



The Oceans and Fisheries Partnership (USAID Oceans)

# REGIONAL TECHNICAL GUIDANCE WORKSHOP ON ELECTRONIC CATCH DOCUMENTATION AND TRACEABILITY

Activity Report | December 2019, Bangkok, Thailand



Date: 21 April 2020

Contract Number: AID-486-C-15-00001

Contract Period: May 14, 2015 to June 30, 2020

COR Name: Cristina Vélez Srinivasan

Submitted by: John Parks, Chief of Party

Tetra Tech | 1320 North Courthouse Road, Suite 600 | Arlington, VA 22201 | USA

Telephone: +1 (703) 387-2100 | Email: [John.Parks@tetratech.org](mailto:John.Parks@tetratech.org)

This document was produced by Tetra Tech under the USAID Oceans and Fisheries Partnership of the United States Agency for International Development/Regional Development Mission for Asia (USAID/RDMA).

*Cover photo: Participants at the Regional Electronic Catch Documentation and Traceability Technical Guidance Workshop, December 2-4 2019, Amari Watergate Hotel, Bangkok, Thailand*

*Photo Credit: USAID Oceans/L Bader*

# TABLE OF CONTENTS

<b>EXECUTIVE SUMMARY</b> .....	<b>6</b>
<b>INTRODUCTION</b> .....	<b>7</b>
<b>DISCUSSION &amp; OUTPUTS</b> .....	<b>8</b>
DAY 1: REVIEW AND VALIDATION OF THE REGIONAL eCDT TECHNICAL GUIDANCE.....	8
<i>Opening Remarks</i> .....	8
<i>Regional eCDT Technical Guidance Review</i> .....	10
DAY 2: SHARING OF KNOWLEDGE AND EXPERIENCES .....	14
<i>Country Experiences and Updates</i> .....	15
<i>Human Welfare, Gender and Labor</i> .....	21
<i>eCDT Technology Showcase</i> .....	22
DAY 3: COUNTRY COMMITMENTS AND MAPPING OF WAY FORWARD.....	25
<i>Participant Feedback: Reflections on Lessons Learned</i> .....	25
<i>Report-out: Finalizing the “Regional Document on Integrating Gender in the Fisheries Workplace”</i> .....	26
<i>Country Commitments on Regional eCDT Technical Guidance Document</i> .....	27
<i>Dialogues on The Way Forward</i> .....	28
<i>Participant Feedback: Most Important Takeaways from this Workshop</i> .....	28
<i>Beyond Oceans</i> .....	29
<i>Regional eCDT Technical Guidance Document: Next Steps</i> .....	29
<i>Closing</i> .....	30
<b>ANNEX I. LIST OF PARTICIPANTS</b> .....	<b>31</b>
<b>ANNEX II. PARTICIPANT DISTRIBUTION BY GENDER &amp; ORGANIZATION</b> .....	<b>35</b>
<b>ANNEX III. AGENDA</b> .....	<b>36</b>
<b>ANNEX IV. USAID OCEANS PARTNERS</b> .....	<b>40</b>
<b>ANNEX V. WELCOME AND OPENING REMARKS, REGIONAL ECDD TECHNICAL GUIDANCE WORKSHOP, 2-4 DECEMBER 2019, BANGKOK, THAILAND</b> .....	<b>44</b>
V.1. MR. BUNCHONG CHUMNONGSITTATHUM, DEPUTY DIRECTOR GENERAL, THAILAND DOF.....	44
V.2. MS ROOPA KARIA, DEPUTY DIRECTOR, REGIONAL ENVIRONMENT OFFICE, USAID/RDMA.....	44
V.3. MR. AKITO SATO, DEPUTY SECRETARY GENERAL, SEAFDEC.....	45
V.4. MR. JOHN PARKS, CHIEF OF PARTY, USAID OCEANS.....	46
<b>ANNEX VI. CLOSING REMARKS, REGIONAL ECDD TECHNICAL GUIDANCE WORKSHOP, 2-4 DECEMBER 2019, BANGKOK, THAILAND</b> .....	<b>48</b>
VI.1. MS CRISTINA VELÉZ SRINIVASAN, ECOSYSTEMS MANAGEMENT AND TRADE TEAM LEAD, USAID/RDMA .....	48
VI.2. MR. JOHN PARKS, CHIEF OF PARTY, USAID OCEANS .....	49
VI.3. MR. AKITO SATO, DEPUTY SECRETARY GENERAL, SEAFDEC.....	50

## ACRONYMS & ABBREVIATIONS

ACDS	ASEAN Catch Documentation Scheme
AMS	ASEAN Member State
AP2HI	<i>Asosiasi Perikanan Pole &amp; Line dan Handline Indonesia</i> (Indonesian Pole & Line and Handline Fisheries Association)
ASEAN	Association of Southeast Asian Nations
BAC	Bureau of Fisheries and Aquatic Resources Administrative Circular
BFAR	Bureau of Fisheries and Aquatic Resources
BoL	Bill Of Lading
CC	Catch Certificate
CD	Catch Document
CDT	Catch Documentation and Traceability
CTI-CFF	Coral Triangle Initiative on Coral Reefs, Fisheries and Food Security
DFISH	Directorate of Fisheries (Vietnam)
DOF	Department of Fisheries
DOI	Department of the Interior
eACDS	Electronic ASEAN Catch Documentation Scheme
EAFM	Ecosystem Approach to Fisheries Management
EC	European Commission
eCDT	Electronic Catch Documentation and Traceability
eCDTS	Electronic Electronic Catch Documentation and Traceability System
EEZ	Exclusive Economic Zone
eLogbook	Electronic Logbook
EU	European Union
FAME	Futuristic Aviation and Maritime Enterprise
FAO	Food and Agriculture Organization
FishMon	Fisheries Monitoring Center
FMA	Fisheries Management Area
GAD	Gender and Development
GAF	Gender in Aquaculture and Fisheries
GPS	Global Positioning System
GT	Gross Tonnage, Gross Ton
HACCP	Hazard Analysis Critical Control Points
HONEST	HACCP online system
HP	Horsepower
HWGE	Human Welfare and Gender Equity
HWGL	Human Welfare, Gender and Labor
IMEMS	Integrated Maritime Environment Monitoring System
IT	Information Technology
IUU	illegal, Unreported, And Unregulated (fishing)

KDE	Key Data Element
KUSUKA	<i>Kartu Pelaku Usaha Kelautan dan Perikanan</i> (Marine and Fisheries Business Actor's Card)
Lao PDR	Lao People's Democratic Republic
MCD	Centre for Marinelife Conservation and Community Development
MCS	Monitoring, Control and Surveillance
MD	Movement Document
MDPI	<i>Yayasan Masyarakat dan Perikanan Indonesia</i> (Indonesian Fisheries and Community Foundation)
MMAF	Ministry of Marine Affairs and Fisheries
MPA	marine protected area
MSC	Marine Stewardship Council
NFC	near field communication
NGO	non-governmental organization
NOAA	National Oceanic and Atmospheric Administration
PFDA	Philippine Fisheries Development Authority
PPS	Processing Statement System
PSM	Port State Measure
QR	Quick Response
RDMA	Regional Development Mission for Asia
RF	Radio Frequency
RFMO	Regional Fisheries Management Organization
SEAFDEC	Southeast Asian Fisheries Development Center
SFFAI	SOCKSARGEN Federation of Fishing and Allied Industries, Inc
SHTI	<i>Sertifikasi Hasil Tangkapan Ikan</i> (Catch Certification System)
SIMP	Seafood Import Monitoring Program
SPB	<i>Sistem Pemberitahuan Berlayar</i> (Sailing Notification System)
STELINA	<i>Sistem Telusur dan Logistik Ikan Nasional</i> (National Fisheries Traceability and Logistic System)
TEMAN SPB	<i>Sistem Informasi Penerbitan Sistem Pemberitahuan Berlayar</i> (Sailing Permit Information System)
TFCCS	Thai-flagged Catch Certificate System
TWG	Technical Working Group
UN	United Nations
USAID	United States Agency for International Development
USAID Oceans	United States Agency for International Development Oceans and Fisheries Partnership Project
USAID/RDMA	United States Agency for International Development Regional Development Mission for Asia
USG	United States Government
VMS	Vessel Monitoring System
WINFISH	The National Network for Women in Fisheries in the Philippines

# EXECUTIVE SUMMARY

The United States Agency for International Development (USAID) Oceans and Fisheries Partnership Project (USAID Oceans), in coordination with the Southeast Asian Fisheries Development Center (SEAFDEC) and the Thailand Department of Fisheries (DOF), conducted a Regional Technical Guidance Workshop on Electronic Catch Documentation and Traceability (eCDT) on December 2-4, 2019, in Bangkok, Thailand. USAID Oceans is a 5-year activity (2015-2020) funded by the USAID Regional Development Mission for Asia (USAID/RDMA) and implemented in partnership with the Southeast Asian Fisheries Development Center (SEAFDEC) and the Coral Triangle Initiative on Coral Reefs, Fisheries and Food Security (CTI-CFF).

The regional technical guidance workshop aimed to:

1. Finalize the “Technical Guidance on the Design and Implementation of Electronic Catch Documentation and Traceability Systems in Southeast Asia”;
2. Review and finalize national roadmaps for implementing national eCDT; and
3. Share lessons from USAID Oceans, as well as from ongoing and future developments in eCDT undertaken by the Association of Southeast Asian Nations (ASEAN) Member States (AMS), beyond the completion of USAID Oceans.

Held in Bangkok, Thailand, the workshop was attended by 52 participants, including 20 representatives from five of the 10 AMS (Indonesia, Lao People’s Democratic Republic (PDR), Myanmar, Philippines and Thailand), non-governmental and private sector partners, SEAFDEC, USAID Oceans and USAID/RDMA. Male-to-female percentage distribution was roughly equal at 48 percent to 52 percent.

Key workshop results included:

1. Country roadmaps for eCDT (2020-2025) – At the end of the workshop, Lao PDR and Myanmar had draft eCDT roadmaps, and Vietnam had a “clearer” roadmap. These were in addition to the roadmaps of Thailand, Indonesia and the Philippines that were already developed coming into the workshop, and Cambodia, which is being assisted by USAID Oceans Consultant Robert Pomeroy to develop its roadmap.
2. Suggestions for revision of the Regional eCDT Technical Guidance document
3. Better understanding of the various technology options available for eCDT – These technology options included SEAFDEC’s electronic ASEAN Catch Documentation Scheme (eACDS) and various eCDT solutions developed by the non-profit and commercial technology providers supported by USAID Oceans, namely, Pointrek by PT Sisfo Indonesia, FAME by Futuristic Aviation and Maritime Enterprise, Trafiz by Altermyth, and TraceTales by MDPI.
4. Lessons learned from eCDT implementation in the region, especially in Indonesia, Philippines, and Thailand

The next steps were identified as follows:

TASK	TARGET DATE	LEAD
Edit document to incorporate revision suggestions from this workshop	15 Dec. 2019	USAID Oceans (Dr. Pomeroy, Mr. Pedrajas)
Submit additional comments to Ms. Yamsangsung or Mr. Parks	15 Dec. 2019	Country focal points
Incorporate additional comments and submit revised final draft to USAID/RDMA for review	January 2020	USAID Oceans
Conduct Workshop on eCDT for Freshwater Fisheries (Vientiane, Lao PDR)	January 2020	USAID Oceans, SEAFDEC, and Lao PDR Department of Fisheries
Submit USAID/RDMA-approved document to SEAFDEC Council Meeting	March 2020	USAID Oceans, SEAFDEC

# INTRODUCTION

The *Regional Technical Guidance Workshop on Electronic Catch Documentation and Traceability (eCDT)* was held on December 2-4, 2019 at the Amari Watergate Hotel, in Bangkok, Thailand. It was organized by USAID Oceans, in coordination with SEAFDEC and Thailand DOF to achieve three objectives:

1. Finalize the “Technical Guidance on the Design and Implementation of Electronic Catch Documentation and Traceability Systems in Southeast Asia”;
2. Review and finalize national roadmaps for implementing national eCDT; and
3. Share lessons from USAID Oceans, as well as from ongoing and future developments in eCDT undertaken by the AMS, beyond the completion of USAID Oceans.

USAID Oceans is a 5-year (2015-2020), USAID-funded activity, working in partnership with SEAFDEC, CTI-CFF, and a wide range of public and private sector partners working across Southeast Asia at regional, national, and local levels, to combat illegal, unreported and unregulated (IUU) fishing, promote sustainable fisheries, and conserve marine biodiversity in the Asia Pacific region.

USAID Oceans is facilitating the development of the “Technical Guidance on the Design and Implementation of Electronic Catch Documentation and Traceability in Southeast Asia” (here after referred to as “Technical Guidance”) to support its core mission of improved integrated and sustainable fisheries management in Southeast Asia through enhanced catch documentation and traceability (CDT) of priority species that are vital for food security and economic growth in the AMS and under threat from IUU fishing and seafood fraud. This effort is an offshoot of a directive from the 3<sup>rd</sup> Meeting of the USAID Oceans Regional Technical Working Group (TWG) in 2018 for the project to put together a guidance document providing, at the minimum, the following information:<sup>1</sup>

1. A set of general principles on establishing national eCDT systems across the AMS;
2. A set of minimum requirements and standards for the development of national eCDT systems across the AMS; and
3. Summary profiles and guidance on the eCDT technologies currently available, and how such technologies could be customized to meet the disparate needs and capacities of the AMS.

USAID Oceans has been working with the AMS and CTI-CFF to advance eCDT through technical guidance, capacity building, and customized support to regional and national partners. Working with private sector, government and NGO partners, the Project initially supported the development and pilot-testing of eCDT technologies in two “learning sites”: Bitung in Indonesia and General Santos City in the Philippines. Subsequently, informed by lessons learned from the learning sites, it progressed toward supporting the development of eCDT systems in expansion sites in Thailand, Brunei Darussalam, Malaysia, and Vietnam. In 2018, it completed the CDT gap analysis reports and partnership appraisals for the expansion sites, based on which it provided recommendations and proposed roadmaps to support each country’s journey to eCDT.

Work on the Technical Guidance started shortly after the 3<sup>rd</sup> USAID Oceans Regional TWG Meeting in 2018. Since then, document has undergone a series of country-level reviews, coming into this *Regional eCDT Guidance Workshop*.

Five of the 10 AMS were officially represented at the three-day workshop. They were Indonesia, Lao People’s Democratic Republic (PDR), Myanmar, Philippines and Thailand, who together had a combined representation of

---

<sup>1</sup> Technical Guidance on the Design and Implementation of Electronic Catch Documentation and Traceability (eCDT) Systems in Southeast Asia (Draft: September 2019)

20 delegates, or about 39 percent of the total number of participants, with the rest composed of technical and support staff from USAID Oceans and SEAFDEC, NGO and private sector partners, and representatives from the DOI and USAID/RDMA (Annex I).

In total, there were 52 attendees over the three workshop days, roughly equally divided between men and women, with men comprising 48 percent and women 52 percent of all attendees (Annex II). Overall facilitation was provided by Dr. Lily Ann Lando.

## DISCUSSION & OUTPUTS

To achieve its objectives, the workshop was structured as three events in one, as follows:

Day 1: Review and validation of the Technical Guidance

Day 2: Sharing of knowledge and experiences

Day 3: Securing country commitments and mapping of the way forward

### Day 1: Review and Validation of the Regional eCDT Technical Guidance

The workshop kicked off with remarks from Thailand DOF Deputy Director General Bunchong Chumnongsittathum, USAID/RDMA Regional Environmental Office Deputy Director Roopa Karia, SEAFDEC Deputy Secretary General Akito Sato, and USAID Oceans Chief of Party John Parks. The rest of the day's sessions was entirely devoted to the review of the Regional eCDT Technical Guidance. Dr. Robert Pomeroy (USAID Oceans) facilitated the review, with assistance from Mr. Joey Pedrajas (USAID Oceans.)

#### Opening Remarks

(The full text of these remarks can be found in Annex V.)

After welcoming the workshop participants, Mr. Chumnongsittathum spoke of the work that Thailand has done to improve its fisheries management. He recalled that, in 2015, the European Union (EU) issued a yellow card warning against his government over its failure to combat IUU fishing. This compelled the passage of new laws that gave authorities greater control over and surveillance of fishing vessels, stricter implementation of the Port State Measures (PSM) Agreement, and assessment of risks on all foreign vessels delivering fish and fishery products to Thailand, with enforcement improvements achieved through increased human resource capacity and the innovative use of technologies, such as machine learning for risk assessments. "Had Thailand not acted to reform its fisheries management and controls, we could have been banned from exporting to the EU entirely," Mr. Chumnongsittathum said. He thanked USAID Oceans for its work in support of the AMS, particularly in relation to fisheries traceability and the development of the Technical Guidance.

