

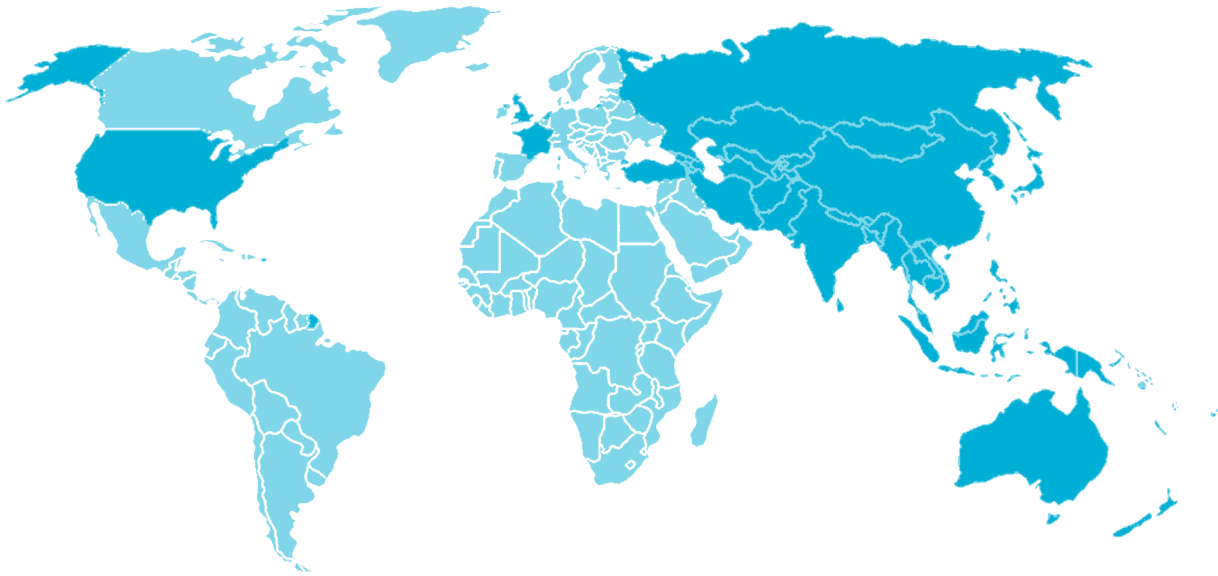
# BUSINESS PROCESS ANALYSIS GUIDE

TO SIMPLIFY TRADE PROCEDURES

Updated September 2012



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**UNITED NATIONS NETWORK OF EXPERTS FOR PAPERLESS TRADE  
IN ASIA AND THE PACIFIC**

**UNITED NATIONS ECONOMIC AND SOCIAL COMMISSION FOR ASIA  
AND THE PACIFIC**

**UNITED NATIONS ECONOMIC COMMISSION FOR EUROPE**

# **Business Process Analysis Guide to Simplify Trade Procedures**



## FOREWORD

Today's international supply chains face an increasingly competitive environment, with new product safety regulations, and intense border security concerns. The need for traders to comply with all procedural, regulatory, and documentary requirements rapidly, accurately and cheaply has become extremely important in order to remain competitive. To improve the efficiency and effectiveness of processes and information flows throughout the supply chain, it is crucial that the existing "as-is" conditions are well understood, prior to implementing trade facilitation reforms. Adapted from the business process modeling techniques that have been originally applied in the automation of mechanistic business processes, this Business Process Analysis Guide to Simplify Trade Procedures (BPA Guide) aims to provide a simple methodology to document the "as-is" business processes in international trade transactions. The BPA Guide also shares valuable country experiences and lessons learned in this area. Insights about existing processes and procedures in trade would provide senior government officials with crucial information on where improvements are necessary.

It is our hope that this BPA Guide will serve government officials as an instrument that facilitates the identification of bottlenecks in trade processes and procedures, prioritization of areas for improvement, and the design of strategies to eliminate these bottlenecks. Ultimately, business process analysis can bring about greater transparency, improved efficiency, and greater capacity to innovate, which are in turn the keys to remaining competitive in today's international markets.



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This revised and extended version of the UNNExT Business Process Analysis (BPA) Guide was prepared by Thayanan Phuaphanthong under the guidance of Yann Duval, Acting Chief, Trade Facilitation Section. The revisions and additions were made on the basis of feedback received from users who had applied the BPA methodology in conducting import and export process analyses in over 10 countries in Asia and the Pacific between 2010 and 2011, including Sok Siphana (Cambodia), Prabir De (India), and Somnuk Keretho (Thailand). Inputs and suggestions received from the members of the UNNExT Business Process Analysis Advisory Group, who met in October 2011 in Seoul, Republic of Korea, were also taken into account, including those from Ian Watt, Applied Electronic Commerce, Australia. Sangwon Lim (ESCAP), Christian Ksoll (ESCAP) and Markus Pikart (UNECE) also contributed useful inputs for the revision. The assistance of Bonkojmanee Kohsuwan in finalizing and formatting the revised Guide is acknowledged.

The Business Process Analysis Guide to Simplify Trade Procedures (BPA Guide) was developed as part of the joint technical assistance project by ESCAP and UNECE and under the auspices of the United Nations Network of Experts for Paperless Trade in Asia and the Pacific (UN NExT). The project aims to raise the capacity and accelerate the adoption of the above-mentioned trade facilitation measures, especially in countries where those measures are not yet commonly implemented.

## PREFACE

Moving goods across borders requires meeting a vast number of commercial, transport and regulatory requirements. More stringent requirements regarding product safety and security lead to potentially inefficient operations and often create unnecessary delays and costs. At present, a source of tremendous inefficiencies is associated with the preparation of transport and regulatory documents, unclear border procedures, and overzealous cargo inspection.

A Single Window (see Glossary) is one of the trade facilitation measures that has increasingly gained momentum, especially in the Asia-Pacific region, as it serves as the backbone for paperless trading. Once it is fully operational, the complexity as well as unnecessary delays and costs in administering cross-border movement of goods are expected to be significantly reduced.

To ensure that the Single Window facility responds to stakeholders' needs in different stages of the international supply chain, it is important that its design reflects present business processes. Given that the existing business processes may entail redundant activities and complexities that create procedural inefficiencies and bottlenecks, it is essential to simplify the existing business processes and harmonize them, where applicable, with relevant international recommendations, best practices, and standards such as UN/CEFACT Recommendation 18 on Facilitation Measures Related to International Trade Procedures, WCO Revised Kyoto Convention, WCO Customs Guidelines on Integrated Supply Chain Management, and WCO Framework of Standards to Secure and Facilitate Global Trade prior to adopting them as a basis for the design of the Single Window. The harmonization and simplification of business processes cannot be achieved without good and in-depth understanding of existing practices.

The *BPA Guide* offers a simple methodology to elicit, document, and analyse the existing “as-is” business processes involved in international trade, as well as aid in developing recommendations for further improvement. It suggests a set of practical steps and activities, from setting the scope of the business process analysis project; planning its implementation; collecting relevant data; and presenting it in an easily understandable manner, to analysing the captured data in order to identify bottlenecks and developing recommendations for improvement. This recommended set of steps and activities was generalized from the business process analysis exercise conducted in Thailand in preparation for the development of Thailand's Single Window e-Logistics, which is a national obligation under the ASEAN Single Window initiative. To demonstrate the practicalities of the *BPA Guide*, a step-by-step approach on how to elicit, document, and analyse the existing “as-is” business processes involved in international trade is presented. Based on the results, recommendations for further improvement are developed under consideration of existing conventions defined in the Guide.

The *BPA Guide* intends to serve practitioners and policymakers from government agencies or the private sector involved in:

- The harmonization and simplification of international trade procedures;
- The harmonization of related data requirements with the international standard; and
- The implementation of Single Window.

From the *BPA Guide*, practitioners will learn a step-by-step approach to business process analysis and the development of recommendations for future improvement. Policymakers, on the other hand, will benefit from a better understanding of the linkage between business process analysis

and trade facilitation measures, including business process simplification, data harmonization, and Single Window implementation. They will become acquainted with prerequisite steps that have to be taken prior to the implementation of trade facilitation measures.

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# ABBREVIATIONS

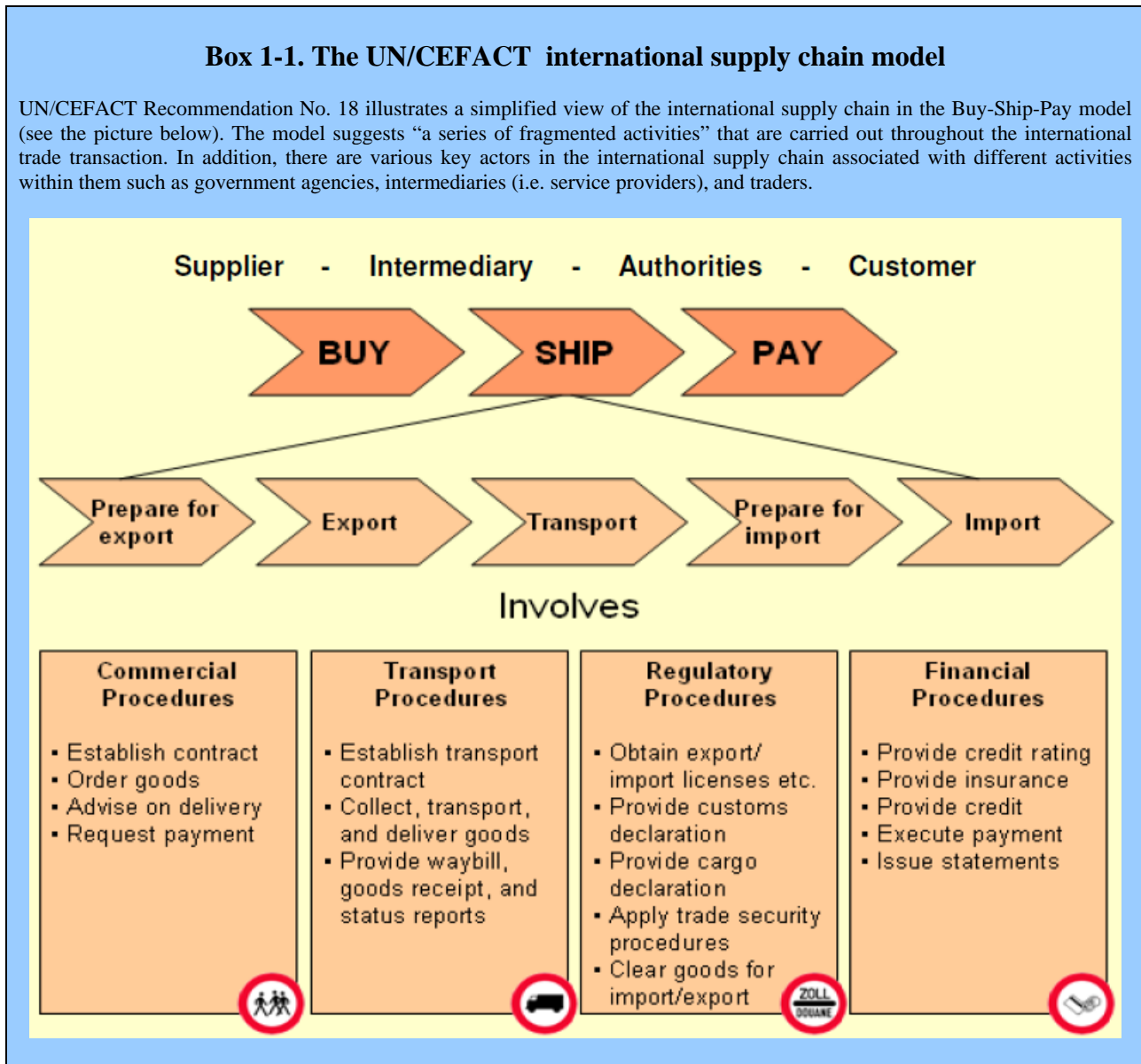
AEO	Authorized Economic Operator
ASEAN	Association of Southeast Asian Nations
ASYCUDA	Automated System for Customs Data
ECE	United Nations Economic Commission for Europe
ESCAP	United Nations Economic and Social Commission for Asia and the Pacific
ICT	Information and Communication Technologies
PERT	Project Evaluation and Review Technique
UML	Unified Modeling Language
UN/CEFACT	United Nations Center for Trade Facilitation and Electronic Business
UN NEXt	United Nations Network of Experts for Paperless Trade in Asia Pacific

# 1. TRADE FACILITATION AND BUSINESS PROCESS ANALYSIS

International trade transaction encompasses all activities related to the establishment of commercial contracts (commercial procedures), the arrangement of inland and cross-border transportation of goods (transport procedures), the export and import formalities to meet regulatory requirements (regulatory procedures), and the payment for purchased goods (financial procedures). These activities involve “collecting, presenting, communicating, and processing the data required for the movement of goods.”<sup>1</sup> They require cooperation between many actors, including exporters/traders, government agencies and service providers from different countries.

## Box 1-1. The UN/CEFACT international supply chain model

UN/CEFACT Recommendation No. 18 illustrates a simplified view of the international supply chain in the Buy-Ship-Pay model (see the picture below). The model suggests “a series of fragmented activities” that are carried out throughout the international trade transaction. In addition, there are various key actors in the international supply chain associated with different activities within them such as government agencies, intermediaries (i.e. service providers), and traders.



<sup>1</sup> OECD. (2002). *Business Benefits of Trade Facilitation*. Organization for Economic Co-operation and Development. Paris.

## **1A Participants and their interests**

According to their interests and needs, the actors of the international trade transaction can be grouped into the following categories:

a) Government agencies

Government agencies involved in the cross-border trade varies by country but are typically Ministry of Trade, Finance/customs, transport, health, agriculture, information and communication technology, veterinary, and plant and quarantine agencies. All of them are responsible for implementing a wide range of border management policies such as preventing an illegal movement of people and goods, protecting national and international public interest in terms of health, safety and security, and facilitating legitimate travel and trade. Customs is one of the government agencies that is heavily involved in border management. Its role has been extended from traditional tasks such as controlling the entry and exit of goods, enforcing trade laws, ensuring trade compliance, and collecting revenues to facilitating trade through the use of pre-arrival clearances, the implementation of the authorized economic operator (AEO) concept, green lanes, post-clearance audits, and the deployment of information and communication technologies (ICT)-enabled trade facilitation solutions, such as Single Window systems.

b) Intermediaries

Intermediaries are those who provide commercial, financial, and/or transport services within an international supply chain, such as freight forwarders, customs brokers, third-party logistics service providers, carriers, express integrators, port and terminal operators, banks, insurance companies, and information technology (IT) value-added service providers. They are normally from the private sector, which needs a swift exchange of trade information and transparent regulatory environment in order to comply with the requirements of clients.

c) Traders

Traders include those who buy and sell goods. Generally, they are the principals of the cargo and users of the services provided by the intermediaries. In carrying out international trade transactions, they must meet the regulatory requirements of government agencies from both the home country, the destination country, and respective transit countries. The competitiveness of the sellers depends not only on sellers' productive capacities, but also on sellers' ability to fulfill orders. This means delivering products to the destination at the right time, at the right quality, at the right quantity, at reasonable costs, and provide other services as required such as traceability of cargo. It is therefore important that transparency and predictability of the international supply chain especially in customs procedures, the physical inspection of goods, and the acquisition of trade-related administrative documents are enhanced so that trade transaction costs and uncertainties within the supply chain can be reduced to the minimum.

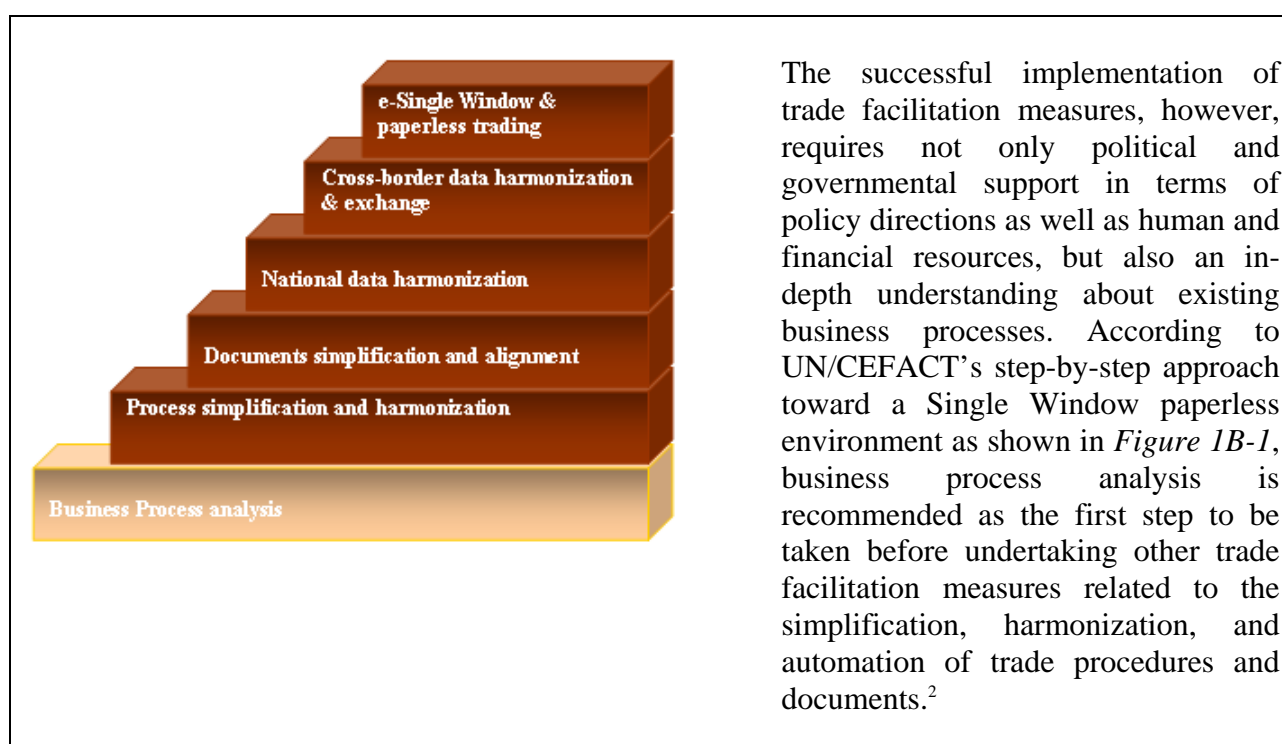
## **1B Business Process Analysis in the context of trade facilitation**

Trade facilitation is recommended by many international and intergovernmental organizations as a strategy to eliminate bottlenecks and complexities of the international trade. Various definitions that have been adopted reflect different trade facilitation measures. They include:

- The simplification of trade procedures and, where possible, elimination of unnecessary and duplicate ones;

- The harmonization of trade procedures with international recommendations, best practices, and standards;
- The simplification and standardization of documents required for the international trade transaction;
- The harmonization and standardization of information and information flows associated with the international trade transaction;
- The effective and efficient sharing of trade and transport related information among relevant stakeholders of the international supply chain;
- The use, standardization, and improvement of physical infrastructure and facilities; and
- The harmonization of applicable laws and regulations with international standards.

**Figure 1B-1 Step-by-step approach toward an electronic Single Window and paperless trade environment**



In order to improve the efficiency and effectiveness of processes and information flows throughout the international supply chain, it is highly recommended that the “as-is” conditions of relevant business processes are well understood prior to the selection of trade facilitation measures.

<sup>2</sup> UNECE (2006). *Background Paper for UN/CEFACT Symposium on Single Window Common Standards and Interoperability*, Geneva.

## 2. INTRODUCTION TO THE BUSINESS PROCESS ANALYSIS

### 2A Definition and scope

A business process is a sequence of steps, with a beginning and an end, performed for a given purpose. Based on this generic definition, a business process considered within the framework of trade facilitation can be defined as:

**A chain of logically connected activities to move goods and related information across borders from buyer to seller and to provide related services**

Business processes are valuable organizational assets. They enable the creation and delivery of business values as defined by organizational goals. Business processes are often driven by information. In the area of international supply chain the movement of cargo has to be escorted by corresponding cargo documents. The export of rice from some of the most trade-friendly countries in Asia, for example, may involve 15 different parties, 24 documents, and about 700 data elements.<sup>3</sup> According to ADB and UNESCAP (2009), no less than 22 days may be necessary for the exporter to comply with various procedures and have the shipment ready for export at the nearest seaport. Delay on document processing or lack of integrity in the information that flows across business processes has become a factor that holds back cargo movement. On average, each additional day that a cargo is delayed prior to being shipped reduces trade volume by at least 1 per cent and by approximately 6 per cent if the products are time-sensitive (perishable) agricultural goods.<sup>4</sup>

Because the underlying business process has a significant impact on the performance of the overall business, any process improvement achieved can enhance the competitiveness both at the organizational and the national level. Business process analysis is a study of existing business processes within one or across several organizations, both in normal operation and in exceptional situations. Its primary goal is to understand attributes of business processes and relationships among them. The results of the business process analysis may serve as a baseline for implementing trade facilitation measures such as:

- Simplification of trade procedures (including commercial, transport, regulatory and financial procedures);
- Simplification of documentary requirements and their alignment with international standards; and
- Automation of international trade transaction and its associated electronic documents for Single Window and paperless trade systems.

### 2B Business process modeling methodology used in this Guide

Business process modeling is a technique for documenting business processes where each element of the business process is represented by graphical notations. The resulting graphical representation of a business process is known as a *business process model*. Each business process model illustrates:

- Activities that come in a specific order and decision points;
- Actors who perform those activities;

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<sup>3</sup> ADB and UNESCAP (2009). *Designing and Implementing Trade Facilitation in Asia and the Pacific*. Asian Development Bank. Manila.

<sup>4</sup> Djankov, S., Freund, C., and Pham, C. (2006). *Trading on Time*. World Bank. Washington DC.



- Inputs and outputs of each activity;
- Criteria for entering and exiting the business process;
- How actors relate to one another;
- How information flows throughout the business process;
- Associated rules and regulations; and
- Quantitative indicators such as number of steps, as well as time and cost required to complete a particular business process.

The documentation of existing business processes in simple diagrams and brief descriptions helps create a common understanding on working norms and operational procedures among relevant stakeholders as well as increase stakeholders' knowledge about the business processes. Additionally, it serves as a basis to identify areas for the optimization of business processes. It thus helps policy makers to redesign processes, make necessary modifications in an informed and targeted manner as well as justify those changes. The BPA provides also insights into how certain policies will improve operational efficiency, transparency, and effectiveness.

The stakeholders of the business processes include practitioners who deal with the documented business processes on a daily basis; experts who may be brought in to assist with the initiation and implementation of business process improvement programs, and decision makers who make informed decisions regarding the revision of related regulations and procedures.

Business process models are increasingly used in trade facilitation. For the purposes of this Guide, the business process model serves as a tool that facilitates:

- The analysis of activities, documents, and information flow in international trade procedures;
- The identification and prioritization of problematic areas that cause the delays in moving goods from seller to buyer; and
- The design of improvement measures to address these problematic areas (e.g. simplifying processes and data, and eliminating redundancies).

The Unified Modeling Language (UML)<sup>5</sup> provides a set of standard graphical notations for business process modeling. UML is internationally accepted and widely used not only among practitioners in business communities but also in information technology and software development.

The quality of a business process model depends not only on its ability to accurately represent various elements of a business process, but also on the appropriate use of graphical notations. The consistent use of modeling techniques produces results that can be easily understood, analysed, compared, and validated. If the ultimate goal of the business process modeling and analysis is to automate the international trade transaction and promote the electronic exchange of trade documents through the Single Window, the use of common standard graphical notations in business process modeling is vital. This is mainly because the common standard graphical notations allow business domain experts to communicate procedural and documentary requirements with technical experts who are designated to put the systems in place.

## ***2C UML graphical notations used in this Guide***

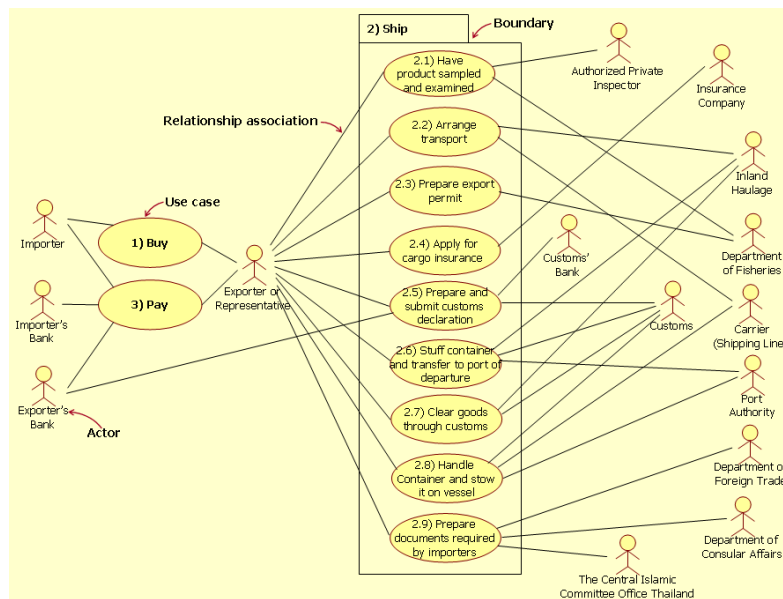
In business process analysis, the use case diagram, such as the one shown in Figure 2C-1, serves as a project's frame of reference. Its purpose is to present a graphical overview of core business processes that are subject to further examination at a greater depth. It indicates all stakeholders

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<sup>5</sup> UML Resource Page, <http://www.uml.org>.

involved in these business processes and demonstrates all actual associations between these business processes and the stakeholders.

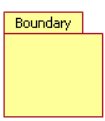



**Figure 2C-1. Use Case Diagram**



Source: ESCAP from The Analysis of Frozen Shrimp Export Process in Thailand, Institute for IT Innovation, Kasetsart University.

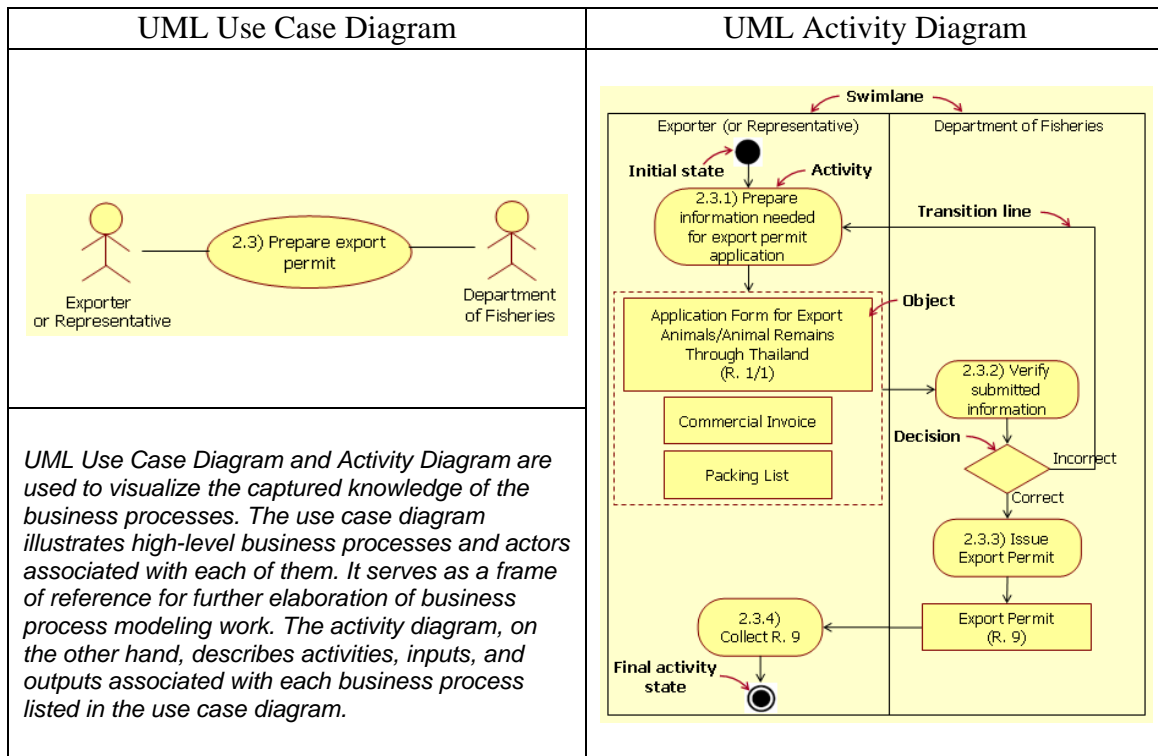
Various elements of a use case diagram include an actor, a use case, and a relationship association. The use of a boundary is optional. It can be useful as means to organize use cases. A set of graphical notations used in the use case diagram are provided with explanations of their meaning in Table 2C-1.

**Table 2C-1. Use Case notations**

Notation	Description and instruction for use
	<b>Boundary:</b> <ul style="list-style-type: none"> <li>– Represents a process area</li> <li>– Includes the name of a subject boundary on top</li> <li>– E.g., ship</li> </ul>
	<b>Actor:</b> <ul style="list-style-type: none"> <li>– Represents a role that participates in a particular business process</li> <li>– Can be an individual, an organization, a department, etc.</li> <li>– Is labelled with a role-name</li> <li>– Is placed outside the subject boundary</li> <li>– E.g., Exporter or Representative, Exporter’s Bank</li> </ul>
	<b>Use Case:</b> <ul style="list-style-type: none"> <li>– Represents a core business process</li> <li>– Is labelled with a descriptive verb-noun phrase</li> <li>– E.g., buy, have product sampled and examined</li> </ul>
	<b>Relationship Association:</b> <ul style="list-style-type: none"> <li>– Links actors with the use cases (later business processes) they participate in</li> </ul>




As illustrated in Figure 2C-2, the activity diagram is an elaboration of each business process displayed in the use case diagram. It portrays a sequence of activities and information flows from one responsible party to another. It informs its audience not only who is doing what in which order, but also documentary inputs that serve as prerequisites to activities and documentary outputs that can be obtained upon completion of activities.

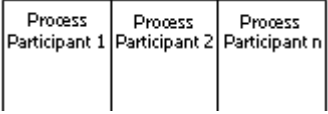






**Figure 2C-2. An activity diagram explaining “2.3) prepare export permit” use case**



A set of graphical notations for used in the activity diagram are provided with explanations of their meaning in Tables 2C-2. These notations are adopted from UML.

**Table 2C-2. Activity Diagram notations**

Notation	Description and instruction for use
	<p><b>Initial State</b></p> <ul style="list-style-type: none"> <li>– Represents the beginning of a set of activities</li> <li>– Can only be one initial state for each activity diagram</li> </ul>
	<p><b>Final Flow State</b></p> <ul style="list-style-type: none"> <li>– Is used to stop the flow of activities</li> <li>– Indicates that further activities cannot be pursued within the described context</li> </ul>
	<p><b>Final Activity State</b></p> <ul style="list-style-type: none"> <li>– Is used to indicate the completion of the business process</li> </ul>

	<p><b>Swimlane</b></p> <ul style="list-style-type: none"> <li>– Is used to break up individual actions to individuals/agencies that are responsible for executing their actions</li> <li>– Is labelled with the name of the responsible individual, organization, or department</li> <li>– E.g., Exporter or Representative, Department of Fisheries</li> </ul>
	<p><b>Activity</b></p> <ul style="list-style-type: none"> <li>– Represents a non-decomposable piece of behaviour</li> <li>– Is labelled with a name that 1) begins with a verb and ends with a noun; and 2) is short yet contains enough information for readers to comprehend</li> <li>– E.g., Prepare information needed for export permit application, Verify submitted information, Issue Export Permit, Collect R. 9</li> </ul>
	<p><b>Object</b></p> <ul style="list-style-type: none"> <li>– Represents a document or information that flows from one activity to another activity</li> <li>– Is labelled with a name of a document</li> <li>– E.g., Application Form for Export Animals/Animal Remains Through Thailand (R. 1/1), Commercial Invoice, Packing List, Export Permit (R. 9)</li> </ul>
	<p><b>Decision</b></p> <ul style="list-style-type: none"> <li>– Represented by a diamond</li> <li>– Refers to the point where a decision, depending on the outcome of a specific prior activity, has to be made</li> <li>– Has multiple transition lines coming out of a decision point and connecting to different activities</li> <li>– Label each transition line that comes out of 'Decision' with the condition, such as Correct, Incorrect</li> </ul>
	<p><b>Transition line</b></p> <ul style="list-style-type: none"> <li>– Indicates a sequential flow of activities and information flows in an activity diagram</li> </ul>
	<p><b>Fork (Splitting of Control)</b></p> <ul style="list-style-type: none"> <li>– Is used to visualize a set of parallel activities or concurrent flow of activities</li> </ul>
	<p><b>Join (Synchronization of Control)</b></p> <ul style="list-style-type: none"> <li>– Is used to indicate the termination of a set of parallel activities or concurrent flow of activities</li> </ul>

## 2D Business process modeling tools

Business process modeling can be achieved through simple drawing tools such as paper and pencil, daily use office software (e.g., Microsoft Powerpoint, OpenOffice Impress, iWork Keynote), and basic diagramming software <sup>6</sup> (e.g., Microsoft Visio, OpenOffice Draw, SmartDraw).

Process analysts may consider using an off-the-shelf tool that has been designed specifically to facilitate not only the modeling of business process models, but also the management of business process model repository<sup>7</sup> (e.g. Enterprise Architect, MajicDraw, StarUML). The management of business process model repository includes activities such as:

- Establishing a business process model repository;
- Storing business process models and related process knowledge in the repository;
- Updating those business process models and process knowledge; and
- Managing any changes made and to be made to business process models and process knowledge.

The business process repository, that these off-the-shelf business process modeling tools help establish, serves as a central location for storing business process models and process knowledge. Via the tool, process analysts have an easy access to a repository that displays both business process models as a whole as well as individual elements that constitute business process models. The re-use of business models, their patterns, and their parts is therefore made easy. Nevertheless, it is important to bear in mind that process analysts may experience a high and steep learning curve before they can enjoy the benefits of rich business process modeling tools.

## 2E Outputs of the business process analysis

The main deliverables of the business process analysis exercise within the context of trade facilitation is the business process analysis report that contains the following components:

- A use case diagram showing the scope of the business process analysis project;
- A set of activity diagrams; each explains a core business process as represented by a use case in the use case diagram;
- A set of process descriptions; each provides a textual description of an activity diagram itself and related information including relevant laws, rules, and regulations, documentary requirements, input and criteria to enter/begin the business process, output and criteria to exit the business process, and indicate the average time required to complete them;
- A list of trade forms and documents which may be accompanied with samples of physical copies;
- An integrated activity diagram;
- A time-procedure chart;
- A list of identified bottlenecks; and
- Recommendations to improve the business process and/or to-be business process models.

These output components are further explained in the following parts of the *BPA Guide*.

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<sup>6</sup> See [http://en.wikipedia.org/wiki/Diagramming\\_software](http://en.wikipedia.org/wiki/Diagramming_software) for an extended list.

<sup>7</sup> See [http://en.wikipedia.org/wiki/List\\_of\\_Unified\\_Modeling\\_Language\\_tools](http://en.wikipedia.org/wiki/List_of_Unified_Modeling_Language_tools) for an extended list.

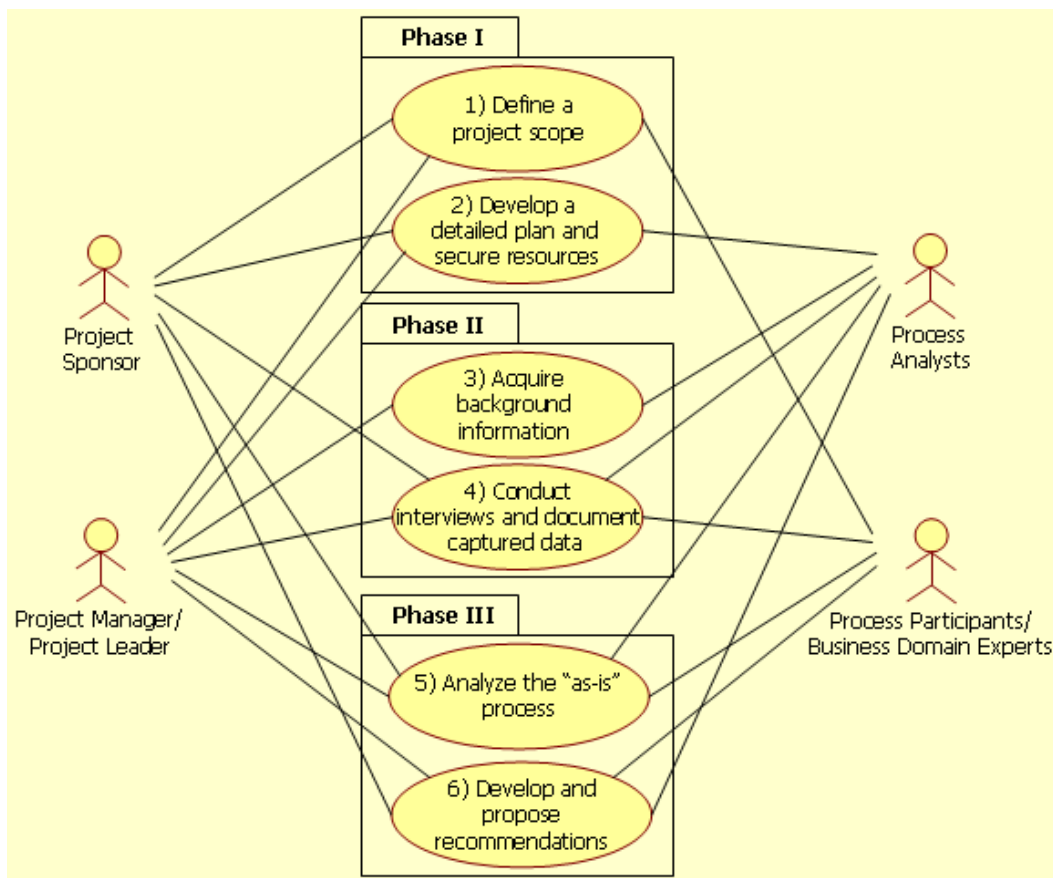
# 3. GUIDE TO BUSINESS PROCESS ANALYSIS TO SIMPLIFY TRADE PROCEDURES

## 3A Introduction to phases, stakeholders and related issues

The business process analysis consists of three phases that have to be carried out in sequence (see Figure 3.1):

- Phase I:** *Scope setting*, which includes the following two steps:  
Step 1 - Define a project scope  
Step 2 - Develop a detailed work plan and secure resources
- Phase II:** *Data collection and process documentation*, which includes two steps:  
Step 3 - Acquire background information  
Step 4 - Conduct interviews and document captured data
- Phase III:** *Process analysis and recommendations development*, which includes the following two steps:  
Step 5 - Analyse the “as-is” processes  
Step 6 - Develop and propose recommendations.

**Figure 3A-1. Key steps and stakeholders in business process analysis**



Four groups of stakeholders participate in a business process:

- Project sponsor, who acts as authorized person from a lead agency commissioning the business process analysis study and who has a crucial role in approving and driving the implementation of process improvement program;
- Project manager/project leader, who is in charge of planning, directing, staffing, and managing the development of the business process study;
- Project analysts, who are in charge of collecting, documenting, and analysing the business processes as well as proposing a set of recommendations on how to improve them;
- Process participants/Business Domain Experts, who carry out business processes and thus have specific expertise and knowledge of a business process.

Their responsibilities in the different phases of the business process analysis are summarized in *Table 3A-1*.

The steps within each phase require that a series of activities be carried out. These activities will be explained in Section 3B. It is highly recommended that validation and verification activities are embedded in each step to ensure the accuracy and comprehensiveness of the outputs. Such validation and verification can be achieved through several rounds of a *peer review* performed by relevant stakeholders of the business process analysis exercise. Refinement shall be made until the quality of outputs is acceptable.

The six steps described in this Guide, together with deliverables of the business process analysis report, are summarized in Table 3A-2. The same table also provides guidance on what should be done (the “Do’s”) and what should be avoided (the “Don’ts”) in conducting the business process analysis exercise.

**Table 3A-1. Roles and responsibilities of stakeholders in BPA**

Role	Phase I		Phase II		Phase III		
	Step 1: <i>Define project scope</i>	Step 2: <i>Develop a detailed plan and secure resources</i>	Step 3: <i>Acquire background information</i>	Step 4: <i>Conduct interview and document captured data</i>	Step 5: <i>Analyse the “as-is” processes</i>	Step 6: <i>Develop and propose recommendations</i>	
<b>Project Sponsor</b>	Finalize and approve the project scope	Approve any changes to project scope  Commit specific resources	Provide management support and direction when needed				Drive the implementation of approved recommendations
			Participate in major project reviews and approve key deliverables including the recommendations toward the desired to-be processes  Ensure timely resolution of issues affecting project success				
<b>Project manager/project leader</b>	Acquire relevant information to define the scope of a process under investigation	Develop a detailed plan  Organize resources	Oversee and control the execution of the plan  Participate in the review of milestone deliverables including the final output				
<b>Process Analysts</b>	-	Review plan and propose adjustment if needed	Conduct desk research  Make necessary preparation for interview and observation	Conduct the interviews  Collect and consolidate data  Document the “as-is” processes	Analyse and identify bottlenecks and improvement opportunities of the “as-is” processes	Develop recommendations for process simplification  Report the final output	
<b>Process participants/business domain experts</b>	Verify the proposed project scope	-	Provide relevant knowledge on process under investigation  Verify the accuracy of applicable deliverables			Participate in the review of the final output	



**Table 3A-2. Overview of BPA**

Step	Deliverables	Do's	Don'ts
Step 1: Define project scope	<p><i>Use case diagram</i> and <i>description</i> illustrating:</p> <ul style="list-style-type: none"> <li>- Business domain</li> <li>- Process areas (optional)</li> <li>- Process participants</li> <li>- Core business processes in which those participants interact</li> </ul>	<p>Be precise on the scope of the process analysis study.</p> <p>Direct limited BPA efforts and resources to the business domains that have strategic importance (e.g., a business domain that deals with major export or import products.), face the largest challenges (e.g., a business domain that is losing its competitive edge), and/or has a large future potential.</p> <p>Specify the environment and conditions in which the business domain of interest operates, such as mode of transport, terms of delivery, terms of payment, country of destination, and country of origin at the early phase of the business process analysis project, because different modes of transport, terms of delivery, and terms of payment have different procedural and documentary requirements. The selected environment and conditions should be common to typical transactions.</p> <p>Set the scope from the perspective of the beneficiary. With limited resources, detailed modeling and analysis of the business process, for example, is not possible. If the beneficiary is an exporter, the emphasis is on what the exporter has to do in order to ship the cargo to the destination country. If the beneficiary is a carrier, the emphasis is on what the carrier has to do in order to leave the port of departure.</p> <p>Break the project into sub-projects if the scope is relatively large. For example, if the project requires the analysis of business processes for exporting 10 countries' strategic products, break the project into 10 sub-projects and define the project scope for each of them.</p>	<p>Do not set the scope that is too broad, too vague, or too complicated.</p>
Step 2: Develop a detailed plan and secure resources	<p><i>Detailed project plan</i> including human resources, schedules, and software supported tools</p>	<p>Set up a team that consists of process analysts with critical thinking, good personalities, and sound interpersonal skills.</p>	<p>Do not underestimate the effort and scheduling of certain tasks, especially those related to human interactions, e.g. data collection and verification.</p>
Step 3: Acquire background information	<p>A <i>folder of background information</i> containing:</p> <ul style="list-style-type: none"> <li>- A list of potential interviewees (e.g. names of contact person from government agencies and businesses responsible for carrying out respective activities in the business processes) and</li> </ul>	<p>Do collect as much background information as possible from diverse available sources.</p>	<p>Do not proceed to any interview session before the interviewers have grasped sufficient background information and familiarity with the organization and the</p>

Step	Deliverables	Do's	Don'ts
	<p>their contact information</p> <ul style="list-style-type: none"> <li>- A note explaining a sequence of activities in core business processes</li> <li>- A list of forms and documents associated with those activities as well as samples of physical copies if available</li> </ul> <p><i>A list of guiding questions for the interview</i></p>		<p>specific business processes in question.</p>
<p>Step 4: Conduct interviews and document captured data</p>	<p><i>A set of activity diagrams</i> illustrating:</p> <ul style="list-style-type: none"> <li>- Starting and ending points</li> <li>- A set of activities</li> <li>- Documents associated with each business transaction</li> </ul> <p><i>A set of process descriptions</i> describing:</p> <ul style="list-style-type: none"> <li>- The name of a process area to which this particular business process belongs</li> <li>- The name of the business process (use case)</li> <li>- Related laws, rules, and regulations</li> <li>- The name of process participants (parties responsible for carrying out certain activities in the business process)</li> <li>- Input and criteria to enter/begin the business process</li> <li>- Activities and associated documentary requirements to complete the business process</li> <li>- Output and criteria to exit the business process</li> <li>- Average time required to complete this business process</li> </ul> <p><i>An activity diagram</i> illustrating integrated processes in the business domain</p> <p><i>Time-Procedure Chart</i> illustrating relationships between business process and time required to complete each business process in the business domain of interest</p>	<p>Arrange interview sessions with a diverse range of process participants performing different roles in the business domain of interest. Interviewing process participants/business domain experts performing different roles allow process analysts to see business processes from different perspectives.</p> <p>Consider practitioners at the operational level potential interviewees. They are likely to be more knowledgeable than the management when it comes to the practicalities of business processes.</p> <p>Inform interviewees about overall expectations from the interview session and the specific business processes of interest.</p> <p>Start with the activity diagram when attempting to define a process using various pieces of information collected from various interviewees. Drawing helps formulate ideas and a logical sequence of activities. Most likely, drawing the first diagram is going to be a struggle. If two connecting activities in a logical sequence do not make sense, it means that some activities may be missing in between.</p> <p>Make sure that 'Swimlane' is labeled with the role-name or the name of the responsible individual, organizational unit, or organization; 'Activities' is labeled with a name that begins with a verb specifying an action; and 'object' is labeled with a name of a document. The appropriate use of notations is important in order to make the activity diagrams complete and meaningful.</p> <p>Read the activity diagrams a few time and make sure that all components of the activity diagrams are organized in a logical sequence and that the activity diagrams are understandable. The activity diagrams are useless if they cannot convey the information on how the business processes are carried out to the readers.</p> <p>Write down questions that come up when drawing the diagram and use them for another interview session. Structure the second round of the interview based on these questions.</p> <p>Define and document processes in a way that reflects the current state of practices.</p> <p>Always re-use patterns (diagram of identical activities) where applicable, as it saves time and ensures the consistency of processes across the business domain.</p>	<p>Do not attempt to create processes that look "perfect" from the beginning. Perfection does not represent what actually happens in reality and thus cannot serve as a baseline for improvement.</p>

Step	Deliverables	Do's	Don'ts
		<p>Hold an experience-sharing session among the team of process analysts from time to time. Experience sharing allows process analysts to observe and depict patterns in some processes across the business domain. For example, process analysts responsible for defining processes of different products will discover among themselves that no matter what products there are, traders have to comply with customs regulations in submitting customs declarations following similar instructions.</p> <p>Make sure that core business processes represented by bars in the time-procedure chart are consistent with core business processes represented by use cases in the use case diagram</p> <p>Reflect accurately a time frame (i.e., the average time it takes to complete the processes, for example, in hour or day) and a timeline (i.e., the time in which core business processes occur in relation to other core business processes, e.g., sequential or simultaneous) in which core business processes are carried out in the time-procedure chart.</p> <p>Collate timelines for selected import and export processes in a separate table. The table should provide the minimum, maximum and average time needed for each selected process (e.g. document preparation, inland transportation, inland customs time, terminal handling time). Additionally, a calculation of the maximum deviation to the average time could show important insights.</p>	
<p>Step 5: Analyse the “as- is” processes</p>	<p><i>A set of observations</i> of the “as-is” processes that have the potential to be improved</p>	<p>During the interview, seek interviewees’ opinions and observations on bottlenecks and issues related to the procedural, regulatory, and documentary requirements that should be improved and how to improve them.</p> <p>Listen to the ‘unsaid.’ The fact that ‘process participants whom process analysts interview find the processes used in administering international trade transactions easy and business friendly’ does not mean that there are no bottlenecks and there is no room for improvement. It is important that all outputs derived from Step 4 are thoroughly reviewed when attempting to identify bottlenecks and improvement opportunities.</p> <p>Apply common sense when analyzing business processes.</p>	<p>Do not wait to the end to analyse and identify any bottlenecks and recommendations for improvement. Rather, incrementally collect them along various phases of the process analysis study.</p> <p>Do not rely only on interviewees’ opinion.</p>
<p>Step 6: Develop and propose recommendations</p>	<p><i>Final report with recommendations</i> for process simplification, which may include diagrams of “to-be” business processes</p>	<p>Consult relevant stakeholders to find out the limitation of what can and cannot be done for process improvement recommendations.</p> <p>Listen to their reasons why a particular procedural, regulatory, or documentary requirement is necessary.</p>	<p>Do not assume that all proposed recommendations can be implemented.</p>

### 3B Individual phases, steps and activities

The rest of this Chapter will discuss the three phases of the business process analysis, detailed steps involved in each phase and activities necessary to complete the steps.

