Program in Annex II. The CCSBT observer shall observe the compliance with this Resolution, and notably that the transhipped quantities of SBT are reasonably consistent with the reported catch in the CCSBT transhipment declaration and, as recorded in the fishing vessel logbook and CDS documents.

Indonesia has systems and processes in place to comply with the first, but less so the second, sentence in clause 26.

Article 85 (1)(a) of Ministerial Regulation 28/2023 requires that CVs receiving transhipments in RFMO-managed areas be monitored by regional observer or a national observer that meets RFMO standards. Moreover, Indonesia has systems and processes in place to ensure all CVs authorised to tranship SBT have a national observer on board prior to departure from port. The details and credentials of the observer are provided by DGCF to the CCSBT Secretariat prior to departure.

The capacity for observers to robustly monitor compliance with the CCSBT Transhipment Resolution requires, at a minimum, training on the provisions of the Resolution itself, any related resolutions (e.g. the CDS Resolution) and other relevant training including species identification. At this stage, no specific training on the CCSBT Transhipment Resolution or SBT species identification is provided.

On the essential question of whether observers are independently estimating transhipment quantities to verify whether quantities are 'reasonably consistent' with volumes declared in TDs and logbooks, there is little evidence that this process is undertaken independently at present. Of the 599 transhipments undertaken during the trial period where SBT were transferred and for which weight estimates from both the TD and OR were available (as at 16

February, 2025), observer estimates of weight were exactly the same as the TD, to the kilo, for 567 (94.7%). Of those that differed, many appeared to be simple typos (e.g. identical weights reported against the wrong transhipment). While many transhipments involved relatively small quantities, 231 involved volumes >1,000kgs for which some variation might be expected between the LSTLV's estimated weight and an independent estimate made by the observer.

The fact that weights reported in ORs and TDs are identical for most transhipments is consistent with observers' advice that they initially estimate a weight based on length, but then confer and ultimately agree a weight with the LSTLV and/or CV masters. Given the vessel estimate of weight and the date of last logbook entry have rarely been completed in ORs, there is little evidence to demonstrate that comparisons have been made between logbook reports and observer estimates.

As discussed above, this process is very different to that undertaken by IOTC ROP observers who make an independent estimate of weight using standardised approaches, record the LSTLV estimated weight and then discuss any differences. Given the independence of both estimates, differences are expected. Importantly, the point of the observer program is not ensure that estimates are identical – it is to serve as an independent monitor to verify that the volumes are 'reasonably consistent'.

On compliance checks with other components of the Transhipment Resolution, it is difficult to get an accurate gauge on how comprehensively these are undertaken. Although observers advise that boardings of the LSTLV are possible in 80%+ of transhipments, no equivalent to the IOTC ROP T5 (Boarding Report) is completed and signed off by both the LSTLV master and observer. While some elements of the form are included in ORs, apart from vessel specific ATF and marking details, all reports appear to have identical outcomes. Notably, no instances of possible infringements have been reported across 599 transhipments. This is a different result to the IOTC ROP which regularly reports potential non-compliances (PNCs) to the IOTC Compliance Committee[8] (including of Indonesian LSTLVs during the period before the IOTC Indonesian transhipment trial, albeit these are now dated[9]).

Overall, we have scored this obligation 'partially compliant' because observers are on board and relevant legal requirements are in place. Nevertheless, we note there is an equally strong case to score it 'non-compliant' given the essential requirement to independently verify weights is not effectively being met.

27. Vessels shall be prohibited from commencing or continuing transhipping at sea without a CCSBT regional observer on board, except in cases of 'force majeure' duly notified to the Executive Secretary.

As above, Article 85 (1)(a) of Ministerial Regulation 28/2023 requires that CVs receiving transhipments in RFMO-managed areas be monitored by regional observer or a national observer that meets RFMO standards.

5.3 Section 5 – General Provisions

5.3.1 CDS validation

37. To ensure the effectiveness of the CCSBT conservation and management measures pertaining to the Catch Documentation System (CDS):

a) In validating the necessary CCSBT CDS documentation, as required by the CDS, Flag Members and CNMs of LSTLVs shall ensure that transhipments are consistent with the reported catch amount by each LSTLV.

b) The Flag Member or CNM of LSTLVs shall validate the necessary CCSBT CDS documentation for the transhipped fish, as required by the CDS, after confirming that the transhipment was conducted in accordance with this Resolution. If transhipped at sea this confirmation shall be based on the information obtained through the CCSBT Regional Observer Program.

[8] https://iotc.org/sites/default/files/documents/2025/02/IOTC-2025-WPICMM08-05_Add2_Rev2_-_Results_investigation_fleets_ROP_2024_no_photos.pdf; https://iotc.org/sites/default/files/documents/2024/02/IOTC-2024-WPICMM07-04_Rev1_-_Review_possible_infraction_under_ROP_in_2023_0.pdf

[9] e.g. https://iotc.org/sites/default/files/documents/2015/03/IOTC-2015-CoC12-08c_E_-_Summary_Report_possible_infractions.pdf; https://iotc.org/sites/default/files/documents/2014/05/IOTC-2014-CoC11-08c_Rev1E_-_Summary_Report_on_possible_infractions.pdf

Validation of CDS documents is undertaken by the DGCF HM's office, after fish are landed and weighed and CTFs/CMFs are completed by the fishing company. Once received, validators reportedly check CTF/CMF details against vessel logbooks, transhipment declarations and VMS records. The extent to which details are checked against observer reports, or discussed with observers, consistent with clause 37 is not known.

Importantly, the process of CDS document validation is potentially a strength of Indonesia's arrangements to monitor SBT catches, albeit not necessarily tied to the observer program. All vessels associated with companies receiving SBT quota are authorised on the CCSBT RAV and required to carry VMS, polled hourly. Both LSTLVs and CVs may only land catch in their base port, with CVs only able to receive catches from LSTLVs within their 'group'. Catches are then accurately counted and weighed upon landing, using scales that are regularly calibrated. The process of counting/weighing is overseen by independent monitors and enumerators from the HM's office. Because a 'post-production' fee is applied to CVs based on the final weights and species composition of the catch (with SBT charged at the highest rate), there is a strong commercial incentive for final weights to be accurate. CTFs and CMFs (albeit not completed at sea) are filled out based on the accurate final landing details and subsequently validated by the HM's office after checking against logbooks, TDs and VMS records. Assuming sufficient controls are in place to ensure LSTLVs tranship only to authorised CVs and CVs land only at nominated sites at the base port, these arrangements provide sound controls over catches, at least for the authorised commercial fleet, and potentially offer an important safety net to limitations in the observer program.

Arrangements to control catches of SBT after a company's quota is exhausted for the year did not appear to be particularly well-known or specified. Nevertheless, industry advised that it was possible for SBT quota to move between companies within an association, with companies not expected to use their quota for the year required to release it for use by others. Any movements of quota require DGCF approval, with an update to their register. DGCF reportedly has a website where companies can check their quota balances. Industry also noted that (a) DGCF may require that LSTLVs fish outside of the main SBT fishing area (in 2023, DGCF reportedly advised to avoid fishing between specified latitudes) and (b) LSTLVs can fish shallower, with SBT tending to be caught on deeper sets (i.e. move from 13-19 branch lines between floats down to ~7).

5.3.2 Annual Reporting

38. The Members and CNMs shall include in their annual report 4 weeks prior to the Annual Meeting of the Commission:

a) The quantities and percentage of SBT transhipped at sea and in port during the previous fishing season,

b) The list of the LSTLVs registered in the CCSBT Authorised Vessel List which have transhipped at sea and in port during the previous fishing season, and

c) A comprehensive report assessing the content and conclusions of the reports of the observers assigned to Carrier Vessels which have received at-sea transhipments from their flag LSTLVs during the previous fishing season.

In their most recent Annual Report (2024), Indonesia reported the volumes and percentages of SBT transhipped at sea, with both growing substantially in recent years. Volumes transhipped in port were listed as 'not available'[10], although in practice these are likely to be negligible or non-existent.

The list of LSTLVs undertaking transhipment in the 2023 year was provided.

Perhaps most importantly in the context of this QAR, in the section allocated for a comprehensive report on the content and conclusions of the reports of observers, Indonesia simply noted that "*The observer report for at-sea transhipments during the 2023 fishing season is currently in process for submission to the IOTC*". Given the importance of the observer program in monitoring compliance with CCSBT requirements, CCSBT Members might reasonably expect a more dedicated analysis of outcomes and conclusions relating to SBT obligations specifically.

[10] https://www.ccsbt.org/system/files/2024-09/CC19_SBTFisheries_ID.pdf

5.4 Annex II – CCSBT Regional Observer Program

1. Each Member and CNM shall require Carrier Vessels included in the CCSBT Record of Carrier Vessels authorised to receive transhipments at sea and which tranship at sea, to carry a CCSBT observer during each transhipment operation at sea.

As above, Article 85 (1)(a) of Ministerial Regulation 28/2023 requires that CVs receiving transhipments in RFMO-managed areas be monitored by regional observer or a national observer that meets RFMO standards.

2. Between approximately 15 days to 2 months before the Carrier Vessel will sail for a trip that will include a SBT transhipment, the Flag State/ Fishing Entity shall complete and transmit a CCSBT observer deployment request to the CCSBT Secretariat.

As discussed above, planning of CV trips is a dynamic exercise and much can change based on catching conditions, weather and logistics. Industry advice is that actual dates of departure tend not to be locked in until around 3-5 days prior to departure. Because the window of approval for port departure from the HM lasts only 24hrs, CV companies typically wait until the date of departure is known before submitting the DR. To that end, the requirement for the flag State to submit the DR between 15 days and 2 months prior to departure is rarely if ever met (and does not appear to be particularly practical).