Ms Karia underscored the USG's commitment to supporting the sustainable use of fisheries and other marine resources to ensure the prosperity and resilience of people and communities for future generations in the Asia-Pacific region. In particular, she highlighted USAID Oceans' eCDT work, and thanked SEAFDEC, CTI-CFF, the USAID Oceans technology partners, and members of the USAID Oceans TWG for their support of the program, outlining their contributions to USAID Oceans' work in general, and the effort to develop the Technical Guidance in particular. "Although USAID Oceans is in the final months of implementation, USAID remains committed to continue progress and engagement in sustainable fisheries in partnership with all of you," she assured, adding,



“We look forward to further discussions on next steps to advance traceability systems and solutions in the region.”

For his part, Mr. Akito thanked USAID Oceans “for putting effort and taking a lead role in developing the draft Technical Guidance,” which aligns well with SEAFDEC’s own work to develop market-driven measures in response to regulations in the EU and U.S. that impact the fisheries industry in the ASEAN region. He briefly explained SEAFDEC’s work to develop the ASEAN Catch Documentation Scheme (ACDS), and the move by USAID Oceans, SEAFDEC and the individual AMS toward electronic systems to address the inherent complexity of establishing effective traceability in a sector that involves multiple stakeholders working at different levels. “It is expected that through this three-day workshop, the draft Technical Guidance would be completed and contribute to the successful development and implementation of future initiatives toward sustainable fisheries management systems not only in Southeast Asia but also beyond,” Mr. Akito said.

Capping the opening session was Mr. Parks’ remarks, which put the spotlight on the partnerships built through USAID Oceans to advance the use of fisheries traceability tools to combat IUU fishing and promote sustainable fisheries and marine resources in the Asia-Pacific region. “During the past few years we have developed, tested, and now implemented seven different eCDT technologies and systems,” Mr. Parks said. Through these eCDT technologies and systems, the legality and sustainability of more than 4 million pounds (about 1,800 metric tons) of tuna worth approximately US\$20 million in import value into the U.S. from this region have been traced and verified. “This is an extraordinary achievement that all of you should be proud of,” Mr. Parks told the participants. “During our fifth and final project year, we are very excited to be finalizing and sharing the technical guidance on why and how to use traceability technologies, in partnership with both SEAFDEC and CTI-CFF,” he said. “Finalizing and sharing our collective guidance and shared experience in using eCDT technologies in the past few years is an important output to be shared prior to project close.”

## Regional eCDT Technical Guidance Review

To lead off the document review, Dr. Pomeroy provided a background on the development progress of the Technical Guidance, and then presented highlights from each section of the document for audience feedback and comment. All participants had the opportunity to ask questions or comment on the document, either verbally or on comment sheets (metacards) that were provided. In addition to the revision suggestions, there was also some rather involved discussion about interoperability and the challenge of integration, which was described as still a long way off, despite the movement within ASEAN to move toward economic integration, such as through the establishment of the ASEAN Single Window.<sup>2</sup>

The revision suggestions are consolidated below.

SECTION (Page No.)	REVISION SUGGESTIONS
<b>ACRONYMS &amp; ABBREVIATIONS</b> (pp3-5)	<ol style="list-style-type: none"> <li>1. Check for duplication</li> <li>2. Add/edit:               <ol style="list-style-type: none"> <li>a. AP2HI - <i>Asosiasi Perikanan Pole &amp; Line dan Handline Indonesia</i> (Indonesian Pole &amp; Line and Handline Fisheries Association)</li> <li>b. BFAR Fisheries Administrative Order/FAO</li> <li>c. BoL – bill of lading</li> <li>d. eLogbook – electronic logbook</li> <li>e. FAO – Food and <b>Agriculture</b> Organization (not ‘Administration’)</li> <li>f. GT – gross tonnage</li> <li>g. IUU (F) – add “fishing”</li> <li>h. PFDA – <b>Philippine</b> Fisheries Development Authority (not ‘Philippines Fisheries...’)</li> <li>i. STELINA – <i>Sistem Telusur dan Logistik Ikan Nasional</i> (National Fisheries Traceability and Logistic System)</li> </ol> </li> <li>3. Delete “eCDTS – Philippines” National Electronic Catch Documentation and Traceability System’</li> </ol>
<b>SEAFDEC MEMBER-COUNTRY FISHERIES AGENCIES</b> (p5)	<ol style="list-style-type: none"> <li>1. Change title to ‘ASEAN Member-Country Fisheries Agencies’</li> <li>2. BFAR – Bureau of Fisheries and <b>Aquatic Resources</b> (not ‘Bureau of Fisheries and Aquaculture’)</li> <li>3. Add: “Vietnam – Directorate of Fisheries (DFISH)”</li> <li>4. Change “Laos” to “Lao People’s Democratic Republic (PDR)”</li> </ol>
<b>TERMS AND DEFINITIONS</b> (pp6-12)	<ol style="list-style-type: none"> <li>1. Artisanal fisheries: 20m trawlers considered artisanal? The reference (FAO) is correct, but no specific reference to this definition of artisanal fisheries can be found in the draft. To be consistent, use the definition for small fishing vessels found on p10.</li> <li>2. Define “Integration”</li> <li>3. “Small Fishing Vessels” (p10) should refer to Annex I (not Annex II)</li> </ol>

<sup>2</sup> The ASEAN Single Window is an integrated platform that will include each National Single Window of the AMS to enable a single, synchronized submission and processing of data, and a single point of approval for customs clearance of cargo.

SECTION (Page No.)	REVISION SUGGESTIONS
<b>SECTION I. INTRODUCTION (pp15-33)</b>	1. Document should include a provision for updates (this should be a living document, to be amended when necessary to reflect new technologies, policies, markets, etc.)
	2. It should be stated at the outset that the guidance is intended for marine capture fisheries. Also note that the guidance may apply to freshwater and aquaculture with modification. (The eCDT design for marine capture fisheries can easily be applied to aquaculture and freshwater, and some companies are already doing it).
	3. p15, paragraph 2, line 5: What is “robust fisheries traceability”?
	4. Table 1 a. Indonesia <ul style="list-style-type: none"> <li>• Capture (small-scale) – Electronic: e-license; KUSUKA Card (<i>Kartu Pelaku Usaha Kelautan dan Perikanan / Marine and Fisheries Business Actor’s Card</i>); eLogbook</li> <li>• Capture (commercial) – Electronic: e-license, eLogbook, observer system (e-borang), vessel licensing (SIMKADA – <i>Sistem Informasi Izin Kapal Daerah / Regional Vessel Permit Information System</i>; SIPEPI – <i>Sistem Informasi Perizinan Penangkapan Ikan / Fishing Licensing Information System</i>)</li> <li>• Port – STELINA, online Catch Certification System (SHTI – <i>Sertifikasi Hasil Tangkapan Ikan</i>), Fishing Ports Information System (PIPP – <i>Pusat Informasi Pelabuhan Perikanan</i>), port clearance (online SPB – <i>Sistem Pemberitahuan Berlayar / Sailing Notification System</i> and TEMAN SPB – <i>Sistem Informasi Penerbitan SPB / Sailing Permit Information System</i>)</li> <li>• Shipment – Electronic: Certificate of Origin (SisterKarolin – <i>Sistem Informasi Karantina Online / Online Quarantine Information System</i>), STELINA</li> <li>• Processing – Electronic: STELINA, Good Manufacturing Certificate (online SKP – <i>Surat Kelayakan Pengolahan</i>); HACCP (Hazard Analysis Critical Control Points) Certificate (HONEST – HACCP online system)</li> <li>• Shipment – Electronic: STELINA, health certification system (SisterKarolin), SHTI, Electronic Certificate of Origin (e-SKA – <i>Surat Keterangan Asal</i>)</li> </ul>
	b. Philippines <ul style="list-style-type: none"> <li>• Capture (Commercial) – Electronic: Add “fisheries observer program”</li> <li>• Capture (Small-scale) – Electronic: RF (radio frequency) technology pilot stage in some areas</li> </ul>
	c. Thailand: Change “small-scale fisheries” to “artisanal fisheries”
	d. Vietnam: Missing footnote
	5. Table 2 a. Philippines: Under Column “Processing” – add “BFAR”
	6. Table 3 a. Myanmar -- info same as table 2 info b. Thailand -- Delete marine department from buying to shipment (air or ship export)
	7. Table 4 a. This is really a list of authorized data document sources, not key data elements (KDEs) b. Lao PDR – wait for update

<b>SECTION (Page No.)</b>	<b>REVISION SUGGESTIONS</b>
	<p>c. Myanmar</p> <ul style="list-style-type: none"> <li>• Capture commercial – Fishing license, logbook, location data details</li> <li>• Buyer – Purchase order, bill of sale or voucher, Catch Document (CD), Product Movement Document</li> </ul> <p>8. Table 5</p> <p>a. Myanmar – Limited post-harvest facilities</p> <p>b. Thailand – Delete word ‘small-scale,’ the sentence should be “lack of implementation of eCDT for artisanal fisheries, which is currently manual and paper-based.”</p> <p>9. Section 1.3.4 – Add sentence on country initiatives (‘not entirely market-driven’) and link to Annex II – The document seems to say the countries are just trying to respond to market demand for traceability and sustainability. This is not the case. The document should mention relevant national laws because ASEAN countries have their own laws mandating eCDT (see Annex II) that are not entirely market-driven. The countries doing this because they believe it is good for fisheries management.</p> <p>10. p33 – Caption says “Figure 2” – shouldn’t this be “Table 6”? This will change the numbering of the tables in pp 43, 47, 54 (2 tables), 55, and 56 to Table 7, 8, 9 &amp; 10, 11, and 12, respectively. It will also change the numbering of the figures in pp 34, 36, 40, 51, 52, and 58 to Figure 2, 3, 4, 5, 6, and 7, respectively. Figure on p59 has no caption (should be Figure 8).</p>
<b>SECTION 2. TECHNICAL GUIDANCE (pp34-49)</b>	<p>1. Page 35: Add paragraph on financing models</p> <p>2. Step 0 (p38) – Add: Scope (e.g., single species or multi-species, fisheries)</p> <p>3. Step 1</p> <p>a. 1a, p 38 – Expand scope to ‘assessment of various drivers of the need for traceability, including IUU fishing, sustainability, food safety, biodiversity conservation, sustainability, market requirements, legislation’</p> <p>b. 1b – review of CDT objectives: reference to Annex II (Policies and Regulations)</p> <p>c. 1c. – Identify/inventory technologies/solutions that are already available/have been done (no need to create a new solution if one is already available and applicable).</p> <p>d. 1f (p41) – Add text at the end of the Paragraph 1: ‘And used as inputs in fisheries management planning process.’</p> <p>e. 1g (p41) – Add: Annex reference to blank template for national roadmaps</p> <p>4. Step 2</p> <p>a. Design considerations (p42-43) – Add:</p> <ul style="list-style-type: none"> <li>i. Responsibility and authority</li> <li>ii. Regulatory and policy framework (cross reference to Annexes II and III)</li> <li>iii. Scope/scale of implementation (e.g., pilot vs whole country, specific fishery or all fisheries, local or national)</li> <li>iv. Validation of model</li> </ul> <p>b. 2a. Model 3 (p43-45) –</p> <ul style="list-style-type: none"> <li>i. Add (p45): Text on additional guidance (2017); Put links for Model 3 (reference to EAFM / CDT 201)</li> <li>ii. Design/integrate system for interoperability – potential for interoperability can fall under Model 3</li> </ul> <p>c. 2b. Capacity development – Add “train stakeholders to be trainers, not just users”</p>

SECTION (Page No.)	REVISION SUGGESTIONS
	5. Step 3. eCDT System Implementation – add case study or box item that provides more specifics on or examples of expected cost components of implementation), or reference (link to case studies). The General Santos City team will add visuals to their case studies
<b>ANNEXES</b>	<p>1. Check pagination – Even pages should be on the left side, odd pages on the right</p> <p>2. Annex I</p> <p>a. Myanmar –</p> <ul style="list-style-type: none"> <li>• Commercial fisheries: change ‘industrial fisheries’ to ‘offshore fisheries’ ( &gt; 25HP engine operating in outer area of inshore to end of EEZ)</li> <li>• Small-scale fisheries: change ‘coastal fisheries’ to ‘inshore fisheries’ (&lt;25HP engine operating in zone 10nm from shore (all are same)</li> </ul> <p>b. Thailand –</p> <ul style="list-style-type: none"> <li>• ‘Artisanal fisheries’ -- fishing operations in coastal seas in which a fishing vessel is used or in which a fishing gear is used without a fishing vessel but, in any case, does not include commercial fishing.</li> <li>• ‘Commercial fishing’ – fishing operations using a fishing vessel from 10 GT or a fishing vessel fitted with an engine of a horsepower as prescribed by the minister.</li> <li>• Thailand DOF will revise definitions of artisanal, commercial – remove reference 18 (Funge-Smith)</li> </ul> <p>c. Indonesia</p> <ul style="list-style-type: none"> <li>• Small-scale fisheries – fisheries operated by fishermen without or with a boat up to 10GT for their livelihood</li> <li>• Large-scale fisheries – fisheries operated using vessel size of more than 10 GT</li> </ul> <p>3. Annex II</p> <ul style="list-style-type: none"> <li>• Philippines – Add: FAO 238 s. 2012 Rules and Regulations governing the implementation of EC regulation No. 1005/2208 on the Catch Certification Scheme</li> <li>• Myanmar – Add: <ul style="list-style-type: none"> <li>• Aquaculture Law (1989)</li> <li>• State and Regional Freshwater Fisheries Laws (14) (2011-12)</li> </ul> </li> <li>• Indonesia – <ul style="list-style-type: none"> <li>• Add: ‘Ministry Regulation No. Per. 13/MEN/2012 regarding catch certification’</li> <li>• Add: ‘Law No. 7/2016’</li> <li>• Change all ‘decrees’ to ‘regulation’</li> </ul> </li> </ul> <p>4. Annex IV – Add: ‘Global Dialogue on Seafood Traceability’</p> <p>5. Suggested new annex listing: Industry-led initiatives on traceability – content to be provided by Susan Roxas/World Wide Fund for Nature (WWF)</p>

The discussion throughout the day clustered around the major topics shown in the figure below. The guidance document had gone through several revisions based on the feedback from participants in the various country consultations described by Dr. Pomeroy. This process was emphasized prior to the start of the workshop sessions and reiterated as sessions continued. It was also emphasized that many of the workshop participants had participated in the earlier workshops to socialize the proposed guidelines in their respective countries.

In relation to eCDT, each country had its own initiatives and systems. Participants agreed that the proposed eCDT guidelines were not necessarily entirely new for them because most countries had guidelines in various forms and at different levels of implementation. However, they recognized the need for a comprehensive and integrated approach adopted to build consensus on the basic guidelines.



**Figure 1: Main discussion topics, Day 1**

The participants pointed to the design of the eCDT and the models used in establishing location-, species-, and/or season-specific controls. The discussion returned to the differences/unique-ness of each AMS especially on governance and resulting policies. In relation, the scope and scale of the coverage of the guidelines were then surfaced. Again, countries will differ, but the guidelines would still apply to them. Since the situations in regional fisheries are basically multi-stakeholder situations, participants saw how different activities and relations of cooperation between various parties can be engendered and/or enhanced by the guidelines.

This then advanced the conversation to the issue of responsibility and authority. Participants sought to differentiate between actions and motives of responsible parties and those in authority. They agreed that documentation and traceability were the responsibility of all AMS. However, not all may be able to exercise authority. Specifically, they agreed that even persons in authority cannot control what happens to the fish once it leaves their area of authority. This launched a lengthy discussion on integration and interoperability. Many could visualize how interoperability and integration would look like but most agreed that these were still a long way off.

Although there were many suggested revisions to the proposed guidelines (p10-13), the body agreed that it is a good start. Many other revisions might surface in the future, but they agreed in conclusion that the Technical Guidelines will be a living document.

