Electronic Animal Health Certificate Message Implementation Guide and Process Specifications
Final Report

Version No. 1.05

20 April 2018

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Acronyms and Definitions

AMS	ASEAN Member States
ASCP	ASEAN Sanitary and Phyto-Sanitary Contact Point
ASEAN	Association of Southeast Asian Nations
ASEC	ASEAN Secretariat
ASW	ASEAN Single Window
BRS	Business Requirements Specification
CCL	Core Component Library
DEN	Dictionary Entry Name
e-AH	Electronic Animal Health
e-Cert	Electronic Certificate
e-SPS	Electronic Sanitary and Phytosanitary
EDIFACT	Electronic Data Interchange For Administration, Commerce and Transport
IATA	International Air Transport Association
ID	Identifier
IPM	Information Processing Modeling
ISO	International Organization for Standardization
ITU	International Telecommunication Union
LOE	Level of Effort
MIG	Message Implementation Guide
NDR	XML Naming and Design Rules
NSW	National Single Window
OCP	Operational Certification Procedure
PHP	Hypertext Preprocessor (Computer Language)
PMO	Project Management Office
RSM	Requirements Specification Mapping
SANCRT	International movement of goods governmental regulatory message
SPS	Sanitary and Phytosanitary
SQL	Structured Query Language
TM	Transition and Migration
TOR	Terms of Reference
TWG	Technical Working Group
UNCL	United Nations Code List
UNECE	United Nations Economic Commission for Europe
UNTDED	United Nations Trade Data Elements Directory
UN/CEFACT	United Nations Centre for Trade Facilitation and Electronic Business
UN/EDIFACT	United Nations Electronic Data Interchange For Administration, Commerce and Transport
UN/LOCODE	United Nations Location Codes

US-ACTI	United States - ASEAN Connectivity through Trade and Investment
USAID	United States Agency for International Development
XML	Extensible Markup Language
XSD	XML Schema Definition

1 Introduction

Sanitary and Phytosanitary (SPS) measures protect humans, animals, and plants from diseases, pests, or contaminants. In international trade, there are various types of certificates that are issued by regulatory agencies at the time of export, including Phytosanitary Certificates, Veterinary Certificates and Health Certificates.

The Consultants were engaged by US-ACTI to assist the ASEAN Single Window (ASW) Technical Working Group (TWG) in the development and implementation of electronic Sanitary and Phytosanitary (e-SPS) Certificates by carrying out an assessment of the ASEAN Member States' (AMS) readiness to exchange SPS information and producing detailed technical specifications. This includes Message Implementation Guides (MIGs), information flows and XML Schema Definitions (XSDs).

The electronic Animal Health (e-AH) Certificate to be exchanged between the AMS must be aligned to the Electronic Certificate (e-Cert), an international standard developed and maintained by the United Nations Centre for Trade Facilitation and Electronic Business (UN/CEFACT). Further, animal health requirements must also be aligned to standards published by the World Organisation for Animal Health (OIE), notably the *"Terrestrial Animal Health Code"* and the *"Aquatic Animal Health Code"*.

The report that follows outlines the "Terms of Reference" (Section 2), the "Methodology Used" (Section 3), "Technical and Legal Mapping" (Section 4), "Proposed Information Flow and Data Structure" (Section 5), "Alignment with UN/CEFACT and OIE Data Sets" (Section 6), the "Operational Certification Procedure" (Section 7) and the "Message Implementation Guide" (Section 8). The report concludes by identifying the "Technical and Legal Gaps" (Section 9), based on the feedback from the AMS, and proposes a series of "Implementation Activities" (Section 10).

2 Terms of Reference

This section outlines the Terms of Reference (TOR) for this report.

2.1 Background

At the 4th ASEAN Sanitary and Phyto-Sanitary Contact Point (ASCP) Meeting, AMS representatives noted both the challenges and advantages in the use of the electronic SPS certificates. It recognized that the phytosanitary certificate plays a key role in ensuring the health and safety of agricultural commodities traded in ASEAN. Exchanging phytosanitary certificate electronically will help to reduce the risk of fraudulent certificates, expedite the clearance of these perishable commodities, and enhance the compliance with SPS measures. Thus, ASCP agreed to support the possible exchange of the electronic SPS certificates through the ASEAN Single Window (ASW) Enabling Infrastructure. As part of the ASW expansion activity, US-ACTI is willing to support the conduct of an e-SPS Study, which will include an e-SPS workshop on the exchange of the e-SPS, subject to USAID approval.

2.2 Objective

The objective of this study is to develop the electronic SPS message implementation guide and process specifications for ASCP's review and approval. This e-SPS data issued by the Exporting AMS would be exchanged through the ASW and could be used as advance information to support risk management in the Importing AMS in compliance with SPS Measures.

The specific goals of this study include:

- *The ASW Operational Model, SPS Measures and Appropriate MRAs, and Value Proposition of Facilitating Trade with Collaborative Exchange of SPS Data;*
- *Propose an electronic SPS information process flow for review by ASCP;*
- *Develop an XML message to convey electronic SPS data (SPS certificate) that is aligned with the latest UN CEFACT E-Cert and IPPC E-Phyto data model for review by ASCP;*
- *Develop an Electronic SPS Operational Certification Procedure (e-SPS OCP) for the exchange of SPS, reviewed and finalized by the ASCP, and signed by Member States; and*
- *Identify other funding requirements needed to support the exchange of the e-SPS, if any.*

2.3 Tasks

The Consultant will prepare a comprehensive written evaluation report that will include:

- *Task 1: Provide the data harmonization methodology to be used;*
- *Task 2: Conduct technical and legal mapping to ASEAN Member States on their readiness to exchange e-SPS;*
- *Task 3: Present the proposed electronic SPS information flow and e-SPS data structure for review and approval by the ASCP;*

- *Task 4: Align the finalized e-SPS data structure with the latest UN CEFACT and IPPC data set, for review and approval by the ASCP;*
- *Task 5: Develop the Electronic Operational Certification Procedure for e-SPS;*
- *Task 6: Develop the e-SPS message implementation guide, export declaration business process flow, process specifications, including the XML Schema Definition (XSD);*
- *Task 7: Identify technical and legal gaps that must be resolved prior to the exchange of the e-SPS and provide recommendations on how to address any remaining gaps; and*
- *Task 8: Develop the user acceptance process criteria and success indicators of the project, to ensure that these requirements are met.*

This activity will be carried out by the SPS Consultant and Legal Consultant in collaboration with the ASCP.

The SPS Consultant shall develop the e-SPS message implementation guide and process specifications for a total of Fifty (50) Level of Effort (LOE) days and the Legal Consultant shall develop the SPS Operational Certification Procedure for the exchange of electronic SPS for a total of Twenty Five (25) Level of Effort (LOE) days starting from August 2016 to March 2017, and submit the final report by March 2017. ASCP representatives are encouraged to recommend available SPS consultants;

2.4 Deliverables

The following deliverables are required for this activity:

- *Deliverable 1: Submit the preliminary report that includes the Member States readiness to exchange e-SPS, the Electronic Operational Certification Procedure for e-SPS, message implementation guide, and process specifications for review and comment by AMS by October 2016. The deliverable will contain a detailed assessment, preliminary findings, user acceptance process, and success indicators for ASCP review; (Member States will be asked to revert with their comments by November 2016)*

- *Deliverable 2: Submit the revised e-SPS preliminary report by November 2016;*

- *Deliverable 3: Presentation of the preliminary report (Deliverable 2) and the draft Operational Certification Procedure (OCP) for e-SPS during the e-SPS Workshop to be held in November or December 2016. Location of the workshop to be agreed with ASCP;*

- *Deliverable 4: A draft e-SPS final report will be submitted by the Consultant to ASCP by 2nd week of January 2016, which will incorporate the comments provided by the ASCP during the preliminary report presentation (Deliverable 3); (Member States will be asked to revert with their comments by February 2017)*

- *Deliverable 5: An e-SPS final report will be submitted by March 2017, and presented at the 5th ASCP Meeting in Singapore;*

2.5 References

The following documents can be used as references by the Consultants. They shall be provided to the Consultants upon contract award:

- *The ASW transition to live operation scope of work*

- *ASW Protocol*

- *ASW Agreement*

- *Relevant deliverables of component 1 of ASW Pilot Project (Deliverables #4, #5, #6, #7, #11 and Sections 6, 7, 8 ,9 and 10 of deliverable #10)*

- *Information Process Modeling (IPM) study*

- *Interoperability Specifications (including the Bridge Script)*

- *Study on the assessment of the viability of ASEC to host the ASW servers*

- *Project Management Office (PMO) Design paper*

- *ASW Transition Management (TM) Plan*

- *Other relevant documents as determined by the Consultant.*

2.6 Management and Governance

The electronic SPS study will be conducted in collaboration with AMS through their representatives at the ASW TWG and ASCP, and with the consultants.

To ensure the success of this activity, ASCP and their representatives are required to provide support for the conduct of the study by the Consultants (e.g. facilitation of contacts with technicians, policy makers, and those in charge of operating the NSWs) for the purpose of this e-SPS study.

Throughout the duration of the project, the Consultants shall prepare and submit brief progress reports to the TWG and ASCP every month for monitoring purposes.

3 Methodology Used

This section outlines the approach of Task 1 of the TOR; *"Provide the data harmonization methodology to be used"*.

3.1 Electronic Certificate (e-Cert)

In 2004, a team of experts from Australia and New Zealand started to develop a generic Electronic Certificate (e-Cert), in XML format, to replace a legacy UN/EDIFACT message known as the "International movement of goods governmental regulatory message" (SANCRT). The first version of the e-Cert message was published by UN/CEFACT in 2008, in directory D08A.

To comply with UN/CEFACT's standards procedures, the e-Cert project team produced a number of documents, collectively referred to as UN/CEFACT's e-Cert standard.

The first document, known as the "Business Requirements Specification (BRS)", describes the scope and objective of e-Cert. It also outlines the business process for e-Cert and defines the generic information requirements, which are intended to cover for a wide range of export certificates. The latest version of the BRS for e-Cert is v5.1.

The second document, known as the "Requirements Specification Mapping (RSM)", defines the technical requirements for e-Cert, in the form of "core components". The latest version of the RSM for e-Cert is v1.4.1.

The core components for e-Cert are now published in UN/CEFACT's Core Component Library (CCL) and are used by UN/CEFACT as the basis to the develop XML Schema Definitions (XSDs) for the e-Cert message. The latest version of the e-Cert message is based on CCL 16B.

3.2 Electronic Animal Health (e-AH) Certificate

The e-AH Certificate is based on two model certificates, as outlined in OIE's Terrestrial Animal Health Code and Aquatic Animal Health Code. The model certificates have provided the basis for the e-AH Certificate Data Structure (see Section 6.1.1), which has subsequently been used to create the XSDs (see Section 6.2) and Message Implementation Guide (see Section 8).

3.2.1 Terrestrial Animal Health Code

The OIE Terrestrial Animal Health Code (hereafter referred to as the "Terrestrial Code") *"sets out standards for the improvement of terrestrial animal health and welfare and veterinary public health worldwide, including through standards for safe international trade in terrestrial animals (mammals, birds and bees) and their products. The health measures in the Terrestrial Code should be used by the veterinary authorities of importing and exporting countries to provide for early detection, reporting and control agents pathogenic to terrestrial animals and, in the case of zoonoses, for humans, and to prevent their transfer via international trade in terrestrial animals and terrestrial animal products, while avoiding unjustified sanitary barriers to trade"*.

In Chapter 5.10 of the Terrestrial Code, the OIE has defined *"Model Veterinary Certificates for International Trade in Live Animals, Hatching Eggs and Products of Animal Origin"*.

3.2.2 Aquatic Animal Health Code

The aim of the Aquatic Animal Health Code (hereafter referred to as the "Aquatic Code") is *"to assure the sanitary safety of international trade in aquatic animals (amphibians, crustaceans, fish and molluscs) and their products. This is achieved through the detailing of health measures to be used by Competent Authorities of importing and exporting countries to avoid the transfer of agents pathogenic for animals or humans, while avoiding unjustified sanitary barriers"*.

In Chapter 5.10 of the Aquatic Code, the OIE has defined *"Model Health Certificates for International Trade in Aquatic Animals and Products of Aquatic Animal Origin"*.

3.3 References

During the course of this e-AH Certificate analysis, the Consultant has identified and used a number of references for this report, including many international standards as listed below:

- United Nations Centre for Trade Facilitation and Electronic Business (UN/CEFACT)

  o Electronic Export Certificate (e-Cert) - Business Requirements Specification (BRS) v5.1

    http://www.unece.org/fileadmin/DAM/cefact/brs/BRS_ExportCertificate__eCert__v5.1.0.pdf

  o Electronic Export Certificate (e-Cert) - Requirements Specification Mapping (RSM)

    http://www.unece.org/fileadmin/DAM/cefact/rsm/RSM_eCert_v1.4.1.zip

  o Electronic Sanitary and Phytosanitary (e-SPS) Certificate – XML Schemas D16B

    http://www.unece.org/fileadmin/DAM/cefact/xml_schemas/D16B.zip

  o Core Component Library (CCL) 16B

    http://www.unece.org/fileadmin/DAM/cefact/codesfortrade/unccl/CCL16B.zip

  o United Nations Code List (UNCL) D16B

    http://www.unece.org/fileadmin/DAM/trade/untdid/d16b/d16b.zip

- World Organisation for Animal Health (OIE)

  o Terrestrial Animal Health Code 2016

    http://www.oie.int/en/international-standard-setting/terrestrial-code/

  o Aquatic Animal Health Code 2016

    http://www.oie.int/en/international-standard-setting/aquatic-code/

- United Economic Commission for Europe (UNECE)

  o UNECE Recommendation 3 – Country Codes (ISO 3166-1 2-alpha code)

    https://www.iso.org/obp/ui/#search/code/

- o UNECE Recommendation 16 – Location Codes (UN/LOCODE)

  https://www.unece.org/cefact/codesfortrade/codes_index.html

- o UNECE Recommendation 19 – Transport Mode Codes

  http://www.unece.org/fileadmin/DAM/cefact/recommendations/rec19/rec19.zip

- o UNECE Recommendation 21 – Package Type Codes (Annex VI)

  https://www.unece.org/fileadmin/DAM/cefact/recommendations/rec21/rec21_Rev9e_2012.xls

4 Technical and Legal Mapping

This section outlines the approach of Task 2 of the TOR; *"Conduct technical and legal mapping to ASEAN Member States on their readiness to exchange e-SPS"*.

4.1 Veterinary Certificates

In order to complete this section, an "e-SPS Readiness Questionnaire" on Veterinary Certificates was sent to all AMS. Completed questionnaires have been returned by all AMS.

4.1.1 AMS Contact Details

The following questions are related to the responsible agencies and the main contact persons.

Q1. Which ministry / division / department / unit is responsible for issuing Veterinary Certificates for export / re-export?

Table 1 provides details of the agencies responsible for issuing Veterinary Certificates including, where applicable, the unit / office / section, department, division and ministry.

Table 1: Agencies Responsible for Issuing Veterinary Certificates

Member State	Responsible Agency
Brunei Darussalam	Animal Biosecurity Unit, Biosecurity Division, Department of Agriculture and Agrifood, Ministry of Primary Resources and Tourism
Cambodia	General Directorate of Animal Health and Production, Ministry of Agriculture, Forestry and Fisheries
Indonesia	Agriculture Quarantine Agency, Ministry of Agriculture
Lao PDR	Veterinary Service Division, Department of Livestock and Fisheries, Ministry of Agriculture and Forestry
Malaysia	Department of Veterinary Services Ministry of Agriculture and Agro-based Industry Malaysia
Myanmar	Animal and Animal Product Export & Import Inspection and Quarantine Unit, Livestock Breeding and Veterinary Department, Ministry of Agriculture, Livestock and Irrigation
Philippines	National Veterinary Quarantine Services Division, Bureau of Animal Industry, Department of Agriculture
Singapore	Agri-Food & Veterinary Authority (AVA)
Thailand	Department of Livestock Development, Ministry of Agriculture and Cooperatives
Viet Nam	Department of Animal Health (DAH), Ministry of Agriculture and Rural Development Certificates are issued by Regional Animal Health Offices (under DAH)

Q2. Who is the main contact point within the ministry / division / department / unit?

Table 2 provides details of the main contact persons within the responsible agencies including their names, positions and email addresses.

Table 2: Main Contact Persons within the Responsible Agencies

Member State	Contact Name, Position and Email Address
Brunei Darussalam	Dr. Hajah Kasumawati binti Haji Jaafar, Senior Livestock Husbandary Officer Email: kasuma5375@gmail.com / kasumawati.jaafar@agriculture.gov.bn Sahjarathudor Nurul Maha'ani, Assistant Veterinary Officer, Email: Hanie243@gmail.com / Mahaani.aian@mprt.gov.bn
Cambodia	Mr. Nou Yuteka, Director, Department of Administration, Planning, Accounting and Cooperation Mr. Peng Chanberna, Director, Department of Animal and Public Health
Indonesia	Mr. Arifin Tasrif Director of Compliance, Cooperation and Information, Agriculture Quarantine Agency, Ministry of Agriculture E-mail: arifintasrif@yahoo.co.uk Mulyanto Director of Animal Quarantine, Agriculture Quarantine Agency, Ministry of Agriculture E-mail: mulyanto_drh@yahoo.com
Lao PDR	Dr. Phachone Bounma, Director of Veterinary Service Division, Department of Livestock and Fisheries, Ministry of Agriculture and Forestry Email: ph_bounma@yahoo.com
Malaysia	Dato Dr. Quaza Nizamuddin Bin Hassan Nizam, Director General Department of Veterinary Services
Myanmar	Dr. Ye Htun Win, Director General, Livestock Breeding and Veterinary Department
Philippines	Dr. Florence D. Silvano Chief, National Veterinary Quarantine Services Division Bureau of Animal Industry Department of Agriculture Email: baiquarantineph@gmail.com / bai_dir@yahoo.com
Singapore	Jolene Chan Suet Heong, Agri-Food & Veterinary Authority of Singapore, Quarantine and Inspection Group, Senior Executive Manager Email: jolene_chan@ava.gov.sg

Member State	Contact Name, Position and Email Address
Thailand	Sopat Chavakul.,D.V.M., Director of sub-division of Livestock product Inspection, Bureaus of Livestock standards and certification Email: Certify4@dld.go.th
Viet Nam	Dr. Pham Van Dong, Director General, Department of Animal Health Email. dongdah@gmail.com / dongpv@dah.gov.vn

4.1.2 Export Processing

The following questions are related to export processing i.e. the issuing of Veterinary Certificates.

Q3. What was the total number of Veterinary Certificates issued in 2015?

Table 3 provides the total numbers of Veterinary Certificates issued by each AMS in 2015.

Table 3: Total Number of Veterinary Certificates Issued in 2015

Member State	Total
Brunei Darussalam	16
Cambodia	361
Indonesia	55,707
Lao PDR	64
Malaysia	152,793
Myanmar	227
Philippines	4,678
Singapore	4,982
Thailand	55,707
Viet Nam	15,650

Q4. How many of these Veterinary Certificates were issued for exports to the other ASEAN Member States?

Tables 4 and 5 provide a breakdown of the number of Veterinary Certificates issued by each AMS in 2015, to the other AMS.

Table 4: Number of Veterinary Certificates Issued in 2015 to other AMS

Exporting Country	Importing Country				
	Brunei	Cambodia	Indonesia	Lao PDR	Malaysia
Brunei Darussalam		0	2	0	15
Cambodia	-		-	-	-
Indonesia					
Lao PDR	-	-	-		-
Malaysia	3,657	284	4,431	6	
Myanmar	2	0	3	0	4
Philippines	5	0	71	0	437
Singapore	15	3	117	2	1,870
Thailand	11	102	340	55	2,284
Viet Nam	7	243	3,213	585	352

Table 5: Number of Veterinary Certificates Issued in 2015 to other AMS (Continued)

Exporting Country	Importing Country				
	Myanmar	**Philippines**	**Singapore**	**Thailand**	**Viet Nam**
Brunei Darussalam	2	0	1	1	1
Cambodia	-	-	-	-	-
Indonesia					
Lao PDR	-	-	-	-	-
Malaysia	1,178	3,210	50,623	6,665	3,281
Myanmar		3	11	56	15
Philippines	13		83	58	75
Singapore	14	45		107	27
Thailand	150	238	3,363		396
Viet Nam	52	353	225	262	

Please note that Cambodia and Lao PDR did not provide a breakdown of the number of Veterinary Certificates issued to other AMS in 2015. However, the total number of Veterinary Certificates issued by Cambodia was 180 to Lao PDR, Malaysia, the Philippines, Thailand and Viet Nam, and the total number issued by Lao PDR to other AMS was 46.

Q5. Can exporters apply for Veterinary Certificates online? If so, can exporters apply through your NSW or do you have your own website?

The application process for Veterinary Certificates is currently manual in Cambodia, Lao PDR, Myanmar and Viet Nam. In the Philippines, exporters can apply for Veterinary Certificates manually or via email.

In Brunei Darussalam, exporters can apply for Veterinary Certificate online via the Ministry's website, http://biz.bruneimipr.gov.bn/eMIPR.

In Indonesia, exporters can apply for Veterinary Certificates through the Indonesia Agriculture Quarantine Agency's website, https://ppkonline.karantina.pertanian.go.id/ and through the Fish Quarantine and Inspection Agency's website, http://ppk.bkipm.kkp.go.id/.

In Malaysia, exporters can apply for Veterinary Certificates through Dagang Net's ePermit system, http://www.dagangnet.com/trade-facilitation/epermit/.

In the Philippines, exporters can apply online through email or manually.

In Singapore, exporters can apply for Veterinary Certificates through Singapore's licensing system, LicenceOne; https://licence1.business.gov.sg.

In Thailand, exporters can apply for Veterinary Certificates online for poultry products to Japan only.

Q6. If you do not have an online system for applications, do you have any plans to develop one?

Cambodia, Lao PDR, Myanmar, the Philippines, Thailand and Viet Nam have plans to develop online systems for the application of Veterinary Certificates.

Q7. Do you have an internal system (or database) for issuing Veterinary Certificates or are they issued manually?

Indonesia, Malaysia, Singapore and Thailand have their own internal systems for issuing Veterinary Certificates (see Section 4.1.4). However, Thailand's system is for live animal and inedible animal products only. In Brunei Darussalam, Cambodia, Lao PDR, Myanmar, the Philippines and Viet Nam, Veterinary Certificates are issued manually.