CCSBT Secretariat records indicate that, of the 152 trips for which data is available on both DR received date and expected CV departure date as at 16th February, 2025, the minimum 15 day notification requirement was met in only 2 trips (1.3%) (Figure 15). Notably, the 152 trips exclude 3 trips where DR received considerably later than expected departure date (in one case 270 days later). The average time between DR received by CCSBT and expected departure date is 2.2 days.

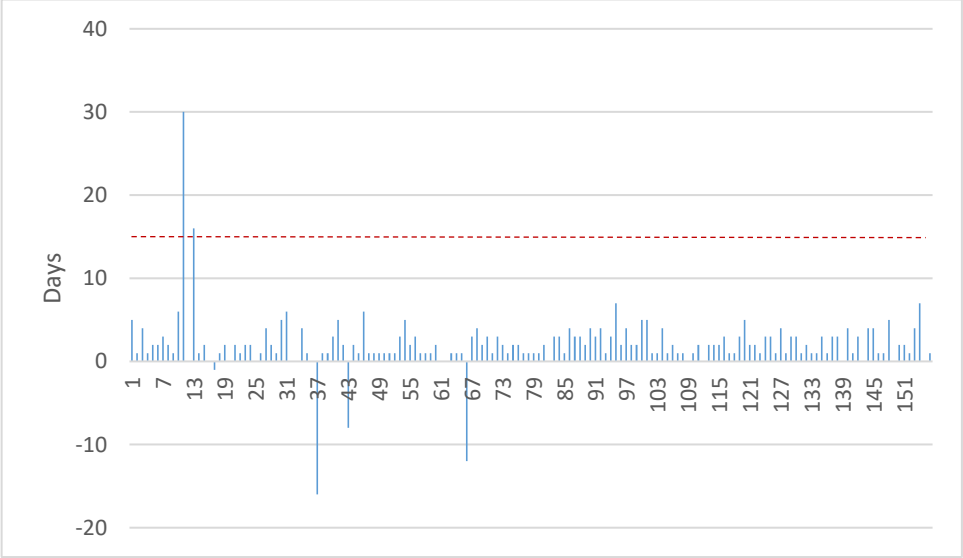


Figure 15: Number of days before expected carrier vessel departure that observer deployment requests have been received by the CCSBT Secretariat (as at 16th February, 2025).

5.4.1 Designation of observers

4. The designated observers shall have the following qualifications to accomplish their tasks:
a) sufficient experience to identify species and fishing gear;
b) satisfactory knowledge of the CCSBT conservation and management measures;
c) the ability to observe and record information accurately;
d) a satisfactory knowledge of the language of the flag of the vessel observed.

We have scored this obligation as 'partially compliant', although in practice formal arrangements to demonstrate compliance are relatively weak and there is an equally strong argument for a 'not compliant' score.

No specific training is provided to observers on CCSBT CMMs, nor any specific training on SBT identification. Moreover, there is no Observer Manual (setting out data collection protocols etc) equivalent to that used by the IOTC ROP service provider. General species identification is reportedly provided as part of generic training modules (and a species ID guide is provided), although there is no detail on SBT in the modules provided (relevant species ID tables appear to be cut off). Training records provided by DGCF to demonstrate observer credentials are frequently on things that are unrelated to the CCSBT Transhipment Resolution (e.g. ETP species).

Notwithstanding that, observer clearly have a knowledge of the language of the vessel and, in practice, it's likely most if not all are capable of identifying most species and gear, and recording information accurately. The latter requirement is difficult to judge given ORs are submitted as Word documents with no working forms or supporting information provided (e.g. to demonstrate how weights were estimated, that compliance checks were comprehensively carried out, etc). Indeed, there appears to be little in the current ORs submitted to the CCSBT Secretariat that could not be completed from Jakarta with access to the CDS app.

Notwithstanding the 'partially compliant' score, performance against this obligation requires considerable strengthening.

5.4.2 Obligations of the observer

5. Observers shall:

a) have completed the technical training required by the guidelines established by CCSBT, or the guidelines established by IOTC or ICCAT providing that the observers have also been trained in relation to paragraphs 4(a) – (c);

b) to the extent possible, not be nationals of the Flag State / Fishing Entity of the receiving Carrier Vessel;

c) be capable of performing the duties provided in paragraph 6 below;

d) be included in the list of observers maintained by the Secretariat of the Commission;

e) not be a crew member of an LSTLV or an employee of an LSTLV company.

There is currently no technical training standard, content or guidelines agreed by CCSBT. To that end, compliance is difficult to judge, although importantly no specific training has been provided on relevant CCSBT CMMs (e.g. Transhipment Resolution, CDS Resolution), SBT identification or data collection relevant to estimating SBT weights.

Paragraph (b) is irrelevant in the context of the Indonesian trial.

Paragraph (c) is discussed below.

Observers used to date have all been on the list of observers maintained by the Secretariat.

Observers are effectively full-time contractors to MMAF and tend to be recent graduates with academic qualifications. DGCF advised that ex-fishers tend to be avoided. While observers are not crew of LSTLVs or employees of fishing companies, a number of current practices blur the lines of independence. Firstly, training material encourages observers to take part in crew activities, including processing fish, cleaning fish rooms, etc. DGCF advised that helping with crew activities is at least tolerated, if not actively encouraged, as long as it doesn't interfere with the observer's work. Secondly, payments to observers for sea days are reportedly made directly by the CV company. This raises the possibility of influence, either explicit or implicit (e.g. how would CV companies feel about paying the observer if they reported multiple possible compliance breaches?). In the latter case, it would be a much cleaner process for all if observer fees to come directly from MMAF (even if cost-recovered originally from CV companies).

6. The observer tasks shall be as follows:

a) while on the Fishing Vessel intending to tranship to the Carrier Vessel and before the transhipment takes place:

i) check the validity of the fishing vessel's authorisation or licence to fish for SBT;

ii) check and note the total quantity of catch on board, and the quantity to be transferred to the Carrier Vessel;

iii) check that the VMS is functioning and examine the logbook;
iv) verify whether any of the catch on board resulted from transfers from other vessels, and check documentation on such transfers;
v) in the case of an indication that there are any violations involving the fishing vessel, immediately report the violations to the Carrier Vessel master; and
vi) report the results of these duties on the fishing vessel in the observer's report.

b) monitor the Carrier Vessel's compliance with the relevant conservation and management measures adopted by the Commission and in particular the observers shall:
i. record and report upon the transhipment activities carried out;
ii. verify the position of the vessel when engaged in transhipping;
iii. observe and estimate products transhipped;
iv. verify and record the name of the LSTLV concerned and its CCSBT Authorised Vessel List number;
v. verify the data contained in the transhipment declaration;
vi. certify the data contained in the transhipment declaration;
vii. countersign the transhipment declaration;

c) produce a daily report of the Carrier Vessel's transhipping activities and transmit a summary of these daily reports to the Secretariat every 5 days;
d) prepare a general reports compiling the information collected in accordance with this paragraph and provide the master the opportunity to include therein any relevant information;
e) submit to the Secretariat the aforementioned general report within 20 days from the end of the period of observation; and
f) exercise any other functions as defined by the Commission.

Clause 6 of Annex II sets out the bulk of the observer's tasks, much of which has been discussed above.

In relation to **clause 6(a)**, observers noted that it was possible to board the LSTLV to verify compliance in 80%+ of transhipments, with checks done over the radio in cases where weather prevented safe boarding. Results of the compliance inspections are reported in ORs. Results of all inspections undertaken in ORs are exactly the same (across the ORs reviewed), notwithstanding vessel specific ATF and marking details.

While the outcomes of compliance checks are reported in ORs, a number of factors raise uncertainties around the comprehensiveness with which checks are undertaken. Firstly, no T5 (Boarding Report) or similar working form is completed by the observer. In the IOTC ROP, this form is completed and signed off by both the LSTLV master and the observer to verify the outcomes of the inspection. In the absence of a signed form, there is nothing from the LSTLV to confirm that the inspection has been undertaken. Second, as above, the outcomes of all reports are the same (notwithstanding vessels specific ATF/marking details), with the date of last logbook entry never filled in. In practice, the logbook date is the only part of the compliance check table that couldn't be filled in remotely with access to vessel details. Thirdly, no incidents of potential non-compliance have been reported across close to 600 transhipments undertaken as part of the trial. While this may indeed be the case, as discussed above, it is a quite different experience to the rate of potential non-compliances reported by the IOTC ROP service provider for other fleets.

In relation to **clause 6(b)**, notwithstanding the absence of specific training on CCSBT CMMs, it is clear that the observer monitors transhipment activity and reports on outcomes. Moreover, the observer signs and retains the TD. Details on the LSTLV and its position are likely to be readily available. The major weakness appears to be the absence of independence in the estimation of SBT transhipment weights, with the observer's weight the same as the TD weight (to the kilo) in 94.7% of transhipments. While observers reportedly make their own visual estimate of weight (based on length measurements), weights are ultimately agreed with the LSTLV and/or CV master. LSTLV estimates have rarely, if ever, been completed in ORs, with no analysis of differences with the observer's independent estimate. Again, this is quite a different process to the IOTC ROP.