## **Day 2: Sharing of Knowledge and Experiences**

Day 2 featured two plenary panel discussions exploring the experiences and progress on CDT in Brunei Darussalam, Indonesia, Malaysia, Myanmar, Philippines, and Vietnam. Dr. Bundit Chokesanguan of SEAFDEC moderated the panel discussion on Brunei Darussalam, Malaysia, Myanmar, and Vietnam, while Mr. Farid Maruf

(USAID Oceans) led the panel on Indonesia and the Philippines, with assistance from Mr. Frengky Sihombing (USAID Oceans-Indonesia) and Ms. Rebeca Andong (USAID Oceans-Philippines). The panelists and their topics were:

- Ms. Nguyen Thu Hue (Centre for Marinelife Conservation and Community Development [MCD]) – Updates from Vietnam (non-state actor’s perspective)
- Ms. Yin Yin Than (Myanmar) – Updates from Myanmar (government perspective)
- Mr. Kongpathai Saraphaivanich (SEAFDEC) – Implementing the eACDS in Brunei Darussalam, Malaysia, Myanmar and Vietnam
- Mr. Achmad Fauzie (Indonesia) – eCDT development in Indonesia
- Mr. La Moriansyah (Indonesia) – eCDT development in Indonesia
- Mr. Nazario Briguera (Philippines) – eCDT development in the Philippines
- Mr. Eugene M. Casas (Philippines) – eCDT development in the Philippines

Additionally, there were two separate presentation-and-Q&A sessions. The first session was on the development of Thailand’s ‘e-Traceability Systems,’ presented by Ms Passarapa Kaewnern, with Ms Araya Poomsaringkarn (USAID Oceans) providing translation support. The other session was on USAID Oceans’ work on human welfare, gender and labor (HWGL), particularly as it relates to eCDT. It was led by Dr. Arlene Nietes-Satapornvanit, with inputs from Mr. Sihombing and Ms. Andong

There were two breakout sessions. In the first breakout session, the participants were sorted into country groups to discuss their respective draft CDT country roadmaps. Facilitation and rapporteur support were provided by the following SEAFDEC and USAID Oceans staff, with Dr. Pomeroy and Dr. Chokesanguan providing overall technical guidance:

- Indonesia – Mr. Maruf and Mr. Sihombing (USAID Oceans)
- Lao PDR – Mr. Parks (USAID Oceans)
- Myanmar – Mr. Len Garces (USAID Oceans) and Mr. Saraphaivanich (SEAFDEC)
- Philippines – Mr. Pedrajas (USAID Oceans) and Ms Andong (USAID Oceans)
- Thailand – Ms Poomsaringkarn (USAID Oceans) and Ms Smita Yamsangsung (USAID Oceans)

The second breakout session had two parallel discussions – one discussion focused on the eCDT technology solutions developed under USAID Oceans for the AMS, and the other on finalizing the ‘Regional Document on Gender Integration in the Fisheries Workplace’ that USAID Oceans plans to submit to USAID/RDMA by March 2020. The eCDT technology discussion was facilitated by Mr. Maruf; the discussion on gender integration was led Dr. Satapornvanit (assisted by Ms Jariya Sornkliang from SEAFDEC).

This section summarizes all plenary discussions and the breakout panel session on eCDT technologies. The report-out from the breakout discussion on gender integration was rescheduled to Day 3 and is therefore taken up in the next section (see Day 3 section further down below). Results from the road-mapping session were not shared in plenary and are not included in this report.

There was also a session where participants worked individually to reflect on the lessons that they learned from the day’s discussions. However, the results were presented on Day 3 and are reported accordingly in this report.

## Country Experiences and Updates

This summary is generally structured according to how the sessions were conducted, except that the points raised by the panelists about issues and lessons learned are consolidated into one (sub)section at the end of this topic:

- Implementing eACDS in Brunei Darussalam, Malaysia, Myanmar and Vietnam
- e-Traceability Systems in Thailand
- eCDT Development in USAID Oceans Learning Sites (Philippines and Indonesia)
- Issues and Lessons Learned

## Implementing eACDS

Developed by SEAFDEC for use by the AMS, eACDS consists of: (1) a web-based application for the fisheries officer responsible for approving port-in/port-out requests and the issuance of Catch Document (CD), Movement Document (MD), and Catch Certificate (CC), and for the buyer-processor to apply for catch certification; and (2) a mobile application for the fishing master/vessel owner to use for catch reporting at sea and for the buyer/processor to apply for MD issuance. The mobile application works in both online and offline modes, allowing the fishing master/vessel owner to record catch data even where there is no Internet connection; data entered offline are automatically sent to the online system as soon as the connection is reestablished.

SEAFDEC takes five broad steps to promote the adaptation and implementation of eACDS in the AMS: (1) Introduction; (2) baseline survey and analysis (including identification of KDEs); (3) development of prototype to adapt the system to country needs; (4) testing and improving the system (including user training); and (5) transfer of technology.

eACDS is at various stages of implementation in Brunei Darussalam, Malaysia, Myanmar and Vietnam, as described below.

### Brunei Darussalam

SEAFDEC started pilot testing eACDS in Brunei in June 2017. After consultations and on-site trainings for stakeholders, the system was tested on 50 vessels operating out of Muara Port, and then adapted and improved to meet the country's eCDT requirements. Brunei completed the eACDS pilot this year, the first country to do so.

### Malaysia

SEAFDEC has conducted the baseline survey and analysis, and identified KDEs for the development of the eACDS prototype for Malaysia. The prototype was verified in November 2019 with the port-in/port-out requirements and will be pilot-tested in two fishing ports in Kalanton and Kuantan (30 fishing vessels).

### Myanmar

SEAFDEC introduced eACDS in Myanmar in June 2018, and is currently developing a prototype based on KDEs collected earlier this year. The prototype will be verified with port-in/port-out requirements later this month (December 2019) in collaboration with the DOF. Pilot testing will be done in three sites, namely, Aung Phyto Myat Jetty, Ei Phyto Yadana Jetty, and Ngwe Pinle Jetty, with a total of 100 vessels.

### Vietnam

SEAFDEC introduced eACDS to stakeholders in Nha Trang in October 2017, at about the same time EU handed Vietnam a yellow card to draw the government's attention to issues of traceability and IUU fishing. Since then, SEAFDEC and USAID Oceans have conducted field visits to the designated pilot area in Binh Thuan Province. This year (2019), SEAFDEC conducted a number of activities in Binh Thuan to introduce eACDS and to develop a prototype adapted to local needs, based on discussions and verification with relevant stakeholders. Training has started for fisheries officers on the use of the eACDS system. Around 50 vessels are currently listed to participate in the system testing. These vessels operate out of four fishing ports, namely, Phan Thiet Fishing Port, Lagi Fishing Port, Phu Hai Fishing Port, and Phan Ri Cua Fishing Port. Pilot testing is expected to be completed next year, making Vietnam the second country after Brunei to complete the trial phase of the program.



## eTraceability Systems in Thailand

After being handed a yellow card by the EU in April 2015, Thailand introduced a comprehensive fishery reform, including changes in law and policy, organizational structure, and regulatory systems and processes, such as traceability and import control; monitoring, control and surveillance (MCS), and resources and fleet management. Today, Thailand has put in place a full control system along the whole value chain and, consequently, has been taken off the EU list of yellow-carded countries. Improving traceability has been a major focus for the government.

Thailand has adopted electronic traceability based primarily on two systems: (1) Thai-flagged Catch Certificate System (TFCCS) for fish caught by Thai-flagged vessels both within and outside Thai waters; and (2) PSM-linked and Processing Statement System (PPS). The main system is the PPS, which has two components: the PSM system and the Processing Statement Endorsement system, both of which feed into the Fisheries Single Window that is in turn linked to the National Single Window of the Customs Department. All parts are electronic, but the CC needs to be printed out and signed as a paper form. Fishing companies in Thailand are required to have a traceability system, but they do not have to use an electronic system unless they require a CC. Only fish exporters that require a CC have to get their CC electronically through the TFCCS.

## eCDT development in USAID Oceans Learning Sites

As well as supporting eACDS, USAID Oceans has also assisted government-developed eCDT systems in its Learning Sites in Indonesia and the Philippines. The Project provided technical guidance and implementation support for the BFAR eCDTS in the Philippines and the several fishery information systems already in use or under development in Indonesia (e.g., STELINA, e-License, eLogbook, etc.). The knowledge and experience underlying the development and implementation of these systems are outlined below.

### Philippines

BFAR eCDTS was developed to facilitate the implementation of BFAR Administrative Circular (BAC) No. 251 series of 2014 establishing “the traceability system for wild-caught and farmed fish and other aquatic products,” in compliance with national policies on food safety and traceability and IUU fishing. It was developed with USAID assistance to streamline and digitize the Philippines’ catch documentation process, allow for seamless reporting from catch to export, and facilitate full-chain traceability. USAID Oceans conducted gap analysis and other studies, based on which BFAR, with private sector support, decided that the system should be developed in-house by BFAR’s information technology (IT) personnel. Initial development took only 2-3 months, largely as a result of a development camp organized by BFAR through the support of USAID Oceans. A beta version of the system was launched at the 19<sup>th</sup> Philippine National Tuna Congress in September 2017. Since then, the system has gone through user-acceptance testing and subsequent modifications and live implementation with 15 commercial fisheries business operators (“First Movers”) through the SOCSKSARGEN Federation of Fishing and Allied Industries, Inc (SFFAI).

USAID Oceans also partnered with a private sector technology provider, Future Aviation and Maritime Enterprise (FAME), to develop a system for small-scale (municipal) fisheries. The system is being pilot-tested with 26 municipal fishing operators through the Alliance of Tuna Handliners. FAME, BFAR and the industry have a common understanding that this system will be integrated with the BFAR eCDTS.

Development work on the eCDTS continues to address gaps identified by stakeholders. For example, there are a few value chain nodes that were not previously identified in BAC 251 and thus are not included in the current system—with USAID Oceans’ support, BFAR is fast-tracking an amendment to BAC 251 to address this gap. The plan is to scale implementation of the two systems nationally as part of BFAR’s Integrated Maritime Environment Monitoring System (IMEMS) that is currently also in the pipeline. BFAR has established two Fish Monitoring Centers (FishMon) in the National Capital Region, and plans to establish “port and coastal monitoring centers”

across the country to house the hardware and software necessary to run IMEMS. In addition, USAID Oceans supported the FishMon run by the regional office of BFAR in the Project Learning Site in General Santos City, as well as six FishMons run by six municipalities in the Sarangani-Celebes Sea area. This will allow local fisheries managers to access CDT data for use in stock assessments and fisheries management.

## Indonesia

In contrast to the Philippines, Indonesia already had a number of CDT data capture systems in place even before European Commission (EC) Regulation 1005/2008<sup>3</sup> came out, but these systems were not integrated. The systems included databases for the issuance of fishing licenses and port clearances in the context of the International Maritime Organization sailing safety regulations, and a fishing port information system that included catch data. With the implementation of the EU Catch Certification Scheme under EC Regulation 1005/2008, the Ministry of Marine Affairs and Fisheries (MMAF) saw the need to link the systems together and, in 2013, started to integrate some basic information, including data from fishing licenses, port clearances, vessel monitoring system (VMS), Regional Fisheries Management Organization (RFMO)-authorized fisheries and record of catch.

In 2017, with training support and technical guidance from USAID Oceans, MMAF started to develop a national traceability and logistic system called STELINA, largely in response to new regulations under the U.S. Seafood Import Monitoring Program (SIMP), which requires the importer of record to provide and report traceability data on selected products identified as vulnerable to IUU fishing or seafood fraud. STELINA, which is designed to bridge the data capture solutions and integrate the databases that MMAF uses, was piloted in the USAID Learning Site in Bitung in April-June 2018 and is now being evaluated and further developed.

In November 2018, MMAF also started implementing an electronic logbook system (eLogbook), which is being used to date on 6,715 fishing vessels (more than 60% of the 2019 usage target). The plan is to integrate the eLogbook and STELINA. The system is intended for use not only in capture fisheries but also aquaculture and other food products, and will be pilot-tested next on shrimp products, one of Indonesia's major exports to the U.S. MMAF will formulate necessary regulations to scale the system nationally and eventually integrate it into the national data system to manage food and protein supply security. In the long term, the system will also be integrated with private sector systems like TraceTales and Trafiz.

As in the Philippines, USAID Oceans also supported the establishment of FishMons in Indonesia, one in the fishing port office in its Learning Site in Bitung, another in the Directorate of Product Competitiveness in Jakarta, and the third in the Directorate-General of Capture Fisheries, also in Jakarta.

## Issues and Lessons Learned

- Government's role – Seafood traceability is fundamentally a complex issue of food safety and economic and environmental sustainability that needs good governance and government input to resolve. Dr. Chokesanguan said SEAFDEC engages with governments first, because government engagement ensures that "others will follow."
- Policies and regulations – In Myanmar, the lack of enabling policy and regulations for seafood traceability has slowed down the uptake of eACDS. A new draft fisheries law that includes regulations for implementing VMS and port state measures can help address at least part of this issue, but the law needs to be enacted first and, even then, Myanmar DOF will need time, and possibly SEAFDEC's support, to build capacity to implement it. Vietnam, on the other hand, has already passed a law that provides for improving traceability in its fisheries sector, such as through the use of eCDT systems, including VMS, which is now mandatory for the country's 95,000-strong fishing fleet. Ms Hue said provinces across

---

<sup>3</sup> This Regulation establishes a European Community system to prevent, deter and eliminate illegal, unreported and unregulated (IUU) fishing, including the EU Catch Certification Scheme.

Vietnam will be looking to the experience of SEAFEC in Binh Thuan for direction as they begin to establish eCDT in compliance with the law.

- Clear articulation of the benefits of having traceability, as well as the sanctions for non-compliance – Fishers and fisheries business operators are more likely to comply with traceability regulations if they know the benefits of complying with those regulations (e.g., access to markets requiring traceability; fisheries sustainability), and if they understand the consequences, whether legal or commercial, of the failure to do so (e.g., fines, loss of market access). This has been exemplified by the First Movers who participated in the pilot phase of system development in both the Philippines and Indonesia, despite cost and manpower concerns.
- Local context, resources and experience – There is no single system that works for everyone. Different countries have different value chain processes and needs, different regulations that apply to them, and specific requirements in terms of language, document formats, application features, and scope and scale of implementation, which must all be considered in the design of the traceability system. For example, transshipment is prohibited in Malaysia and Brunei Darussalam, but it is quite legal in Myanmar and Vietnam, and the eACDS needs to be adapted to reflect that. In Vietnam, the eACDS must account for some very complex transshipment arrangements, as well as at least five paper-based report formats that need to be digitized. Furthermore, each country likely already has some level of fishery documentation, and perhaps even eCDT capacity and experience – these should be taken as building blocks for designing and implementing an integrated, full-chain eCDT system, as in the case of Indonesia.
- eCDT for small-scale fisheries – BFAR's, MMAF's and Thailand DOF's traceability programs have mainly focused on tuna fisheries, largely because tuna is a major export for the countries concerned. Consequently, their systems are designed for commercial-scale fisheries, which account for the bulk of their tuna exports. USAID Oceans supported and tested a number of traceability solutions for small-scale fisheries, but they were developed by non-state technology providers. This does not mean that small-scale fisheries are not a priority for any of the three countries – it only means that small-scale fishers do not have a particular need to comply with traceability requirements, because they generally do not sell directly to the export market. In the Philippines, although small-scale fishers do not necessarily participate (at least for now) in BFAR's eCDTS, they are included in the system when they register with the Municipal Fisherfolk Registration System (FishR) and the national Municipal Fisherfolk Registration System is linked to the eCDTS, so they are therefore considered in government policy and fisheries management and development programs. The same is true for small-scale fishers in Indonesia. Indonesia has a system called KUSUKA, which collects and identifies all persons who work in fisheries, not just fishers but also traders, fish processing workers, etc. – KUSUKA data is used to deliver health insurance and other government benefits. And Thailand has just made registration compulsory for vessels of less than 10GT.
- Consultation and coordination with private sector stakeholders – Throughout the development of eCDTS in the Philippines, USAID Oceans and BFAR maintained communication with private sector stakeholders through close and regular consultation and coordination with SFFAIL. This helped build the private sector's trust in the system, which was the basic ingredient for encouraging their cooperation.
- Ease of use – Ease of use (or at least the perception thereof) is key to user acceptance of traceability applications. For BFAR, this has been a major consideration in the design of eCDTS. However, more than just being easy to use in terms of its traceability applications, eCDTS is also designed to be easily accessible and convenient for fisheries managers from the standpoint of stock assessment and management.
- Trust in the technology provider – There were questions about how much access to sensitive fisheries data should be granted to external technology providers during the development of the eCDT system, and how well these providers can control where the data might be distributed. As well as assuring the governments that they have full control and decision over the data and where they are stored, SEAFDEC

and other technology providers gained trust through transparency in the system development process (e.g., by working closely with government staff involved in repository management and maintaining the traceability system, including providing them the source code of the app).

