JOINT IATTC AND WCPFC-NC WORKING GROUP MEETING ON THE CATCH DOCUMENTATION SCHEME (CDS) TECHNICAL MEETING

Fukuoka, Japan
3 July 2023

Options for Budgetary and Administrative Consideration for the Development of CDS

IATTC-NC-CDS04-2023/02

1. Background

At the 3rd CDS Technical meeting of the JWG, the participants agreed to establish a small working group that will review the budgetary and administrative considerations for the development of the ePBCD system. Canada, Chinese Taipei, Japan, Korea and United States joined the small working group. It was also agreed that the working group will seek information regarding bluefin CDS from CCSBT and ICCAT and take into consideration the ongoing work to develop a CDS at the IOTC.

Information from the ICCAT eBCD for Atlantic bluefin, in particular on the cost and budget allocation, was presented to the 2nd CDS Technical meeting[1]. Therefore, during the intersessional period, Japan studied information concerning development of CCSBT e-CDS for southern bluefin tuna from the CCSBT Secretariat as well as ongoing work to develop a CDS at the IOTC from the publicly available documents. The information collected by Japan's study was shared among the members of small working group (see **Attachment 1**). Japan also summarized the CDS Strategy document developed by the IOTC, which is attached as **Attachment 2** for a reference purpose.

Considering the developments in other RFMOs and foregoing discussion at this CDS Technical meeting, Japan offers some options for the budgetary and administrative issues for the development of ePBCD, for the discussion at the 4th CDS Technical Meeting.

[1] Chair's Summary of the 2nd Catch Documentation Scheme (CDS) Technical Meeting, paras 4 and 5.

2. Options for Budgetary and Administrative Consideration

(1) Basis of the system development

Options	Situation in other RFMOs	Consideration
a. Use resources from ICCAT eBCD as a basis of development	ICCAT eBCD: Operational since 2016	i. In operation for years. System expected to be stable. ii. Functions developed in harmony with ICCAT specific MCS measures, designed for unique fishing and farming operations in the Mediterranean iii. Program developer (Tragsa) based in Spain
b. Use resources CCSBT e-CDS as a basis of development	CCSBT e-CDS: Under testing by members of CCSBT. Full implementation scheduled in 2025.	i. Under development, but a trial version is already available. ii. Functions developed in harmony with CCSBT specific MCS measures (e.g. tagging of individual fish), but relatively simpler. iii. Program developer (Shore Informatics) based in Canberra iv. Developed using database platform TUFMAN2 (developed by SPC), familiar to WCPFC Secretariat
c. Develop IATTC/WCPFC's own e-CDS system from the scratch	ICCAT spent approx. 4.5 years and 1.2 million Euro for initial development. CCSBT expects approx. 5 years and approx. 0.2 million AUD before full implementation. IOTC consultant report estimated 1.5 million USD	i. Systems to be developed in harmony with the needs of IATTC/WCPFC ii. Time-consuming and costly

(2) Location of the system

Options	Situation in other RFMOs	Consideration
A cloud-based system	ICCAT eBCD: A cloud server is provided by a private service provider (Amazon Web Service) CCSBT e-CDS: A cloud server is provided by a private service provider (Microsoft Azure)	i. No need to select physical location of the server between IATTC and WCPFC ii. Need to decide which RFMO administrates the system

(3) Use of external company in development and maintenance of the system

Options	Situation in other RFMOs	Consideration
a. An external company is contracted for the development and maintenance of the system. Secretariat coordinates communication between the company and members.	ICCAT eBCD: External company (Tragsa) has been contracted. CCSBT e-CDS: External company (Shore informatics) has been contracted.	i. Minimize the increase in workload of the Secretariat(s) ii. Could be cost efficient, in particular in short-term, because the development phase is considered to be the peak of the resources demand. iii. Advisable to contract with the same external company, if resource from ICCAT/CCSBT system is used as a basis of development.
b. External company is not contracted, and the Secretariat staff (s) will engage.	IOTC consultant report suggested that a position for CDS officer should be created.	i. Expected to increase the burden of the Secretariat significantly. ii. Could be costly – by requiring new officer (s) hired for the CDS.

(4) Demarcation of responsibility between IATTC and WCPFC Secretariats in the operational work for the development and maintenance of the system.