While the process of transhipment is different for vessels monitored by the IOTC ROP (with larger volumes and fish usually transferred on strings or in nets), it would be a relatively straightforward exercise to develop some more robust weight estimation protocols for Indonesian observers (against which they could assess whether the LSTLV reported weight is 'reasonably consistent'). For example, SBT have a very well-established length-weight relationship

(including for fish landed in Benoa). Observers could easily measure the length of each SBT transferred, with a simple formula used to estimate weight. LSTLV reported weights outside of some agreed level of tolerance with the observer's calculated weight could be flagged as not being 'reasonably consistent'. The observer could make any observations around differences (fish appeared unusually skinny or fat, etc). Weights could then further investigated upon return to port. This process would strengthen the independence of the observer's estimate while taking the guesswork out of determining weight. It should also help in any discussions with the LSTLV master around weight differences because the observer's estimate is derived from a well-established scientific formula (i.e. it's not something they've just guessed).

Clause 6(c) requires the observer to submit R2 reports to the Secretariat every 5 days while at sea. R2 reports are important both from a data collection perspective (e.g. to allow vessels undertaking at sea inspections to know what should be on the vessel), as well as to monitor observer safety and welfare. CCSBT Secretariat records show that compliance with reporting deadlines was particularly weak in the early stages of the trial, with reports averaging over 200 days late at one point, although performance has substantially improved in recent trips (Figure 16). Of the last 200 R2 reports received (as at 16th February, 2025), 71% were on time, with the average only 1.2 days late.

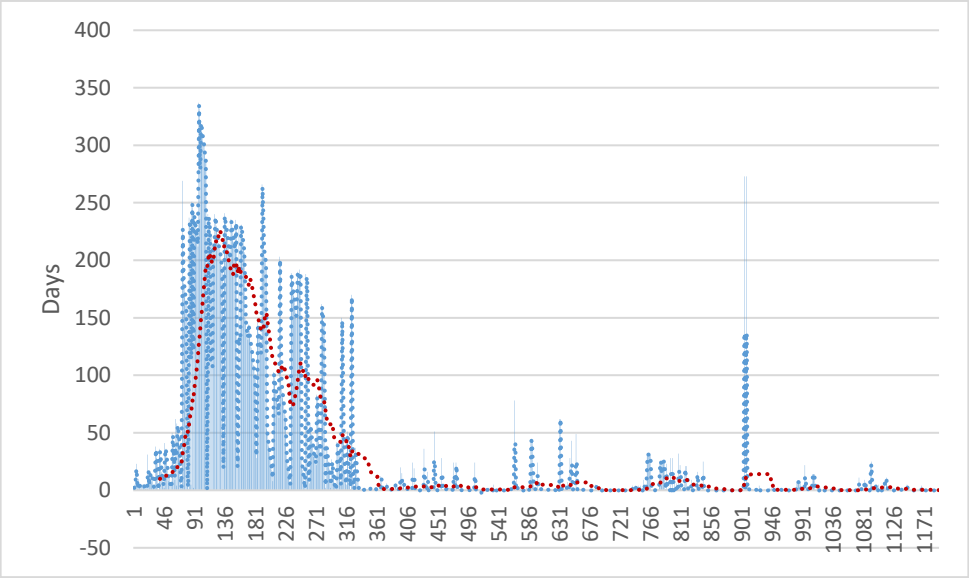


Figure 16: Number of days after the 5-day deadline that R2 reports have been received by the CCSBT Secretariat (n=1,192). The red dotted line shows the moving average across the most recent 40 reports.

In practice, R2 report details are provided either by radio or satellite phone to the CV company, who transcribes them and submits to DGCF. Given the observer works for DGCF, and not the CV company, a cleaner (and presumably faster) process would be for the observer to send R2 details directly to DGCF.

Importantly from a safety perspective, R2 reports indicate that the CV was in excess of its permissible complement of people onboard for a number of trips (e.g. Trips, 8, 46, 93, 102).

Clauses (d) and (e) require the production of ORs and submission to the Secretariat within 20 days of trip return. ORs have been completed for each trip and are generally completed in the format used by the IOTC ROP service provider, albeit with important details not completed in Indonesian trial ORs including:

- No comparison of observer vs LSTLV estimated weight in Table 3, or analysis of differences;
- No comparison of observed vs declared weights in Table 4;
- No date of last logbook entry in the compliance table (Table 9) and no photos demonstrating inspections (all photos in ORs inspected were of LSTLVs from the CV, or fish being brought on board the CV - e.g. there no

photos of logbooks showing data of last entry, ATFs, VMS power etc. IOTC ROP reports routinely include photos of LSTLV logbooks or markings etc, usually to demonstrate PNCs);

- No discussion of PNCs.

CCSBT Secretariat records indicate that meeting reporting deadlines was particularly challenging in the early part of the trial, with reports averaging close to 150 days late at one point, but recent performance has improved considerably (Figure 17). Of the most recent 30 reports received (as at 16th February, 2025), 23 were within the 20 day deadline. Those received after the deadline averaged 4.6 days late.

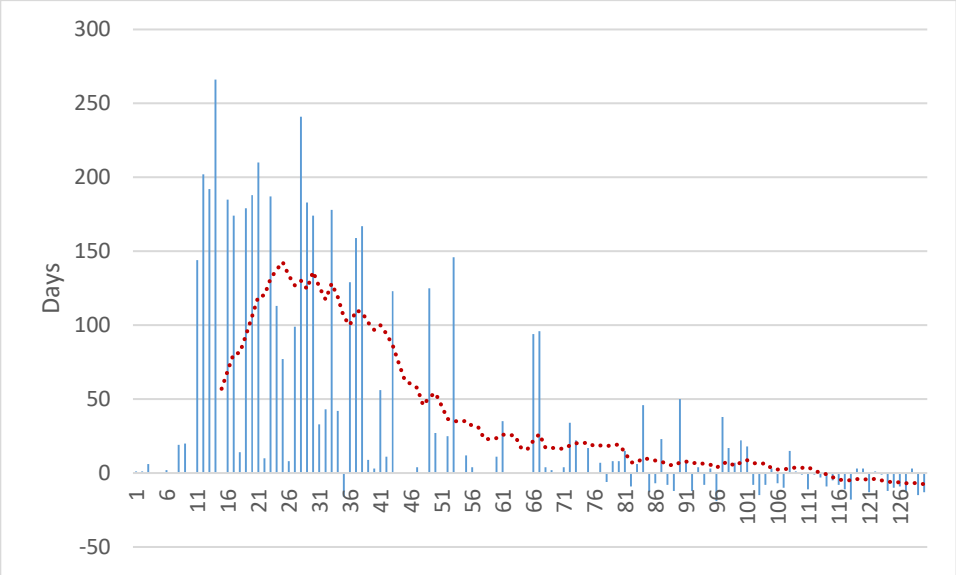


Figure 17: Comparison of observer report submission times against the 20-day deadline. The 20-day deadline is set at 0 – reports received after the deadline are positive numbers; reports received before the deadline are negative numbers.

Notably, no ORs have been received for 11 trips, 9 of which were in 2023.

7. Observers shall treat as confidential all information with respect to the fishing operations of the LSTLVs and of the LSTLV owners and accept this requirement in writing as a condition of appointment as an observer.
8. Observers shall comply with requirements established in the laws and regulations of the Flag State / Fishing Entity which exercises jurisdiction over the vessel to which the observer is assigned.
9. Observers shall respect the hierarchy and general rules of behavior which apply to all vessel personnel, provided such rules do not interfere with the duties of the observer under this program, and with the obligations of vessel personnel provided in paragraph 10 of this program.

No evidence was received during the site visits that these requirements were anything other than fully complied with by observers. A requirement to keep all LSTLV information confidential is set out in the observer contract with MMAF. Similarly, a requirement for DGCF to maintain confidentiality of CV data is set out in the MOU between DGCF and CV companies.

5.4.3 Obligations of the flag State/Fishing Entity of Carrier Vessels

10. The responsibilities of the Flag State / Fishing Entities of the Carrier Vessels and their masters in relation to observers shall include the following:
a) Observers shall be allowed access to the vessel personnel and to the gear and equipment;
b) Upon request, observers shall also be allowed access to the following equipment, if present on the vessels to which they are assigned, in order to facilitate the carrying out of their duties provided in paragraph 6:
i) satellite navigation equipment;
ii) radar display viewing screens when in use; and

iii) electronic means of communication;
c) Observers shall be provided accommodation, including lodging, food and adequate sanitary facilities, equal to those of officers;
d) Observers shall be provided with adequate space on the bridge or pilot house for clerical work, as well as space on deck adequate for carrying out observer duties; and
e) The Flag State / Fishing Entities shall ensure that masters, crew and vessel owners do not obstruct, intimidate, interfere with, influence, bribe or attempt to bribe an observer in the performance of his/her duties.

A requirement to allow necessary access by observers to facilities and equipment on board the CV is set out in the MOU between DGCF and CV companies. Observers advised that all CVs participating in the trial had been fully cooperative in facilitating access to the vessel, crew and equipment. Electronic equipment is limited on CVs although full access is provided to the equipment available.

Observers also advised that the standard of accommodation, food and sanitary facilities is equivalent to that provided to officers on board. The sleeping quarters for the observer on the CV inspected was an air-conditioned a dual cabin, shared with an officer, and accessed directly from the bridge (Figure 18).

Figure 18: Observer sleeping quarters.

Observers advised that adequate working space was provided, with no obstruction, interference or attempted bribery encountered.

5.4.4 Obligations of the LSTLV during transhipment

12. Observers shall be allowed to visit the fishing vessel if the observer's safety can be reasonably assured given the weather and sea conditions, and access shall be granted to personnel and areas of the vessel necessary to carry out their duties provided in paragraph 6.