- External assistance – Full-chain electronic seafood traceability will take longer than the lifespan of USAID Oceans to achieve. As USAID Oceans exits, the AMS and ASEAN region as a whole will continue to need external assistance, especially technical assistance. SEAFDEC has additional funding from Japan that will allow them to continue to provide the countries, if needed, with some type of technical assistance up to 2024, and it has funding from the World Bank to support traceability in Vietnam. ASEAN governments should also negotiate with EU for assistance to continue the program, but more importantly, they should continue to invest in the infrastructures needed for real-time traceability, including hardware, software, operations, and processes.
- Institutional capacity and long-term sustainability – BFAR, MMAF and Thailand DOF have all invested in building in-house IT expertise, which has allowed them to develop tailored and comprehensive end-to-end traceability solutions. But even those countries that rely on external partners to develop their systems will eventually need to operate, manage and build their fisheries traceability and sustainability management systems from within. For this reason, USAID Oceans and SEAFDEC have both emphasized the “soft” aspects of technology transfer, including capacity building and informational resources (e.g., trainers and consultants) for implementing traceability and fisheries management. SEAFDEC has made a point to train trainers, and will continue to serve as a technical resource for its member-countries. In addition, strong NGO and private sector engagement with USAID Oceans is expected to translate into a lasting cooperation with the AMS that can support sustainable traceability implementation. For example, in Vietnam, an NGO partner of USAID Oceans, MCD), has gained the endorsement of both the central and local governments to implement traceability in Binh Dinh based on the Binh Thuan model.
- Scaling up – Positive pilot testing results are no guarantee that a technology will perform reliably at full national scale, where factors other than technology are at play. Scaling up requires more than simply deploying the technology to more areas. It involves a wider range of actors and should therefore consider a much wider range of factors. For example, the IT people and fisheries officials who get traceability training and understand the traceability needs for fisheries are not the only decision-makers that impact the system. Traceability involves non-fisheries actors like telecommunication authorities and providers that should also be engaged in the consultation and coordination process to ensure that they understand the needs of fisheries traceability and how to respond to them. This can be challenging for a country like Vietnam, which has a complex government structure made up of several layers of authority.
- Multi-level implementation – Depending on the government structure, a country may have a national eCDT system or local eCDT systems, or both. In countries like the Philippines and Indonesia, where jurisdiction over marine waters is divided between the national government and local governments, the policy is to have both a national system and local systems, with the local systems linked to the national system. As well as implementing the national system, the national government generally also serves to standardize and harmonize policy and data to enable data consolidation and allow for comprehensive, national-scale analysis.
- Aquaculture and inland fisheries traceability – Lao PDR has no marine fisheries but the country can benefit from having an eCDT system for aquaculture and inland fisheries (freshwater fisheries). eACDS can be adapted for this purpose, should Lao PDR request SEAFDEC to do so (subject to availability of budget). USAID Oceans is planning an eCDTS workshop in Vientiane for Lao PDR, Cambodia and Myanmar, where this topic can be taken up in greater detail.
- Reporting labor data – As part of the government’s effort to protect fish workers, Thailand’s traceability system is designed to collect labor data. All fish workers in Thailand are required to register in the system, and during port in and port out, it is mandatory for fishing vessel owners to record labor data for each trip into the Fishing Info System, which can be tracked from the TFCCS. Migrant labor data are

reported every year to the Marine Department (under the Ministry of Transport), while data on Thai fish workers stay with Thailand DOF (which is under the Ministry of Agriculture and Cooperatives). Both departments' information systems are linked to the Ministry of Labor's information system.

- Interoperability and integration within and between countries – These remain a goal for the future. All of the AMS have committed to joining the ASEAN Single Window, but how much and what data to share is up to the countries. In addition, SEAFDEC is hoping to see the eACDS become the traceability standard for ASEAN. Exploratory discussions have started with BFAR for eACDS to be pilot-tested in some sites, and to interface with BFAR's eCDTS.

## Human Welfare, Gender and Labor

The ideal eCDT system is holistic, encompassing all aspects in seafood traceability, not just the fish and aquatic environment but also and especially the human components. The technology should have a positive impact on the men and women along the value chain. This has been the objective and focus of USAID Oceans in both of its Learning Sites in Indonesia and the Philippines.

In both Learning Sites, USAID Oceans is providing capacity building support to develop a local gender network to ensure that there are competent people to continue the work beyond the Project's completion. The Project often takes a deliberately country- and situation-specific approach to ensure that local needs and issues are effectively addressed. For example, in Indonesia, project activities include:

- Working with another USAID project called USAID Invest (implemented by MDPI) to see how and whether or not Trafiz is actually helping women traders, looking in particular at the impact of the technology on their financial literacy, inclusion and access, and how that could be translated to sustainable financing.
- Supporting young women IT and fisheries practitioners from Manado to participate in the Global Dialogue on Seafood Traceability's 3<sup>rd</sup> Seafood Trackathon held in Bali last October 2019
- Conducting, with CTI-CFF, gender research on KUSUKA, which found that women fishers are left out of the fisher ID system. Field research showed that this was because the women were identified as 'housewives,' making them ineligible to participate in KUSUKA and the program's benefits. In response to these findings, the Marine and Fisheries Office in Bitung, through its extension workers, is helping the women change their registered occupation to 'fishers,' so they can be eligible for the fisher ID.

Similarly, in the Philippines, the Project focused on country-specific activities, including:

- Supporting gender resolutions to be incorporated in the National Tuna Congress, giving SFFAI and its partners a legal basis to implement gender-sensitive approaches and incorporate human welfare considerations into their work.
- Working through USAID Oceans grantee WINFISH (The National Network for Women in Fisheries in the Philippines) to develop recommendations for the revision of the Gender and Development (GAD) Code of General Santos City, which currently does not include provisions for the fisheries and seafood industry
- Regularly updating the fisherfolk registry with sex-disaggregated data
- Developing a 'Women Situationer' showing where women are in the fisheries value chain and what activities they are engaged in
- Harmonizing GAD guidelines, which include a fisheries checklist to address the needs of women fishers
- Planning for 'Outstanding Women in Fisheries Awards'
- Working with BFAR (through WINFISH) to integrate human welfare, especially a gender-sensitive approach, into BFAR's Ecosystem Approach to Fisheries Management (EAFM) and eCDT Training Module.

Lessons learned include:

- Despite wide acknowledgment that human welfare and gender equity (HWGE) are important considerations for traceability and sustainable fisheries management, there remains a need to raise awareness of these human aspects of fisheries in technology development.
- Technologies that are designed to incorporate human welfare KDEs will provide relevant information to policy, action and behavior transformation, which makes them valuable human welfare tools, especially when they are linked to existing data sources.
- Achieving HWGL objectives entails partnership and collaboration with a wide range of sectors, including IT, banking and finance, labor, family and women, social welfare, etc.

## Participant Comments

Dr. Bundit – Are there any women involved in software development?

Mr. Maruf – In the Philippines, there is one company, owned by a woman, working on AI in fisheries, and one of BFAR's project managers is a woman. There were also three women from Manado who attended the Trackathon in Bali, and two of them won prizes.

Myanmar – In Myanmar, women do not go out to sea, and generally depend on whatever money their fisher-husbands give them. However, this does not seem to be the case anymore in one village where we conducted a gender analysis with SEAFDEC. The women there have told us that this is due to what they learned from the validation workshop about gender roles (reproductive and productive), which gave them a reason to ask their husbands for more money for the household. They are very grateful to the SEAFDEC resource team for that.

Mr. Fetizanan – In my company, we don't have any female developers right now, but most of our developers are differently abled, so I would like to suggest that future discussions on eCDT should also consider the needs of the differently abled sector.

## eCDT Technology Showcase

### Pointrek

*Presented by Nirwan Harahap, PT Sisfo-Indonesia*

Pointrek is a two-way satellite-based communication and VMS intended for medium- to large-scale fishing vessels. The system is currently in use in more than 200 fishing vessels operating in Indonesian waters. The basic components of the device include a small server that contains the backbone application, a satellite antenna, a tablet that functions as user interface for recording data and messaging, and a compact power supply. Features include two-way satellite-based communication with a small backbone technology for messaging between vessels or between vessel and land, geofencing for marine protected areas (MPA), fish directory, weather information system, eLogbook, GPS reporting/tracking, multi-map references, track-back information system, backup battery, emergency alert system, distance measurement, estimated time of arrival calculator, and a dedicated domain.

### **Nutrindo: A first mover's user experience of Pointrek** *(Presented by Tedy Harmoko, Nutrindo Fresfood Internasional)*

Established in 2002, Nutrindo is a fishing and tuna processing company committed to responsible and sustainable fisheries. The company, which is based in Bitung, collaborated with USAID Oceans as a first mover for Pointrek. It used to rely solely on radio communication to report catch, which meant manually recording catch data, and then keying the information into WhatsApp to share it within the company. Now,

with Pointrek, it has the option to communicate in real time (even in stormy weather), access to data mobility, less paperwork, improved reporting accuracy, and the ability to monitor a ship's status any time, plan the operation for purchasing raw materials, integrate with the government system, and automatically convert catch data into the eLogbook format. Data collected include: catching area, date of operation, location (GPS coordinates), fishing results (total pieces, size, total stock, ice stock), number of fishers, and temperature (Pointrek is equipped with an offline temperature data logger). Data entry is easy and does not burden the fisher, and the fishing and catch data can be accessed by anyone onshore using the Pointrek website. Information available on the Pointrek website include: real-time vessel location (whole fleet, not just one vessel), real-time vessel status (movement, location, coordinates and distance from the shore), track replay (record of vessel movement), and estimated time of vessel arrival. Other features can be added, including sensors to monitor real-time fish hold temperature and fuel consumption.

## FAME

*Presented by Arcelio Fetizanan Jr., Futuristic Aviation and Maritime Enterprises (FAME)*

FAME uses RF to transmit data to a gateway within a range of 50km, which then sends the data to the cloud (the range can be greatly extended through radio relay communication). The transponder device is light and compact, requiring practically no space in the boat, and runs on a rechargeable battery, which can be solar- or wind-charged. Through USAID Oceans, gateways were installed in six municipalities across the Project's Learning Site in the Sarangani Bay area, where the transponder was tested on 30 small-scale fishing vessels. Since then, the system has been updated to fix issues and add new features, based on feedback from USAID Oceans and the system users. For example, NFC (near field communication) modules were added, providing the system with CDT capabilities designed especially with the needs and limitations of small-scale fishers in mind. When the vessel catches a tuna, the fishing master gets an NFC card and taps it on the transponder. This saves the location data, timestamp, tuna identification and boat identification on the card, which is then attached to the tail of the tuna, so wherever the tuna goes, the information goes with it. The card can be read by any NFC-enabled device (e.g., smartphone) but, as an added service, FAME developed a mobile application for buyers to record the weight of the tuna and generate a QR (quick response) code containing all the data, which can be saved electronically or printed out.

For small-scale fishers, the lower cost compared to satellite-based systems would be the main draw (the system is subscription-based). As an added incentive, it also includes two-way communication capability that allows fishers to send and receive text messages even when they are at sea beyond cellular coverage (within RF range). Additionally, FAME, the technology provider, is finding ways to shift the burden of paying the subscription cost to other sectors that have interest in knowing the movements and locations of fishing vessels. For example, in Palawan, a seafood processor is paying fishers an incentive for using the technology – fishers that sell NFC-tagged tuna are paid a certain extra amount for the data. FAME is also planning to work with “focal representatives” for the distribution of information – each representative will be provided with a tablet that the family of any participating fisher can use to communicate with the fisher while the latter is out at sea.

The FAME system can be customized to the data needs of each client, and can easily be integrated with other systems through interoperability. Testing on the integration with BFAR eCDTS has been completed using BFAR's standard KDEs, and the company has inked a partnership with Bangkok-based system provider Trinity Roots to help market its products in Thailand.

Future projects include:

- Project replication – The system will be deployed through USAID Oceans and World Wide Fund for Nature (WWF) in other areas in the Philippines, such as Sablayan, Mindoro and Lagonoy Gulf in the Bicol Region.

- Continuous technology updates, including improving the app’s user interface in coordination with BFAR – The domain FISHTEGRATE.com has been set up for application developers that need connectivity when they are in remote areas, and a new user interface is being developed specifically for traceability.

## Trafiz

*Presented by Dien Wong, Altermyth*

Trafiz is an application that provides seafood traceability at first buyer, especially in situations where data capture at sea is not possible and fish is landed in informal landing sites that are not monitored by fisheries authorities, rendering it, in effect, “untraceable to its source.” It is a traceability and business accounting tool designed to facilitate the fish buyers to report their data to the CDT system by converting their daily operations seamlessly from manual to digital. It has four main features with a simple interface that is easy to navigate: (1) Catch data recording (fish name, weight, number of pieces and price); (2) fishers’ loan accounting; (3) delivery recording and preparation of delivery sheet; and (4) simple bookkeeping (to help with preparing profit-and-loss statements and other basic financial reports). The application is currently still in the prototype stage, but it has been tested by two buyers in Manado, Indonesia with at least one buyer using it to keep records on about 117 kg of fish. Trafiz features fast data entry, ease of use, offline capability and interoperability; helps define KDEs for eCDT compliance; and is multi-language and can easily be translated to other languages. Moreover, fish data (e.g., weight, quantity) recorded in Trafiz are self-verifying, since both fisher and buyer have an interest in making sure that the data are recorded accurately. Research is ongoing to upgrade the application with AI for fish identification. Developers are also looking into how Trafiz can be used in monitoring, control, and surveillance and in empowering women through access to finance.

## TraceTales

*Presented by Stephani Mangunsong, MDPI*

TraceTales is a traceability tool developed by MDPI to help small- to medium-scale fish processors to comply with traceability requirements. In the value chain, it is the processor that needs traceability the most, because they are the most likely source of data bottlenecks. Fish that enter the processing line often come from several suppliers, and each and every individual fish should be traceable to its supplier. Moreover, each fish is typically cut up into several pieces, and every single piece needs to be traceable. The challenge is particularly great for small-scale seafood processors that still rely on manual recordkeeping. With TraceTales, data recording from tracking to packing can now be done electronically. The information is converted into the QR code that is printed on the product label and used to trace the product to its source. The system also generates a printout of the packing list and invoice. Since TraceTales was first deployed in 2018, nearly 3,260 tons of traceable tuna products from more than 5,215 tons of raw materials have been shipped from processing plants in North Maluku, Maluku and North Sulawesi, Indonesia.

## Issues and Lessons Learned

- Sustainability of the technology – The sustainability of a technology depends on user acceptance, affordability and availability. If the technology is easily available and provides value for money in terms of effective results and the user company’s bottomline, it will have a good chance of being well received by users. A case in point is Pointrek. USAID Oceans gave Nutrindo three Pointrek units to test – the company found the technology so useful that they bought three additional units, and ordered five more.
- Harmonize, not integrate – Instead of system integration, the focus should be on harmonizing data to enable interoperability. It is easier to harmonize data than to integrate systems.
- Human-centered design – At the outset, the point was made that the fisher’s job is to catch fish and not to collect data, so there has been a focus on ensuring that the technologies are not only easy to use but can actually enrich fishers’ lives, such as, for example, by giving fishers the ability to communicate with their families even while they are at sea, as is the case with Pointrek and FAME.



- Use of incentives – Incentives in the form of cash, technical assistance or management support can help to encourage or reward the uptake of traceability solutions. Small-scale fishers, in particular, may need more incentives to participate in the traceability system.
- Applications in other fisheries – Although the pilot testing has focused on tuna, all of the technology solutions that USAID Oceans supported are not limited to any specific fishery. This makes it possible to expand their use to other fisheries like purse seining. BFAR has already started testing its eCDTS on blue swimming crab.
- Full-chain traceability – The use of QR codes and different identifiers works well in terms of translating data into the Electronic Product Code Information Services format and tracking events, which makes the technologies truly interoperable down the value chain to the consumer.

## Day 3: Country Commitments and Mapping of Way Forward

The final day was focused on wrap-up and looking ahead. The sessions were structured as follows:

1. Participant Feedback: Reflections on Lessons Learned (from Day 2) – Dr. Lando
2. Report-out: Finalizing the ‘Regional Document on Integrating Gender in the Fisheries Workplace’ (from Day 2) – Ms Sornkliang
3. Country Commitments on the Regional eCDT Guidance Document
4. Dialogues on The Way Forward
5. Participant Feedback: Most Important Takeaway from this Workshop
6. Beyond Oceans – Mr. Parks
7. Regional eCDT Guidance Document: Next Steps – Dr. Pomeroy
8. Closing Remarks – Ms Cristina Srinivasan (USAID/RDMA), Mr. Parks, and Mr. Akito

## Participant Feedback: Reflections on Lessons Learned

### What Went Well with eCDT Testing?

- Value and strength of collaboration
- Strength of cooperation both within the country among different stakeholders and between different countries
- Coordination between different NGOs and government
- Partnership between industry, fishers and technology providers
- A lot of knowledge and information developed and shared among the people that participated

### What Could Have Been Improved with eCDT Testing?

- While collaboration, cooperation, coordination and partnerships were strong, these should be further strengthened to expedite the work, especially on integration/interoperability.
- Be more flexible and not be married to a specific system: Recognize the uniqueness and context of each country
- Simplify – ASEAN as a region can adopt a common set of KDEs, from which the countries can select KDEs that are relevant to their needs.
- SEAFDEC should socialize eACDS with the EU, U.S. and Japan and explain its equivalence to the EU Catch Certification Scheme, U.S. SIMP, and CATCH Japan.
- Develop eLogbook for those countries where this would be relevant

## Lessons Learned from the Work We Did Together

- The AMS are at different stages of establishing the legal framework for CDT: On one end are countries that have only general laws recognizing the value of fisheries management, and on the other end, countries that have very specific laws on CDT.
- It is very important to link CDT to the value chain.
- Collaboration is key to success in the development and implementation of CDT
- Lessons from USAID Oceans' pilot programs in Indonesia and the Philippines and its expansion activities in the other countries, and how each country is adapting the different eCDT solutions to their various needs:
  - eCDT development can be initiated at any node in the value chain
  - eCDT is an important tool for fisheries management
  - There are ways to reduce operational cost, such as by using offline-enabled apps
  - The government's role is to provide policy, regulations, and funding for the development of eCDT infrastructures and the human capital (e.g., in-house IT team) needed to operate and manage them. The private sector's role, on the other hand, is to help in testing or providing proof of concept for the development of eCDT systems.
  - The eCDT system design should consider the interplay between technology and human welfare.