Q8. If you do not have an internal system, do you have any plans to develop one?

Brunei Darussalam, Cambodia, Lao PDR, Myanmar, the Philippines and Vet Nam have plans to develop an internal system.

Q9. Do exporters need to provide evidence of an import permit issued by the import Competent Authority to determine import requirements, in the application for a Veterinary Certificate?

Brunei Darussalam, Cambodia, Indonesia, Lao PDR, the Philippines and Thailand require evidence of an import permit before the Veterinary Certificate is issued. An import permit is not required in Myanmar and Singapore.

In Malaysia, the current practice is that the requirement for a Veterinary Certificate is received manually from the importing country before the exporter can apply online.

In Viet Nam, whether an import permit is required is dependent on the requirements of the importing country.

Q10. Are there any other supporting documents required e.g. Export Licence, Commercial Invoice etc.?

In addition to the import permit, which is required by some AMS, other supporting documents may also be required, such as; Bills of Lading / Air Waybills, Certificates of Analysis, Certificates of Origin, Certificates of Product Registration (for animal products), CITES Certificates, Declaration Forms, Halal Certificates, Invoices, Laboratory Results, Original Vaccination Records, Original Serology Test Reports, Packing Lists, Private / Import Health Certificates and Vaccination Certificates.

Q11. How many working days does it take for an application for a Veterinary Certificate to be processed?

In Brunei Darussalam, Thailand and Viet Nam, applications are usually processed within 1 working day; in Cambodia, the Philippines and Singapore, it takes up to 2 working days; in Indonesia, it can take from 3 hours up to 7 working days; in Malaysia, it takes up to 3 working days; in Lao PDR, it usually takes up to 5 working days and; in Myanmar, it takes up to 7 working days.

4.1.3 Import Processing

The following questions are related to import processing i.e. the receipt of Veterinary Certificates.

Q12. Do you also conduct 100% verification on the authenticity, integrity and compliance of Veterinary Certificates for import requirements? How long does it take to conduct this verification? Will you do the verification if the Veterinary Certificate is received in advance/prior to arrival of cargo?

In Brunei Darussalam, Cambodia, Indonesia, Malaysia, the Philippines, Singapore, Thailand and Viet Nam all (100%) of Veterinary Certificates are verified. In Lao PDR and Myanmar, it depends on the type of commodity.

In Indonesia, Veterinary Certificates are verified within 1 hour. In Lao PDR, Malaysia and Thailand, Veterinary Certificates are verified within 1 working day. In Cambodia, it takes up to 3 working days and; in Singapore, it depends on the Competent Authority who issued them at the country of export.

In Indonesia, Malaysia and Thailand, Veterinary Certificates can be verified in advance/prior to the arrival of the cargo.

Q13. What was the total number of Veterinary Certificates you received in 2015?

Table 6 provides the total numbers of Veterinary Certificates received by each AMS in 2015.

Table 6: Total Number of Veterinary Certificates Received in 2015

Member State	Total
Brunei Darussalam	3,154
Cambodia	2,129
Indonesia	14,191
Lao PDR	56
Malaysia	80,043
Myanmar	1,313
Philippines	-
Singapore	35,094
Thailand	14,191
Viet Nam	39,418

Please note that the Philippines did not provide the total number of Veterinary Certificates received in 2015.

Q14. How many of these Veterinary Certificates were received for imports from the other ASEAN Member States?

Tables 7 and 8 provide a breakdown of the number of Veterinary Certificates received by each AMS in 2015, from the other AMS.

Table 7: Number of Veterinary Certificates Received in 2015 from other AMS

Importing Country	Exporting Country				
	Brunei	**Cambodia**	**Indonesia**	**Lao PDR**	**Malaysia**
Brunei Darussalam		0	22	0	2,612
Cambodia	-		-	-	-
Indonesia	-	-		-	-
Lao PDR	-	-	-		-
Malaysia	9	11	1,681	6	
Myanmar	0	0	5	0	233
Philippines	-	-	-	-	-
Singapore	4	1	193	0	34,894
Thailand	-	-	-	-	-
Viet Nam	0	30	559	6	312

Table 8: Number of Veterinary Certificates Received in 2015 from other AMS (Continued)

Importing Country	Exporting Country				
	Myanmar	**Philippines**	**Singapore**	**Thailand**	**Viet Nam**
Brunei Darussalam	2	11	19	53	0
Cambodia	-	-	-	-	-
Indonesia	-	-	-	-	-
Lao PDR	-	-	-	-	-
Malaysia	4	480	5,440	7,048	489
Myanmar		0	64	478	33
Philippines	-		-	-	-
Singapore	4	49		84	1,165
Thailand	-	-	-		-
Viet Nam	93	115	311	1,545	

Please note that Cambodia, Indonesia, Lao PDR, the Philippines and Thailand did not provide a breakdown of the number of Veterinary Certificates received from other AMS in 2015. However, the total number received by Indonesia was 2,227, the total number received by Lao PDR was 48 and the total number received by Thailand from the other AMS was 2,227. Cambodia did not provide a total number, but they receive Veterinary Certificates from Lao PDR, Malaysia, the Philippines, Thailand and Viet Nam.

Q15. Are scanned copies of Veterinary Certificates uploaded into your NSW as attachments to import declarations?

Scanned copies of Veterinary Certificates are uploaded into the NSWs as attachments to import declarations in Indonesia and in Singapore, depending on the type of commodity. In the Philippines, there is an agreement with Australia on e-certificates, which are uploaded into the NSW. However, in Brunei Darussalam, Cambodia, Lao PDR, Malaysia, Myanmar, Thailand and Viet Nam scanned copies are not uploaded to their NSW.

Q16. Do you keep hard copies of Veterinary Certificates received from other countries?

Brunei Darussalam, Cambodia, Indonesia, Lao PDR, Malaysia, Myanmar, the Philippines, Singapore, Thailand and Viet Nam all keep hard copies of Veterinary Certificates.

Q17. Is the information on Veterinary Certificates received from other countries entered into an internal system?

Some details of Veterinary Certificates received are entered into an internal system in Indonesia, Lao PDR, Malaysia, Thailand and Viet Nam. Brunei Darussalam, Cambodia, Myanmar, the Philippines and Singapore do not record details of Veterinary Certificates received.

Q18. Does your national legislation require original Veterinary Certificates to be cited at the time of import?

Current national legislation requires original Veterinary Certificates to be cited at the time of import in Cambodia, Indonesia, Malaysia, Myanmar, Singapore, Thailand and Viet Nam. There is no such legislation in Brunei Darussalam, Lao PDR and the Philippines. However, in Brunei Darussalam there is a policy in place.

Q19. Does your national legislation allow for electronic Veterinary Certificates to be accepted instead of paper documents?

Current national legislation allows for Veterinary Certificates to be accepted instead of paper documents in Indonesia. However, current national legislation does not allow for electronic Veterinary Certificates to be accepted instead of paper documents in Brunei Darussalam, Cambodia, Lao PDR, Myanmar, the Philippines, Singapore, Thailand and Viet Nam. Malaysia need to seek further legal advice.

Q20. If not, are there any plans to change your national legislation?

Brunei Darussalam, Cambodia, Lao PDR, Malaysia, the Philippines, Singapore, Thailand and Viet Nam would consider changing national legislation to allow electronic Veterinary Certificates to be accepted instead of paper documents.

Currently, Myanmar has no plans to change national legislation.

Q21. Do you carry out inspections on imports? If so, at what rate e.g. is it 100% or random?

Malaysia, Myanmar, the Philippines, Thailand and Viet Nam carry out inspections at a rate of 100%, especially for animals and animal products (e.g. beef, lamb, mutton, chicken, pork, milk etc). Brunei Darussalam, Indonesia and Lao PDR carry out random inspections. Singapore carry out both 100% inspections and random inspections, depending on the species.

4.1.4 Technical Readiness

The following questions are related to the technical readiness of each AMS.

Q22. If exporters can apply for Veterinary Certificates online, is it integrated with an internal system?

The online systems in Indonesia, Malaysia, Singapore and Thailand are fully or partially integrated.

Q23. If you have an internal system for issuing Veterinary Certificates, do you have your own IT team to support it, or is it supported by external party?

The systems in Malaysia and Singapore are supported by third party software / service providers. Indonesia and Thailand has its own IT teams to support their internal system.

Q24. Where is your internal system hosted?

The system in Indonesia is hosted in the Indonesia Agriculture Quarantine Agency, Center for Compliance, Cooperation and Information. The system in Malaysia is hosted by the Ministry of Finance (MOF). The systems in Singapore and Thailand are hosted at data centres.

Q25. What operating system does your internal system run on?

The system in Malaysia runs on Windows Server. The systems in Indonesia, Singapore and Thailand run on Linux.

Q26. What language was your internal system developed in?

The system in Indonesia was developed using PHP. The systems in Malaysia, Singapore and Thailand were developed in Java.

Q27. What database does your internal system use?

The database used in Indonesia is MySQL. The databases used in Malaysia and Thailand is Oracle. The database used in Singapore is DB2.

Q28. Is your internal system able to generate an electronic Veterinary Certificate? Is it based on the UN/CEFACT e-Cert?

The systems in Indonesia, Malaysia and Singapore are capable of generating electronic Veterinary Certificates. The system in Thailand is currently not capable of generating electronic Veterinary Certificates.

4.2 Health Certificates

In order to complete this section, an "e-SPS Readiness Questionnaire" on Health Certificates was sent to all AMS. At the time of writing this Draft Final Report, completed questionnaires had been returned by Brunei Darussalam, Indonesia, Lao PDR, the Philippines, Singapore and Thailand.

4.2.1 AMS Contact Details

The following questions are related to the responsible agencies and the main contact persons.

Q1. Which ministry / division / department / unit is responsible for issuing Health Certificates for export / re-export?

Table 1 provides details of the agencies responsible for issuing Health Certificates including, where applicable, the unit / office / section, department, division and ministry.

Table 1: Agencies Responsible for Issuing Health Certificates

Member State	Responsible Agency
Brunei Darussalam	Fisheries Biosecurity Division, Department of Fisheries, Ministry of Primary Resources and Tourism
Cambodia	
Indonesia	Indonesia Agriculture Quarantine Agency, Ministry of Agriculture *For Health Certificate for Fish and Fisheries Products:* Fish Quarantine and Inspection Agency, Ministry of Marine Affairs and Fisheries
Lao PDR	Veterinary Service Division, Department of Livestock and Fisheries, Ministry of Agriculture and Forestry
Malaysia	Food Safety and Quality Division, Ministry of Health Malaysia
Myanmar	
Philippines	Fisheries Inspection and Quarantine Division Bureau of Fisheries and Aquatic Resources Department of Agriculture National Veterinary Quarantine Services Division Bureau of Animal Industry Department of Agriculture
Singapore	Agri-Food and Veterinary Authority of Singapore

Member State	Responsible Agency
Thailand	Ministry of Agriculture and Cooperatives, Department of Fisheries, Aquatic Animal Health Research and Development Division (AAHRDD)
Viet Nam	

Q2. Who is the main contact point within the ministry / division / department / unit?

Table 2 provides details of the main contact persons within the responsible agencies including their names, positions and email addresses.

Table 2: Main Contact Persons within the Responsible Agencies

Member State	Contact Name, Position and Email Address
Brunei Darussalam	Ms Wanidawati Tamat, Head of Fisheries Biosecurity Division, Department of Fisheries, Ministry of Primary Resources and Tourism Email: wanidawati.tamat@fisheries.gov.bn Mr Pengiran Muhamad Asdi Pengiran Mohammad Salleh, Department of Fisheries, Ministry of Primary Resources and Tourism
Cambodia	
Indonesia	Mr. Arifin Tasrif Director of Compliance, Cooperation and Information, Indonesia Agriculture Quarantine Agency – Ministry of Agriculture E-mail: arifintasrif@yahoo.co.uk *For Health Certificate for Fish and Fisheries Products:* Riza Priyatna, Head of Center For Fish Quarantine and Biosecurity Email: rizapriyatna@bkipm.kkp.go.id/rizapriyatna@gmail.com Widodo Sumiyanto, Head of Center For Quality Certification and Fisheries Product Safety Email: wsumiyanto@bkipm.kkp.go.id/wsumiyanto@yahoo.com
Lao PDR	Dr. Phachone Bounma, Director of Veterinary Service Division, Department of Livestock and Fisheries, Ministry of Agriculture and Forestry Email: ph_bounma@yahoo.com
Malaysia	Mdm. Noraini bt Dato' Mohd Othman, Senior Director for Food Safety and Quality, Food Safety and Quality Division, Ministry of Health Malaysia Email: noraini_othman@moh.gov.my
Myanmar	
Philippines	Dr. Florence D. Silvano

Member State	Contact Name, Position and Email Address
	Chief, National Veterinary Quarantine Services Division Bureau of Animal Industry Department of Agriculture Email: baiquarantineph@gmail.com / bai_dir@yahoo.com Commodore Eduardo B. Gongona, PCG (Ret) Director, Bureau of Fisheries and Aquatic Resources Department of Agriculture Email: bfar.director@gmail.com
Singapore	Jolene Chan Suet Heong, Agri-Food & Veterinary Authority of Singapore, Quarantine and Inspection Group, Senior Executive Manager Email: jolene_chan@ava.gov.sg
Thailand	Ms. Janejit Kongkumnerd, Director of AAHRDD Email: kjanejit@yahoo.com
Viet Nam	

4.2.2 Export Processing

The following questions are related to export processing i.e. the issuing of Health Certificates.

Q3. What was the total number of Health Certificates issued in 2015?

Table 3 provides the total numbers of Health Certificates issued by each AMS in 2015.

Table 3: Total Number of Health Certificates Issued in 2015

Member State	Total
Brunei Darussalam	49
Cambodia	
Indonesia	97,145
Lao PDR	92
Malaysia	50,667
Myanmar	
Philippines	16,279
Singapore	8,446
Thailand	11,457
Viet Nam	

Please note that the total number of Health Certificates in Indonesia includes those issued by both the Indonesia Agriculture Quarantine Agency (21,270) and Fish Quarantine and Inspection Agency (75,875).

Q4. How many of these Health Certificates were issued for exports to the other ASEAN Member States?

Tables 4 and 5 provide a breakdown of the number of Health Certificates issued by each AMS in 2015, to the other AMS.

Table 4: Number of Health Certificates Issued in 2015 to other AMS

Exporting Country	Importing Country				
	Brunei	**Cambodia**	**Indonesia**	**Lao PDR**	**Malaysia**
Brunei Darussalam		0	4	0	5
Cambodia					
Indonesia	101	81		8	24,776
Lao PDR	-	-	-		-
Malaysia					
Myanmar					
Philippines	14	0	0	0	97
Singapore	-	-	-	-	-
Thailand	-	-	-	-	-
Viet Nam					

Table 5: Number of Health Certificates Issued in 2015 to other AMS (Continued)

Exporting Country	Importing Country				
	Myanmar	**Philippines**	**Singapore**	**Thailand**	**Viet Nam**
Brunei Darussalam	0	1	3	6	1
Cambodia					
Indonesia	17	1,352	27,241	1,849	2,843
Lao PDR	-	-	-	-	-
Malaysia					
Myanmar					
Philippines	2		54	0	180
Singapore	-	-		-	-
Thailand	-	-	-		-
Viet Nam					

Please note that the total number of Health Certificates in Indonesia includes those issued by both the Indonesia Agriculture Quarantine Agency (5,515) and Fish Quarantine and Inspection Agency (52,753).

Please also note that Lao PDR, Singapore and Thailand did not provide a breakdown of the number of Health Certificates issued to other AMS in 2015. However, the total number of Health Certificates issued by was Lao PDR was 84 and the total number issued by Thailand was 4,575.

Q5. Can exporters apply for Health Certificates online? If so, can exporters apply through your NSW or do you have your own website?

The application process for Health Certificates is currently manual in Brunei Darussalam, Lao PDR and the Philippines.

In Indonesia, exporters can apply for Health Certificates online through the Indonesia Agriculture Quarantine Agency's website, https://ppkonline.karantina.pertanian.go.id/, and through the Fish Quarantine and Inspection Agency's website, http://ppk.bkipm.kkp.go.id.

In Singapore, exporters can apply for Health Certificates through Singapore's national licensing system, LicenceOne; https://licence1.business.gov.sg.

In Thailand, exporters can also apply for Health Certificates online.

In Malaysia, exporters can apply for Health Certificates online through the Ministry of Health's website, *http://fexoc.moh.gov.my/fexoc/index.php,* for the export of fish and fishery products to the European Union. However, applications for Health Certificates for other countries are done manually.

Q6. If you do not have an online system for applications, do you have any plans to develop one?

Brunei Darussalam has no plans to develop an online system for the application of Health Certificates, at the moment. However, Lao PDR and the Philippines have plans to develop an online system.

Malaysia is currently developing an online system for the application of Health Certificates, except for fish and fishery products exported to the European Union, as there is an existing online system.

Q7. Do you have an internal system (or database) for issuing Health Certificates or are they issued manually?

Indonesia, Singapore and Thailand have their own internal systems for issuing Health Certificates (see Section 4.2.4). In Brunei Darussalam, Lao PDR and the Philippines, Health Certificates are issued manually.

Malaysia has an internal system for issuing Health Certificates for the export of fish and fishery products to the European Union. For others, the issuance of health certificates is done manually.

Q8. If you do not have an internal system, do you have any plans to develop one?

Brunei Darussalam has no plans to develop an internal system for issuing Health Certificates, at the moment. However, Lao PDR and the Philippines have plans to develop an internal system.

Malaysia is currently developing an internal system for issuing Health Certificates, except for fish and fishery products exported to the European Union, as there is an existing internal system.

Q9. Do exporters need to provide evidence of an import permit issued by the import Competent Authority to determine import requirements, in the application for a Health Certificate?

Brunei Darussalam, Lao PDR, Singapore and Thailand require evidence of an import permit before the Health Certificate is issued, as does the Indonesia Agriculture Quarantine Agency. An import permit is not required in Malaysia or the Philippines.

Q10. Are there any other supporting documents required e.g. Export Licence, Commercial Invoice etc.?

In addition to the import permit, which is required by some AMS, other supporting documents may also be required, such as Certificates of Analysis, CITES permits, Invoices, Declaration Forms, Export Licence, Export Registration Number, Laboratory Test Reports, Packing Lists, Premise Registrations and Premise Licences.

Q11. How many working days does it take for an application for a Health Certificate to be processed?

In Brunei Darussalam, it can take up to 21 working days from the start of applying, product sampling and release of Health Certificate. In Indonesia, applications can be processed from 3 hours to 7 working days. In Lao PDR, they are processed from 1 to 5 working days. In Malaysia, application are processed within 3 to 19 working days. In the Philippines, they are processed from 1 to 2 working days. In Singapore, applications are usually processed within 2 working days and in Thailand, they are usually processed within 1 working day.

4.2.3 Import Processing

The following questions are related to import processing i.e. the receipt of Health Certificates.

Q12. Do you also conduct 100% verification on the authenticity, integrity and compliance of Health Certificates for import requirements? How long does it take to conduct this verification? Will you do the verification if the Health Certificate is received in advance/prior to arrival of cargo?

In Indonesia, Malaysia and Singapore, all (100%) of Health Certificates are verified. In Brunei Darussalam, Health Certificates are verified at random and in Lao PDR, it depends on the type of commodity.

In Indonesia, Health Certificates are verified within 1 hour. In Lao PDR, Health Certificates can be verified from 30 minutes to 1 working day, depending on the type of commodity. In Malaysia, Health Certificates are usually verified within a few hours. In Singapore, it depends on the Competent Authority who issued them at the country of export.

In Indonesia, Health Certificates can be verified in advance/prior to the arrival of the cargo.

In Thailand, Health Certificates are not verified.

Q13. What was the total number of Health Certificates you received in 2015?

Table 6 provides the total numbers of Health Certificates received by each AMS in 2015.

Table 6: Total Number of Health Certificates Received in 2015

Member State	Total
Brunei Darussalam	58
Cambodia	
Indonesia	43,364
Lao PDR	64
Malaysia	11,187
Myanmar	
Philippines	
Singapore	3,976
Thailand	-
Viet Nam	

Please note that the total number of Health Certificates in Indonesia includes those received by both the Indonesia Agriculture Quarantine Agency (36,552) and Fish Quarantine and Inspection Agency (6,812).

Q14. How many of these Health Certificates were received for imports from the other ASEAN Member States?

Tables 7 and 8 provide a breakdown of the number of Health Certificates received by each AMS in 2015, from the other AMS.

Table 7: Number of Health Certificates Received in 2015 from other AMS

Importing Country	Exporting Country				
	Brunei	**Cambodia**	**Indonesia**	**Lao PDR**	**Malaysia**
Brunei Darussalam		0	10	0	38
Cambodia					
Indonesia	6	0		0	2,212
Lao PDR	-	-	-		-
Malaysia	0	6	2,490	0	
Myanmar					
Philippines					
Singapore	-	-	-	-	-
Thailand	-	-	-	-	-
Viet Nam					

Table 8: Number of Health Certificates Received in 2015 from other AMS (Continued)

Importing Country	Exporting Country				
	Myanmar	**Philippines**	**Singapore**	**Thailand**	**Viet Nam**
Brunei Darussalam	0	3	1	5	0
Cambodia					
Indonesia	14	93	687	3,615	2,349
Lao PDR	-	-	-	-	-
Malaysia	30	2	86	975	61
Myanmar					
Philippines					
Singapore	-	-		-	-
Thailand	-	-	-		-
Viet Nam					

Please note that the total number of Health Certificates in Indonesia includes those received by both the Indonesia Agriculture Quarantine Agency (6,601) and Fish Quarantine and Inspection Agency (2,375).

Please also note that Lao PDR, Singapore and Thailand did not provide a breakdown of the number of Health Certificates received from other AMS in 2015. However, the total number of Health Certificates received by Lao PDR from the other AMS was 42.

Q15. Are scanned copies of Health Certificates uploaded into your NSW as attachments to import declarations?

Scanned copies of Health Certificates are uploaded into the NSWs as attachments to import declarations for the Indonesia Agriculture Quarantine Agency, and in Singapore depending on the type of commodity. However, in Brunei Darussalam, for Indonesia's Fish Quarantine and Inspection Agency, Malaysia and Lao PDR, scanned copies are not uploaded to their NSW.