Options	Situation in other RFMOs	Consideration
a. Both secretariats have equal responsibility, and work collaboratively through consultation.	No preceding example	i. No need to decide which Secretariat will take a lead. ii. Decision making could be difficult because of equal responsibility and consultative nature. iii. Responsibility could be demarcated between the two Secretariats (i.e. by area of catch).
b. One secretariat has a leading responsibility, while the other has a right to comment where appropriate through.	No preceding example	i. Need to decide which Secretariat will take a lead. ii. An MOU could be considered to clarify the demarcation and process. iii. Members of "the other" RFMO may have concerns.
c. One secretariat has the full responsibility, under the conditions agreed by the other RFMO.	No preceding example	i. Need to decide which Secretariat will have the full responsibility. ii. An MOU could be considered to clarify the demarcation and process. iii. Members of "the other" RFMO may have concerns.

(5) Cost Sharing between IATTC and WCPFC and/or among CPCs of each RFMO

Options	Situation in other RFMOs	Consideration
a. Equal division b. Proportionate to PBF catches c. Proportionate to PBF transactions recorded in d. Combination of a.~c.	In the case of ICCAT, additional contribution for the support, maintenance, and functionality development of eBCD system is collected from Contracting Parties that catch and/or trade bluefin tuna, with following formula: (a) basic fee of 700 USD from each Contracting Party (b) variable fee: i. 30% in proportion to the Contracting Party's round weight of bluefin tuna catch ii. 40% in proportion to Contracting Party's total number of trades in the system iii. 30% in proportion to Contracting Party's overall volume of import	(Cost sharing between IATTC and WCPFC) i. Advisable to agree on a formula to divide the cost between IATTC and WCPFC. ii. Advisable to have simple formula such as a. or b, to make the prediction of the budget easier. (Cost sharing within each RFMOs and among CPCs) i. No need to have a common formula between IATTC and WCPFC ii. Each RFMO can decide a best formula for the organization, and ICCAT formula can be used as a reference.

e-CDS development in CCSBT and IOTC

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1. CCSBT[1]

(1) Status of the development

CCSBT established its CDS for southern bluefin tuna in 2010, that uses paper based CDS. The CCSBT CDS is established by the "Resolution on the implementation of a CCSBT Catch Documentation Scheme"[2].

Members of the Commission supported developing a trial eCDS based on the currently applied CDS Resolution in 2019. The trial eCDS system has been developed and is under testing by the Secretariat and Members. Some remaining issues (such as delegation of validation), development of user manual and revision of the CDS Resolution were discussed and/or agreed on by Members at its 2022 Compliance Committee meeting. The current plan envisages that the development of eCDS will be completed in 2023, and that eCDS will be partially implemented in 2024 (Some vessels would start to use eCDS while other vessels would continue with the paper based CDS forms. Once a fishing vessel creates an eCDS, all the subsequent receivers of the fish and the CDS (i.e. exporters, carrier vessels and importers) are supposed to use the eCDS consistently) and fully implemented in 2025.

(2) System development and the role of the Secretariat

CCSBT eCDS utilizes TUFMAN2, the database platform developed by SPC. CCSBT and SPC agreed on an MOU that enables CCSBT to access the program code of TUFMAN2 and develop its eCDS system based on the TUFMAN2 code.

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[1] Summarized by the author based on publicly available information on CCSBT website and CCSBT-CC/2210/17 "Progress Update on the CCSBT's Trial eCDS Project" (https://www.ccsbt.org/system/files/CC17_17_Progress_update_trial_eCDS.pdf), as well as an interview to the CCSBT Secretariat.

[2] The up-to-date resolution (last updated October 2021) is available at: https://www.ccsbt.org/sites/default/files/userfiles/file/docs_english/operational_resolutions/Resolution_CDS.pdf

The developed eCDS system and relevant data is deployed in a secured cloud server, so there is no need to have a server device at the CCSBT Secretariat office. The cloud server is provided by a private service provider (Microsoft Azure) and is not linked to the SPC server.

The CCSBT eCDS system was developed by a private company[3] based in Australia which was commissioned by CCSBT. CCSBT Secretariat has a Database Manager, who is authorized and capable to modify the eCDS system. The Database Manager is also playing an important role to coordinate requests from Members and revisions of the system. The Database Manager will be responsible for the maintenance of the eCDS system, in consultation with the private company and/or SPC, wherever necessary.