## What Could Have Been Done Differently (to Improve this Workshop)

- More time should have been devoted to discussing possible collaboration between and among participating countries especially on anti-IUU measures.
- Participants should have been given more time to share experiences and best practices from their respective countries.
- It would have been good to hear directly from Brunei Darussalam and Malaysia about their experiences.

## Report-out: Finalizing the “Regional Document on Integrating Gender in the Fisheries Workplace”

*(This is the report-out from the breakout discussion on Day 2 about finalizing the ‘Regional Document on Integrating Gender in the Fisheries Workplace.’ The discussion was attended by Lao PDR, Myanmar, Vietnam and Thailand.)*

The “Regional Document on Integrating Gender in the Fisheries Workplace” was developed through a series of activities, including the annual USAID Oceans TWG Workshop (2016-18), the 6<sup>th</sup> Global Symposium on Gender in Aquaculture and Fisheries (2016), and the Regional Gender Workshop (2017). Two matrices were used to collect relevant country data, such as on how gender is mainstreamed or integrated in the fisheries workplace in each country, practical and specific applications of gender integration approaches, and what results, outputs or impacts have resulted or will result from the actions taken.

Seven countries have so far completed the matrices: Cambodia, Malaysia, Myanmar, Philippines, Thailand, Vietnam, and Indonesia. The data show that:

- All seven countries have multiple government agencies responsible for human welfare, gender and labor.
- Cambodia has national and local laws on labor protection, gender equality, social welfare etc. for port activities only; Thailand's laws cover activities in the fisheries value chain from at-sea capture to port; and Indonesia, Malaysia, Myanmar, Philippines, and Vietnam have laws that cover all activities in the value chain.
- All countries are implementing activities on human welfare, although not at all nodes of the value chain.
- Cambodia, Indonesia, Myanmar, and the Philippines reported that there are other groups working in the same space.

The discussion focused mainly on the next steps for moving forward with finalizing the document. The results were:

1. Distribute Matrix 1 and Matrix 2
  - Distribute the filled-out matrix forms
  - Distribute blank matrix forms for additional information
2. What else is missing? (Suggestions)
  - Women leaders' and gender champions' profiles (for each country)
  - Acknowledgment page, including a list of contributors
3. Timelines
  - Send out Matrix 1 and Matrix 2 that include this workshop's inputs: December 17, 2019
  - Circulate draft document: January 14, 2020 (to give the countries time to review the matrices before the USAID Oceans Regional Oceans Training, where the matrices will be compiled)
  - Continue discussion during Regional Gender Training: January 21-23, 2020
  - Finalize document for submission to USAID: March 2020
4. Dissemination plan
  - Hand over document to SEAFDEC Training Department
  - Send hard and electronic copies of the document to each country for final comments and revisions as may be needed to reflect their respective contexts.

## Country Commitments on Regional eCDT Technical Guidance Document

In this session, the country representatives were asked to discuss and respond to the following questions:

1. How do you think the Regional eCDTS Technical Guidance can be tailored to your respective countries? (Specific issues in your country that you want to focus on) [content]
2. How can the Technical Guidance be tailored to your country's strategic fisheries development plan? (How the Technical Guidance can help with or be incorporated in your country's strategic planning for fisheries) [planning]
3. Do you recommend that we finalize this guidance and make it available?

The responses, particularly to Question #3, were shared in plenary, as follows:

**Indonesia** –Yes, we would like to see the Technical Guidance finalized and made available. What we have in Indonesia right now is Model 3 (existing eCDT system that is not integrated across the value chain), so we will be looking at how we can integrate the apps and systems that already exist and establish coordination among government stakeholders, private sector and other stakeholders. Yes, we recommend finalizing and making this guidance available to all ASEAN countries.

**Philippines** – Yes, the Philippines' Department of Agriculture-BFAR fully supports finalizing the Technical Guidance and making it available to ASEAN Member States (AMS). We believe the document will help the AMS in implementing their respective traceability systems for various fisheries in accordance with their national policies, requirements and practices.

**Myanmar** – The eCDT program is strongly recommended by our country, so yes, we recommend that the Technical Guidance should be finalized and made available to the region. For now, we see this a very good opportunity to learn how to address IUU fishing, because implementing eCDT is still a big challenge for us. We need financial support, and we need technical assistance to validate the data that we have and to evaluate what we already have in terms of technical resources and the overall national system to implement eCDT. And we also need time to develop our policy framework and system for eCDT. On the upside, we already

have a National Plan of Action for IUU fishing that we can build on, so in the future we will be able to maybe implement eCDT.

**Lao PDR** – eCDT is really new to us, and we have no marine fishery, only freshwater fisheries. Nevertheless, we agree the technical guidance should be finalized and shared so that we can better understand how it can be applied to the Lao PDR context. So, we would like SEAFDEC or USAID to translate this document to Lao to help our staff understand it better. Perhaps your team can visit Lao PDR early next year to explain the Guidance to our people, and we can have representatives from Myanmar and Cambodia as well, so they can take part in the learning experience. When we have a better grasp of what this is about and how it applies to us, we will try to put it in our plan, policy or strategy for fisheries.

**Thailand** – Yes, we recommend finalizing and sharing the Technical Guidance with ASEAN member countries. For Thailand DOF, this is almost like our eCDT “bible”, something from which we can take whatever contents are appropriate for us to use in our own eCDT implementation in Thailand.

In addition to the country representatives, Dr. Hue (from MCD Vietnam) also gave a response as a non-state actor working to promote sustainable fisheries management in Vietnam, saying: “I think the Technical Guidance will be very useful to Vietnam as a reference. As an NGO, we are not a decision-making body but I will do my best to advise DFISH that this document is a very good reference for developing and implementing our country’s eCDT system, at whatever point in the value chain they may want to start it. So, yes, I strongly recommend that we finalize it and we will have a responsible discussion with the DFISH about this.”

The session ended with SEAFDEC also agreeing that the regional technical guidance should be finalized, and committing to distribute and circulate the finalized document with all ASEAN member countries during the next SEAFDEC Council Meeting (planned for March 2020).

## Dialogues on The Way Forward

This was a breakout session consisting of three small group discussions on:

1. Technology for eACDS/eCDT – Facilitators: Dr. Chokesanguan and Mr. Maruf; Rapporteur: Ms Andong
2. eCDT for Freshwater Fishery – Facilitator: Dr. Pomeroy; Rapporteur: Mr. Pedrajas
3. Human Welfare and Gender Equity – Facilitator: Dr. Satapornvanit and Ms Sornkliang; Rapporteur: Ms Yamsangsung

The results of the discussions were not reported back and discussed in plenary.

## Participant Feedback: Most Important Takeaways from this Workshop

This interactive session used a wrap-up activity called “28,” which involved the following steps:

1. The participants were divided into groups of eight and each asked to write on a metacard their “most important takeaway from this workshop.”
2. The participants each exchanged cards with other participants three times, before pairing up with one participant to mutually score each other’s card and then writing the score at the back of the card (the total score for a pair of cards should not be more than 7, which meant a score combination could only be 7-0, 6-1, 5-2, or 4-3). This step was repeated four times.
3. At the end of the exercise, each person held a card with four scores at the back, which were summed up to obtain the final score for that card. (The highest possible score for a card would be 28, i.e., four 7’s.)

The top 10 ‘takeaways’ were:

TOPIC	SCORE
1. Electronic catch documentation and traceability (eCDT) technologies are useful	21
2. Southeast Asian countries share a collectively vision to use technology to trace their fisheries and benefit their people	19
3. Diversity of the eCDT system to meet country-specific needs	18
4. Need for data integration	18
5. Expanding work and growth of experiences in using eCDT	18
6. Importance of connectivity	18
7. National eCDT roadmap for Vietnam is clearer	16
8. eCDT for freshwater fisheries focused on food security and food safety	15
9. eCDT is a tool to improve fisheries management	15
10. eCDT technology strengthens trust of export market countries (EU, U.S. and Japan)	15

## Beyond Oceans

*Presented by Mr. John Parks, Chief of Party, USAID Oceans*

There are three key messages we hope that the countries take away from this workshop:

1. Country roadmaps for eCDT (2020-2025) – Thailand, Indonesia and the Philippines have been working on their traceability systems for a few years now, so their roadmaps are already quite well developed. With this workshop, Vietnam now has a clearer roadmap, and Lao PDR and Myanmar have their draft roadmaps. In addition, Dr. Pomeroy has been working with Cambodia to develop their national roadmap. So, these countries are in a good place to move forward at the national level and take their eCDT work beyond the completion of USAID Oceans.
2. Revised Guidance supporting the roadmaps – This document will exist and be adapted after the close of the USAID Oceans project. It will be a living document that belongs to the AMS and reflects their voices. SEAFDEC or CTI-CFF in the future may want to bring all the countries together again to review and perhaps revise it, and then perhaps freshwater fisheries will have a bigger section.
3. Better understanding of the various technology options available for eCDT – Providers will continue to evolve their technologies, which will be available to all of the AMS beyond the completion of USAID Oceans. These companies are doing fantastic work and will continue to flourish beyond the Project’s completion and build tools that the countries can use.

All this will help the countries continue the work that was started under USAID Oceans, including:

- Scaling-up eCDT to new locations and fishery supply chains – With the Technical Guidance and roadmaps, the countries and assisting organizations have clear targets to align with.
- Implementing nested EAFM plans (local, national and sub-regional) – eCDT technologies are providing a growing amount of information that fisheries managers can use to make decisions with more confidence, not only at the local or even national level, but also at the sub-regional level as countries hopefully continue to strengthen that transboundary management of shared resources, such as, for example, in the Sulu-Sulawesi Seascape.
- Expanding NGO and civil society support to national government and private sector “First Movers” – USAID Oceans’ NGO partners, including MDPI, WWF, and MCD – will continue to operate and support all of the governments well beyond USAID Oceans.

USAID Oceans is ending, but your collaboration and shared vision continues and will make positive change.

## Regional eCDT Technical Guidance Document: Next Steps

TASK	TARGET DATE	LEAD
Edit document to incorporate revision suggestions from this workshop	15 Dec. 2019	USAID Oceans (Dr. Pomeroy, Mr. Pedrajas)
Submit additional comments to Ms. Yamsangsung or Mr. Parks	15 Dec. 2019	Country focal points
Incorporate additional comments and submit revised final draft to USAID/RDMA for review	January 2020	USAID Oceans
Conduct Workshop on eCDT for Freshwater Fisheries (Vientiane, Lao PDR)	January 2020	USAID Oceans, SEAFDEC, and Lao PDR Department of Fisheries
Submit USAID/RDMA-approved document to SEAFDEC Council Meeting	March 2020	USAID Oceans, SEAFDEC

## Closing

The closing remarks were given by USAID/RDMA Ecosystems Management and Trade Team Lead and Contracting Officer Representative for USAID Oceans Cristina Srinivasan; SEAFDEC Deputy Secretary General Sato; and USAID Oceans Chief of Party John Parks. The full text of their remarks can be found in Annex 6.

Ms Srinivasan started her remarks by saying, “This is quite a milestone for me because this is the last USAID Oceans workshop where we are all in the same room together.” She thanked the participants for their contributions, not only during this workshop but in the several months leading up to it. However, while acknowledging the hard work and dedication that went into finalizing the Technical Guidance, she emphasized that there is still a lot of work that needs to be done. “We need to continue the momentum that we’ve all built, and continue to collaboratively work together to advance traceability effort,” she said, adding: “We look to SEAFDEC as the regional leader in fisheries management and eCDT across ASEAN, and we look to each of the ASEAN member-countries for leadership to help champion the uptake and use of all of these traceability solutions.” In conclusion, she reaffirmed USAID’s commitment to “engaging and promoting sustainable fisheries in the region,” and thanked the USAID Oceans team, saying, “You have a lot to be proud of.”

Mr. Parks thanked USAID in return, saying “We are honored and privileged to be a part of the continuing partnership between the United States government and the ASEAN community.” He also acknowledged the contributions of all the countries and organizations represented in this workshop, and others that were also involved in the development of the Technical Guidance, including CTI-CFF. “We thank all of your countries for your commitment, for sharing your national experiences and lessons, and for bringing your voices into this document. In doing so, you made the document truly reflective of the collective, shared regional experiences, lessons, and voices of the AMS,” he said.

Mr. Sato gave his own thanks to the participants and USAID, and offered his hope that SEAFDEC and USAID will continue to work together as partners and collaborators in the pursuit of sustainable fisheries in the ASEAN region. Then he concluded the workshop by wishing everyone a safe journey home.

# ANNEX I. LIST OF PARTICIPANTS

## INDONESIA

### Mr. Achmad Fauzie

Head of Section for Fishing Port Operations,  
Directorate General of Capture Fisheries, MMAF,  
Gedung Mina Bahari II, Jalan Medang Merdeka Timur  
No. 16 Jakarta  
Email: achmad.fauzie.kkp@gmail.com

### Mr. La Moriansyah

Staff, Directorate of Business and Investment,  
MMAF, Gedung Mina Bahari II, Jalan Medang  
Merdeka Timur No. 16 Jakarta  
Email: lamoriano@gmail.com

### Ms. Wiji Lestari

Deputy Director for Mapping and Monitoring,  
Directorate of Logistic, MMAF, Gedung Mina Bahari  
II, Jalan Medang Merdeka Timur No. 16 Jakarta  
Email: wlestari10@gmail.com

## LAO PEOPLE'S DEMOCRATIC REPUBLIC

### Ms. Dongdavanh Sibounthong

National Gender Focal Point, Department of  
Livestock and Fisheries, PO Box 6644, Vientiane  
Email: apone53@gmail.com

### Ms. Somphou Phasulath

Fisheries Officer, Department of Livestock and  
Fisheries, Khunta village, Sikhattabong, Vientiane  
Email: sp.somphou@hotmail.com

### Ms. Daovieng Yaibouathong

Fisheries Officer, Department of Livestock and  
Fisheries, Khunta Village, Sikhattabong, Vientiane  
Email: da\_yaibouathong@hotmail.com

## MYANMAR

### Ms. Wint Wint Tun

Deputy Director, Department of Fisheries

Building 36, Ministry of Agriculture Livestock and  
Irrigation, Ministerial Zone, Naypyi Taw  
Email: wintwint19@gmail.com

### Dr. Yin Yin Than

Fisheries Officer, Department of Fisheries  
Building 36, Ministry of Agriculture Livestock and  
Irrigation, Ministerial Zone, Naypyi Taw  
Email: yinyinthan.fg@gmail.com

### Ms. Myat Khine Mar

Assistant Director, Department of Fisheries  
Building 36, Ministry of Agriculture Livestock and  
Irrigation, Ministerial Zone, Naypyi Taw  
Email: mar268354@gmail.com

## PHILIPPINES

### Mr. Eugene M. Casas

Senior Fishing Regulations Officer, Bureau of  
Fisheries and Aquatic Resources (BFAR), 3/F PCA  
Building, Elliptical Road, Diliman, Quezon City  
Email: emcasas2002@yahoo.com

### Mr. Nazario C. Briguera

Market Specialist, BFAR, 3/F PCA Building, Elliptical  
Road, Diliman, Quezon City  
Email: naze\_cb@yahoo.com

### Ms. Wilhelmina Pearl C. Guliman

Administrative Officer II, BFAR, Old Laboratory  
Bldg., PCA Compound, Elliptical Road, Diliman,  
Quezon City,  
Email: minaguliman@gmail.com

## THAILAND

### Ms. Jariya Pucharoen

Food Technologist, Senior Professional Level,  
Department of Fisheries (DOF), Phahonyothin  
Rd, Lat Yao, Chatuchak, Bangkok  
Email: jariya.p@dof.mail.go.th

### Ms. Passarapa Kaewnern

Food Technologist, Senior Professional Level,  
DOF, Phahonyothin Rd, Lat Yao, Chatuchak,  
Bangkok

Email: [passarapa.k@dof.mail.go.th](mailto:passarapa.k@dof.mail.go.th)