#### Phase I: Scope setting

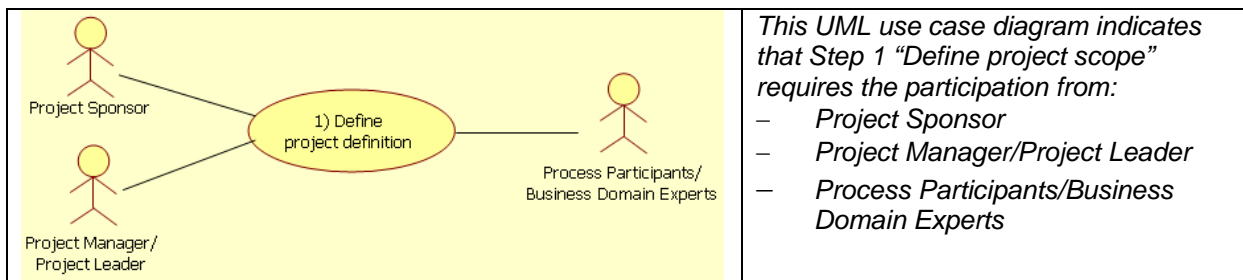
The objective of this phase is to establish a baseline for the implementation and management of a business process analysis project. It consists of two steps:

- Step 1 - Define the project scope
- Step 2 - Develop a detailed work plan and ensure resources.

#### Step 1: Define the project scope

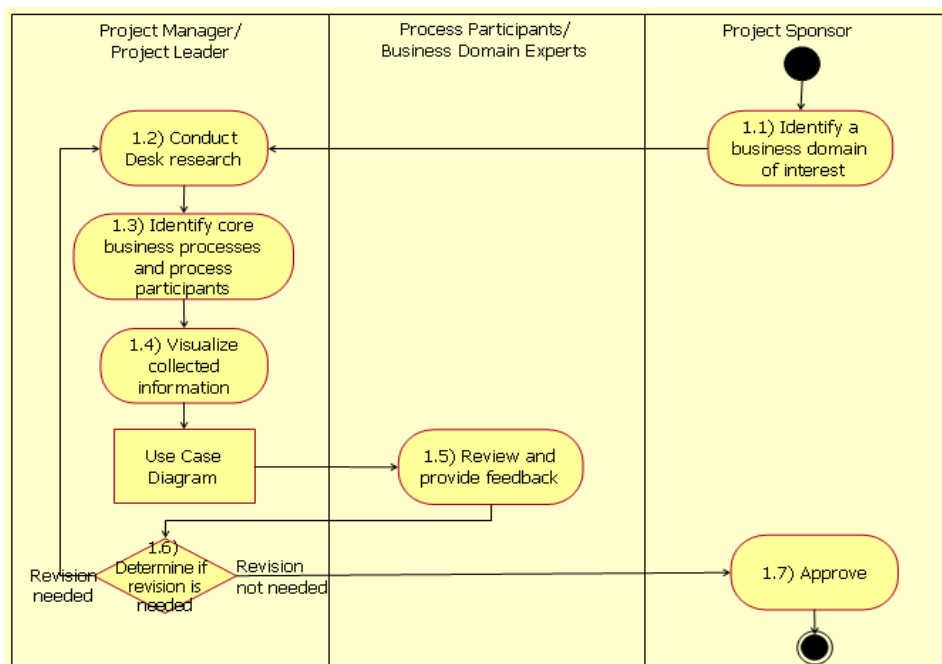
Step 1 aims at identifying a frame of reference for further detailed business process modeling work. The frame of reference, which is visualized in a UML use case diagram, illustrates the high-level business processes and actors associated with each of them.

**Figure 3B-1. Stakeholders involved in Step 1**



This step includes seven necessary activities, as illustrated with the UML activity diagram in Figure 3B-2. Its detailed description is provided below.

**Figure 3B-2. Activities involved in Step 1**



Project sponsor identifies “a business domain” of interest. A business domain is usually the name of the industry (such as frozen shrimp export) or service (such as customs clearance) whose business processes are subject to the business process analysis exercise. (See Box 3B-1 for an example)

### **Box 3B-1. Case study – define the project scope**

Recognizing the need for a greater efficiency in documentary procedures related to international trade transactions, Thailand has prioritized the establishment of the Single-Window e-Logistic Platform as the national flagship project. Progress towards the establishment of the Single-Window e-Logistic Platform was hindered by several factors. One was the absence of knowledge about the integrative nature of processes performed by different parties and about information flow throughout the international supply chain.

In response to this shortfall, the Department of Export Promotion (under the Ministry of Commerce) commissioned an in-depth study on the export process with the following objectives:

- To drive the formalization of the export process;
- To investigate interrelationships among processes, information, and stakeholders, as well as related laws and regulations;
- To provide a basis for simplification of procedural requirements and harmonization of data requirements; and
- To facilitate automation of international trade transactions, and thus the establishment of the Single-Window e-Logistic Platform.

As export processes vary by product, it is not possible to carry out the study of the export process for all products at once. The selection of export products for the BPA project is based on the following criteria:

- Strategic importance of the product on national economy;
- Aggressiveness of competition; and
- Degree of willingness of stakeholders to participate in data collection process.

For this particular project, frozen shrimp was selected, based on the above criteria. It is one of the country’s strategic export products. The export volume of shrimp has been growing for the past five years. The production of frozen shrimp, in addition, involves the whole chain of production from farmers to manufacturers, retailers, and suppliers. About 80 percent of raw materials for production are sourced locally. Thai producers have been targeted to differentiate their products to deal with direct competition with low-cost Chinese and Vietnamese shrimp. Rice and poultry are also considered as among Thailand’s strategic export products. However, relatively close connection with stakeholders from shrimp exporters, their logistics service providers, and relevant government agencies gave relatively more confidence in achieving the goal of the project.

Source: ESCAP from The Analysis of Frozen Shrimp Export Process in Thailand, Institute for IT Innovation, Kasetsart University.

To initiate a Business process analysis, it is crucial that the project sponsor clearly specifies:

- The process or set of procedures that he/she is interested in analysing – e.g. only customs clearance or payment process; or the entire set export procedures from factory floor to the port.
- The environment and conditions in which the industry of interest operates and which shall be included in the BPA; i.e. mode of transport, terms of delivery, terms of payment, and country of destination (given that regulatory requirements vary from one country to another). An example is provided in Box 3B-2.

### **Box 3B-2. Case study – scope of analysis**

The Ministry of Commerce, represented by Department of Export Promotion, as a project sponsor, specified that the analysis of the frozen shrimp export process covers all activities in the international trade transaction, which range from “the establishment of commercial contracts,” through “the arrangement of inland and cross-border transportation and export formalities to meet regulatory requirements” to “the payment of the purchased cargo.” Due to the fact that mode of transport, terms of delivery, and terms of payment can vary, the project sponsor agreed to the following assumptions made for the study:

- Ship: Shrimp exporters choose ocean freight as a mode of transport, as it is one of the cheapest and most convenient ways to ship goods overseas.
- CIF (Cost, Insurance, and Freight): Shrimp exporters in most cases arrange and absorb the cost of shipping their cargo to the port of destination. Minimum insurance coverage is also procured against loss of or damage to the goods during the carriage.
- FCL (Full Container Load): For simplicity, the analysis of frozen shrimp export process traces the operation of a sole exporter. It is also assumed that the whole container is intended for a single consignee.
- CY (Container Yard) Container Service: For simplicity, it is assumed that “CY/CY” container service is used. Under such service, the carrier delivers an empty container to exporter’s premises for loading and brings the loaded container back to the container yard. At the container yard, the container waits to be loaded onto the vessel. No unpacking or modification is made.
- L/C (Letter of Credit): For simplicity, a letter of credit is assumed as method of payment.

Source: ESCAP from The Analysis of Frozen Shrimp Export Process in Thailand, Institute for IT Innovation, Kasetsart University

#### *Activity 1.2*

Project manager/project leader conducts initial desk research on the environment and conditions in which the business domain of interest operates.

#### *Activity 1.3*

Project manager/project leader, based on the outcome of the desk research, identifies core business processes and stakeholders who interact with those business processes.

### **Box 3B-3. Identifying core business processes**

Core business process in the context of this BPA Guide refers to the business process that regularly occurs in typical trade transactions. Business processes on the production or manufacturing side are not included. Box 3B-4 provides a sample list of business processes that must be carried out every time when exporting frozen shrimp to the major export markets for Thai frozen shrimp including the United States, Japan, and the European Union.

In the business domain of interest under the environment and conditions in which the business domain of interest operates, the project manager/project leader often comes across business processes that are not needed to be carried out in every trade transaction. These business processes are not core business processes. For example, the acquisition of an export license falls into this category of business processes. It is one of the first requirements that one needs to fulfill in order to obtain the right to export goods to countries of trading partners. An export license, whether a general or a product-specific one, usually permits exporters to export their products multiple times within a pre-specified timeframe. The renewal of the export license is required only when the validity period is about to end. The validity period may vary from months to years.

Project manager/project leader should view business processes that are not usually carried out in every trade transaction as either conditions that must exist before carrying out core business processes or exceptions that only apply when certain conditions prevail. Even though they are not core business processes, it is also important that the project manager/project leader addressed them in the study. Relevant information such as time, costs, and how to complete the processes may be provided. However, it is recommended that the project manager/project leader does not incorporate it into the analysis.

For example, the project manager/project leader should note in the 'Process Description' that in order to export frozen shrimp from Thailand to the United States, Japan, and European Union, exporters must possess a general license issued by Department of Foreign Trade and a license for trading fishery and aquaculture products issued by Department of Fisheries. If the export shipment is for the United States and the European Union, a membership with Thai Frozen Foods Association is also required.

	Time	Cost (Baht)	Valid (Year)
General license	3 Days	150	5
License for trading fishery and aquaculture products	5 Days	200	1
Membership with Thai Frozen Foods Association	2 Months	15,000-30,000	1


Project manager/project leader may provide the information about the time and costs that exporters have to spend to obtain them as well as the validity period. The information regarding such regulatory requirements, however, should only be treated as 'input and criteria to enter/begin the business process.' It should only be addressed in process description, but not incorporated into the use case diagram, the activity diagram, and the time-procedure chart.


Source: ESCAP from The Analysis of Frozen Shrimp Export Process in Thailand, Institute for IT Innovation, Kasetsart University`


#### Activity 1.4


Project manager/project leader documents capture core business processes and stakeholders of the business domain of interest using UML Use Case notations (see table 2C-1).

Project manager/project leader uses the following notations:

 - to depict core business processes;

 - to depict each stakeholder, who is known as Process participant/business domain expert; and

 - to depict all actual associations between business processes and process participants/business domain experts.

When there are core sub-business processes, project manager/project leader may organize core business processes into a process area. Boundaries  may be used to group core sub-business processes together.

An example of a UML use case diagram is given in Box 3B-4.

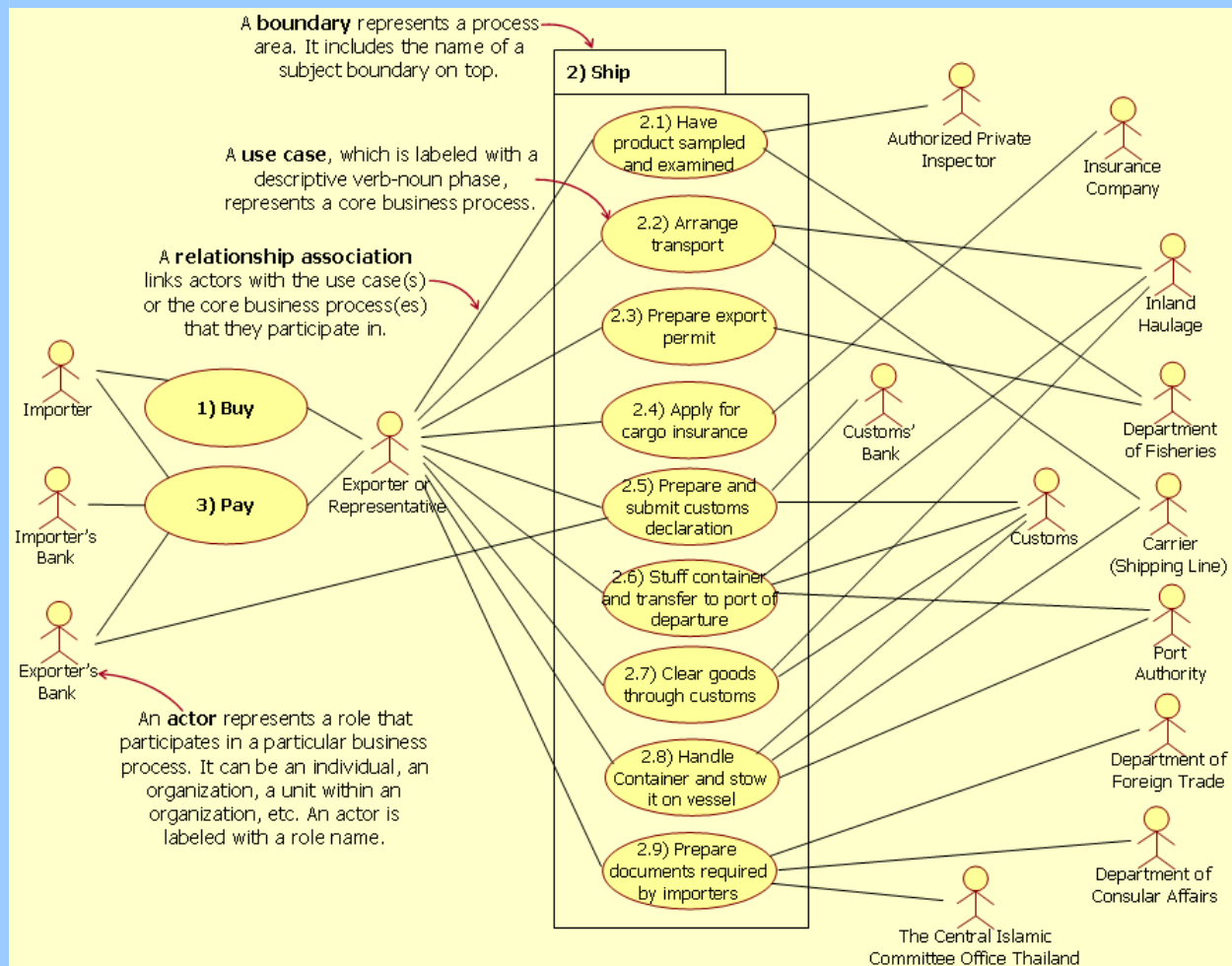
The illustration of high-level business processes and their stakeholders in the use case diagram is recommended as the first step in identifying business processes that fall under the business domain of interest for several reasons:

1. The use case diagram visualizes high-level business processes and their stakeholders in a viewpoint that is simple enough to be easily validated by process participants/business domain experts. Having the use case diagram validated by process participants/business domain experts helps ensure the modeling of the 'right' business processes.
2. The validated use case diagram serves as a frame of reference for project manager/project leader to plan and manage the complexities of the BPA project.
3. The validated use case helps process analysts structure their business process modeling and analysis work. Using the validated use case diagram as a frame of reference, scope creep can be avoided.

### Box 3B-4. Case study – visualize the project scope

This UML use case diagram illustrates core business processes used when exporting frozen shrimp from Thailand to its major export markets including the United States, Japan, and European Union. It provides the frame of reference for analysing the business processes in detail. The diagram lists all process participants/business domain experts, business processes, and the relationships among them.

The diagram shows that the scope of analysis will cover all activities in the international trade transaction, which include commercial procedures, transport procedures, regulatory procedures, and financial procedures. The core business processes are organized according to the UN/CEFACT “Buy-Ship-Pay” model. Given that the movement of cargo has to comply with regulatory requirements, transport procedures and regulatory procedures their main sub-processes are therefore grouped as “Ship”.



Source: ESCAP from The Analysis of Frozen Shrimp Export Process in Thailand, Institute for IT Innovation, Kasetsart University

#### Activity 1.5

Process participants/business domain experts review the use case diagram and provide feedback as well as suggestions for further improvement.

#### Activity 1.6

Project manager/project leader determines if the use case diagram accurately visualizes the project scope, based on the feedback from process participants/business domain experts. If it does, project manager/project leader revises and/or refines it according to the feedback from process participants/business domain experts.



### Activity 1.7

Project sponsor approves the final version of use case diagram. The use case diagram acts as a baseline for planning, managing, and carrying out the business analysis study.

The use case diagram may be changed at a later stage if an inaccuracy is found. The revised diagram should be approved by the project sponsor before adopting it as a frame of reference.

### **Step 2: Develop a work plan and secure resources**

The objective of this step is to develop a detailed work plan that guides and manages the implementation of the business process analysis. The work plan should be based on the use case diagram developed in Step 1.

Based on the use case diagram, the work breakdown structure can be developed. An output-oriented description of project tasks as summarized in the work breakdown structure then serves as a basis for project time, cost, and effort estimation.

**Figure 3B-3. Stakeholders involved in Step 2**

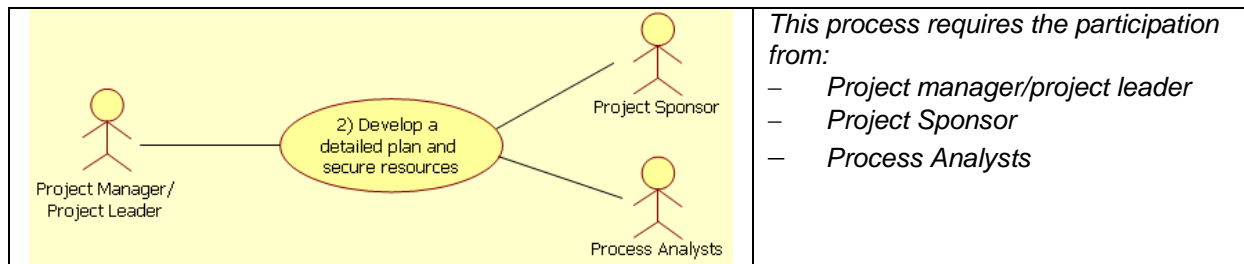
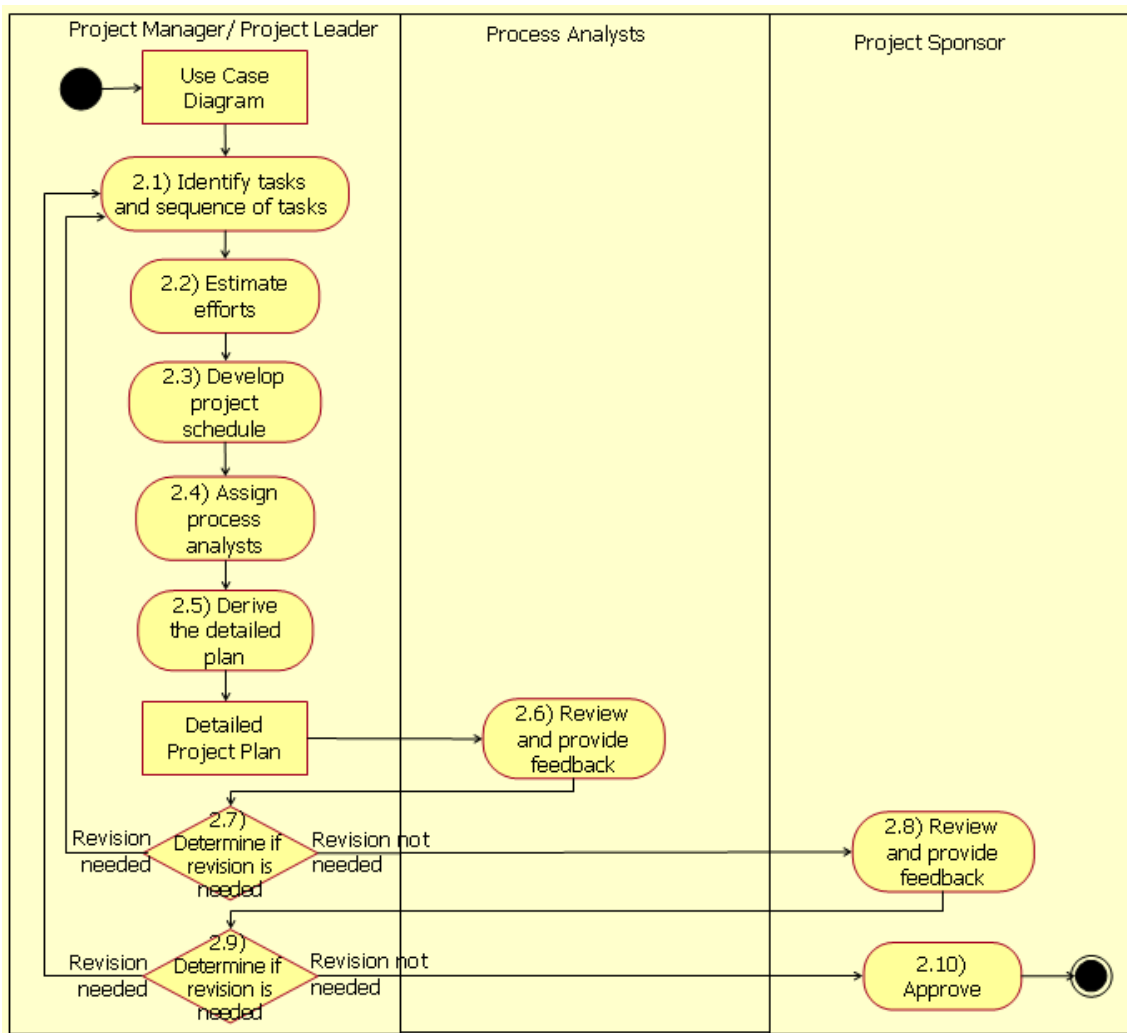


Figure 3B-4 illustrates activities that a project manager/project leader has to carry out in this step in cooperation with process analysts and under the oversight of the project sponsor. These activities are further explained below.

**Figure 3B-4. Activities involved in Step 2**



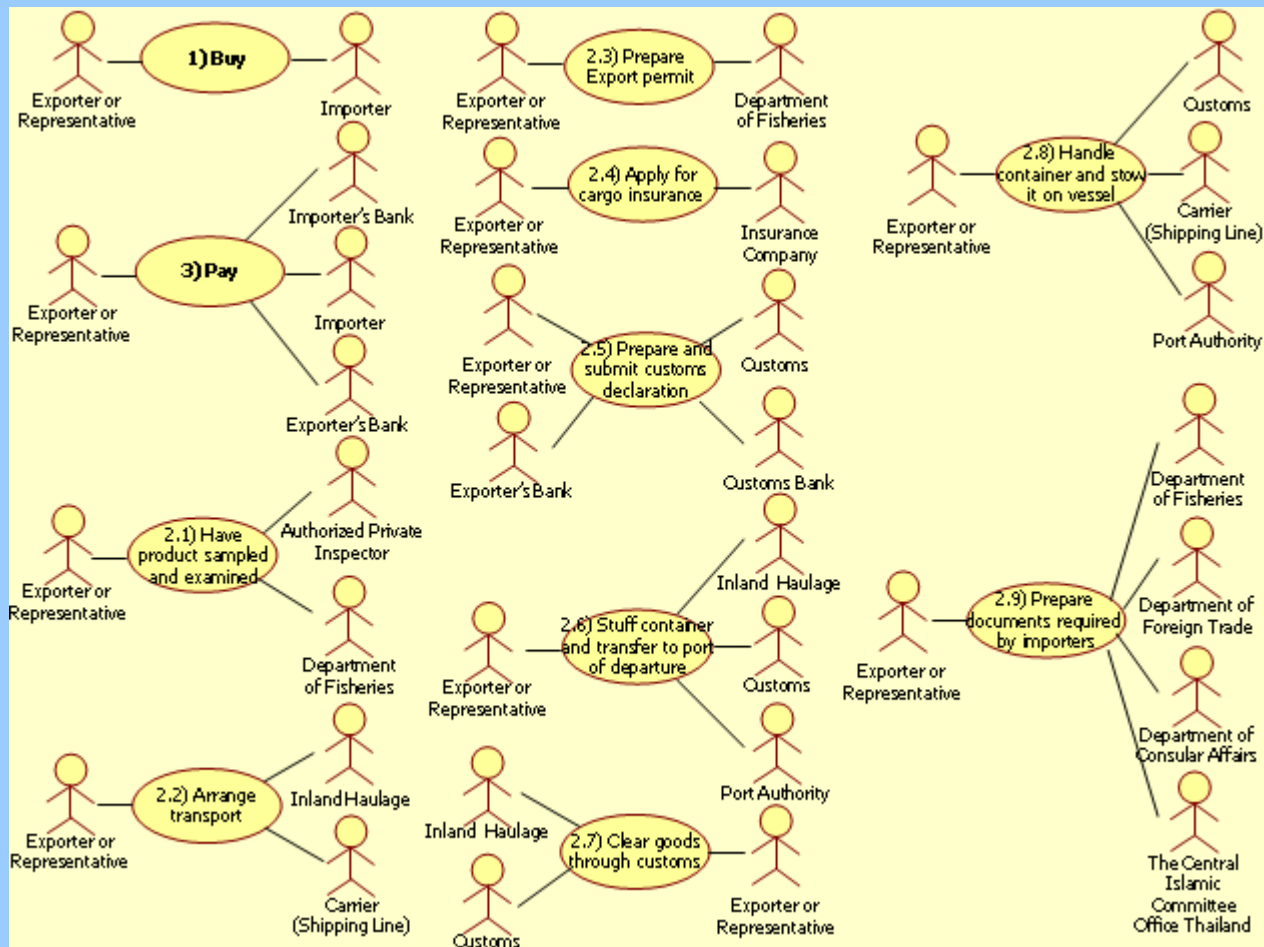
**Activity 2.1**

Project manager/project leader identifies, in sequential order, tasks required to derive each output of the business process analysis project. They include:

- A set of activity diagrams; each explains a core business process as represented by a use case in the use case diagram;
- A set of process descriptions; each provides a textual description of an activity diagram itself and related information including relevant laws, rules, and regulations, documentary requirements, input and criteria to enter/begin the business process, output and criteria to exit the business process, and indicate the average time required to complete them;
- An integrated activity diagram;
- A time-procedure chart;
- A list of identified bottlenecks; and
- Recommendations to improve the business process and/or to-be business process models.

To prepare a detailed breakdown of the work and structure of the project, the project manager/project leader needs to anticipate all project activities outlined in Step 3 onward. While *Activity 3.1 – 3.4* and *Activity 4.1 – 4.12* have to be carried out for all core business processes represented by use cases in the use case diagram (see Box 3B-5 for an example), the rest – including the development of integrated activity diagram, time-procedure chart, a list of identified bottlenecks, and recommendations for future improvement – requires only a one-time implementation.

### Box 3B-5. Case study – use cases of core business processes in frozen shrimp export



Source: ESCAP from The Analysis of Frozen Shrimp Export Process in Thailand, Institute for IT Innovation, Kasetsart University

#### Activity 2.2

Project manager/project leader estimates the effort (man-hours or man-days) needed to complete each identified task and to prepare all deliverables. There is no standard benchmark time for each activity required to complete the business process analysis project. Likewise there is no one-size-fits-all solution to determine the amount of required resources. However, the following tips may be helpful for time and resource estimation:

- In conducting business process analysis, great time and effort is spent on collecting and compiling data into visual diagrams and written descriptions. There is a set of similar project tasks for elaborating each use case into an activity diagram and process description. The more process participants/business domain experts are involved in a business process or a use case, the more complex and time-consuming the business process analysis will be.
- The first session of a face-to-face data-collection interview with each process participant/business domain expert (Activity 4.4) may take one to two hours. Given that the business process analysis is an iterative task, the interview with relevant process participants/business domain experts may be conducted more than once. However, the project teams should avoid conducting more than three interviews with the same process participants/business domain experts.

- Project Evaluation and Review Technique (PERT) estimate<sup>8</sup> might be used for this purpose (See Box 3B-6).

### Box 3B-6. Project Evaluation and Review Technique (PERT) estimate

Project Evaluation and Review Technique (PERT) allows probabilistic treatment of activity duration in the estimation. PERT estimate may be used to compute weighted average for each individual task. A three-point estimate includes pessimistic, most likely and optimistic. The equation is as follows:

$$\text{Task Estimate} = \frac{\text{Optimistic Time} + (4 * \text{Most Likely Time}) + \text{Pessimistic Time}}{6}$$

- The Optimistic Time is the minimum time in which a task can be completed. It is the best-case scenario set under the assumption that everything goes as planned and no internal or external obstacles will occur.
- The Most Likely Time is an estimate of the expected time that is required to complete the task.
- The Pessimistic Time is the maximum time of the worst-case scenario in which the task should be completed.

#### Activity 2.3

Project manager/project leader develops a project schedule based on the following information:

- Set of tasks which are identified in a sequential manner
- Project effort estimates
- Duration of the project stated in the contractual arrangement made with the project sponsor.

#### Activity 2.4

Project manager/project leader assigns process analysts to the project. Once again the number of process analysts required depends on the project duration. The shorter the project duration is, the larger the number of process analysts is required. The responsibilities and required skills of process analysts are listed in Box 3B-7.

### Box 3B-7. Responsibilities and required skills of process analysts

Process analysts are responsible for the following:

- Studying and analysing the current processes (“as-is” processes);
- Creation of the business process model;
- Developing recommendations how to improve the current processes; and
- Designing the new processes (“to-be” processes) in collaboration with other stakeholders.

Process analysts should be selected based on the following skills.

- *Technology skills:* Although it is not necessary, basic knowledge of UML notations, especially in use case diagrams and activity diagrams is desirable. Related work experience is complementary.
- *Business/ organization skills:* It is important that the selected process analysts know or have an access to the individuals of the business domain subject to the business process analysis study. It is also very useful if they have knowledge of a particular organization or industry associated with the targeted business domain.
- *Interpersonal/ communication skills:* The ability of the selected process analysts to effectively communicate and interact with other project members is crucial to project success. They should have the ability to create and sustain reasonably good relationships with project stakeholders and especially process participants/business domain experts.
- *Analytical skills:* Ability to think analytically. They should be able to capture relevant information from verbal expression and written documents. They should be able to summarize the information, as well as formulate and document the business processes.

<sup>8</sup> Marchewka, J.T. (2006). *Information Technology Project Management*, 2<sup>nd</sup> ed. John Wiley & Sons Inc. Hoboken, New Jersey.

#### *Activity 2.5*

Project manager/project leader compiles project time and effort estimates, project schedules, and project staff (process analysts) into the detailed plan for project stakeholders to review.

#### *Activity 2.6*

Project stakeholders review the detailed plan and then provide feedback.

#### *Activity 2.7*

Project manager/project leader, based on the feedback from process analysts, determines if the detailed project plan needs further revision. If it does, project manager/project leader revises and/or refine according to the feedback received.

#### *Activity 2.8*

Project sponsor review the detailed plan and then provide feedback.

#### *Activity 2.9*

Project manager/project leader, based on the feedback from project sponsor, determines if the detailed project plan needs further revision. If it does, project manager/project leader revises and/or refines it according to the feedback received.

#### *Activity 2.10*

Project sponsor approves the detailed plan as the baseline for future project execution, monitoring and evaluation.

### **Phase II: Data collection and process documentation**

The knowledge about existing business processes is normally embedded in government or private sector employees who routinely carry them out. The know-how aspect of those business processes is usually not documented and the lack of process documentation makes it impossible to analyse and improve existing business processes further. The purpose of Phase II is to make the knowledge of these business processes readily available through documenting them. The documentation then can serve as a baseline to improve the existing business processes.

Phase II includes two steps:

Step 3 - Acquire background information

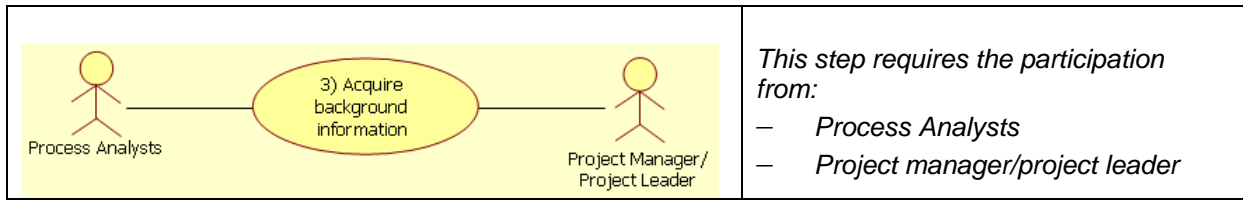
Step 4 - Conduct interviews and document captured data

#### ***Step 3: Acquire background information***

It is important that process analysts acquire at the outset as much background information on the business processes under examination as possible, prior to the face-to-face interviews. Background information could be obtained via desk research through information publicly available on the Internet, information portals, and at inquiry points of the agencies or businesses involved in the business domain of interest.

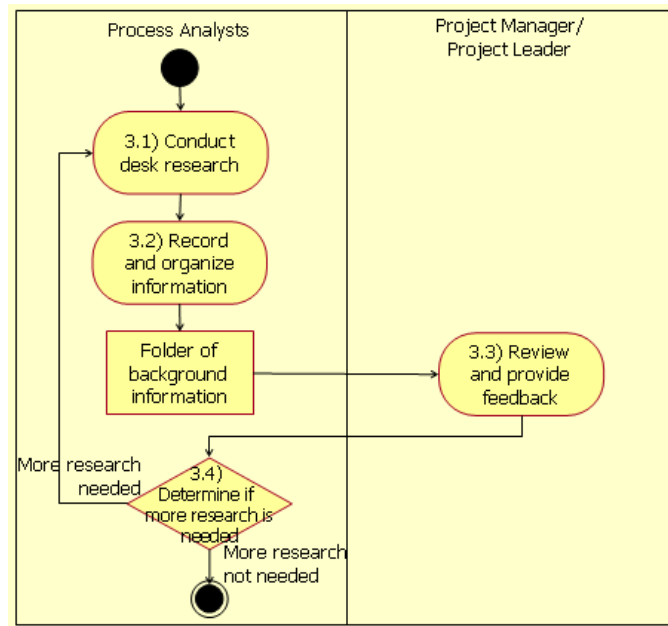
The background information provides process analysts with useful leads to the preparation of interview questions and makes them better prepared to conduct face-to-face interviews. It also allows process analysts to effectively and efficiently capture the information to be collected during the face-to-face interviews and put it into a broader context. Stakeholders participating in this step are shown in Figure 3B-5.

**Figure 3B-5. Stakeholders involved in Step 3**



Activities associated with gathering the background information are described in Figure 3B-6, and further explained below.

**Figure 3B-6. Activities involved in Step 3**



**Activity 3.1**

For each use case (see Box 3B-5 for example), process analysts conduct desk research, which involves the gathering of the background information, related laws and regulations from publicly accessible sources such as websites or inquiry points of relevant governmental agencies and business.

**Activity 3.2**

For each use case, process analysts systematically record and organize relevant information into a folder. The folder should contain the following information:

- Names of government agencies and businesses responsible for carrying out respective activities in the business processes under examination (e.g. chambers of commerce, in case of issuance of a non-preferential certificate of origin);
- Contact names and details of potential interviewees from the identified government agencies and businesses, i.e. officer-in-charge at the operational level for each activity;
- Sequence of activities in a process;
- Forms and documents associated with each activity (e.g., import/ export permits, SPS certificates<sup>9</sup>, certificates of origin, commercial invoice, customs declaration, etc.).

**Activity 3.3**

The project manager/project leader reviews the outcome of desk research and provides feedback.

<sup>9</sup> Sanitary and Phytosanitary certificate

### *Activity 3.4*

Process analysts, based on the feedback from project manager/project leader, determine whether they have sufficient information to proceed to the next step.

#### ***Step 4: Conduct interviews and document captured data***

The purpose of Step 4 is to conduct the face-to-face interviews with process participants/business domain experts. Face-to-face interview is the most commonly used data collection method for the business process analysis exercise. This process aims to confirm the accuracy of the previously collected background information and to gain an in-depth understanding of each use case or core business process in question. Such comprehensive information is necessary for creating a visual representation and descriptive explanation for each use case.

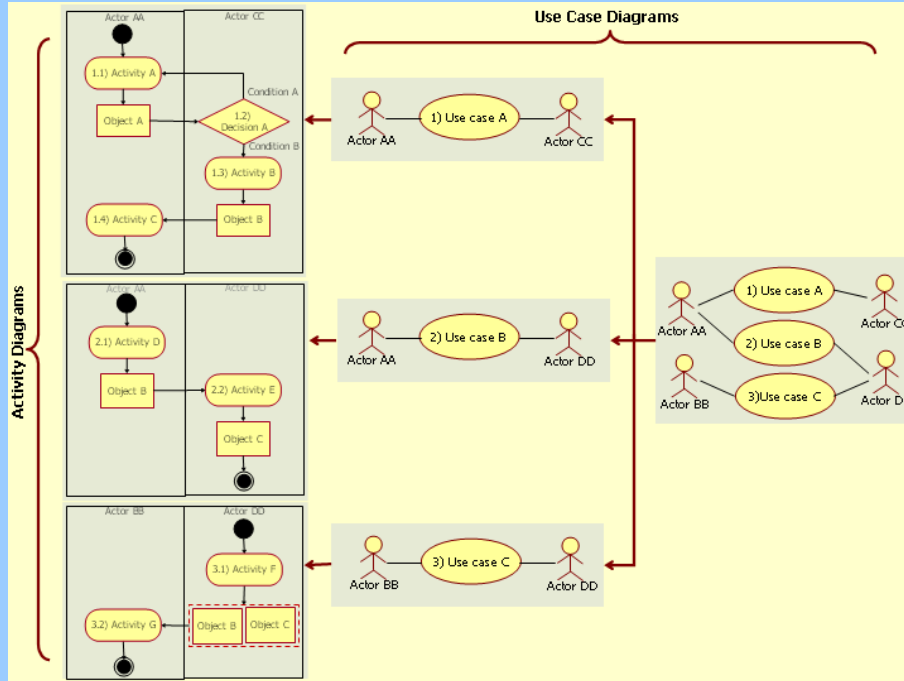
Once the face-to-face interviews with the relevant business process participants have been conducted, process analysts consolidate all inputs from interviewees and document them. There are four main outputs that should be delivered under Step 4:

1. A set of activity diagrams
2. A set of process descriptions
3. An integrated activity diagram
4. A time-procedure chart

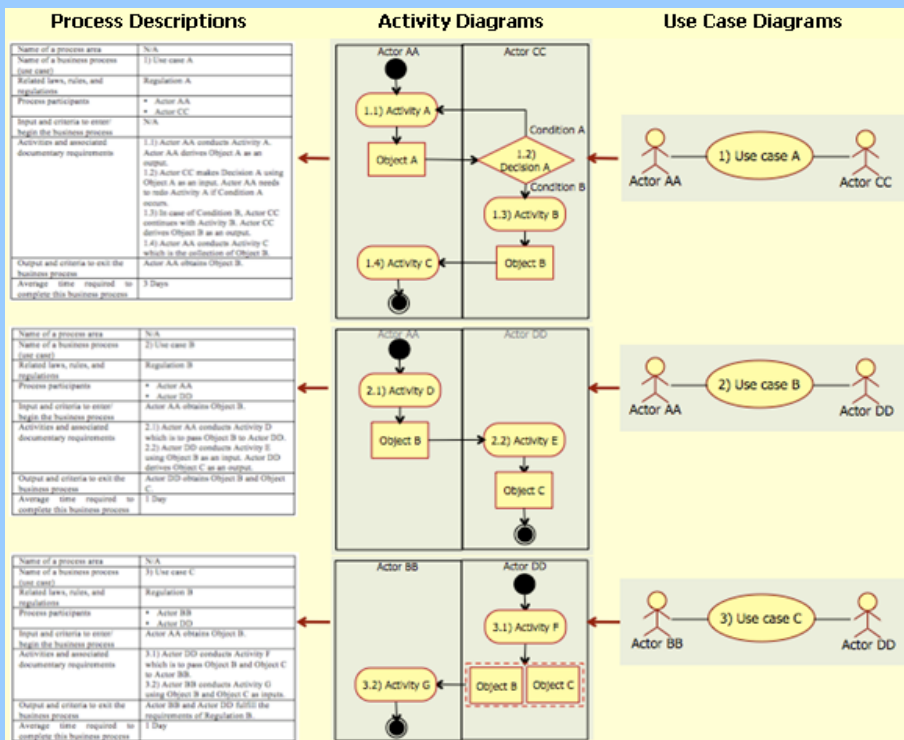
A description of each of the four outputs including a graphical example is provided in Box 3B-8 below.