Q16. Do you keep hard copies of Health Certificates received from other countries?

Brunei Darussalam, Indonesia, Lao PDR, Malaysia and Singapore all keep hard copies of Health Certificates. In Singapore, soft copies are kept for ornamental fish and live food fish products.

Q17. Is the information on Health Certificates received from other countries entered into an internal system?

Some details of Health Certificates received are entered into an internal system in Indonesia, Lao PDR and Myanmar. In Brunei Darussalam and Singapore, information is not entered into an internal system.

Q18. Does your national legislation require original Health Certificates to be cited at the time of import?

Current national legislation requires original Health Certificates to be cited at the time of import in Brunei Darussalam, Indonesia, Lao PDR and Singapore. In Malaysia, although there is no national legislation, Standard Operating Procedures require Health Certificates to be cited.

Q19. Does your national legislation allow for electronic Health Certificates to be accepted instead of paper documents?

Current national legislation allows for electronic Health Certificates to be accepted instead of paper documents in Indonesia and Lao PDR. However, the national legislation in Brunei Darussalam, Malaysia and Singapore does not yet allow for electronic Health Certificates to be accepted.

Q20. If not, are there any plans to change your national legislation?

Brunei Darussalam has no plans to change their national legislation to allow electronic Health Certificates to be accepted instead of paper documents, at the moment. However, Malaysia and Singapore would consider changing their national legislation.

Q21. Do you carry out inspections on imports? If so, at what rate e.g. is it 100% or random?

Indonesia carry out inspections at a rate of 100%, where the level of inspection depends on the commodity. For example, they may require laboratory examination for high risk goods. Brunei Darussalam, Lao PDR and Malaysia carry out random inspections (physical and sampling. Singapore carry out both 100% inspections and random inspections, depending on the species.

4.2.4 Technical Readiness

The following questions are related to the technical readiness of AMS' who have internal systems.

Q22. If exporters can apply for Health Certificates online, is it integrated with an internal system?

The online systems in Indonesia and Singapore are already integrated. Thailand's system is not integrated. Lao PDR and the Philippines do not have online systems (see Q5), so this question is not applicable to them.

Q23. If you have an internal system for issuing Health Certificates, do you have your own IT team to support it, or is it supported by external party?

Indonesia has its own IT teams to support their internal systems, and the system in Singapore is supported by third party software / service providers. The system in Thailand is supported by a third party.

Q24. Where is your internal system hosted?

The systems in the Indonesia Agriculture Quarantine Agency and in Thailand are hosted internally. The systems in Indonesia's Fish Quarantine and Inspection Agency and Singapore are hosted at data centres.

Q25. What operating system does your internal system run on?

The systems in the Indonesia Agriculture Quarantine Agency and in Singapore run on Linux. The systems in Indonesia's Fish Quarantine and Inspection Agency and Thailand run on Microsoft Windows Server.

Q26. What language was your internal system developed in?

Both systems in Indonesia, and the system in Thailand, were developed in PHP. The system in Singapore was developed in Java.

Q27. What database does your internal system use?

The database used in the Indonesia Agriculture Quarantine Agency is MySQL. The database used in Indonesia's Fish Quarantine and Inspection Agency and Thailand is Microsoft SQL Server. The database used in Singapore is DB2.

Q28. Is your internal system able to generate an electronic Health Certificate? Is it based on the UN/CEFACT e-Cert?

Both systems in Indonesia, and in Singapore, are capable of generating electronic Health Certificates.

5 Proposed Information Flow and Data Structure

This section outlines the approach of Task 3 of the TOR; *"Present the proposed electronic SPS information flow and e-SPS data structure for review and approval by the ASCP"*.

5.1 Information Flow

Figure 1 below shows the information flow of the e-AH Certificate. It shows the flow of information starting from the issuing of the e-AH Certificate by the Competent Authority of the Exporting Country through to the receipt of an e-SPS Acknowledgment from the Competent Authority of the Importing Country.
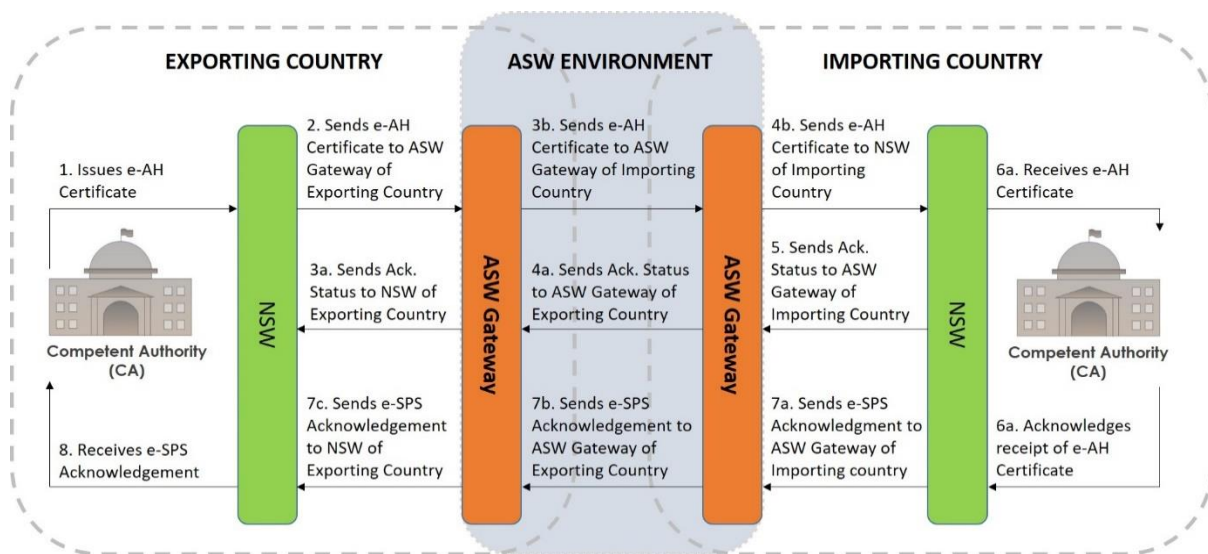
Figure 1 – Information Flow

Sub-processes for the e-AH Certificate information flow comprise the following:

- Step 1: - The Competent Authority of the Exporting Country issues the e-AH Certificate;

- Step 2: - The NSW of the Exporting Country sends the e-AH Certificate to the ASW Gateway of the Exporting Country;

- Step 3: The ASW Gateway of the Exporting Country transmits an Acknowledgment Status to the NSW of the Exporting Country and sends the e-AH Certificate to the ASW Gateway of the Importing Country;

- Step 4: The ASW Gateway of the Importing Country transmits an Acknowledgment Status to the ASW Gateway of the Exporting Country and sends the e-AH Certificate to the NSW of the Importing Country;

- Step 5: The NSW of the Importing Country transmits an Acknowledgment Status to the ASW Gateway of the Importing Country and routes the e-AH Certificate to the Competent Authority of the Importing Country;

- Step 6: The Competent Authority of the Importing Country receives and acknowledges the receipt of the e-AH Certificate;

- Step 7: The NSW Gateway of the Importing Country sends the e-SPS Acknowledgment to the NSW of the Exporting Country via the ASW Gateway of the Importing Country and the ASW Gateway of the Exporting Country;

- Step 8: The Competent Authority of the Exporting Country receives the e-SPS Acknowledgment.

5.2 Data Structure

The information parameters for the e-AH Certificate have been based on the model Veterinary Certificates and Health Certificates, published by the OIE (see Section 3.2). Table 9 contains a list of these information parameters, divided into 3 columns:

- **Box No.** – a sequential number used to identify the information parameter
- **Box Name** – the name of the information parameter, according to OIE's Terrestrial Animal Health Code and Aquatic Animal Health Code
- **Description** – the description of the information parameter, according to OIE's Terrestrial Animal Health Code and Aquatic Animal Health Code

Please note that each information parameter has been assigned a unique "Box No.", so that it can be used as a cross-reference when mapping it to UN/CEFACT's e-Cert standard (see Section 6).

Table 9: Animal Health Information Parameters

Box No.	Box Name	Description
Part I. Details of dispatched consignment		
I	Country	Name of the country that issues the certificate.
I.1	Consignor	Name and full address of the natural or legal entity / person dispatching the consignment. Information on telephone and fax numbers or e-mail address is recommended.
I.2	Certificate reference number	The certificate reference number is the number used by the Veterinary / Competent Authority of the country to identify the certificate.
I.3	Veterinary / Competent Authority	Name of the Veterinary / Competent Authority.
I.4	Consignee	Name and full address of the natural or legal entity / person to whom the consignment is destined at the time the certificate is issued.
I.5	Country of origin	Name of the country from which the animals / live aquatic animals, hatching eggs, embryos, semen, ova, brood combs or gametes are being exported. For animal / aquatic animal products, name the country(ies) where the finished products were produced, manufactured or packed.
		"ISO code" refers to the international standard two-letter code (ISO 3166-1 Alpha-2 Code) for a country produced by the International Organization for Standardization.

Box No.	Box Name	Description
I.6	Zone or compartment of origin	Name of the zone or compartment of origin, if relevant, in part II of the certificate.
I.7	Country of destination	Name of the country of destination. "ISO code" refers to the international standard two-letter code (ISO 3166-1 Alpha-2 Code) for a country produced by the International Organization for Standardization.
I.8	Zone or compartment of destination	Name of the zone or compartment of destination, if relevant, in part II of the certificate.
I.9	Place of origin	Name and full address of the place(s) from which the animals / live aquatic animals, animal / aquatic animal products or gametes are being exported; and official approval or registration number when required.
		For animals and hatching eggs: the establishment(s), wildlife or hunting reserves.
		For semen: the artificial insemination centre.
		For embryos and ova: the name, address and official approval number of the collection team (not the premises of storage).
		For products of animal origin: the premises from which the products are to be dispatched.
		For live aquatic animals and gametes: the establishment(s) or place of capture.
		For products of aquatic animal origin: the premises from which the products are to be dispatched.
I.10	Place of shipment	Name of the place from which the animals / live aquatic animals, animal / aquatic animal products or gametes are being shipped (this will be a land, sea or airport).
I.11	Date of departure	Date of departure. For animals / live aquatic animals include the expected time of departure.
I.12	Means of transport	Details of the means of transport.
		Identification of the means of transport at the time the certificate is issued: for air transport, the flight number; for maritime transport, the name of the vessel; for rail transport, the number of the train and the wagon and for road transport, the registration number of the road vehicle and the number of the trailer where used.
I.13	Expected border post	Name of expected border post and, if available, its UN/LOCODE (refer to the United Nations Code for Trade and Transport Locations).
I.14	CITES permit No(s)	CITES permit number(s) if the commodity concerns species listed in the Convention on International Trade in Endangered Species of Wild Fauna and Flora.
I.15	Description of commodity	Describe the commodity or use the titles as they appear in the Harmonised System of the World Customs Organization.

Box No.	Box Name	Description
I.16	Commodity code (HS code)	Heading or HS Code of the Harmonized System set up by the World Customs Organization.
I.17	Total quantity/weight	Total quantity or weight of the commodity.
		For animals, hatching eggs and animal products (semen, ova, embryos) give the total count of animals, eggs or straws.
		For products give the gross weight and the net weight in kg of the whole consignment.
		For live aquatic animals and gametes give the total count or weight.
		For aquatic animal products give the gross weight and the net weight in kg of the whole consignment.
I.18	Temperature	Temperature of products for transport and storage.
I.19	Total number of packages	Total number of boxes, cages or stalls in which the animals or hatching eggs are being transported. Total number of cryogenic containers for semen, ova, embryos. Total number of packages for products.
		For live aquatic animals and gametes give the total number of containers in which they are being transported. For aquatic animal products give the total number of packages.
I.20	Identification of container/seal number	Identify the containers/seal numbers where required.
I.21	Type of Packaging	Identify the type of packaging of products as defined in Recommendation No. 21 – Code of Passengers, Type of Cargo, Package and Packaging Materials of UN/CEFACT (United Nation Centre for Trade Facilitation and Electronic Business).
I.22	Commodities intended for use as	Intended use of the imported animals / live aquatic animals or animal / aquatic animal products.
		Breeding/rearing: applies to animals, gametes or broodstock for breeding, or rearing and hatching eggs.
		Slaughter: applies to animals / live aquatic animals for slaughter.
		Wildlife management: applies to wildlife for the purpose of managing populations.
		Pet: applies to animals kept for companionship or enjoyment. This excludes livestock species.
		Exhibition/education: applies to animals exhibited in zoos, circuses or sporting activities or for educational purposes.
		Human consumption: applies to products intended for human consumption.

Box No.	Box Name	Description
		Animal feed: means any product of animal origin (single or multiple), whether processed, semi-processed or raw, which is intended to be fed to animals.
		Grow out: applies to live aquatic animals, aquatic eggs and aquatic larvae requiring time in culture.
		Ornamental: applies to live aquatic animals kept for companionship or enjoyment.
		Competition/display: applies to live aquatic animals used for competition or display purposes.
		Restocking: applies to live aquatic animals for the purpose of rebuilding stocks.
		Human consumption: applies to live aquatic animals (without further aquaculture involved) or animal / aquatic animal products intended for human consumption.
		Aquatic animal feed: means any product of animal origin (single or multiple), whether processed, semi-processed or raw, that is intended to be fed to aquatic animals.
		Further processing: applies to products of animal / aquatic animal origin which have to be further processed before being suitable for end use.
		Technical use: applies to animal / aquatic animal products not intended for human or animal / aquatic animal consumption. These include animal / aquatic animal products that are intended for use in the pharmaceutical, medical, cosmetic and other industries. Such products may be subjected to extensive further processing.
		Technical use in live aquatic animals: applies to aquatic animal products used in live aquatic animals, e.g. to stimulate ovulation.
		Other: intended for purposes not listed elsewhere in this classification.
I.23	For import or admission	Mark, if appropriate.
I.24	Identification of commodities	Details on the nature of the commodity sufficient to identify it.
		For animals and hatching eggs: Species (scientific name); Identification system; Identification number or other identification details; Quantity and if required, Breed / Category (e.g. heifer, steer, layer, broiler); Age; Sex. For animals holding an official passport, the international animal passport number should be provided, and a copy of the details on the passport attached to the certificate.

Box No.	Box Name	Description
		For embryos, ova and semen: Species (Scientific name); Identification mark according to the International Embryo Transfer Society (IETS) or the International Committee for Animal Recording (ICAR); Collection date; Approval number of the centre/team; Identification of the donor animal; Quantity. If required, Breed.
		For bees and brood combs: Category means hive with bees, swarm, consignment of bees (worker bees, drones), queen bees, brood-combs, royal cells, etc. Identification details include peculiarities (e.g. Marks or age or weight or surface). Breed / Variety if required.
		For products of animal origin: Species (Scientific name); Nature of commodity; Treatment type; approval number of establishment(s) (e.g. abattoir; cutting plant; processing plant; cold store); Lot identification/date code; Quantity; Number of packages; Net weight.
		For live aquatic animals and gametes: Category (i.e. amphibian, crustacean, fish or mollusc); Wild stocks or Cultured stocks; Species (scientific name); and if required, Identification system; Batch number or other identification details; Age; Sex.
		For products of aquatic animal origin: Category (i.e. amphibian, crustacean, fish or mollusc); Wild stocks or Cultured stocks; Species (Scientific name); Approval number of establishment(s) (e.g. processing plant; cold store); Lot identification/date code; Number of packages.
Part II. Zoosanitary information		
II	The undersigned Official Veterinarian / Certifying Official certifies that the animal(s)/hatching eggs described above satisfy(ies) the following requirements	Complete this part in accordance with the requirements agreed between the Veterinary / Competent Authorities of the importing and exporting countries in accordance with the recommendations in the Terrestrial / Aquatic Code.
IIa	Certificate reference number	Reference number: see box I.2.
IIb	Official Veterinarian / Certifying Official	Name, address, official position, date of signature and official stamp of the Veterinary Services / Competent Authority.

6 Alignment with UN/CEFACT and OIE Data Sets

This section details the approach of Task 4 of the TOR; "*Align the finalized e-SPS data structure with the latest UN CEFACT and IPPC data set, for review and approval by the ASCP*".

6.1 Electronic Certificate (e-Cert)

The structure of the e-AH Certificate consists of two different data sets. The first data set, hereafter referred to as the "e-AH Certificate", is a subset of the e-Cert data structure. The second data set, hereafter referred to as the "e-SPS Acknowledgment" is a subset of the e-Cert acknowledgment data structure.

The data elements for both data sets are provided in Tables 10 and 11. There are 5 columns in each table:

- UN/CEFACT Structure
    - **Unique ID** – the unique identifier of the core component within the CCL
    - **Dictionary Entry Name (DEN)** – the unique name of the core component within the CCL
- UNTDED
    - **ID –** the unique identifier of the data element within the UNTDED
    - **Format –** the format of the data element within the UNTDED
- OIE
    - **Box No.** – mapping of OIE's model veterinary and health certificates to the CCL using the Animal Health Information Parameters (see Section 5.2)

It should be noted that the e-Cert standard itself does not provide recommended formats, other than the data type (e.g. text, date time, measure, quantity), although the CCL contains the mapping to the UNTDED, as shown in Tables 10 and 11. However, for the Message Implementation Guide (see Section 8), it is recommended that the format of common data elements (e.g. party names, country names, location names etc.) should be consistent with other ASW documents (e.g. the ACDD). Therefore, the UNTDED formats provided in the table below should only be used for those data elements which are unique to the e-AH Certificate.

6.1.1 e-AH Certificate

Following the methodology described in Section 3.2, the mapping of OIE's model veterinary and health certificates to the CCL can be used as a basis of the e-AH Certificate Data Structure. This mapping is represented in Table 10 by the column "Box No.".

Table 10: e-AH Certificate – Data Structure

UN/CEFACT Data Structure		UNTDED		OIE
Unique ID	Dictionary Entry Name (DEN)	ID	Format	Box No.
UN03000001	SPS Exchanged_ Document. Details			
UN03000002	SPS Exchanged_ Document. Name. Text	1000	an..35	
UN03000003	SPS Exchanged_ Document. Identification. Identifier	1004	an..35	I.2, IIa
UN03000004	SPS Exchanged_ Document. Description. Text	4142	an..512	

UN/CEFACT Data Structure		UNTDED		OIE
Unique ID	Dictionary Entry Name (DEN)	ID	Format	Box No.
UN03000005	SPS Exchanged_ Document. Type. Code	1001	an..3	
	SPS Exchanged_ Document. Sub_Type. Code	1001	an..3	
UN03000006	SPS Exchanged_ Document. Status. Code	4405	an..3	
UN03000007	SPS Exchanged_ Document. Issue. Date Time	2007	an..19	
UN03000009	SPS Exchanged_ Document. Issuer. SPS_ Party			
UN03000112	SPS_ Party. Identification. Identifier	3039	an..35	I.3
UN03000113	SPS_ Party. Name. Text	3036	an..35	I.3
UN03000012	SPS_ Trade Line Item. Reference. SPS Referenced_ Document			
UN03000015	SPS Referenced_ Document. Issue. Date Time	2007	an..19	I.14
UN03000016	SPS Referenced_ Document. Type. Code	1001	an..3	I.14
UN03000018	SPS Referenced_ Document. Identification. Identifier	1154	an..70	I.14
UN03000013	SPS Exchanged_ Document. Signatory. SPS_ Authentication			
UN03000035	SPS_ Authentication. Actual. Date Time	2007	an..19	IIb
UN03000037	SPS_ Authentication. Provider. SPS_ Party			
UN03000113	SPS_ Party. Name. Text	3036	an..35	IIb
UN03000116	SPS_ Party. Specified. SPS_ Address			
UN03000020	SPS_ Address. Postcode. Code	3251	an..17	IIb
UN03000021	SPS_ Address. Line One. Text	3286	an..70	IIb
UN03000022	SPS_ Address. Line Two. Text	3286	an..70	IIb
UN03000023	SPS_ Address. Line Three. Text	3286	an..70	IIb
UN03000024	SPS_ Address. Line Four. Text	3286	an..70	IIb
UN03000025	SPS_ Address. Line Five. Text	3286	an..70	IIb
UN03000026	SPS_ Address. City Name. Text	3224	an..256	IIb
UN03000027	SPS_ Address. Country. Identifier	3207	an..3	IIb
UN03000028	SPS_ Address. Type. Code	3131	an..3	IIb
UN03000029	SPS_ Address. Country Name. Text	3206	an..35	IIb
UN03000030	SPS_ Address. Country Sub-Division. Identifier	3229	an..9	IIb
UN03000031	SPS_ Address. Country Sub-Division Name. Text	3228	an..70	IIb
UN03000032	SPS_ Address. City. Identifier	3225	an..35	IIb
UN03000118	SPS_ Party. Specified. SPS_ Person			
UN03000124	SPS_ Person. Name. Text	3412	an..35	IIb
	SPS_ Person. Role. Text	3480	an..17	IIb
UN03000039	SPS_ Authentication. Included. SPS_ Clause			
UN03000048	SPS_ Clause. Identification. Identifier	4181	an..3	II
UN03000049	SPS_ Clause. Content. Text	4180	an..512	II
UN03000053	SPS_ Consignment. Details			
UN03000056	SPS_ Consignment. Export Exit. Date Time	2043	an..19	I.11
UN03000058	SPS_ Consignment. Consignor. SPS_ Party			
UN03000112	SPS_ Party. Identification. Identifier	3039	an..35	I.1
UN03000113	SPS_ Party. Name. Text	3036	an..35	I.1
UN03000116	SPS_ Party. Specified. SPS_ Address			
UN03000020	SPS_ Address. Postcode. Code	3251	an..17	I.1
UN03000021	SPS_ Address. Line One. Text	3286	an..70	I.1
UN03000022	SPS_ Address. Line Two. Text	3286	an..70	I.1