**Mr. Chirdsak Chookong**

Fishery Biologist, Professional level, Fisheries Resources Management and Measure Division, DOF, Phahonyothin Rd, Lat Yao, Chatuchak, Bangkok  
Email: [chirdchoo2@gmail.com](mailto:chirdchoo2@gmail.com)

**Mr. Bunchong Chumnongsittathum**

Deputy Director General, DOF, Phahonyothin Rd, Lat Yao, Chatuchak, Bangkok

**NGO/PRIVATE SECTOR**

**Ms. Hue Nguyen Thu**

Chief Executive Officer and Founder, Centre for Marinelifelife Conservation and Community Development (MCD), Room 3104, Floor 31, Building 34T, Hoang Dao Thuy, Hanoi, Vietnam  
Email: [nthue@mcdvietnam.org](mailto:nthue@mcdvietnam.org)

**Dien Wong**

Director, Altermyth, Indonesia  
Email: [dienw@altermyth.com](mailto:dienw@altermyth.com)

**Arcelio Fetizanan Jr.**

CEO, FAME  
Email: [junjun@fame.systems](mailto:junjun@fame.systems)

**Nirwan Harahap**

Chief of Operation, PT Sisfo, Indonesia  
Email: [nirwan@sisfo.net](mailto:nirwan@sisfo.net)

**Stephani Mangunsong**

Supply Chain Manager, MDPI  
Email: [stephani@mdpi.or.id](mailto:stephani@mdpi.or.id)

**Tedy Harmoko**

Plant Manager, Nutrindo, Indonesia  
Email: [tharmoko@gmail.com](mailto:tharmoko@gmail.com)

**Ms Susan Roxas**

Asia Pacific Lead, Global Dialogue Seafood Traceability (GDST)/WWF  
Email: [sroxas@wwf.org.ph](mailto:sroxas@wwf.org.ph)

**Mr. Jirawat Eauchai**

Co-Founder/Chief Operation Officer/Project Manager, Trinity Roots, 30/1 Wachiratham Sathit 51 Alley, Bang Chak, Phra Khanong, Bangkok, Thailand  
Email: [jirawat@trinityroots.co.th](mailto:jirawat@trinityroots.co.th)

**Mr. Thammayut Arunyanon**

Project Coordinator and Business Consultant, Trinity Roots, 30/1 Wachiratham Sathit 51 Alley, Bang Chak, Phra Khanong, Bangkok, Thailand  
Email: [thammayut.aru@trinityroots.co.th](mailto:thammayut.aru@trinityroots.co.th)

**Mr. Prakrit Waithayawan**

Project Coordinator and Business Consultant, Trinity Roots, 30/1 Wachiratham Sathit 51 Alley, Bang Chak, Phra Khanong, Bangkok, Thailand  
Email: [prakrit@trinityroots.co.th](mailto:prakrit@trinityroots.co.th)

**Ms. Anakkawee Thonthong**

Business Consultant, Trinity Roots, 30/1 Wachiratham Sathit 51 Alley, Bang Chak, Phra Khanong, Bangkok, Thailand  
Email: [anakkawee@trinityroots.co.th](mailto:anakkawee@trinityroots.co.th)

**Ms. Pongjitta Phoowathanarittikul**

Business Analyst, Trinity Roots, 30/1 Wachiratham Sathit 51 Alley, Bang Chak, Phra Khanong, Bangkok, Thailand  
Email: [pongjitta@trinityroots.co.th](mailto:pongjitta@trinityroots.co.th)

**SEAFDEC**

**Mr. Akito Sato**

Deputy Chief of the Training Department, SEAFDEC Training Department, PO Box 97, Phasamut Chedi, Samutprakarn  
Email: [dsg@seafdec.org](mailto:dsg@seafdec.org)

**Dr. Bundit Chokesanguan**

Technical Coordinator, SEAFDEC, PO Box 97, Phasamut Chedi, Samutprakarn  
Email: [bundit@seafdec.org](mailto:bundit@seafdec.org)

**Mr. Kongpathai Saraphaivanich**

Head of Training and Information Section, SEAFDEC Training Department, PO Box 97, Samutprakarn  
Email: [kongpathai@seafdec.org](mailto:kongpathai@seafdec.org)



**Ms. Jariya Sornkliang**

Fisheries Management Scientist/Socioeconomics  
Scientist, SEAFDEC Training Department, PO Box  
97, Phasamut Chedi, Samutprakarn  
Email: jariya@seafdec.org

**U.S. DEPARTMENT OF THE INTERIOR  
(DOI)**

**Ms Kulthida Techasarin**

Regional Coordinator, Marine &  
Fisheries/Smart Infrastructure for the Mekong  
Program, U.S. DOI  
Bangkok, Thailand  
Email: annkulthida.doi.sim@gmail.com

**USAID REGIONAL DEVELOPMENT  
MISSION FOR ASIA (RDMA)**

**Ms. Roopa Karia**

Deputy Director, Regional Environment Office,  
USAID/RDMA, Athenee Tower, 25/F, 63 Wireless  
Road, Pathumwan, Bangkok, Thailand  
Email: rkaria@usaid.gov

**Ms. Cristina Velez Srinivasan**

Ecosystems Management and Trade Team Lead,  
Contracting Officer Representative USAID Oceans  
USAID/RDMA, Athenee Tower, 25th Floor, 63  
Wireless Road, Pathumwan, Bangkok, Thailand  
Email: cvelez@usaid.gov

**USAID OCEANS**

**Mr. John Parks**

Chief of Party  
208 Wireless Road Building, Unit 1201/1, 12th  
Floor, Wireless Road, Lumpini, Pathumwan,  
Bangkok, Thailand  
Email: John.Parks@oceans-partnership.org

**Ms. Araya Poomsaringkhan**

Partnerships and Industry Engagement Specialist  
208 Wireless Road Building, Unit 1201/1, 12th  
Floor, Wireless Road, Lumpini, Pathumwan,  
Bangkok, Thailand  
Email: Araya.Poomsaringkarn@oceans-  
partnership.org

**Ms. Arlene Nietes-Satapornvanit**

Gender Integration Specialist  
208 Wireless Road Building, Unit 1201/1, 12th  
Floor, Wireless Road, Lumpini, Pathumwan,  
Bangkok, Thailand  
Email: Arlene.Satapornvanit@oceans-  
partnership.org

**Ms. Lauren Bader**

Communications & Outreach Specialist  
208 Wireless Road Building, Unit 1201/1, 12th  
Floor, Wireless Road, Lumpini, Pathumwan,  
Bangkok, Thailand  
Email: Lauren.Bader@oceans-partnership.org

**Ms. Smita Yamsangsong**

Program Assistant  
208 Wireless Road Building, Unit 1201/1, 12th  
Floor, Wireless Road, Lumpini, Pathumwan,  
Bangkok, Thailand  
Email: smita.yamsangsong@oceans-partnership.org

**Mr. Michael Kidd**

Sr. Administration, Finance Manager  
208 Wireless Road Building, Unit 1201/1, 12th  
Floor, Wireless Road, Lumpini, Pathumwan,  
Bangkok, Thailand  
Email: Michael.Kidd@oceans-partnership.org

**Ms. Bussaracum Chamchoy**

Administration, Finance, Grants Specialist  
208 Wireless Road Building, Unit 1201/1, 12th  
Floor, Wireless Road, Lumpini, Pathumwan,  
Bangkok, Thailand  
Email: Bussaracum.Chamchoy@oceans-  
partnership.org

**Mr. Pakkaphong Pakdeepipath**

Administration, Finance Assistant  
208 Wireless Road Building, Unit 1201/1, 12th  
Floor, Wireless Road, Lumpini, Pathumwan,  
Bangkok, Thailand  
Email: Pakkaphong.Pakdeepipath@oceans-  
partnership.org

**Mr. Farid Maruf**

Regional CDT Specialist

Jakarta, Indonesia  
Email: Farid.Maruf@oceans-partnership.org

**Mr. Frengky Sihombing**  
Country, Site Coordinator – Indonesia  
Manado, Northern Sulawesi, Indonesia  
Email: Frengky.Sihombing@oceans-partnership.org

**Ms. Rebeca Andong**  
Country, Site Coordinator - Philippines  
General Santos City, Philippines  
Email: Rebeca.Andong@oceans-partnership.org

**Mr. Len Garces**  
Fisheries Management Specialist  
Manila, Philippines  
Email: Len.Garces@oceans-partnership.org

**Mr. Joey Pedrajas**  
Fisheries Management Assistant  
Iloilo City, Philippines  
Email: Joey.Pedrajas@oceans-partnership.org

**Mr, Supol Singhapoom**  
M&E Specialist  
208 Wireless Road Building, Unit 1201/1, 12th  
Floor, Wireless Road, Lumpini, Pathumwan,  
Bangkok, Thailand  
Email: supol.singhapoom@oceans-partnership.org

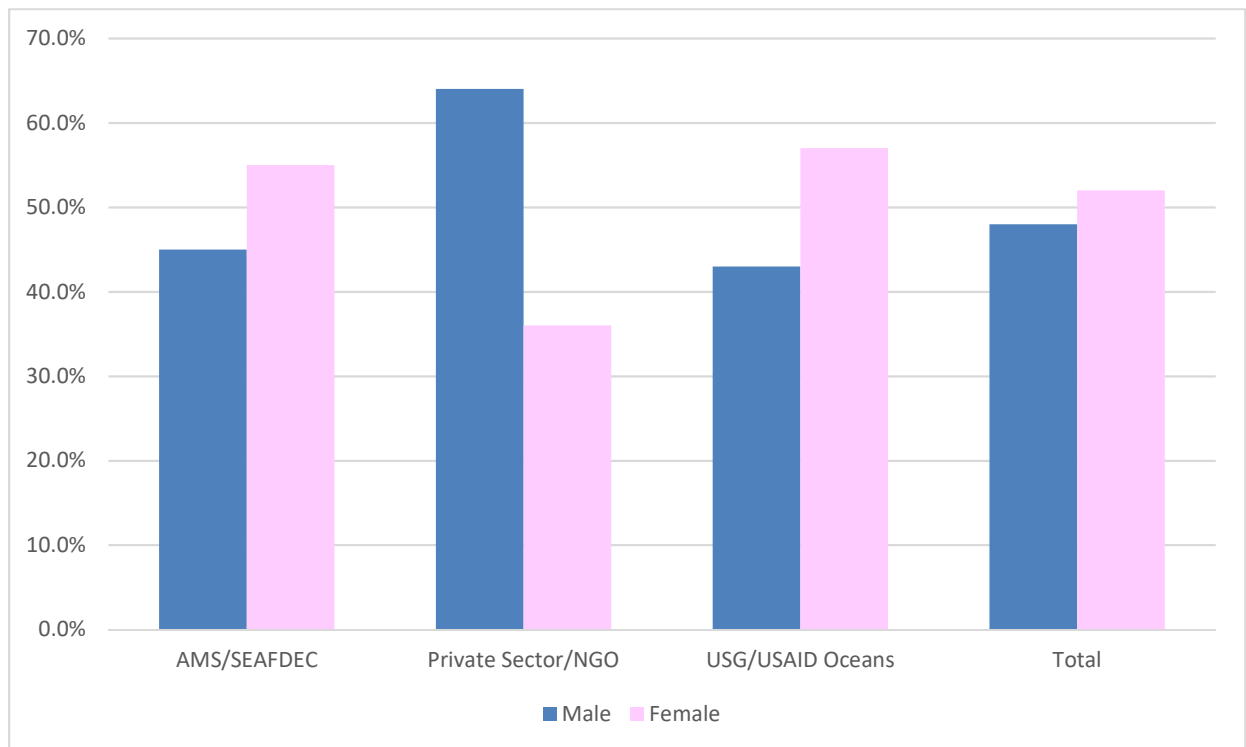
**Dr. Robert Pomeroy**  
Regional Fisheries Planning Specialist  
University of Connecticut, USA  
Email: bobpom53@gmail.com

**Dr. Lily Ann Lando**  
Lead Facilitator  
Manila, Philippines  
Email: lilyann.lando@gmail.com

**Ms. Asuncion Sia**  
Workshop Rapporteur  
Manila, Philippines  
Email: ciony.sia@gmail.com

## ANNEX II. PARTICIPANT DISTRIBUTION BY GENDER & ORGANIZATION

Category	Male (% of Category)	Female (% of Category)	% of Total
AMS / SEAFDEC	9 (45%)	11 (55%)	20 (39%)
Private sector, NGO	7 (64%)	4 (36%)	11 (21%)
USG / USAID Oceans	9 (43%)	12 (57%)	21 (40%)
<b>TOTAL (%)</b>	<b>25 (48%)</b>	<b>27 (52%)</b>	<b>52 (100.0%)</b>



## ANNEX III. AGENDA

The below agenda was provided at the beginning of the workshop and does not reflect agenda or schedule changes made during the course of the workshop.

**Regional Electronic Catch Documentation and Traceability Guidance Workshop, 2-4 December 2019, Amari Watergate Hotel, Bangkok, Thailand**

<b>Day 1 - Monday, December 2, 2019: Review and Validation of the Regional eCDT Technical Guidance</b>		
<b>TIME</b>	<b>ACTIVITY</b>	<b>LEAD</b>
8:30 – 9:00	Registration	
9:00 – 9:30	<u>Opening Session</u> Opening and Welcome Remarks      Brief participant introductions	Mr. Bunchong Chumnongsittathum Deputy Director General, Thailand Department of Fisheries  Ms. Roopa Karia USAID RDMA Deputy Office Director  Mr. Akito Sato Deputy Secretary General, SEAFDEC  Mr. John Parks Chief of Party, USAID Oceans  Dr. Lily Ann Lando Lead Facilitator
9:30 – 10:00	Overview of Regional eCDT Technical Guidance	Dr. Robert Pomeroy Technical Consultant, USAID Oceans
<b>10:00 – 10:15</b>	<b>Group photo and coffee break</b>	
10:15 – 10:45	Review of Acronyms and Abbreviations: Terms and Definitions	Dr. Robert Pomeroy
10:45 – 12:00	<u>Review of Section 1</u> 1.1 Purpose, Goals, and Objectives 1.2 Electronic Catch Documentation Systems 1.3 Fundamental Principals of eCDT Systems 1.4 Relevant Importing Policies and Regulations 1.5 Technical Guidance Background and Development Process	Dr. Robert Pomeroy
<b>12:00 – 13:15</b>	<b>Lunch (provided)</b>	
13:15 – 15:30	<u>Review of Section 2: Technical Guidance on Design and Implementation of eCDT</u> 2.1 eCDT System and Data Capture Integration 2.2 Process of Moving Paper-Based Systems to an integrated, Electronic System	Dr. Robert Pomeroy

Day 1 - Monday, December 2, 2019: Review and Validation of the Regional eCDT Technical Guidance		
	Step 0: Pre-step Step 1: CDT Gap Analysis and Foundational Research Step 2: eCDT System Design Step 3: eCDT System Implementation	
<b>15:30 – 15:45</b>	<b>Coffee break</b>	
15:45 – 16:45	Review of Annexes	Dr. Robert Pomeroy
16:45 – 17:00	Day 1 wrap-up and announcements	Dr. Lily Ann Lando

Day 2 - Tuesday, December 3, 2019: Knowledge and Experience Sharing		
TIME	ACTIVITY	LEAD
8:30 – 9:00	Registration	
9:00 – 9:15	Welcome: Day 1 recap, Day 2 overview	Dr. Lily Ann Lando
9:15 – 10:15	<u>Panel discussion:</u> Experience from the eACDS Implementation – Experience, progress, and updates  Presenter: Mr. Kongpathai Saraphaivanich, Training and Information Section Head, SEAFDEC  Panelists: Myanmar	Dr. Bundit Chokesanguan Consultant, SEAFDEC
<b>10:15 – 10:30</b>	<b>Coffee break</b>	
10:30 – 11:00	Thailand National Experience: Thailand Department of Fisheries	Ms. Passarapa Kaewnern Food Biologist, Thailand Department of Fisheries
11:00 – 12:00	<u>Panel discussion:</u> USAID Oceans Learning Site Experiences  Panelists: Mr. Frengky Sihombing, Indonesia Country Coordinator, USAID Oceans Indonesia Ministry of Marine Affairs and Fisheries Ms. Rebeca Andong, Philippines Country Coordinator, USAID Oceans Bureau of Fisheries and Aquatic Resources XII (Philippines) Dr. Arlene Satapornvanit, Gender Integration Specialist, USAID Oceans	Moderator: Mr. Farid Maruf, eCDT Specialist, USAID Oceans
<b>12:00 – 13:15</b>	<b>Lunch (provided)</b>	
13:15 – 14:15	Group reflection on lessons learned	Dr. Lily Ann Lando