Observers advised that LSTLVs participating in the trial have been fully cooperative in facilitating access to the vessel and records. Physical boardings of the LSTLV are reportedly possible in 80%+ of transhipments (likely 90%+), with details sought via radio where weather conditions prevent boarding. The main limitation in the current arrangements is the absence of evidence to demonstrate that inspections have been carried out comprehensively (e.g. no T5 form, no physical sign off from the LSTLV master, no date of last logbook entry, etc).

6 CONCLUSIONS AND RECOMMENDATIONS

While welcome improvements have been made over the course of the 2-year trial (e.g. in the timeliness of report submission), the overall conclusion of this QAR is that substantial improvements are required in key areas for the Indonesian national observer program to serve as an effective system to monitor compliance with the CCSBT Transhipment Resolution, and to demonstrate equivalence with the IOTC ROP. In particular, this will require substantially strengthening the independence of the observer in the monitoring process. At a practical level, this will mean:

- Ensuring observer estimates of SBT transhipment weight are made independently of the LSTLV/CV masters/reported weights;
- Providing an independent assessment of whether the quantities of SBT reported by the LSTLV are 'reasonably consistent' with those estimated by the observer, with an analysis of any differences;
- Ensuring the observer does not actively participate as a member of the crew in normal crew duties;
- Ensuring the observer is not directly paid by the CV company for sea day fees; and
- Avoiding revisions to the observer report, particularly without the observer's input.

Strengthening observer capacity

To strengthen the capacity of observers to operate effectively as independent monitors, a number of improvements to process and training are recommended:

- To effectively monitor compliance with the CCSBT Resolutions, observers require dedicated training in CCSBT CMMs, particularly the observer-related compliance monitoring requirements of the Transhipment and CDS Resolutions;
- A robust, practical process to independently estimate the weight of individual SBT should be developed, with visual estimates avoided. One approach would be to use the well-established length-weight relationship, with each individual SBT measured for length and weights derived from lengths. The intent would be to develop an objective estimate of weight, against which observers could assess whether the LSTLV reported amount is 'reasonably consistent';
- An Observer Manual (similar in style and content to the IOTC ROP Manual) should be developed to serve as a reference guide to observers on data collection protocols, compliance monitoring and processes to complete forms; and
- Dedicated species identification training should be provided, particularly around distinguishing SBT from other tuna species.

Demonstrating independence

To strengthen the Indonesia's capacity to demonstrate the independence and robustness of the observer program, a number of process improvements are recommended:

- A T4 form (Transhipment Details Form) or equivalent should be completed which sets out the observer's working on weight estimates;
- A T5 form (Boarding Inspection Report Form) or equivalent should be completed and signed off by both the LSTLV Master and observer to demonstrate the LSTLV compliance check has been completed

comprehensively. All fields in the form should be completed, including the date of last logbook entry. Ideally, a photo of the most recent logbook entry should be included as evidence of the check;

- Consideration should be given to having the observer physically sign off on the observer report. At present, observer reports are provided as unsigned Word documents, with revisions often provided. Observers interviewed indicated they were unaware of revised versions of observer reports being submitted;
- Details of R2 (5-day) reports could be relayed directly between the observer and DGCF, rather than through the CV company.

Other measures

In relation to strengthening compliance with other components of the CCSBT Transhipment Resolution:

- Indonesia should minimise changes to forms submitted to the CCSBT Secretariat. Under normal circumstances, there should be no need to produce revised versions of observer deployment requests, transhipment declarations, R2 reports and observer reports;
- Indonesia should establish a system to issue prior authorisations for transhipments at sea, consistent with clauses 19 and 20 of the Transhipment Resolution;
- Participants in the Indonesian trial should be encouraged to adopt stronger communications arrangements to better meet reporting obligations (e.g. submission of transhipment declaration within 24hrs).

Observer Safety

While it was not the main purpose of the QAR to review safety arrangements for observers under the Indonesian program, a number of practical measures could be taken to strengthen safety conditions. These include:

- Equipment provided by MMAF currently lacks some of the personal protective equipment (PPE) and devices widely used in other programs internationally (and in some cases mandated by RFMO ROPs). To that end, we recommend observers be provided with:
    - Personal locator beacon (PLB – i.e. personal EPIRB) (models are now available combined with AIS-based 'man overboard' devices to potentially facilitate faster rescues in man overboard situations);
    - Personal life vests which are easily wearable while on deck;
    - Two-way satellite communication device (e.g. Garmin InReach);
    - Immersion suit.
- Both DGCF and CV companies should ensure that the number of people on CVs does not exceed the legally permitted complement.
- MMAF should ensure that safety and medical certificates for all observers are current and valid.

Note that a more dedicated safety assessment may identify other improvements required.

Support required

While improvements of the type described above are capable of being made, our assessment is that Indonesia will require dedicated support and capacity building assistance to strengthen compliance with the CCSBT Transhipment Resolution, including bringing its observer program arrangements up to a standard comparable to the IOTC ROP.

Annex 1: Terms of Reference

Background: At-Sea Transhipment (Indonesia)

To tranship SBT at sea, a key requirement of CCSBT's Transhipment Resolution is that Carrier Vessels (CVs) have on board a "CCSBT observer", in accordance with the CCSBT Regional Observer Program in Annex II of CCSBT's Transhipment Resolution.

Indonesia has noted that its longline fleet effort has increased in CCSBT statistical area 2, which is further from its ports and that the ability to tranship SBT at-sea is important for its commercial fishery to ensure the quality of the product. Indonesia's SBT fishing grounds fall within the IOTC's area of competence. This means that in practice it is the IOTC that deploys regional transhipment observers to monitor any at-sea transhipments in this area, with IOTC transhipment observers being deemed to be CCSBT observers in cases where SBT are transhipped.

An issue for Indonesia has been that its CV fleet are wooden and do not meet the minimum health and safety standards that are required by IOTC's transhipment observer programme provider. Therefore, it has not been possible to place IOTC/CCSBT regional transhipment observers on board Indonesian-flagged CVs. This has in turn meant that Indonesia could not make at-sea transhipments of SBT to its wooden CV fleet without contravening CCSBT's Transhipment Resolution.

In 2023, a number of revisions to CCSBT's Transhipment Resolution were agreed to enable a CCSBT two-year trial of at-sea SBT transhipments to wooden Indonesian-flagged CVs to commence from 1 November 2023. The trial allows for:

- At-sea transhipments of SBT to be made from Indonesian-flagged longliners to a specified list of Indonesian-flagged wooden CVs, and
- The requirements of paragraph 26 to be met by Indonesian national observers rather than IOTC/CCSBT Regional transhipment observers.

The relevant paragraphs added to CCSBT's Transhipment Resolution to facilitate the implementation of the two-year trial are paragraphs 13 - 26:

> 13. Where SBT is transhipped at-sea to a wooden Indonesian-flagged Carrier Vessels listed in Annex IV, Indonesia may fulfill the requirements of paragraph 26 through the use of its own national observers.
>
> 14. Indonesia shall provide directly to both the CCSBT and IOTC Secretariats, copies of all data and documentation required by and within the timeframes set out in the respective CCSBT and IOTC Transhipment Resolutions. The information provided shall include transhipment observer information, notifications and reports (reports should include reports equivalent to – in standard and content - those currently prepared and provided by IOTC's independent ROP Contractor).
>
> 15. The provisions in paragraph 13 will be considered as a two-year trial with a start date of 1 November 2023 and concluding on 31 October 2025. A Quality Assurance Review (QAR), whose aim will be to provide an independent assessment of the performance of the trial, will be conducted in 2025 and presented to CC 20. This QAR will be funded by the CCSBT. In addition to the QAR, CC 20 shall also consider advice from the IOTC as well as the performance in meeting existing CCSBT transhipment obligations.
>
> 16. Replacement of any wooden carrier vessels in Annex IV is only permitted if the material of the substitute vessel shall remain wooden and the carrying capacity or fish hold volume is not larger than the vessel(s) being replaced. In such case, the authorisation of the replaced wooden vessel shall be immediately revoked.

2. SCOPE

This QAR will review the suitability of the Indonesia's systems and processes for ensuring compliance with CCSBT's Transhipment Resolution, in particular the two-year trial at-sea transhipment programme using its own national transhipment observers as described in paragraphs 13 – 16 of the Resolution.

The QAR will assess whether Indonesia's systems and processes meet CCSBT's Minimum Performance Requirements for CCSBT's Transhipment Resolution. It will inform the Compliance Committee's assessment of whether Indonesia's systems and processes for at-sea transhipment using wooden vessels and national observers provides the same level of confidence and transparency as the processes required for other at-sea transhipment activities under the CCSBT resolution.

In assessing the suitability of systems, the QAR will include consideration of any issues identified by the Compliance Committee (CC) as well any compliance risks identified by the Extended Commission which will be provided to the reviewer(s) by the Executive Secretary.

The QAR consultation will be between the appointed reviewer and the Indonesian Ministry of Marine Affairs and Fisheries – Directorate General of Capture Fisheries.

The review will be focused on government systems and processes to implement and meet the requirements of the Transhipment Resolution but may also include consultation with industry stakeholders. Approval will be sought from Indonesia prior to any engagement with industry stakeholders taking place.

3. LANGUAGE

The review will be conducted in English and documents requested from Indonesia will need to be provided in, or translated into, one of the official languages of the Commission.

4. REVIEW PROCESS

The methodology used should be based on that used in recent Phase I and II combined QARs as much as possible and should be detailed in the reviewer's proposal to the CCSBT.

The review will commence with an "Application Process", similar to that described in Section 5.1 of CCSBT paper CCSBT-CC/1610/18, to assist the Member being reviewed to understand what the QAR is about, what to expect and what is expected of them. The "Application Process" should also provide the reviewer with the necessary contact information for conducting the QAR.