The program developer in the private company as well as Database Manager have experience in working at SPC, which made it easier to collaborate with SPC for the use of TUFMAN2.

(3) Budget

In accordance of the paper CCSBT-CC/2210/17, CCSBT Secretariat observed that eCDS has been relatively inexpensive project and it was expected that the accumulated expenditure on the project (excluding Secretariat staff time) will be ~AUD 139,000 at the end of 2022.

In this paper, the approximate expected expenditure for future years was:

2023: AUD 40,000 (final testing and modifications)

2024: AUD 20,000 (partial implementation and further modifications as required)

2025: AUD 15,000 (full implementation and maintenance)

(4) Possible collaboration

WCPFC may wish to have formal collaboration with CCSBT, including the possible utilization of some resources from the CCSBT eCDS system. For such possibility, WCPFC will need to make a formal request to the CCSBT on this issue, and a formal decision for acceptance at CCSBT Commission level (i.e. consensus by CCSBT Members) will be necessary.

[3] Shore Informatics: https://shoreinformatics.com/

2. IOTC

(1) Consultant report

As pointed out during the 3rd CDS Technical Meeting held in July 2022, there was a consultant report on the development of MCS system and e-CDS, that was funded by the European Union and submitted to IOTC in December 2018[4] ("the Consultant Report", hereinafter).

The report observed that CDS adopted by CCSBT and ICCAT were effective quota monitoring tools for bluefin tunas through their centralized registry or electronic system.

Noting that major tuna species such as albacore, bigeye, yellowfin and skipjack tunas fall within the competence of the four t-RFMOs (i.e. IOTC, ICCAT, IATTC and WCPFC), and also observing that there is no traceability mechanism outside of a CDS allowing for the proper accounting of all oceanic sources of tuna, the report recommended that IOTC take a lead in harmonizing CDS or developing a single e-CDS platform serving all t-RFMOs (i.e. "super-CDS") through Kobe-type round of negotiations.

Assuming the development of "super-CDS", the report estimates four and half years from the launch of a dedicated project to the development of an e-platform for full implementation of e-CDS. The report estimated the total development cost (including cost for Kobe-type consultation) of USD 1,740,000 and operation and maintenance cost of USD 75,000/year.

The report suggested that operation and maintenance of the platform should be entrusted to a permanent IOTC staff member, and a position for CDS officer ought to be created for this function under IOTC's regular budget. The CDS officer, an IT expert with a solid fisheries background, will be tasked with operating the platform on a daily basis, responding to CPC queries, and liaising with the other staff of IOTC's compliance section.

(2) Status of the discussion

(a) Discussion at the CDS WG

CDS WG of the IOTC was established in 2020, and its 8th meeting was held in February

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[4] Consultant report, "Developing a comprehensive MCS system and an electronic Catch Documentation Scheme for IOTC", available at: https://iotc.org/documents/developing-comprehensive-mcs-system-and-electronic-catch-documentation-scheme-iotc-0

2023. Taking into account the Consultant Report and subsequent discussion at the CDS WG, the Chair of the WG and the IOTC Secretariat produced a strategy document[5] ("The Strategy" hereinafter) of IOTC CDS for the discussion at the IOTC. The Strategy is complemented by a companion document[6] ("The Companion Document" hereinafter) which offers the discussion and justification of various elements and a draft CDS Resolution. They are still subject to change through further discussion at the CDS WG including correspondence and relevant bodies of the IOTC including the Commission. Following observation is a summary by the author based on the version 1.0 that was submitted to the 8th CDS WG meeting and does not represent the view of the CDS WG.

(b) Scope and phased introduction of the CDS

The Strategy suggests tropical tuna species (bigeye, yellowfin and skipjack, and possibly swordfish) would be candidates of the IOTC CDS in the initial stage. It anticipates several phases for the introduction of the IOTC CDS, namely, (i) introduction of catch certificate for industrial fisheries from the outset; (ii) introduction of simplified trade certificate and then catch certificate for artisanal fisheries; (iii) incorporation of all the port states and processing states outside IOTC membership; (iv) expansion of number of species subject to IOTC CDS and (v) collaboration with other RFMOs.