UN/CEFACT Data Structure		UNTDED		OIE
Unique ID	Dictionary Entry Name (DEN)	ID	Format	Box No.
UN03000023	SPS_ Address. Line Three. Text	3286	an..70	I.1
UN03000024	SPS_ Address. Line Four. Text	3286	an..70	I.1
UN03000025	SPS_ Address. Line Five. Text	3286	an..70	I.1
UN03000026	SPS_ Address. City Name. Text	3224	an..256	I.1
UN03000027	SPS_ Address. Country. Identifier	3207	an..3	I.1
UN03000028	SPS_ Address. Type. Code	3131	an..3	I.1
UN03000029	SPS_ Address. Country Name. Text	3206	an..35	I.1
UN03000030	SPS_ Address. Country Sub-Division. Identifier	3229	an..9	I.1
UN03000031	SPS_ Address. Country Sub-Division Name. Text	3228	an..70	I.1
UN03000032	SPS_ Address. City. Identifier	3225	an..35	I.1
UN03000059	SPS_ Consignment. Consignee. SPS_ Party			
UN03000112	SPS_ Party. Identification. Identifier	3039	an..35	I.4
UN03000113	SPS_ Party. Name. Text	3036	an..35	I.4
UN03000116	SPS_ Party. Specified. SPS_ Address			
UN03000020	SPS_ Address. Postcode. Code	3251	an..17	I.4
UN03000021	SPS_ Address. Line One. Text	3286	an..70	I.4
UN03000022	SPS_ Address. Line Two. Text	3286	an..70	I.4
UN03000023	SPS_ Address. Line Three. Text	3286	an..70	I.4
UN03000024	SPS_ Address. Line Four. Text	3286	an..70	I.4
UN03000025	SPS_ Address. Line Five. Text	3286	an..70	I.4
UN03000026	SPS_ Address. City Name. Text	3224	an..256	I.4
UN03000027	SPS_ Address. Country. Identifier	3207	an..3	I.4
UN03000028	SPS_ Address. Type. Code	3131	an..3	I.4
UN03000029	SPS_ Address. Country Name. Text	3206	an..35	I.4
UN03000030	SPS_ Address. Country Sub-Division. Identifier	3229	an..9	I.4
UN03000031	SPS_ Address. Country Sub-Division Name. Text	3228	an..70	I.4
UN03000032	SPS_ Address. City. Identifier	3225	an..35	I.4
UN03000060	SPS_ Consignment. Export. SPS_ Country			
UN03000088	SPS_ Country. Identification. Identifier	3207	an..3	I
UN03000089	SPS_ Country. Name. Text	3206	an..35	I
UN03000063	SPS_ Consignment. Loading Baseport. SPS_ Location			
UN03000094	SPS_ Location. Identification. Identifier	3225	an..35	I.10
UN03000095	SPS_ Location. Name. Text	3224	an..256	I.10
UN03000064	SPS_ Consignment. Import. SPS_ Country			
UN03000088	SPS_ Country. Identification. Identifier	3207	an..3	I.7
UN03000089	SPS_ Country. Name. Text	3206	an..35	I.7
UN03000090	SPS_ Country. Subordinate. SPS_ Country Sub-Division			
UN03000080	SPS_ Country Sub-Division. Identification. Identifier	3229	an..9	I.8
UN03000081	SPS_ Country Sub-Division. Name. Text	3228	an..70	I.8
UN03000082	SPS_ Country Sub-Division. Hierarchical Level. Code	7168	an..3	I.8
UN03000068	SPS_ Consignment. Unloading Baseport. SPS_ Location			
UN03000094	SPS_ Location. Identification. Identifier	3225	an..35	I.13

UN/CEFACT Data Structure		UNTDED		OIE
Unique ID	Dictionary Entry Name (DEN)	ID	Format	Box No.
UN03000095	SPS_ Location. Name. Text	3224	an..256	I.13
UN03000074	SPS_ Consignment. Main Carriage. SPS_ Transport Movement			
UN03000173	SPS_ Transport Movement. Identification. Identifier	8028	an..17	I.12
UN03000174	SPS_ Transport Movement. Mode. Code	8067	an..3	I.12
UN03000175	SPS_ Transport Movement. Used. SPS_ Transport Means			
UN03000171	SPS_ Transport Means. Name. Text	8212	an..35	I.12
UN03000076	SPS_ Consignment. Included. SPS_ Consignment Item			
UN03000051	SPS_ Consignment Item. Nature Identification. SPS_ Cargo			
UN03000041	SPS_ Cargo. Type. Code	7085	an..3	I.23
UN03000052	SPS_ Consignment Item. Included. SPS_ Trade Line Item			
UN03000147	SPS_ Trade Line Item. Sequence. Numeric	1082	an..6	I.24
UN03000148	SPS_ Trade Line Item. Description. Text	7008	an..256	I.15
UN03000149	SPS_ Trade Line Item. Common_ Name. Text	7036	an..35	I.24
UN03000150	SPS_ Trade Line Item. Scientific_ Name. Text	7036	an..35	I.24
UN03000151	SPS_ Trade Line Item. Production Batch. Identifier	7338	an..17	I.24
UN03000152	SPS_ Trade Line Item. Intended_ Use. Text	7110	an..35	I.22
UN03000154	SPS_ Consignment Item. Net Weight. Measure	6020	n..16	I.17
UN03000155	SPS_ Consignment Item. Gross Weight. Measure	6018	n..16	I.17
UN03000159	SPS_ Trade Line Item. Applicable. SPS_ Classification			
UN03000043	SPS_ Classification. System. Identifier	9019	an..17	I.16
UN03000044	SPS_ Classification. System Name. Text	9018	an..256	I.16
UN03000045	SPS_ Classification. Class. Code	9021	an..17	I.16
UN03000046	SPS_ Classification. Class Name. Text	9020	an..70	I.16
UN03000160	SPS_ Trade Line Item. Physical. SPS_ Package			
UN03000105	SPS_ Package. Level. Code	7075	an..3	I.21
UN03000106	SPS_ Package. Type. Code	7065	an..17	I.21
UN03000107	SPS_ Package. Item. Quantity	7224	n..8	I.19
UN03000161	SPS_ Trade Line Item. Associated. SPS_ Transport Equipment			
UN03000167	SPS_ Transport Equipment. Identification. Identifier	8260	an..35	I.20
UN03000168	SPS_ Transport Equipment. Affixed. SPS_ Seal			
UN03000136	SPS_ Seal. Identification. Identifier	9308	an..35	I.20
UN03000169	SPS_ Transport Equipment. Setting. SPS_ Temperature			
UN03000142	SPS_ Temperature. Value. Measure	6246	n..15	I.18
UN03000162	SPS_ Trade Line Item. Origin. SPS_ Country			
UN03000088	SPS_ Country. Identification. Identifier	3207	an..3	I.5

UN/CEFACT Data Structure		UNTDED		OIE
Unique ID	**Dictionary Entry Name (DEN)**	**ID**	**Format**	**Box No.**
UN03000089	SPS_ Country. Name. Text	3206	an..35	I.5
UN03000090	SPS_ Country. Subordinate. SPS_ Country Sub-Division			
UN03000080	SPS_ Country Sub-Division. Identification. Identifier	3229	an..9	I.6
UN03000081	SPS_ Country Sub-Division. Name. Text	3228	an..70	I.6
UN03000082	SPS_ Country Sub-Division. Hierarchical Level. Code	7168	an..3	I.6
UN03000086	SPS_ Country Sub-Division. Activity_ Authorized. SPS_ Party			
UN03000112	SPS_ Party. Identification. Identifier	3039	an..35	I.9
UN03000113	SPS_ Party. Name. Text	3036	an..35	I.9
UN03000115	SPS_ Party. Type. Code	3035	an..3	I.9
UN03000116	SPS_ Party. Specified. SPS_ Address			
UN03000020	SPS_ Address. Postcode. Code	3251	an..17	I.9
UN03000021	SPS_ Address. Line One. Text	3286	an..70	I.9
UN03000022	SPS_ Address. Line Two. Text	3286	an..70	I.9
UN03000023	SPS_ Address. Line Three. Text	3286	an..70	I.9
UN03000024	SPS_ Address. Line Four. Text	3286	an..70	I.9
UN03000025	SPS_ Address. Line Five. Text	3286	an..70	I.9
UN03000026	SPS_ Address. City Name. Text	3224	an..256	I.9
UN03000027	SPS_ Address. Country. Identifier	3207	an..3	I.9
UN03000028	SPS_ Address. Type. Code	3131	an..3	I.9
UN03000029	SPS_ Address. Country Name. Text	3206	an..35	I.9
UN03000030	SPS_ Address. Country Sub-Division. Identifier	3229	an..9	I.9
UN03000031	SPS_ Address. Country Sub-Division Name. Text	3228	an..70	I.9
UN03000032	SPS_ Address. City. Identifier	3225	an..35	I.9
UN03000164	SPS_ Trade Line Item. Applied. SPS_ Process			
UN03000127	SPS_ Process. Type. Code	7187	an..17	I.24
UN03000131	SPS_ Process. Operator. SPS_ Party			
UN03000112	SPS_ Party. Identification. Identifier	3039	an..35	I.24
UN03000113	SPS_ Party. Name. Text	3036	an..35	I.24
	SPS_ Trade Line Item. Specified. SPS_ Product			
	SPS_ Product. Type. Code	5379	an..3	I.24
	SPS_ Product. Identification. Identifier	7135	an..35	I.24
	SPS_ Product. Unit. Quantity	6061	n..16	I.17
	SPS_ Product. Applicable. SPS Product_ Characteristic			
	SPS Product_ Characteristic. Type. Code	9021	an..17	I.24
	SPS Product_ Characteristic. Value. Text	9018	an..256	I.24

6.1.2 e-SPS Acknowledgment

Table 11 shows the complete data structure for e-SPS Acknowledgment, which should be used as the basis for the e-SPS Acknowledgment in order to comply with UN/CEFACT standards. Where applicable, the corresponding "Box Nos" from the e-AH Certificate are also provided.

Table 11: e-SPS Acknowledgment – Data Structure

UN/CEFACT Data Structure		UNTDED		OIE
Unique ID	**Dictionary Entry Name (DEN)**	**ID**	**Format**	**Box Nos**
UN03000182	SPS Acknowledgement_ Document. Details			
UN03000184	SPS Acknowledgement_ Document. Issue. Date Time	2007	an..19	
UN03000185	SPS Acknowledgement_ Document. Status. Code	4405	an..3	
UN03000183	SPS Acknowledgement_ Document. Reason_ Information. Text	9012	an..256	
UN03000186	SPS Acknowledgement_ Document. Reference. SPS Referenced_ Document			
UN03000015	SPS Referenced_ Document. Issue. Date Time	2007	an..19	
UN03000016	SPS Referenced_ Document. Type. Code	1001	an..3	
	SPS Referenced_ Document. Type. Code	1001	an..3	
UN03000017	SPS Referenced_ Document. Relationship Type. Code	1153	an..3	
UN03000018	SPS Referenced_ Document. Identification. Identifier	1154	an..70	I.2, IIa
UN01007574	SPS Referenced_ Document. Attachment. Binary Object		binary	
UN01007575	SPS Referenced_ Document. Information. Text	4142	an..512	

6.2 XML Schema Definitions (XSDs)

UN/CEFACT's e-Cert standard also contains a set of XSDs. The structure of the e-Cert message, based on the CCL, is used to create the XSDs using another UN/CEFACT standard called the "XML Naming and Design Rules (NDR)".

6.2.1 e-AH Certificate

To create the e-AH Certificate, as a subset of e-Cert, 13 standard XSDs have been used, most of which have required some level of customization (e.g. to remove unwanted data elements and codes):

- SPSCertificate_16p0.xsd

- ReusableAggregateBusinessInformationEntity_20p0.xsd

- QualifiedDataType_20p0.xsd

- ISO_ISOTwo-letterCountryCode_SecondEdition2006.xsd

- UNECE_AddressType_D16A.xsd

- UNECE_DocumentNameCode_D16A.xsd

- UNECE_MeasurementUnitCommonCodeWeight_4.xsd

- UNECE_PackageTypeCode_2006.xsd

- UNECE_ProcessTypeCode_D16A.xsd

- UNECE_ReferenceTypeCode_D16A.xsd

- UNECE_StatusCode_D16A.xsd

- UNECE_TransportModeCode_2.xsd

- UnqualifiedDataType_20p0.xsd

The XSDs above have been used to create a sample XML instance file (see Appendix B.1) and also the corresponding Message Implementation Guide (see Table 14, Section 8.2).

6.2.2 e-SPS Acknowledgment

To create the e-SPS Acknowledgment, as a subset of e-Cert, 7 standard XSDs have been used, most of which have required some level of customization (e.g. to remove unwanted data elements and codes):

- SPSAcknowledgement_16p0.xsd

- ReusableAggregateBusinessInformationEntity_20p0.xsd

- QualifiedDataType_20p0.xsd

- UNECE_DocumentNameCode_D16A.xsd

- UNECE_ReferenceTypeCode_D16A.xsd

- UNECE_StatusCode_D16A.xsd

- UnqualifiedDataType_20p0.xsd

The XSDs above have been used to create a sample XML instance file (see Appendix B.6) and also the corresponding Message Implementation Guide (see Table 15, Section 8.2).

7 Operational Certification Procedure

This section details the approach of Task 5 of the TOR; "*Develop the Electronic Operational Certification Procedure for e-SPS*".

7.1 Objectives

For the purpose of implementing the electronic exchange of the Animal Health Certificate (hereinafter referred to as the "e-AH Certificate") between the ASEAN Member States (AMS) via the ASEAN Single Window (ASW), the following operational procedures on the issuance, exchange and verification of the Animal Health Certificate, shall be observed.

7.2 Coverage of the Animal Health Certificate Exchange

The implementation of the electronic Animal Health Certificate for AMS shall cover:

- Veterinary Certificates for Live Animals, Hatching Eggs and Products of Animal Origin
- Health Certificates for Live Aquatic Animals and Products of Aquatic Animal Origin

Please note that the scope of the electronic Animal Health Certificate does not cover products for human consumption, including products of Animal of Origin (e.g. meat) and products of Aquatic Origin (e.g. fish). Products for human consumption will be covered by a separate electronic Food Safety Certificate.

Article 1. Definition of Terms

1.1 Animal Health Certification

The procedure by which official certification bodies and officially recognized bodies, hereinunder referred to as the Competent Authority, provide written, electronic or equivalent assurance that the consigned animals / live aquatic animals, hatching eggs and products of animal / aquatic animal origin, conform to OIE's Terrestrial Animal Health Code or Aquatic Animal Health Code.

1.2 Animal Health Certificate

An authorized document which provides a statement, declaration or assurance on the compliance of an animal / aquatic animal or a product of animal / aquatic animal origin issued by the Competent Authority (Export) in compliance to the requirements of the Competent Authority (Import).

1.3 Electronic Animal Health (e-AH) Certificate

The electronic Animal Health Certificate or e-AH Certificate is the electronic equivalent of the wording and date of the Animal Health Certificate in paper form, based on the UN/CEFACT e-Cert, and the ASW e-AH Certificate Message Implementation Guide (see Section 8) as agreed by the ASEAN Member States, including the certifying statement, and to be exchanged electronically between the Competent Authority (Export) and the Competent Authority (Import) thru the ASEAN Single Window.

1.4 UN/CEFACT e-Cert Standard

The standard message for certification as defined by UN/CEFACT.

1.5 Consignment

A separately identifiable collection of goods items to be transported or available to be transported from one consignor to one consignee via one or more modes of transport where each consignment is the subject of one single transport contract.

1.6 Cross Border

Where a consignment moves from one jurisdiction, i.e. territorial range of authority or control, to another.

1.7 Competent Authority (Export)

The competent authority charged by a government with the control, inspection and/or certification of animals / aquatic animals and products of animal / aquatic animal origin for export.

1.8 Competent Authority (Import)

The competent authority charged by a government with the control and clearance of animals / aquatic animals and products of animal / aquatic animal origin upon importation.

1.9 Exporter

A natural or juridical person located in the territory of a Member State where a good is exported from by such a person.

1.10 Importer

A natural or juridical person located in the territory of a Member State where a good is imported into by such a person.

1.11 Certification System

The system used by the respective AMS to issue, exchange and receive export SPS Certificates, e.g. Animal Health Certificates, between trading partners for agricultural commodities e.g. animals / aquatic animals and products of animal / aquatic animal origin.

1.12 ASEAN Single Window

A unique regional initiative that connects and integrates National Single Windows (NSWs) of Member States, as defined in Article 5(a) of the Protocol of Legal Framework (PLF). The ASW objective is to expedite cargo clearance within the context of increased economic integration in ASEAN.

1.13 National Single Window

A National Single Window (NSW) is an electronic system to facilitate trade, increase efficiency of the Government delivery system and provide benefits to all ASEAN Members States, as defined in Article 5(c) of the Protocol on the Legal Framework.

1.14 Protocol on the Legal Framework (PLF)

The framework of agreement on the implementation of the ASEAN Single Window, as agreed on 4 September 2015.

Article 2. Authorities issuing Animal Health Certificates

2.1 The Member States shall authorize their respective Competent Authorities for the issuance of the corresponding Animal Health Certificate on animals / aquatic animals and products of animal / aquatic animal origin.

2.2 The Competent Authority shall provide a list of the names, addresses, specimen signatures of the authorized and qualified officers issuing the corresponding Animal Health Certificates, in hard copy and soft copy format, through the ASEAN Secretariat for dissemination to other AMS in soft copy format.

2.3 Any change in the said list shall be promptly provided in the same manner.

2.4 The specimen signatures and official seals of the issuing authorities, compiled by the ASEAN Secretariat, shall be updated annually. Any Animal Health Certificate issued by a Competent Authority (Export) official not included in the list referred to in paragraph 2.1 shall not be honored by the receiving Competent Authority (Import).

Article 3. Obtaining the Importing Country's Animal Health Requirements

3.1 The purpose of the animal health certification is to confirm that the animal health requirements of the Competent Authority (Import) have been meet.

3.2 The requirements for commodities exported shall be provided by the Competent Authority (Import) officially, and upon adoption, the publication and transmission to the AMS which may directly be affected by such measures.

3.3 The Competent Authority (Import) may also issue an import permit to the importer, with such permit providing animal health requirements on such commodities. The import permit shall be transmitted by the importer to the exporter, and for the exporter to secure the necessary certification from the Competent Authority (Export) to ensure compliance to the import requirements.

Article 4. Application and Issuance of Animal Health Certificates

4.1 Exporter application for animal health certification. The exporter shall apply for the issuance of the corresponding Animal Health Certificate from the Competent Authority (Export), by providing the animal health information parameters in Table 9 (see Section 5.2).

The exporter shall also submit the required supporting documents to the application for animal health certification e.g. a copy of the import permit issued to the Consignee/Importer by the Competent Authority (Import).

4.2 Competent Authority (Export) Verification

4.2.1 Purpose of Animal Health Certification

Certification for export refers to the Animal Health Certificate as issued by the Competent Authority (Export) for a consignment of animals / aquatic animals or products of animal / aquatic animal origin, for importation and clearance by the Competent Authority (Import)

4.2.2 Compliance to data requirements

- Contain the necessary information to clearly identify the consignment;
- The unit of measurement to be used in the description of the consignment and for other declared quantities;

- All sections of the Animal Health Certificate shall be completed, with valid information or "none" if not applicable.

4.2.3 Compliance to import requirements

- Review of the official notifications from importing countries;
- Review of conditions and additional requirements as may be indicated in an import permit;
- The period of time allowed for the issuance after inspection or treatment and/or quarantine, and the period of time between the issuance of the Animal Health certification and the dispatch of the consignment from the exporting country.

4.3 Competent Authority (Export) Inspection

- The Competent Authority shall assign an authorized inspector and schedule the date of inspection
- The authorized inspector shall conduct of inspection at exporter premises or at the Competent Authority premises; if necessary, the inspection may include testing, treatment and other verification such as further laboratory tests of samples.
- The report on the result of inspection and recommendations of the authorized inspector, i.e., for the issuance of animal health certification and/or application of proper animal health measures to ensure compliance to import requirements, or the non-issuance of the Animal Health Certificates for non-compliant consignments.

4.4 Animal Health Certificate Statement

For animals, hatching eggs and products of animal origin, the Animal Health Certificate shall state that - *"The undersigned Official Veterinarian / Certifying Official certifies that the animal(s)/hatching eggs described above satisfy(ies) the following requirements:".*

For aquatic animals, gametes and products of aquatic animal origin, the Animal Health Certificate shall state that – *"The undersigned Certifying Official certifies that the animal(s)/gametes described above satisfy(ies) the following requirements:".*

4.5 Approval of the Animal Health Certificate

The Competent Authority's authorized officer shall review the report of inspection and endorsement for approval and issuance of the Animal Health Certificate. If compliant to the import requirements, the Competent Authority's authorized officer shall approve and sign on the Animal Health Certificate.

4.6 Issuance of the Animal Health Certificate

The Competent Authority (Export) shall print the Animal Health Certificate in OIE's model veterinary or health certificate form and format, to be signed by the Competent Authority authorized officer and stamped with the Competent Authority stamp.

The Animal Health Certificate shall be issued to the exporter, and shall accompany the consignments for which they have been issued. The Animal Health Certificate may also be transmitted by mail, courier or other means, if acceptable by the Competent Authority (Import).

4.7 Generation and transmission of the e-AH Certificate

Upon approval of the Animal Health Certificate, the Certification System shall automatically generate the e-AH Certificate following the ASW e-AH Certificate Message Implementation Guide (see Section 8), and shall be transmitted by the Competent Authority (Export) to the Competent Authority (Import) thru the ASW.

Article 5. Use of the Animal Health Certificate for Quarantine Clearance

5.1 Receipt of the Animal Health Certificate by the Competent Authority (Import)

The Animal Health Certificate shall be presented by the importer, together with the request for animal health inspection and other documents (commercial invoice, packing list, AWB/BL, import declaration, etc. The Competent Authority (Import) shall validate the integrity of the said Certificate vis-à-vis the e-AH Certificate directly transmitted by the Competent Authority (Export).

5.2 Unacceptable Animal Health Certificate

The Animal Health Certificate may be rejected by the Competent Authority (Import) if said certificate is deemed invalid or fraudulent, based on the criteria below.

5.2.1 Invalid Animal Health Certificate

- Incomplete of incorrect information
- False or misleading information
- Conflicting of inconsistent information
- Wording or information inconsistent with OIE's model certificates
- Containing information added by unauthorized person
- Unauthorized alterations or deletions
- Unauthorized, not stamped, dated or countersigned
- Expired period of validity
- Ineligible
- Certificates issued for prohibited imports

5.2.1 Fraudulent Animal Health Certificate

- Information in the Animal Health Certificate is not consistent with the e-AH Certificate transmitted by the Competent Authority (Export)
- Issued on non-authorized form
- Not dated, stamped, marked or sealed
- Not signed by Competent Authority's authorized officer
- Issued by persons who are not authorized officers of the Competent Authority

The Animal Health Certification System of the Competent Authority (Export) shall have automated syntax validation to ensure that the Animal Health Certificate is compliant to the data requirements, thereby eliminating clerical errors, incomplete information or providing alterations or deletions.