### Box 3B-8. Output of Step 4

1. A set of activity diagrams; each explains each core business process as represented by a use case in the use case diagram

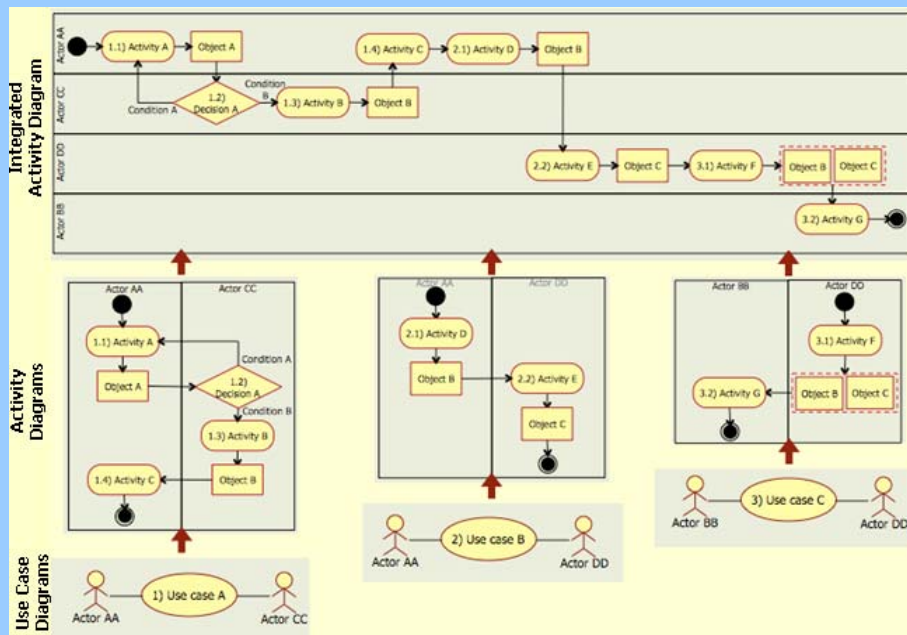


2. A set of process descriptions; each provides a textual description of an activity diagram itself and related information including relevant laws, rules, and regulations, documentary requirements, input and criteria to enter/begin the business process, output and criteria to exit the business process, and indicate the average time required to complete them

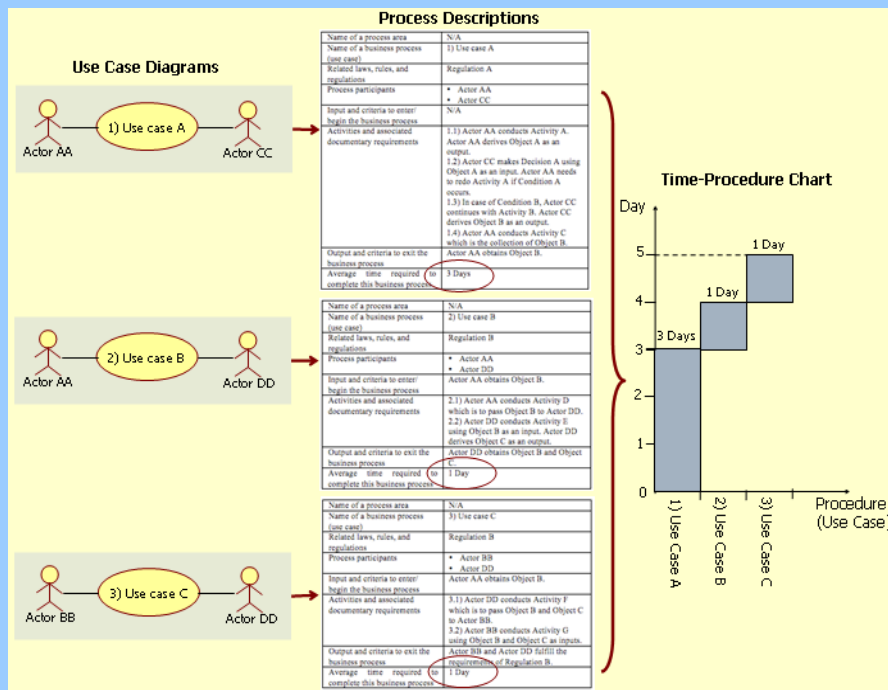




3. An integrated activity diagram that combines all activity diagrams together

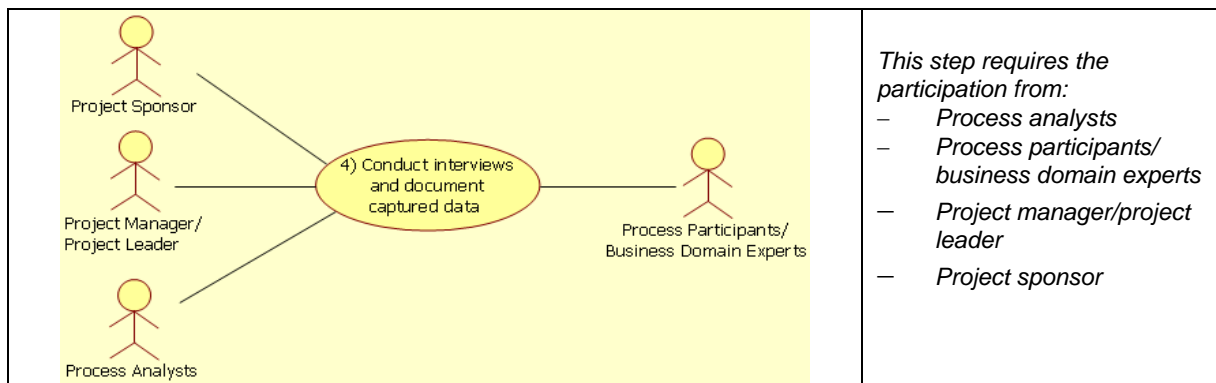


4. A time-procedure chart which informs the average time required to complete each core business process and the sequential order that core business processes are carried out



The stakeholders and activities involved in this step are shown in Figures 3B-7 and 3B-8.

**Figure 3B-7. Stakeholders involved in Step 4**



**Activity 4.1**

As noted before, potential interviewees are selected based on their involvement in a business process area of interest and the type of information that they can provide. The process analysts contact potential interviewees by phone or email to agree on the date, time and venue of the face-to-face interview. Process participants/business domain experts who are in charge at the operational level have relatively more potential as they usually deal with respective procedures and formalities associated with the business process on a daily basis.

To ensure the comprehensiveness and accuracy of the data to be collected, it is ideal that process analysts interview a diverse range of process participants/business domain experts performing different roles in the business domain of interest. A list of process participants/business domain experts whom process analysts should interview can be derived from a use case diagram. Box 3B-4, for example suggests that, in the case of Thai shrimp exports, process analysts should interview exporters, exporter’s representatives, authorized private inspectors, customs, department of fisheries, port authority, etc. in order to obtain necessary information for the modeling of business process used when exporting frozen shrimp from Thailand to its major export markets.

It is important that process analysts have sound communication skills. Prior to inviting the potential interviewees, process analysts need to introduce themselves in a polite, friendly, and professional manner. Process analysts also need to clearly explain the purpose of the interview, how the interview will contribute to the overall business process analysis exercise, what will be the results of this exercise, and how these will be used. Doing so allows them to establish a good rapport with the potential interviewees. Establishing a good rapport not only increases the chance of having potential interviewees participate effectively in the planned face-to-face interview, but also helps create a pleasant atmosphere during the interview. Pleasant atmosphere is a vital precondition for a successful and result-oriented interview session.

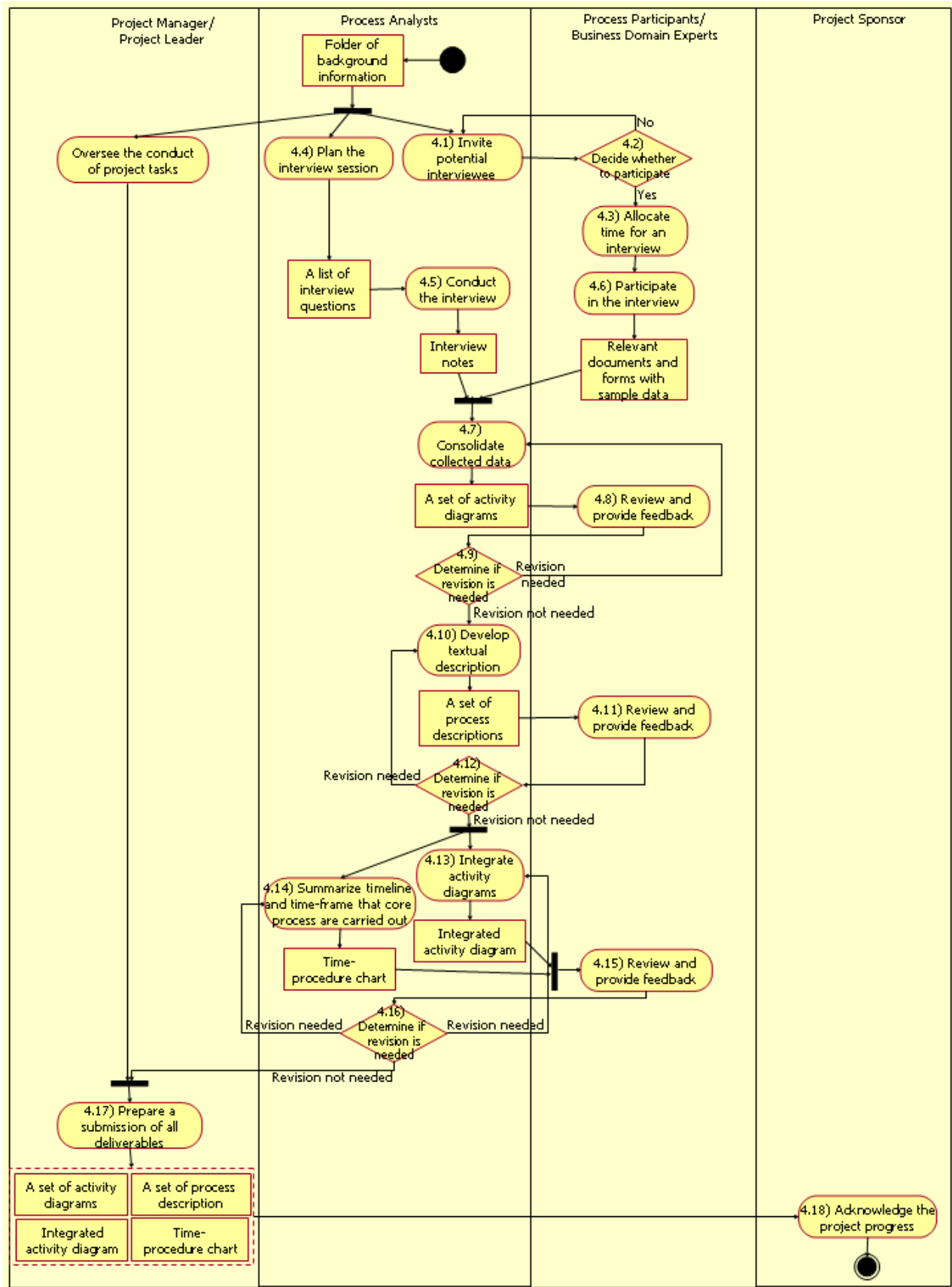
**Activity 4.2**

Process participants/business domain experts decide if they wish to participate.

**Activity 4.3**

If process participants/business domain experts agree to participate, they inform process analysts when it is convenient to have a face-to-face interview. If not, process analysts look for other potential interviewees who can substitute for the person who rejected an interview. A potential source could be a referral from the initial person to be interviewed.

Figure 3B-8. Activities involved in Step 4



In parallel with Activity 4.1, process analysts plan the interview session and prepare a list of questions based on the background information acquired earlier. The questions need to be easy to understand and structured in a logical sequence to ensure the best possible result. The questions should enable process analysts to gain a better understanding of those points they have previously found unclear. Examples of such interview questions, which were generalized from the Frozen Shrimp Export Process Analysis, are provided in Box 3B-9.

**Box 3B-9. Examples of interview questions  
(for interviewing exporter/importer and government agency)**

*Business process analysis:*

- What are objectives of the business process?
- Who is involved in this business process?
- What are necessary activities that an exporter/importer has to take in order to acquire a particular document?
- Are copies of documents accepted in lieu of original documents?
- How does an exporter/importer submit the request for a particular document?
- Are there guidelines that provide an exporter/importer with instructions on how to prepare the request for a particular document? If yes, do the guidelines clearly specify what you have to do or what information you have to provide?
- How often are the request for a particular document (e.g. permit, certificate) rejected? Why?
- How does an exporter/importer collect the requested document (manually or electronically)?
- Is there any fee that an exporter/importer has to pay in order to acquire the document? If so, how much (total sum including informal payments)?
- What are the laws, rules, or regulations associated with these procedural and documentary requirements?
- For what purposes are the collected data used?
- Which business processes can be carried out in parallel?
- Which business process has to be carried out next?

*Information flow analysis:*

- With which other actor in the business do you need to communicate?
- What kind of data do you exchange?
- What kind of information do you send to which actor?

*Time analysis:*

- How much time, including waiting time, on average in hours or days does it take to complete this entire business process from the beginning to the end? What is the maximum and minimum time?
- How many actual man-hours does it require to complete this particular activity in this business process?

*Cost analysis:*

- How much on average does it cost to complete this particular activity in this business process or to process a particular document/set of documents?

*Suggestions for improvement:*

- What are the problems/bottlenecks you encounter in terms of procedures and regulations to import or export?
- What are improvements that you would like to see in the near future?

**Activity 4.5**

Process analysts conduct the face-to-face interviews with the process participants/business domain experts. It is recommended that the following issues are taken into account.

- Each face-to-face interview session is attended by 1-2 process analysts. Having two process analysts in the session is in fact necessary when the process analysts are relatively new to the field, or have little experience in conducting business process analysis.
- If the interview is tape recorded, it is necessary to obtain permission from the interviewee prior to the interview. But note, tape recorders may deter interviewees from providing critical information and is therefore not advisable (e.g., business information, information on informal payments, other sensitive information etc.)

- Although the process analysts conduct the interview session with prepared questions which are organized in a logical sequence, the interview is unlikely to be a pure question and answer session. It is recommended to keep the interview free-flowing and conversational, however within a basic structured framework. The best way is to start with general questions to draw information about a particular business process that is common to all operational cases. The general questions are then followed by more specific set of questions not only to seek clarifications but also to identify discrepancies and conditions where such discrepancies occur. Process analysts should adjust their questions according to how the interviewee is responding. They may also inject their opinions or ideas to stimulate the interviewee to express and elaborate his/her ideas related to the subject matter.
- During the face-to-face interviews, the process analysts should also seek interviewees' opinions and observations on any bottlenecks and issues related to the process, documents, laws, rules, and regulations that should be improved, why and how to improve them.
- Process analysts should take notes carefully. All points the interviewees make should be written down, even though they may sound irrelevant at the moment.
- Process analysts should reiterate statements made by the interviewees to confirm their correctness and understanding of the obtained information.
- Process analysts should always respect the time schedule. A summary of the major points should be made before ending the interview session.

#### *Activity 4.6*

Process participants/business domain experts participate in the interview and, if possible, provide process analysts with documents that contain additional information related to the discussion as well as forms with sample data mentioned during the interview. Sample documents and data related to the interview should be taken as the opportunity arises as it is often difficult to obtain documents and data afterwards.

#### *Activity 4.7*

Process analysts consolidate all the statements made by interviewees into an activity diagram for each use case immediately upon their return to the office. This work should be completed within maximum one working day after the interview. How to draw an activity diagram is demonstrated in Box 3B-10.

In this activity, process analysts may discover common patterns in the activity diagrams. Reusing these patterns helps avoid repetition of work and save time. For example, the customs declaration process from the business process analysis of exporting frozen shrimp can be reused in a business process analysis for exporting frozen poultry products.

#### *Activity 4.8*

Process participants/business domain experts review the activity diagrams and provide feedback.

#### *Activity 4.9*

Process analysts, based on feedback from process participants/business domain experts determine if individual activity diagrams need further revision. If it does, process analysts revise and/or refine them according to the feedback received.

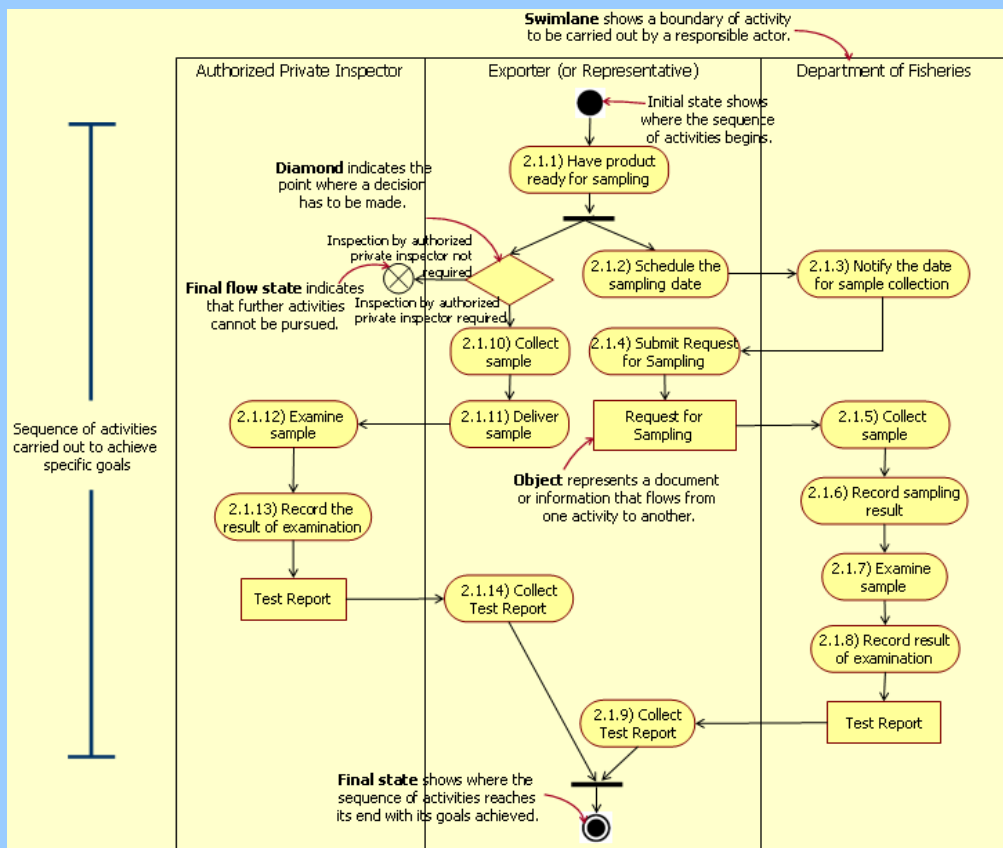
### Box 3B-10. How to draw an activity diagram

An *activity diagram* portrays a sequence of activities carried out to achieve a specific goal. It illustrates detailed activities and flows of information or documents from one responsible party to another in a given sequence. To draw an activity diagram,

- Process analysts first prepare swimlanes for parties involved in a business process.
- Process analysts then list activities involved in the business process in a sequential order and assign a unique identifier to each of them. Each activity is placed in the swimlane with a label of the party who carries it out.
- Process analysts list documents associated with the business process. The documentary objects should be placed in the swimlane of the party either originating or holding them.
- Process analysts add decision points represented by a diamond where needed and provide a conditional statement for each transition.
- Lastly, process analysts create a starting point (initial state), an ending point (final state), and connections for all activities and documents between them.

Table 2C-2 presents the basic elements and notations of an activity diagram that is applied in this business process analysis study.

The sample activity diagram shown below provides an elaboration of “Have the product sampled and examined” use case which is part of the BPA of frozen shrimp export from Thailand to the major export markets for Thai frozen shrimp including the United States, Japan, and the European Union.



Source: ESCAP from The Analysis of Frozen Shrimp Export Process in Thailand, Institute for IT Innovation, Kasetsart University

#### Activity 4.10

Once further revision on individual diagrams is no longer required, process analysts provide textual description of individual activity diagrams.

*Process description* is where process analysts provide clarifications on practicalities of the business process and each ‘activity’ listed in the activity diagram. Process description has to include the following elements:

- The name of a process area to which this particular business process belongs to;
- The name of a business process (use case);
- Related laws, rules, and regulations;
- The name of process participants (parties responsible for carrying out certain activities in the business process);
- Input and criteria to enter/ begin the business process;
- Activities and associated documentary requirements to complete the business process
- Output and criteria to exit the business process; and
- Average time required to complete the business process.

To ensure that the explanation is given to each listed activity, process analysts provide a brief description of each activity. The description should begin with the name of the party carrying out the activity, followed by action verb describing the activity that has to be carried out. If the activity involves document(s), process analysts should include it (them) in the description. The unique number given to each activity should also be included in the description so that a trace between the textual description and the activity is maintained. An example of process description is shown in Box 3B-11.

#### *Activity 4.11*

Process participants/business domain experts review process description and then provide feedback.

#### *Activity 4.12*

Process analysts, based on the feedback from process participants and/or business domain experts, determine whether process description of each activity diagram needs further revision. If it does, process analysts revise and/or refine process description of each activity diagram according to the feedback received.

**Box 3B-11. Case Study – Process description of “2.1) Have the product sampled and examined” use case within the BPA of frozen shrimp export from Thailand to the United States, Japan, and the European Union**

Name of a process area	Ship
Name of a business process (use case)	2.1) Have the product sampled and examined
Related laws, rules, and regulations	<ul style="list-style-type: none"> <li>• Fisheries Act (1497 as amended in 1953 and 1985)</li> <li>• Good Aquaculture Practice</li> <li>• Code of Conduct for Responsible Shrimp Aquaculture</li> <li>• Practical Guideline for HACCP Regulatory Audit</li> </ul>
Process participants	<ul style="list-style-type: none"> <li>• Authorized Private Inspector</li> <li>• Department of Fisheries by <i>Fish Inspection</i> and <i>Quality Control Division or Fish Inspection</i> and Research Center in Samutsakorn, Suratthani, or Songkhla</li> <li>• Exporter (or Representative)</li> </ul>
Input and criteria to enter/begin the business process	<ul style="list-style-type: none"> <li>• Shrimp processing plant has already been registered by Department of Fisheries.</li> <li>• Shrimp processing plant is a member of Thai Frozen Foods Association.</li> <li>• Shrimp processing plant has complied with Department of Fisheries’ HACCP-based requirements. (As of 2000, 92% of processors have been implementing HACCP effectively.*)</li> </ul>
Activities and associated documentary requirements	<p>2.1.1. Exporter (or Representative) has product ready for sampling.</p> <p>2.1.2. Exporter (or Representative) contacts Department of Fisheries by phone to schedule the sampling date.</p> <p>2.1.3. Department of Fisheries notified the date for sample collection</p> <p>2.1.4. Exporter (or Representative) prepares the Request for Product Sampling and Inspection (DOF./KTS. 2) and submit in person or by fax to Department of Fisheries. Exporter (or Representative) must use the paper with the logo of the processing plant when preparing the Request. Prior to submitting the Request, Exporter (or Representative) must make sure that the Request for Product Sampling and Inspection (DOF./KTS. 2) has the name of the processing plant, type(s) of product(s) to be sampled and inspected, description of product(s) to be sampled and inspected, the name of importing country, the quantity to be exported, the signature of the authorized person, and company’s stamp.</p> <p>2.1.5. After receiving the Request for Product Sampling and Inspection (DOF./KTS. 2), an officer from Department of Fisheries goes to the processing plant to collect sample. There is no fee for product sampling. Exporter (or representative) only has to cover for officer’s traveling expense.</p> <p>2.1.6. An officer from Department of Fisheries records the sampling result.</p> <p>2.1.7. An officer from Department of Fisheries examines the collected sample according to the standards and requirements of the importing country. The inspection service provided by Department of Fisheries is free of charge.</p> <p>2.1.8. An officer from Department of Fisheries records the results and prepares the Test Report which more or less contains test report no., date of issue, office of inspector, address of office of inspector, client name, client address, place of destination, description of goods, packing, gross weight per pack, net weight per pack, weight unit, number of package, total number of package, sample characteristic and condition, date of sampling/date of receipt, date of analysis/date of test, test method, microbiological result, chemical result, physical result, overall result (accept/reject), name of inspector, signature of inspector, name of authorized senior inspector, and signature of authorized senior inspector. There is no standard format for Test Report.</p> <p>2.1.9. Exporter (or Representative) goes to Department of Fisheries to collect Test Report. The Test Report can be collected after the sample has been collected for 10 days.</p> <p>2.1.10. In case an inspection by Authorized Private Inspector is required, Exporter (or Representative) has to collect the sample. The inspection by Authorized Private Inspector is normally required when Exporter (or Representative) has an urgent need for product inspection or when the scope of product inspection is beyond the standards and requirements of the importing country.</p> <p>2.1.11. Exporter (or Representative) also has to deliver the sample to Authorized Private Inspector.</p> <p>2.1.12. Authorized Private Inspector then examines the sample.</p> <p>2.1.13. Authorized Private Inspector records the results and prepares the Test report.</p> <p>2.1.14. Exporter (or Representative) collects the Test Report after the sample has been delivering for 7 days. The cost of inspection can be as high as 8,000 Baht.</p>
Output and criteria to exit the business process	Exporter or Representative receives the test report.
Average time required to complete this business process	14 Days

Source: ESCAP from The Analysis of Frozen Shrimp Export Process in Thailand, Institute for IT Innovation, Kasetsart University

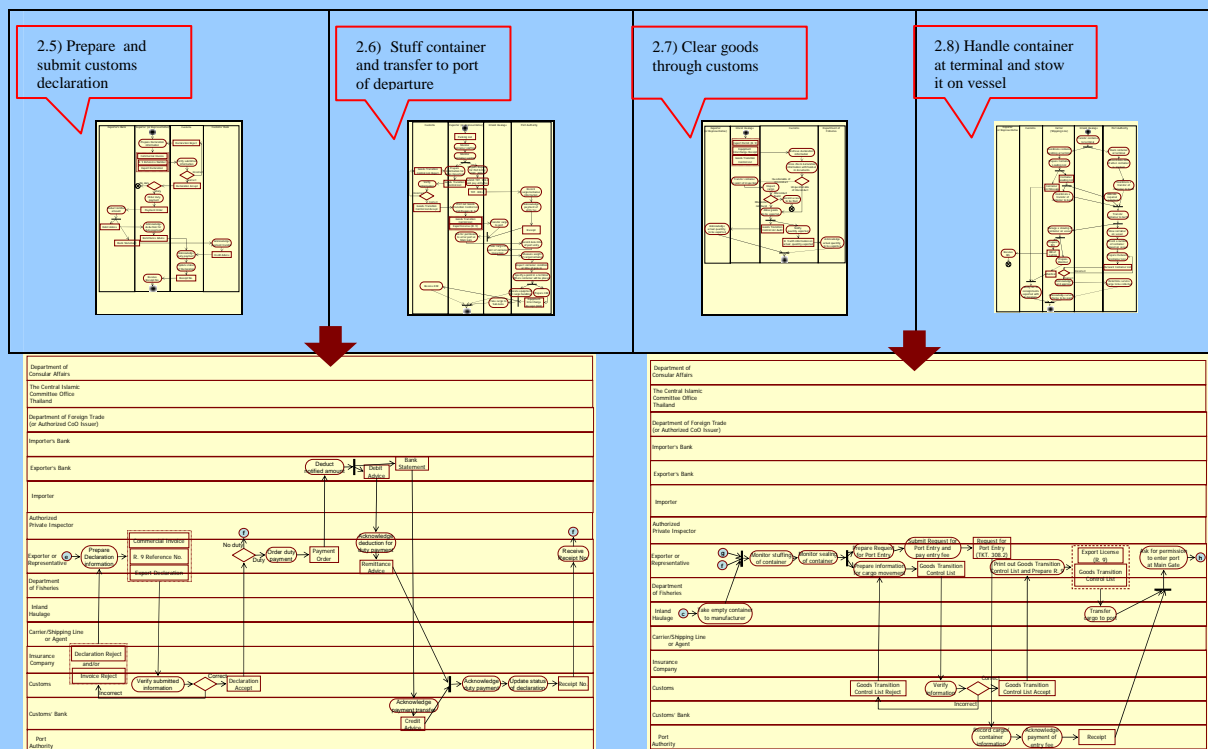
\* Suwanrangsi, S. (2002). Experiences in the Application of HACCP for Export and Local Markets: The Case of Thai Fisheries. In E. Hanak, E. Boutrif, P. Fabre, and M. Pineiro. Food Safety Management in Developing Countries: Proceedings of the International Workshop, CIRAD-FAO, 11-13 December 2000, Montpellier, France.



### Activity 4.13

Once further revision on process description is no longer required, process analysts work together to integrate all activity diagrams of the business processes associated with all use cases defined earlier into a *single integrated activity diagram*. The integrated activity diagram represents an interconnected view of business processes used in an industry or to provide a particular service. It illustrates relationships between core business processes, process participants, and information flow throughout the area under the scope of the study. An example of an integrated activity diagram is provided in Box 3B-12.

**Box 3B-12. Integration (partial) of activity diagrams chart from the BPA of frozen shrimp export from Thailand to the United States, Japan, and the European Union**



The above diagrams illustrate the integration of some business processes (use cases) that have to be carried out in order to export frozen shrimp from Thailand. The use cases shown in these diagrams include “prepare and submit customs declaration”, “load container and transfer to port of departure”, “clear goods through customs”, and “handle container at terminal and stow it on vessel”. In the horizontal swimlanes, all process participants involved in exporting frozen shrimp from Thailand, as also shown in Box 3B-4, are listed.

Source: ESCAP, from the Analysis of Frozen Shrimp Export Process in Thailand, Institute for IT Innovation, Kasetsart University.

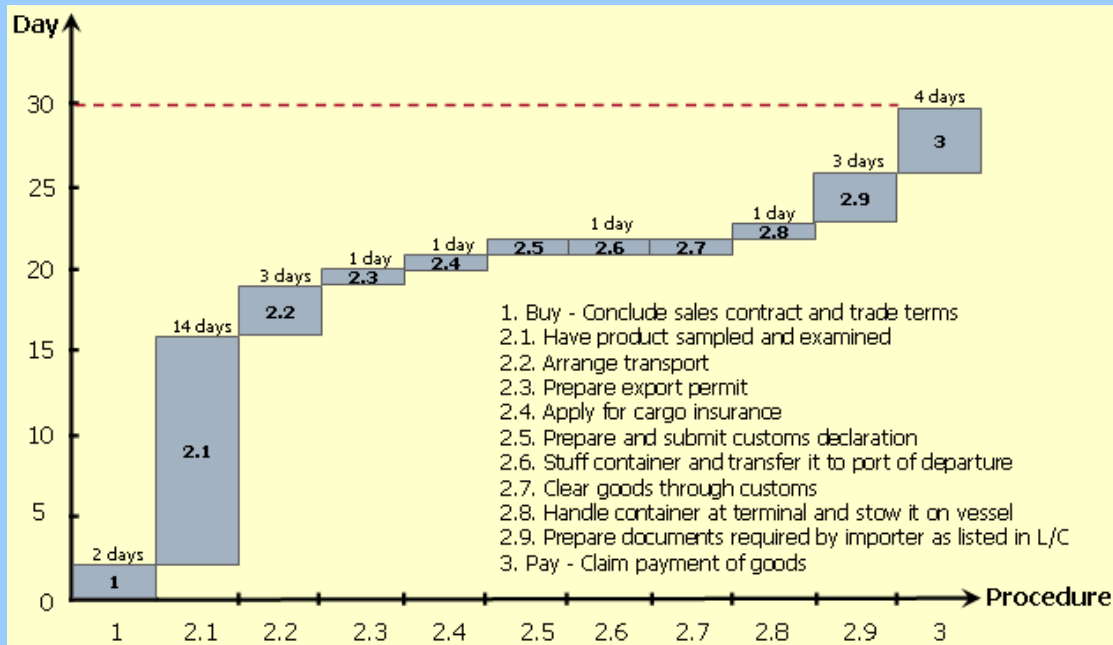
### Activity 4.14

Process analysts present a time frame (i.e., the average time it takes to complete the processes) and a timeline (i.e., the time in which core business processes occur in relation to other core business processes, e.g., sequential or simultaneous) in which core business processes are carried out in a time-procedure chart.

### Box 3B.13. The time-procedure chart from the BPA of frozen shrimp export from Thailand to the United States, Japan, and the European Union

The time-procedure chart corresponds to the use case diagram in Box 3B-4. It summarizes the timeframe and timeline in which core business processes (as represented by use cases in the use case diagram) have to be completed in order to export frozen shrimp from Thailand to its major export markets.

This time-procedure chart, initially used in the World Bank's Doing Business project, is a simple bar chart that assists process analysts in spotting possible bottlenecks. Each bar on the *x axis* represents an individual business process or a use case that has been previously defined in the use case diagram. Each bar is denoted by the number that has previously been assigned to the corresponding use case. The height of the bar indicates the time frame that the business process is completed in a normal situation.



For the time-procedure chart, it is recommended that the time frame is presented in working days. A fragment of a working day should be rounded up to a working day. The business processes represented by the bars are organized in order of their occurrence in the current state of practice. How a particular business process occurs in relation to other business processes, whether sequentially or simultaneously, should also be accurately reflected in the time-procedure chart (e.g. activity 2.5 – 2.7).

These core business processes in the time-procedure chart are presented in sequential order of their occurrence. Special attention is drawn to “2.5. Prepare and submit customs declaration”, “2.6. Stuff container and transfer it to port of departure”, and “2.7. Clear goods through customs”. Note that:

- While the procedures “2.5 Prepare and submit customs declaration” and “2.7 Clear goods through customs” only take each 30 minutes to complete, procedure “2.6 Stuff container and transfer it to port of departure” requires about 7 hours. Nevertheless, the height of the bars representing procedures 2.5, 2.6, and 2.7 is equally high because these business processes are all completed within the same working day (summarized on top of the three activities).
- The order in the diagram results from the sequence of completed activities. Procedures 2.5 and 2.6 can be carried out in parallel whereas procedure 2.7 can only occur after 2.6 is completed. Therefore, it is listed last among the three activities.

Source: ESCAP from The Analysis of Frozen Shrimp Export Process in Thailand, Institute for IT Innovation, Kasetsart University

#### Activity 4.15

Process participants/business domain experts review the integrated activity diagram and the time-procedure chart, and then provide a feedback.

#### Activity 4.16

Process analysts, based on the feedback from process participants and/or business domain experts, determine whether the integrated activity diagram and the time-procedure chart need further revision. If it does, process analysts revise and/or refine the integrated activity diagram and time-procedure chart according to the feedback received.

*Activity 4.17*

Once further revision on the integrated activity diagram and the time-procedure chart is no longer required, project manager/project leader consolidates all deliverables achieved in this step for a submission to project sponsor.

*Activity 4.18*

Project sponsor acknowledges the completion of the documentation of existing business processes.

*Activity 4.19*

Project manager/project leader oversees the implementation of Activity 4.1-4.16.

**Phase III: Process analysis and recommendations development**

A better understanding of the “as-is” processes is obtained once the processes are defined and systematically documented. Activity diagrams, process descriptions listing all documentary requirements, associated laws, rules, and regulations as well as time-procedure chart provide the stakeholders with an overall and integrated view of the current situation and facilitate the discovery of problem areas. Based on these inputs, recommendations for improvement can be developed. International recommendations on trade and transport facilitation, best practices, and standards such as UN/CEFACT Recommendation 18 on Facilitation Measures Related to International Trade Procedures, WCO Revised Kyoto Convention, WCO Customs Guidelines on Integrated Supply Chain Management, and WCO Framework of Standards to Secure and Facilitate Global Trade should be considered and applied. The logical steps in this phase include:

- Step 5 – Analyse the “as-is” processes
- Step 6 – Develop and propose recommendations

**Step 5: Analyse the “as-is” processes**

The purpose of Step 5 is to identify the bottlenecks and opportunities to improve the “as-is” processes described in the activity diagrams, the process descriptions, and the time-procedure chart. It aims at developing a set of observations related to the current business processes that have potential for improvement, such as the identification of duplicated and redundant procedural and documentary requirements which cause delays. Figure 3B-9 shows stakeholders participating in Step 5.

**Figure 3B-9. Stakeholders involved in Step 5**

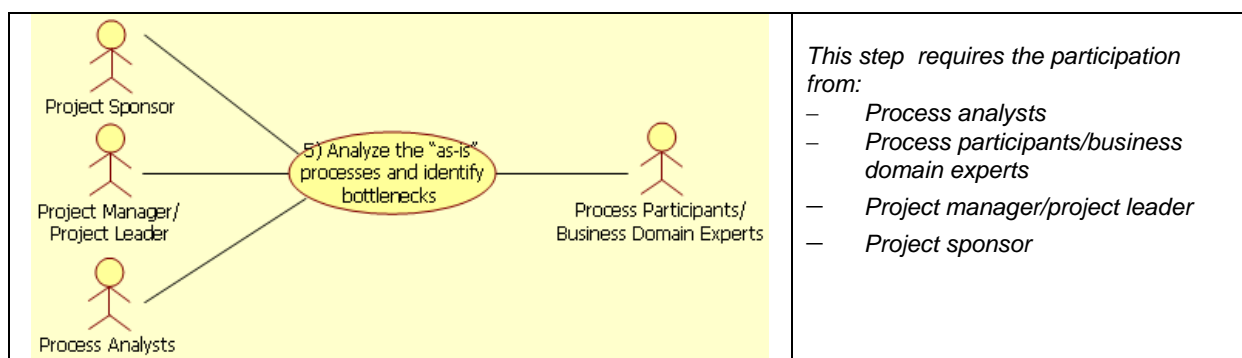
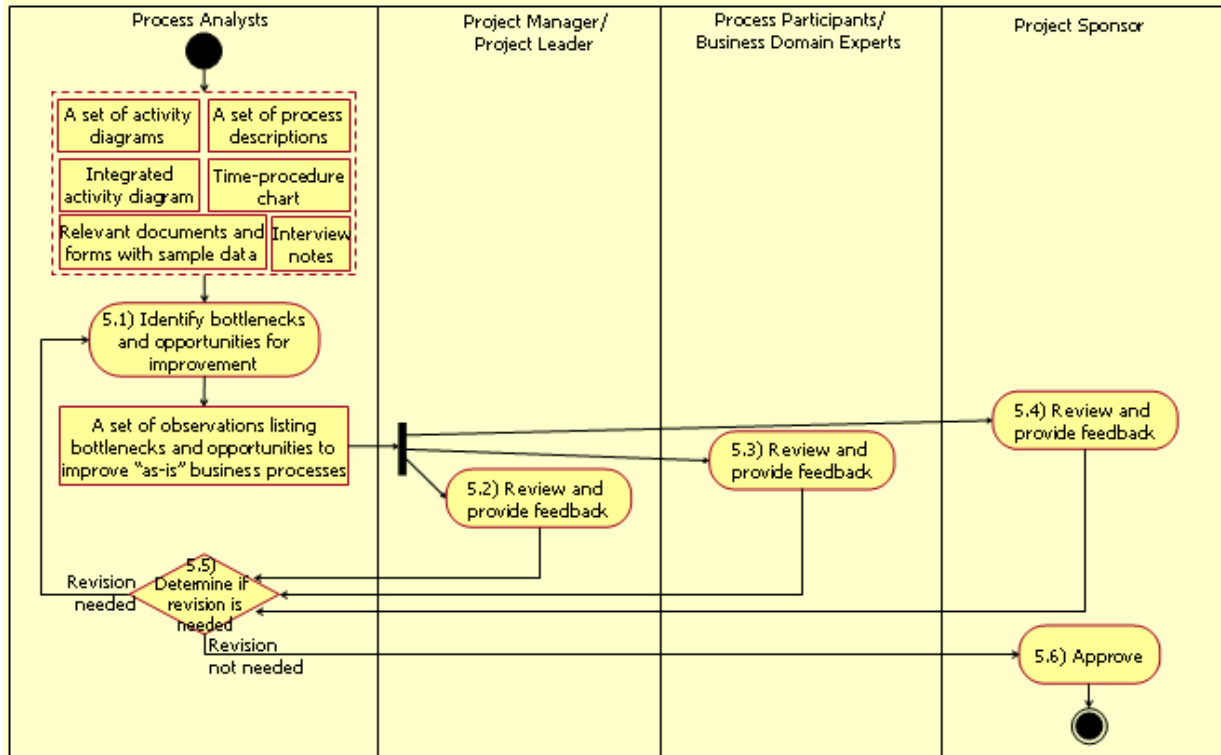


Illustration of necessary activities that have to be conducted in order to analyse the “as-is” business processes and identify the bottlenecks is provided in Figure 3B-10.

**Figure 3B-10. Activities involved in Step 5**

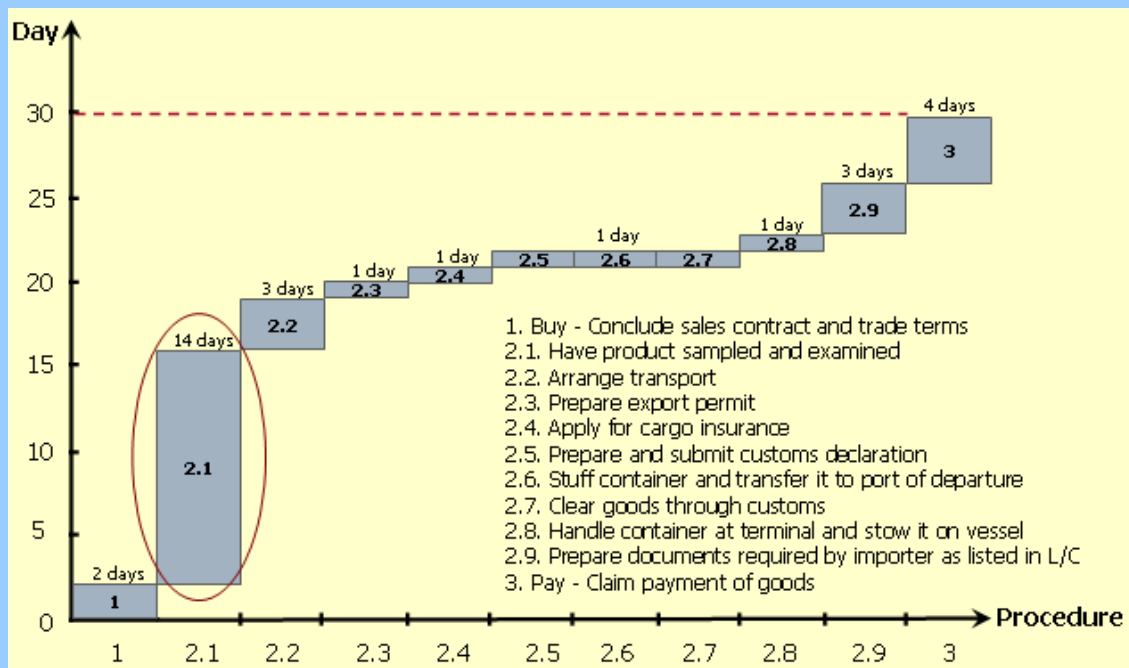


**Activity 5.1**

Using a set of activity diagrams, a set of process descriptions, an integrated activity diagram, a time-procedure chart, interview notes, and relevant documents and forms with sample data that process analysts have collected as inputs, process analysts identify the bottlenecks and record observations related to the current “as-is” business processes that have the potential for improvement.

Process analysts may first review the time-procedure chart as it visualizes the current state of all business processes under the scope of analysis. As illustrated in Box 3B-13, the time-procedure chart enables process analysts to instantly spot business processes that require extensive time to complete. The time-procedure chart, however, is not informative. It only summarizes the average time required to complete each business process under the scope of the study. To find out the cause of delays, process analysts need to investigate the properties of corresponding business processes by examining relevant activity diagrams, process descriptions, related laws, rules, and regulations as well as interview notes and relevant documents and forms with sample data that process analysts collect from process participants/business domain experts during the interview or from other sources. Issues that process analysts should investigate are the efficiency (e.g., caused by redundant and unnecessary requirements), the effectiveness (e.g. the amount of rework), the reliability, the transparency, and the predictability of business processes.

**Box 3B.14. Analyzing the time-procedure chart of frozen shrimp export from Thailand to its major export market including the United States, Japan, and European Union (1)**

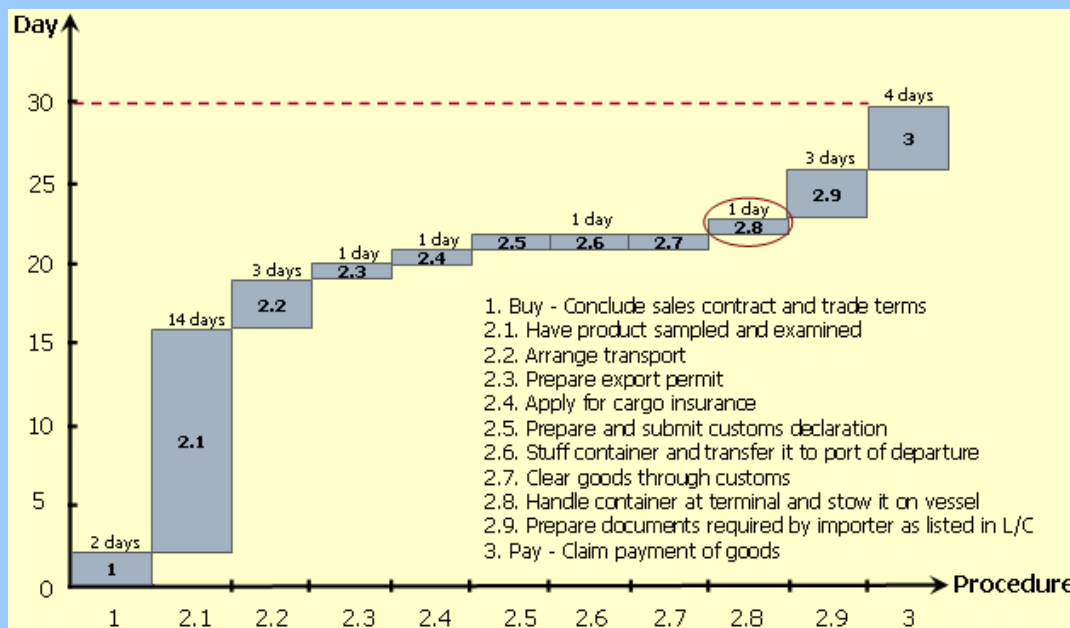


The above time-procedure chart suggests that the major delay in exporting frozen shrimp from Thailand to its major export market lies in the process “2.1. Have product sampled and examined”. The corresponding process description (Box 3B-11) further explains that the result of product examination can only be collected after the product has been sampled for 10 days. According to the interview notes, it is due to Department of Fisheries’ resource constraints, in terms of both lab technicians and lab facilities.