(c) Financial and Administrative Consideration

The Strategy observes that three financial aspects need to be addressed: (i) investment cost for the establishment of the eCDS (technical specification, development of e-platform, piloting, launching, and training for IOTC CPCs; (ii) investment costs of implementing the CDS in selected developing coastal States; and (iii) maintenance cost.

As for (i), the Companion Document refers to the Consultant Report, that estimated USD 1,490,000 excluding cost for Kobe-type consultation (the WG already rejected such style of negotiation). The Companion Document also refers to the case of ICCAT, which invested EUR 864,000 in the three years (2012-2014) of the initial development. Reference to CCSBT is omitted here because of section 1.

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[5] "IOTC Catch Documentation Scheme Strategy version 1.0" https://iotc.org/documents/draft-iotc-catch-documentation-scheme-strategy

[6] "IOTC Catch Documentation Scheme Strategy Companion version 1.0" https://iotc.org/documents/iotc-catch-documentation-scheme-iotc-cds-strategy-companion

As for (ii), the Companion Document observed that the Consultant Report did not offer specific financial proposal on this aspect. The Companion Document emphasized the importance of this issue for the coastal developing states and have a separate section discussing the need for special consideration to artisanal fleets.

As for (iii), the Companion Document introduces the case of ICCAT which spent EUR 348,000 per year in average between 2015 and 2018 with a high of EUR 403,194 in 2018. It also considered a cost for an additional dedicated full-time staff the Consultant Report suggested to hire. The annual cost for the staff was estimated to be USD 170,000 based on the average of current staff. The cost will be reduced to USD 40,000 if he/she is a general service local staff or USD 16,000 if national project personnel.

Attachment 2

IOTC CDS Strategy

By Japan

IOTC adopted its CDS Strategy* at the 27th annual meeting held on May 22 – 26 this year.

This presentation summarizes the strategy as a reference for ICCAT work on CDS

* The document can be accessed by IOTC-2023-CoC20-12_Add1_Rev3E_-_IOTC_CDS_Strategy_V3.0_Comments_MYS_MDV_EU_JPN.docx (live.com).

SPECIES TO BE COVERED

- Bigeye tuna, Skipjack tuna, Yellowfin tuna and Swordfish for initial coverage

- Step-wise implementation in terms of species and product types

- Consider whether all IOTC species should be covered in the long run, with possible inclusion of sharks.

SCOPE

- The species should be covered in their global range. The port States and processing States that are not members of IOTC will be requested to cooperate.

- IOTC shall develop its own platform, but it must allow for other systems to access some of its data, and vice-versa. This implies using standardised key data elements and exchange with other RFMOs.

- Initially start with a trade-based system, then consider transition to a fisheries-based system. All internationally-traded fish and as much landed fish as possible must be covered to achieve objectives.

GOALS (GENERAL OBJECTIVES)

- Reduced IUU fishing and trade in illegally caught products; and

- Improved provision of catch information and traceability for fisheries management.

EXPECTED RESULTS (OUTPUTS)

Phase 1 Stage 1
A trade-based CDS for all vessels over 24 meters is operational for the three tropical tunas and swordfish subject to the future decision of the Commission.

Phase 1 Stage 2
A trade-based simplified CDS for vessels below 24 meters is operational for the three tropical tunas and swordfish.

Phase 2
All relevant port States and processing States are included in the CDS.

Phase 2
All IOTC species and relevant sharks are covered by the CDS.

Phase 2
The species covered by the CDS are documented by other RFMOs and vice versa.

ACTIVITIES

Elaborate and approve eCDS Concept paper

- A detailed eCDS Concept Paper will be produced based on the Strategy.
- This paper will specify the technical model, requirements and specifications, projections of data load and infrastructure needs, detailed description of individual eCDS functions and programming language.
- Staffing implications will be considered.

Adoption of CDS Resolution

- The Commission shall adopt a resolution on CDS which includes “gold standard” incorporating all the essential requirements for achieving the Specific Objective or Purpose of the IOTC CDS Strategy.

Development of eCDS platform

Secure budgets and recruit CDS team

- Costs of establishing the eCDS
- Costs of implementing eCDS
- Costs of maintaining eCDS at the Secretariat.

Consultations with those RFMOs who have implemented a CDS would be fruitful.