4.1 Phase 1 Review (Desktop)

The purpose of a Phase 1 QAR is to independently document and evaluate whether Indonesia's systems and processes meet the relevant Minimum Performance Requirements for CCSBT's Transhipment Resolution.

The reviewer must evaluate Indonesia's current systems and processes with respect to CCSBT's Transhipment Measure, and provide a detailed review of these systems and processes in the following areas:

- What systems and supporting processes are in place to implement and meet the requirements of CCSBT's Transhipment Resolution?
- What systems prevent Indonesia from complying with ordinary processes and requirements of CCSBT's Transhipment Resolution for at-sea transhipment, that are applied to and implemented by other CCSBT Members?
- How do these systems and supporting processes ensure compliance with CCSBT's Transhipment Resolution?
- Are the relevant systems and processes fit for purpose?
- Do the systems meet CCSBT obligations in terms of the CCSBT's Minimum Performance Requirements?

- Are any changes or improvements to current systems or processes underway or being planned? If so, how will these impact Indonesia's ability to meet their CCSBT obligations?
- Have any corrective or preventative measures been taken in response to compliance monitoring?
- Are the requirements of CCSBT's Transhipment Measure being met, in particular the 2year trial of at-sea transhipments of SBT:
    a. Implemented in National Laws?
    b. Clearly defined and documented processes that support implementation of the CCSBT Transhipment Measure and monitor compliance with requirements.
    c. Clearly provided and communicated to CV masters and transhipment observers?

It is expected that the review will involve the general steps detailed below. Emphasis will be placed on whether the systems and processes in place for the accurate reporting and verification of SBT within the timeframes required by the measure:

- Analysis of relevant documentation submitted to the CCSBT Secretariat, in particular all of Indonesia's relevant domestic legislation/instruments, relevant information from National Reports, data submissions to the CCSBT Secretariat including transhipment deployment requests, 5-day reports, observer reports and observer particulars (and revisions of documents where provided), and whether all the required documentation was submitted and within required timeframes;
- Examination of the IOTC Report on the Indonesia Transhipment Trial, specifically as this relates to national reports and data submissions, including whether documentation was submitted with required timeframes.
- Examination of transhipment observer training material to ensure it meets the technical training guidelines established by CCSBT, or the guidelines established by IOTC or ICCAT, and that observers receive appropriate training to identify SBT and ensure satisfactory knowledge and understanding of the CCSBT conservation and management measures;
- Drafting of an initial process map of systems in place at the time of the review, which clearly identifies the process steps, required inputs and outputs at each step, responsible parties and measures in place to ensure compliance;
- Consultation with Indonesia to verify the general accuracy of the initial process map, clarify areas of uncertainty and seek any additional information required to complete the process map; and
- Preparation of an initial SWOT analysis (strength, weakness, opportunities, threat/risk) analysis. The opportunities section of the SWOT analysis will include recommendations for improvement.

4.2 Phase 2 Review (on site)

Phase 2 is an on-site inspection of Indonesia's systems and processes documented in Phase 1 of the QAR. It may be conducted as a combined Phase 1 and 2 QAR. The purpose of Phase 2 is for the reviewer to independently verify the existence and effectiveness of Indonesia's systems and processes. During Phase 2, the reviewer is expected to assess:

- Whether the documentation of systems and processes described in Phase 1 is correct and whether Indonesia's provided documentation accurately reflects the systems and processes that are consistently implemented;
- Whether these systems and processes are effective to ensure that CCSBT transhipment obligations are being met;
- Whether the key staff involved in implementing these systems and processes have sufficient knowledge and understanding of the CCSBT transhipment obligations as they relate to the process step they are involved with; and
- Whether there is any possible further improvement of Indonesia's compliance systems and processes, taking into account the results of the above assessments.

It is expected that Phase 2 will involve the following general steps:

- In collaboration with Indonesia, development of a site visit, interview and testing plan based on the outcomes of Phase 1, including development of an audit checklist for the site visit similar to that proposed in CCSBT-CC/1610/18;
- A visit to the principal site(s) where Indonesia's main systems and processes are located and:
    - Interviews of the key personnel (including transhipment observers and industry participants as appropriate) involved in the operation of these systems and processes;
    - Verification of operations and the effectiveness of systems and processes with objective evidence such as demonstrations of how the systems function in practise in real-time; and
    - Verification that observers have satisfactory knowledge to identify SBT and understanding of the CCSBT conservation and management measures;
- Identify and document any differences between Phase 1 (documented and mapped systems and processes) and Phase 2 (system and process implementation) QAR findings along with any gaps or weakness in implementation of the Resolution;
- Modification and refinement of the process map and update the SWOT analysis from Phase 1 as necessary; and
- Preparation and completion of the final QAR report including an Executive Summary, recommendations and conclusions.

Annex 2: Checklist of CCSBT Transhipment Obligations

Checklist of CCSBT Transhipment Obligations

This checklist has been developed to support the independent Quality Assurance Review (QAR) of Indonesia's at-sea transhipment activities consistent with paragraph 15 of CCSBT's *Resolution on Establishing a Program for Transhipment by Large-Scale Fishing Vessels* ('the Resolution'). The checklist highlights relevant obligations in the Resolution, as well as associated compliance policy guidelines and minimum performance requirements (MPRs) from *Compliance Policy Guideline 1 - Minimum performance requirements to meet CCSBT Obligations* and is intended to serve as a framework against which performance against relevant obligations can be assessed.

The checklist focuses primarily on at-sea monitoring obligations in the Resolution, as well as general obligations required to support effective at-sea monitoring. It is not intended to review compliance with obligations related to in-port transhipment. The nature of the obligation is emphasised e.g. mandatory (***shall***), recommendatory (***should***). A cross-reference to the paragraph number in the original Resolution is provided in square brackets [n]. Where multiple obligations are present in the same paragraph of the Resolution, these have been broken out where appropriate. In other circumstances, composite requirements have been retained or underlined.

Where there is any inconsistency or uncertainty between the obligation in the Resolution and the associated MPR, the obligation in the Resolution takes precedence.

For each obligation, examples of the types of documentation required to evaluate compliance with the Resolution are provided, although Indonesia may choose to provide alternative forms of documentation/evidence where appropriate.

Obligation (in the Transhipment Resolution) **Pre-commencement – Carrier Vessels** (applies to transhipping at sea and in port)	**CPG1 ref**	**MPR**	**Example information required to evaluate whether obligations are met**
1. Each Member and CNM ***shall*** submit, electronically where possible, to the CCSBT Executive Secretary the list of the Carrier Vessels that are authorised to receive transhipments from its LSTLVs without delay. [5]	2.3 i	2.3 1 a Operating systems and processes to: a. authorise specific Carrier Vessels to receive at-sea and/or in-port transhipments from its authorised Fishing Vessels (LSTLVs);	Documentation on operating systems/processes to authorise carrier vessels. Confirmation from CCSBT Sec that relevant information received (electronically) 'without delay'.
2. Each Member ***shall*** promptly notify the Executive Secretary of any addition to, deletion from, and/or any modification to the list of Carrier Vessels at any time such changes occur without delay. [5]	2.3 ii	2.3 1 d :submit any updates to the Executive Secretary promptly, and not later than 15 days from the date the change(s) occur(s), and before such vessels are actually used in transhipments	Documentation on operating systems/processes to authorise carrier vessels (include requirement to advise CCSBT Sec within required timeframe?). Confirmation from CCSBT that relevant information received within acceptable timeframe.
3. The list [of authorised Carrier Vessels referred to in (1)] ***shall*** include the following information: [5] a) Flag of the vessel	2.3 i	2.3 1 c :provide required information on authorised Carrier Vessels to the Executive Secretary within 15 days of the	SOPs etc documenting authorisation/ submission process.

b) CCSBT Record Number (if any) c) IMO Number d) Name of vessel, vessel registration number e) Previous name (if any) f) Previous flag (if any) g) Previous details of deletion from other registries (if any) h) International radio call sign i) Type of vessels, length, gross tonnage (GT) and carrying capacity j) Name and address of owner(s) and operator(s) k) Time period authorised for transhipping.		vessel being authorised, and before such vessels are actually used in transhipments	Documentation received by CCSBT submitting list of authorised carriers.
4. Members and CNMs ***shall*** ensure they: 1. do not authorise Carrier Vessels not already authorised by another RFMO. [4a] 2. do not authorise Carrier Vessels if they are included on another RFMO's IUU vessel list. [4b]	-	-	SOPs etc documenting authorisation/ submission process. Review ID carrier list against IOTC vessel records/IUU lists Evidence of checks made.
5. Carrier vessels authorised by Members and CNMs to conduct at-sea or in-port transhipments ***shall*** be required to have an operational Vessel Monitoring System (VMS) that is operating in accordance with all applicable CCSBT Resolutions and decisions, including the Resolution on the CCSBT Vessel Monitoring System (2017), and any successor Resolution, including any future revisions thereto. [7]	3.3 C. xiii. and 2.3 iii	2.3 2 a-c Operating systems and processes to ensure that Carrier Vessels are only to be authorised to carry out transhipments if: a. The Carrier Vessel already has an operational VMS installed, or the Carrier Vessel undertakes to install an operational VMS before any authorisation and transhipments of SBT take place, and b. The VMS transmits at frequency sufficient to show transhipping operations, and c. The VMS will function effectively in the expected operating conditions.	Documentation requiring/ demonstrating VMS installed/ operational (e.g. license conditions and checks). Documentation on polling frequency. Any evidence/analysis of VMS uptime/ downtime (i.e. are VMS systems on authorised carriers working effectively?).
Pre-commencement – LSTLVs (applies to vessels transhipping at sea and in port)			
6. LSTLVs which tranship at sea or in-port ***shall*** install and operate a VMS in accordance with CCSBT's Resolution on the CCSBT Vessel Monitoring System (2017), and any successor Resolution, including any future revisions thereto. [8]	3.3 C. xiii.	Pg 44 Operating systems and processes and rules to ensure that LSTLVs and Carrier Vessels authorised by Members and CNMs are only to be authorised to conduct transhipments if:	As above for LSTLVs.