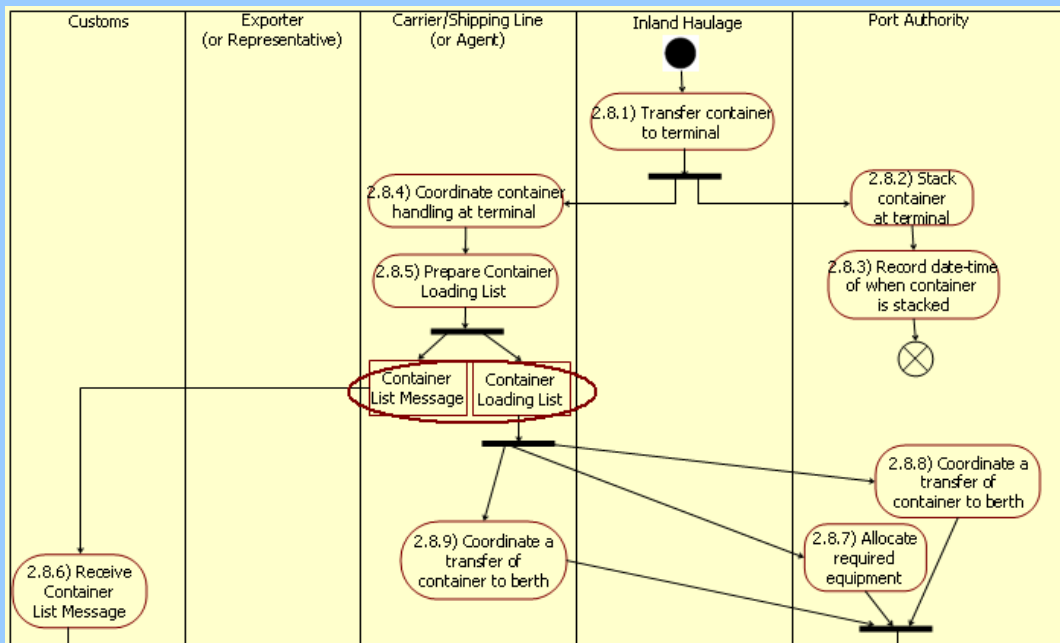
Source: ESCAP from The Analysis of Frozen Shrimp Export Process in Thailand, Institute for IT Innovation, Kasetsart University

The fact that ‘process analysts do not spot any major delays in the time-procedure chart’ does not mean that those processes do not have any bottlenecks or rooms for improvement. It is therefore important that process analysts go over each and every activity diagram, process descriptions related laws, rules, and regulations, and interview notes in different angles.

**Box 3B-15. Analyzing the time-procedure chart of frozen shrimp export from Thailand to its major export market including the United States, Japan, and European Union (2)**



According to the time-procedure chart provided here, process “2.8 Handle container at terminal and stow it on vessel” can be completed in a day on average. The process seems to be completed in a reasonable time. The examination of its corresponding activity diagram, process description, sampled documents, and interview notes, however, leads to the discovery of redundancy and inefficiency in fulfilling documentary requirements.



The activity diagram helps spot documentary requirements that carrier/shipping line (or agent) has to fulfill prior to its departure. Following the above activity diagram, it is clear that carrier/shipping line (or agent) has to prepare Container List Message and Container Loading List. Container list Message has to be submitted to Customs whereas Container Loading List has to be submitted to Port Authority. The review of a data dictionary that explains data requirements of Container List Message and a sample Container Loading List reveals that the content of these two documents are very much alike. Nevertheless, according to the corresponding process description, the two documents are prepared in different formats and submitted using different methods.

Source: ESCAP from The Analysis of Frozen Shrimp Export Process in Thailand, Institute for IT Innovation, Kasetsart University

To discover bottlenecks and improvement opportunities, process analysts may also use guiding questions such as those provide in Box 3B-16. The answers to these questions can be derived from activity diagrams, process descriptions, related laws, rules, and regulations as well as interview notes and relevant documents and forms with sample data that process analysts collect from process participants/business domain experts during the interview or from other sources.

### **Box 3B-16. Examples of questions guiding the analysis of a business process**

*Questions for each individual business process:*

- What are the objectives of the business process?
- Are the objectives in line with the business process in place?
- Does the business process have any value to the delivery of goods, the collection of national revenue, the enhancement of border security, the protection of public health and safety?
- Does every activity comprising the business process add value or contribute to meeting the business processes' objectives?
- Is the business process excessively complicated?
- Are the interaction and communication among process participants smooth enough to allow process participants to accomplish each activity without any difficulties?
- Do any process participants ask for data, reports, and responses that they do not need?
- Are there any unnecessary approvals?
- Are there any duplicated activities?
- Which activities are being done sequentially now that could be done in parallel?
- Is the business process standardized?
- Is the provision and processing of data standardized?
- Have the service levels ever been specified?
- Are the objectives of the business process met within the specified service levels?
- Is the average time reasonable?
- Are there variances in the time it takes to complete a business process? What are causes of variance?
- How often are the applications for permit/certificate rejected? Why?
- Are there any redundant inspections?
- Are all shipments subject to physical inspection?
- Do laws, rules, and regulations prohibit process participants from being more efficient and effective?
- Is there anything that prevents process participants from achieving desired results?
- Is there anything wrong with the current state of the business process?

*Questions for the entire business domain of interest:*

- How many documents are typically required for administering trade transactions under the business domain of interest?
- Across the business processes, are there any areas of commonality? (e.g., business processes with identical objective, business processes with identical data requirements) If yes, what are they?
- Across the business processes, are there unnecessary duplications of efforts? If yes, are they associated with documentary or procedural requirements? What are they? (e.g. duplicated forms, duplicated decision requirements, etc)
- Are trade- and transport-related data efficiently shared among relevant process participants?

Process analysts may also supplement the use of guiding questions with the checklist that assembles key trade facilitation measures from international recommendations, best practices, and standards, such as UN/CEFACT Recommendation No. 18: Facilitation Measures Related to International Trade Procedures, Revised Kyoto Convention, WCO Customs Guidelines on Integrated Supply Chain Management, and WCO SAFE Framework of Standards. Box 3B-16 provides examples of items that may be included in the checklist.

### **Box 3B-17. Examples of business process analysis checklist**

#### *Procedural requirements*

- Procedures are kept to a minimum.
- Procedures are standardized.
- Procedures comply with international standards. For example, customs procedures are in line with the Revised Kyoto Convention, WCO Customs Guidelines on Integrated Supply Chain Management, and Customs SAFE Framework of Standards. In case procedures partially comply with international standards, identify practices that do not.
- Where goods are required to be physically inspected by multiple government authorities, those government authorities coordinate and carry out the physical inspection at the same time.
- Sufficient number of modern non-intrusive and radiation detection equipments have been installed and used in the inspection of high-risk shipments.
- Authorized Economic Operators, who have good record of compliance and demonstrate commitment to supply chain security, benefited from simplified and rapid procedures. The same principle is applied by other controlling government agencies in the context beyond customs.

#### *Data requirements*

- Data requirements are kept to a minimum. (A set of data requirements should be no larger than by the data set for WCO Data Model, given that the WCO Data Model defines a maximum set of data for the accomplishment of export and import formalities.)
- Data requirements are harmonized and standardized.

#### *Documentary requirements*

- Documentary requirements are kept to a minimum.
- Documentary requirements are in line with UN Recommendation No. 1: UN Layout Key for Trade Documents. (Identify the documentary requirements that are not in line with UN Recommendation No. 1: UN Layout Key for Trade Documents.)
- The use of plain paper, documents produced or appearing to be produced by reprographic automated or computerized systems are acceptable. (Identify where the use of plain paper, documents produced or appearing to be produced by reprographic automated or computerized systems are not acceptable.)
- Hand-written signatures and their equivalents by Authorities are avoided on paper documents (Identify where hand-written signatures or their equivalents are still required).
- No documents are required to be legalized, verified, or authenticated by representatives abroad.
- The requirement for authentication can be fulfilled by means of technological solutions and need not be accompanied by a signed and/or authenticated paper document.
- International standards for electronic information exchange are used as a basis for developing information systems used to facilitate the completion of trade related procedural and documentary requirements.

#### *Transparency and predictability*

- Official publications of existing laws, regulations, and other information regarding procedures and data requirements including rate of duties and taxes, general rule for classification of products for customs purposes, trade-related requirements and restrictions, fees and charges related imposed in connection with the administration of trade, penalty provisions against breaches of trade formalities, and trade-related bilateral or multilateral agreements are systematically available and readily accessible to all parties concerned (Identify laws, regulations, and other information regarding procedures and data requirements are not readily accessible to all parties concerned).
- The time required, the procedures used, and the fees related to official regulations are predictable.

Source: ADB and UNESCAP. (2009). *Designing and Implementing Trade Facilitation in Asia and the Pacific*. Asian Development Bank. Manila.

UN/CEFACT. (2001). *UN/CEFACT Recommendation No. 18: Facilitation Measures Related to International Trade Procedures*. United Nations. Geneva.

WCO. (2007). *WCO SAFE Framework of Standards*. World Customs Organization. Brussels.

Process analysts may also supplement the above techniques with benchmarking. By applying a benchmarking technique, process analysts can determine how well the countries as members of the international community, are doing in terms of trade logistics. To benchmark, process analysts compare the performance of the business processes with relevant performance indicators



(e.g. Logistics Performance Index, Doing Business' Trading Across Borders, and documents that contain relevant business process information<sup>10</sup>) in terms of:

- Efficiency of the customs clearance process
- Quality of trade and transport-related infrastructure
- Competence and quality of logistics services
- Ability to track and trace consignments
- Frequency with which shipments reach the consignee within the scheduled time
- Time for exporting and importing
- Costs associated with completing the procedural requirements for export and import
- Numbers of documents required per shipment to export and import.

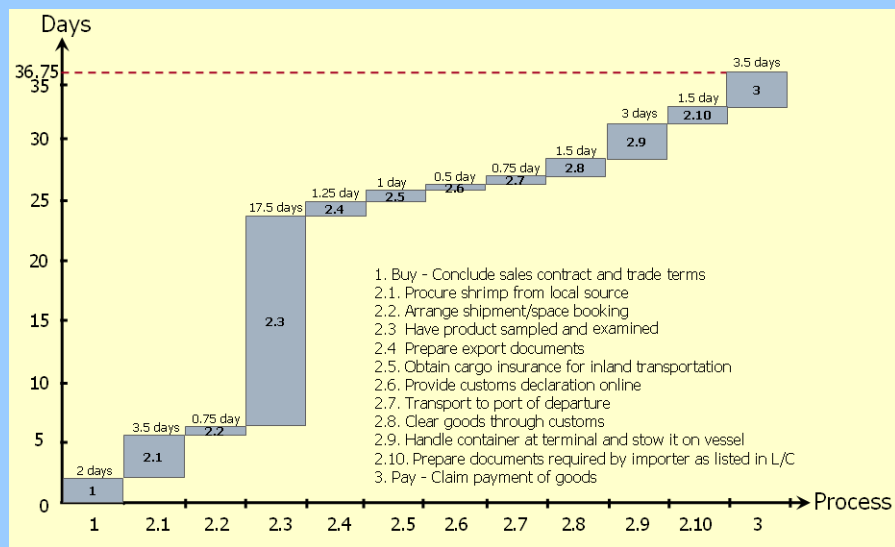
Given that the performance indicators are based on certain assumptions, it is therefore important that process analysts clearly understand the assumptions underlying the chosen performance indicators prior to adopting them as baselines for benchmarking trade facilitation performance.

If information about how a particular business process is carried out in other countries is available, process analysts may also compare, partially or fully, the practicalities of the business process.

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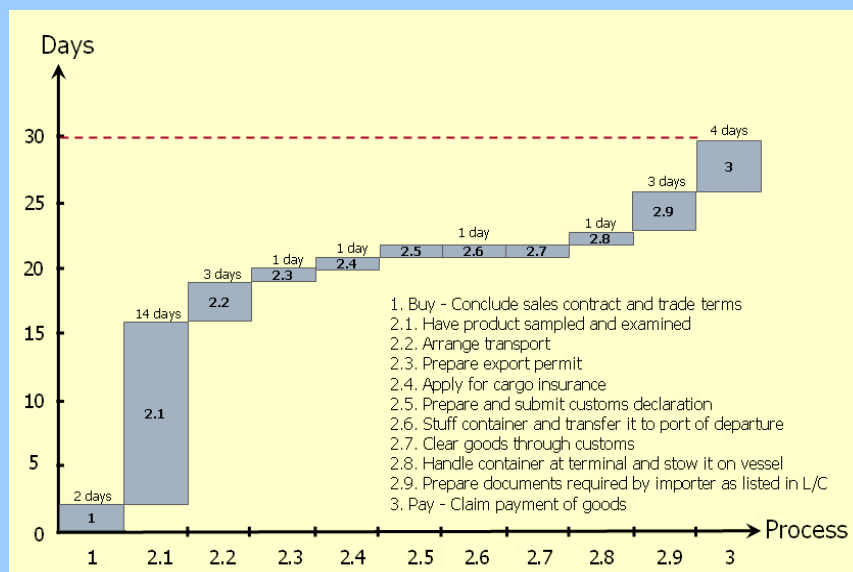
<sup>10</sup> UNNExT provides a repository of documents with relevant business process information that may serve as a baseline for benchmarking. The repository can be accessed through [http://www.unescap.org/unnext/tools/business\\_process.asp](http://www.unescap.org/unnext/tools/business_process.asp).

### Box 3B-18. Case study – benchmarking Bangladesh’s and Thailand’s frozen shrimp export to Japan (1)



a) Time-procedure chart of frozen shrimp export from Bangladesh to Japan

Source: Hossain, S.S. & Rahman, M.T. (2011). Facilitating Trade through Simplification of Trade Processes and Procedures in Bangladesh. *Asia-Pacific Research and Training Network on Trade: Working Paper Series*, No. 93.



b) Time-procedure chart of frozen shrimp export from Thailand to Japan

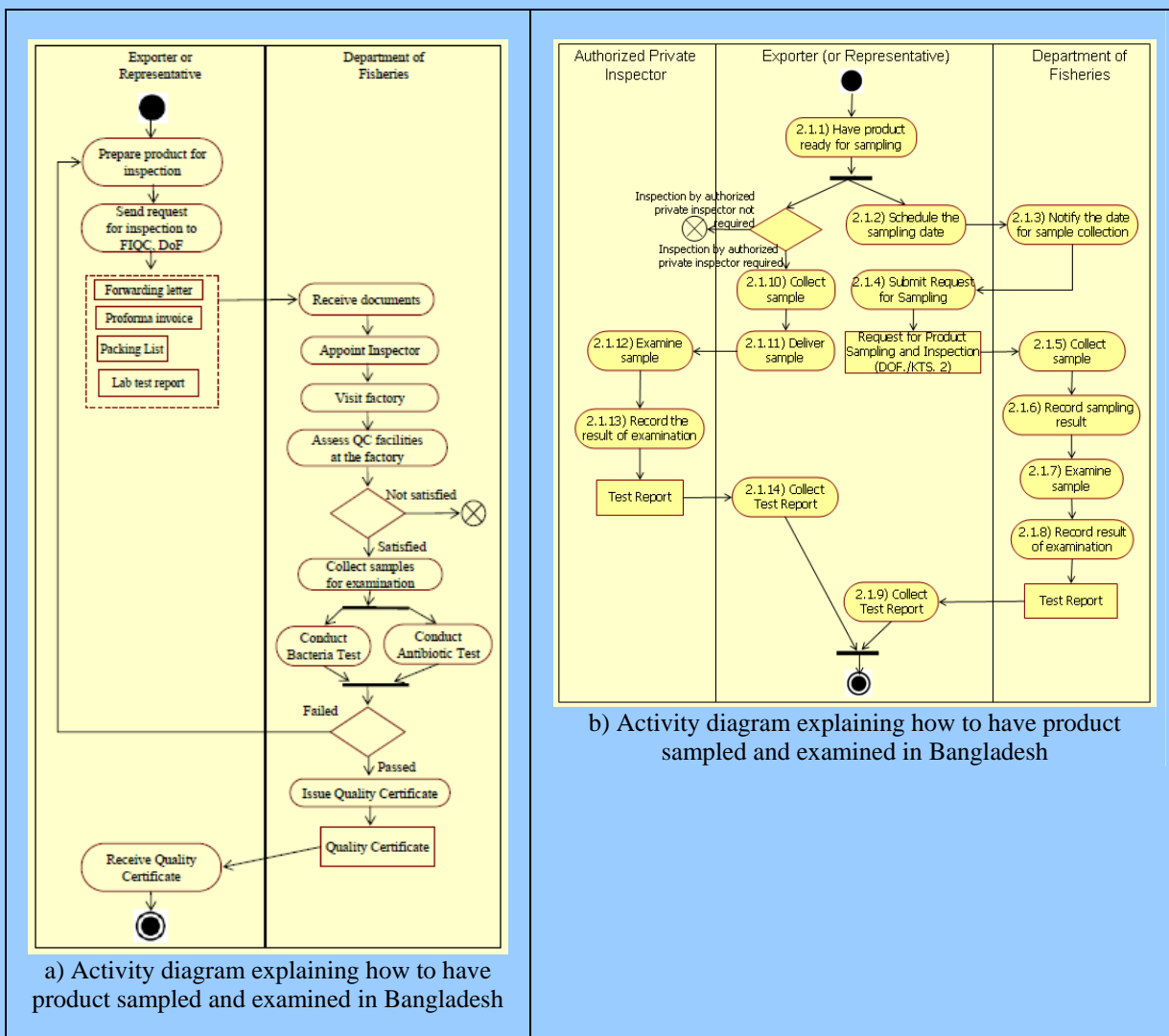
Source: ESCAP from The Analysis of Frozen Shrimp Export Process in Thailand, Institute for IT Innovation, Kasetsart University

By comparing the two time-procedure charts, we learn that:

- It takes 6.75 days longer to make necessary arrangements to export frozen shrimp from Bangladesh to Japan than from Thailand to Japan.
- It takes 0.75 day to arrange shipment/space booking in Bangladesh but 3 days in Thailand.
- It requires a Bangladeshi exporter 17.5 days to ‘have product sampled and examined.’ The same process takes 14 days in Thailand.
- The preparation of export documents for frozen shrimp export take 1.25 days in Bangladesh, but a day in Thailand.
- In Thailand, ‘Prepare and submit customs declaration,’ ‘stuff container and transfer it to port of departure,’ and ‘clear goods through customs’ can be done in a day, but 2.75 days in Bangladesh.
- The preparation for documents required by importer of frozen shrimp takes 3 days in Thailand, but 1.5 days in Bangladesh.
- The claim for payment of good is half a day faster in Bangladesh than in Thailand.

### Box 3B-19. Case study – benchmarking Bangladesh’s and Thailand’s frozen shrimp export to Japan (2)

Assuming that the studies of business processes for exporting frozen shrimp from Bangladesh and Thailand to Japan follows the methodology proposed by this BPA Guide, and thus produce, in addition to the time-procedure chart, a set of activity diagrams and process descriptions, in this case, process analysts can find out why it takes 14 days to have product sampled and examined in Thailand but 17.5 days in Bangladesh from the activity diagram and process description that explain ‘have product sampled and examined’ of both Bangladeshi and Thai cases.



The activity diagrams and process descriptions reveal that the inspection of processing plant is listed as one of the activities in the Bangladeshi case, but input and criteria to enter/ begin the business process in Thai case. To be more precise, the inspection of processing plant in the case of Thailand is part of the HACCP-based inspection integrated quality assurance program for the seafood industry which Thailand’s Department of Fisheries has been implementing since 1991. As of 2000, 92% of processors now implementing HACCP effectively. The processing plant that meets the HACCP requirements has a privilege of having product sampled and examined without having the processing plants inspected.

\* Suwanrangsi, S. (2002). Experiences in the Application of HACCP for Export and Local Markets: The Case of Thai Fisheries. In E. HANAK, E. BOUTRIF, P. FABRE, and M. PINEIRO. *Food Safety Management in Developing Countries: Proceedings of the International Workshop*, CIRAD-FAO, 11-13 December 2000, Montpellier, France.

*Activity 5.2*

Project manager/project leader reviews a set of observations listing bottlenecks and opportunities to improve “as-is” business processes and provide feedback.

*Activity 5.3*

Process participants/business domain experts review a set of observations listing bottlenecks and opportunities to improve “as-is” business processes and provide feedback.

*Activity 5.4*

Project sponsor reviews a set of observations listing bottlenecks and opportunities to improve “as-is” business processes and provide feedback.

*Activity 5.5*

Process analysts, based on feedback from project manager/project leader, process participants/business domain experts, and project sponsor, determine if a set of observations listing bottlenecks and opportunities to improve “as-is” business processes needs further revision. If it does, process analysts revise and/or refine it according to the feedback received.

*Activity 5.6*

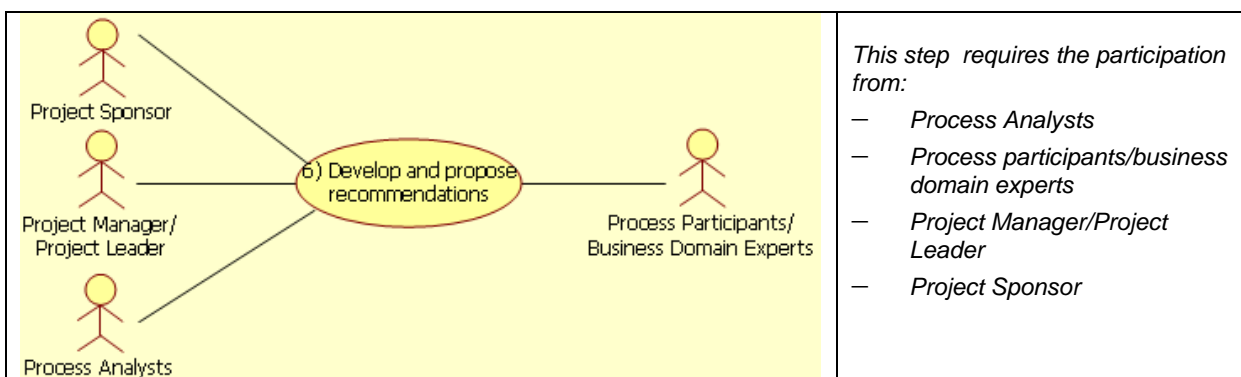
Once no further revision is required, project sponsor approves the observations.

**Step 6: Develop and propose recommendations**

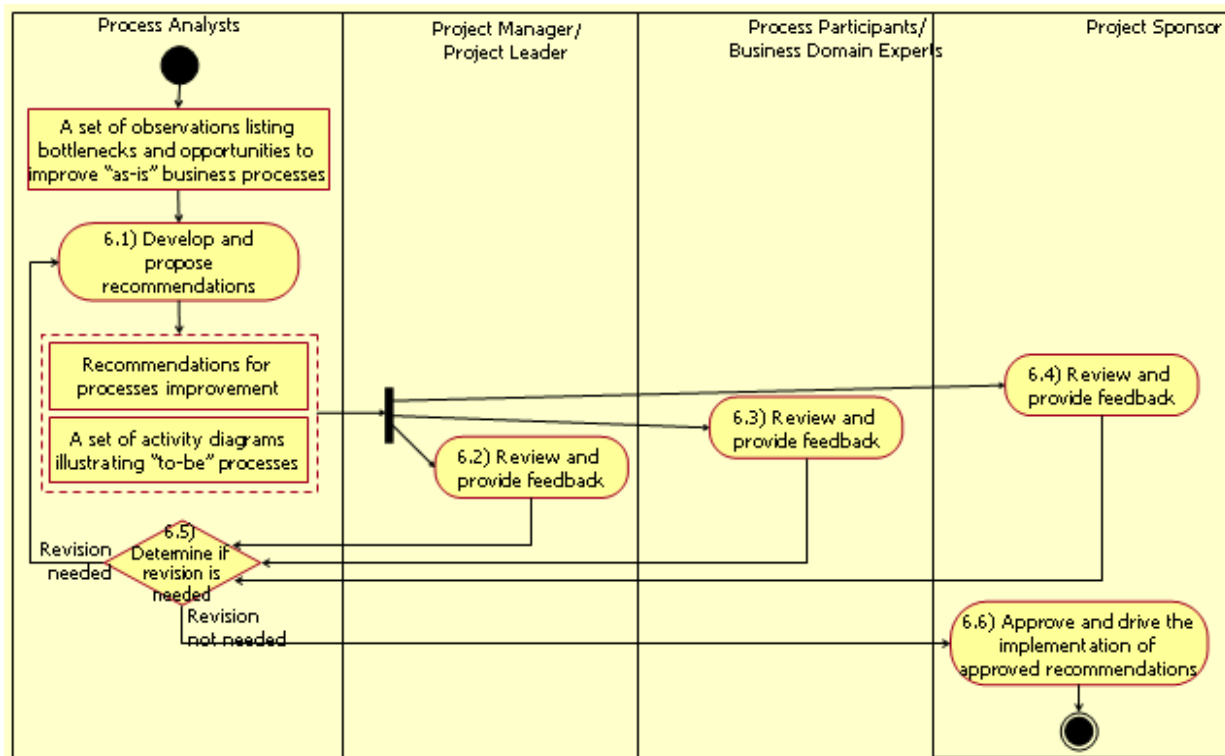
The objective of this step is to develop and propose recommendations that help eliminate bottlenecks and inefficiencies of procedures and documentary requirements in the examined business process. Such recommendations should also aim at enhancing transparency in trade and border procedures in a way that does not impede trade facilitation. The measurable benefits of implementing those recommendations may include improved trade competitiveness resulting from a reduction in trade transaction cost, increased foreign direct investment due to the advent of more business-friendly environment, and greater participation of SMEs in the international trade.

Figures 3B-11 and 3B-12 illustrate the stakeholders and activities involved in this step.

**Figure 3B-11. Stakeholders involved in Step 6**



**Figure 3B-12. Activities involved in Step 6**



**Activity 6.1**

Using a set of observations listing bottlenecks and opportunities to improve "as-is" business processes as an input, process analysts develop recommendations for each bottlenecks and improvement opportunities identified. The recommendations may be accompanied by a set of activity diagrams illustrating "to-be" processes.

Business process improvement can take various forms. General recommendations may include the following measures:

- Re-sequence of activities in a more appropriate order
- Elimination of redundant procedures
- Eliminate business processes or activities that do not add any value to the delivery of goods, the collection of national revenue, the enhancement of border security, the protection of public health and safety
- Integrate business processes that have similar objectives by fostering collaboration between all concerned parties
- Merge of some procedures that may also lead to the elimination of duplicate or unnecessary documentary requirements
- Eliminate redundant data and unnecessary documentary requirements
- Harmonize data requirements with the international standards
- Enhance information sharing among concerned parties through automation such as the automation of paper-based transactional operations, either in a full-scale trade and transport information exchange among stakeholders (paperless trade) such as what

has been implemented under the CASSANDRA project<sup>11</sup> or partly for customs clearance systems such as ASYCUDA.<sup>12</sup>

- Eliminate outdated laws, rules, and regulations
- Privatize quality control related tasks
- Modify existing or create new laws, rules, and regulations to support the implementation of recommendations
- Incorporate appropriate international best practices and standards where possible
- Organize seminars, workshops and trainings to communicate and charter changes
- Implement the Authorized Economic Operator accreditation scheme

It is recommended that process analysts review the following international recommendations and standards as they may provide process analysts ideas for the development of recommendations (See also Box 3B-20):

- UN/CEFACT Recommendation No. 18 on Facilitation Measures Related to International Trade Procedures
- Revised Kyoto Convention
- Customs SAFE Framework of Standards (part of WCO SAFE Package)
- WCO Customs Guidelines on Integrated Supply Chain Management (part of WCO SAFE Package)

### **Box 3B-20. Examples of international instruments for the simplification of trade related procedures**

#### **UN/CEFACT Recommendation No. 18: Facilitation Measures Related to International Trade Procedures**

UN/CEFACT Recommendation 18 provides a comprehensive set of recommendations regarding international best practices and standards for the facilitation and harmonization of trade transactions. In order to understand the complexity of international trade, including the key elements of a trade transaction, UN/CEFACT developed a model of an international supply chain. Based on this model, specific measures were developed to cover the key elements of the trade transaction process. These are presented grouped into four major categories, namely: commercial measures; international payment measures; official control measures; and transport-related measures. UN/CEFACT Recommendation No.18 can be downloaded in English, French and Russian from:

[http://www.unece.org/cefact/recommendations/rec\\_index.htm](http://www.unece.org/cefact/recommendations/rec_index.htm).

#### **Revised Kyoto Convention**

The Revised Kyoto Convention is an international convention that sets out standards and recommended practices for the clearance of goods, the payment of duties and taxes, the use of risk management, the establishment of dialogue between customs and trade, and the application of information technology in the context of customs. Given that the Convention promotes the use of simplified practices, its implementation is expected to bring about a reduction in time and cost associated with customs processing

<http://unstats.un.org/UNSD/trade/WS%20Bangkok06/Workshop%20materials/KYOTO%20Convention.pdf>).

#### **Customs SAFE Framework of Standards**

The SAFE Framework sets forth the principles and standards that promote the harmonization of advanced electronic cargo information requirements on inbound, outbound, and transit requirements, the consistent use of risk management approach to address security threats including the conduct of an outbound inspection of high-risk cargo. The SAFE Framework encourages the establishment of cooperative arrangements between customs and other government agencies especially for the integrated border management. Various elements and necessary steps that have to be taken into account when implementing an integrated border management system are summarized in Customs Compendium # 9: Integrated Border Management. The SAFE Framework also supports the establishment

<sup>11</sup> CASSANDRA (Common Assessment and Analysis of Risk in Global Supply Chain – <http://www.cassandra-project.eu/>) is a project under the European’s Seventh Framework Programme for Security. It is initiated with a strategic goal to enhance supply chain visibility which will eventually lead to an improvement in business operations as well as efficiency and effectiveness of government security inspections.

<sup>12</sup> ASYCUDA (Automated SYstem for CUstoms DATA – <http://www.asycuda.org>) is a computerized customs management system, developed and provided by UNCTAD. The system handles manifests and customs declarations, accounting procedures, transit and suspense procedures.

of partnerships between customs and the private sector through the implementation of the Authorized Economic Operator (AEO) program. It describes the concepts of the AEO and outlines a set of standards, practices, and procedures that both customs and members of trade community aspiring to the AEO status are expected to adopt into routine usage. AEO implementation guidance and related information is provided in separate documents in WCO Safe Package ([http://www.wcoomd.org/home\\_pfoverviewboxes\\_safepackage.htm](http://www.wcoomd.org/home_pfoverviewboxes_safepackage.htm)).

#### **WCO Customs Guidelines on Integrated Supply Chain Management (ISCM)**

The ISCM Guidelines describes how various processes i.e., the advance electronic transmission of an initial export goods declaration by the exporter, the advance electronic transmission of an initial declaration by the carrier, and the advance electronic transmission of an initial import goods declaration by the importer should be integrated into an integrated customs control chain with an aim to ensure the integrity of the consignment from the time it leaves the place of origin until it arrives at the place or destination. The ISCM Guidelines encourages the use of a Unique Consignment Reference (UCR) that is in line with the WCO Recommendation on the UCR and its accompanying Guidelines as it is important instrument that allows customs to link consignment information received from different parties. The ISCM Guidelines also explained how the customs controlled chain can be further simplified when the Authorized Economic Operator program is also implemented

([http://www.wcoomd.org/files/1.%20Public%20files/PDFandDocuments/Procedures%20and%20Facilitation/safe\\_package/safe\\_package\\_II.pdf](http://www.wcoomd.org/files/1.%20Public%20files/PDFandDocuments/Procedures%20and%20Facilitation/safe_package/safe_package_II.pdf)).

#### *Activity 6.2*

Project manager/project leader reviews proposed recommendations for the business process improvement, which may be accompanied by a set of activity diagrams representing the future “to-be” business processes and provides feedback.

#### *Activity 6.3*

Process participants/business domain experts review proposed recommendations for the business process improvement, which may accompanied by a set of activity diagrams representing the future “to-be” business processes and provide feedback.

#### *Activity 6.4*

Project sponsor reviews proposed recommendations for the business process improvement, which may include a set of activity diagrams representing the future “to-be” business processes and provides feedback.

#### *Activity 6.5*

Process analysts, based on feedback from project manager/project leader, process participants/business domain experts, and project sponsor, determine if the proposed recommendations and the activity diagrams representing the “to-be” processes needs further revision. If they do, process analysts revise and/or refine them according to the feedback received.

#### *Activity 6.6*

Once no further revision is required, project sponsor approves the recommendations and ensure that they are implemented.

## 4. RECOMMENDATIONS FOR IMPLEMENTATION

Trade facilitation measures such as the simplification, harmonization, and automation of procedures and documents involve interagency coordination and collaboration. Their successful implementation requires not only political and governmental support in terms of both policy directives and human and financial resources, but also an in-depth understanding about existing business processes, including their related information flows, laws, rules, and regulations.

Analysis of business processes involved in moving goods across borders is, therefore, a necessary exercise that must be carried out prior to implementing any other trade facilitation measure. Trade facilitation measures, in other words, cannot be applied without locating the source of problem areas, bottlenecks and redundancies.

The following recommendations are outlined to assist the policymakers and trade facilitation practitioners in setting up the BPA project:

- **Get buy-in from the officials:** Convey the necessity of trade facilitation and business process analysis through awareness-raising programs – starting at the top. Educate both relevant government officials and the trade and transport community on the necessity of business process analysis and its potential return on investment for all stakeholders in the long run.
- **Adequate resources:** Secure adequate human resources and funding. Obtain a mandate from top government officials for the members of the business process analysis team, which may be from an outsourced third party.
- **Roles and responsibilities of the project stakeholders:** Identify clearly the roles of each agency (e.g. project sponsor, project manager/project leader, process participants/business domain experts).
- **Choose a champion:** Determine a lead agency that is capable of guiding the conduct of BPA and facilitating the communication among business process analysis stakeholders. Choose the business process analysis champion wisely. Avoid the “ivory tower dictator” approach. Instead, nominate the party with efficient and effective team-player skills.
- **Start small, and then evolve:** Chose the right starting point and form an effective team, which is critical to succeed. If the team members of the business process analysis project are new to the BPA, start with a relatively smaller scope. See what works for the project and learn from that. Drop steps that do not work. It is important to start small and demonstrate success, then to build on that success. As a general rule, the wider the scope, the more difficult it is to choreograph the initial project, but the bigger is the opportunity to improve processes.
- **Profit from experience:** Keep in mind that the learning experience gained during the initial phase helps accelerate the business process analysis tasks at the later stage. Make use of the learning effect; start with simple processes and engage complex issues later on. This avoids frustration and repetition of efforts. Also try to benefit from international best practice and expertise. Studies and case studies can be obtained from various standard development organizations and trade facilitation bodies.



- **Invest in training:** Train the staff that disseminates relevant knowledge about the business process analysis and familiarize the business process analysis team about the common methodology that all members must follow.
- **Performance measurement:** Set realistic benchmarks to be achieved after the “to-be” processes are in place. Performance indicators of an optimum best practice country<sup>13</sup> can be taken as a model.

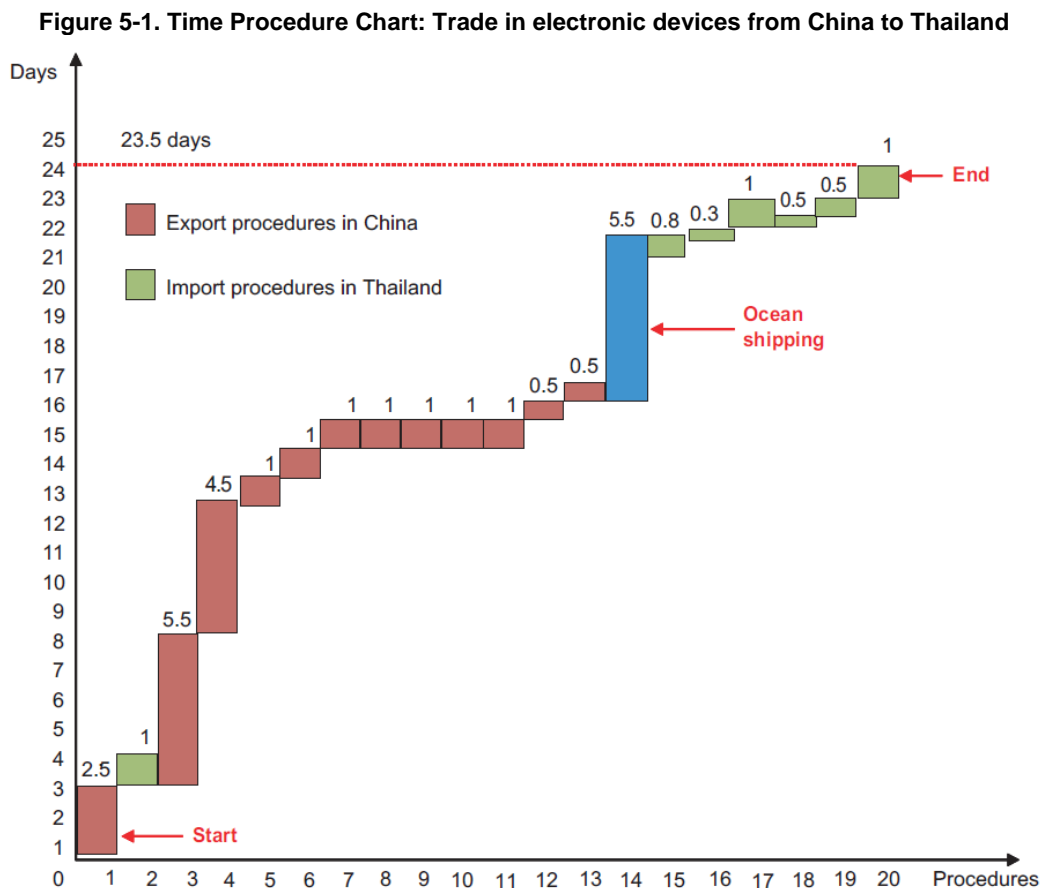
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<sup>13</sup> Refer to the World Bank’s study on *Trading across Borders* as one of the performance benchmarkings, <http://www.doingbusiness.org>

## 5. CONCLUDING REMARKS

This Guide offers detailed insights on how to conduct a business process analysis. The BPA is a useful tool to analyse various business processes in different product-specific trade procedures such as export, import, or related logistics. The results of the BPA can be used to induce policy change through the provision of a clear and precise “as-is” condition analysis. Bottlenecks and inefficiencies in trade procedures and processes can be identified more easily and used as the basis for the development of well-targeted policy recommendations.

The benefits of using this methodology are obvious: through using a unified modeling language, processes and procedures become comparable not only between products (of the same country) but also between countries. In addition, it allows re-constructing and analysing supply chains across various countries by combining the BPA results for the production for one specific product across trading partners (e.g. from the import of raw materials or parts and components, to the export of the final product). The following Figure 5-1 provides an example of combining the results of two “domestic” BPA’s where the red rectangles show the export procedures of electronic devices in China and the green rectangles the import procedures for Thailand.



Source: ESCAP. (2011). *Trade Facilitation in Asia and the Pacific: An Analysis of Import and Export Processes*. Studies in Trade and Investment, No. 71. Economic and Social Commission for Asia and the Pacific. New York.

It is further recommended to combine the business process analysis method with the time-cost-distance method often used in transport facilitation and corridor analysis studies. Such an approach would allow for a more precise understanding and evaluation of the various bottlenecks associated with competing modes of transport operating on the same route or alternate transit routes.

## GLOSSARY

*Activity Diagram* – a graphical representation that describes the flow of activities carried out by stakeholders involved in a particular business process. The activity diagram is a type of diagram that uses a set of notations defined by the Unified Modeling Language (UML).

*Automation* – the application of information and communication technologies to facilitate the manual operation of business processes.

*Business Process* – a logical series of related transactions that converts input to results or output. A business process considered within the frame of trade facilitation in this paper can be defined as “a chain of logically connected activities to move goods and related information across borders from buyer to seller and to provide related services”.

*Business Process Model* – a graphical representation of a business process. It illustrates (i) activities performed and decision points, (ii) actors who perform those activities, (iii) activities’ input and output, (iv) alternate routes of activities subject to different business rules and conditions, and (v) criteria for entering and exiting the business process. The process model also demonstrates how the various actors relate to one another and how the information flows throughout the business process. The process model has become increasingly important in the area of *trade facilitation*. It serves as an organizational blueprint that facilitates the identification of bottlenecks, the prioritization of areas for improvement and improvement strategies, and the design of automated systems to promote paperless trade. It also enables the benchmarking of process improvement after implementing the improvement initiatives.

*Business Process Modeling* – a technique for documenting business processes where each element of the business process is represented by graphical notations. Unified Modeling Language (UML) provides graphical notations for business process modeling that are accepted and widely used not only among practitioners in business community but also those in information technology and software industry. Business process modeling can be achieved by a simple drawing with paper and pencil or a software tool.

*Harmonization* – the effort to align procedural, regulatory, and/or documentary requirements with relevant standards.

*Business Process Analysis* – a systematic examination of business processes in order to gain better understanding and to develop improvement strategies.

*Simplification* – the effort to reduce complexity, in our context, of the trade and transport facilitation processes and documentary requirements.

*Single Window* – a facility that allows parties involved in trade and transport to lodge standardized information and documents with a Single Window entry point to fulfil all import, export and transit-related regulatory requirements. If information is electronic, then individual data should only be submitted once. UN/CEFACT Recommendation No. 33 and Case Studies on Implementing a Single Window can be found at:  
[http://www.unece.org/cefact/single\\_window/welcome.htm/](http://www.unece.org/cefact/single_window/welcome.htm/).

*Time-Procedure Chart* – a chart illustrating relationships between each business process and time (normally in days) required to complete each business process in the business domain of interest.

While each bar on the x axis represents a business process (procedure), the height of the bar associated with the time scale on the y axis represents the average total time required to complete that particular business process.

*Trade Facilitation* – measures used to simplify and harmonize procedural, regulatory, and/or documentary requirements associated with the international supply chain.

*UN/CEFACT Recommendations* – a series of more than 30 recommendations developed and maintained by the United Nations Center for Trade Facilitation and Electronic Business (UN/CEFACT). These recommendations are used worldwide as an international best practice to simplify and harmonize trade procedures and information flow.

*Unified Modeling Language* – a standardized visual specification language for business process and information modeling.

*Use Case* – a UML notation representing a business process.

*Use Case Diagram* – a graphical representation that illustrates major elements of the business domain which includes relevant business processes and their stakeholders.

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## ONLINE RESOURCES

ASYCUDA Resource page: <http://www.asycuda.org>

CASSANDRA Resource page: <http://www.cassandra-project.eu>

UML Resource Page: <http://www.uml.org>

UN Trade Facilitation Recommendations:

[http://www.unece.org/cefact/recommendations/rec\\_index.htm](http://www.unece.org/cefact/recommendations/rec_index.htm)

World Bank, The *Doing Business* project: <http://www.doingbusiness.org>

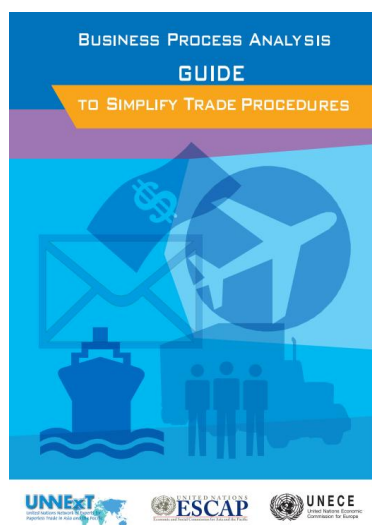
World Customs Organization, WCO Safe Package:

[http://www.wcoomd.org/home\\_pfoverviewboxes\\_safepackage.htm](http://www.wcoomd.org/home_pfoverviewboxes_safepackage.htm)

World Customs Organization, Revised Kyoto Convention Resource page:

[http://www.wcoomd.org/home\\_pfoverviewboxes\\_tools\\_and\\_instruments\\_pfrevisedkyotoconv.htm](http://www.wcoomd.org/home_pfoverviewboxes_tools_and_instruments_pfrevisedkyotoconv.htm)

# Business Process Analysis Guide To Simplify Trade Procedures



Available at  
<http://www.unescap.org/tid/publication/tipub2558.asp>

## ANNEX<sup>1</sup> (December 2011)

### BUSINESS PROCESS ANALYSIS OF THE EXPORT OF JASMINE RICE FROM THAILAND TO THE UNITED STATES



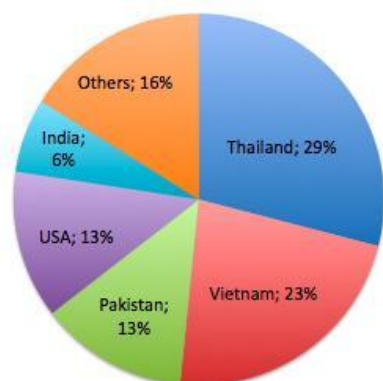
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<sup>1</sup> This Annex updates and extends the earlier annex included in the printed version of the UNNExT Business Process Analysis Guide to Simplify Trade Procedures. This document has not been formally edited. The views expressed in this document are those of the authors and do not necessarily reflect those of the United Nations.

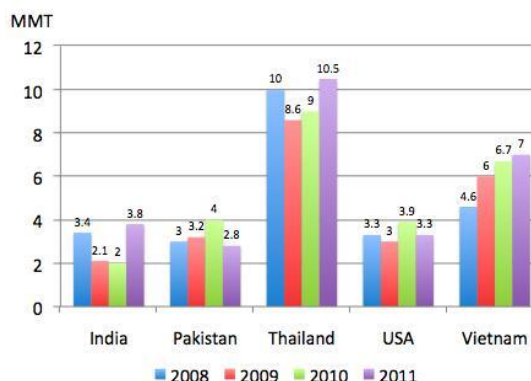
## A1. Overview of jasmine rice export – a business domain of interest

Although Thailand produces less than 5 percent of the total world rice production,<sup>2</sup> it is the world's biggest rice exporter (see figure A1-1). The volume of rice exported from Thailand in 2010 constitutes about 30 percent of world rice exports (see figure A1-2).<sup>3</sup>

**Figure A1-1. Major rice exporters**



**Figure A1-2. Volume of rice exported**



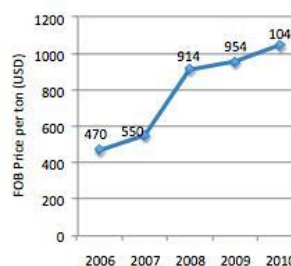
Source: Foreign Agricultural Service, United States Department of Agriculture. (2011). *World Rice Trade*.