Day 2 - Tuesday, December 3, 2019: Knowledge and Experience Sharing		
14:15 – 15:15	Country roadmap overview and breakout discussion of draft country roadmaps	Dr. Robert Pomeroy Dr. Lily Ann Lando
15:15 – 15:35	<u>Technology showcase (concurrent)</u> : Technology pitches  Pointrek, Mr. Nirwan Harahap; Nutrindo, Mr. Teddy Harmoko; Futuristic Aviation and Maritime Enterprise, Inc. (FAME), Mr. Arcelio Fetizanan, Jr.; Trafiz: Mr. Dien Wong; TraceTales: Ms. Stephanie Mangunsong	Mr. Farid Maruf
15:35 – 16:25	Coffee break and marketplace	
16:25 – 16:45	Technology panel / Open forum  Panelists: Mr. Nirwan Harahap, Pointrek Mr. Teddy Harmoko, Nutrindo Mr. Arcelio Fetizanan, Jr., FAME Mr. Dien Wong, Trafiz Ms. Stephanie Mangunsong, TraceTales	
15:15 - 16:45	<u>HWGE Session (concurrent)</u> : Finalizing the document on “Gender Integration in the Fisheries Workplace”	Dr. Arlene Satapornvanit Ms. Jariya Sornkliang, Fisheries Management Scientist and Gender Focal Person, SEAFDEC TD
16:45 – 17:00	Report Out - HWGE Session Day 2 wrap-up and announcements	TBD Dr. Lily Ann Lando

Day 3 - Wednesday, December 4, 2019: Wrap-up and Way Forward		
TIME	ACTIVITY	LEAD
8:30 – 9:00	Registration	
9:00 – 9:10	Welcome: Day 2 recap, Day 3 overview	Dr. Lily Ann Lando
9:10 – 10:10	Finalizing the eCDT Regional Guidance Document	Dr. Lily Ann Lando
<b>10:10 – 10:25</b>	<b>Coffee break</b>	
10:25 – 11:25	Dialogues on the way forward  Technology for eACDS including eCDT (Rapporteur: Ms. Rebecca Andong, Philippines Country Coordinator, USAID Oceans)  Catch Documentation and Traceability for Freshwater Fishery (Rapporteur: Mr. Joey Pedrajas, Fisheries Management Assistant, USAID Oceans)	Dr. Bundit Chokesanguan Mr. Farid Maruf  Dr. Robert Pomeroy Mr. Len Garces Fisheries Management Specialist, USAID Oceans

Day 3 - Wednesday, December 4, 2019: Wrap-up and Way Forward		
	Gender Equity and Human Welfare (Rapporteur: Ms. Smita Yamsangsung, Program Assistant, USAID Oceans)	Dr. Arlene Satapornvanit Ms. Jariya Sornkliang
11:25 – 11:40	<u>Wrap-up</u> : Moving forward beyond USAID Oceans	Mr. John Parks
11:40 – 12:00	Final remarks on Technical Guidance on the design and implementation of eCDT systems in Southeast Asia	Dr. Robert Pomeroy
<b>12:00 – 13:15</b>	<b>Lunch (provided)</b>	
13:15 – 13:45	Event wrap-up activity	Dr. Lily Ann Lando
13:45 – 14:10	Closing remarks and announcements	Mr. John Parks Chief of Party, USAID Oceans  Mr. Akito Sato Deputy Secretary General, SEAFDEC  Ms. Cristina Vélez Srinivasan Ecosystems Management and Trade Team Lead, USAID RDMA

## ANNEX IV. USAID OCEANS PARTNERS

The Oceans and Fisheries Partnership is a USAID-funded activity, implemented by Tetra Tech ARD. USAID Oceans is a collaboration between USAID and the Southeast Asian Fisheries Development Center (SEAFDEC) and the Coral Triangle Initiative on Coral Reefs, Fisheries, and Food Security (CTI-CFF). The program works with a wide range of partners that bring additional expertise and experience to the mission.

### **USAID**

USAID's Regional Development Mission for Asia (USAID RDMA), located in Bangkok, Thailand, implements programs and forges partnerships with government, civil society, private sector and regional institutions across 24 Asian nations. RDMA's regional programs that address cross-border issues, including environmental issues, which are among the chief impediments to Asia's long-term development success. Rapid economic growth has led to dramatic increases in the use of natural resources and wrought unprecedented damage on Asia's forests, fisheries, wildlife and vulnerable ecosystems in response to these threats.

### **SEAFDEC**

Partner organization, the Southeast Asian Fisheries Development Center (SEAFDEC), is the technical and operational arm for fisheries matters in the region, and is engaged in the ASEAN-SEAFDEC Strategic Partnership (ASSP). ASSP works to enhance cooperation between ASEAN, SEAFDEC, and ASEAN member countries and recognizes USAID Oceans as an official ASSP program. SEAFDEC facilitates regional engagement and supports Activity work streams through the Oceans/SEAFDEC Technical Working Group. SEAFDEC also bring tremendous technical expertise to the Activity, in support of capacity building activities in the learning and expansion sites. SEAFDEC is working closely with national fisheries agencies on the implementation of the ASEAN Catch Documentation Scheme, which complements Ocean's regional approach and supports traceability objectives.

### **CTI-CFF**

The Coral Triangle Initiative on Coral Reefs, Fisheries and Food Security (CTI-CFF) is a multilateral partnership of six countries (Indonesia, Malaysia, Papua New Guinea, the Philippines, Solomon Islands and Timor-Leste), formed in 2007 to address the urgent threats facing the coastal and marine resources of one of the most biologically diverse and ecologically rich regions on earth. CTI-CFF seeks to sustain the region's extraordinary marine and coastal resources in the face of climate change and other anthropogenic threats by improving conservation of the Coral Triangle coral reefs and associated ecosystem functions, goods, and services. CTI-CFF has performed extensive work in regional fisheries management planning, and complements Oceans' objectives to establish enhanced national and regional Sustainable Fisheries Management Plans using an Ecosystem Approach to Fisheries Management.

### **USAID OCEANS NATIONAL TECHNICAL WORKING GROUP**

USAID Oceans aims to strengthen the capacity of regional and national governance bodies and institutions. In support of this goal, the USAID Oceans National Technical Working Group (TWG) was established in 2016, and is comprised of individual members appointed at the regional, national and local level that mirror the USAID Oceans team structure. The TWG is a network and mechanism to facilitate regional collaboration. A TWG has been established for each member country and for SEAFDEC's technical leads, with each team coming together to work collectively to further regional engagement and implementation. Technical leads within the TWG will work directly with USAID Oceans' work stream specialists in the areas of catch documentation and traceability, fisheries management, human welfare, and partnerships.



## **IMPLEMENTING PARTNERS**

### **Tetra Tech ARD**

Tetra Tech ARD is the prime contractor for USAID Oceans, and is a leading provider of consulting, engineering, and technical services worldwide. Tetra Tech ARD provides support to USAID on a wide-range of international development programs, using engineering, science, and high-technology solutions to solve the complex problems of the modern environment. Tetra Tech's approach is based on sound science, stakeholder engagement, capacity building, and innovative technologies and best practices. Tetra Tech has a substantial presence in Asia and extensive experience in the Asia-Pacific region having served as the Program Integrator for two of USAID/RDMA's groundbreaking regional programs, the US Indian Ocean Tsunami Warning System (IOTWS), and the US CTI Support Program (USCTI).

### **SSG Advisors**

SSG Advisors harnesses the power of collaboration to enable communities, companies, and governments to drive market-based solutions to global challenges. SSG Advisors has proven experience in partnerships for development, building on their recent successes with TV White Space's broadband with the USAID Ecosystems Improved for Sustainable Fisheries (ECOFISH) Project. Under USAID Oceans, SSG has been working to develop public-private partnerships with information and communications technology firms, leading retailers, Southeast Asian seafood processors and fisheries, and the financial sector to support the development of electronic catch documentation and traceability to reduce illegal fishing and improve fisheries management.

### **Verité**

Verité is a global non-profit with a mission to ensure that people work under fair and safe conditions. Verité aims to ensure that globalization is made to work for poor and vulnerable populations around the world. As part of the Oceans and Fisheries Partnership, Verité is conducting the program's Gender Analyses. Analyses will gather information on and document a range of labor conditions and current labor compliance efforts in USAID Oceans Learning Sites, which will be used to inform the design and implementation of CDT system. Verité will also determine potential goals for improved labor conditions, document existing labor compliance efforts by private sector entities, and document the legal and regulatory labor frameworks of target countries relevant to the fishing sector.

## **TECHNICAL PARTNERS**

USAID Oceans works with a vast network of partners that support traceability, enhanced oceans sustainability, and fisheries management. Partners are engaged to review and inform Activity strategies and through the USAID Oceans Technical Advisory Group. Partners include FishWise, FAO, The Government of Sweden, the Government of Japan through the Japanese Trust Fund, the International Seafood Sustainability Foundation, the Marine Stewardship Council, Yayasan Masyarakat dan Perikanan Indonesia (MDPI), and others. USAID Oceans is also supported by the following formal partners:

### **ADM Capital**

USAID Oceans and ADM Capital Foundation announced a partnership in January 2017 to explore the development and implementation of a financing vehicle to promote innovation and scalability in seafood traceability. The partnership seeks to combat IUU fishing, promote a fair and ethical seafood supply chain and advance sustainable fisheries and marine biodiversity conservation in Indonesia from 2017-2019. ADM Capital

Foundation, ADM Capital and other partners are working to build an innovative finance vehicle for Indonesia, the Tropical Landscape Finance Facility, which offers long-term loans to support projects that lead to improved rural livelihoods and access to energy for off-grid communities.

### **Future of Fish**

USAID Oceans has partnered with Future of Fish to leverage its existing collaborations with traceability technology vendors, seafood supply chain actors, and NGOs. Future of Fish is working with these stakeholders to build the business case and supporting infrastructure needed for scalable full-chain traceability. Future of Fish is a nonprofit systems change incubator that works with entrepreneurs, industry players, and investors to create business solutions to ocean challenges. Future of Fish's goal is to end overfishing by building strategic, collective impact through a powerful combination of analytics and design.

### **Institute of Food Technologists (IFT)-Global Food Technology Center (GFTC)**

USAID Oceans has formed a partnership with the Institute of Food Technologists (IFT)-Global Food Technology Center (GFTC) to leverage best practices and knowledge of food and seafood traceability standards from around the world to ensure the USAID Oceans CDT system is aligned with emerging traceability requirements in key export markets. GFTC assists the global food industry to trace products through the supply chain to improve food safety, diminish risk, avert devastating health consequences, and prevent economic loss to the food system. GFTC generates knowledge that addresses research gaps and delivers applied research, objective advice, and practical expertise about global food product traceability and data collaboration for private benefit and public good.

### **International Pole and Line Foundation (IPNLF)**

USAID Oceans and the International Pole and Line Foundation (IPNLF) announced their partnership in May 2017, designed to develop and implement a financially sustainable CDT system in Indonesia's coastal tuna fisheries, that will integrate with existing government and industry systems. IPNLF works to develop, support and promote socially and environmentally responsible pole-and-line and handline tuna fisheries around the world. IPNLF's ambition is to contribute to thriving coastal fisheries, including the people, communities, businesses and seas connected with them. Through the partnership, IPNLF will engage its Members and networks to build awareness and support in key export markets for implementation of the CDT system and sustainable fisheries management in Indonesia. USAID Oceans and IPNLF are also working closely to develop an Indonesian Coastal Tuna Sustainability Alliance that will support the coordination and scaling of various traceability and sustainable fisheries management initiatives in Indonesia.

### **Monterey Bay Aquarium Seafood Watch®**

USAID Oceans and the Monterey Bay Aquarium Seafood Watch® launched a partnership to improve the traceability of seafood products entering the North American market and increase sustainable fisheries management in the Asia-Pacific region. Seafood Watch® empowers consumers and businesses to choose seafood that is fished or farmed using responsible methods that protect sea life and habitats, now and for future generations. Seafood Watch is the leading North American seafood ratings program whose science-based sustainability standards encourage environmentally sustainable practices. The program assesses over 80% of seafood by volume consumed in the US market, and helps major businesses and individual consumers make choices that support a healthy, sustainable ocean. Its partnerships with major seafood buyers create market incentives for well-managed fisheries to maintain strong regulations, traceability, and high environmental performance.

## **Thai Union**

Thai Union is one of the world's leading seafood companies with annual sales exceeding THB 134 billion (\$3.8 billion). Sustainability is of critical importance for Thai Union, and as a leading seafood company, Thai Union is determined to drive positive change throughout the industry. USAID Oceans and Thai Union are partnering to implement digital catch documentation and traceability (CDT) systems in tuna fisheries in Thailand and Indonesia, with future expansion to other countries and fisheries in the Asia-Pacific region. The partnership will work to improve fisheries management practices; form partnerships with governments and other industry stakeholders to improve transparency in seafood supply chains; and explore linking additional features to CDT systems including labor data and crew communications to promote responsible and equitable labor practices in the seafood sector.

## **World Ocean Council (WOC)**

The World Ocean Council (WOC) is a USAID Oceans partner, working to engage the private sector, including the investment community in support of the CDT system and Activity objectives. WOC will bring together the ocean business community to develop leadership, collaboration, and investment to bolster project support and long term sustainability. WOC is a global, cross-sectoral ocean industry leadership alliance committed to "Corporate Ocean Responsibility", developed by and for the private sector, with a unique and multi-sectoral approach to address cross-cutting issues affecting ocean sustainable development, science and stewardship of the seas. WOC brings together the multi-sector Ocean Business Community to catalyze global leadership and collaboration in ocean sustainable development, science and stewardship. [LEARN MORE.](#)

## **COOPERATING U.S. GOVERNMENT PARTNERS**

USAID Oceans coordinates closely with U.S. Government agencies that work in Southeast Asia to enhance marine ecosystems and combat illegal and unsustainable fishing practices. Key agencies include:

U.S. National Oceanic and Atmospheric Administration (NOAA)

U.S. Department of the Interior (DOI)

U.S. Department of State (DOS)

# ANNEX V. Welcome and Opening Remarks, Regional eCDT Guidance Workshop, 2-4 December 2019, Bangkok, Thailand

## **V.1. Mr. Bunchong Chumnongsittathum, Deputy Director General, Thailand DOF**

It is an honor to be here and preside over the Opening Session of the USAID Oceans and Fisheries Partnership (USAID Oceans) Regional Electronic Catch Documentation and Traceability (eCDT) Guidance Workshop organized by the USAID Oceans and Fisheries Partnership. First of all, the Department of Fisheries of Thailand, as the host country, is pleased to welcome all of you to Bangkok, Thailand.

Thailand was issued with a formal warning that the yellow card provided in 2015 and had Thailand not acted to reform its fisheries management and controls, we could have been banned from exporting to the EU entirely. However, we have taken significant steps to improve our fisheries management and exert greater controls on Thai vessels as well as foreign vessels landing in Thai ports. These reforms include passing laws which empower greater control, enforcement and surveillance of fishing vessels, as well as higher penalties and sanctions for non-compliance.

Another major achievement has been Thailand's stringent implementation of the Port State Measures Agreement, with required risk assessment of all foreign vessels delivering fish and fishery products to Thailand.

These improvements came through both growing human capacity as well as through innovative use of technologies such as machine learning for risk assessments.

USAID Oceans is the organization that has worked in partnership with SEAFDEC and a wide range of public and private sector partners at the local, national and regional levels in order to combat IUU fishing, promote sustainable fisheries, counter labor exploitation, and conserve marine biodiversity in the Asia-Pacific region. And it is a pleasure for us to learn that USAID Oceans has analyzed the ASEAN Member States' fisheries traceability systems and come up with the gap analysis and the regional eCDT Technical Guidance that we are about to review in this workshop.

For such determination, we would like to express our sincere thanks to USAID Oceans and we strongly believe that this workshop will come up with the constructive results and achieve its goals that will lead to the finalization of the eCDT Regional Guidance document, with active participation of all delegates.

Last but not least, the Government of Thailand through the Department of Fisheries would like to avail itself this opportunity to give the best regards and cordial greetings to all participants, wish you all good luck and memorable stay in Bangkok.

## **V.2. Ms Roopa Karia, Deputy Director, Regional Environment Office, USAID/RDMA**

I'm pleased to welcome you this week to our Regional Electronic Catch Documentation and Traceability Workshop. The U.S. Government recognizes that the Asia-Pacific region's fishery and marine resources are invaluable for long-term sustainable growth in the region. These ecosystems provide food and income to over 200 million people. We are committed to supporting the sustainable use of these natural resources to ensure the prosperity and resilience of people and communities for future generations.

For over a decade, the U.S. Government has joined in regional efforts to protect marine biodiversity and support sustainable fisheries. Our current program launched in 2015, known as the Oceans and Fisheries Partnership,

continued this effort to protect our vital marine resources in the Asia region. In fact, a decade ago, I had the pleasure of participating in USAID's early work in support of the Coral Triangle Initiative on Coral Reefs, Fisheries and Food Security when I was based in USAID's office in the Philippines. A few years later, USAID began to explore a potential partnership with SEAFDEC and I'm thrilled to see how that effort has developed. I have a special connection to this work and it's one reason I am very honored to welcome you here today.