		a) The LSTLV already has an operational VMS installed, or the LSTLV undertakes to install an operational VMS before any authorisation/ transhipments of SBT take place, and b) The VMS transmits at frequency sufficient to show transhipping operations, and c) The VMS will function effectively in the expected operating conditions.	
Separation of cargo			
7. Carrier Vessels authorised to receive transhipments of SBT ***shall*** be required to separate and stow transhipped SBT by fishing vessel. [10]	3.3 C. xv.	Pg 45 Operating systems and processes are in place to ensure: a. That CVs stow SBT received from each LSTLV separately from SBT received from other LSTLVs, and	Documentation requiring carriers to separate SBT and stow by fishing vessel. Evidence that separation was verified at port. Evidence that observers are monitoring the requirement to separate catch by fishing vessel.
8. Carrier Vessels authorised to receive transhipments of SBT ***shall*** develop a stowage plan to show the locations in the hold of the quantities of SBT by fishing vessel. [10]	3.3 C. xv.	Pg 45 Accurate stowage plans are available for each CV with SBT on board and are updated whenever new transhipments of SBT are received.	Documentation requiring carriers to develop stowage plans. Stowage plans for selected trips. Evidence that observers are monitoring the requirement for carrier vessels to maintain up to date stowage plans.
9. The Carrier Vessel master ***shall*** submit the stowage plan to inspectors, if requested. [10]	3.3 C. xv.	-	As above.
Monitoring at-sea transhipments			
10. Members and CNMs ***shall*** determine whether or not to authorise their LSTLVs to tranship at sea. [12]	-	-	SOPs/documentation on authorisation to TS at sea. Evidence that TS at sea prohibited unless authorised.
11. Indonesia ***shall*** provide directly to both the CCSBT and IOTC Secretariats, copies of all data and documentation required by and within the timeframes set out in the respective CCSBT and IOTC Transhipment Resolutions. The information provided ***shall*** include transhipment observer information, notifications and reports (reports ***should*** include reports equivalent to - in	3.3 A. vi.	Pg 38 Operating systems and processes to ensure: b. Submission to the CCSBT Secretariat of all required transhipment observer programme information relating to:	Reports provided by Indonesia to CCSBT/IOTC Secretariats on TS Resolutions. Material to demonstrate compliance with MPRs (observer designation and deployment).

standard and content - those currently prepared and provided by IOTC's independent ROP Contractor). [14]		iii. Observer designation: including the observer details and evidence to demonstrate sufficient experience and knowledge of CCSBT conservation and management measures, species identification and fishing gear and the ability to observe, record, report and verify carrier and fishing vessel transfers and SBT onboard; and iv. Observer deployment: including 5-day reports, transhipment declarations and observer reports, and any other required notifications, reports and revisions thereof. b. The items listed in a. above are submitted within the required timeframes.	Indonesia's observer reports.
12. (Annex IV identifies those wooden Carrier Vessels where Indonesian observers may be used to fulfill the requirements of the Resolution). Replacement of any wooden carrier vessels in Annex IV ***is only permitted if*** the material of the substitute vessel ***shall*** remain wooden and the carrying capacity or fish hold volume ***is not larger*** than the vessel(s) being replaced. In such case, the authorisation of the replaced wooden vessel ***shall*** be immediately revoked. [16]	3.3 A. vii.	Pg 39 Rules in place to ensure that: a. Any replacement Indonesian CVs are notified to the Secretariat promptly and before they receive any at-sea transhipments of SBT; and b. Do not have a greater hold volume (gross tonnage used as a proxy) than the CV being replaced; and c. The replacement vessel is also of wooden construction.	Documentation governing authorisation of carriers. Evidence that any replacement vessel is wooden and does not have a larger hold capacity. Evidence that replaced vessel's authorisation revoked immediately.
13. Transhipments by LSTLVs in waters under the jurisdiction of Members and CNMs are ***subject to prior authorisation*** from the Coastal State / Fishing Entity concerned. [17]	3.3 A. i	Pg 35 Operating systems and processes to ensure: a. the authorisation document(s) from the Coastal State Fishing Entity (where applicable) and/or Fishing State Entity, including details of the intended transhipment provided by the master or owner of the LSTLV, is/are available on the LSTLV prior to the transhipment occurring; b. any Carrier Vessel receiving the transhipped SBT is meeting its obligations to provide access and accommodation to observers, and to cooperate with the observer in relation to the performance of his or her duties (see Carrier Vessel Authorisation minimum performance requirements, section 2.3).	Evidence that legal regime is in place implementing obligation in 15. Documents showing prior authorisation has been provided.

14. An original or copy of the documentation of Coastal State/ Fishing Entity prior authorisation (referred to in 16 above], ***must*** be retained on the LSTLV ***and*** made available to the CCSBT observer when requested. [17]	3.3 A. i	Pg 35	Evidence (e.g. license conditions) requiring prior authorisation to be retained on the LSTLV and made available to observer. Examples of prior authorisations provided (or received from other coastal States).
Flag State authorisation			
15. LSTLVs ***shall*** not be authorised to tranship at sea, unless they have obtained prior authorisation from their Flag State / Fishing Entity. [19]	3.3 A. ii	Pg 36 - 38 Rules in place to ensure: a. all SBT transhipments receive prior authorisation; b. fishing vessels are authorised on the CCSBT authorised fishing vessel register on the date(s) the SBT are harvested, retained on board, transhipped and landed; Operating systems and processes to: a. issue transhipment authorisations; b. verify the date and location of transhipments; c. request placement of observers on board Carrier Vessels; d. notify any cases of 'force majeure' (where transhipment occurs without an observer on the Carrier Vessel) to Executive Secretary within 15 days of the event occurring; e. ensure observers can board the LSTLV (provided it is safe to do so) before transhipment takes place, and have access to personnel and areas necessary to monitor compliance with paragraph 6(a) of Annex 2 of the Transhipment Resolution; f. enable observers to report any concerns about inaccurate documentation or obstruction, intimidation, or influence in relation to carrying out their duties; g. monitor compliance with the control measures; and h. impose sanctions or corrective action programmes for any non-compliance detected.	Evidence of legal regime and a process to authorise LSTLVs to tranship (and prohibit at sea TS if not authorised). SOPs/documentation governing authorisation process (including information required in MPRs). Evidence that TS details (e.g. date and location of TS) are verified. Any notifications of force majeure.

16. An original or copy of the documentation of prior authorisation ***must*** be retained on the LSTLV **and** made available to the CCSBT observer when requested. [19]	3.3 A. ii.	Pg 36 As above (observer related components).	Legal requirements to retain copy of prior authorisation on board and make available to observer when requested. Evidence that prior authorisations have been verified by observer (e.g. in observer reports).
Notification obligations – Fishing vessel			
17. To receive the prior authorisation from the Flag State [see 18], the master and/or owner of the LSTLV ***must*** notify the following information to its Flag State / Fishing Entity authorities ***at least 24 hours*** in advance of an intended transhipment: [20] a) Name of the LSTLV, its number in the CCSBT Authorised Vessel List and its IMO number b) Name of the Carrier Vessel and its number in the CCSBT Record of Carrier Vessels authorised to receive transhipments at sea and its IMO number c) Tonnage and product type (see Annex 1 of Resolution) to be transhipped (by species where known) d) Date and location of transhipment e) Geographic location of the SBT catches.	3.3 A. ii a.	Pg 36 Rules in place to ensure: a. all SBT transhipments receive prior authorisation; b. fishing vessels are authorised on the CCSBT authorised fishing vessel register on the date(s) the SBT are harvested, retained on board, transhipped and landed; c. Carrier Vessels are authorised on the CCSBT authorised; Carrier Vessel register on the date(s) any transhipments occur; d. a named CCSBT observer is on board the Carrier Vessel; e. no SBT transhipment occurs without an observer on board except in the case of 'force majeure' (as notified to the Executive Secretary);	Evidence of legal requirement to provide relevant information >24hr in advance of intended transhipment. SOPs/documentation covering authorisation process (e.g. request forms). Examples of notifications received. Evidence that TS details are verified.
18. The master and/or owner of the LSTLV concerned ***shall*** complete and transmit to its Flag State / Fishing Entity, and, where applicable, the Coastal State / Fishing Entity, ***not later than 5 working days*** after the transhipment, the CCSBT transhipment declaration, ***in accordance*** with the format set out in Annex I. [21]	3.3 A. ii. b.	Pg 36/37 Rules in place to ensure: f. transhipment declarations are completed, signed and transmitted by the LSTLV and the Carrier Vessel, in accordance with paragraphs 21, 23 and 24 of the Transhipment Resolution, in particular that: i. The master and/or owner of the LSTLV shall transmit a completed CCSBT Transhipment Declaration to its Flag State / Fishing Entity, not later than 5 working days after the transhipment;	Legal requirement to complete and transit required info. SOPs/documentation covering handling (e.g. receipt, storage, verification) of authorisations received. Examples of transhipment declaration forms received. CCSBT Secretariat records of transhipment data and information received from ID.
Notification obligations – Carrier vessel			
19. ***Before starting transhipment***, the master of the receiving Carrier Vessel ***shall*** confirm that the LSTLV concerned is participating in the CCSBT programme to monitor transhipment at sea (which	3.3 A. iii. a.	Pg 36 (MPRs are not directly linked) 2. Rules in place to ensure: a. all SBT transhipments receive prior authorisation;	Legal requirement on CV master to confirm LSTLV is participating in the CCSBT programme to monitor transhipment at sea, has prior authorisation.