Among all types of rice traded, Thai jasmine rice has, for some years, achieved recognition for its high quality. Export volume of jasmine rice from Thailand has been growing at the average rate of 100,000 tons per year since 1988.<sup>4</sup> In 2010, the volume of jasmine rice export accounted for 34 percent of total value of rice exported or almost 1.7 billion USD.<sup>5</sup> Between 2007 and 2010, the value of jasmine rice exports increased by an average of 16 percent per year.

The United States is the major export market of high quality Thai jasmine rice. The volume of jasmine rice exported to the United States accounts for 21.53 percent of total jasmine rice exported. The volume of export between 2007 and 2010 has grown by the average of 28 percent. The outlook of jasmine rice export from Thailand to China, the third largest export market of Thai jasmine rice, on the other hand, has turned negative due to higher prices.

**Figure A1-3. FOB Price of Thai Jasmine Rice**

(FOB Price = processed goods price + domestic cost to port of export + cost of meeting health and safety standards + exporter profit)



Source: FAO. (2011). *Rice Market Monitor July 2011*, Volume XIV, No. 3.

<sup>2</sup> Forssell, S. (2009). Rice Price Policy in Thailand: Policy Making and Recent Development. *Minor Field Study Series*, No. 189.

<sup>3</sup> Foreign Agricultural Service, United States Department of Agriculture. (2011). *World Rice Trade*.

<sup>4</sup> Rerkasem, B. (2007). Having your Rice and Eating it too: A View of Thailand's Green Revolution. *ScienceAsia*, 33(1), pp. 75-80.

<sup>5</sup> ECBER. (2010). *Report on an Export of Thailand's Agricultural Products*.



**Table A1-1. Thailand's rice export 2007-2010**

10-digit HS Code	Description	Value (Million USD)					Ratio of Total Value of Rice Exported
		2007	2008	2009	2010	Average	
1006301500	Jasmine rice	1,085.32	1,417.51	1,610.91	1,686.56	1,450.08	31.80%
1006302000	Parboiled rice	670.35	1,706.37	1,522.14	1,433.42	1,333.07	29.23%
1006301911	White rice 100%	946.82	1,666.19	526.85	1,028.65	1,042.13	22.85%
1006301912	White rice 5-45%	147.38	958.19	328.74	295.18	282.37	6.19%
1006301900	Pathumthani fragrant rice	183.17	163.07	146.77	128.98	155.49	3.41%
1006303030	Glutinous rice	75.23	115.73	169.20	149.67	127.46	2.8%
1006209010	Brown rice 5-100% and parboiled	42.37	115.24	107.05	123.12	96.95	2.13%
1006201000	Brown jasmine rice	73.64	63.68	37.18	37.36	52.96	1.16%
1006209000	Brown Pathumthani fragrant rice	6.56	3.41	5.02	15.78	7.69	0.17%
1006309009	Cargo rice	15.01	2.30	0.15	0.10	4.39	0.1%
1006209020	Other brown rice	0.61	0.54	1.39	12.17	3.68	0.08%
1006309000	Other semi-milled or wholly-milled rice, whether or not polished or glazed	12.50	0.50	0.10	0.002	3.29	0.07%
1006100000	Rice in husk (paddy or rough)	2.33	0.00	0.00	0.01	0.59	0.01%
	Total	3,261.28	5,612.72	4,466.49	4,911.00	4,660.13	100%

Source: ECBER. (2010). *Report on an Export of Thailand's Agricultural Products*.

**Table A1-2. Thailand's jasmine rice export 2007-2010, by country**

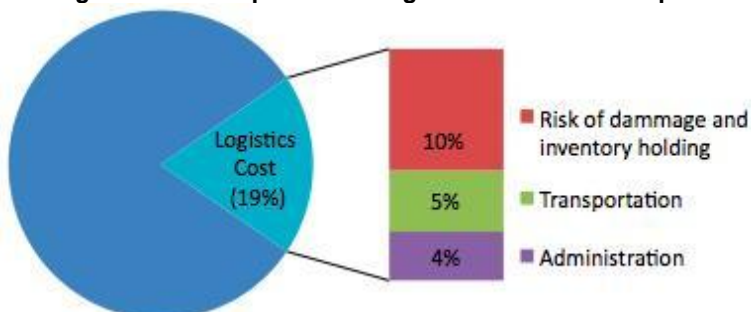
Importing country	Value (Million USD)					Ratio of Total Rice Exported	Average Growth
	2007	2008	2009	2010	Average		
USA	200.27	301.38	340.77	406.48	312.22	21.53%	28%
Hong Kong	125.31	149.31	166.32	160.02	151.74	10.46%	10%
China	132.80	119.50	108.58	126.47	121.84	8.40%	-1%
Côte d'Ivoire	64.54	57.61	141.70	116.25	95.03	6.55%	39%
Singapore	70.97	91.95	100.86	103.41	91.80	6.33%	14%
Malaysia	58.13	80.12	88.86	53.99	70.27	4.85%	3%
Ghana	45.43	79.63	67.42	83.01	69.12	4.77%	26%
Canada	40.11	66.21	70.46	83.59	65.09	4.49%	30%
Australia	31.29	68.23	65.33	69.72	56.14	3.87%	35%
France	24.53	37.65	42.17	43.43	36.94	2.55%	23%
Saudi Arabia	19.47	31.98	32.57	33.05	30.52	2.10%	23%
Brunei	19.71	31.68	30.26	26.76	27.10	1.87%	15%
Israel	16.88	20.74	29.41	32.62	24.91	1.72%	25%
United Arab Emirate	23.39	23.65	19.88	22.32	22.01	1.54%	-1%
Gabon	10.72	17.32	22.27	24.94	18.81	1.30%	34%
United Kingdom	9.95	19.63	18.77	24.38	18.16	1.25%	41%
Netherlands	10.75	17.29	19.70	18.74	18.62	1.15%	23%
Germany	8.16	10.43	14.46	17.77	12.71	0.88%	30%
Other importing countries	171.91	203.23	226.12	233.62	208.72	14.39%	11%
Total	1,085.32	1,417.61	1,610.91	1,686.56	1,450.08	100%	16%

Source: ECBER. (2010). *Report on an Export of Thailand's Agricultural Products*.

The higher prices are caused not only by a sharp increase in prices of urea, fuel, rice seeds, and fertilizers,<sup>6</sup> but also by the substitution of harvesting machine for labor due to unavailable household labor in harvesting period, and by government's rice pledging scheme.<sup>7</sup> It is projected that the FOB price of jasmine rice will continue rising to 1,100-1,200 USD a ton.<sup>8</sup>

In addition to losing their competitive edge due to increased production costs and government's rice pledging scheme, Thai rice exporters are also suffering from relatively high logistics costs. The logistics costs of exporting rice are estimated as high as 19 percent of the market value of rice exported.<sup>9</sup>

**Figure A1-4. Components of logistics costs in rice export**



Source: Office of Transport and Traffic Policy and Planning, Ministry of Transport. (2006). *The Development of Multimodal Transport and Logistics Supply Chain Management for Implementation of Action Plan*.

In Thailand, road transport is a major transportation of rice from a miller to a port of exit. Although inland transport network was built, the lack of the integrated multimodal link puts off the use of more cost-efficient modes, i.e., inland waterway and rail transport. Based on data in the calendar years 2006, 2007, and 2008, the cost of inland transport is on average 500 THB per ton and the freight cost is approximately 400 THB.<sup>10</sup> Terminal handling charge is estimated at 120 THB per ton. The cost of DNA inspection varies. While Biotechnology Research and Development Office (Department of Agriculture) charges 1,500 THB, DNA Technology Laboratory (Kasetsart University at Kamphaengsaen) charges 2,500-3,500 THB depending on the coverage of the analysis. Rice to be exported is also subject to fumigation. The fumigation is charged at 30 THB per ton.<sup>11</sup> The cost of administering transport and regulatory requirements inclusive of completing customs formalities and processing other paper work is estimated at 3,000 THB per transaction.

Thailand is facing a risk of losing international market share to the rivals. To regain market share and ensure export growth, Thailand needs to rethink its rice policy. Measures to help farmers cut production costs and create an enabling environment for productivity improvement must be introduced. Measures that will lead to a reduction in logistics costs must also be taken immediately.

<sup>6</sup> Forssell, *Op. Cit.*

<sup>7</sup> Pledging Scheme could Destroy Thai Rice Exports. *The Nation*. September 9, 2011.

<sup>8</sup> Thai Rice has Image Problem. *The Nation*. September 20, 2011.

<sup>9</sup> Office of Transport and Traffic Policy and Planning, Ministry of Transport. (2006). *The Development of Multimodal Transport and Logistics Supply Chain Management for Implementation of Action Plan*.

<sup>10</sup> Dechachete, R. (2011). *Composite Index of Market Access for the Export of Rice from Thailand*. International Centre for Trade and Sustainable Development, Geneva.

<sup>11</sup> *Ibid.*

## A2. Scope of business process analysis

The business process analysis of jasmine rice export was conducted in 2009 as part of a project that aimed toward piloting the implementation of a single window entry, i.e., a facility that facilitates exporters and importers in completing documentary requirements of various government agencies involved in the international trade, for this particular project, of a few strategic products. With the single window entry, the need for exporters and importers to repeatedly generate identical pieces of data and submit them multiple times to multiple government agencies can be eliminated. As data can be shared more efficiently and effectively, data consistency and integrity can be improved as a result.

The business process analysis of jasmine rice export was included as one component of the single window entry pilot project as its outputs served as a basis for:

- The analysis of data requirements and data flow;
- The development of a standardized data;
- The design of a to-be jasmine rice export process;
- The design of the prototype single window entry form; and
- The design of the prototype single window entry system.

**Figure A2-1. Use Case Diagram of Business Processes in Jasmine Rice Exportation from Thailand**

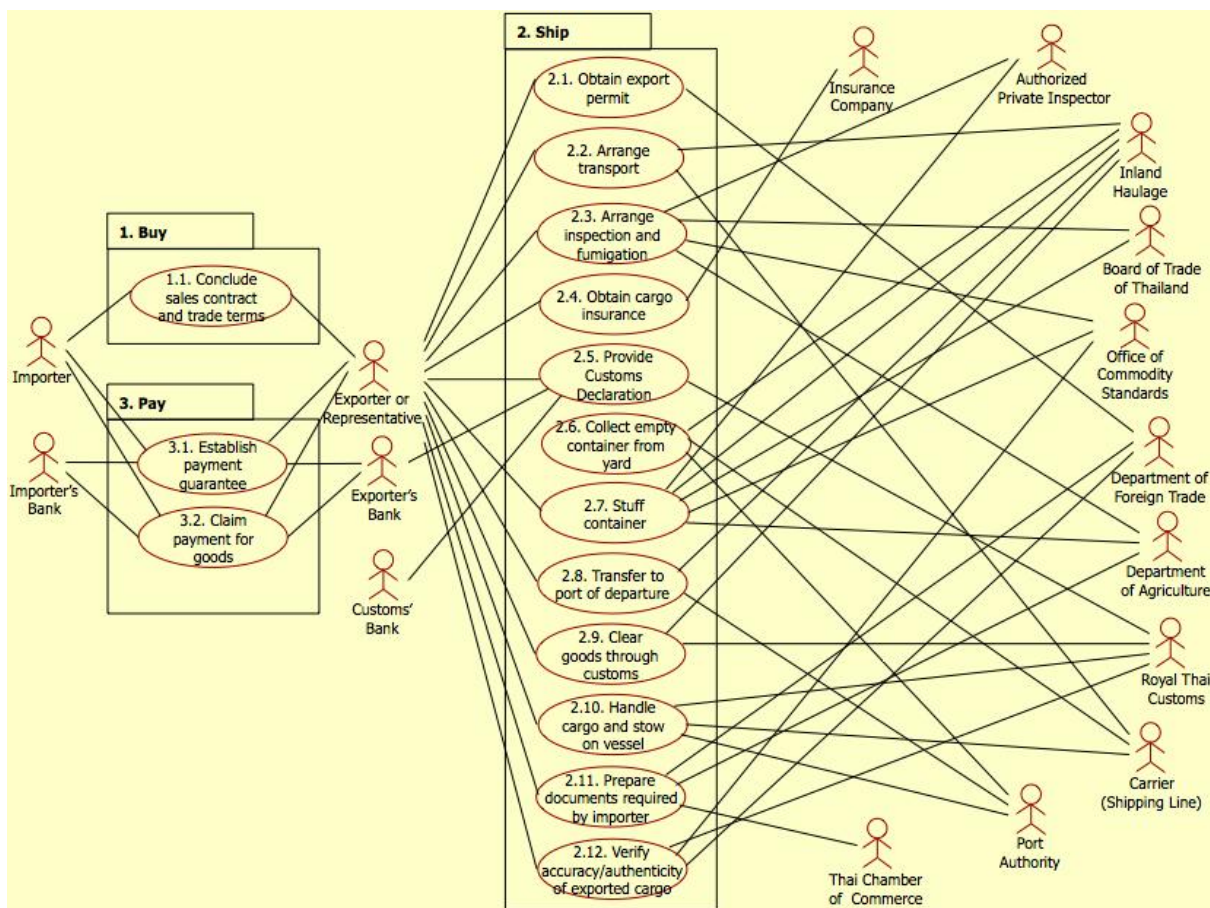


Figure A2-1 presents a list of core business processes that are typically carried out when exporting jasmine rice from Thailand to the United States under the assumptions made above and a list of stakeholders that an exporter indirectly or directly deals with. Although the prototype single window entry system only focused on the B2G, G2G, and G2B information

sharing, the Ministry of Information and Communication Technology (MICT), as a project sponsor, specified that the analysis of jasmine rice export process covered all 3 process areas of the UN/CEFACT International Supply Chain Model.

- Buy: the conclusion of trade terms and the establishment of sales contract
- Ship: the arrangement for cargo movement and the completion of necessary actions to meet regulatory requirements of both export and import countries
- Pay: the claim for the payment and the payment for the purchased cargo

The project sponsor also agreed that the analysis of jasmine rice export process was based on the assumptions that:

- Jasmine rice is exported from Thailand to the United States.
- Jasmine rice is shipped by an ocean transport.
- Jasmine rice travels in a 20-foot full container load.
- The carrier delivers an empty container to exporter's premise for loading and brings the loaded container back to the container yard before loading it onto the vessel.
- Jasmine rice is delivered under the C.I.F. term where an exporter arranges and absorbs the costs of shipping jasmine rice to the port of destination.
- The payment for the purchased jasmine rice is made by a letter of credit.

It should be noted that a shipment of jasmine rice exported to the United States requires an import permit from Plant Protection and Quarantine within Animal and Plant Health Inspection Service, United States Department of Agriculture (APHIS PPQ) for its importation into the United States. It is a responsibility of an importer, a U.S. resident with a valid U.S. street address to apply for the permit 30 days before the first shipment of jasmine rice ever imported arrives as it can take up to 30 days for a permit to be processed. Currently, the APHIS PPQ does no charge nay fees for the permit.

Obtaining an import permit is not listed in Figure A2-1 as it is not considered as a core business process of jasmine rice export. Indeed, the importer does not have to apply for the permit for every future shipment of jasmine rice to be exported. The permit remains valid for future shipments up to the expiration date and can be renewed. The importer should submit a request for the renewal at least 30 days before the expiration date.<sup>12</sup>

Obtaining an import permit is not listed as a core business process in Figure A2-1 also because the lack of an import permit is not grounds to prohibit the entry of jasmine rice shipment. If all other import requirements are met, U.S. Customs and Border Protection may allow the importer to complete an application for import permit on the spot and grant oral authorization for the entry of jasmine rice shipment without an import permit for plant and plant products.

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<sup>12</sup> United States Department of Agriculture. (2007). Permits: Rice and Rice Related Information, Available at: [http://www.aphis.usda.gov/plant\\_health/permits/faq/rice\\_faqs.shtml](http://www.aphis.usda.gov/plant_health/permits/faq/rice_faqs.shtml)

### A3. Core business processes of jasmine rice export

There are 14 core business processes and 15 parties involved in the export of jasmine rice from Thailand to the United States. These core business processes are categorized into 3 process areas, i.e., Buy, Ship, and Pay, as highlighted in the UN/CEFACT International Supply Chain Model. A summary of stakeholders' participation in each identified core business process is provided in Table A3-1. The detailed information about activities constituting each core business process and parties responsible in carrying them out follows.

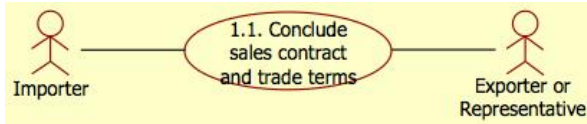
**Table A3-1. Core business processes and stakeholders involved in jasmine rice export**

Core business process	Party														
	Authorized Private Inspector	Board of Trade of Thailand	Carrier (Shipping Line)	Customs	Department of Agriculture	Department of Foreign Trade	Exporter's Bank	Exporter or Representative	Importer	Importer's Bank	Inland Haulage	Insurance Company	Bureau of National Import-Export Product Standards	Port Authority	Thai Chamber of Commerce
<b>1. Buy</b>															
1.1. Conclude sales contract and trade terms								x	x						
<b>2. Ship</b>															
2.1. Obtain export permit						x		x							
2.2. Arrange transport			x					x			x				
2.3. Arrange the inspection and fumigation	x	x			x			x					x		
2.4. Obtain cargo insurance								x				x			
2.5. Provide customs declaration				x				x							
2.6. Collect empty container from yard			x								x			x	
2.7. Stuff container	x	x			x			x			x		x		
2.8. Transfer to port of departure								x			x			x	
2.9. Clear goods through customs				x				x			x				
2.10. Handle cargo and stow on vessel			x	x				x			x			x	
2.11. Prepare documents required by importer					x	x		x							x
2.12. Verify the accuracy/authenticity of exported cargo				x		x		x					x		
<b>3. Pay</b>															
3.1. Establish payment guarantee							x	x	x	x					
3.2. Claim payment for goods							x	x	x	x					

## Process area 1: Buy

### Core business process area 1.1: Conclude sales contract and trade terms

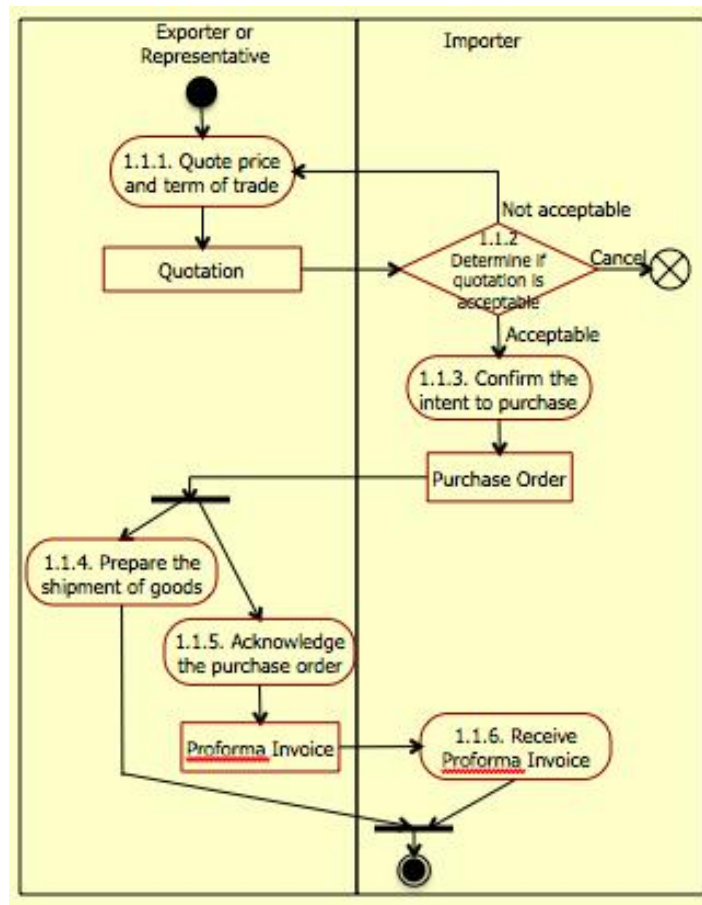
**Figure A3-1. “Conclude sales contract and trade terms” use case diagram**



“Conclude sales contract and trade terms” is the only core business process under “Buy” process area. The use case diagram in Figure A3-1 suggests that this core business process requires the participation from:

- Importer
- Exporter or Representative

**Figure A3-2. “Conclude sales contract and trade terms” activity diagram**



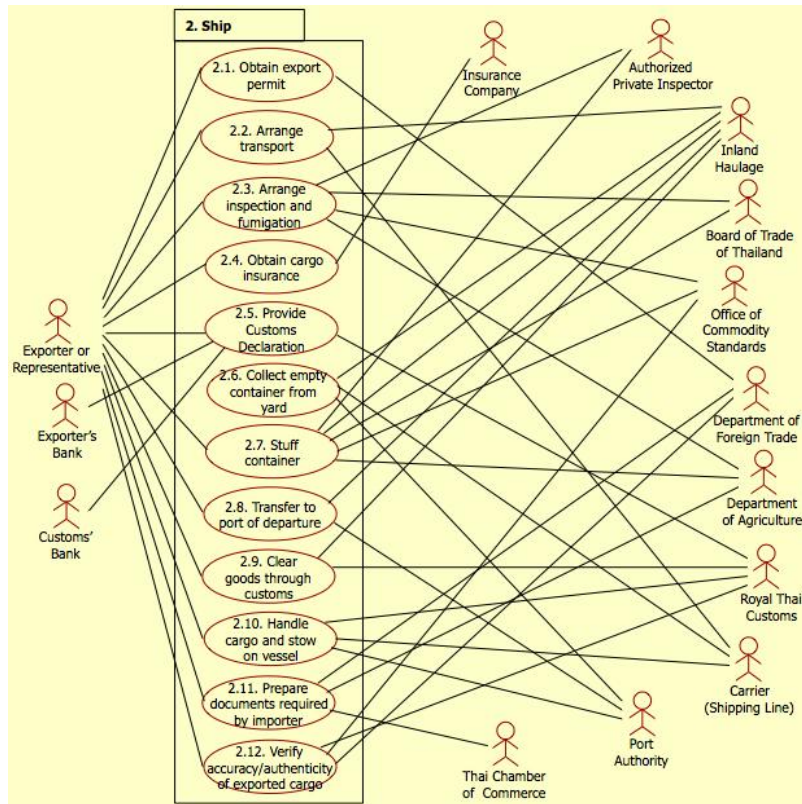
Name of a process area	1. Buy
Name of a business process	1.1. Conclude sales contract and trade terms
Related laws, rules, and regulations	<ul style="list-style-type: none"> <li>• Incoterms</li> </ul>
Process participant	<ul style="list-style-type: none"> <li>• Importer</li> <li>• Exporter or Representative</li> </ul>
Input and criteria to enter/begin the business process	<ul style="list-style-type: none"> <li>• Exporter has a list of jasmine rice potential buyers.</li> <li>• Exporter is eligible to export rice. The qualifications of exporter meet regulatory requirements outlined in Ministry of Commerce Regulation on the Export of Rice No. 1 (B.E. 2534), 5 (B.E. 2637), and 7 (B.E. 2539).</li> </ul>

	<ul style="list-style-type: none"> <li>As required by Rice Trading Act (B.E. 2489), exporter has already received a permission from Department of Internal Trade (a government agency under the administration of Ministry of Commerce) to trade rice with overseas trading partners (general classification). The application form for a request of a permission to trade rice with overseas trading partners costs 5 THB. The permission to export rice costs 20,000 THB yearly.</li> <li>In line with Export Commodity Standards Act (B.E.2503 and 2523), exporter has successfully registered itself as a registered jasmine rice exporter with Office of Commodity Standards, one of the divisions in Department of Foreign Trade. The registration takes less than 1 working day and costs 2,500 THB. It expires on December 31 of every year.</li> <li>To register with Office of Commodity Standards, exporter must have the qualifications listed in Ministry of Commerce Regulation on the Export of Products under the Standard Scheme (B.E. 2504).</li> </ul>
Activities and associated documentary requirements	<p>1.1.1. Exporter prepares Quotation to inform an importer about quoted price and sales terms.</p> <p>1.1.2. Importer reviews the Quotation and determines if the quoted price and sales terms are acceptable. If the quoted price and sales terms are not acceptable, importer requests exporter to revise the quoted price and sales terms.</p> <p>1.1.3. If the quoted price and sales terms are acceptable, importer confirms exporter the purchase of goods with Purchase Order.</p> <p>1.1.4. Exporter prepares the delivery of goods accordingly.</p> <p>1.1.5. Exporter acknowledges the receipt of Purchase Order and confirms that the jasmine rice will be delivered according to established conditions and terms by sending importer Proforma Invoice.</p> <p>1.1.6. Importer receives Proforma Invoice.</p>
Output criteria to exit the business process	<ul style="list-style-type: none"> <li>Importer and exporter have concluded trade contract and terms.</li> <li>Based on a purchase order, an exporter can prepare goods for export.</li> </ul>
Average time required to complete this business process	2 Days

## Process area 2: Ship

Figure A3-3. Use case diagram of core business processes in ship process area

In the context of jasmine rice export from Thailand to the United States, ship process area consists of 12 core business processes. As shown in Figure A3-3, these core business processes deal with both transport and regulatory requirements. They involve the arrangement for cargo movement as well as the completion of customs formalities and necessary actions to meet jasmine rice export requirements imposed by government agencies from both Thailand and the United States.



### Core business process area 2.1: Obtain export permit

Figure A3-4. "Obtain export permit" use case diagram

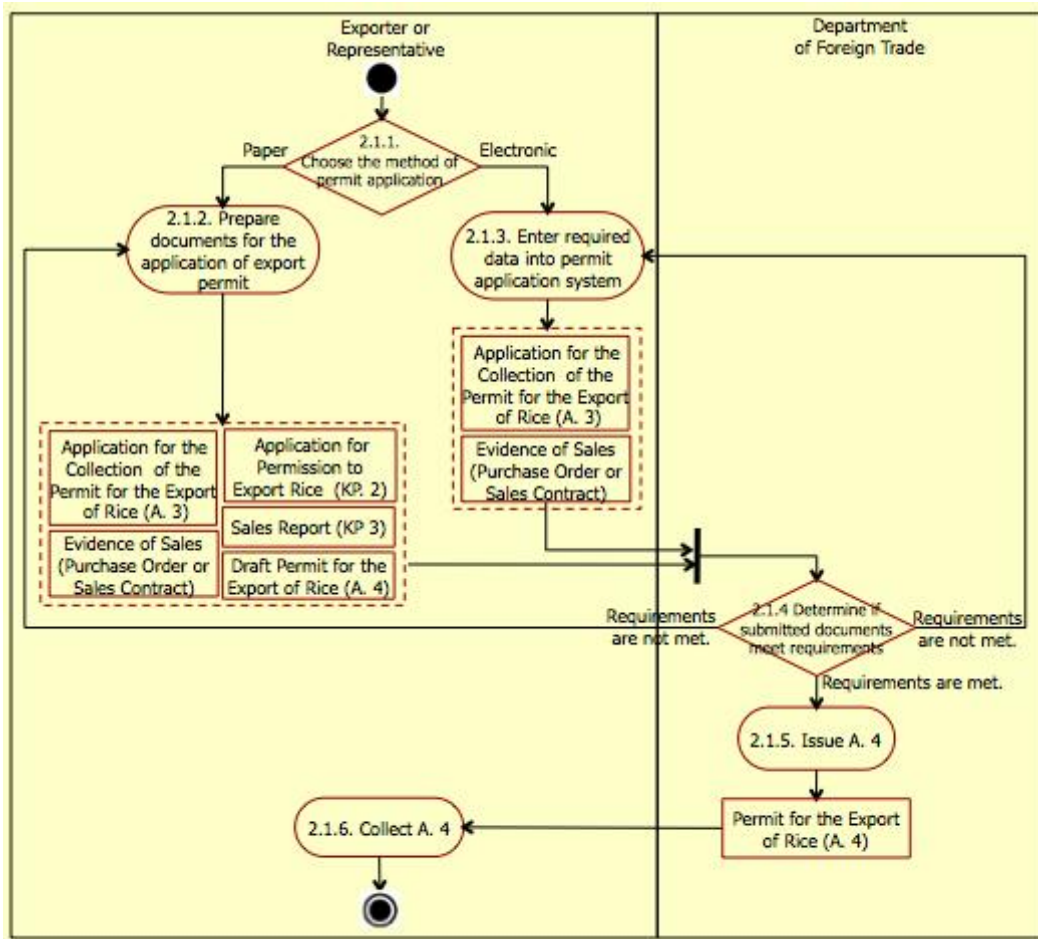


The use case diagram shown in Figure A3-4 suggests that "Obtain export permit" process requires the participation from:

- Department of Foreign Trade
- Exporter or Representative



Figure A3-5. "Obtain export permit" activity diagram

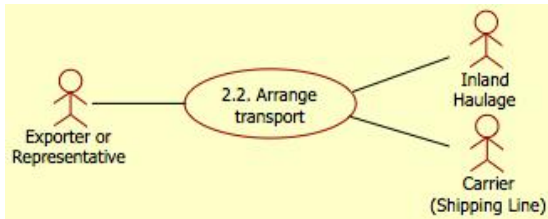


Name of a process area	2. Ship
Name of a business process	2.1. Obtain export permit
Related laws, rules, and regulations	<ul style="list-style-type: none"> <li>Ministry of Commerce Regulation on the Export of Rice No. 1 (B.E. 2534), 8 (B.E. 2540), and 15 (B.E. 2547)</li> </ul>
Process participant	<ul style="list-style-type: none"> <li>Department of Foreign Trade</li> <li>Exporter or Representative</li> </ul>
Input and criteria to enter/begin the business process	<ul style="list-style-type: none"> <li>Exporter and importer have already concluded trade contract and terms.</li> </ul>
Activities and associated documentary requirements	<p>2.1.1. Exporter decides whether to submit a request for the Export of Rice (A. 4) manually or electronically.</p> <p>2.1.2. If exporter prefers the manual or paper-based system, exporter prepares the following documents:</p> <ul style="list-style-type: none"> <li>Application for Permission to Export Rice (KP. 2)</li> <li>Sales Report (KP 3)</li> <li>Application for the Collection of the Permit for the Export of Rice (A. 3)</li> <li>Draft Permit for the Export of Rice (A. 4)</li> <li>Evidence of Sales (Purchase Order or Sales Contract)</li> </ul> <p>The required forms can be purchased at Department of Foreign Trade. A set of required forms costs 30 THB. Once the documents are ready, exporter submits the documents at one of the following locations:</p>

	<ul style="list-style-type: none"> <li>– Bureau of Foreign Trade Services, Department of Foreign Trade</li> <li>– Office of the Provincial Governor or Office of Commercial Affairs in a province of exporter’s residency, except exporter residing in Bangkok</li> <li>– Regional Office of Foreign Trade</li> </ul> <p>2.1.3. To submit the request electronically through a web-based EDI system for permit and certificate application provided by Department of Foreign Trade, exporter enters data requirements of Application for the Collection of the Permit for the Export of Rice (A. 3) and attaches the evidence of sales.</p> <p>2.1.4. Department of Foreign Trade, either by its officer or its web-based EDI system for permit and certificate application, determines if submitted documents meet Department of Foreign Trade’s requirements. If they do not, Department of Foreign Trade, either by its officer or its web-based EDI system for permit and certificate application, informs exporter where revision is needed. Exporter who submits the request for the Permit electronically can check the status of the request online. Exporter then revises the documents accordingly.</p> <p>2.1.5. If the submitted data meet Department of Foreign Trade’s requirements, Department of Foreign Trade issues the Permit for the Export of Rice (A. 4).</p> <p>2.1.6. Regardless of the submission methods, exporter collects the Permit at the pre-specified location.</p> <ul style="list-style-type: none"> <li>– In the manual system, the signed and authenticated Permit can be collected after the application is submitted for six working hours. For example, if the application is submitted at 9.00, the Permit should be ready for a pick-up at 16.00. If the application is submitted in the afternoon, the permit can be collected the next morning.</li> <li>– In the electronic system, exporter can collect the Permit 1 hour after being notified that the request is approved.</li> </ul> <p>The Permit is valid for a month. Department of Foreign Trade allows a renewal of the Permit twice. The issuance of the Permit is free of charge.</p>
Output criteria to exit the business process	<ul style="list-style-type: none"> <li>• The Permit for the Export of Rice (A. 4) is issued.</li> </ul>
Average time required to complete this business process	<p>2 Days (manual) 1 Day (electronic)</p>

## Core business process area 2.2: Arrange transport

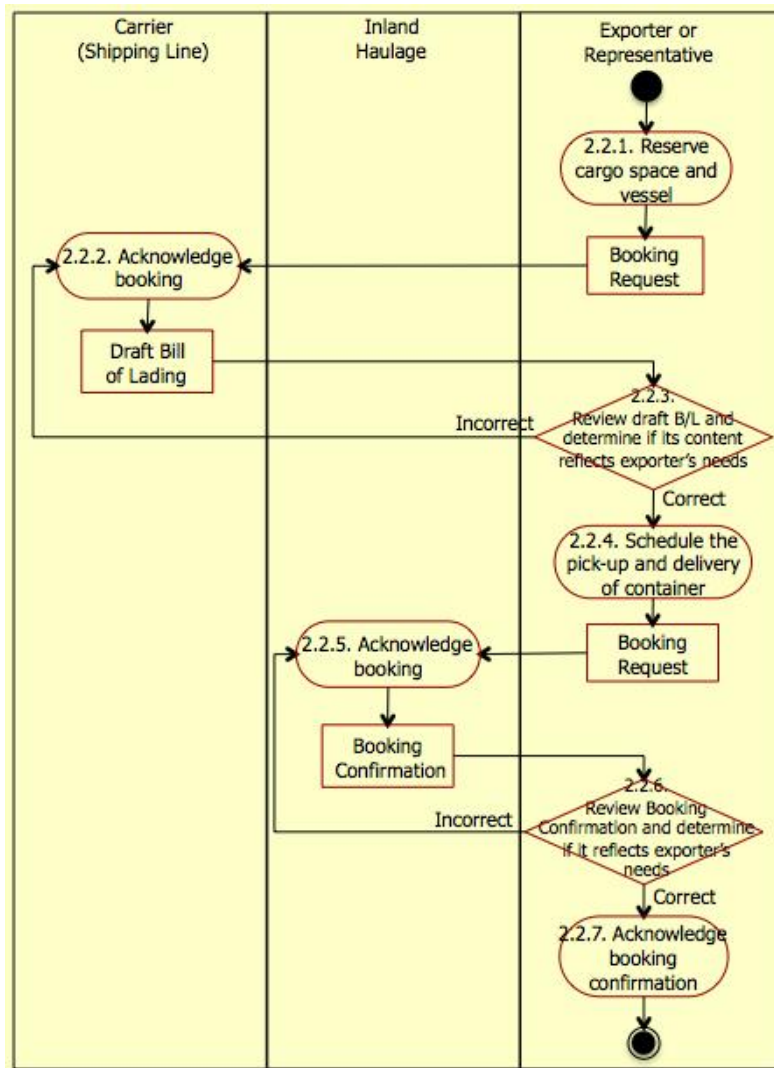
Figure A3-6. “Arrange transport” use case diagram



The use case diagram shown in Figure A3-6 suggests that “Arrange transport” process requires the participation from:

- Carrier (Shipping Line)
- Exporter or Representative
- Inland Haulage

Figure A3-7. “Arrange transport” activity diagram

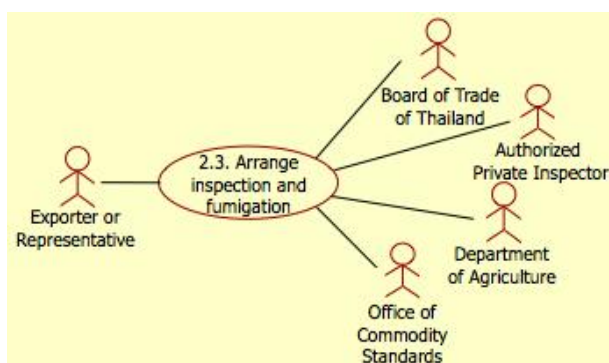


Name of a process area	2. Ship
Name of a business process	2.2. Arrange transport
Related laws, rules, and regulations	N/A
Process participant	<ul style="list-style-type: none"> <li>• Carrier (Shipping Line)</li> <li>• Exporter or Representative</li> <li>• Inland Haulage</li> </ul>
Input and criteria to enter/	<ul style="list-style-type: none"> <li>• Importer and an exporter have already agreed that the delivery of</li> </ul>

begin the business process	purchased jasmine rice to the specified port of destination is a responsibility of exporter.
Activities and associated documentary requirements	<p>2.2.1. Exporter contacts carrier to reserve cargo space and vessel. Booking request can be prepared in various forms depending on the shipping line. For some shipping lines, a booking of cargo space and vessel can be done through online reservation system. For those that do not have such system, the booking is done over the phone, fax, or email.</p> <p>2.2.2. Carrier acknowledges the booking request by returning draft Bill of Lading to exporter.</p> <p>2.2.3. Exporter reviews draft Bill of Lading and determines if its content reflects what exporter needs. If it does not, exporter informs carrier that draft Bill of Lading requires further revision.</p> <p>2.2.4. Once correct draft Bill of Lading is received, exporter contacts inland haulage to schedule a pick-up of an empty container from carrier's container yard, a delivery of that empty container to exporter's warehouse, and a return of stuffed container to container yard for loading. The booking request is often done over phone, fax, and email.</p> <p>2.2.5. Inland haulage acknowledges the booking request by returning a booking confirmation to an exporter or representative.</p> <p>2.2.6. Exporter reviews booking confirmation and determines if its content reflects what exporter needs. If it does not, exporter informs inland haulage that revision of booking confirmation is needed.</p> <p>2.2.7. Exporter acknowledges a receipt of correct booking confirmation.</p>
Output criteria to exit the business process	<ul style="list-style-type: none"> <li>Transportation required to move jasmine rice to port of exit is arranged.</li> </ul>
Average time required to complete this business process	3 Days

### Core business process area 2.3: Arrange inspection and fumigation

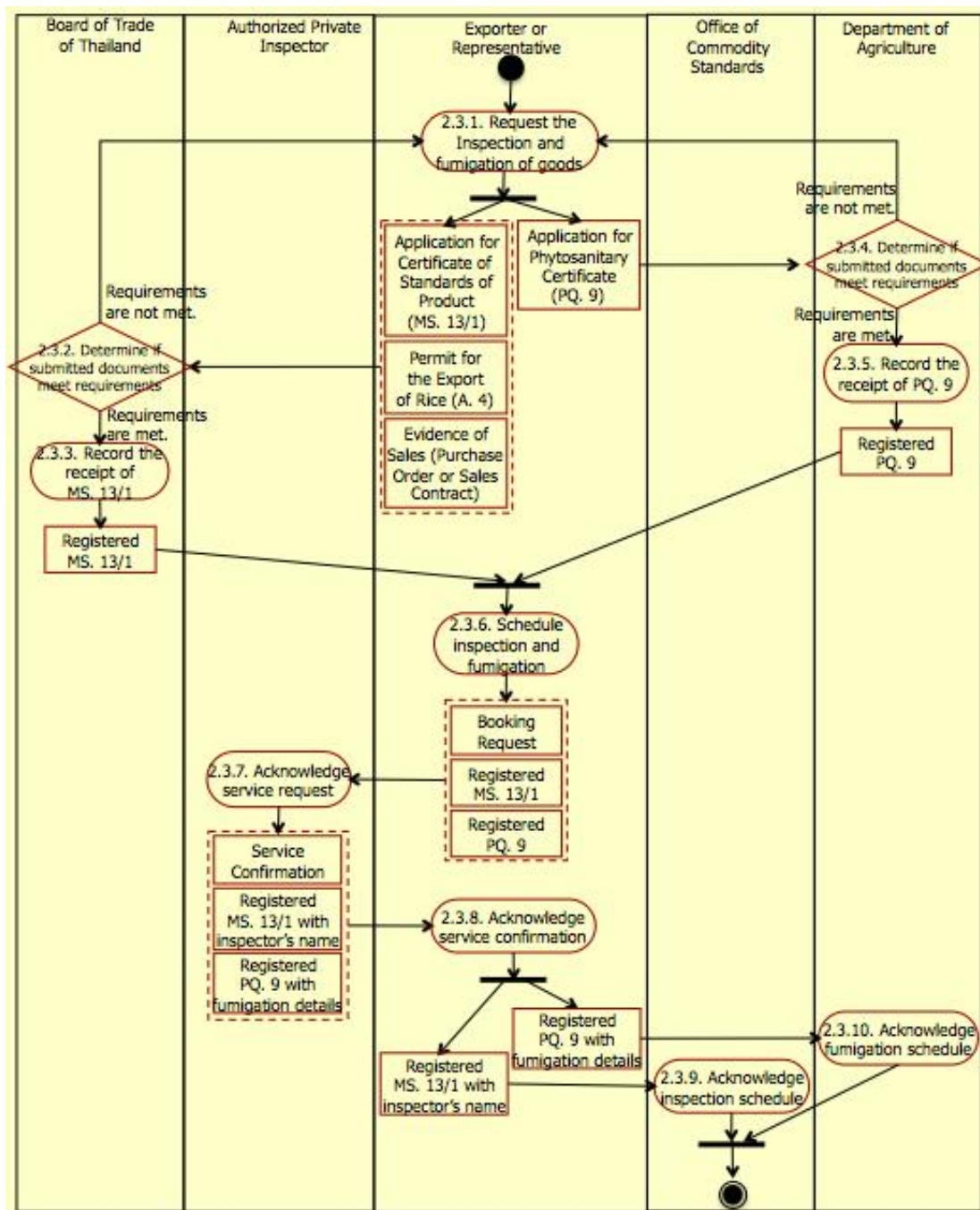
Figure A3-8. "Arrange inspection and fumigation" use case diagram



The use case diagram shown in Figure A3-8 suggests that "Arrange inspection and fumigation" process requires the participation from:

- Authorized Private Inspector
- Board of Trade of Thailand
- Office of Commodity Standards
- Exporter or Representative
- Department of Agriculture

Figure A3-9. “Arrange inspection and fumigation” activity diagram



Name of a process area	2. Ship
Name of a business process	2.3. Arrange inspection and fumigation
Related laws, rules, and regulations	<ul style="list-style-type: none"> <li>• Export Commodity Standards Act (B.E. 2503) and amended (B.E. 2523)</li> <li>• Ministry of Commerce Regulation on the Export of Rice No. 1 (B.E. 2534), No. 15 (B.E. 2547), and No. 16 (B.E. 2552)</li> <li>• Notification of Ministry of Commerce No. 1 (B.E. 2545) Re: Instructions for Standard-based Inspection of Goods under the Standard Scheme and Thai Jasmine Rice</li> <li>• Notification of Ministry of Commerce Re: The Classification of Jasmine Rice as a Controlled Product under the Standard</li> </ul>

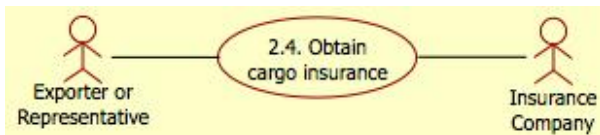
	<p>Scheme and Standard Specifications of Thai Jasmine Rice (B.E. 2549)</p> <ul style="list-style-type: none"> <li>• Notification of Department of Foreign Trade Re: The Inspection of To-be Exported Rice (B.E. 2500)</li> <li>• Notification of Office of Commodity Standards Re: Practical Guideline for Inspection Thai Jasmine Rice (B.E. 2550)</li> <li>• Plant Quarantine Act (B.E. 2507) and amended (B.E. 2542, 2551)</li> <li>• Ministry of Agriculture and Cooperatives Regulation on the Application for and the Issuance of Phytosanitary Certificate (B.E. 2550)</li> <li>• Notification of Department of Agriculture Re: Application Form for Phytosanitary Certificate</li> </ul>
Process participant	<ul style="list-style-type: none"> <li>• Authorized Private Inspector</li> <li>• Board of Trade of Thailand</li> <li>• Office of Commodity Standards</li> <li>• Exporter or Representative</li> <li>• Department of Agriculture</li> </ul>
Input and criteria to enter/ begin the business process	<ul style="list-style-type: none"> <li>• Exporter has already obtained the Permit for the Export of Rice (A. 4).</li> <li>• Transportations required to move jasmine rice to port of exit and the specified port of destination have already been arranged.</li> <li>• Jasmine rice in amount and conditions specified in the purchase order and Permit for the Export of Rice (A. 4) are ready for inspection.</li> </ul>
Activities and associated documentary requirements	<p>2.3.1. Exporter informs Board of Trade of Thailand about the need for product inspection. In doing so, exporter submits the following documents.</p> <ul style="list-style-type: none"> <li>– Application for Certificate of Standards of Product (MS. 13/1)</li> <li>– Permit for the Export of Rice (A. 4)</li> <li>– Evidence of Sales (Purchase Order or Sales Contract)</li> </ul> <p>Exporter also informs Department of Agriculture about the need for the fumigation by submitting the Application for Phytosanitary Certificate (PQ. 9). Exporter must make sure that data declared in PQ. 9 are consistent with data shown in Purchase Order and Invoice.</p> <p>2.3.2. Officer from Board of Trade of Thailand reviews submitted document and determines if they meet Board of Trade of Thailand’s requirements. If they do not, officer from Board of Trade of Thailand informs exporter where revision is needed. Exporter then revises the documents accordingly.</p> <p>2.3.3. If submitted documents meet Board of Trade of Thailand’s requirements, officer from Board of Trade of Thailand records the receipt of MS. 13/1. As part of a registration process, an officer-in-charge also assigns a reference number to submitted MS. 13/1, states date and time of receipt, and signs the form.</p> <p>2.3.4. Officer from Department of Agriculture reviews submitted document and determines if they meet Department of</p>