Through our work together with all of you, USAID Oceans has designed and implemented five new traceability technologies across the region, tracked more than 2,000 metric tons of tuna through the seafood supply chain, and protected over 100 million hectares of the region's most significant habitats. Transforming the dream of bait-to-plate traceability into a reality requires hard work and dedication by all of us. Our regional and local partners, including SEAFDEC, the CTI-CFF, technology partners, and members of the USAID Oceans Technical Working Group, thank you for your ongoing support for the program and for your participation here today.

This workshop will be the final regional workshop supported by USAID Oceans. The goal is to finalize the Technical Guidance for the Design and Implementation of eCDT Systems in Southeast Asia to support and to scale up regional implementation of best practices that we can achieve together to improve transparency in seafood supply chains in Asia.

Over the last year, many of you have taken part in USAID Oceans events that have showcased program lessons and technologies. Through your active participation in those events, many of you have provided input into the development of this regional eCDT guidance. Each of you here today has played and will continue to play an important role in the successful implementation of catch documentation and traceability systems, and in improving fisheries management in ASEAN, from developing and managing technology to capture essential CDT data to advocating for gender-equitable policies and practices in the industry. The impacts of these efforts create a ripple effect, strengthening food, maritime and economic security, as well as improving the lives of the millions that depend on this sector.

Thank you again for the opportunity to participate in this final regional workshop with the USAID Oceans and Fisheries Partnership. Although USAID Oceans is in the final months of implementation, USAID remains committed to continue progress and engagement in sustainable fisheries in partnership with all of you. We look forward to further discussions on next steps to advance traceability systems and solutions in the region.

Thank you very much.

### **V.3. Mr. Akito Sato, Deputy Secretary General, SEAFDEC**

First of all, please let me express the utmost delight of SEAFDEC for being invited to organize this Regional Electronic Catch Documentation and Traceability Guidance Workshop together with USAID Oceans. On behalf of SEAFDEC, I would like to also express our appreciation to USAID Oceans for putting effort and taking a lead role in developing the draft 'Technical Guidance on the Design and Implementation of Electronic Catch Documentation and Traceability Systems' in Southeast Asia that aims to provide practical guidance for developing and improving electronic catch documentation and traceability (eCDT).

As you may already be aware, SEAFDEC has undertaken extensive work towards sustainable development of fisheries in Southeast Asia and part of that initiative was to develop market-driven measures, particularly in response EU regulations and U.S. Presidential Task Force that strongly impact the fisheries industry, especially the economic and social aspects. SEAFDEC was requested by member-countries to develop the ASEAN Catch Documentation Scheme (ACDS), with the aim to ensure that the traceability of capture fisheries is improved to meet the requirements and reduce the impacts of such market-driven measures. However, due to the complexity of the ACDS and the large number of stakeholders concerned, an effective electronic tool or system is needed to support the implementation of ACDS. USAID Oceans has integrated new concepts such as electronic catch

documentation and traceability being implemented mainly in the Philippines and Indonesia, and for several years, SEAFDEC has initiated the eACDS.

In addition to the eACDS initiative by SEAFDEC, there are also other initiatives of SEAFDEC that work towards sustainable management and resource utilization such as capacity building on EAFM, and the integrated gender considerations in fisheries. We will have the opportunity to highlight these activities in the USAID Oceans program, which will also be discussed in the dialogue on “The Way Forward” of this Regional Workshop.

It is expected that through this three-day workshop, the draft Technical Guidance would be completed and contribute to the successful development and implementation of future initiatives towards sustainable fisheries management systems not only in Southeast Asia but also beyond. In this regard, I would like to express our deepest appreciation to the participants in this workshop, led by representatives from SEAFDEC member-countries. Your experiences and best practices, as well as your willingness share your knowledge and ideas, are highly valuable and necessary to sustain the discussions during this workshop.

Ladies and gentlemen, without further ado, let me welcome you again to the Regional eCDT Guidance.

#### **V.4. Mr. John Parks, Chief of Party, USAID Oceans**

Ladies and Gentlemen, distinguished guests: I would like to begin by thanking all of our regional and national partners, including the Southeast Asian Fisheries Development Center, the Coral Triangle Initiative on Coral Reefs, Fisheries and Food Security, the Kingdom of Thailand and Department of Fisheries for being our hosts in the last five years, the United States Agency for International Development, all the National Technical Working Group Members from each of your respective countries, and partners from private sector and non-governmental organizations. We thank you for coming here together this week to collaborate. I am honored to be here, with you all. On behalf of the entire USAID Oceans and Fisheries Partnership team, thank you for your continued support, your collaboration in the last five years, including here at the close of the Project.

USAID Oceans has been partnering with all of you as Southeast Asian nations since 2015 to advance the use of fisheries traceability tools to combat illegal, unreported, and unregulated fishing and to promote the sustainable use and conservation of the rich diversity of marine resources that this region is famous for. Here in our program’s final few months, we are able to reflect on the progress that—together—we have made.

With the support of you all as our National Technical Working Group members and private sector and non-governmental partners across the region, during the past few years we have developed, tested, and now implemented seven different electronic catch documentation and traceability technologies and systems. These eCDT technologies have successfully traced and verified the legality and sustainability of over four million pounds of tuna into the United States, representing approximately US\$20 million in value as imported seafood products into the U.S. This is an extraordinary achievement that all of you should be proud of. These eCDT technologies are actively promoting fisheries sustainability and food security while also providing all of you as fisheries managers with real-time information so you can do your job better, informing daily decision making and strengthening fisheries management and marine biodiversity conservation across the region.

During the last few years, we have also worked together with many of you to support developing national and sub-regional sustainable fisheries management plans using an ecosystem approach to fisheries management. Together, the implementation of these new plans encompasses nearly 100 million hectares of biologically significant marine habitat for fisheries and fishery resources. These efforts not only sustainably promote conservation and management of those resources, but also allow us to look to the future in food security and marine biodiversity. The Sub-Regional Plan for Managing Transboundary Fisheries in the Sulu-Sulawesi Seascape that last month was formally endorsed by member-countries during the 15<sup>th</sup> Senior Officials Meeting of CTI-CFF

represents the world's first sub-regional EAFM plan between neighboring countries to together more effectively manage transboundary fish stocks. This is a view into the future.

During our fifth and final project year, we are very excited to be finalizing and sharing the technical guidance on why and how to use traceability technologies, in partnership with both SEAFDEC and CTI-CFF. We are hopeful that by documenting and sharing the technical experience and the collective knowledge in this room that together we gained during the last several years, this can provide a technical foundation and capacity for private sectors and NGO partners across Southeast Asia to work with the public agencies to design, test, and implement at a national level their own eCDT systems that use and adapt the innovative digital solutions developed with the support of USAID and all of you during the past few years.

Finalizing and sharing the collective guidance and experience in the room on using eCDT technologies and data is an important component of our project as we close. In this regard, we are hopeful that the outputs from this week's workshop will not only allow member-countries of SEAFDEC and CTI-CFF countries to document and share their technical knowledge, experience and lessons from using traceability tools, but also encourage these tools and systems now operational here in the region to be sustained in the region and elsewhere beyond the close of the project. Reviewing and updating the proposed national eCDT roadmaps that many of the countries here in the room have developed will be an important step in ensuring that this sustainability moves forward beyond the project.

We have confidence that SEAFDEC and CTI member countries are now better equipped to better build and implement eCDT systems to meet not only national but also international strategic interests. We are encouraged that our private sector partners will continue to engage in innovation and expand the use of these technologies into the seafood industry so that fisheries traceability and sustainability will continue to be promoted beyond 2019, and that we will continue to reduce the entry of illegally-sourced products into the international supply chain. We anticipate that the technologies and systems developed, tested, and implemented under USAID Oceans can be scaled up to new geographies, new systems, and even new fisheries. We see that these new technologies being scaled can provide tangible benefits to more people than ever before while at the same time enhancing fisheries sustainability and helping with marine biodiversity conservation.

I would like to close by expressing how grateful the USAID Oceans team is to all of you, and particularly to the Kingdom of Thailand for hosting us these last five years, for your continued partnership and support here during our final months of the project, as illustrated through your commitment and participation here during this week's workshop. I wish all participants and partners the very best on a productive and fruitful technical engagement this week, and look forward to working together.

Thank you.

# ANNEX VI. Closing Remarks, Regional eCDT Guidance Workshop, 2-4 December 2019, Bangkok, Thailand

## **VI.1. Ms Cristina Veléz Srinivasan, Ecosystems Management and Trade Team Lead, USAID/RDMA**

This is quite a milestone for me because this is the last USAID Oceans workshop where we are all in the same room together. Thank you so much not only for allowing me to participate, but for all your contributions, all the value added, and not just these three days. I know this has been several weeks – for some of you several months – in the making, so I just want to start with a big thank you.

I also want to acknowledge and thank SEAFDE Deputy Secretary General Sato for being here, and all of you traveling here from all around the region. I know that you all have busy lives and work demand, but just the fact that you show up is 90% of what it takes, so thank you. Let's all show up and do this together.

I'm here on behalf of USAID as well as representing the USAID Oceans team when I say that big thank you to all of you, regional and local partners, for all the hard work you have done over the past three days and past several weeks to finalize the Regional eCDT Guidance. This Guidance that you helped refine this week will be a reference for regional eCDT standards, resource requirements, architectural options and protocol implementation, to encourage the adoption, sustained use and replication of eCDT systems across the region. It is an important supplement to SEAFDEC's ACDS Guidelines and, in April of next year, the finalized eCDT Guidance will be presented and shared at the SEAFDEC Council Meeting and made available to all SEAFDEC countries for their use and development and continued implementation of national and regional eCDT initiatives.

However, while it is truly noteworthy accomplishment to finalize this guidance, ongoing work is needed to fully transform the fisheries sector through the adoption and implementation of eCDT.

USAID Oceans, in partnership with SEAFDEC and CTI-CFF and all of the Technical Working Group members here today, set out four-and-a-half years ago to develop and implement traceability solutions that could be demonstrated not only in the public sector but in the private sector as well. And the two learning sites have demonstrated success in both of those and they can be scaled across the region. I want to acknowledge all of you for making that happen. It is a reflection of all your hard work and dedication, and I just want to say congratulations and give you a hand.

However, through this movement (my former office director Alfred Nakatsuma used to say this is a movement), we are transforming the fisheries sector, and five years is a very short timeframe. There is still a lot of work that needs to be done. We need to continue the momentum that we've all built, and continue to collaboratively work together to advance traceability effort. We are fortunate to have this week representatives not just from the government but also the private sector, NGOs and development partners, which is a true model of collaboration that offers multiple perspectives and multiple support systems that will help push traceability solutions that can be tailored both at the regional and national levels to specific needs.

We look to SEAFDEC as the regional leader in fisheries management and eCDT across ASEAN, and we look to each of the ASEAN member-countries for leadership to help champion the uptake and use of all of these traceability solutions. The ubiquitous use of traceability systems will ultimately help guide decision-making. The data when used appropriately not only can be used to combat IUU fishing but can actually transform the way we do fisheries management by using that data. Data is power that helps influence how we move forward, how we can better manage for sustainable resources. It can help preserve marine biodiversity, promote gender equity, and improve the well-being of the millions of people whose livelihoods depend on fisheries in the region.



USAID and the USAID Oceans team would again like to congratulate and thank SEAFDEC, the TWG members and all the other regional and national partners for your contributions to developing the regional eCDT Guidance and also for helping spread the message about the importance of adopting and implementing traceability solutions.

As this is the final regional USAID Oceans workshop where we will be seeing each other, I just want to say that personally it has been a real privilege to work with all of you over the past several years. Every time we meet, I am continuing to be impressed with all of your commitment and dedication to advancing sustainable fisheries in the region. That's really our common thread, our common passion and our common goal and I'm really fortunate to be part of this community. As Roopa mentioned on Monday and as John just mentioned right now USAID Oceans activities will be ending in a few months but USAID remains committed to engaging and promoting sustainable fisheries in the region, so you will be seeing more of me and definitely more of our USAID colleagues. We're together in this. We're not ending with Oceans, we're still here.

Sadly though, because USAID Oceans is ending in a few months, we will be losing some staff members starting at the end of this month. So, therefore, I really want to end this session by asking all of the USAID Oceans team members that have been working on this activity for the past four plus years to please stand so we can all acknowledge and thank you for all your hard work and diligent efforts over the past several years. You have a lot to be proud of. You will be missed dearly and this is not a goodbye, this is a we'll see you again in some other capacity. Big hand to the team please.

Thank you.

## **VI.2. Mr. John Parks, Chief of Party, USAID Oceans**

I would like to begin by congratulating you all on the successful completion of this week's workshop. We were focused here on technology, and specifically on electronic catch documentation and traceability technology. I am pleased to hear from the facilitation team and the organizers that the intended workshop objectives and outputs were all achieved so my congratulations to all of you, you all deserve a round of applause. Well done. That does not always happen. Sometimes you'll do these workshops and you may miss a piece.

I would like to recognize and thank the Southeast Asian Fisheries Development Center for their sustained engagement over the last five years and their support not only in conceptualizing, designing and conceiving this regional workshop but helping us to plan it. Without SEAFDEC support, both this workshop and the Regional Guidance document would not have been possible, so I would just like to recognize and thank SEAFDEC for their regional leadership in making this all feasible.

I would also like to recognize and thank the governments of Cambodia, Indonesia, Malaysia, the Philippines, Thailand, and Vietnam for their deep engagement over this past year, including meetings held in each of those countries to develop the content of this document and to review the prior draft. The revisions that were provided are what brought us here together today to finalize and recommend that the document move forward.

I would also like to recognize and thank the six member-countries of the Coral Triangle Initiative — Indonesia, Malaysia, Papua New Guinea, the Philippines, Solomon Islands, and Timor Leste. All of these countries also engaged with us this year, over the last 12 months. They also reviewed earlier drafts of the document and brought their voices and experiences inside it, and so they too are represented in it. I would like to recognize and thank them for their contributions.

On behalf of the entire USAID Oceans team, we thank all of your countries for your commitment, for sharing your national experiences and lessons, and for bringing your voices into this document. In doing so, you have made the document truly reflective of the collective, shared regional experiences, lessons, and voices of the AMS.

I would also like to thank the United States Agency for International Development and the American people for their generous support to make not just this workshop but this entire project possible. We are honored and privileged to be a part of the continuing partnership between the United States government and the ASEAN community. Even if only in this small way, we have been very fortunate to contribute toward combatting IUU fishing, promoting fisheries traceability and supporting marine biodiversity conservation here in beautiful Southeast Asia.

Finally, and most importantly, I would like to recognize and thank all of you as National Technical Working Group Members over the last five years, and all of our private sector company partners and the non-governmental organizations that are here. All of you have come together and collaborated this week and the last few years in support of revising and finalizing this first version of the Technical Guidance document, which now has a life of its own and will continue beyond the life of our project. Beyond the termination of the USAID Oceans Project in a few months' time, I actually look forward to following this document and this Guidance, and as they move forward, they adapt and change through time, evolving to become a new reflection of the new technologies that will certainly going to be built, the continuing innovation that is very clearly represented in this room, and the increased experience in using fisheries traceability in both marine and now freshwater fisheries over the next several years.

I would like to close by expressing how grateful the USAID Oceans team is to all of you for your continued partnership and support here during our final few months. We do have a few months left, and we appreciate all the support that you have been giving us and will continue to give us. At a personal level, for me being from Hawaii, U.S., it has been an honor and a pleasure to live here in beautiful Thailand, to be welcomed by the Thai Government, and to have the opportunity to work with all of you and to visit your homes. I am coming away from this week with much encouragement and confidence that all of you will be moving together in your shared vision for a prosperous, fair, and sustainable future for Southeast Asian fisheries and the communities that depend upon them.

On behalf of the entire USAID Oceans and Fisheries Partnership team, my thanks to all of you. I wish you all the best in your continued commitment and all of your energies and efforts toward combatting IUU fishing, and promoting regional and national fisheries traceability and sustainability.

Thank you.

### **VI.3. Mr. Akito Sato, Deputy Secretary General, SEAFDEC**

As this 3-day workshop is successfully coming to an end, please allow me to express my appreciation to all of you for your cooperation and support during our deliberations. I especially wish to thank all the resource persons, presenters and moderators, for their support driving this workshop to success. I wish that the output of this workshop and the USAID Oceans contribution to our countries will support activities to strengthen traceability of each fishery product and reduce IUU fishing in the region in the future. In addition, I work like to thank USAID for their support of this workshop and hope that SEAFDEC and USAID will work in good collaboration in other projects in near future for enhancing sustainable fisheries and marine resources in ASEAN.

Thank you once again and I wish you all safe journey. Now let me close the workshop. Thank you.