The transmission of the e-AH Certificate by the Competent Authority (Export) directly to the Competent Authority (Import), serves as a deterrent to invalid or fraudulent Animal Health

Certificates since the Competent Authority (Import) will be able to easily detect invalid or fraudulent Certificates.

The e-AH Certificate may be verified vis-à-vis the import permit and import requirements. The inclusion of the import permit reference number in the e-AH Certificate may facilitate and enable automated verification prior to arrival and the conduct of the animal health inspection by the Competent Authority (Import).

5.3 If there are no derogatory or negative findings during the physical animal health inspection of the consignment at the port of entry, the Competent Authority authorized officer shall clear the consignment for release.

Article 6. e-AH Certificate Exchange

6.1 Animal Health Certification System

The Competent Authority shall maintain its animal health certification system for the application, review, report of the findings inspection and laboratory tests, if any, and the approval and issuance of the Animal Health Certificate.

The system may enable accredited or registered exporters to submit their application for animal health certification online, the verification and submission of inspection findings, indicating compliance to the import animal health requirements, and the approval and issuance of the Animal Health Certificate. The system shall be configured to generate the corresponding e-AH Certificate for transmission to the Competent Authority (Import).

The Competent Authority shall periodically review the effectiveness of all aspects of export its Animal Health Certification System and implement changes to the system, to ensure compliance to the requirements of the importing country.

The Animal Health Certification System shall also be used in the receipt of the e-AH Certificate transmitted by the Competent Authority (Export), for verification vis-à-vis the import certification and permit requirements, input of the report of findings on the quarantine inspection of consignment upon arrival at the port of entry, and the subsequent approval of quarantine clearance and release of the consignment to the importer.

6.2 e-AH Certificate

The e-AH Certificate, based on the e-AH Certificate Message Implementation Guide as agreed by the AMS (see Section 8), shall have equivalence to the paper Animal Health Certificate, including the certifying statement, and transmitted via authenticated and secure electronic means, i.e. thru the ASW.

Upon its approval, the e-AH Certificate will be transmitted by the Competent Authority (Export) to the Competent Authority (Import), and shall serve as the basis for determining compliance of the consignment to the import requirements of the Competent Authority (Import), as well as for the subsequent inspection and quarantine clearance of the consignment.

6.3 Rejection of the e-AH Certificate

The e-AH Certificate may be rejected automatically by the Animal Health Certification System of Competent Authority (Import) if it is non-compliant to the ASW e-AH Certificate MIG, per Section 1.4.

Further, the Competent Authority (Import) may reject the e-AH Certificate and require the Competent Authority (Export) to issue a replacement of the Animal Health Certificate prior to actual physical quarantine inspection upon arrival of the consignment, if the certification issued does not comply with the import animal health requirements.

6.4 Validity of the e-AH Certificate

The e-AH Certificate shall be issued per consignment and shall have limited duration of the validity as may be determined by the Competent Authority (Export), considering the handling, storage and the high perishability nature of the consignment.

6.5 Electronic Retention and Data Archiving

The Competent Authorities shall maintain records on animal health certification for verification and traceability, for a period of three (3) years.

8   Technical Specifications

This section details the approach of Task 6 of the TOR; "*Develop the e-SPS message implementation guide, export declaration business process flow, process specifications, including the XML Schema Definition (XSD)*".

8.1   Process Specifications

Figure 2 below provides a more detailed process flow of the e-AH Certificate, including the ASW Gateway's Acknowledgement Status messages and an optional e-SPS Acknowledgement, which can also be used when exchange e-AH Certificates with non-ASEAN countries.
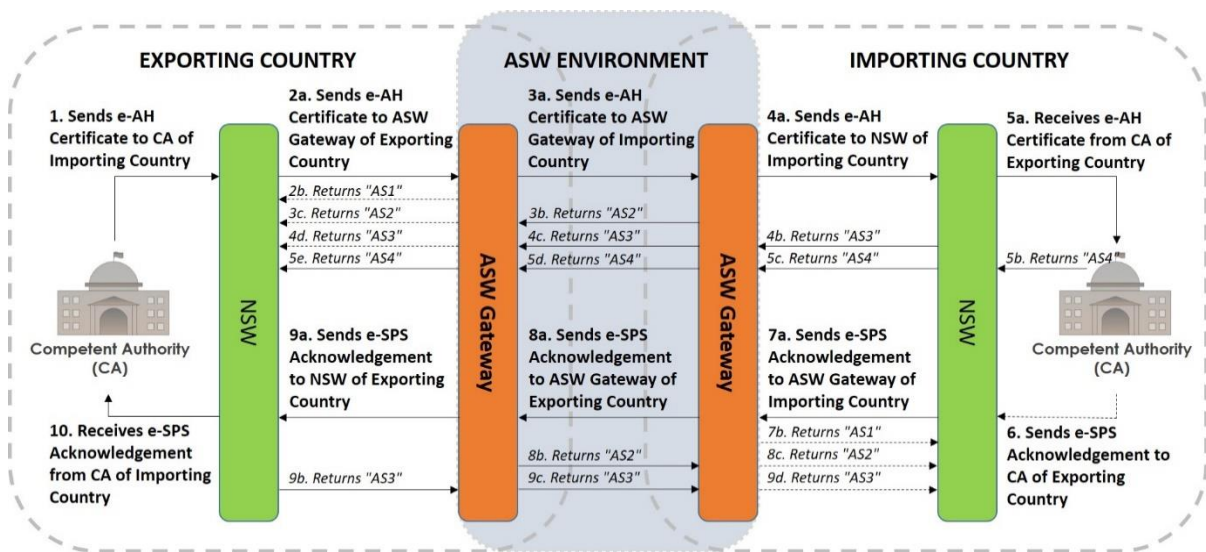

Figure 2 – Detailed Process Flow

The step-by-step processes for sending an e-AH Certificate and sending an e-SPS Acknowledgement are based on the *Generic Message Implementation Guide* and are detailed below.

8.1.1.1   Sending an e-AH Certificate

As shown in Figure 2, and described in more detail in Table 12, the process for sending an e-AH Certificate starts with the CA of the Exporting Country (Step 1) and ends when they receive an Acknowledgement Status ("AS4") message from the CA of the Importing Country (Step 5e).

Table 12: Step-by-Step Process for Sending an e-AH Certificate

Step	Description	Implementation Notes
1	The CA of the Exporting Country sends an e-AH Certificate to the CA of the Importing Country via the NSW of the Exporting Country. *Please note that this step is Mandatory.*	An e-AH Certificate is sent by the CA of the Exporting Country either from a back-end system or using a facility within the NSW.

Step	Description	Implementation Notes
2a	The NSW of the Exporting Country sends the e-AH Certificate to the ASW Gateway of the Exporting Country. *Please note that this step is Mandatory.*	The e-AH Certificate is sent to the ASW Gateway of the Exporting Country as a message, in accordance with the Message Implementation Guide, outlined in Table 12, Section 8.2. *It is recommended that XML schemas are used to validate the e-AH Certificate <u>before</u> it is encapsulated within the Common Header.* *Appendix B.1 provides an example of an e-AH Certificate, encapsulated within the Common Header, where "SequenceNo" should be set to "1" and "FunctionCode" should be set to "9" to indicate an original document.*
2b	The ASW Gateway of the Exporting Country returns an Acknowledgement Status to the NSW of the Exporting Country. *Please note that this step is Optional.*	The ASW Gateway's "AS1" message will be used for this Acknowledgement Status, in accordance with the Generic Message Implementation Guide. *Appendix B.2 provides an example of an "AS1" message, where the "Reference Document" must specify the details of the e-AH Certificate being sent, including its unique reference number, its type and the date when it was sent.*
3a	The ASW Gateway of the Exporting Country sends the e-AH Certificate to the ASW Gateway of the Importing Country. *Please note that this step is Mandatory.*	The message must be the same as Step 2a.
3b	The ASW Gateway of the Importing Country returns an Acknowledgement Status to the ASW Gateway of the Exporting Country. *Please note that this step is Mandatory.*	The ASW Gateway's "AS2" message will be used for this Acknowledgement Status, in accordance with the Generic Message Implementation Guide. *Appendix B.3 provides an example of an "AS2" message, where the "Reference Document" must specify the details of the e-AH Certificate being sent, including its unique reference number, its type and the date when it was sent.*
3c	The ASW Gateway of the Exporting Country returns the Acknowledgement Status to the NSW of the Exporting Country.	The message must be the same as Step 3b.

Step	Description	Implementation Notes
	Please note that this step is Optional.	
4a	The ASW Gateway of the Importing Country sends the e-AH Certificate to the NSW of the Importing Country. *Please note that this step is Mandatory.*	The message must be the same as Step 2a.
4b	The NSW of the Importing Country returns an Acknowledgement Status to the ASW Gateway of the Importing Country. *Please note that this step is Mandatory.*	The ASW Gateway's "AS3" message will be used for this Acknowledgement Status, in accordance with the Generic Message Implementation Guide. *Appendix B.4 provides an example of an "AS3" message, where the "Reference Document" must specify the details of the e-AH Certificate being sent, including its unique reference number, its type and the date when it was sent.*
4c	The ASW Gateway of the Importing Country returns the Acknowledgement Status to the ASW Gateway of the Exporting Country. *Please note that this step is Mandatory.*	The message must be the same as Step 4b.
4d	The ASW Gateway of the Exporting Country returns the Acknowledgement Status to the NSW of the Exporting Country. *Please note that this step is Optional.*	The message must be the same as Step 4b.
5a	The CA of the Importing Country receives the e-AH Certificate from the CA of the Exporting Country via the NSW of the Exporting Country. *Please note that this step is Mandatory.*	The e-AH Certificate is received from the CA of the Exporting Country either into a back-end system or using a facility within the NSW. *It is recommended that XML schemas are used to validate the e-AH Certificate after it is has been extracted from the Common Header.*
5b	The CA of the Importing Country returns an Acknowledgement Status to the NSW of the Importing Country. *Please note that this step is Mandatory.*	The ASW Gateway's "AS4" message will be used for this Acknowledgement Status, in accordance with the Generic Message Implementation Guide. *At this point, if the XML was successfully validated in Step 5a and processed by the Recipient, "CategoryCode" should be set to "REC". If the XML could not be processed, "CategoryCode" should be set to "NOT".*

Step	Description	Implementation Notes
		Appendix B.5 provides an example of an "AS4" message, where the "Reference Document" must specify the details of the e-AH Certificate being sent, including its unique reference number, its type and the date when it was sent.
5c	The NSW of the Importing Country returns the Acknowledgement Status to the ASW Gateway of the Importing Country. *Please note that this step is Mandatory.*	The message must be the same as Step 5b.
5d	The ASW Gateway of the Importing Country returns the Acknowledgement Status to the ASW Gateway of the Exporting Country. *Please note that this step is Mandatory.*	The message must be the same as Step 5b.
5e	The ASW Gateway of the Importing Country returns the Acknowledgement Status to the NSW of the Exporting Country. *Please note that this step is Optional.*	The message must be the same as Step 5b.

8.1.1.2   Sending an e-SPS Acknowledgement

As shown in Figure 2, and described in more detail in Table 13, the process for sending an e-SPS Acknowledgement starts with the CA of the Importing Country (Step 6) and ends when the CA of the Exporting Country receives it (Step 10).

Table 13: Step-by-Step Process for Sending an e-SPS Acknowledgement

Step	Description	Implementation Notes
6	The CA of the Importing country sends an e-SPS Acknowledgement to the CA of the Exporting Country via the NSW of the Importing Country. *Please note that this step is Optional.*	An e-SPS Acknowledgement is sent by the CA of the Exporting Country either from a back-end system or using a facility within the NSW.
7a	The NSW of the Importing Country sends the e-SPS Acknowledgement to the ASW Gateway of the Importing Country. *Please note that this step is Mandatory, if an e-SPS Acknowledgement has been sent in Step 6.*	The e-SPS Acknowledgement is sent to the ASW Gateway of the Importing Country as a message, in accordance with the Message Implementation Guide, outlined in Table 13, Section 8.2. *It is recommended that XML schemas are used to validate the e-SPS Acknowledgement before it is*

Step	Description	Implementation Notes
		encapsulated within the Common Header. *Appendix B.6 provides an example of an e-SPS Acknowledgement, encapsulated within the Common Header, where "SequenceNo" should be incremented by "1" and "FunctionCode" should be set to either "29" to indicate the message was accepted or; "27" to indicate that the message was not accepted.*
7b	The ASW Gateway of the Importing Country returns an Acknowledgement Status to the NSW of the Importing Country. *Please note that this step is Optional.*	The ASW Gateway's "AS1" message will be used for this Acknowledgement Status, in accordance with the Generic Message Implementation Guide. *Appendix B.2 provides an example of an "AS1" message, where the "Reference Document" must specify the details of the e-SPS Acknowledgment being sent, including its unique reference number, its type and the date when it was sent.*
8a	The ASW Gateway of the Importing Country sends the e-SPS Acknowledgement to the ASW Gateway of the Exporting Country. *Please note that this step is Mandatory, if an e-SPS Acknowledgement has been sent in Step 6.*	The message must be the same as Step 7a.
8b	The ASW Gateway of the Exporting Country returns an Acknowledgement Status to the ASW Gateway of the Importing Country. *Please note that this step is Mandatory, if an e-SPS Acknowledgement has been sent in Step 6.*	The ASW Gateway's "AS2" message will be used for this Acknowledgement Status, in accordance with the Generic Message Implementation Guide. *Appendix B.3 provides an example of an "AS2" message, where the "Reference Document" must specify the details of the e-SPS Acknowledgement being sent, including its unique reference number, its type and the date when it was sent.*
8c	The ASW Gateway of the Importing Country returns the Acknowledgement Status to the NSW of the Importing Country. *Please note that this step is Optional.*	The message must be the same as Step 8b.
9a	The ASW Gateway of the Exporting Country sends the e-SPS	The message must be the same as Step 7a.

Step	Description	Implementation Notes
	Acknowledgement to the NSW of the Exporting Country. *Please note that this step is Mandatory, if an e-SPS Acknowledgement has been sent in Step 6.*	
9b	The NSW of the Exporting Country returns an Acknowledgement Status to the ASW Gateway of the Exporting Country. *Please note that this step is Mandatory, if an e-SPS Acknowledgement has been sent in Step 6.*	The ASW Gateway's "AS3" message will be used for this Acknowledgement Status, in accordance with the Generic Message Implementation Guide. *Appendix B.4 provides an example of an "AS3" message, where the "Reference Document" must specify the details of the e-SPS Acknowledgement being sent, including its unique reference number, its type and the date when it was sent.*
9c	The ASW Gateway of the Exporting Country returns the Acknowledgement Status to the ASW Gateway of the Importing Country. *Please note that this step is Mandatory, if an e-SPS Acknowledgement has been sent in Step 6.*	The message must be the same as Step 9b.
9d	The ASW Gateway of the Importing Country returns the Acknowledgement Status to the NSW of the Importing Country. *Please note that this step is Optional.*	The message must be the same as Step 9b.
10	The CA of the Exporting Country receives the e-SPS Acknowledgment from the CA of the Importing country via the NSW of the Importing Country. *Please note that this step is Mandatory, if an e-SPS Acknowledgement has been sent in Step 6.*	The e-SPS Acknowledgement is received from the CA of the Exporting Country either into a back-end system or using a facility within the NSW. *It is recommended that XML schemas are used to validate the e-SPS Acknowledgement after it is has been extracted from the Common Header.*

8.2 Message Implementation Guide

The Message Implementation Guide contains the detailed technical specifications for both the e-AH Certificate and e-SPS Acknowledgment. The Acknowledgment Status messages (AS-1, AS-2 and AS-3), which were designed as generic messages for the ASW Gateway, are documented separately.

Details of how to create a UN/CEFACT compliant XML instance file for the e-AH Certificate and e-SPS Acknowledgment are provided in Tables 14 and 15. Each table consists of 6 columns:

- **XML Tag Name** – the name of the XML tag as defined in the UN/CEFACT compliant XSDs for the e-Cert message (see Section 6.2)

- **Description** – a description of the data element

- **Occurs** - the minimum and maximum number of occurrences of the data element or group of data elements, depending on whether they are optional or mandatory. For example, "0..1" and "0..n" are used to indicate a minimum occurrence of zero (i.e. optional) with maximum occurrences of one or unlimited, respectively. Mandatory data elements are indicated using "1..1" or "1..n".

- **Box No.** – the unique number used to identify an Animal Health Information Parameter, which can be used as a cross-reference against Table 9 (see Section 5.2).

- **Format** – the recommended format of the data element, where "a" indicates alphabetic characters, "n" indicates numeric characters and "an" indicates alphanumeric characters. For example, "a3" indicates 3 fixed alphabetic characters, whereas as "an..3" indicates up to 3 alphanumeric characters. Decimal points are also used for monetary amounts, exchange rates and weight measurements and (e.g. "n..16.2").

- **Comments** – contains further information about the data element, such as the format of a date or recommended code lists.

Further information can be found in the Appendices. Appendix A contains a complete list of code lists, including links to standards where applicable, and Appendix B contains example XML instance files for both the e-AH Certificate and e-SPS Acknowledgment.

Table 14: e-AH Certificate – XML Structure

XML Tag Name	Description	Occurs	Box No.	Format	Comments
<rsm:SPSCertificate>		1..1			
<rsm:SPSExchangedDocument>	Details about the certificate.	1..1			
<ram:Name>	The name of the certificate.	1..1		an..35	Set to "Animal Health Certificate"
<ram:ID>	The unique identifier of the certificate.	1..1	I.2, IIa	an..35	
<ram:Description>	A description of the certificate, if applicable.	0..1		an..512	
<ram:TypeCode>	The type of certificate, coded.	1..1		n3	Set to "648" *Note: This is the international (UN) standard code for "Certificate of compliance with standards of the World Organization for Animal Health (OIE)"*
<ram:SubTypeCode>	The sub-type of certificate, coded.	1..1		n1	See Appendix A.1
<ram:StatusCode>	The status of the certificate, coded.	1..1		n..2	See Appendix A.2
<ram:IssueDateTime>	The date when the certificate was issued.	1..1		an10	CCYY-MM-DD
<ram:IssuerSPSParty>	The authority who issued the certificate.	1..1			
<ram:ID>	A unique identifier of the issuing authority, if applicable e.g. a country code.	1..1	I.3	an..17	National codes
<ram:Name>	The name of the issuing authority e.g. "Ministry of Agriculture".	1..1	I.3	an..70	
<ram:ReferenceSPSReferencedDocument>	To provide details of CITES Permit(s), if applicable.	0..9			
<ram:IssueDateTime>	The date when the CITES Permit was issued, if applicable.	0..1	I.14	an10	CCYY-MM-DD

XML Tag Name	Description	Occurs	Box No.	Format	Comments
<ram:RelationshipTypeCode>	The code used to indicate that the type of referenced document is an import permit, if applicable.	1..1	I.14	a2	Set to "IP'
<ram:ID>	The CITES Permit No.	1..1	I.14	an..35	
<ram:SignatorySPSAuthentication>	Details about the certification.	1..1			
<ram:ActualDateTime>	The actual date of certification.	1..1	IIb	an10	CCYY-MM-DD
<ram:ProviderSPSParty>	The party who certified the certificate, if different from the issuing authority.	1..1			
<ram:Name>	The name of the certifying party.	1..1	IIb	an..70	
<ram:SpecifiedSPSAddress>	The address of the certifying party, if applicable.	0..1			
<ram:PostcodeCode>	The postcode of the address, if applicable.	0..1	IIb	an..9	
<ram:LineOne>	The first line of the address, if applicable.	0..1	IIb	an..70	
<ram:LineTwo>	The second line of the address, if applicable.	0..1	IIb	an..70	
<ram:LineThree>	The third line of the address, if applicable.	0..1	IIb	an..70	
<ram:LineFour>	The fourth line of the address, if applicable.	0..1	IIb	an..70	
<ram:LineFive>	The fifth line of the address, if applicable.	0..1	IIb	an..70	
<ram:CityName>	The name of the city in the address, if applicable.	0..1	IIb	an..35	
<ram:CountryID>	The code of the country in the address, if applicable.	0..1	IIb	a2	See Appendix A.3
<ram:TypeCode>	The type of address, coded, if applicable.	0..1	IIb	n1	See Appendix A.4
<ram:CountryName>	The name of the country in the address, if applicable.	0..1	IIb	an..35	
<ram:CountrySubDivisionID>	The unique identifier of the country sub-division (e.g. state, province) in the address, if applicable.	0..1	IIb	an..9	National codes

XML Tag Name	Description	Occurs	Box No.	Format	Comments
<ram:CountrySubDivisionName>	The name of the country sub-division (e.g. state, province) in the address, if applicable.	0..1	IIb	an..70	
<ram:CityID>	The unique identifier of the city in the address using the UN/LOCODE, if applicable.	0..1	IIb	an5	See Appendix A.5
<ram:SpecifiedSPSPerson>	The person who provided the certification, if applicable.	0..1			
<ram:Name>	The name of the Official Veterinarian / Certifying Official.	1..1	IIb	an..70	
<ram:Role>	The role of the Official Veterinarian / Certifying Official.	1..1	IIb	an..70	
<ram:IncludedSPSClause>	The clause relevant to the certificate.	1..1			
<ram:ID>	The unique identifier of the clause.	1..1	II	n..2	See Appendix A.6
<ram:Content>	The associated text of the clause	1..1	II	an..512	
<rsm:SPSConsignment>	Details about the consignment.	1..1			
<ram:ExportExitDateTime>		0..1	I.11	an10	CCYY-MM-DD
<ram:ConsignorSPSParty>	The consignor / exporter of the products on the certificate.	1..1			
<ram:ID>	A unique identifier of the consignor / exporter, if applicable, such as a national business registration number.	0..1	I.1	an..17	National codes
<ram:Name>	The name of the consignor / exporter.	1..1	I.1	an..70	
<ram:SpecifiedSPSAddress>	The address of the consignor / exporter, if applicable.	0..1			
<ram:PostcodeCode>	The postcode of the address, if applicable.	0..1	I.1	an..9	
<ram:LineOne>	The first line of the address, if applicable.	0..1	I.1	an..70	
<ram:LineTwo>	The second line of the address, if applicable.	0..1	I.1	an..70	
<ram:LineThree>	The third line of the address, if applicable.	0..1	I.1	an..70	