Compatibility with IOTC's MCS tools and national programs

- Ensure compatibility with EU Catch Certification Scheme and US Seafood Import Monitoring Programme.
- Consideration to integration and complementarity of CDS with other MCS tools (record of authorised vessels, ePSM, IUU vessel lists, VMS, fishing license, logbooks, etc.)

Development of eCDS platform (continued)

Purchase and install software and hardware

- Programme and set up platforms, which would be compatible with the PCs, tablets and mobile phones.

Develop information and training materials

- Intuitive platforms without large complicated manuals
- Start-up guides and instructive videos

Training in the application of eCDS

- Training for the Secretariat
- Training for CPCs
- Special training for developing CPCs regarding artisanal fisheries

Development of eCDS platform (continued)

Operate & maintain

- System integrity and functionality would be assured by the CDS Officer at the Secretariat.

- CPCs would operate the CDS on their relevant platforms at their disposal (PC, tablet or mobile phone).

Monitor and Evaluate

- The progress of the Strategy will be monitored every year.

- Adjustments will be made to the Strategy and IOTC Resolutions.

A trade-based CDS for vessels in the IOTC record (Phase 1 Stage 1)

- Covers all exported catches of three tropical species and swordfish.

- Trials
  -- Volunteer CPCs to try issuing and verifying Catch Certificates on their fisheries
  -- Trade Certificates to be tested after Catch Certificates have been piloted.
  -- Trade Certificates to be instituted after Catch Certificates are instituted for all fisheries.

- Review the results of trials and consider stepwise implementation schedules

- CPCs notify the Secretariat of competent authorities.

- Estimate Catch Certificate is generated by vessel and verified by flag State, Port State and Trade Certificate.

- A date to be decided for the mandatory use of Trade Certificates. Catch Certificates shall be mandatory three months before Trade Certificates are mandatory.

A trade-based simplified CDS for vessels not in the IOTC record (Phase 1 Stage 2)

- Identify funding sources for capacity building in developing coastal States
- Carry out pilot trials of the simplified Catch Certificate
  -- Trade Certificates to be tested after Catch Certificates have been piloted.
  -- Link to be established between Trade Certificates and Catch Certificates
- Review the results of trials and consider stepwise implementation schedules
- CPCs notify the Secretariat of competent authorities.
- Estimate Catch Certificate is generated by buyer or operator and validated by flag State and Trade Certificate.
- A date to be decided for the mandatory use of Trade Certificates. Catch Certificates shall be mandatory three months before Trade Certificates are mandatory.

Transition from trade-based CDS to fisheries-based CDS will be considered

Port State & processing State documentation (Phase 2)

- Identify and Invite relevant port States and processing States that are not CPCs to become members or CNCP

Expand species coverage (Phase 2)

- Additional four species to be considered (albacore, blue marlin, black marlin, striped marlin).

- Additional eight IOTC species (Longtail tuna, Kawakawa, Frigate tuna, Bullet tuna, Narrow barred Spanish mackerel, Indo-Pacific king mackerel, sailfish, and SBT) (note: SBT will be presumably excluded)

- Sharks with priority given to those most associated with fishing on IOTC species.

Other RFMOs (Phase 2)

- Monitor progress on CDS in other tuna RFMOs.
- Ensure technical compatibility.
  -- The CDS will consider use of Key Data Elements recommended in the FAO CDS Guide for National Authorities.
  -- Data compatibility for potential exchange with other RFMOs will be assessed.
- Agree data exchange and mutual recognition
  -- LOU or MOU will be drafted to formalise the conditions of data exchange, access to platforms and mutual recognition of Catch Certificates and Trade Certificates with other RFMOs.

Schedule in 2024 and 1st half of 2025

	2024	1st half of 2025
Elaborate & approve eCDS concept paper	X	
Adopt CDS Resolution	X	
Rationalise & consolidate Resolutions relating to MCS		X
Secure budgets & recruit CDS team	X	
Ensure compatibility with MCS tools & EU/US system		X
Purchase and install software & hardware		X
Programme and set up platforms		X
Test for the CDS for IOTC vessels		X
Carry out pilot trials of estimate Catch Certificate (CC) & verified CC		X
Test for the CDS for no IOTC vessels		X
Identify funding for capacity building in developing coastal States		X