includes payment of the fee in paragraph 14 of Annex II) ***and*** has obtained the prior authorisation from their Flag State / Fishing Entity referred to in paragraph 19 [of the original Resolution, see 18 above). The master of the receiving Carrier Vessel ***shall*** not start transhipment without such confirmation. [22]		b. fishing vessels are authorised on the CCSBT authorised fishing vessel register on the date(s) the SBT are harvested, retained on board, transhipped and landed;	
20. The master of the receiving Carrier Vessel ***shall*** complete and transmit the CCSBT transhipment declaration to the CCSBT Secretariat and the Flag Member/ CNM of the LSTLV, along with its number in the CCSBT Record of Carrier Vessels authorised to receive transhipment at sea, ***within 24 hours*** of the completion of the transhipment. The Secretariat will forward all received Transhipment Declarations to the Flag Member/ CNM of LSTLVs on a quarterly basis, and the Flag Member / CNM ***will*** reconcile these against Transhipment Declarations they have received. [23]	3.3 A. iii. a.	Pg 37 2. Rules in place to ensure: f. ii. The master of the carrier vessel shall transmit its CCSBT Registration Number and a completed CCSBT Transhipment Declaration to the CCSBT Secretariat and the Flag Member/ CNM of the LSTLV, within 24 hours of the completion of the transhipment.	Evidence that transhipment declaration has been received from the CV master by the CCSBT Sec/Indonesia within 24hr for all TS. Evidence that reconciliations have been undertaken by Indonesia.
21. The master of the receiving Carrier Vessel ***shall***, no later than 48 hours before the first point of landing, transmit a CCSBT transhipment declaration, along with its number in the CCSBT Record of Carrier Vessels authorised to receive transhipment at sea, to the competent authorities of the State / Fishing Entity where the landing takes place. [24]	3.3 A. iii. b.	(no direct MPR?)	Evidence that transhipment declarations received for all landings >48hr prior to landing.
Regional Observer Programme			
22. Each Member and CNM ***shall*** ensure that all Carrier Vessels transhipping at sea have on board a CCSBT observer (or national observer for specified Indonesian vessels, refer [13]), in accordance with the CCSBT Regional Observer Program in Annex II. The CCSBT observer ***shall*** observe the compliance with this Resolution, and notably that the transhipped quantities of SBT are reasonably consistent with the reported catch in the CCSBT transhipment declaration and, as recorded in the fishing vessel logbook and CDS documents. [26]	3.3 A. iv.	Pg 36,38 Rules in place to ensure: d. a named CCSBT observer is on board the Carrier Vessel; e. no SBT transhipment occurs without an observer on board except in the case of 'force majeure' (as notified to the Executive Secretary); 3. Operating systems and processes to: c. request placement of observers on board Carrier Vessels; d. notify any cases of 'force majeure' (where transhipment occurs without an observer on the Carrier	Legal requirement to place observer on CVs transhipping at sea. Register of observers placed on all CV trips involved in SBT TS since commencement of exemption. SOPs/documentation covering the coordination of the observer program (e.g. requests for placement, briefing,

		Vessel) to Executive Secretary within 15 days of the event occurring; e. ensure observers can board the LSTLV (provided it is safe to do so) before transhipment takes place, and have access to personnel and areas necessary to monitor compliance with paragraph 6(a) of Annex 2 of the Transhipment Resolution; f. enable observers to report any concerns about inaccurate documentation or obstruction, intimidation, or influence in relation to carrying out their duties; g. monitor compliance with the control measures; and h. impose sanctions or corrective action programmes for any non-compliance detected.	debriefing, processes for authorising observers for CCSBT placements, etc). Observer Manual/ documentation (e.g. covering training, processes used to observe compliance with Resolution, forms completed/guidance, etc) Observer reports of CV transhipment trips. Evidence of any sanctions imposed for non-compliance.
23. Vessels ***shall*** be prohibited from commencing or continuing transhipping at sea without a CCSBT regional observer on board, except in cases of 'force majeure' duly notified to the Executive Secretary. NB: This requirement can be met by using a CPG5 (Compliance Policy Guideline 5 - Guideline on principles for action and steps to be taken in relation to extraordinary circumstances) notification. [27]	3.3 A. v.	Pg 38 Rules in place to ensure: d. a named CCSBT observer is on board the Carrier Vessel; e. no SBT transhipment occurs without an observer on board except in the case of 'force majeure' (as notified to the Executive Secretary); 3. Operating systems and processes to: d. notify any cases of 'force majeure' (where transhipment occurs without an observer on the Carrier Vessel) to Executive Secretary within 15 days of the event occurring;	Evidence of legal regime prohibiting TS without CCSBT observer on board, except for 'force majeure'. SOPs/documentation covering 'force majeure'. Any documentation covering examples of 'force majeure'.
General Provisions (All transhipments)			
24. To ensure the effectiveness of the CCSBT conservation and management measures pertaining to the Catch Documentation System (CDS): a) In validating the necessary CCSBT CDS documentation, as required by the CDS, Flag Members and CNMs of LSTLVs ***shall*** ensure that transhipments are consistent with the reported catch amount by each LSTLV. b) The Flag Member or CNM of LSTLVs ***shall*** validate the necessary CCSBT CDS documentation for the transhipped fish, as required by the CDS, after confirming that the	3.3 C. b & c.	(no specific MPR on p45, although CDS validation processes set out in p 26-28 of CPG1)	CDS validation procedures (or other SOPs/documentation outlining process used to cross-reference transhipments vs catch amount reported by LSTLVs, review observer reports to verify compliance with the Resolution). Evidence that cross-referencing against observer reports has been completed for each CDS involving transhipment at sea.

transhipment was conducted in accordance with this Resolution. If transhipped at sea this confirmation ***shall*** be based on the information obtained through the CCSBT Regional Observer Program. [37]			
25. The Members and CNMs ***shall*** include in their annual report 4 weeks prior to the Annual Meeting of the Commission: a) The quantities and percentage of SBT transhipped at sea and in port during the previous fishing season, b) The list of the LSTLVs registered in the CCSBT Authorised Vessel List which have transhipped at sea and in port during the previous fishing season, and c) A comprehensive report assessing the content and conclusions of the reports of the observers assigned to Carrier Vessels which have received at-sea transhipments from their flag LSTLVs during the previous fishing season.	-	-	Indonesia's Annual Reports. Evidence of robust transhipment data capture and storage to support annual reporting requirements.
ANNEX II - CCSBT REGIONAL OBSERVER PROGRAM			
1. Each Member and CNM ***shall*** require Carrier Vessels included in the CCSBT Record of Carrier Vessels authorised to receive transhipments at sea and which tranship at sea, to carry a CCSBT observer during each transhipment operation at sea. [1]			Evidence that all TS involving SBT on ID CVs have been undertaken in the presence of a CCSBT observer.
2. Between approximately 15 days to 2 months before the Carrier Vessel will sail for a trip that will include a SBT transhipment, the Flag State/ Fishing Entity ***shall*** complete and transmit a CCSBT observer deployment request to the CCSBT Secretariat. [2]			Legal requirement for vessels to notify MMAF of planned trips to support observer deployment requests. SOPs/processes requiring CVs to advise of upcoming trips including SBT transhipment >15 days before departure. Evidence of observer deployment requests submitted.
Designation of observers			
3. The designated observers ***shall*** have the following qualifications to accomplish their tasks [4]:			Observer training modules and records of delivery. CVs and Training Records of deployed observers.

a) sufficient experience to identify species and fishing gear; b) satisfactory knowledge of the CCSBT conservation and management measures; c) the ability to observe and record information accurately; d) a satisfactory knowledge of the language of the flag of the vessel observed.			
Obligations of the observer			
4. Observers ***shall***: a) have completed the technical training required by the guidelines established by CCSBT, or the guidelines established by IOTC or ICCAT providing that the observers have also been trained in relation to paragraphs 4(a) – (c); … d) be included in the list of observers maintained by the Secretariat of the Commission; e) not be a crew member of an LSTLV or an employee of an LSTLV company			Training materials as above. List of CCSBT observers.
5. The observer tasks ***shall*** be as follows [6]: b) monitor the Carrier Vessel's compliance with the relevant conservation and management measures adopted by the Commission and in particular the observers shall: i. record and report upon the transhipment activities carried out; ii. verify the position of the vessel when engaged in transhipping; iii. observe and estimate products transhipped; iv. verify and record the name of the LSTLV concerned and its CCSBT Authorised Vessel List number; v. verify the data contained in the transhipment declaration; vi. certify the data contained in the transhipment declaration; vii. countersign the transhipment declaration; c) produce a daily report of the Carrier Vessel's transhipping activities and transmit a summary of these daily reports to the Secretariat every 5 days; d) prepare a general reports compiling the information collected in accordance with this paragraph and provide the master the opportunity to include therein any relevant information;			Observer data collection/report forms. Examples of completed observer reports. CCSBT Secretariat records of transhipment data, reports and information received from ID.