XML Tag Name	Description	Occurs	Box No.	Format	Comments
<ram:LineFour>	The fourth line of the address, if applicable.	0..1	I.1	an..70	
<ram:LineFive>	The fifth line of the address, if applicable.	0..1	I.1	an..70	
<ram:CityName>	The name of the city in the address, if applicable.	0..1	I.1	an..35	
<ram:CountryID>	The code of the country in the address, if applicable.	0..1	I.1	a2	See Appendix A.3
<ram:TypeCode>	The type of address, coded, if applicable.	0..1	I.1	n1	See Appendix A.4
<ram:CountryName>	The name of the country in the address, if applicable.	0..1	I.1	an..35	
<ram:CountrySubDivisionID>	The unique identifier of the country sub-division (e.g. state, province) in the address, if applicable.	0..1	I.1	an..9	National codes
<ram:CountrySubDivisionName>	The name of the country sub-division (e.g. state, province) in the address, if applicable.	0..1	I.1	an..70	
<ram:CityID>	The unique identifier of the city in the address using the UN/LOCODE, if applicable.	0..1	I.1	an5	See Appendix A.5
<ram:ConsigneeSPSParty>	The consignee of the products on the certificate.	1..1			
<ram:ID>	A unique identifier of the consignee, if applicable, such as a national business registration number.	0..1	I.4	an..17	National codes
<ram:Name>	The name of the consignee.	1..1	I.4	an..70	
<ram:SpecifiedSPSAddress>	The address of the consignee, if applicable.	0..1			
<ram:PostcodeCode>	The postcode of the address, if applicable.	0..1	I.4	an..9	
<ram:LineOne>	The first line of the address, if applicable.	0..1	I.4	an..70	
<ram:LineTwo>	The second line of the address, if applicable.	0..1	I.4	an..70	

XML Tag Name	Description	Occurs	Box No.	Format	Comments
<ram:LineThree>	The third line of the address, if applicable.	0..1	I.4	an..70	
<ram:LineFour>	The fourth line of the address, if applicable.	0..1	I.4	an..70	
<ram:LineFive>	The fifth line of the address, if applicable.	0..1	I.4	an..70	
<ram:CityName>	The name of the city in the address, if applicable.	0..1	I.4	an..35	
<ram:CountryID>	The code of the country in the address, if applicable.	0..1	I.4	a2	See Appendix A.3
<ram:TypeCode>	The type of address, coded, if applicable.	0..1	I.4	n1	See Appendix A.4
<ram:CountryName>	The name of the country in the address, if applicable.	0..1	I.4	an..35	
<ram:CountrySubDivisionID>	The unique identifier of the country sub-division (e.g. state, province) in the address, if applicable.	0..1	I.4	an..9	National codes
<ram:CountrySubDivisionName>	The name of the country sub-division (e.g. state, province) in the address, if applicable.	0..1	I.4	an..70	
<ram:CityID>	The unique identifier of the city in the address using the UN/LOCODE, if applicable.	0..1	I.4	an5	See Appendix A.5
<ram:ExportSPSCountry>	The country where the products on the certificate are being exported from.	1..1			
<ram:ID>	The code of the export country.	1..1	I	a2	See Appendix A.3
<ram:Name>	The name of the export country.	1..1	I	an..35	
<ram:LoadingBaseportSPSLocation>	The location where the consignment will be loaded, if applicable.	0..1			
<ram:ID>	The unique identifier of the loading location using the UN/LOCODE, if applicable.	0..1	I.10	an5	See Appendix A.5
<ram:Name>	The name of the loading location.	1..1	I.10	an..256	

XML Tag Name	Description	Occurs	Box No.	Format	Comments
<ram:ImportSPSCountry>	The country where the products on the certificate are being imported into.	1..1			
<ram:ID>	The code of the import country.	1..1	I.7	a2	See Appendix A.3
<ram:Name>	The name of the import country.	1..1	I.7	an..35	
<ram:SubordinateSPSCountrySubDivision>	The sub-division (e.g. state, province) of the export country from where the products on the certificate are being exported, if applicable.	0..1			
<ram:ID>	The unique identifier of the country sub-division, if applicable.	0..1	I.8	an..9	National codes
<ram:Name>	The name of the country sub-division.	1..1	I.8	an..70	
<ram:HierarchicalLevelCode>	The level of the country sub-division.	1..1	I.8	an..3	Set to "1"
<ram:UnloadingBaseportSPSLocation>	The location where the consignment will be unloaded, if applicable.	0..1			
<ram:ID>	The unique identifier of the unloading location using the UN/LOCODE, if applicable.	0..1	I.13	an5	See Appendix A.5
<ram:Name>	The name of the unloading location.	1..1	I.13	an..256	
<ram:MainCarriageSPSTransportMovement>	Transport details relating to the consignment, if applicable.	0..1			
<ram:ID>	The unique identifier of the transport, if applicable, such as a voyage number, flight number, or railcar identification number.	0..1	I.12	an..25	Sea: ITU Standard or Lloyd's number; Air: IATA aircraft ID; Road: national license plate; Rail: locomotive number
<ram:ModeCode>	The mode of transport, coded.	1..1	I.12	n1	See Appendix A.7
<ram:UsedSPSTransportMeans>	The means of transport, if applicable.	0..1			
<ram:Name>	The name of the means of transport.	1..1	I.12	an..35	

XML Tag Name	Description	Occurs	Box No.	Format	Comments
<ram:UtilizedSPSTransportEquipment>	Transport equipment, if applicable, such as containers, utilized for the consignment.	0..9			
<ram:ID>	The unique identifier of the utilized transport equipment.	1..1	I.20	an..17	ISO 6346, IATA
<ram:AffixedSPSSeal>	Seals on the utilized transport equipment, if applicable.	0..9			
<ram:ID>	The unique identifier of the seal.	1..1	I.20	an..35	
<ram:SettingSPSTemperature>	The transport / storage temperature.	0..1			
<ram:ValueMeasure unitCode="CEL">	The value of the temperature, measured in degrees Celsius.	1..1	I.18		
<ram:IncludedSPSConsignmentItem>	Consignment items, grouped by type of cargo.	1..1			
<ram:NatureIdentificationSPSCargo>		0..1			
<ram:TypeCode>	The type of import or admission for the cargo, coded.	1..1	I.23	an2	See Appendix A.8
<ram:IncludedSPSTradeLineItem>	List of products on the certificate.	1..999			
<ram:SequenceNumeric>	A sequence number of the product.	1..1	I.24	n..3	
<ram:Description>	The description of the product.	1..1	I.15	an..256	
<ram:CommonName>	The common name of the product, if applicable.	0..1	I.24	an..35	
<ram:ScientificName>	The scientific name of the product, if applicable.	0..1	I.24	an..35	
<ram:ProductionBatchID>	A unique identifier of the batch for this product e.g. batch number, if applicable.	0..1	I.24	an..17	
<ram:IntendedUse>	The intended use of the product, if applicable.	0..1	I.22	an..35	See Appendix A.9
<ram:NetWeightMeasure unitCode="KGM">	The net weight of the product, if applicable.	0..1	I.17	n..13.n3	See Appendix A.10
<ram:GrossWeightMeasure unitCode="KGM">	The gross weight of the product, if applicable.	0..1	I.17	n..13.n3	See Appendix A.10
<ram:ApplicableSPSClassification>	Classifications of the product, if applicable.	0..9			

XML Tag Name	Description	Occurs	Box No.	Format	Comments
<ram:SystemID>	The unique identifier of the classification system, if applicable.	0..1	I.16	an..4	See Appendix A.11
<ram:SystemName>	The name of the classification system.	1..1	I.16	an..256	
<ram:ClassCode>	The code specifying the class of the classification, if applicable, depending on the classification system.	0..1	I.16	an..17	
<ram:ClassName>	The name of the class of the classification.	1..1	I.16	an..70	
<ram:PhysicalSPSPackage>	Packaging of the product, if applicable.	0..9			
<ram:LevelCode>	The level of the package, coded.	1..1	I.21	n1	See Appendix A.12
<ram:TypeCode>	The type of package, coded.	1..1	I.21	an2	See Appendix A.13
<ram:ItemQuantity>	The number of items within the package.	1..1	I.19	n..8	
<ram:AssociatedSPSTransportEquipment>	Transport equipment, if applicable, such as containers, associated with the products.	0..9			
<ram:ID>	The unique identifier of the associated transport equipment.	1..1	I.20	an..17	
<ram:AffixedSPSSeal>	Seals on the associated transport equipment, if applicable.	0..9			
<ram:ID>	The unique identifier of the seal.	1..1	I.20	an..35	
<ram:SettingSPSTemperature>	The transport / storage temperature.	0..1			
<ram:ValueMeasure unitCode="CEL">	The value of the temperature, measured in degrees Celsius.	1..1	I.18	n..15	
<ram:OriginSPSCountry>	The country of origin, if applicable.	0..1			
<ram:ID>	The code of the country of origin.	1..1	I.5	a2	See Appendix A.3
<ram:Name>	The name of the country of origin.	1..1	I.5	an..35	
<ram:SubordinateSPSCountrySubDivision>	The sub-division (e.g. state, province) of the country of origin where the products originated, if applicable.	0..1			

XML Tag Name	Description	Occurs	Box No.	Format	Comments
<ram:ID>	The unique identifier of the country sub-division, if applicable.	0..1	I.6	an..9	National codes
<ram:Name>	The name of the country sub-division.	1..1	I.6	an..70	
<ram:HierarchicalLevelCode>	The level of the country sub-division.	1..1	I.6	an..3	Set to "1"
<ram:ActivityAuthorizedSPSParty>	The producer of the goods, if applicable.	0..1			
<ram:ID>	A unique identifier of the producer, such as a national business registration number.	0..1	I.9	an..17	National codes
<ram:Name>	The name of the producer.	1..1	I.9	an..70	
<ram:TypeCode>	The type of party, coded.	1..1	I.9	an2	See Appendix A.14
<ram:SpecifiedSPSAddress>	The address of the producer, if applicable.	0..1			
<ram:PostcodeCode>	The postcode of the address, if applicable.	0..1	I.9	an..9	
<ram:LineOne>	The first line of the address, if applicable.	0..1	I.9	an..70	
<ram:LineTwo>	The second line of the address, if applicable.	0..1	I.9	an..70	
<ram:LineThree>	The third line of the address, if applicable.	0..1	I.9	an..70	
<ram:LineFour>	The fourth line of the address, if applicable.	0..1	I.9	an..70	
<ram:LineFive>	The fifth line of the address, if applicable.	0..1	I.9	an..70	
<ram:CityName>	The name of the city in the address, if applicable.	0..1	I.9	an..35	
<ram:CountryID>	The code of the country in the address, if applicable.	0..1	I.9	a2	See Appendix A.3
<ram:TypeCode>	The type of address, coded, if applicable.	0..1	I.9	n1	See Appendix A.4
<ram:CountryName>	The name of the country in the address, if applicable.	0..1	I.9	an..35	
<ram:CountrySubDivisionID>	The unique identifier of the country sub-division (e.g. state, province) in the address, if applicable.	0..1	I.9	an..9	National codes

XML Tag Name	Description	Occurs	Box No.	Format	Comments
<ram:CountrySubDivisionName>	The name of the country sub-division (e.g. state, province) in the address, if applicable.	0..1	I.9	an..70	
<ram:CityID>	The unique identifier of the city in the address using the UN/LOCODE, if applicable.	0..1	I.9	an5	See Appendix A.5
<ram:AppliedSPSProcess>	The treatment that was applied to the product, if applicable.	0..9			
<ram:TypeCode>	The type of treatment applied, coded.	1..1	I.24	n..2	See Appendix A.15
<ram:OperatorSPSParty>	The establishment who applied the treatment, if applicable.	0..1			
<ram:ID>	The approval number of the establishment.	0..1	I.24	an..17	
<ram:Name>	The name of the establishment.	1..1	I.24	an..70	
<ram:SpecifiedSPSProduct>	Details of the product, if applicable.	0..1			
<ram:TypeCode>	The type of product, coded.	1..1	I.24	n..2	See Appendix A.16
<ram:ID schemeID="PETS">	A unique identifier of the producer, such as a national business registration number. International Passport Number	0..1	I.24	an..17	See Appendix A.17
<ram:UnitQuantity>	The total number of units of the product.	1..1	I.17	n..8	
<ram:ApplicableSPSProductCharacteristic>	Characteristics of the product, if applicable.	0..9			
<ram:TypeCode>	The type of characteristic, coded, if applicable.	1..1	I.24	an..3	See Appendix A.18
<ram:Value>	The value of the characteristic, if applicable.	1..1	I.24	an..18	

Table 15: e-SPS Acknowledgment – XML Structure

XML Tag Name	Description	Occurs	Box No.	Format	Comments
<rsm:SPSAcknowledgement>					
<rsm:SPSAcknowledgementDocument>					
<ram:IssueDateTime>	The date when the acknowledgment was issued.	1..1		an10	CCYY-MM-DD
<ram:StatusCode>	The status of the acknowledgment, coded.	1..1		n..2	See Appendix A.2
<ram:ReasonInformation>	The reason for the status, expressed as text, if applicable.	0..1		an..256	
<ram:ReferenceSPSReferencedDocument>	The certificate to which this reference relates.	1..1			
<ram:IssueDateTime>	The date when the referenced document was issued, if applicable.	1..1		an10	CCYY-MM-DD
<ram:TypeCode>	The code used to identify the type of referenced document.	1..1		n3	Set to "648"
<ram:SubTypeCode>	The code used to identify the sub-type of referenced document.	1..1		n1	See Appendix A.1
<ram:RelationshipTypeCode>	The relationship between the referenced document and the acknowledgment, coded.	0..1		n3	Set to "AIR"
<ram:ID>	The unique identifier of the referenced document.	1..1	I.2, IIa	an..35	

9 Technical and Legal Gaps

This section explains the approach of Task 7 of the TOR; *"Identify technical and legal gaps that must be resolved prior to the exchange of the e-SPS and provide recommendations on how to address any remaining gaps"*.

Based on the results of the survey questionnaire (see Section 4), the following technical and legal gaps have been identified, which must be resolved by the relevant AMS prior to the exchange of e-AH Certificates.

9.1 Technical Gaps

Only five (5) AMS are currently connected to the ASW via their respective NSWs, including Indonesia, Malaysia, Singapore, Thailand and Viet Nam. While Brunei Darussalam are expected to be connected to the ASW by mid-2017, Cambodia, Lao PDR, Myanmar and the Philippines are still not ready to connect.

Only four (4) AMS currently have online systems for the application of Veterinary / Health Certificates, including Brunei Darussalam, Indonesia, Malaysia and Singapore. However, Thailand has implemented an online system to allow exporters to apply for Veterinary Certificates for poultry products to Japan.

Only four (4) AMS have their internal systems for issuing Veterinary / Health Certificates, including Indonesia, Malaysia, Singapore and Thailand. The other six (6) AMS issue Veterinary / Health Certificates manually.

The internal systems of Indonesia, Malaysia, Singapore and Thailand are integrated with their online systems. The systems in Indonesia, Malaysia and Singapore would be capable of generating electronic Veterinary Certificates, and the systems in Indonesia and Singapore would be capable of generating electronic Health Certificates.

In summary, Indonesia, Malaysia and Singapore appear to be the most ready to exchange e-AH Certificates. However, Malaysia and Singapore have indicated that they will not be ready among AMS to exchange e-AH Certificates in the near future.

9.2 Legal Gaps

Eight (8) AMS already have national legislation or policies in place that requires Veterinary Certificates to be cited at the time of import, including Brunei Darussalam, Cambodia, Indonesia, Malaysia, Myanmar, Singapore, Thailand and Viet Nam. However, Lao PDR and the Philippines do not have such legislation in place.

Currently, only Indonesia has national legislation in place that allows for electronic Veterinary Certificates to be accepted instead of paper documents. However, Indonesia and Lao PDR has national legislation in place that allows for electronic Health Certificates to be accepted instead of paper documents.

10 Implementation Activities

This section explains the approach of Task 8 of the TOR; *"Develop the user acceptance process criteria and success indicators of the project, to ensure that these requirements are met".*

10.1 Timeline

The target date for the implementation of the e-AH Certificate is the 1st April 2019.

At least 3 participating AMS should be ready to start the End-to-End tests (see Section 10.2.2) by the 1st January 2019, before the formal user acceptance process should commence.

10.2 User Acceptance Process

The User Acceptance process for the e-AH Certificate involve carrying out End-to-End Tests in the test environment, followed by Parallel Tests in the production environment. In addition, it is also recommended that Point-to-Point tests should be carried out by each Member State before starting the End-to-End tests.

10.2.1 Point-to-Point Tests

In the first phase, "Point-to-Point" tests should be carried out to ensure that each step in the process described in Section 5.1 are working satisfactorily within each AMS' own test environment.

The proposed tests are provided in Table 16 below, which contains 3 columns:

- **Test No.** – the unique number to identify the Point-to-Point test

- **Test Description** – the description of each "send" process, as described in Section 5.1

- **Expected Outcomes** – the main outcomes of each test, including the expected message types, recipient parties and MIS reporting requirements

Table 16: Point-to-Point Tests

Test No.	Test Description	Expected Outcomes
1	Sending an e-AH Certificate: *1. The CA of the Exporting Country sends an e-AH Certificate to the CA of the Importing Country via the NSW of the Exporting Country.*	1. The CA of the Exporting Country issues an e-AH Certificate and a message is generated with the document type code "648".
2	Sending an e-AH Certificate: *2a. The NSW of the Exporting Country sends the e-AH Certificate to the ASW Gateway of the Exporting Country. 2b. The ASW Gateway of the Exporting Country returns an Acknowledgement Status to the*	1. The NSW of the Exporting Country sends the "648" message to the ASW Gateway of the Exporting Country and records it as a "sent" transaction for reconciliation with the MIS Reports. 2. The ASW Gateway of the Exporting Country receives the "648" message

Test No.	Test Description	Expected Outcomes
	NSW of the Exporting Country. *[OPTIONAL]*	and records it as a "received" transaction for MIS Reporting. 3. The ASW Gateway of the Exporting Country returns an "AS1" message to the NSW of the Exporting Country and records it as a "sent" transaction for MIS Reporting. *[OPTIONAL]* 4. The NSW of the Exporting Country receives the "AS1" message and records it as a "received" transaction for reconciliation with the MIS Reports. *[OPTIONAL]*
3	Sending an e-AH Certificate: *3a. The ASW Gateway of the Exporting Country sends the e-AH Certificate to the ASW Gateway of the Importing Country.* *3b. The ASW Gateway of the Importing Country returns an Acknowledgement Status to the ASW Gateway of the Exporting Country.* *3c. The ASW Gateway of the Exporting Country returns the Acknowledgement Status to the NSW of the Exporting Country. [OPTIONAL]*	1. The ASW Gateway of the Exporting Country sends the "648" message to the ASW Gateway of the Importing Country and records it as a "sent" transaction for MIS Reporting. 2. The ASW Gateway of the Importing Country receives the "648" message and records it as a "received" transaction for MIS Reporting. 3. The ASW Gateway of the Importing Country returns an "AS2" message to the ASW Gateway of the Exporting Country and records it as a "sent" transaction for MIS Reporting. 4. The ASW Gateway of the Exporting Country receives the "AS2" message and records it as a "received" transaction for MIS Reporting. 5. The ASW Gateway of the Exporting Country returns the "AS2" message to the NSW of the Exporting Country and records it as a "sent" transaction for MIS Reporting. *[OPTIONAL]* 6. The NSW of the Exporting Country receives the "AS2" message and records it as a "received" transaction for reconciliation with the MIS Reports. *[OPTIONAL]*
4	Sending an e-AH Certificate: *4a. The ASW Gateway of the Importing Country sends the e-AH Certificate to the NSW of the Importing Country.* *4b. The NSW of the Importing Country returns an Acknowledgement Status to the ASW Gateway of the Importing Country.*	1. The ASW Gateway of the Importing Country sends the "648" message to the NSW of the Importing Country and records it as a "sent" transaction for MIS Reporting. 2. The NSW of the Importing Country receives the "648" message and records it as a "received" transaction for reconciliation with the MIS Reports. 3. The NSW of the Importing Country returns an "AS3" message to the ASW

Test No.	Test Description	Expected Outcomes
	4c. The ASW Gateway of the Importing Country returns the Acknowledgement Status to the ASW Gateway of the Exporting Country. *4d. The ASW Gateway of the Exporting Country returns the Acknowledgement Status to the NSW of the Exporting Country. [OPTIONAL]*	Gateway of the Importing Country and records it as a "sent" transaction for reconciliation with the MIS Reports. 4. The ASW Gateway of the Importing Country receives the "AS3" message and records it as a "received" transaction for MIS Reporting. 5. The ASW Gateway of the Importing Country returns the "AS3" message to the ASW Gateway of the Exporting Country and records it as a "sent" transaction for MIS Reporting. 6. The ASW Gateway of the Exporting Country receives the "AS3" message and records it as a "received" transaction for MIS Reporting. 7. The ASW Gateway of the Exporting Country returns the "AS3" message to the NSW of the Exporting Country and records it as a "sent" transaction for MIS Reporting. *[OPTIONAL]* 8. The NSW of the Exporting Country receives the "AS3" message and records it as a "received" transaction for reconciliation with the MIS Reports. *[OPTIONAL]*
5	Sending an e-AH Certificate: *5a. The CA of the Importing Country receives the e-AH Certificate from the CA of the Exporting Country via the NSW of the Exporting Country.* *5b. The CA of the Importing Country returns an Acknowledgement Status to the NSW of the Importing Country.* *5c. The NSW of the Importing Country returns the Acknowledgement Status to the ASW Gateway of the Importing Country.* *5d. The ASW Gateway of the Importing Country returns the Acknowledgement Status to the ASW Gateway of the Exporting Country.* *5e. The ASW Gateway of the Importing Country returns the Acknowledgement Status to the NSW of the Exporting Country.*	1. The NSW of the Importing Country sends the "648" message to the CA of the Importing Country and records it as a "sent" transaction for MIS Reporting. 2. The CA of the Importing Country receives the "648" message and records it as a "received" transaction for reconciliation with the MIS Reports. 3. The CA of the Importing Country returns an "AS4" message to the NSW of the Importing Country and records it as a "sent" transaction for reconciliation with the MIS Reports. 4. The NSW of the Importing Country receives the "AS4" message and records it as a "received" transaction for MIS Reporting. 5. The NSW of the Importing Country returns the "AS4" message to the ASW Gateway of the Importing Country and records it as a "sent" transaction for MIS Reporting. 6. The ASW Gateway of the Importing Country receives the "AS4" message