	<p>Agriculture’s requirements. If they do not, officer from Department of Agriculture informs exporter where revision is needed. Exporter then revises the documents accordingly.</p> <p>2.3.5. If submitted documents meet Department of Agriculture’s requirements, officer from Department of Agriculture records the receipt of PQ. 9. As part of a registration process, an officer-in-charge also assigns a reference number to submitted PQ.9, states date and time of receipt, and signs the form.</p> <p>2.3.6. After MS. 13/1 and PQ. 9 are registered with respective government agencies, exporter schedules the inspection and fumigation with an authorized private inspector who also provides a fumigation service. To schedule the inspection and fumigation, exporter has to forward the following documents to an authorized private inspector for reference.</p> <ul style="list-style-type: none"> <li>– Booking Request</li> <li>– Registered MS. 13/1</li> <li>– Registered PQ. 9</li> </ul> <p>The scheduling of inspection and fumigation is based on the loading date and preferred inspection date declared in MS. 13/1 and date of exportation declared in PQ. 9. The time of inspection has to be between 8.00-22.30 as specified by Notification of Ministry of Commerce No. 1 (B.E. 2545) Re: Instructions for Standard-based Inspection of Goods under the Standard Scheme and Thai Jasmine Rice. A written approval from Office of Commodity Standards is required if exporter needs to have jasmine rice inspected in other time period. If, for some reasons, exporter cannot seek approval prior to the inspection, he/she is legally bound to submit a report to Office of Commodity Standards in order to explain reasons for not having the product inspected within the time specified by Notification of Ministry of Commerce No. 1 (B.E. 2545) within 5 days after having jasmine rice inspected.</p> <p>2.3.7. Authorized private inspector who also provides a fumigation service acknowledges the service request by returning the following documents to exporter.</p> <ul style="list-style-type: none"> <li>– Service Confirmation</li> <li>– Registered MS. 13/1 with an inspector’s name</li> <li>– Registered PQ. 9 with fumigation details including a party performing the fumigation as well as fumigation date and venue</li> </ul> <p>2.3.8. Exporter acknowledges service confirmation and inform Office of Commodity Standards and Department of Agriculture about the inspection and fumigation.</p> <p>2.3.9. An officer-in-charge at office of Commodity Standards acknowledges the inspection schedule.</p> <p>2.3.10. An officer-in-charge at Department of Agriculture acknowledge the fumigation schedule.</p>
Output criteria to exit the	<ul style="list-style-type: none"> <li>• The inspection and fumigation of the consignment is</li> </ul>

business process	successfully scheduled.
Average time required to complete this business process	2 Days

**Core business process area 2.4: Obtain cargo insurance**

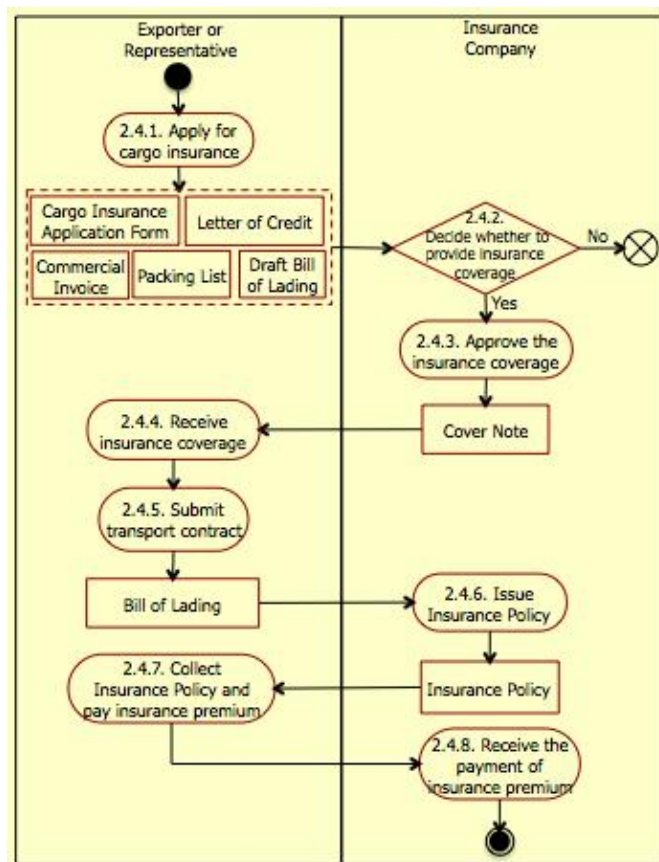
**Figure A3-10. “Obtain cargo insurance” use case diagram**



The use case diagram shown in Figure A3-10 suggests that “Obtain cargo insurance” process requires the participation from:

- Exporter or Representative
- Insurance Company

**Figure A3-11. “Obtain cargo insurance” activity diagram**



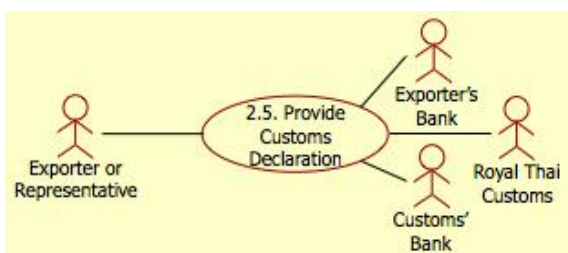
Name of a process area	2. Ship
Name of a business process	2.4. Obtain cargo insurance
Related laws, rules, and regulations	N/A
Process participant	<ul style="list-style-type: none"> <li>• Exporter or Representative</li> <li>• Insurance Company</li> </ul>
Input and criteria to enter/begin the business process	<ul style="list-style-type: none"> <li>• Importer and exporter have agreed that the cargo insurance is at the exporter’s expense.</li> <li>• Transportations required to move jasmine rice to port of exit and the specified port of destination have already been arranged.</li> </ul>



Activities and associated documentary requirements	<p>2.4.1. Under the CIF term, exporter is required to arrange cargo insurance. To apply for the insurance , the following documents have to be submitted to an insurance company.</p> <ul style="list-style-type: none"> <li>- Cargo Insurance Application Form</li> <li>- Letter of Credit</li> <li>- Commercial Invoice</li> <li>- Packing List</li> <li>- Draft Bill of Lading</li> </ul> <p>2.4.2. Based on the submitted documents, insurance company decides whether or not to provide the insurance coverage.</p> <p>2.4.3. If insurance company decides to provide the insurance coverage, insurance company issues Cover Note for the to-be-insured consignment as evidence to confirm that the insurance coverage is active.</p> <p>2.4.4. Exporter collects Cover Note from insurance company.</p> <p>2.4.5. Upon a receipt of Bill of Lading, Exporter hands one copy to insurance company</p> <p>2.4.6. Insurance company then issues Insurance Policy.</p> <p>2.4.7. Exporter collects Insurance Policy from insurance company and pays insurance premium.</p> <p>2.4.8. Insurance company receives the payment for insurance premium.</p>
Output criteria to exit the business process	<ul style="list-style-type: none"> <li>• The consignment is insured from the place of dispatch to the place of destination.</li> </ul>
Average time required to complete this business process	2 Days

**Core business process area 2.5: Provide Customs Declaration**

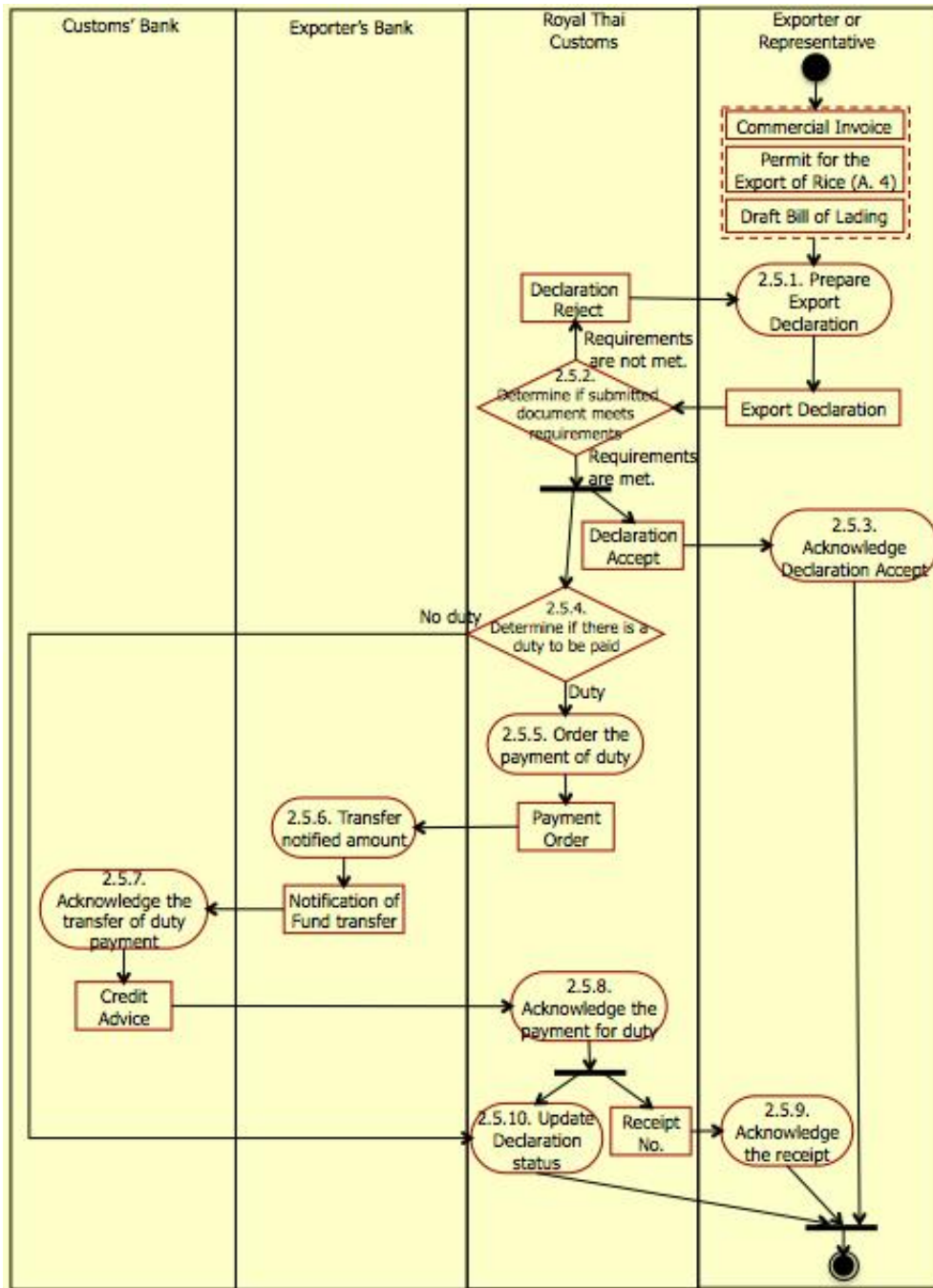
**Figure A3-12. “Provide Customs Declaration” use case diagram**



The use case diagram shown in Figure A3-12 suggests that “Provide Customs Declaration” process requires the participation from:

- Customs’ Bank
- Exporter or Representative
- Exporter’s Bank
- Royal Thai Customs

Figure A3-13. "Provide Customs Declaration" activity diagram



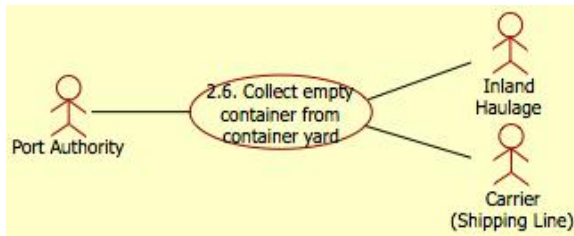
Name of a process area	2. Ship
Name of a business process	2.5. Provide Customs Declaration
Related laws, rules, and regulations	<ul style="list-style-type: none"> <li>• Customs Act (B.E. 2469) and Amended (B.E. 2543)</li> <li>• Notification of Royal Thai Customs No. 116/2549 Re: Electronic Customs Clearance</li> <li>• Notification of Royal Thai Customs No. 39/2550 Re: Manual for e-Export System</li> </ul>
Process participant	<ul style="list-style-type: none"> <li>• Customs</li> <li>• Customs' Bank</li> <li>• Exporter or Representative</li> <li>• Exporter's Bank</li> </ul>

<p>Input and criteria to enter/ begin the business process</p>	<ul style="list-style-type: none"> <li>• Exporter or representative is a registered user of the e-Customs system.</li> <li>• Exporter has participated in Customs' Electronic Fund Transfer program.</li> <li>• Exporter has already obtained the Permit for the Export of Rice (A. 4).</li> <li>• Transportations required to move jasmine rice to port of exit and the specified port of destination have already been arranged.</li> <li>• The consignment of to-be exported jasmine rice has already been insured.</li> </ul>
<p>Activities and associated documentary requirements</p>	<p>2.5.1. Exporter prepares Export Declaration in e-Export system based on data from the following documents.</p> <ul style="list-style-type: none"> <li>– Commercial Invoice</li> <li>– Permit for the Export of Rice (A. 4)</li> <li>– Draft Bill of Lading</li> </ul> <p>Exporters then electronically submits Export Declaration to Royal Thai Customs.</p> <p>2.5.2. Royal Thai Customs, by e-Export system, determines if submitted Export Declaration meets Customs requirements. If it does not, e-Export system generates a message named Declaration Reject to notify exporter about the error(s) in the Export Declaration. It is important that exporter revises Export Declaration accordingly. If submitted Export Declaration meets Customs requirements, e-Export system generates a message named Declaration Accept which contains a reference number of accepted Export Declaration and the amount of duty (if any) to be paid by exporter.</p> <p>2.5.3. Exporter acknowledges successful submission of Export Declaration upon the receipt of Declaration Accept.</p> <p>2.5.4. Royal Thai Customs, by e-Export system, determines if there is a duty to be collected. If there is no duty to be collected, Royal Thai Customs, by e-Export system, skips activity 2.5.5-2.5.8 and updates the status of Declaration to 'Export Declaration with Export Tax Exemption. It should be noted that, according to Notification of Ministry of finance No. SK. 1/2531, all kinds of rice are exempted from export tax.</p> <p>2.5.5. If there is a duty to be collected, Royal Thai Customs, by e-Export system, sends Payment Order to request Exporter's bank to transfer the amount of duty that exporter owes to Customs' bank.</p> <p>2.5.6. Upon the receipt of Payment Order, exporter's bank transfers the notified amount to Customs' bank and informs Customs' bank about the transfer of duty payment.</p> <p>2.5.7. Customs' bank acknowledges the duty payment that has been transferred to Royal Thai Customs' saving account and issues Credit Advice to inform Royal Thai Customs.</p> <p>2.5.8. Royal Thai Customs, by e-Export system, acknowledges the receipt of duty payment and generates the receipt number for exporter to keep as a reference.</p> <p>2.5.9. Exporter acknowledges that Royal Thai Customs has</p>

	successfully received the payment for duty. 2.5.10. Royal Thai Customs, by e-Export system, updates the status of Export Declaration.
Output criteria to exit the business process	<ul style="list-style-type: none"> <li>• Exporter receives a message from e-Export system inclusive of a Declaration's reference number notifying that the Export Declaration has been accepted.</li> <li>• The status of Export Declaration has been updated to Export Declaration ready for customs release.</li> </ul>
Average time required to complete this business process	30 Minutes

**Core business process area 2.6: Collect empty container from container yard**

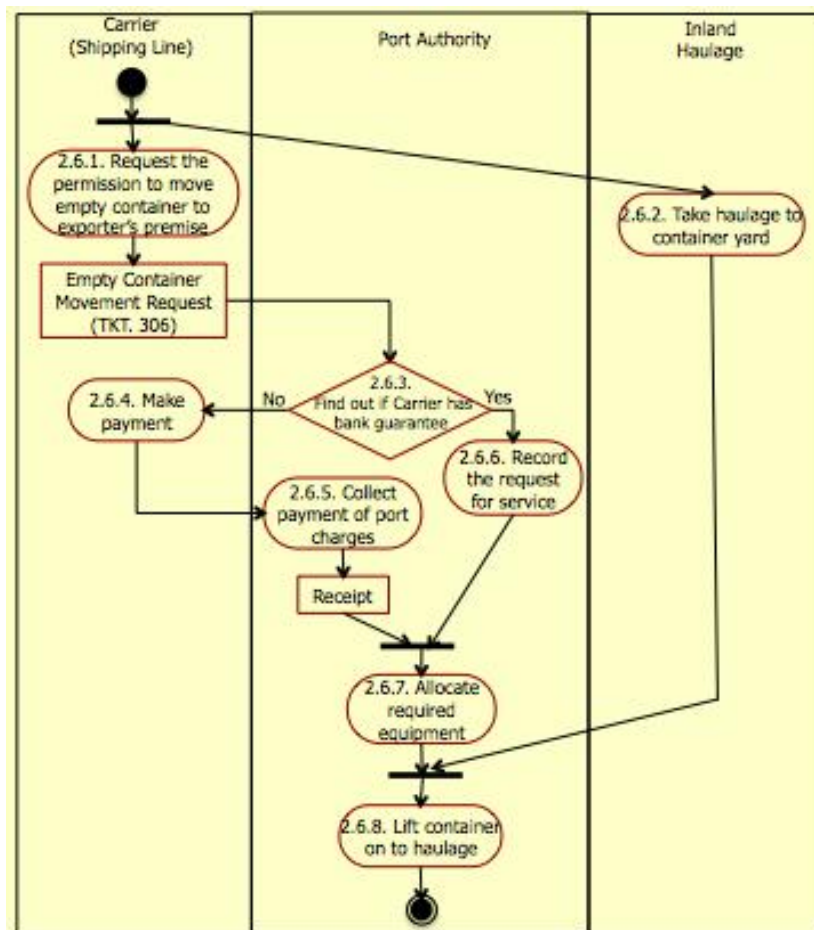
**Figure A3-14. "Collect empty container from container yard" use case diagram**



The use case diagram shown in Figure A3-14 suggests that "Collect empty container from container yard" process requires the participation from:

- Carrier (Shipping Line)
- Inland Haulage
- Port Authority

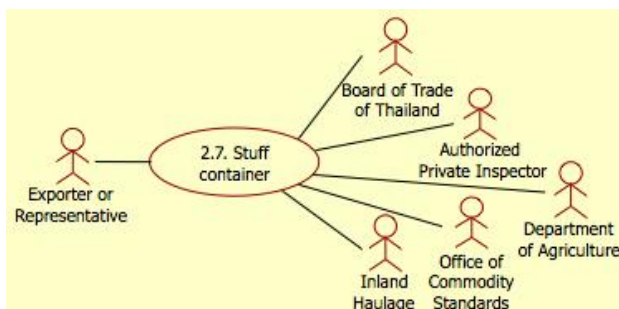
**Figure A3-15. "Collect empty container from container yard" activity diagram**



Name of a process area	2. Ship
Name of a business process	2.6. Collect empty container from container yard
Related laws, rules, and regulations	
Process participant	<ul style="list-style-type: none"> <li>• Customs</li> <li>• Customs' Bank</li> <li>• Exporter or Representative</li> <li>• Exporter's Bank</li> </ul>
Input and criteria to enter/begin the business process	<ul style="list-style-type: none"> <li>• Transportations required to move jasmine rice to port of exit and the specified port of destination have already been arranged.</li> <li>• The consignment of to-be exported jasmine rice has already been insured.</li> </ul>
Activities and associated documentary requirements	<p>2.6.1. Carrier's agent submits Empty Container Movement Request (TKT. 306) to request for the permission to transfer an empty container to exporter's premise.</p> <p>2.6.2. Driver takes the haulage to the specified container yard to pick up an empty container.</p> <p>2.6.3. Officer from Port Authority finds out whether carrier has bank guarantee.</p> <p>2.6.4. If carrier does not have bank guarantee, carrier has to make a payment for port charges.</p> <p>2.6.5. Officer from Port Authority has to collect the payment for port charges upfront.</p> <p>2.6.6. If carrier has bank guarantee, officer from Port Authority records the amount of port charges to be paid.</p> <p>2.6.7. Officer from Port Authority then allocates necessary equipment for lifting an empty container onto haulage.</p> <p>2.6.8. Officer from Port Authority, with necessary equipment lifts an empty container onto haulage.</p>
Output criteria to exit the business process	<ul style="list-style-type: none"> <li>• An empty container has already been lifted on to haulage and the driver is ready to take it to exporter's premise.</li> </ul>
Average time required to complete this business process	1 Hr.

### **Core business process area 2.7: Stuff container**

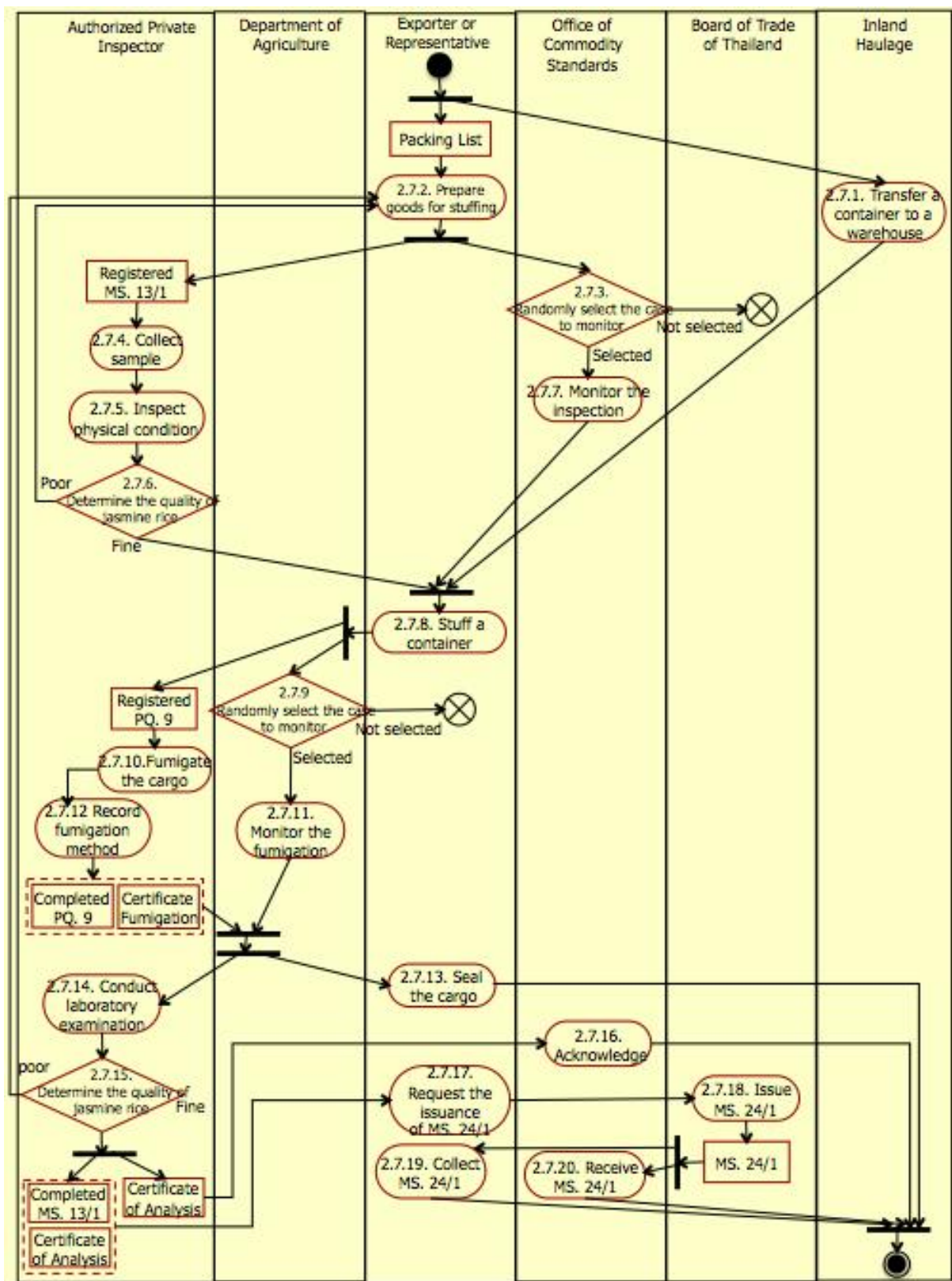
**Figure A3-16. "Stuff container" use case diagram**



The use case diagram shown in Figure A3-16 suggests that "Stuff container" process requires the participation from:

- Authorized Private Inspector
- Board of trade of Thailand
- Department of Agriculture
- Exporter or Representative
- Inland Haulage
- Office of Commodity Standards

Figure A3-17. “Stuff container” activity diagram



Name of a process area	2. Ship
Name of a business process	2.7. Stuff container
Related laws, rules, and regulations	<ul style="list-style-type: none"> <li>Export Commodity Standards Act (B.E. 2503) and amended (B.E. 2523)</li> </ul>

	<ul style="list-style-type: none"> <li>• Ministry of Commerce Regulation on Product Inspector (B.E. 2504)</li> <li>• Ministry of Commerce Regulation on the Export of Rice No. 1 (B.E. 2534), 8 (B.E. 2540), and 15 (B.E. 2547)</li> <li>• Notification of Ministry of Commerce No. 1 (B.E. 2545) and 2 (B.E. 2549) Re: Instructions for Standard-based Inspection of Goods under the Standard Scheme and Thai Jasmine Rice</li> <li>• Notification of Ministry of Commerce Re: The Classification of Jasmine Rice as a Controlled Product under the Standard Scheme and Standard Specifications of Thai Jasmine Rice (B.E. 2549)</li> <li>• Notification of Ministry of Commerce Re: Service Fees for the Inspection of a Controlled Product under the Standard Scheme and the Issuance of Certificate of Product Standards (B.E. 2549)</li> <li>• Notification of Department of Foreign Trade Re: The Inspection of To-be Exported Rice (B.E. 2500)</li> <li>• Notification of Office of Commodity Standards Re: Practical Guideline for Inspection Thai Jasmine Rice (B.E. 2550)</li> <li>• Plant Quarantine Act (B.E. 2507) and amended (B.E. 2542, 2551)</li> <li>• Ministry of Agriculture and Cooperatives Regulation on The Application for and the Issuance of Phytosanitary Certificate (B.E. 2550)</li> <li>• Customs Act (B.E. 2469) and Amended (B.E. 2543)</li> <li>• Notification of Royal Thai Customs No. 116/2549 Re: Electronic Customs Clearance</li> </ul>
Process participant	<ul style="list-style-type: none"> <li>• Authorized Private Inspector</li> <li>• Board of trade of Thailand</li> <li>• Department of Agriculture</li> <li>• Exporter or Representative</li> <li>• Inland Haulage</li> <li>• Office of Commodity Standards</li> </ul>
Input and criteria to enter/ begin the business process	<ul style="list-style-type: none"> <li>• Driver of an inland haulage is ready to transfer an empty container to exporter's premise.</li> <li>• The inspection and fumigation of the consignment has already been scheduled.</li> <li>• Exporter has already informed Office of Commodity Standards about the inspection schedule. Application for Certificate of Standards of Product (MS. 13/1) has already been registered.</li> <li>• Exporter has already informed Department of Agriculture about the fumigation schedule. Application for Phytosanitary Certificate (PQ. 9) has already been registered.</li> </ul>
Activities and associated documentary requirements	<p>2.7.1. Driver of an inland haulage transfer an empty container to exporter's premise.</p> <p>2.7.2. Exporter prepares jasmine rice to be stuffed according to the Packing List.</p> <p>2.7.3. Officer from Office of Commodity Standards randomly selects the case to go monitor the inspection.</p> <p>2.7.4. Authorized private inspector collects sample of jasmine rice from the consignment specified in registered MS. 13/1. When</p>

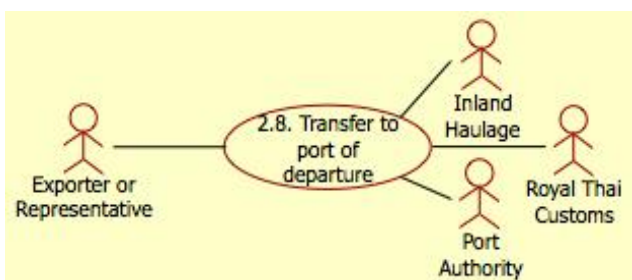
	<p>collect jasmine rice sample, authorized private inspector also keeps the sample for further inspection in a laboratory. The sample is divided into three portions. The first portion is for the authorized private inspector. The other two is for an exporter and Office of Commodity Standards to keep as a reference. The sample has to be delivered to Office of Commodity Standards in 7 days after the collection.</p> <p>2.7.5. Authorized private inspector then inspects the physical condition of jasmine rice.</p> <p>2.7.6. Authorized private inspector determines the quality of sampled jasmine rice based on the result of physical inspection. If the actual quality does not meet the condition specified in registered MS. 13/1, exporter has to bring in a new lot of jasmine rice. The new lot of jasmine rice is also subject to a similar inspection process.</p> <p>2.7.7. In a selected case, officer from Office of Commodity Standards also monitors the inspection of jasmine rice's physical condition.</p> <p>2.7.8. If the actual quality of sampled jasmine rice meet the condition specified in registered MS. 13/1, exporter can then stuff the jasmine rice into a container.</p> <p>2.7.9. Officer from Department of Agriculture randomly selects the case to go monitor the fumigation.</p> <p>2.7.10. When container stuffing is completed, authorized private inspector fumigates the cargo.</p> <p>The fumigation of jasmine rice in 20-foot container using Aluminium Phosphide costs 1,100 THB for the first container and 650 THB for the second container onward. The fumigation of jasmine rice in 20-foot container using Methyl Bromide costs 2,000 THB per container. Transportation fee is included. If the fumigation is not conducted during the working hours (8.00-17.00), overtime fee will be charged. The rate varies from 500-1,000 THB per shipment per day.</p> <p>2.7.11. In a selected case, officer from Department of Agriculture also monitors the fumigation.</p> <p>2.7.12. Authorized private inspector records the chemical and the method used in the fumigation in Registered PQ. 9 and issues Certificate of Fumigation.</p> <p>2.7.13. Exporter then closes and seals the container after the fumigation is completed.</p> <p>2.7.14. Authorized private inspector conducts a laboratory examination on sample jasmine rice and records the result of analysis in Registered MS. 13/1 and Certificate of Analysis.</p> <p>2.7.15. Authorized private inspector determines the quality of sampled jasmine rice based on lab results. If the result of analysis informs that the quality of sample jasmine rice is below what has already been agreed upon by an importer, exporter has to bring in a new lot of jasmine rice. The new lot</p>
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	<p>of jasmine rice has to go through activity 2.7.3 – 2.7.15 again until the laboratory examination yields desirable results. If the result of analysis is satisfactory, authorized private inspector completes MS. 13/1 and issues 2 copies of Certificate of Analysis. One copy of Certificate of Analysis is to be given to Office of Commodity Standards in 5 days after its issuance. Completed MS. 13/1 and original copy of Certificate of Analysis are to be given to exporter.</p> <p>According to Rice Export Manual prepared by Department of Foreign Trade, the inspection of jasmine rice from the first container costs 1,500 THB. From the second container onward, the service charge is calculated per ton. The costs inspection per ton is 18 THB.</p> <p>2.7.16. Office of Commodity Standards acknowledges a receipt of Certificate of Analysis.</p> <p>2.7.17. Exporter or representative then submits completed MS. 13/1 and Certificate of Analysis to officer from Board of Trade of Thailand to request the issuance of Certificate of Product Standards (MS. 24/1).</p> <p>2.7.18. An officer from Board of Trade of Thailand issues three copies of MS. 24/1. The last copy is to be kept by Board of Trade of Thailand. The issuance of MS. 24/1 for exporter costs 100 THB.</p> <p>2.7.19. The first copy is to be collected by exporter.</p> <p>2.7.20. The second copy is to be sent to Office of Commodity Standards.</p>
<p>Output criteria to exit the business process</p>	<ul style="list-style-type: none"> <li>• The container is stuffed with goods specified in the Packing List and ready to be transfer to port of departure.</li> <li>• The cargo is fumigated.</li> <li>• MS. 24/1 is issued and given to an exporter to certify that the quality of jasmine rice to be exported meets the quality specified by an importer.</li> </ul>
<p>Average time required to complete this business process</p>	<p>5 Hrs.</p>

**Core business process area 2.8: Transfer to port of departure**

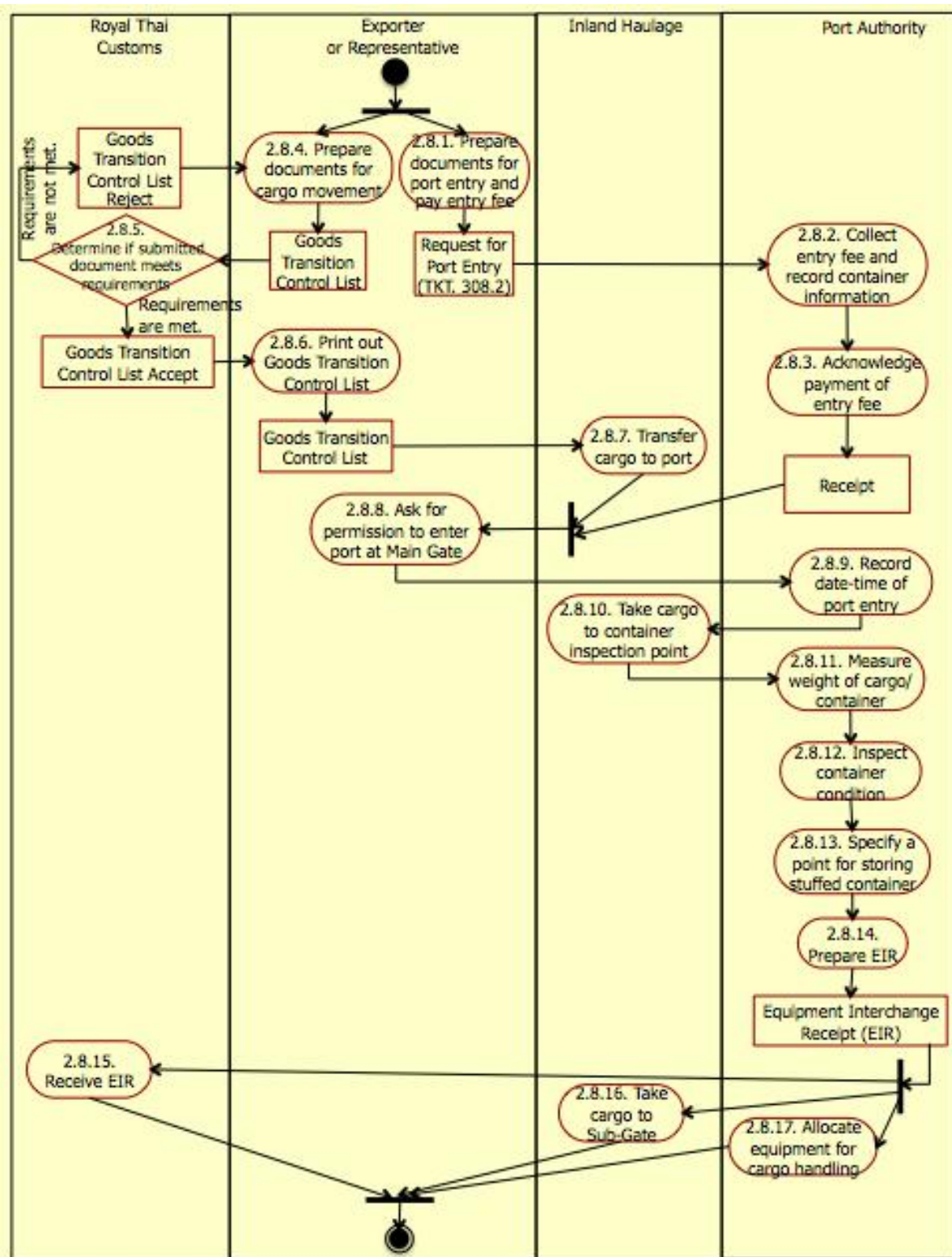
**Figure A3-18. “Transfer to port of departure” use case diagram**



The use case diagram shown in Figure A3-18 suggests that “Transfer to port of departure” process requires the participation from:

- Exporter or Representative
- Inland Haulage
- Port Authority
- Royal Thai Customs

Figure A3-19. "Transfer to port of departure" activity diagram



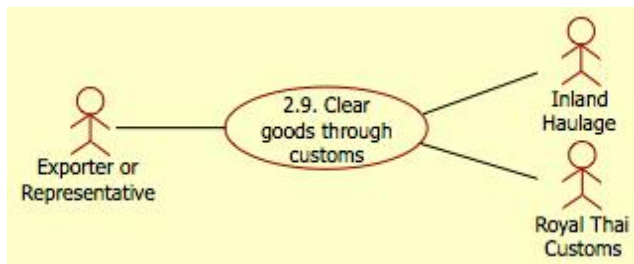
Name of a process area	2. Ship
Name of a business process	2.8. Transfer to port of departure
Related laws, rules, and regulations	<ul style="list-style-type: none"> <li>• Customs Act (B.E. 2469) and Amended (B.E. 2543)</li> <li>• Notification of Royal Thai Customs No. 116/2549 Re: Electronic Customs Clearance</li> </ul>

	<ul style="list-style-type: none"> <li>• Notification of Royal Thai Customs No. 39/2550 Re: Manual for e-Export System</li> <li>• Notification of Port Authority of Thailand Re: The Delivery of Outward Containerized Cargo to Port's Container Terminal (B.E. 2547)</li> </ul>
Process participant	<ul style="list-style-type: none"> <li>• Exporter or Representative</li> <li>• Inland Haulage</li> <li>• Port Authority</li> <li>• Royal Thai Customs</li> </ul>
Input and criteria to enter/begin the business process	<ul style="list-style-type: none"> <li>• The container is stuffed with goods specified in the Packing List and ready to be transfer to port of departure.</li> <li>• The cargo is fumigated.</li> </ul>
Activities and associated documentary requirements	<p>2.8.1. Exporter prepares the Request for Port Entry (TKT. 308.2). This document has to be submitted to Port Authority with entry fee one hour prior to the entry of containerized cargo into port. TKT. 308.2 can be submitted via fax. In case of submitting TKT. 308.2 via fax, exporter needs to submit the original copy to port officer at the time when the containerized cargo enters port.</p> <p>2.8.2. Once receives TKT 308.2 and fee, officer from Port Authority records cargo/container information in Port system.</p> <p>2.8.3. Officer from Port Authority acknowledges the payment of entry fee by issuing a Receipt for exporter.</p> <p>2.8.4. To move to-be exported jasmine rice from exporter's premise to port of exit, exporter also has to inform Royal Thai Customs about the movement. Goods Transition Control List must be prepared and submitted using Customs' e-Export system. In Goods Transition Control List, exporter must report the actual quantity and weight of jasmine rice to be exported.</p> <p>2.8.5. Royal Thai Customs, by e-Export system, determines if submitted Goods Transition Control List meets Customs requirements. If it does not, e-Export system generates a message named Goods Transition Control List Reject to notify exporter about the error(s) in the Goods Transition Control List. It is important that exporter revises Goods Transition Control List accordingly. If submitted Goods Transition Control List meets Customs requirements, e-Export system generates a message named Goods Transition Control List Accept which contains a reference number of accepted Goods Transition Control List.</p> <p>2.8.6. Exporter has to print out Goods Transition Control List and hand it to inland haulage's driver. Goods Transition Control List has to accompany the cargo to port of departure.</p> <p>2.8.7. Driver of inland haulage then takes the containerized cargo to a point of container inspection.</p> <p>2.8.8. At Main Gate, exporter presents the Receipt of port entry to officer from Port Authority to request a permission for inland haulage to enter port.</p> <p>2.8.9. Once an inland haulage enters port, port officer at Main Gate</p>

	<p>record date and time of port entry.</p> <p>2.8.10. Driver of inland haulage takes the containerized cargo to the inspection point.</p> <p>2.8.11. Officer from Port Authority measures weight of the container.</p> <p>2.8.12. Officer from Port Authority inspects container condition at time of gate in.</p> <p>2.8.13. Officer from Port Authority specifies a point in Sub-Gate where container will be placed.</p> <p>2.8.14. Officer from Port Authority records the information about weight of cargo/container, container condition, and a location of the container in the Sub-Gate in Equipment Interchange Receipt (EIR). In addition to enter EIR information into port system, Officer from Port Authority has to record it in the information system of Royal Thai Customs. One copy of EIR is given to a driver of inland haulage and another is given to</p> <p>2.8.15. Royal Thai Customs receives EIR via electronic means.</p> <p>2.8.16. Driver of inland haulage, with EIR, takes the containerized cargo into Sub-Gate and places the containerized cargo as instructed. This activity has to be completed three hours prior to the berthing of vessel for loading.</p> <p>2.8.17. Officer from Port Authority allocates necessary equipment to facilitate the handling of a containerized cargo at Sub-Gate and terminal.</p>
Output criteria to exit the business process	<ul style="list-style-type: none"> <li>• Driver of inland haulage has brought containerized cargo through Sub-Gate.</li> </ul>
Average time required to complete this business process	2 Hrs.

**Core business process area 2.9: Clear goods through customs**

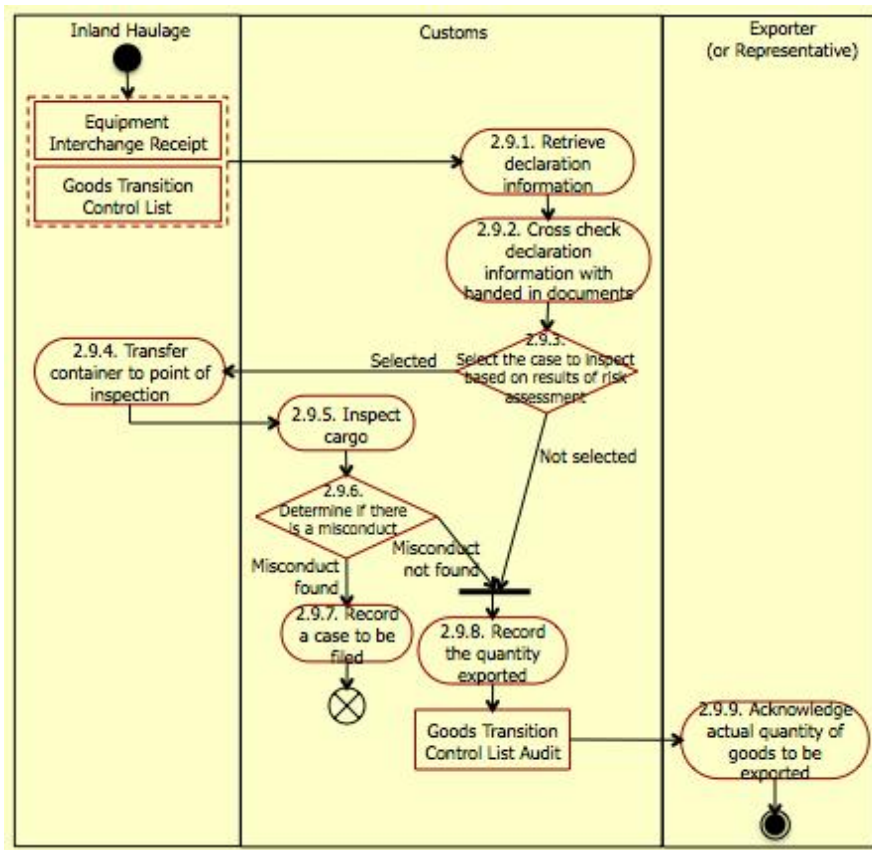
**Figure A3-20. “Clear goods through customs” use case diagram**



The use case diagram shown in Figure A3-20 suggests that “Clear goods through customs” process requires the participation from:

- Exporter or Representative
- Inland Haulage
- Royal Thai Customs

Figure A3-21. “Clear goods through customs” activity diagram

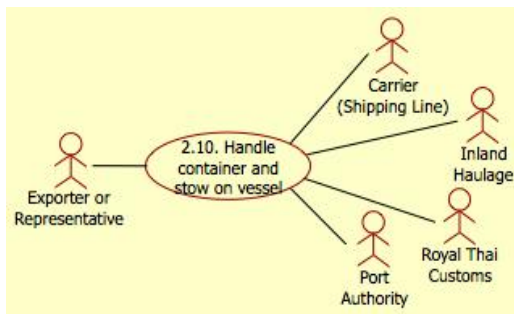


Name of a process area	2. Ship
Name of a business process	2.9. Clear goods through customs
Related laws, rules, and regulations	<ul style="list-style-type: none"> <li>• Customs Act (B.E. 2469) and Amended (B.E. 2543)</li> <li>• Notification of Royal Thai Customs No. 116/2549 Re: Electronic Customs Clearance</li> <li>• Notification of Royal Thai Customs No. 39/2550 Re: Manual for e-Export System</li> <li>• Notification of Royal Thai Customs No. 43/2550 Re: Amendment of Practical Guideline on the Inspection and Release of Containerized Cargo in Ocean Freight</li> <li>• Export Commodity Standards Act (B.E. 2503) and Amended (B.E. 2523)</li> <li>• Notification of Ministry of Commerce Re: Customs Checkpoints where Exporter of Jasmine Rice Must Present Certificate of Product Standards (MS. 24/1)</li> </ul>
Process participant	<ul style="list-style-type: none"> <li>• Exporter or Representative</li> <li>• Inland Haulage</li> <li>• Royal Thai Customs</li> </ul>
Input and criteria to enter/begin the business process	<ul style="list-style-type: none"> <li>• Driver of inland haulage has brought containerized cargo through Sub-Gate.</li> </ul>
Activities and associated documentary requirements	2.9.1. With a reference made to Equipment Interchange Receipt and Goods Transition Control List received from inland haulage’s driver, officer from Royal Thai Customs retrieves information that exporter has declared.