e) submit to the Secretariat the aforementioned general report within 20 days from the end of the period of observation; and f) exercise any other functions as defined by the Commission.			
6. Observers ***shall*** treat as confidential all information with respect to the fishing operations of the LSTLVs and of the LSTLV owners and accept this requirement in writing as a condition of appointment as an observer. [7]			Observer contract/appointment letter template.
Obligations of the Flag State / Fishing Entities of Carrier Vessels			
7. The responsibilities of the Flag State / Fishing Entities of the Carrier Vessels and their masters in relation to observers ***shall*** include the following: [10] a) Observers shall be allowed access to the vessel personnel and to the gear and equipment; b) Upon request, observers shall also be allowed access to the following equipment, if present on the vessels to which they are assigned, in order to facilitate the carrying out of their duties provided in paragraph 6: i) satellite navigation equipment; ii) radar display viewing screens when in use; and iii) electronic means of communication; c) Observers shall be provided accommodation, including lodging, food and adequate sanitary facilities, equal to those of officers; d) Observers shall be provided with adequate space on the bridge or pilot house for clerical work, as well as space on deck adequate for carrying out observer duties; and e) The Flag State / Fishing Entities shall ensure that masters, crew and vessel owners do not obstruct, intimidate, interfere with, influence, bribe or attempt to bribe an observer in the performance of his/her duties.			Legal regime requiring CVs to allow observers access to relevant personnel, areas and equipment. Legal regime requiring observers to be provided with accommodation etc equivalent to an officer. Any examples of observer obstruction, etc? action taken?
Obligations of LSTLV during transhipment			

8. Observers ***shall*** be allowed to visit the fishing vessel if the observer's safety can be reasonably assured given the weather and sea conditions, and access shall be granted to personnel and areas of the vessel necessary to carry out their duties provided in paragraph 6. [12]			Legal requirement for LSTLV to allow the observer onboard. SOPs or other processes governing transfer of observer to FV. Evidence of checks made.

Annex 3: Workflow description

Pre-departure processes

Prior to trip departure, the CV company coordinates with associated LSTLVs on catch volume, vessel location and any other needs (e.g. food provisions, bait, crew changes, etc) to plan the upcoming trip. Advice from industry is planning for CV trips is highly dynamic (e.g. variable based on catches, weather, etc), with the expected date of departure typically only known 3-4 days in advance. Because clearance is required from the HM before port departure, and the HM's clearance approval is only valid for a 24hr period, CV companies tend to apply for port clearance (and complete associated paperwork) when the estimated date of departure is 'fixed'.

When the date of departure is known, CV companies complete the observer DR and submit to DGCF. The DR contains the estimated departure date, as well as the details of expected transhipments. Based on the DR, the DGCF Observer Team identifies a suitable available observer and submits the DR and observer details (passport, training certificates, Seaman's Book) to the CCSBT Secretariat. Notwithstanding the requirement in Annex II, clause 3 that "*The Executive Secretary shall appoint the observers…*", the Secretariat simply acknowledges receipt (typically within 24hr) and stores the DR and observer details.

Once 'approval' has been given, the HM's office briefs the observer and provides equipment (e.g. data collection forms, measuring tape). The observer then boards the CV, with a pre-sea safety inspection completed between the HM's office, CV agent and observer. The pre-sea safety inspection is stored by DGCF and submitted to the CCSBT Secretariat with the other relevant paperwork post-trip.

Once port clearance has been provided by the HM, the vessel departs port. All CVs are fitted with VMS, with vessels polled hourly (many CVs also carry AIS). Once at sea, the observer completes 5-day (R2) reports, with details communicated to the CV company via radio or satellite phone. The CV company submits the R2 reports to DGCF who review the details and forward these to the CCSBT Secretariat, who acknowledge receipt and store the files.

At-sea processes

Once at sea, the CV company/captain actively coordinate with associated LSTLVs on transhipment times, locations and expected volumes. Consistent with the CCSBT CDS Resolution, industry/DGCF advised that all SBT are tagged by LSTLVs at sea (unless they run out of tags, which reportedly only happens rarely). LSTLVs also reportedly complete e-logs (or paper logs in some cases) daily, although this does not appear to be actively verified by observers. Industry advised that where transhipment plans change (e.g. vessels are added or removed from the list of vessels to be transhipped), a revised DR is submitted to DGCF.

Once the transhipment details are agreed, the CV and LSTLV come together at sea. At present, there is no process by which LSTLVs seek prior authorisation from the flag State to tranship (consistent with clauses 19 and 20 of the Resolution). To that end, there is no capacity for the master of the CV to confirm that LSTLV has obtained the prior authorisation from their Flag State / Fishing Entity before starting transhipment (consistent with clause 22 of the Resolution). Nevertheless, as discussed above, this is not a situation where the CV and LSTLV are from independent companies/flags and may not be well known to each other; the CV and LSTLV are typically from the same company/group and very well known to each other.

If weather permits, the LSTLV will tie up alongside the CV, with fish and provisions being transferred between vessels with the CV crane. However, in rougher weather the vessels will remain apart, with fish and provisions transferred using small vessels/rafts. Observers monitor and record fish as they come aboard. Observers report that the LSTLV master/crew will usually advise when an SBT is coming aboard. Observers reportedly measure SBT lengths (although the proportion of trips on which this occurs and the proportion of fish measured was not clear) and visually estimate weights. Estimated weights are discussed at agreed with the LSTLV or CV master.

The LSTLV and CV masters complete and sign the TD based on agreed weights. The observer also signs the TD and retains the hard copy for submission to the HM's office upon return to port.

If weather permits, the observer boards the LSTLV to check compliance with measures including vessel markings, authorisation to fish (ATF), VMS and logbooks. Observers advised that boardings are possible in over 80% of all transhipments. Where boarding is not possible, observers attempt to gather available information over the radio. Most LSTLV operate on e-logs, which are set up as an Android phone app (e-PIT) and designed to be completed on a set-by-set basis. The date of last logbook entry (which would help confirm that the observer has actually checked the logbook) is never entered in observer reports. Observers interviewed advised they had never observed an incident of non-compliance on any LSTLV boarded.

Where weather conditions prevent boarding, TDs are wrapped in plastic and transferred between vessels in small boats/rafts with fish.

Industry advised that CTFs/CMFs are not completed at sea. Rather, these are completed by the fishing company after fish are counted and weighed upon landing.

Post-landing processes

At the conclusion of the trip, the CV seeks clearance from the HM for the vessel to enter port and land fish. As part of the clearance process, the HM reportedly reviews details from the trip including VMS and transhipment records.

After clearance is granted, the CV lands at the wharf. Upon landing, the observer reportedly submits the TDs from the trip to the HM's office. The TDs are then provided to the CV company, who stamp the form and enter the data into the MMAF CDS app. Observers also provide to the HM a record of which coloured raffia tag belongs to which LSTLV (the CV captain also provides a record).

Fish from the CV are loaded onto a truck for transport to the CV company's processing facility, which is typically very close-by (in Benoa, within the same port precinct). The process of transferring fish onto the truck is reportedly not independently monitored.

Upon delivery to the CV company's facility, the fish are counted and accurately weighed. The process of counting and weighing is undertaken by the company staff, but independently supervised by two DGCF staff (one from the HM's office, one enumerator). The CV captain and observer are also sometimes present. Scales used for weighing are reportedly calibrated monthly. Importantly, CV companies are charged a 'post-production' (landing) fee by the HM's office, calculated based on the volume and species composition of fish landed (with landings of SBT charged at a higher rate than BET/YFT). Accordingly, there is a commercial incentive for both parties for numbers/weights to be accurate.

After counting/weighing, the fishing company enters the details of any SBT into the MMAF CDS app (including tag numbers, weights etc). The HM enumerator also enters the details of the landings counts and weights into the port management database via the PIPP app. These details are available to the DGCF HM and Observer teams.

The fishing company also completes the CTF and CMF, based on the final numbers, weights and tag details. The CV master and observer reportedly sign the CMF in port. It is not clear when and how the LSTLV master signs the form (given the LSTLV may remain at sea for months after the CV has returned to port; although, notably, all CMFs reviewed have the LSTLV master, CV master and observer all signing the CMF on the date of transhipment). CTFs and CMFs are then submitted to the HM for validation through the CDS app. We understand validation typically involves reviews of license details, vessel logbooks, TDs and VMS data.

After landing, the observer reportedly prepares a draft Observer Report using computer facilities available at the DGCF office. Reports are originally completed in Indonesian and later translated into English by DGCF. SBT weights are based on the figures agreed in the TDs (although observers noted that they had access to the final landed weights and did refer to them when preparing reports). The draft report is submitted to DGCF (usually within 3-4 days after landing) and reviewed by the observer team (the draft is not shown to the CV master, as is the case in the IOTC ROP). Some graphs are added by the DGCF Observer team (e.g. Figures 1 and 2 in ORs), based on data submitted by the observer. A remote debriefing session is held via Zoom. The observer then makes any necessary revisions to the draft Report, which is then submitted to the CCSBT Secretariat.

Once the final count and weight details become available in the CDS app, the DGCF Observer team reviews these against the details in the original Observer Report. If the details (e.g. SBT counts, weights) are different, the DGCF Observer Team may prepare an updated version of the Observer Report using the counts/weights in the CDS app (which will accord with the information reported in the CTFs/CMFs). This revised version is then submitted to the CCSBT Secretariat. Revised observer reports have been submitted for at least 15 trips under the Indonesian trial. Observers interviewed advised they had no knowledge of revised observer reports being submitted.

The TDs, plus updated versions of the observer DR and R2 reports are also submitted to the CCSBT Secretariat along with the Observer Report. CTFs and CMFs are submitted quarterly.