Test No.	Test Description	Expected Outcomes
		and records it as a "received" transaction for MIS Reporting. 7. The ASW Gateway of the Importing Country returns the "AS4" message to the ASW Gateway of the Exporting Country and records it as a "sent" transaction for MIS Reporting. 8. The ASW Gateway of the Exporting Country receives the "AS4" message and records it as a "received" transaction for reconciliation with the MIS Reports. 9. The ASW Gateway of the Exporting Country returns the "AS4" message to the NSW of the Exporting Country and records it as a "sent" transaction for MIS Reporting. *[OPTIONAL]* 10. The NSW of the Exporting Country receives the "AS4" message and records it as a "received" transaction for reconciliation with the MIS Reports. *[OPTIONAL]*
6	Sending an e-SPS Acknowledgment: *6. The CA of the Importing country sends an e-SPS Acknowledgement to the CA of the Exporting Country via the NSW of the Importing Country.*	1. The CA of the Importing Country acknowledges receipt of the e-AH Certificate and a message is generated with the document type code "312".
7	Sending an e-SPS Acknowledgment: *7a. The NSW of the Importing Country sends the e-SPS Acknowledgement to the ASW Gateway of the Importing Country.* *7b. The ASW Gateway of the Importing Country returns an Acknowledgement Status to the NSW of the Importing Country. [OPTIONAL]*	1. The NSW of the Importing Country sends the "312" message to the ASW Gateway of the Importing Country and records it as a "sent" transaction for reconciliation with the MIS Reports. 2. The ASW Gateway of the Importing Country receives the "QRR" message and records it as a "received" transaction for MIS Reporting. 3. The ASW Gateway of the Importing Country returns an "AS1" message to the NSW of the Importing Country and records it as a "sent" transaction for MIS Reporting. *[OPTIONAL]* 4. The NSW of the Importing Country receives the "AS1" message and records it as a "received" transaction for reconciliation with the MIS Reports. *[OPTIONAL]*
8	Sending an e-SPS Acknowledgment: *8a. The ASW Gateway of the Importing Country sends the e-*	1. The ASW Gateway of the Importing Country sends the "312" message to the ASW Gateway of the Exporting Country

Test No.	Test Description	Expected Outcomes
	SPS Acknowledgement to the ASW Gateway of the Exporting Country. *8b. The ASW Gateway of the Exporting Country returns an Acknowledgement Status to the ASW Gateway of the Importing Country.* *8c. The ASW Gateway of the Importing Country returns the Acknowledgement Status to the NSW of the Importing Country.* *[OPTIONAL]*	and records it as a "sent" transaction for MIS Reporting. 2. The ASW Gateway of the Exporting Country receives the "QRR" message and records it as a "received" transaction for MIS Reporting. 3. The ASW Gateway of the Exporting Country returns an "AS2" message to the ASW Gateway of the Importing Country and records it as a "sent" transaction for MIS Reporting. 4. The ASW Gateway of the Importing Country receives the "AS2" message and records it as a "received" transaction for MIS Reporting. 5. The ASW Gateway of the Importing Country returns the "AS2" message to the NSW of the Importing Country and records it as a "sent" transaction for MIS Reporting. *[OPTIONAL]* 6. The NSW of the Importing Country receives the "AS2" message and records it as a "received" transaction for reconciliation with the MIS Reports. *[OPTIONAL]*
9	Sending an e-SPS Acknowledgment: *9a. The ASW Gateway of the Exporting Country sends the e-SPS Acknowledgement to the NSW of the Exporting Country.* *9b. The NSW of the Exporting Country returns an Acknowledgement Status to the ASW Gateway of the Exporting Country.* *9c. The ASW Gateway of the Exporting Country returns the Acknowledgement Status to the ASW Gateway of the Importing Country.* *9d. The ASW Gateway of the Importing Country returns the Acknowledgement Status to the NSW of the Importing Country.*	1. The ASW Gateway of the Exporting Country sends the "312" message to the NSW of the Exporting Country and records it as a "sent" transaction for MIS Reporting. 2. The NSW of the Exporting Country receives the "312" message and records it as a "received" transaction for reconciliation with the MIS Reports. 3. The NSW of the Exporting Country returns an "AS3" message to the ASW Gateway of the Exporting Country and records it as a "sent" transaction for reconciliation with the MIS Reports. 4. The ASW Gateway of the Exporting Country receives the "AS3" message and records it as a "received" transaction for MIS Reporting. 5. The ASW Gateway of the Exporting Country returns the "AS3" message to the ASW Gateway of the Importing Country and records it as a "sent" transaction for MIS Reporting. 6. The ASW Gateway of the Importing Country receives the "AS3" message

Test No.	Test Description	Expected Outcomes
		and records it as a "received" transaction for MIS Reporting. 7. The ASW Gateway of the Importing Country returns the "AS3" message to the NSW of the Importing Country and records it as a "sent" transaction for MIS Reporting. *[OPTIONAL]* 8. The NSW of the Importing Country receives the "AS3" message and records it as a "received" transaction for reconciliation with the MIS Reports. *[OPTIONAL]*
10	Sending an e-SPS Acknowledgment: *10. The CA of the Exporting Country receives the e-SPS Acknowledgment from the CA of the Importing country via the NSW of the Importing Country.*	1. The NSW of the Exporting Country extracts the contents of the "312" message and makes the e-SPS Acknowledgement available to the CA of the Exporting Country.

10.2.2 End-to-End Tests

Once the Point-to-Point Tests have been completed, the next phase would be to carry out End-to-End Tests with other participating AMS, one-by-one. There are 6 main tests to be carried out, as shown in Table 17. It is recommended that each test should be repeated at least 10 times for each type of certificate until both the sender and recipient are satisfied.

Table 17: End-to-End Tests

Test No.	Test Description	Expected Outcomes

1	The CA of the Exporting Country sends an original e-Phyto Certificate *with no errors*
	
	This test is Mandatory
		1. An e-Phyto Certificate ("851") is received by the CA of the Importing Country with:
		   a. SequenceNo = "1"
		   b. TypeCode = "851"
		   c. SubTypeCode = " "
		   d. FunctionCode = "9"
		2. An Acknowledgement Status ("AS4") is received by the CA of the Exporting Country with:
		   a. TypeCode = "AS4"
		   b. CategoryCode = "REC"

2	The CA of the Importing Country sends an e-SPS Acknowledgement to acknowledge that the e-Phyto Certificate was *accepted*
	
	This test is Optional
		1. An e-SPS Acknowledgement ("312") is received by the CA of the Exporting Country with:
		   a. SequenceNo = "2"
		   b. TypeCode = "312"
		   c. SubTypeCode = " "
		   d. FunctionCode = "29"

Test No.	Test Description	Expected Outcomes
		2. An Acknowledgement Status ("AS3") is received by the NSW of the Importing Country with: a. TypeCode = "AS3"

3	The CA of the Exporting Country sends an original e-Phyto Certificate *with errors*
	
	This test is Mandatory
		1. An e-Phyto Certificate ("851") is received by the CA of the Importing Country with:
		   a. SequenceNo = "1"
		   b. TypeCode = "851"
		   c. SubTypeCode = " "
		   d. FunctionCode = "9"
		2. An Acknowledgement Status ("AS4") is received by the CA of the Exporting Country with:
		   a. TypeCode = "AS4"
		   b. CategoryCode = "NOT"

4	The CA of the Importing Country sends an e-SPS Acknowledgement to acknowledge that the e-Phyto Certificate was *not accepted*
	
	This test is Optional
		1. An e-SPS Acknowledgement ("312") is received by the CA of the Exporting Country with:
		   a. SequenceNo = "2"
		   b. TypeCode = "312"
		   c. SubTypeCode = " "
		   d. FunctionCode = "27"
		2. An Acknowledgement Status ("AS3") is received by the NSW of the Importing Country with:
		   a. TypeCode = "AS3"

5	The CA of the Exporting Country sends a replacement e-Phyto Certificate for Export *with no errors*
	
	This test is Mandatory
		1. An e-Phyto Certificate ("851") is received by the CA of the Importing Country with:
		   a. SequenceNo = "1"
		   b. TypeCode = "851"
		   c. SubTypeCode = " "
		   d. FunctionCode = "9"
		2. An Acknowledgement Status ("AS4") is received by the CA of the Exporting Country with:
		   a. TypeCode = "AS4"
		   b. CategoryCode = "REC"

6	The CA of the Importing Country sends an e-SPS Acknowledgement to acknowledge that the e-Phyto Certificate was *accepted*
	
	This test is Optional
		1. An e-SPS Acknowledgement ("312") is received by the CA of the Exporting Country with:
		   a. SequenceNo = "2"
		   b. TypeCode = "312"
		   c. SubTypeCode = " "
		   d. FunctionCode = "29"

Test No.	Test Description	Expected Outcomes
		2. An Acknowledgement Status ("AS3") is received by the NSW of the Importing Country with: a. TypeCode = "AS3"

7	The CA of the Exporting Country sends a replacement e-Phyto Certificate *with errors*
	
	This test is Mandatory
		1. An e-Phyto Certificate ("851") is received by the CA of the Importing Country with:
		   a. SequenceNo = "1"
		   b. TypeCode = "851"
		   c. SubTypeCode = " "
		   d. FunctionCode = "9"
		2. An Acknowledgement Status ("AS4") is received by the CA of the Exporting Country with:
		   a. TypeCode = "AS4"
		   b. CategoryCode = "NOT"

8	The CA of the Importing Country sends an e-SPS Acknowledgement to acknowledge that the e-Phyto Certificate was *not accepted*
	
	This test is Optional
		1. An e-SPS Acknowledgement ("312") is received by the CA of the Exporting Country with:
		   a. SequenceNo = "2"
		   b. TypeCode = "312"
		   c. SubTypeCode = " "
		   d. FunctionCode = "27"
		2. An Acknowledgement Status ("AS3") is received by the NSW of the Importing Country with:
		   a. TypeCode = "AS3"

10.2.3 Parallel Tests

In the final phase, the same End-to-End Tests should be repeated in the production environment, to simulate live Parallel Tests. It is recommended that each test should be repeated at least 10 times for each type of certificate until both the sender and recipient are satisfied.

10.3 Success Indicators

The success indicators for the User Acceptance Process should cover all of the expected outcomes described in Section 9.2. It is also recommended that they should cover other areas as well, such as the successful implementation of the XSDs and code maintenance within the Regional Service Portal.

The proposed acceptance criteria is provided in Table 18 below. There are 3 columns:

- **No.** – the unique number used to identify the success indicator

- **Success Indicator** – a description of each success indicator

- **Requirement** – Mandatory or Optional, to indicate whether the success indicator must be satisfied or not

Table 18: Acceptance Criteria

No.	Description	Requirement
1	End-to-end test of e-AH Certificate from the Competent Authority of the Exporting Country to the Competent Authority of Importing Country (Message Type = 648)	
1.1	e-AH Certificate is "Approved" (Status Code = 39)	Mandatory
1.2	e-AH Certificate is "Withdrawn" (Status Code = 40)	Mandatory
1.3	e-AH Certificate is "Replaced" (Status Code = 44)	Mandatory
2	End-to-end test of e-SPS Acknowledgment from the Competent Authority of the Importing Country to Competent Authority of Exporting Country	
2.1	e-AH Certificate is "Approved" (Status Code = 39)	Mandatory
2.2	e-AH Certificate is "Rejected" (Status Code = 41)	Mandatory
3	Acknowledgment Status messages	
3.1	AS-1: From ASW Gateway of Exporting Country to NSW of Exporting Country	Mandatory
3.2	AS-2: From ASW Gateway of Importing Country to ASW Gateway of Exporting Country	Mandatory
3.3	AS-3: From NSW of Importing Country to ASW Gateway of Importing Country	Mandatory
4	UN/CEFCT XML Schema Definitions (XSDs)	
4.1	Implementation of e-AH Certificate	Mandatory
4.2	Implementation of e-SPS Acknowledgment	Mandatory
5	Code Lists	
5.1	Consensus reached on the harmonization of all code lists	Mandatory
5.2	Maintenance of code lists within Regional Services Portal	Mandatory
6	MIS reporting	
6.1	The number of e-AH Certificate messages sent by the NSW of the Exporting Country is the same as the number of e-AH Certificate messages received by the NSW of the Importing Country	Mandatory
6.2	The number of Acknowledgment Status (AS-1) messages sent by the ASW Gateway of the Exporting Country is the same as the number of Acknowledgment Status (AS-1) messages received by the NSW of the Exporting Country	Mandatory
6.3	The number of Acknowledgment Status (AS-2) messages sent by the ASW Gateway of the Importing Country is the same as the number of Acknowledgment Status (AS-2) messages received by the ASW Gateway of the Exporting Country	Mandatory
6.4	The number of Acknowledgment Status (AS-3) messages sent by the NSW of the Importing Country is the same as the number of Acknowledgment Status (AS-3) messages received by the ASW Gateway of the Importing Country	Mandatory
6.5	The number of e-SPS Acknowledgment messages sent by the NSW of the Importing Country is the same as the number of e-SPS Acknowledgment messages received by the NSW of the Exporting Country	Mandatory

Appendix A   Code Lists

Appendix A.1 – Certificate Sub-Type Codes

It is suggested that the following codes should be used to identify the sub-type of certificate, based on the OIE's Terrestrial Code (Chapter 5.10) and Aquatic Animal Health Code (Chapter 5.11).

Code	Description
1	Live Animals
2	Hatching Eggs
3	Products of Animal Origin
4	Live Aquatic Animals
5	Products of Aquatic Animal Origin

Appendix A.2 – Certificate Status Codes

UN/CEFACT recommends EDIFACT codes (UNCL 4405). It is suggested that a subset of this code list to validate "Certificate Status Codes", which may include the codes shown in the table below.

Code	Description
39	Approved
40	Withdrawn
41	Rejected
44	Replaced

Please note that the above code list can found in the following XSD:

UNECE_StatusCode_D16A.xsd

Appendix A.3 - Country Codes

It is recommended that UNECE Recommendation 3 (ISO 3166-1 2-alpha code) is used to validate "Country Codes". The latest version of this code list can be found in the following XSD:

ISO_ISOTwo-letterCountryCode_SecondEdition2006.xsd

Appendix A.4 – Address Type Codes

UN/CEFACT recommends EDIFACT codes (UNCL 3131). It is suggested that the full or a subset of this code list to validate "Address Type Codes", which may include the codes shown in the table below.

Code	Description
1	Postal address
2	Fiscal address
3	Physical address

Please note that the above code list can found in the following XSD:

UNECE_AddressType_D16A.xsd

Appendix A.5 - Location Codes

It is recommended that UNECE Recommendation 16 (UN/LOCODE) is used to validate "Location Codes", which can be downloaded from the following link:

https://www.unece.org/cefact/codesfortrade/codes_index.html

Appendix A.6 – Certifying Statement Codes

It is recommended that the following codes are used to validate "Certifying Statement Codes", which are stated OIE's Terrestrial Animal Health Code and Aquatic Animal Health Code.

Code	Description
1	*"The undersigned Official Veterinarian certifies that the animal(s)/hatching eggs described above satisfy(ies) the following requirements:"*
2	*"The undersigned Certifying Official that the animal(s)/gametes described above satisfy(ies) the following requirements:"*

Appendix A.7 - Transport Mode Codes

It is recommended that a subset of UNECE Recommendation 19 is used to validate "Transport Mode Codes", which include the codes shown in the table below.

Code	Description
1	Maritime transport
2	Rail transport
3	Road transport
4	Air transport
5	Mail
7	Fixed transport installation
8	Inland water transport

Please note that the latest version of the above code list can found in the following XSD:

UNECE_TransportModeCode_2.xsd

Appendix A.8 – Cargo Type Codes

It is suggested that the following codes are used to validate "Cargo Type Codes", which are stated in OIE's Terrestrial Animal Health Code and Aquatic Animal Health Code.

Code	Description
1	Definitive import
2	Re-entry
3	Temporary admission

Appendix A.9 – Intended Use

It is suggested that the following codes are used to validate the "intended use" of commodities, which are stated in OIE's Terrestrial Animal Health Code and Aquatic Animal Health Code.

Code	Description
B	Breeding/rearing
C	Competition

Code	Description
E	Exhibition/education
G	Grow out
O	Ornamental
P	Pets
R	Restocking
S	Slaughter
W	Wildlife management
	Other – please specify

Appendix A.10 – Weight Units of Measure Codes

It is recommended that a subset of UNECE Recommendation 20 is used to validate "Weight Units of Measure", which may include the codes shown in the table below.

Code	Description
C62	One
GRM	Gram
KGM	Kilogram
TNE	Tonne

Please note that the above code list can found in the following XSD:

UNECE_MeasurementUnitCommonCodeWeight_4.xsd

Appendix A.11 – Classification System Codes

It is suggested that the following codes may be used to validate "Classification System Codes".

Code	Description
AHTN	ASEAN Harmonized Tariff Nomenclature
HS4	Harmonised System (First 4 digits)
HS6	Harmonised System (First 6 digits)

Appendix A.12 – Package Level Codes

UN/CEFACT recommends EDIFACT codes (UNCL 7075). It is suggested that a subset of this code list to validate "Package Level Codes", which may include the codes shown in the table below.

Code	Description
1	Inner
2	Intermediate
3	Outer

Appendix A.13 - Package Type Codes

It is recommended that UNECE Recommendation 21 Annex VI is used to validate "Package Type Codes". The latest version of this code list can be found in the following XSD:

UNECE_PackageTypeCode_2006.xsd

Appendix A.14 – Party Type Codes

It is suggested that the following codes are used to validate "Party Type Codes", which are stated in OIE's Terrestrial Animal Health Code and Aquatic Animal Health Code.

Code	Description
1	Wildlife / hunting reserve (for animals and hatching eggs)
2	Artificial insemination centre (for semen)
3	Collection team (for embryos and ova)
4	Place of dispatch (for products of animal origin / aquatic animal origin)
5	Place of capture (for live aquatic animals and gametes)

Appendix A.15 – Process Type Codes

UN/CEFACT recommends EDIFACT codes (UNCL 7187). It is suggested that a subset of this code list to validate "Process Type Codes", which may include the codes shown in the table below.

Code	Description
7	Freezing
12	Slaughter
13	Packing
14	Heat sterilisation
15	Chemical sterilisation
16	Fumigation
17	Irradiation
27	Planning
28	Trading
29	Operating
32	Chilling
33	Collecting
34	Cutting
35	Harvesting
36	Inspecting
37	Manufacturing
38	Preserving
39	Processing
40	Producing
41	Rendering
42	Sampling
43	Storing
44	Transferring
45	Treating

Please note that the latest version of the above code list can found in the following XSD:

UNECE_ProcessTypeCode_D16A.xsd

Appendix A.16 – Product Type Codes

It is suggested that the following codes are used to validate "Product Type Codes", which are stated in OIE's Terrestrial Animal Health Code and Aquatic Animal Health Code.

Code	Description
1	Animals and hatching eggs
2	Embryos ova and semen
3	Bees and brood combs
4	Products of animal origin
5	Live aquatic animals and gametes
6	Products of aquatic animal origin
7	Table eggs
8	Animal feed

Appendix A.17 – Identification System Codes

It is suggested that the following codes are used to validate "Identification System Codes", which are stated in OIE's Terrestrial Animal Health Code and Aquatic Animal Health Code.

Code	Description
ICAR	International Committee for Animal Recording
IETS	International Embryo Transfer Society
PETS	Pet Travel Scheme

Appendix A.18 – Product Characteristic Type Codes

It is recommended that a subset of EDIFACT codes (UNCL 7081) are used to validate "Product Characteristic Type Codes", which may include the codes shown in the table below.