	<p>2.9.2. Officer from Royal Thai Customs crosses check information that has been declared with information in Equipment Interchange Receipt and Goods Transition Control List. He or she needs to make sure that the container to be exported is identical to the container that exporter has declared in Goods Transition Control List.</p> <p>2.9.3. Based on the results of risk assessment, officer from Royal Thai Customs determines whether to inspect the cargo. If the e-Export system indicates that the consignment is not subject to further inspection, officer from Royal Thai Customs can go to activity 2.9.8 and release the consignment from Sub-Gate right away. The actual quantity of goods to be exported is recorded as part of Goods Transition Control List Audit in the system.</p> <p>2.9.4. If officer from Royal Thai Customs decides to inspect the cargo, driver of inland haulage has to move the containerized cargo to point of inspection.</p> <p>2.9.5. Officer from Royal Thai Customs then inspect the containerized cargo.</p> <p>2.9.6. Officer from Royal Thai Customs determines if there is a misconduct.</p> <p>2.9.7. If there is a misconduct found, officer from Royal Thai Customs records a misconduct case which requires further investigation.</p> <p>2.9.8. If misconduct is not found, officer from Royal Thai Customs can release the containerized cargo from the Sub-Gate right away. The actual quantity of goods to be exported and released date are then recorded as part of Goods Transition Control List Audit in the system.</p> <p>2.9.9. Upon the release of the containerized cargo from Customs-controlled area, exporter will be notified of the actual quantity of goods to be exported.</p>
Output criteria to exit the business process	<ul style="list-style-type: none"> <li>• The consignment is released from Customs-controlled area.</li> </ul>
Average time required to complete this business process	30 Minutes

## Core business process area 2.10: Handle container and stow on vessel

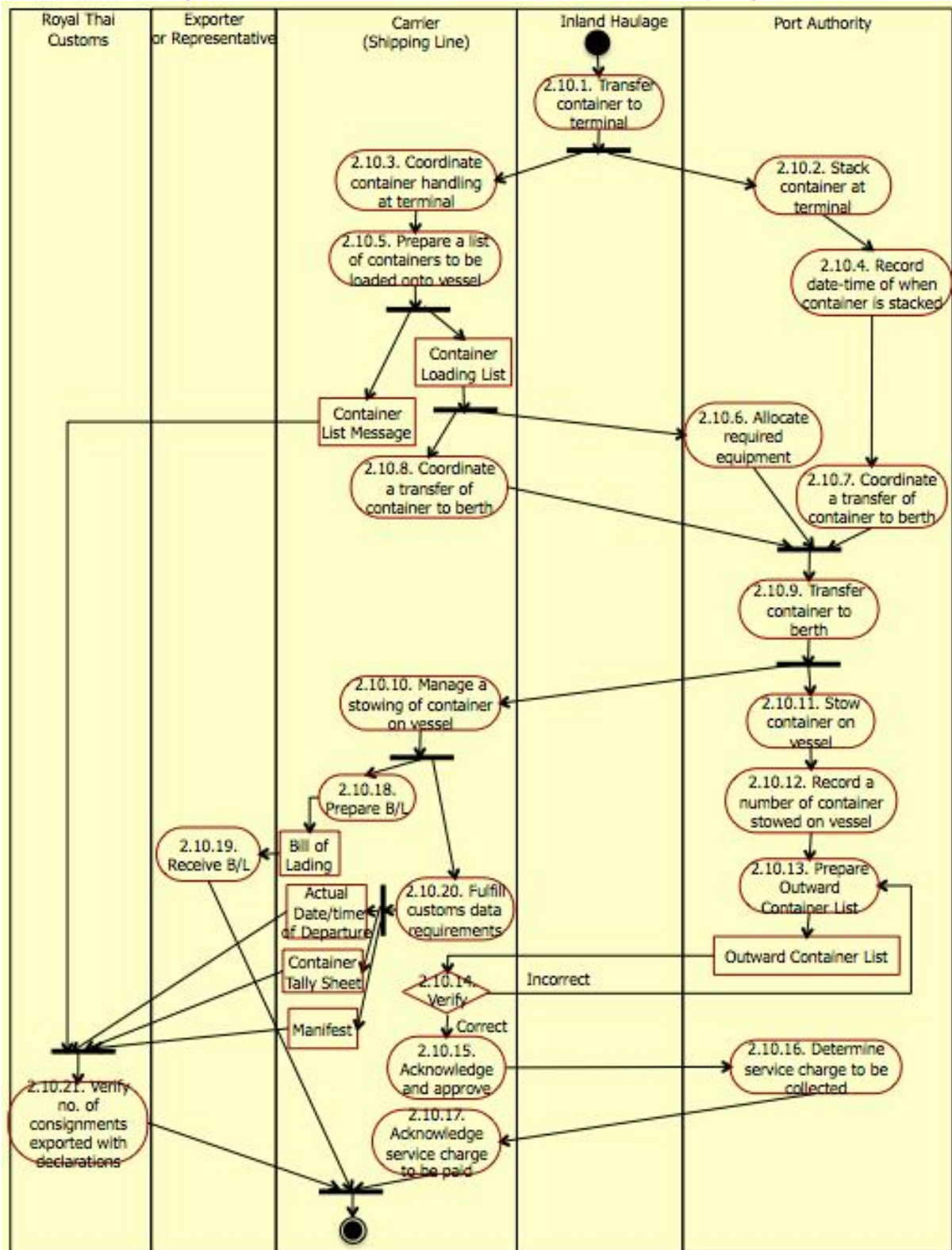
Figure A3-22. “Handle container and stow on vessel” use case diagram



The use case diagram shown in Figure A3-22 suggests that “Handle container and stow on vessel” process requires the participation from:

- Carrier (Shipping Line)
- Exporter or Representative
- Inland Haulage
- Port Authority
- Royal Thai Customs

Figure A3-23. "Handle container and stow on vessel" activity diagram



Name of a process area	2. Ship
Name of a business process	2.10. Handle container and stow on vessel
Related laws, rules, and regulations	<ul style="list-style-type: none"> <li>• Customs Act (B.E. 2469) and Amended (B.E. 2543)</li> <li>• Notification of Royal Thai Customs No. 116/2549 Re: Electronic Customs Clearance</li> </ul>

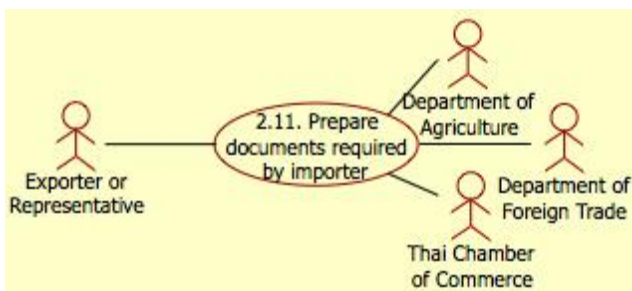


	<ul style="list-style-type: none"> <li>• Port Authority of Thailand Regulation No. 3: Practical Guideline on the Use of Port Facilities and Services (B.E. 2547)</li> </ul>
Process participant	<ul style="list-style-type: none"> <li>• Carrier (Shipping Line)</li> <li>• Exporter or Representative</li> <li>• Inland Haulage</li> <li>• Port Authority</li> <li>• Royal Thai Customs</li> </ul>
Input and criteria to enter/begin the business process	<ul style="list-style-type: none"> <li>• Containerized cargo is released from Customs-controlled area.</li> <li>• Carrier has already received permission from Marine Department to leave port of departure.</li> <li>• Through customs information system, carrier agent has already submitted Vessel Schedule and received Receive Control Number from Royal Thai Customs. Receive Control Number is considered as a permission from Royal Thai Customs to load cargo onto vessel.</li> </ul>
Activities and associated documentary requirements	<p>2.10.1. Driver of inland haulage transfers the container to the location in the terminal specified in Equipment Interchange Receipt.</p> <p>2.10.2. Port staff stacks the container at the terminal using the equipments that have already been prepared after issuing the Equipment Interchange Receipt towards the end of “transfer to port of departure” business process.</p> <p>2.10.3. Carrier agent coordinates the handling of container at the terminal with port staff.</p> <p>2.10.4. Port staff then records date and time when the container is stacked.</p> <p>2.10.5. Carrier agent prepares Container Loading List for Port Authority and Container List Message for Royal Thai Customs. The content of these two documents is almost identical. These two documents have to be submitted to Port Authority and Customs three hours prior to the loading time. If there are changes in the list of containers, changes must be informed to relevant parties prior to the loading time as well.</p> <p>2.10.6. Based on Container Loading List, Port staff, through the handheld device, allocates equipment necessary for transferring containers to berth.</p> <p>2.10.7. Port staff coordinates with carrier agent on a transfer of container to berth.</p> <p>2.10.8. Carrier agent coordinates with port staff on a transfer of container to berth.</p> <p>2.10.9. Port staff transfers container from the terminal to berth.</p> <p>2.10.10. Based on Container Loading List, carrier agent instructs port staff about the location of each container on a vessel.</p> <p>2.10.11. Port staff stows containers on vessel according to carrier agent’s instruction.</p> <p>2.10.12. Port staff then records a number of containers stowed on vessel upon the completion of the task.</p> <p>2.10.13. Based on Container Loading List and a number of containers stowed on vessel recorded, port staff prepares Outward Container List.</p>

	<p>2.10.14. Carrier agent verifies Outward Container List received from port staff..</p> <p>2.10.15. Carrier agent acknowledges and approves the correct Outward Container List. If Outward Container List is incorrect, carrier agent needs to inform port staff about the revision needed.</p> <p>2.10.16. Port staff determines port charges and informs carrier agent the amount of charges to be paid.</p> <p>2.10.17. Carrier agent then acknowledges the amount of service charge to be paid to Port Authority.</p> <p>2.10.18. Once all the containers are on board, carrier agent issues Bill of Lading for an exporter.</p> <p>2.10.19. Exporter receives Bill of Lading from carrier agent.</p> <p>2.10.20. Carrier agent is also required to fulfill customs data requirements by submitting the following items in customs format to customs information system.</p> <ul style="list-style-type: none"> <li>- The actual date and time of departure</li> <li>- Container Tally Sheet (within 72 hours after the departure)</li> <li>- Manifest (within 6 days after receiving Receive Control Number)</li> </ul> <p>2.10.21. Once Customs officer receives Manifest from carrier agent, he or she verifies the information of containers on board with submitted Export declarations and Goods Transition</p> <p>It should be noted that in addition to Outward Container List, port staff summarizes container movement activities in Container Gate-in/Gate-out Report Message (CODECO) and Container Discharge/Loading Report Message (COARRI). These messages are sent to carrier agent every morning in either an EDI File or a Text File.</p>
Output criteria to exit the business process	<ul style="list-style-type: none"> <li>• The consignment is released from Customs-controlled area.</li> </ul>
Average time required to complete this business process	1 Day

**Core business process area 2.11: Prepare documents required by importer**

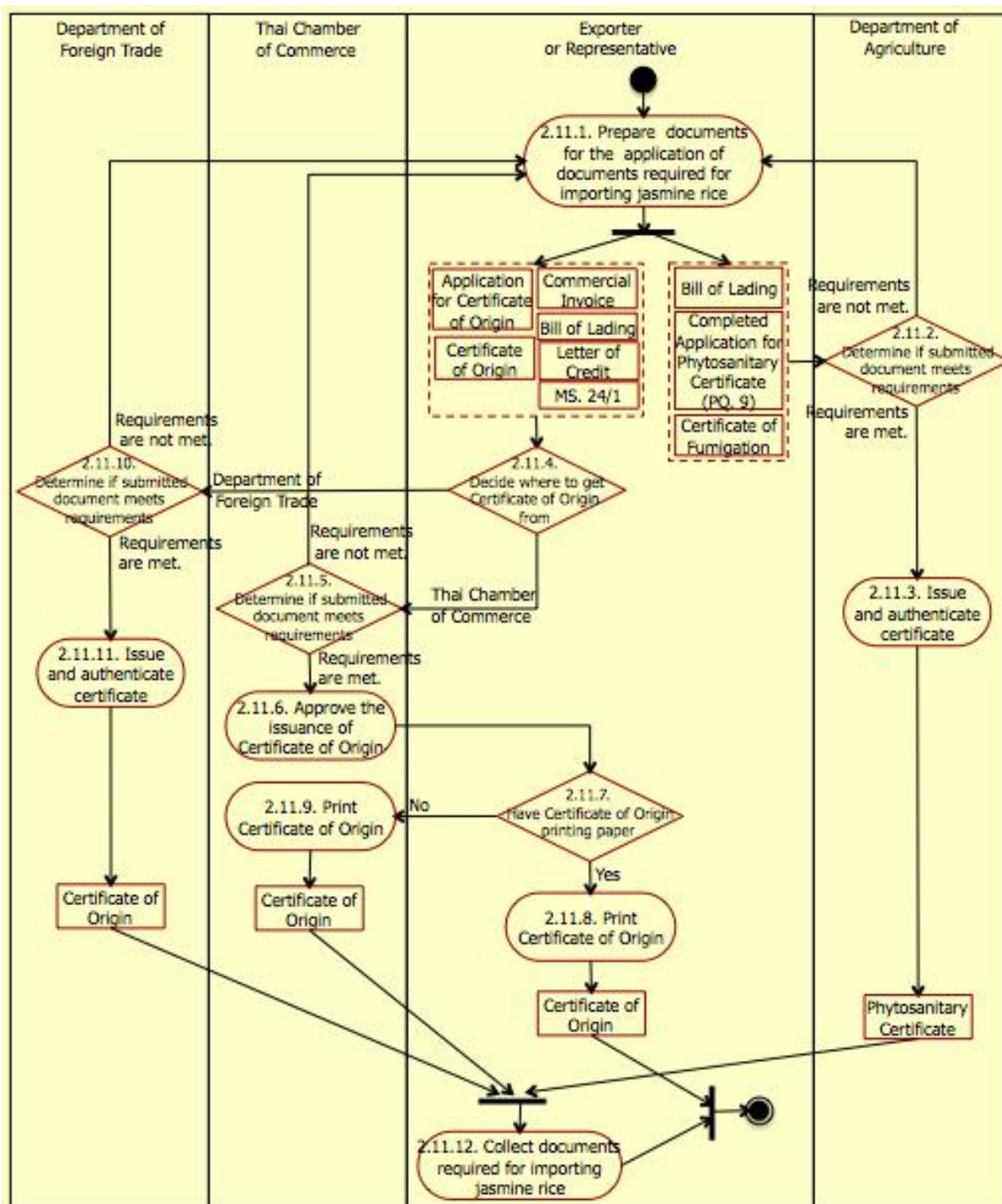
**Figure A3-24. “Prepare documents required by importer” use case diagram**



The use case diagram shown in Figure A3-24 suggests that “Prepare documents required by importer” process requires the participation from:

- Department of Agriculture
- Department of Foreign Trade
- Exporter or Representative
- Thai Chamber of Commerce

Figure A3-25. "Prepare documents required by importer" activity diagram



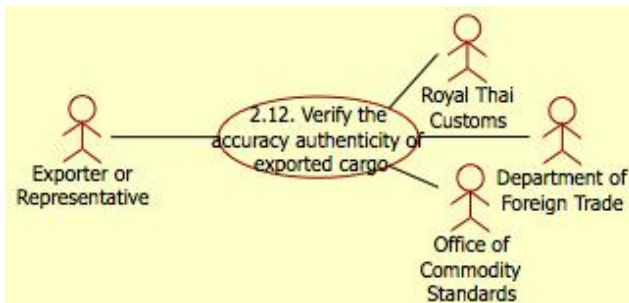
Name of a process area	2. Ship
Name of a business process	2.11. Prepare documents required by importer
Related laws, rules, and regulations	<ul style="list-style-type: none"> <li>Plant Quarantine Act (B.E. 2507) and amended (B.E. 2542, 2551)</li> <li>Ministry of Agriculture and Cooperatives Regulation on The Application for And the Issuance of Phytosanitary Certificate (B.E. 2550)</li> <li>Notification of Department of Agriculture Re: Application Form for Phytosanitary Certificate</li> </ul>

	<ul style="list-style-type: none"> <li>• USDA Fresh Fruits and Vegetables Import Manual</li> </ul>
Process participant	<ul style="list-style-type: none"> <li>• Department of Agriculture</li> <li>• Department of Foreign Trade</li> <li>• Exporter or Representative</li> <li>• Thai Chamber of Commerce</li> </ul>
Input and criteria to enter/begin the business process	<ul style="list-style-type: none"> <li>• Container of fumigated jasmine rice has already been loaded onto vessel.</li> </ul>
Activities and associated documentary requirements	<p>2.11.1. Exporter prepares documents necessary for the application of Certificates used in import formalities. To apply for Phytosanitary Certificate, exporter in person submits the following documents at Department of Agriculture.</p> <ul style="list-style-type: none"> <li>– Bill of Lading</li> <li>– Completed Application for Phytosanitary Certificate (PQ. 9)</li> <li>– Certificate of Fumigation</li> </ul> <p>To apply for Certificate of Origin, exporter needs to submit the following documents:</p> <ul style="list-style-type: none"> <li>– Commercial Invoice</li> <li>– Certified-true-copy Bill of Lading</li> <li>– Letter of Credit</li> <li>– Certificate of Standard of Products (MS. 24/1)</li> <li>– Completed Application for Certificate of Origin</li> <li>– Draft Certificate of Origin</li> </ul> <p>The submission of an application for Certificate of Origin can be done electronically. Exporter who has already registered with either Department of Foreign Trade of Thai Chamber of Commerce can fill in required data in the provided online Application form.</p> <p>2.11.2. Upon the receipt of the application and supplementary documents, officer from Department of Agriculture reviews them and determines if they meet Department of Agriculture’s requirements. If they do not, officer from Department of Agriculture informs exporter where revision is needed. Exporter then revises the documents accordingly.</p> <p>2.11.3. If submitted documents meet Department of Agriculture’s requirements, officer from Department of Agriculture issues and authenticates Phytosanitary Certificate.</p> <p>2.11.4. To apply for Certificate of Origin, exporter first decides whether he or she would like to submit the application through the system of Department of Foreign Trade or of Thai Chamber of Commerce.</p> <p>2.11.5. If exporter chooses the system of Thai Chamber of Commerce, he or she needs to upload supplementary documents, i.e., Commercial Invoice, Certified-true-copy Bill of Lading, Letter of Credit, and Certificate of Standard of Products (MS. 24/1) as attached files prior to submitting the application to Thai Chamber of Commerce. Upon the receipt of the application and supplementary documents,</p>

	<p>officer from Thai Chamber of Commerce reviews them and determines if they meet Department of Foreign Trade's requirements. If they do not, officer from Thai Chamber of Commerce informs exporter where revision is needed. Exporter then revises the documents accordingly.</p> <p>2.11.6. If submitted documents meet Department of Foreign Trade's requirements, officer from Thai Chamber of Commerce approves the issuance of Certificate of Origin.</p> <p>2.11.7. Exporter sees if he or she has already purchased Certificate of Origin printing paper.</p> <p>2.11.8. If exporter has Certificate of Origin printing paper, he or she can print Certificate of Origin from an office printer right away.</p> <p>2.11.9. In a case where exporter does not have Certificate of Origin printing paper, officer from Thai Chamber of Commerce can print it.</p> <p>2.11.10. If exporter chooses to apply for Certificate of Origin through the system of Department of Foreign Trade, in addition to entering required data in the provided online Application form, he or she needs to spell out supplementary documents. No attachment of those documents is needed. Upon the receipt of the application and supplementary documents, officer from Department of Foreign Trade reviews them and determines if they meet Department of Foreign Trade's requirements. If they do not, officer from Department of Foreign Trade informs exporter where revision is needed. Exporter then revises the documents accordingly.</p> <p>2.11.11. If the submitted application and supplementary documents meet Department of Foreign Trade's requirements, officer from Department of Foreign Trade issues and authenticates Certificate of Origin.</p> <p>2.11.12. Certificate of Origin can be collected 6 working hours after the application is submitted. For example, if the application is submitted at 9.00, the Certificate should be ready for a pick-up by 16.00. There is no fee involving in the issuance of Certificate of Origin. Phytosanitary Certificate, on the other hand, can be collected a few hours after the application is submitted. The issuance of Phytosanitary Certificate costs 50 THB.</p>
Output criteria to exit the business process	<ul style="list-style-type: none"> <li>• Exporter obtained all regulatory documents required to fulfill import formalities.</li> </ul>
Average time required to complete this business process	3 Days

**Core business process area 2.12: Verify the accuracy/authenticity of exported cargo**

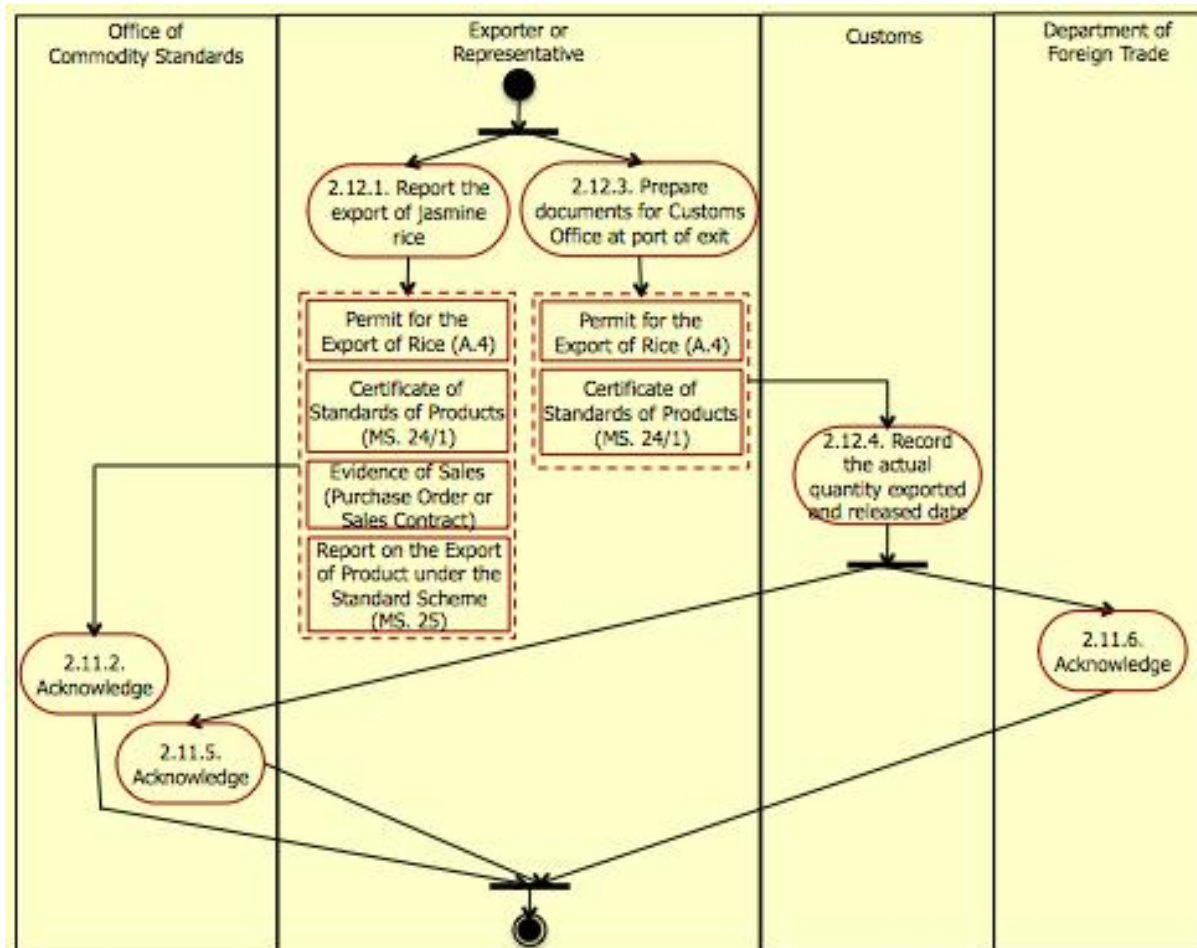
**Figure A3-26. “Verify the accuracy/authenticity of exported cargo” use case diagram**



The use case diagram shown in Figure A3-26 suggests that “Verify the accuracy and authenticity of exported cargo” process requires the participation from:

- Department of Foreign Trade
- Exporter or Representative
- Office of Commodity Standards
- Royal Thai Customs

**Figure A3-27 “Verify the accuracy/authenticity of exported cargo” activity diagram**



Name of a process area	2. Ship
Name of a business process	2.12. Verify the accuracy and authenticity of exported cargo
Related laws, rules, and regulations	<ul style="list-style-type: none"> <li>• Notification of Ministry of Commerce Re: Customs Checkpoints where Exporter of Jasmine Rice Must Present Certificate of Product Standards (MS. 24/1)</li> <li>• Notification of Royal Thai Customs No. 32/2550 Re: The Termination of Completing Customs’ Export Formalities via</li> </ul>

	<p>Electronic Data Interchange</p> <ul style="list-style-type: none"> <li>Ministry of Commerce Regulation on the Export of Products under the Standard Scheme (B.E. 2504)</li> </ul>
Process participant	<ul style="list-style-type: none"> <li>Department of Foreign Trade</li> <li>Exporter or Representative</li> <li>Office of Commodity Standards</li> <li>Royal Thai Customs</li> </ul>
Input and criteria to enter/begin the business process	<ul style="list-style-type: none"> <li>Royal Thai Customs has already recorded the actual quantity of jasmine rice in Goods Transition Control List.</li> </ul>
Activities and associated documentary requirements	<p>2.12.1. Exporter informs Office of Commodity Standards about the export of jasmine rice by submitting the following documents</p> <ul style="list-style-type: none"> <li>Permit for the Export of Rice (A. 4)</li> <li>Certificate of Standards of Products (MS. 24/1) with additional data entered by exporter on number and issue date of Commercial Invoice and Bill of Lading as well as term of payment</li> <li>Evidence of Sales (Purchase Order or Sales Contract)</li> <li>Report on the Export of Product under the Standard Scheme (MS. 25)</li> </ul> <p>MS. 25 can be prepared and submitted to Office of Commodity Standards online. It has to be submitted in 15 days after the date of export.</p> <p>2.12.2. Office of Commodity Standards acknowledges the export of jasmine rice.</p> <p>2.12.3. Exporter prepares the following documents to be submitted to Customs Office at port of exit.</p> <ul style="list-style-type: none"> <li>Permit for the Export of Rice (A. 4)</li> <li>Certificate of Standards of Products (MS. 24/1) with additional data entered by exporter on number and issue date of Commercial Invoice and Bill of Lading as well as term of payment</li> </ul> <p>The documents can be submitted in person or by a registered mail. They have to be submitted within 15 days after Royal Thai Customs recorded the actual quantity of jasmine rice exported in Goods Transition Control List.</p> <p>2.12.4. Upon the receipt of A. 4 and MS. 24/1, Royal Thai Customs records the actual quantity of jasmine rice exported in the documents and then forward the physical copies to Office of Commodity Standards and Department of Foreign Trade.</p> <p>2.12.5. Office of Commodity Standards receives the documents with acknowledgement.</p> <p>2.12.6. Department of Foreign Trade receives the documents with acknowledgement.</p>
Output criteria to exit the business process	<ul style="list-style-type: none"> <li>Department of Foreign Trade, Office of Commodity Standards, and Royal Thai Customs acknowledged the export of jasmine rice.</li> </ul>
Average time required to complete this business process	1 Day

### Process area 3: Pay

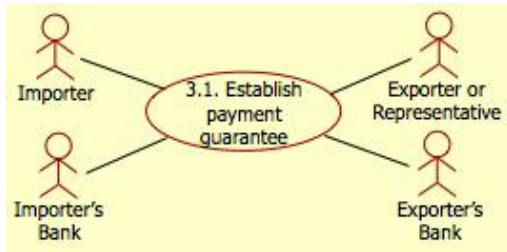
Pay process area deals with the establishment of payment guarantee and the collection of payments for goods. It consists of 2 core business processes. Given that the study is conducted under the assumption that the payment for the purchased jasmine rice is made by Letter of Credit, an emphasis will be placed on how to apply for Letter of Credit and collect payment for goods using Letter of Credit.

Figure A3-28. Use case diagram of core business processes in pay process area



### Core business process area 3.1: Establish payment guarantee

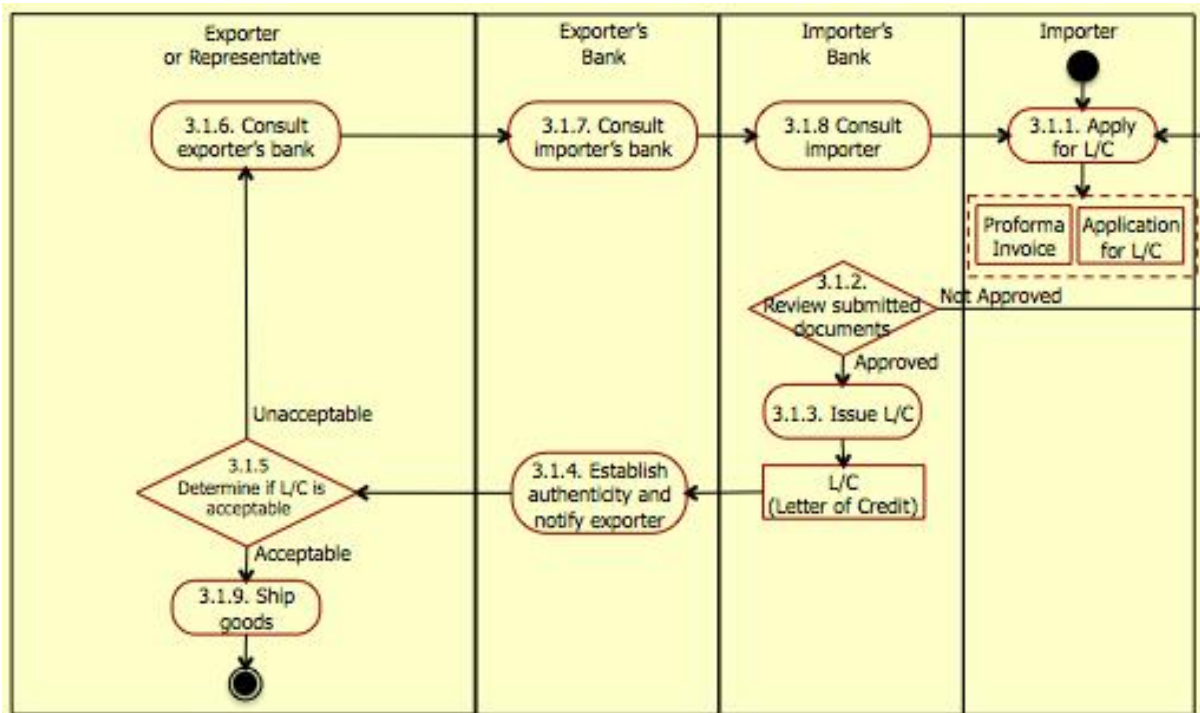
Figure A3-29. “Establish payment guarantee” use case diagram



The “Establish payment guarantee” use case diagram shown in Figure A3-29 suggests that this core business process requires the participation from:

- Exporter or Representative
- Exporter’s Bank
- Importer
- Importer’s Bank

Figure A3-30 “Establish payment guarantee” activity diagram

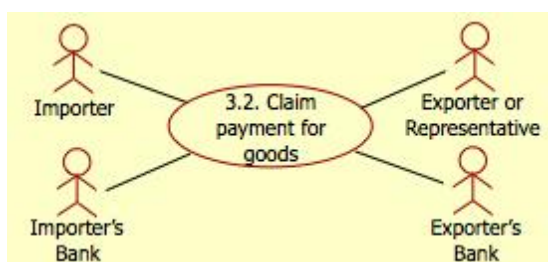




Name of a process area	3. Pay
Name of a business process	3.1. Establish payment guarantee
Related laws, rules, and regulations	<ul style="list-style-type: none"> <li>Uniform Custom and Practice for Documentary Credit, International Chamber of Commerce Publication No. 500</li> </ul>
Process participant	<ul style="list-style-type: none"> <li>Exporter or Representative</li> <li>Exporter's Bank (advising bank)</li> <li>Importer</li> <li>Importer's Bank (issuing bank)</li> </ul>
Input and criteria to enter/begin the business process	<ul style="list-style-type: none"> <li>Exporter and importer have already concluded trade contract and terms.</li> </ul>
Activities and associated documentary requirements	<p>3.1.1. Importer applies for Letter of Credit by submitting Application for Irrevocable Documentary Letter of Credit and Proforma Invoice to importer's bank.</p> <p>3.1.2. Importer's bank reviews submitted documents and evaluates importer's credit standing.</p> <p>3.1.3. If importer's credit is in good standing, importer's bank approves the application, issues Letter of Credit, and forward it to exporter's bank by electronic means.</p> <p>3.1.4. Exporter's bank establishes authenticity of the letter of credit and informs exporter that Letter of Credit is ready for collection.</p> <p>3.1.5. Exporter collects Letter of Credit and determines if it meets contractual agreement and its terms and conditions can be satisfied.</p> <p>3.1.6. If exporter finds Letter of Credit unacceptable, he or she needs to consult exporter's bank.</p> <p>3.1.7. Exporter's bank consults importer's bank.</p> <p>3.1.8. Importer's bank then consults importer on the amendment of Letter of Credit.</p> <p>3.1.9. If exporter finds the already issued Letter of Credit acceptable, he or she makes necessary arrangements for the delivery of goods.</p>
Output criteria to exit the business process	<ul style="list-style-type: none"> <li>Exporter accepted Letter of Credit</li> <li>Exporter started to make necessary arrangements to deliver jasmine rice to importer.</li> </ul>
Average time required to complete this business process	2 Days

### **Core business process area 3.2: Claim payment for goods**

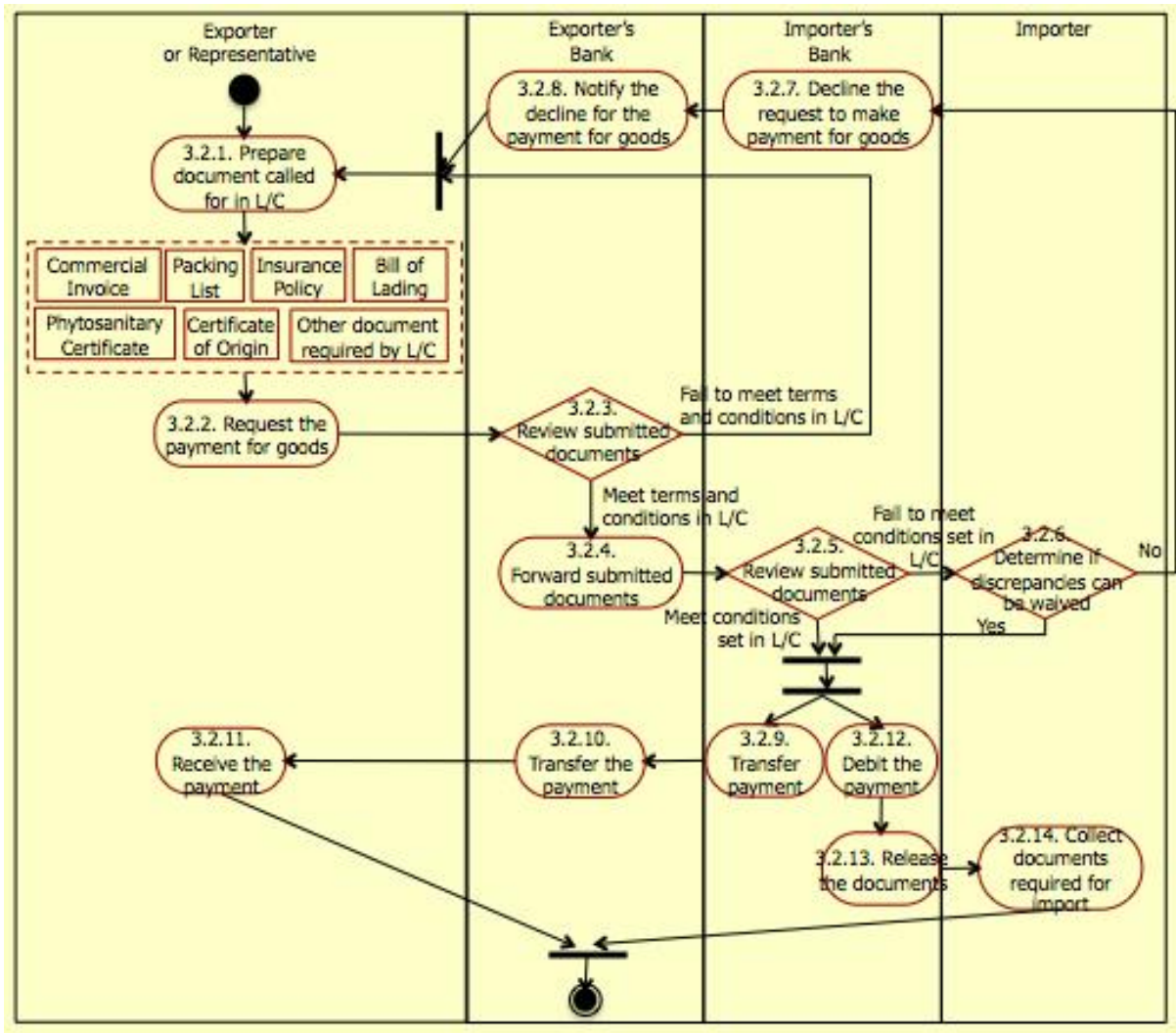
**Figure A3-31. "Claim payment for goods" use case diagram**



The "Claim payment for goods" use case diagram shown in Figure A3-31 suggests that this core business process requires the participation from:

- Exporter or Representative
- Exporter's Bank
- Importer
- Importer's Bank

Figure A3-32 “Claim payment for goods” activity diagram



Name of a process area	3. Pay
Name of a business process	3.2. Claim payment for goods
Related laws, rules, and regulations	<ul style="list-style-type: none"> <li>Uniform Custom and Practice for Documentary Credit, International Chamber of Commerce Publication No. 500</li> </ul>
Process participant	<ul style="list-style-type: none"> <li>Exporter or Representative</li> <li>Exporter's Bank (advising bank)</li> <li>Importer</li> <li>Importer's Bank (issuing bank)</li> </ul>
Input and criteria to enter/begin the business process	<ul style="list-style-type: none"> <li>Exporter has already fulfilled contractual agreement.</li> </ul>
Activities and associated documentary requirements	3.2.1. Exporter also prepares documents called for in Letter of Credit. Those documents typically include: <ul style="list-style-type: none"> <li>Commercial Invoice,</li> <li>Packing List,</li> <li>Insurance Policy,</li> <li>Bill of Lading,</li> <li>Phytosanitary Certificate, and</li> <li>Certificate of Origin.</li> </ul>

	<p>3.2.2. With the documents called for in Letter of Credit, exporter requests exporter's bank to advise importer's bank to proceed the payment for goods.</p> <p>3.2.3. Exporter's bank reviews submitted documents and determines if they are compliant with the terms and conditions as listed in Letter of Credit. If they do not meet the terms and conditions in Letter of Credit, exporter's bank informs exporter about the discrepancies. In this case, exporter needs to make necessary corrections.</p> <p>3.2.4. If the submitted documents meet the terms and conditions as listed in Letter of Credit, exporter's bank forward them to importer's bank.</p> <p>3.2.5. Importer's bank reviews submitted documents and determines if they are compliant with the terms and conditions of Letter of Credit. If they do not meet the terms and conditions in Letter of Credit, importer's bank informs importer about the discrepancies.</p> <p>3.2.6. Importer determines if discrepancies can be waived.</p> <p>3.2.7. If importer does not waive the discrepancies, importer's bank declines the request to make payment for goods.</p> <p>3.2.8. Exporter's bank notifies exporter about the decline for the payment for goods so that exporter makes necessary corrections.</p> <p>3.2.9. If importer's bank finds the submitted documents compliant with the terms and conditions listed in Letter of Credit from the very beginning, importer's bank transfer the payment for goods to exporter's bank.</p> <p>3.2.10. Exporter's bank transfers the payment for goods to exporter.</p> <p>3.2.11. Exporter receives the payment for goods.</p> <p>3.2.12. Importer's bank debits the payment for goods from importer's account.</p> <p>3.2.13. Importer's bank releases documents collected from exporter.</p> <p>3.2.14. Importer collected documents required for import.</p>
Output criteria to exit the business process	<ul style="list-style-type: none"> <li>• Exporter received the payment for goods.</li> <li>• Importer received documents required to complete import formalities.</li> </ul>
Average time required to complete this business process	2 Days

#### A4. Business processes of jasmine rice export in a Nutshell

Figure A4-1. Time-procedure chart for jasmine rice export from Thailand to USA

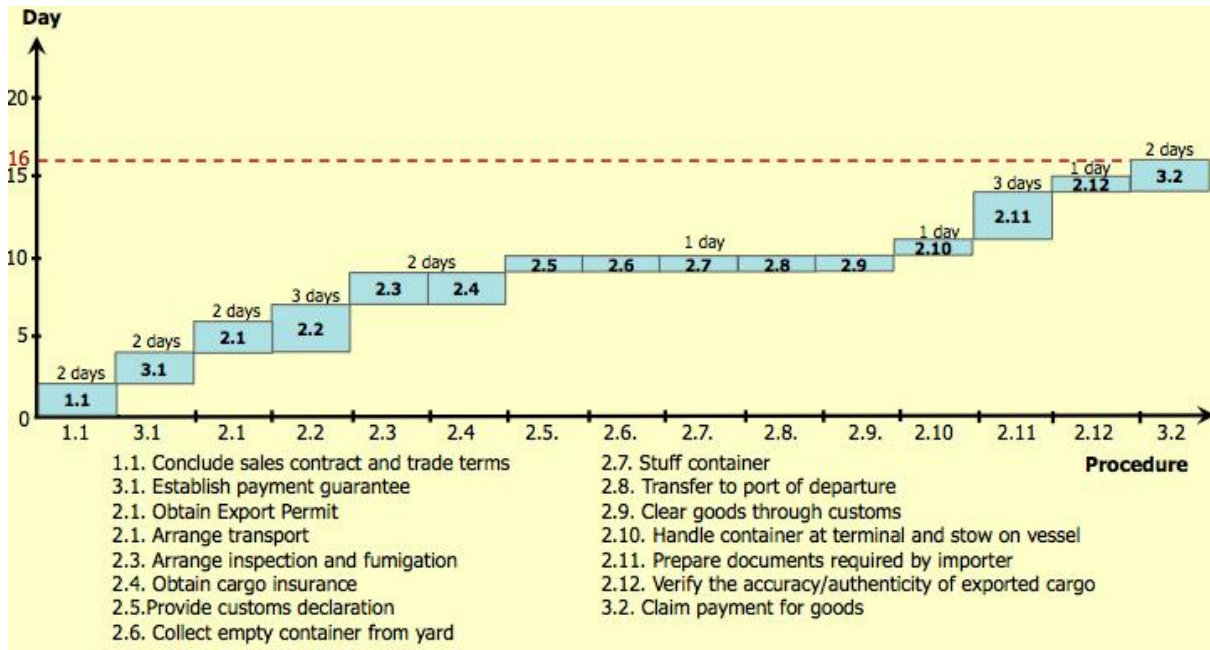
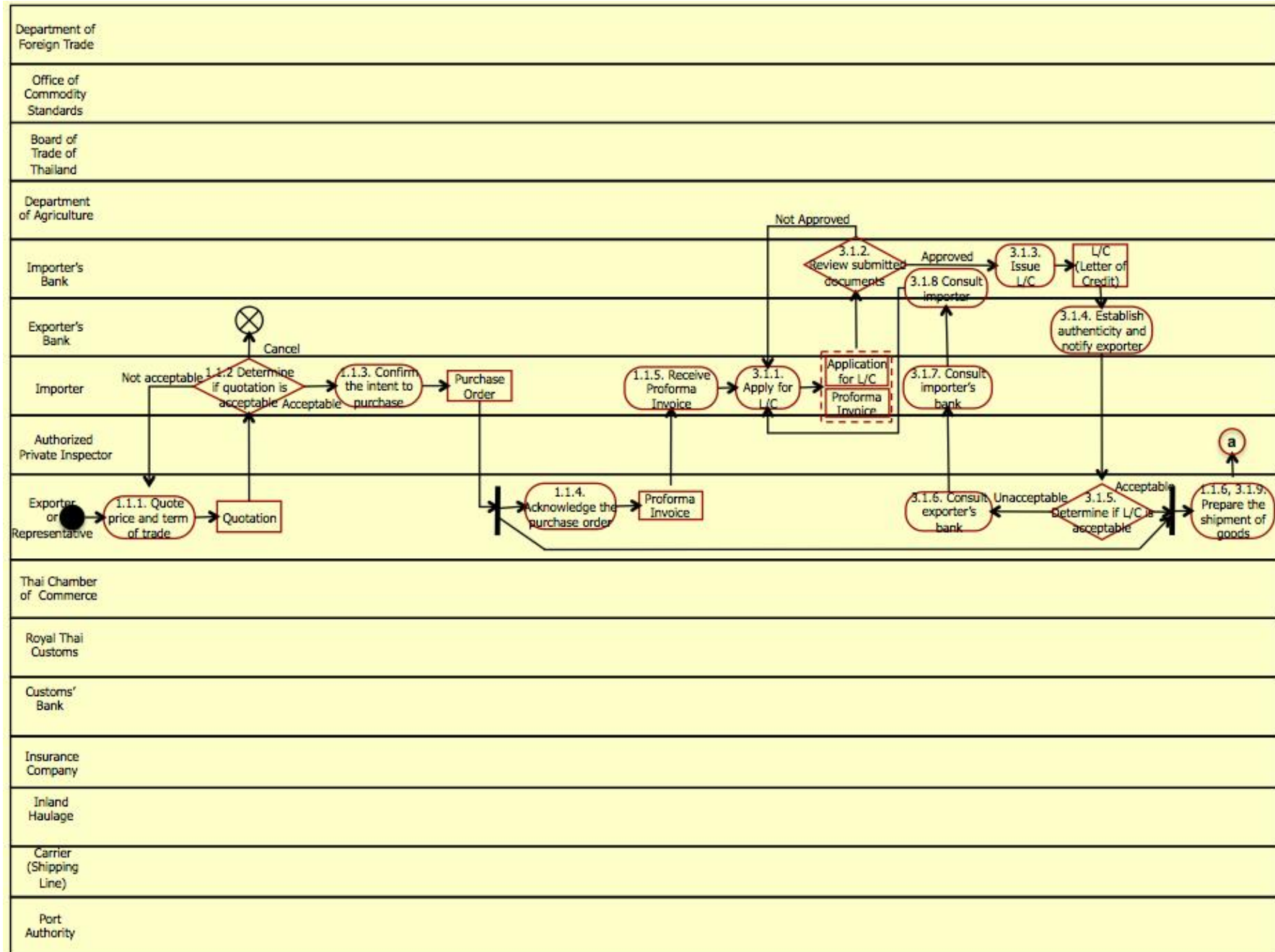


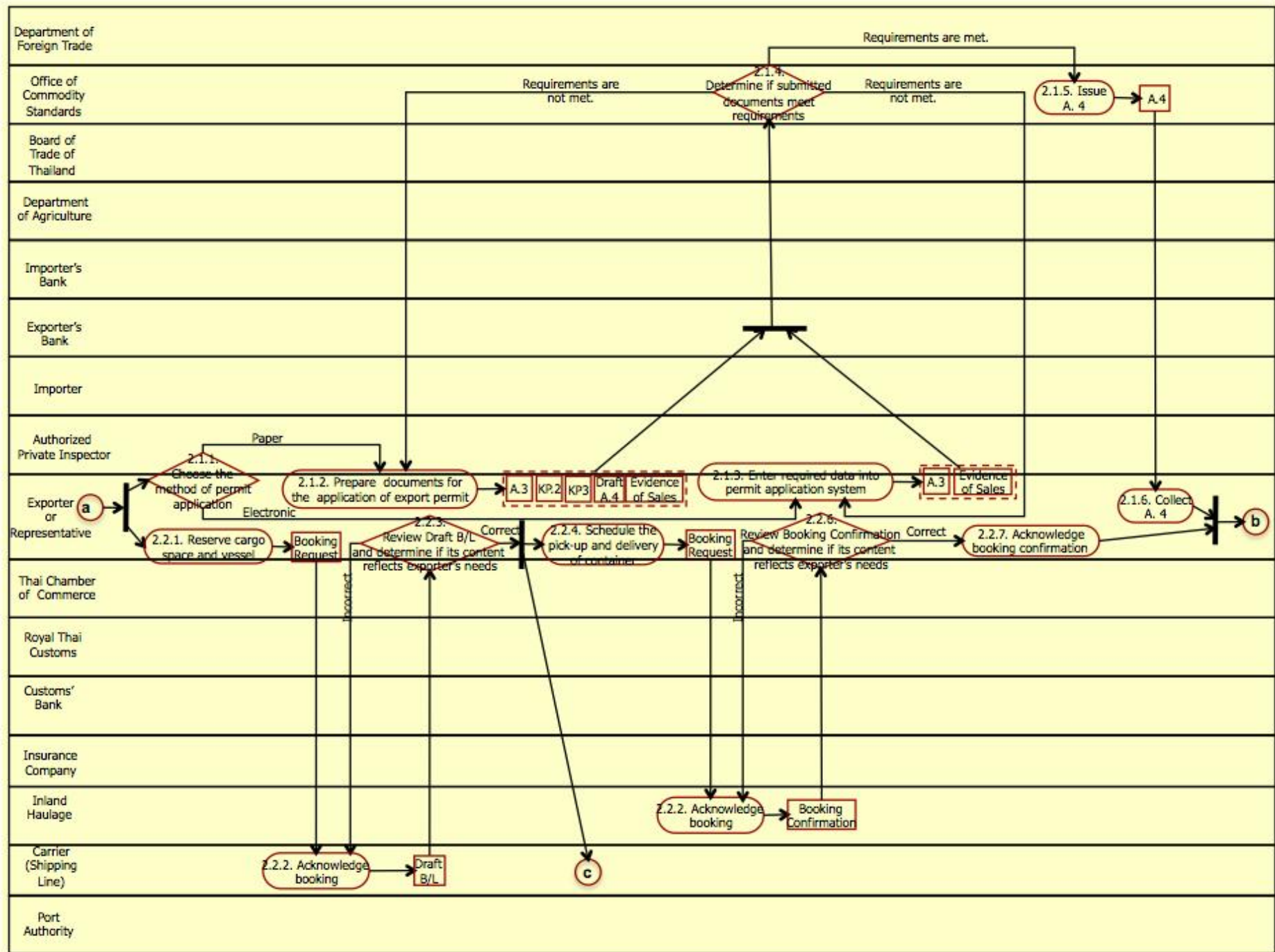
Figure A4-1 presents a time-procedure chart listing core business processes that are required to be carried out to export jasmine rice from Thailand to the United States. The time-procedure chart suggests that it takes, in average, 16 days for stakeholders to fulfill commercial and regulatory requirements of 15 jasmine rice export business processes. It also provides an illustration of when each core business process occurs in relation to others. Table A4-1, on the other hand, provides the precise time it normally takes to complete each business process and a spotlight into dependencies among them.