Code	Description
35	Colour
44	Further identifying characteristic
60	Age
209	Gender

Appendix B   XML Examples

Appendix B.1 – Electronic Animal Health (e-AH) Certificate

```xml
<?xml version="1.0" encoding="UTF-8"?>
<rsm:HeaderDocument xmlns:xsd="http://www.w3.org/2001/XMLSchema"
 xmlns:rsm="urn:un:unece:uncefact:data:draft:generalheader:0:1"
 xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
 xsi:schemaLocation="urn:un:unece:uncefact:data:draft:generalheader:0:1
GenericHeaderMessage_V1.04.xsd">
 <SenderParty>
  <IdentificationId>XXXXXXXXX</IdentificationId>
 </SenderParty>
 <RecipientParty>
  <IdentificationId>XXXXXXXXX</IdentificationId>
 </RecipientParty>
 <Document>
  <IdentificationId>XXXXXXXXX</IdentificationId>
  <SequenceNo>1</SequenceNo>
  <TypeCode>648</TypeCode>
  <SubTypeCode>   </SubTypeCode>
  <FunctionCode>9</FunctionCode>
  <SubmissionDateTime>2002-07-01T05:10:10</SubmissionDateTime>
 </Document>
 <Payload>
  <![CDATA[
    <?xml version="1.0" encoding="UTF-8"?>
    <rsm:SPSCertificate xmlns:xsd="http://www.w3.org/2001/XMLSchema"
      xmlns:rsm="urn:un:unece:uncefact:data:standard:SPSCertificate:16"
xmlns:ccts="urn:un:unece:uncefact:documentation:standard:CoreComponentsTechnicalSpecification:2"
      xmlns:udt="urn:un:unece:uncefact:data:standard:UnqualifiedDataType:20"

xmlns:ram="urn:un:unece:uncefact:data:standard:ReusableAggregateBusinessInformationEntity:20"
      xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
      xsi:schemaLocation="urn:un:unece:uncefact:data:standard:SPSCertificate:16
SPSCertificate_16p0.xsd">
    <rsm:SPSExchangedDocument>
     <ram:Name>Animal Health Certificate</ram:Name>
     <ram:ID>XXXXXXXXX</ram:ID>
     <ram:Description>XXXXXXXXX</ram:Description>
     <ram:TypeCode>648</ram:TypeCode>
     <ram:SubTypeCode>1</ram:SubTypeCode>
     <ram:StatusCode>39</ram:StatusCode>
     <ram:IssueDateTime>2016-08-11</ram:IssueDateTime>
     <ram:IssuerSPSParty>
      <ram:ID>XXXXXXXXX</ram:ID>
      <ram:Name>XXXXXXXXX</ram:Name>
     </ram:IssuerSPSParty>
     <ram:ReferenceSPSReferencedDocument>
      <ram:IssueDateTime>2016-08-11</ram:IssueDateTime>
      <ram:RelationshipTypeCode>IP</ram:RelationshipTypeCode>
      <ram:ID>XXXXXXXXX</ram:ID>
     </ram:ReferenceSPSReferencedDocument>
```

```
<ram:SignatorySPSAuthentication>
  <ram:ActualDateTime>2016-08-11</ram:ActualDateTime>
  <ram:ProviderSPSParty>
    <ram:Name>XXXXXXXXX</ram:Name>
    <ram:SpecifiedSPSAddress>
      <ram:PostcodeCode>XXXXXXXXX</ram:PostcodeCode>
      <ram:LineOne>XXXXXXXXX</ram:LineOne>
      <ram:LineTwo>XXXXXXXXX</ram:LineTwo>
      <ram:LineThree>XXXXXXXXX</ram:LineThree>
      <ram:LineFour>XXXXXXXXX</ram:LineFour>
      <ram:LineFive>XXXXXXXXX</ram:LineFive>
      <ram:CityName>XXXXXXXXX</ram:CityName>
      <ram:CountryID>CH</ram:CountryID>
      <ram:TypeCode>1</ram:TypeCode>
      <ram:CountryName>XXXXXXXXX</ram:CountryName>
      <ram:CountrySubDivisionID>XXXXXXXXX</ram:CountrySubDivisionID>
      <ram:CountrySubDivisionName>XXXXXXXXX</ram:CountrySubDivisionName>
      <ram:CityID>XXXXXXXXX</ram:CityID>
    </ram:SpecifiedSPSAddress>
    <ram:SpecifiedSPSPerson>
      <ram:Name>XXXXXXXXX</ram:Name>
      <ram:Role>XXXXXXXXX</ram:Role>
    </ram:SpecifiedSPSPerson>
  </ram:ProviderSPSParty>
  <ram:IncludedSPSClause>
    <ram:ID>XXXXXXXXX</ram:ID>
    <ram:Content>XXXXXXXXX</ram:Content>
  </ram:IncludedSPSClause>
</ram:SignatorySPSAuthentication>
</rsm:SPSExchangedDocument>
<rsm:SPSConsignment>
  <ram:ExportExitDateTime>2016-08-11</ram:ExportExitDateTime>
  <ram:ConsignorSPSParty>
    <ram:ID>XXXXXXXXX</ram:ID>
    <ram:Name>XXXXXXXXX</ram:Name>
    <ram:SpecifiedSPSAddress>
      <ram:PostcodeCode>XXXXXXXXX</ram:PostcodeCode>
      <ram:LineOne>XXXXXXXXX</ram:LineOne>
      <ram:LineTwo>XXXXXXXXX</ram:LineTwo>
      <ram:LineThree>XXXXXXXXX</ram:LineThree>
      <ram:LineFour>XXXXXXXXX</ram:LineFour>
      <ram:LineFive>XXXXXXXXX</ram:LineFive>
      <ram:CityName>XXXXXXXXX</ram:CityName>
      <ram:CountryID>CH</ram:CountryID>
      <ram:TypeCode>1</ram:TypeCode>
      <ram:CountryName>XXXXXXXXX</ram:CountryName>
      <ram:CountrySubDivisionID>XXXXXXXXX</ram:CountrySubDivisionID>
      <ram:CountrySubDivisionName>XXXXXXXXX</ram:CountrySubDivisionName>
      <ram:CityID>XXXXXXXXX</ram:CityID>
    </ram:SpecifiedSPSAddress>
  </ram:ConsignorSPSParty>
  <ram:ConsigneeSPSParty>
    <ram:ID>XXXXXXXXX</ram:ID>
    <ram:Name>XXXXXXXXX</ram:Name>
    <ram:SpecifiedSPSAddress>
      <ram:PostcodeCode>XXXXXXXXX</ram:PostcodeCode>
```

```
        <ram:LineOne>XXXXXXXXX</ram:LineOne>
        <ram:LineTwo>XXXXXXXXX</ram:LineTwo>
        <ram:LineThree>XXXXXXXXX</ram:LineThree>
        <ram:LineFour>XXXXXXXXX</ram:LineFour>
        <ram:LineFive>XXXXXXXXX</ram:LineFive>
        <ram:CityName>XXXXXXXXX</ram:CityName>
        <ram:CountryID>CH</ram:CountryID>
        <ram:TypeCode>1</ram:TypeCode>
        <ram:CountryName>XXXXXXXXX</ram:CountryName>
        <ram:CountrySubDivisionID>XXXXXXXXX</ram:CountrySubDivisionID>
        <ram:CountrySubDivisionName>XXXXXXXXX</ram:CountrySubDivisionName>
        <ram:CityID>XXXXXXXXX</ram:CityID>
      </ram:SpecifiedSPSAddress>
    </ram:ConsigneeSPSParty>
    <ram:ExportSPSCountry>
      <ram:ID>MY</ram:ID>
      <ram:Name>XXXXXXXXX</ram:Name>
    </ram:ExportSPSCountry>
    <ram:LoadingBaseportSPSLocation>
      <ram:ID>XXXXXXXXX</ram:ID>
      <ram:Name>XXXXXXXXX</ram:Name>
    </ram:LoadingBaseportSPSLocation>
    <ram:ImportSPSCountry>
      <ram:ID>MY</ram:ID>
      <ram:Name>XXXXXXXXX</ram:Name>
      <ram:SubordinateSPSCountrySubDivision>
        <ram:ID>XXXXXXXXX</ram:ID>
        <ram:Name>XXXXXXXXX</ram:Name>
        <ram:HierarchicalLevelCode>1</ram:HierarchicalLevelCode>
      </ram:SubordinateSPSCountrySubDivision>
    </ram:ImportSPSCountry>
    <ram:UnloadingBaseportSPSLocation>
      <ram:ID>XXXXXXXXX</ram:ID>
      <ram:Name>XXXXXXXXX</ram:Name>
    </ram:UnloadingBaseportSPSLocation>
    <ram:MainCarriageSPSTransportMovement>
      <ram:ID>XXXXXXXXX</ram:ID>
      <ram:ModeCode>4</ram:ModeCode>
      <ram:UsedSPSTransportMeans>
        <ram:Name>XXXXXXXXX</ram:Name>
      </ram:UsedSPSTransportMeans>
    </ram:MainCarriageSPSTransportMovement>
    <ram:UtilizedSPSTransportEquipment>
      <ram:ID>XXXXXXXXX</ram:ID>
      <ram:AffixedSPSSeal>
        <ram:ID>XXXXXXXXX</ram:ID>
      </ram:AffixedSPSSeal>
      <ram:SettingSPSTemperature>
        <ram:ValueMeasure unitCode="CEL">23</ram:ValueMeasure>
      </ram:SettingSPSTemperature>
    </ram:UtilizedSPSTransportEquipment>
    <ram:IncludedSPSConsignmentItem>
      <ram:NatureIdentificationSPSCargo>
        <ram:TypeCode>1</ram:TypeCode>
      </ram:NatureIdentificationSPSCargo>
      <ram:IncludedSPSTradeLineItem>
```

```
<ram:SequenceNumeric>23</ram:SequenceNumeric>
<ram:Description>XXXXXXXXX</ram:Description>
<ram:CommonName>XXXXXXXXX</ram:CommonName>
<ram:ScientificName>XXXXXXXXX</ram:ScientificName>
<ram:ProductionBatchID>XXXXXXXXX</ram:ProductionBatchID>
<ram:IntendedUse>XXXXXXXXX</ram:IntendedUse>
<ram:NetWeightMeasure unitCode="KGM">23</ram:NetWeightMeasure>
<ram:GrossWeightMeasure unitCode="KGM">23</ram:GrossWeightMeasure>
<ram:ApplicableSPSClassification>
 <ram:SystemID>XXXXXXXXX</ram:SystemID>
 <ram:SystemName>XXXXXXXXX</ram:SystemName>
 <ram:ClassCode>XXXXXXXXX</ram:ClassCode>
 <ram:ClassName>XXXXXXXXX</ram:ClassName>
</ram:ApplicableSPSClassification>
<ram:PhysicalSPSPackage>
 <ram:LevelCode>XXXXXXXXX</ram:LevelCode>
 <ram:TypeCode>BX</ram:TypeCode>
 <ram:ItemQuantity>23</ram:ItemQuantity>
</ram:PhysicalSPSPackage>
<ram:AssociatedSPSTransportEquipment>
 <ram:ID>XXXXXXXXX</ram:ID>
 <ram:AffixedSPSSeal>
  <ram:ID>XXXXXXXXX</ram:ID>
 </ram:AffixedSPSSeal>
 <ram:SettingSPSTemperature>
  <ram:ValueMeasure unitCode="CEL">23</ram:ValueMeasure>
 </ram:SettingSPSTemperature>
</ram:AssociatedSPSTransportEquipment>
<ram:OriginSPSCountry>
 <ram:ID>MY</ram:ID>
 <ram:Name>XXXXXXXXX</ram:Name>
 <ram:SubordinateSPSCountrySubDivision>
  <ram:ID>XXXXXXXXX</ram:ID>
  <ram:Name>XXXXXXXXX</ram:Name>
  <ram:HierarchicalLevelCode>1</ram:HierarchicalLevelCode>
  <ram:ActivityAuthorizedSPSParty>
   <ram:ID>XXXXXXXXX</ram:ID>
   <ram:Name>XXXXXXXXX</ram:Name>
   <ram:TypeCode>1</ram:TypeCode>
   <ram:SpecifiedSPSAddress>
    <ram:PostcodeCode>XXXXXXXXX</ram:PostcodeCode>
    <ram:LineOne>XXXXXXXXX</ram:LineOne>
    <ram:LineTwo>XXXXXXXXX</ram:LineTwo>
    <ram:LineThree>XXXXXXXXX</ram:LineThree>
    <ram:LineFour>XXXXXXXXX</ram:LineFour>
    <ram:LineFive>XXXXXXXXX</ram:LineFive>
    <ram:CityName>XXXXXXXXX</ram:CityName>
    <ram:CountryID>CH</ram:CountryID>
    <ram:TypeCode>1</ram:TypeCode>
    <ram:CountryName>XXXXXXXXX</ram:CountryName>
    <ram:CountrySubDivisionID>XXXXXXXXX</ram:CountrySubDivisionID>
    <ram:CountrySubDivisionName>XXXXXXXXX</ram:CountrySubDivisionName>
    <ram:CityID>XXXXXXXXX</ram:CityID>
   </ram:SpecifiedSPSAddress>
  </ram:ActivityAuthorizedSPSParty>
 </ram:SubordinateSPSCountrySubDivision>
```

```
        </ram:OriginSPSCountry>
        <ram:AppliedSPSProcess>
          <ram:TypeCode>7</ram:TypeCode>
          <ram:OperatorSPSParty>
            <ram:ID>XXXXXXXXX</ram:ID>
            <ram:Name>XXXXXXXXX</ram:Name>
          </ram:OperatorSPSParty>
        </ram:AppliedSPSProcess>
        <ram:SpecifiedSPSProduct>
          <ram:TypeCode>1</ram:TypeCode>
          <ram:ID schemeID="PETS">XXXXXXXXX</ram:ID>
          <ram:UnitQuantity>23</ram:UnitQuantity>
          <ram:ApplicableSPSProductCharacteristic>
            <ram:TypeCode>AAA</ram:TypeCode>
            <ram:Value>23</ram:Value>
          </ram:ApplicableSPSProductCharacteristic>
        </ram:SpecifiedSPSProduct>
      </ram:IncludedSPSTradeLineItem>
    </ram:IncludedSPSConsignmentItem>
  </rsm:SPSConsignment>
 </rsm:SPSCertificate>
 ]]>
 </Payload>
</rsm:HeaderDocument>
```

Appendix B.2 – Acknowledgement Status (AS1)

```
<?xml version="1.0" encoding="UTF-8" ?>
<rsm:UNeDocsShipBIM
xmlns="urn:un:unece:uncefact:data:draft:ReusableAggregateBusinessInformationEntitySchema
Module:0:8" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:rsm="urn:un:unece:uncefact:data:draft:UNeDocsShipBIM:0:8"
xsi:schemaLocation="urn:un:unece:uncefact:data:draft:UNeDocsShipBIM:0:8 UNeDocsShipBIM-
0.8.xsd">
 <rsm:HeaderDocument>
  <IdentificationId>XXXXXXXXXX</IdentificationId>
  <TypeCode>AS1</TypeCode>
  <Name>AS1 Response</Name>
  <SubmissionDateTime>2002-07-01T05:10:10</SubmissionDateTime>
  <CategoryCode>AS1</CategoryCode>
  <Remark>Message received by sending ASW Gateway</Remark>
  <ReasonCode>006</ReasonCode>
  <ReferenceDocument>
   <IdentificationId>XXXXXXXXXX</IdentificationId>
   <TypeCode>648</TypeCode>
   <IssueDateTime>2002-07-01T05:10:10</IssueDateTime>
  </ReferenceDocument>
  <SenderParty>
   <IdentificationId schemeId="1"
schemeAgencyId="ASEAN">XXXXXXXXXX</IdentificationId>
  </SenderParty>
  <RecipientParty>
   <IdentificationId schemeId="1"
schemeAgencyId="ASEAN">XXXXXXXXXX</IdentificationId>
  </RecipientParty>
  <IssueCountry>
```

```
    <IdentificationId schemeId="3" schemeAgencyId="UNECE"
schemeVersionId="15">ID</IdentificationId>
      <Name>XXXXXXXXXX</Name>
    </IssueCountry>
  </rsm:HeaderDocument>
</rsm:UNeDocsShipBIM>
```

Appendix B.3 – Acknowledgement Status (AS2)

```
<?xml version="1.0" encoding="UTF-8" ?>
<rsm:UNeDocsShipBIM
xmlns="urn:un:unece:uncefact:data:draft:ReusableAggregateBusinessInformationEntitySchema
Module:0:8" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:rsm="urn:un:unece:uncefact:data:draft:UNeDocsShipBIM:0:8"
xsi:schemaLocation="urn:un:unece:uncefact:data:draft:UNeDocsShipBIM:0:8 UNeDocsShipBIM-
0.8.xsd">
  <rsm:HeaderDocument>
    <IdentificationId>XXXXXXXXXX</IdentificationId>
    <TypeCode>AS2</TypeCode>
    <Name>AS2 Response</Name>
    <SubmissionDateTime>2002-07-01T05:10:10</SubmissionDateTime>
    <CategoryCode>AS2</CategoryCode>
    <Remark>Message received by receiving ASW Gateway</Remark>
    <ReasonCode>006</ReasonCode>
    <ReferenceDocument>
      <IdentificationId>XXXXXXXXXX</IdentificationId>
      <TypeCode>648</TypeCode>
      <IssueDateTime>2002-07-01T05:10:10</IssueDateTime>
    </ReferenceDocument>
    <SenderParty>
      <IdentificationId schemeId="1"
schemeAgencyId="ASEAN">XXXXXXXXXX</IdentificationId>
    </SenderParty>
    <RecipientParty>
      <IdentificationId schemeId="1"
schemeAgencyId="ASEAN">XXXXXXXXXX</IdentificationId>
    </RecipientParty>
    <IssueCountry>
      <IdentificationId schemeId="3" schemeAgencyId="UNECE"
schemeVersionId="15">ID</IdentificationId>
      <Name>XXXXXXXXXX</Name>
    </IssueCountry>
  </rsm:HeaderDocument>
</rsm:UNeDocsShipBIM>
```

Appendix B.4 – Acknowledgement Status (AS3)

```
<?xml version="1.0" encoding="UTF-8" ?>
<rsm:UNeDocsShipBIM
xmlns="urn:un:unece:uncefact:data:draft:ReusableAggregateBusinessInformationEntitySchema
Module:0:8" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:rsm="urn:un:unece:uncefact:data:draft:UNeDocsShipBIM:0:8"
xsi:schemaLocation="urn:un:unece:uncefact:data:draft:UNeDocsShipBIM:0:8 UNeDocsShipBIM-
0.8.xsd">
  <rsm:HeaderDocument>
   <IdentificationId>XXXXXXXXXX</IdentificationId>
   <TypeCode>AS3</TypeCode>
   <Name>AS3 Response</Name>
   <SubmissionDateTime>2002-07-01T05:10:10</SubmissionDateTime>
   <CategoryCode>AS3</CategoryCode>
   <Remark>Message received by NSW</Remark>
   <ReasonCode>006</ReasonCode>
   <ReferenceDocument>
    <IdentificationId>XXXXXXXXXX</IdentificationId>
    <TypeCode>648</TypeCode>
    <IssueDateTime>2002-07-01T05:10:10</IssueDateTime>
   </ReferenceDocument>
   <SenderParty>
    <IdentificationId schemeId="1"
schemeAgencyId="ASEAN">XXXXXXXXXX</IdentificationId>
   </SenderParty>
   <RecipientParty>
    <IdentificationId schemeId="1"
schemeAgencyId="ASEAN">XXXXXXXXXX</IdentificationId>
   </RecipientParty>
   <IssueCountry>
    <IdentificationId schemeId="3" schemeAgencyId="UNECE"
schemeVersionId="15">ID</IdentificationId>
    <Name>XXXXXXXXXX</Name>
   </IssueCountry>
  </rsm:HeaderDocument>
</rsm:UNeDocsShipBIM>
```

Appendix B.5 – Acknowledgement Status (AS4)

```
<?xml version="1.0" encoding="UTF-8" ?>
<rsm:UNeDocsShipBIM
xmlns="urn:un:unece:uncefact:data:draft:ReusableAggregateBusinessInformationEntitySchema
Module:0:8" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:rsm="urn:un:unece:uncefact:data:draft:UNeDocsShipBIM:0:8"
xsi:schemaLocation="urn:un:unece:uncefact:data:draft:UNeDocsShipBIM:0:8 UNeDocsShipBIM-
0.8.xsd">
  <rsm:HeaderDocument>
   <IdentificationId>XXXXXXXXXX</IdentificationId>
   <TypeCode>AS4</TypeCode>
   <Name>AS4 Response</Name>
   <SubmissionDateTime>2002-07-01T05:10:10</SubmissionDateTime>
   <CategoryCode>REC</CategoryCode>
   <Remark>Message received by recipient</Remark>
   <ReasonCode>006</ReasonCode>
   <ReferenceDocument>
    <IdentificationId>XXXXXXXXXX</IdentificationId>
```

```
    <TypeCode>648</TypeCode>
    <IssueDateTime>2002-07-01T05:10:10</IssueDateTime>
   </ReferenceDocument>
   <SenderParty>
    <IdentificationId schemeId="1"
schemeAgencyId="ASEAN">XXXXXXXXXX</IdentificationId>
   </SenderParty>
   <RecipientParty>
    <IdentificationId schemeId="1"
schemeAgencyId="ASEAN">XXXXXXXXXX</IdentificationId>
   </RecipientParty>
   <IssueCountry>
    <IdentificationId schemeId="3" schemeAgencyId="UNECE"
schemeVersionId="15">ID</IdentificationId>
    <Name>XXXXXXXXXX</Name>
   </IssueCountry>
  </rsm:HeaderDocument>
</rsm:UNeDocsShipBIM>
```

Appendix B.6 – e-SPS Acknowledgment

```
<?xml version="1.0" encoding="UTF-8"?>
<rsm:HeaderDocument xmlns:xsd="http://www.w3.org/2001/XMLSchema"
 xmlns:rsm="urn:un:unece:uncefact:data:draft:generalheader:0:1"
 xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
 xsi:schemaLocation="urn:un:unece:uncefact:data:draft:generalheader:0:1
GenericHeaderMessage_V1.04.xsd">
 <SenderParty>
  <IdentificationId>XXXXXXXXXX</IdentificationId>
 </SenderParty>
 <RecipientParty>
  <IdentificationId>XXXXXXXXXX</IdentificationId>
 </RecipientParty>
 <Document>
  <IdentificationId>XXXXXXXXXX</IdentificationId>
  <SequenceNo>2</SequenceNo>
  <TypeCode>312</TypeCode>
  <SubTypeCode>   </SubTypeCode>
  <FunctionCode>9</FunctionCode>
  <SubmissionDateTime>2002-07-01T05:10:10</SubmissionDateTime>
 </Document>
 <Payload>
  <![CDATA[
   <?xml version="1.0" encoding="UTF-8"?>
   <rsm:SPSAcknowledgement xmlns:xsd="http://www.w3.org/2001/XMLSchema"
     xmlns:rsm="urn:un:unece:uncefact:data:standard:SPSAcknowledgement:16"

xmlns:ccts="urn:un:unece:uncefact:documentation:standard:CoreComponentsTechnicalSpecifica
tion:2"
      xmlns:udt="urn:un:unece:uncefact:data:standard:UnqualifiedDataType:20"
xmlns:ram="urn:un:unece:uncefact:data:standard:ReusableAggregateBusinessInformationEntity:
20"
      xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
```

```
        xsi:schemaLocation="urn:un:unece:uncefact:data:standard:SPSAcknowledgement:16
SPSAcknowledgement_16p0.xsd">
     <rsm:SPSAcknowledgementDocument>
      <ram:IssueDateTime>2016-08-12</ram:IssueDateTime>
      <ram:StatusCode>39</ram:StatusCode>
      <ram:ReasonInformation>XXXXXXXXX</ram:ReasonInformation>
      <ram:ReferenceSPSReferencedDocument>
       <ram:IssueDateTime>2016-08-12</ram:IssueDateTime>
       <ram:TypeCode>648</ram:TypeCode>
       <ram:SubTypeCode>1</ram:SubTypeCode>
       <ram:RelationshipTypeCode>AIR</ram:RelationshipTypeCode>
       <ram:ID>XXXXXXXXX</ram:ID>
      </ram:ReferenceSPSReferencedDocument>
     </rsm:SPSAcknowledgementDocument>
    </rsm:SPSAcknowledgement>
  ]]>
 </Payload>
</rsm:HeaderDocument>
```