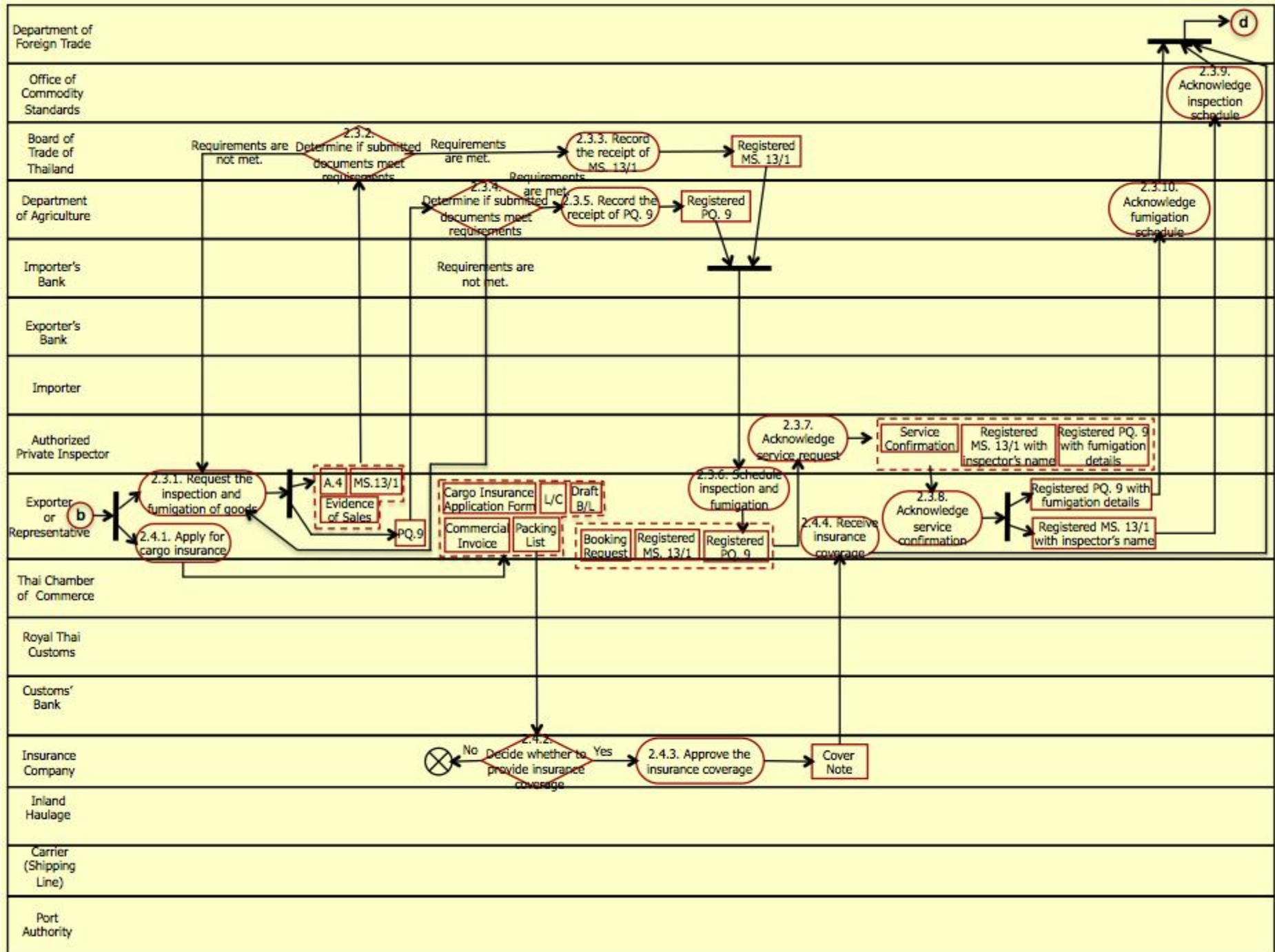
**Table A4-1. Duration and dependencies among jasmine rice export business processes**

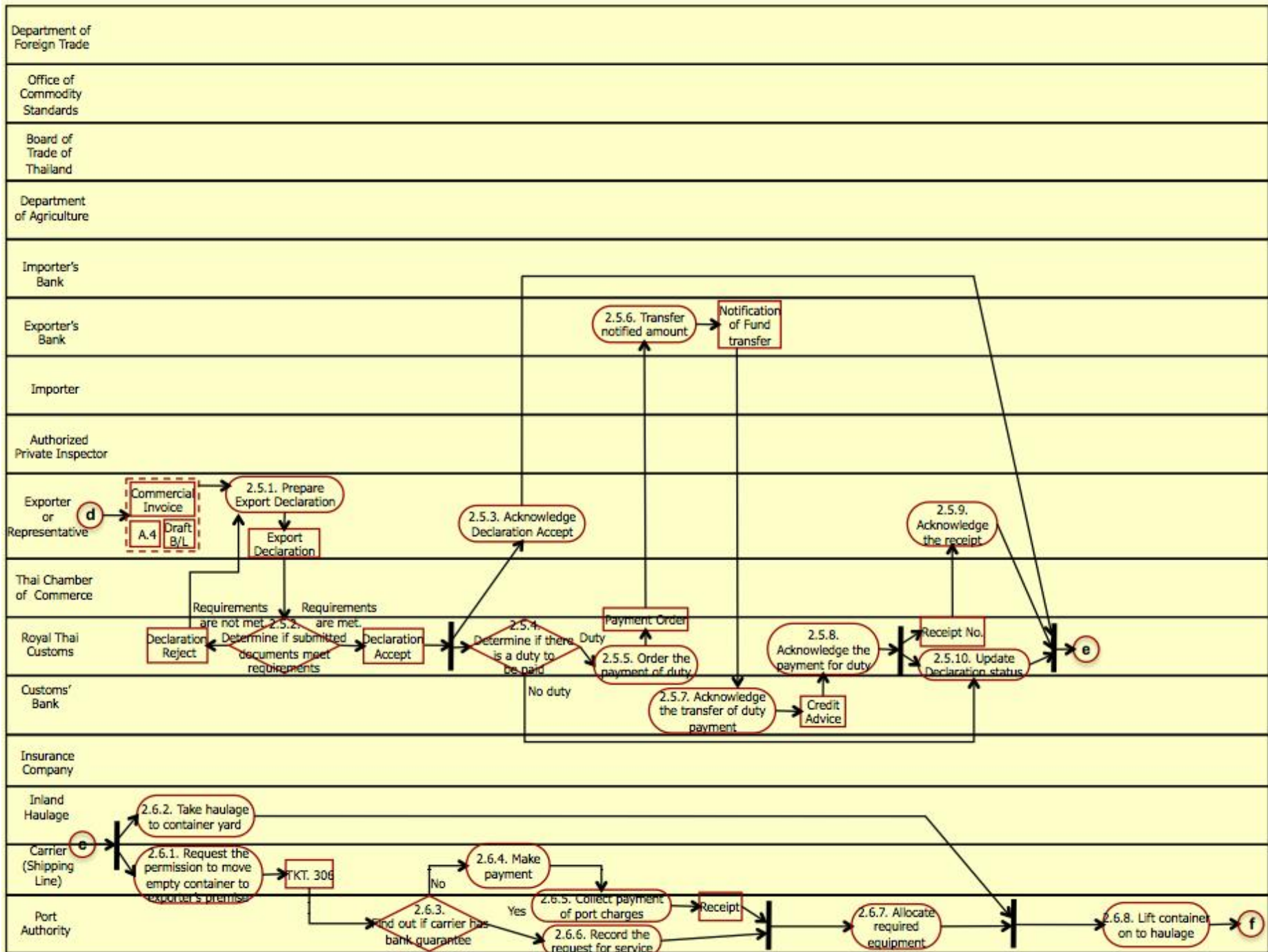
Core business process (use case)	Duration	Predecessor	Simultaneous task
<b>1. Buy</b>			
1.1. Conclude sales contract and trade terms	2 Days	N/A	N/A
<b>2. Ship</b>			
2.1. Obtain export permit	2 Days	1.1, 3.1	2.2
2.2. Arrange transport	3 Days	1.1, 3.1	2.1
2.3. Arrange the inspection and fumigation	2 Days	2.1, 2.2	2.4
2.4. Obtain cargo insurance	2 Days	2.1, 2.2	2.3
2.5. Provide customs declaration	30 Minutes	2.3, 2.4	2.6
2.6. Collect empty container from yard	1 Hour	2.3, 2.4	2.5
2.7. Stuff container	5 Hours	2.5, 2.6	N/A
2.8. Transfer to port of departure	2 Hours	2.7	N/A
2.9. Clear goods through customs	30 Minutes	2.8	N/A
2.10. Handle cargo and stow on vessel	1 Day	2.9	N/A
2.11. Prepare documents required by importer	3 Days	2.10	N/A
2.12. Verify the accuracy/authenticity of exported cargo	1 Day	2.11	3.2
<b>3. Pay</b>			
3.1. Establish payment guarantee	2 Days	1.1	N/A
3.2. Claim payment for goods	2 Days	2.11	2.12

Figure A4-2. Holistic view of jasmine rice export from Thailand to US

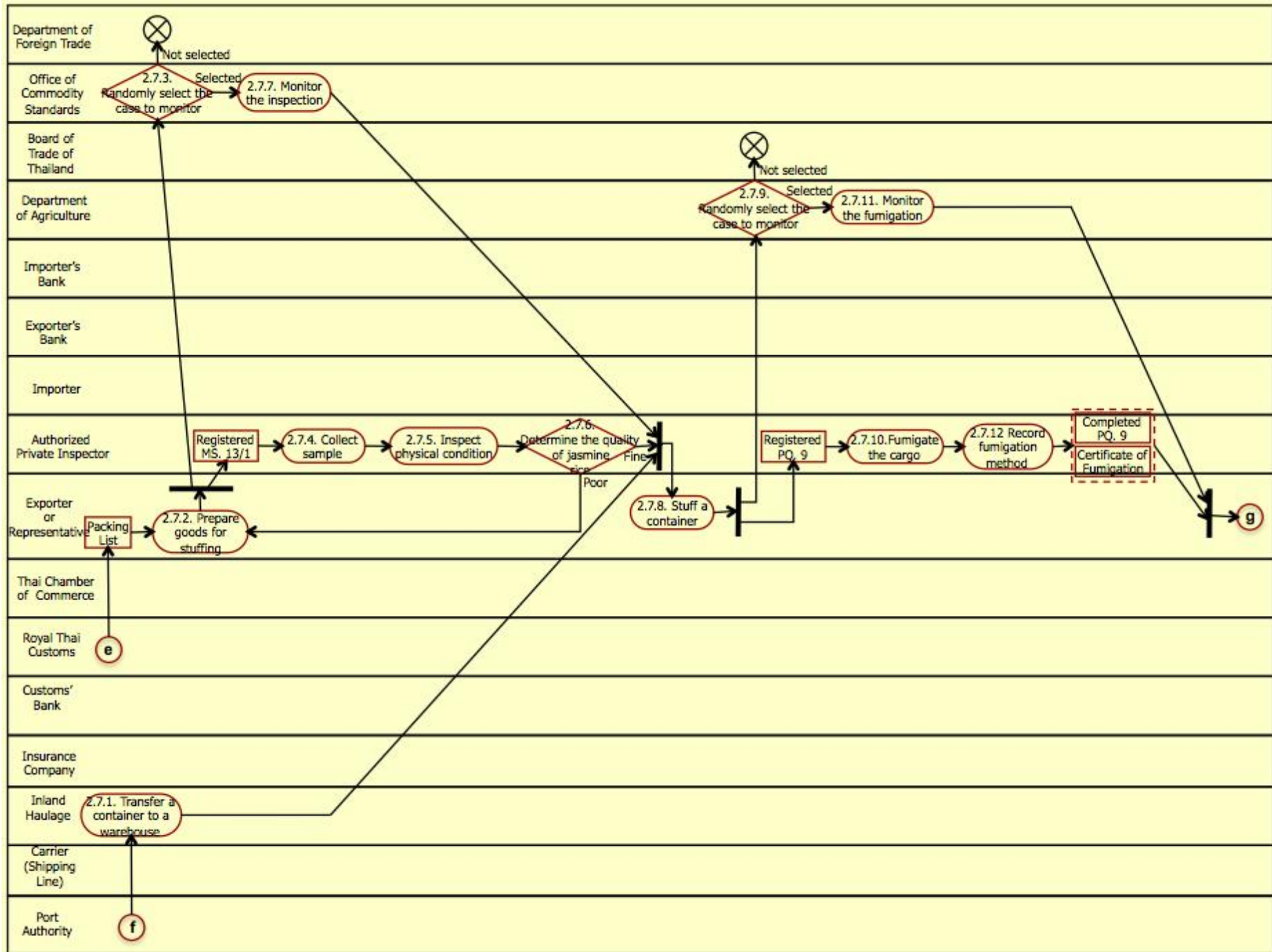


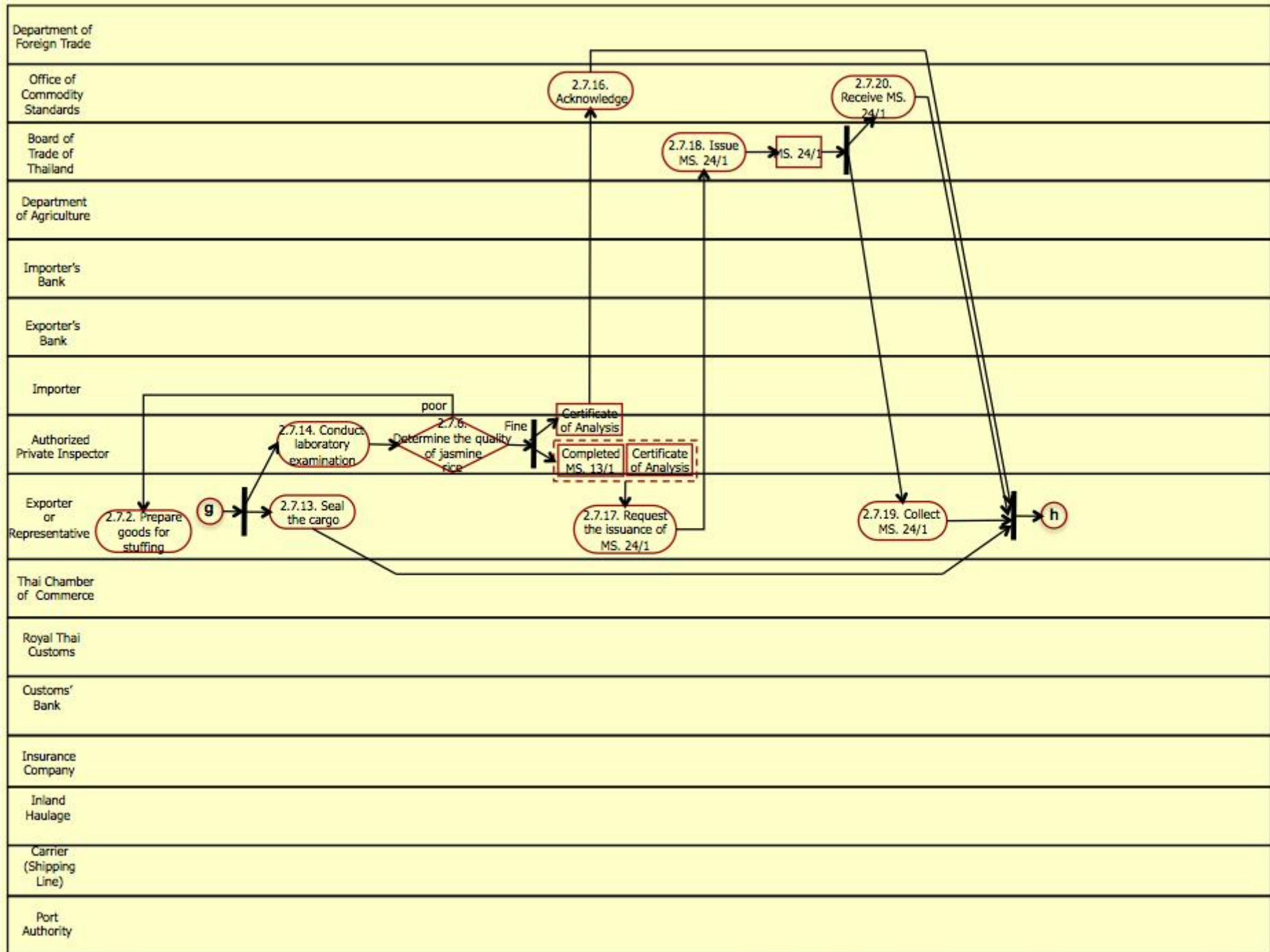


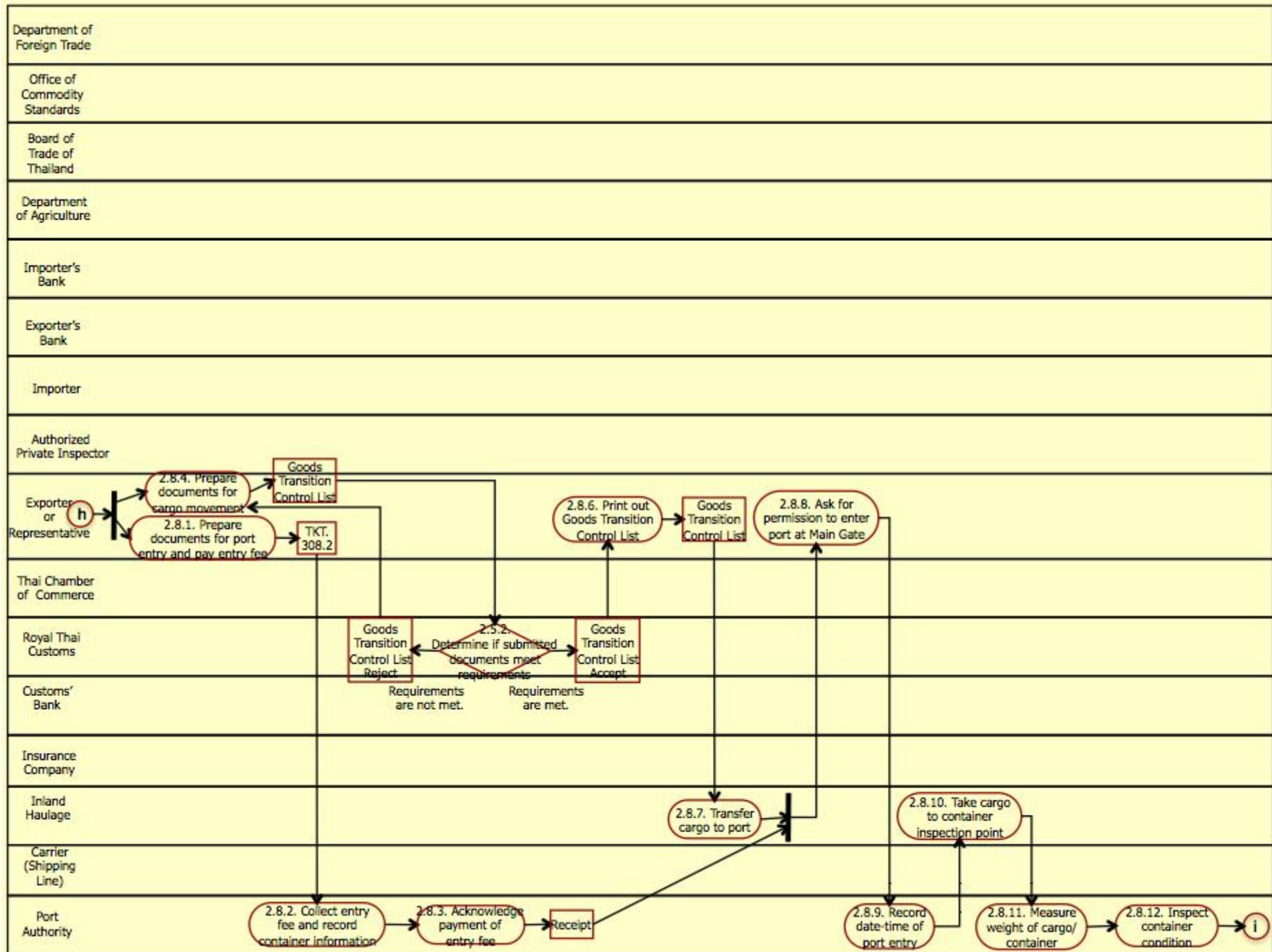


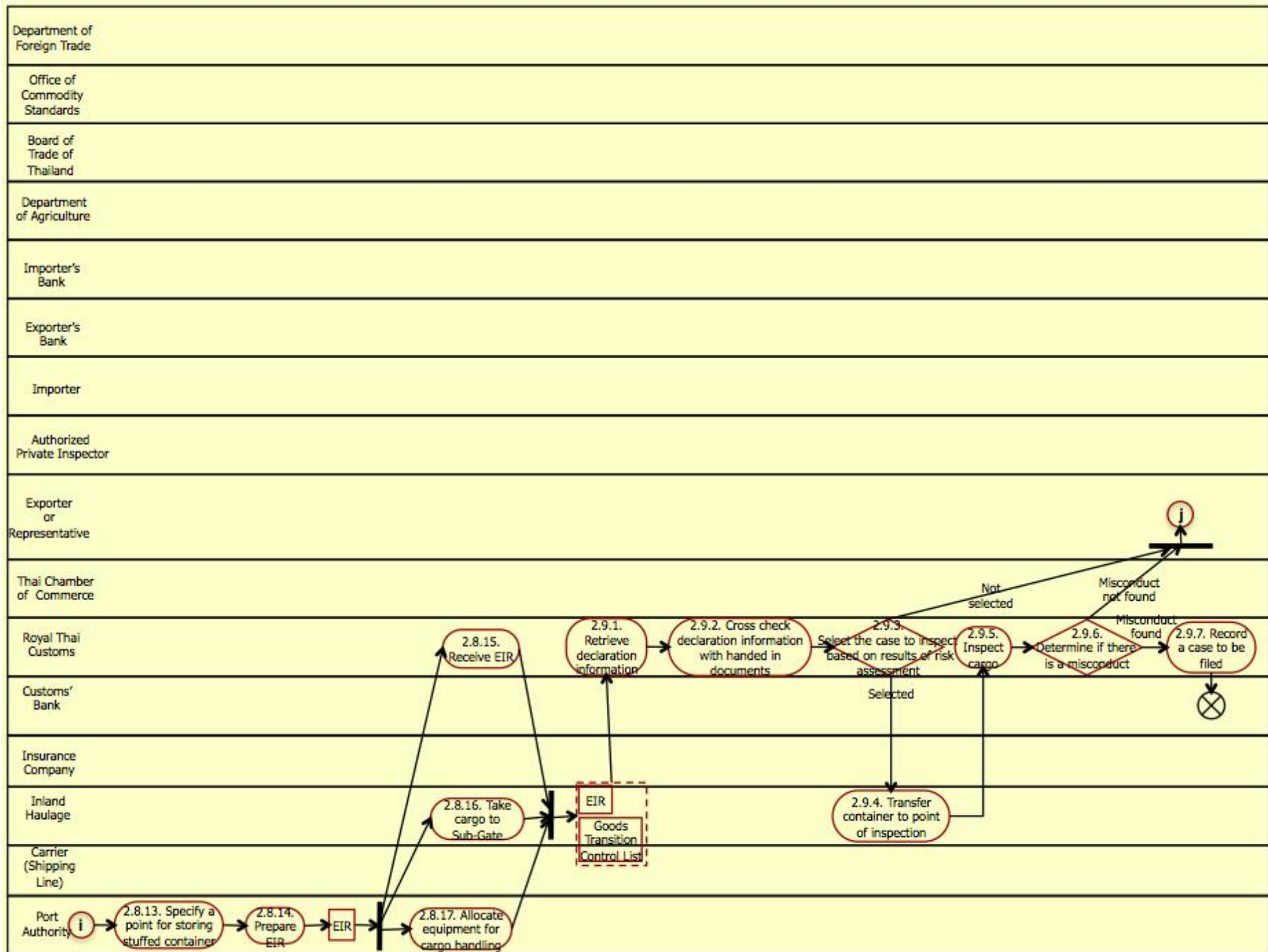


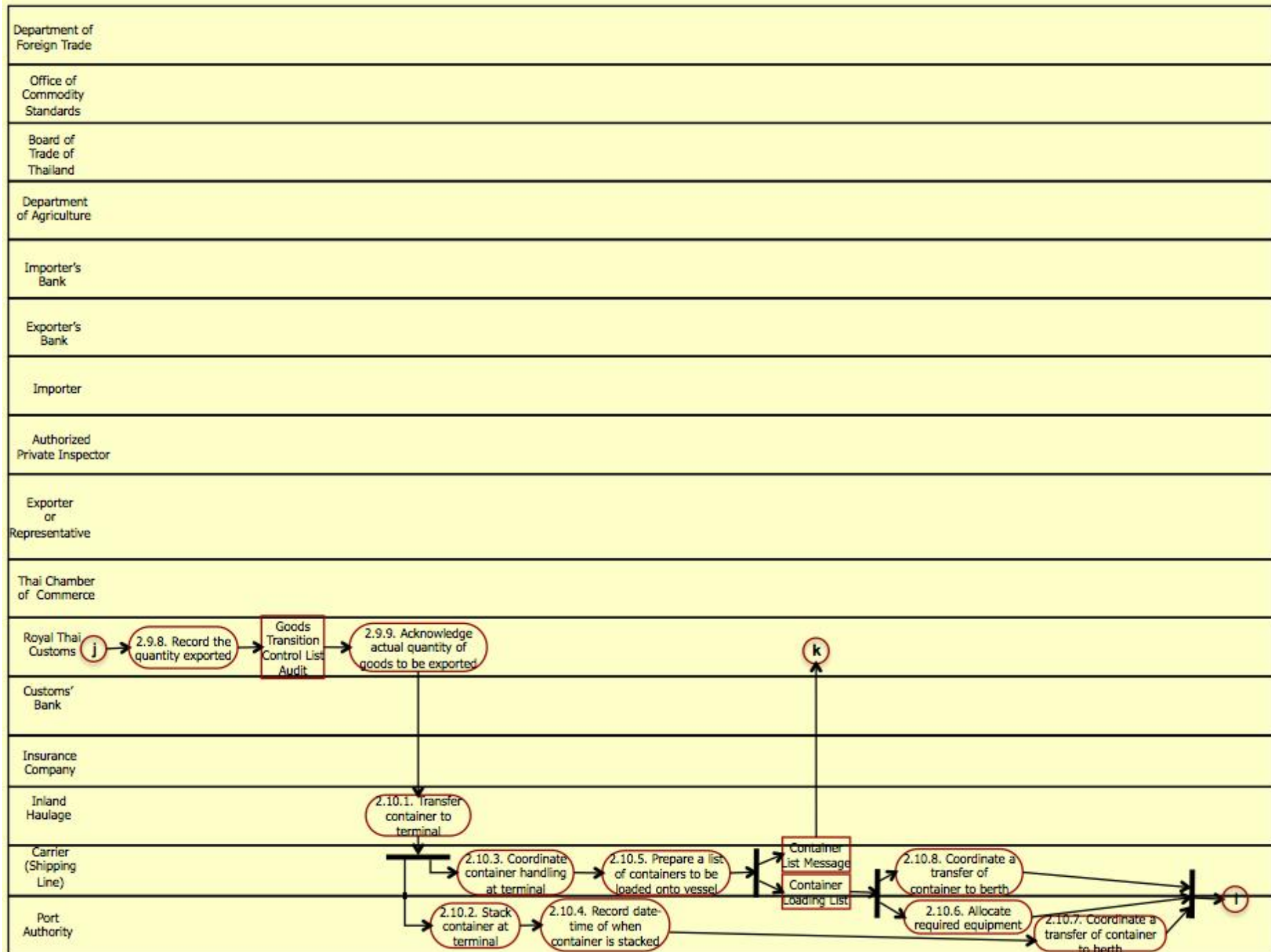


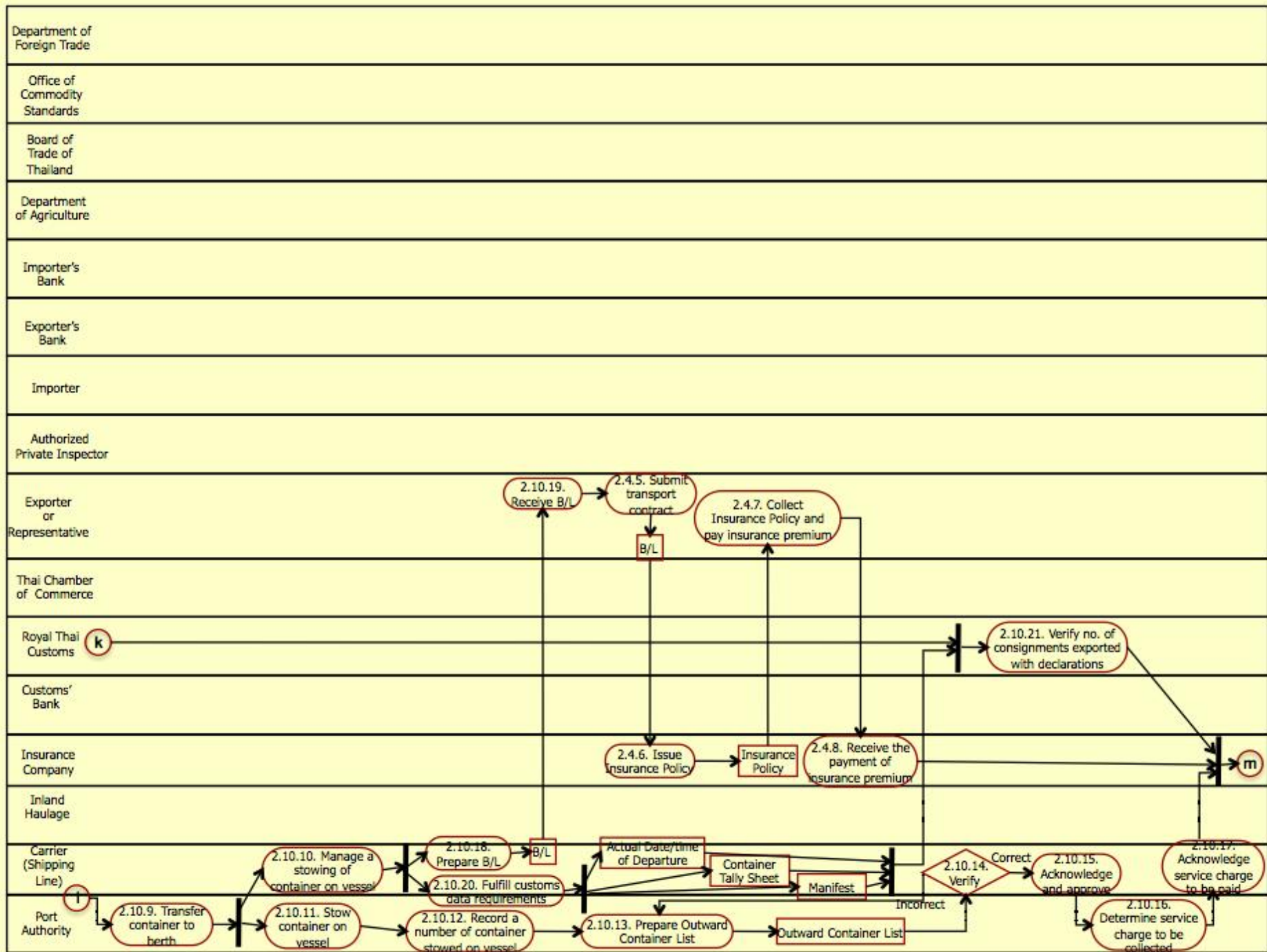


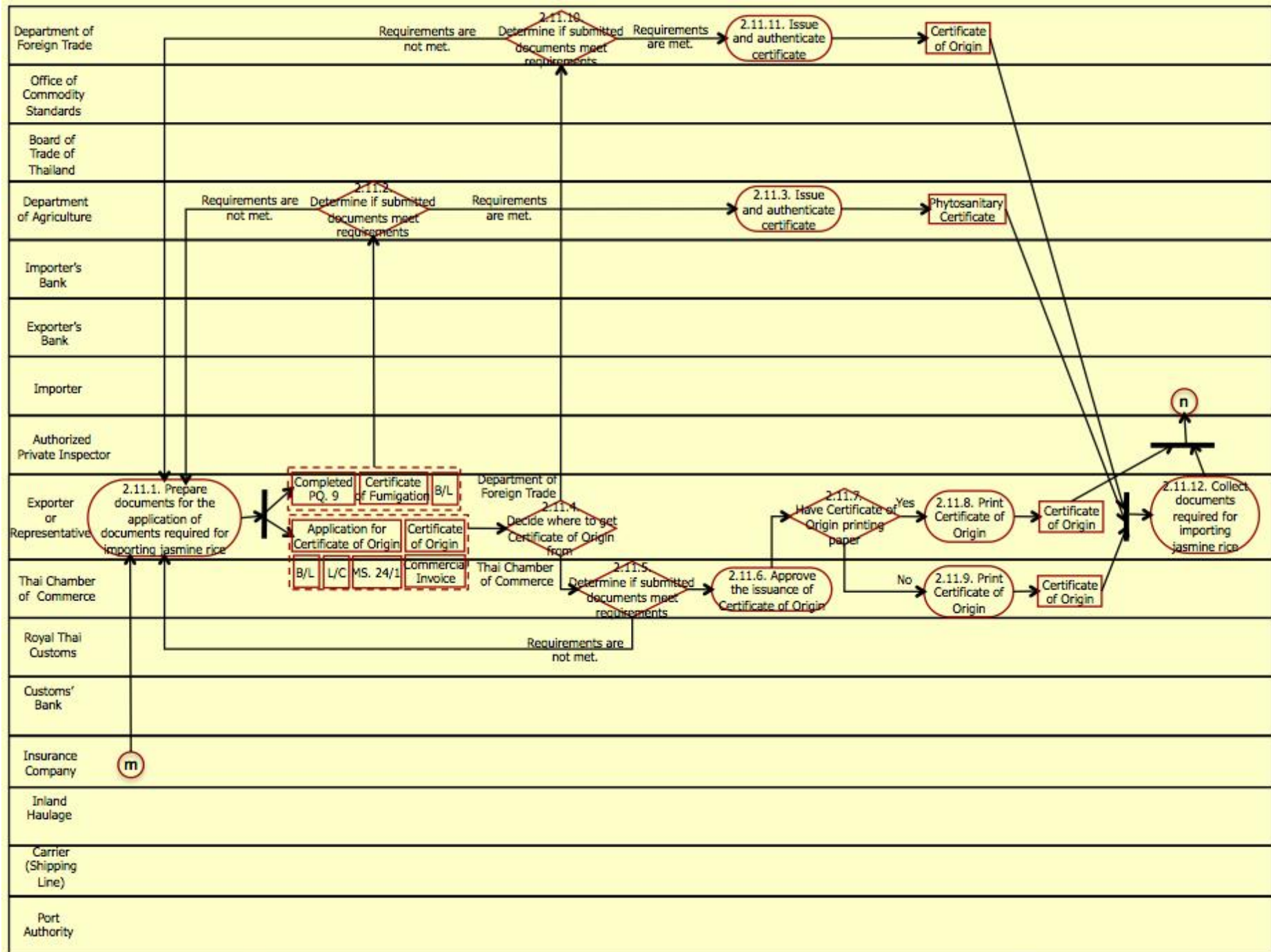


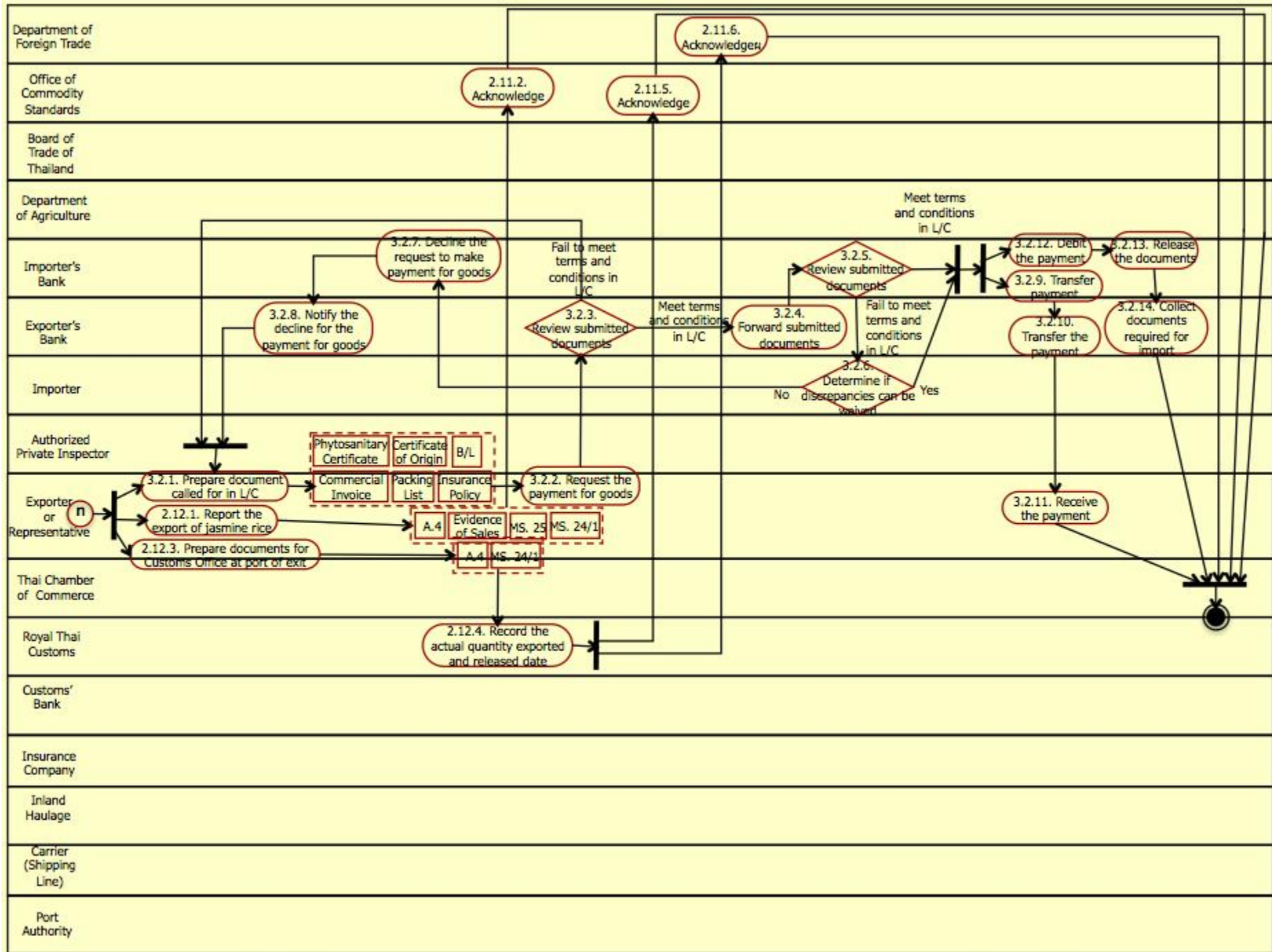














## A5. Analysis of jasmine rice export business process and recommendations for improvement

The table below provides a summary of the analysis of each business process in terms of (1) procedural requirements, (2) data and documentary requirements, (3) the regulations underpinning (or not) the requirements and the existing level of transparency – and predicatability – in the time and cost associated with meeting the procedural, data and documentary requirements. Recommendations resulting from the analysis are also included in the table.

Core business process (use case)	Observations			Recommendations
	Procedural requirements	Data and documentary requirements	Transparency / predictability	
1. Buy				
1.1. Conclude sales contract and trade terms	<p>Activities that have to be carried out to conclude sales contract and trade terms are simple.</p>	<p>Data elements included in Quotation and Purchase Order are very much identical with sample Quotation and Order provided in UNECE Recommendation 1.</p>		
	<p>Procedural requirements that potential jasmine rice exporters have to follow in order to legally export jasmine rice from Thailand are complicated. According to Rice Trading Act (B.E. 2534), potential jasmine rice exporters need to get a permission from Department of Internal Trade. The permission costs 20,000 THB a year. Export Commodity Standards Act (B.E. 2503 and 2523) also requires that the potential jasmine rice exporters register themselves with Office of Commodity Standards. The registration only costs 2,500 THB. However, to register, the potential rice exporters must be members of Thai Rice Exporters Association. To be members of Thai Rice Exporters Association, the potential rice exporters need to pay 20,000 THB entrance fee, 500 THB monthly fee, and 1.50 THB per every ton of rice exported.</p> <p>The permit and registration must be renewed every year.</p>	<p>To apply for the permission from Department of Internal Trade and register with Office of Commodity Standards, lengthy documentary requirements, mostly about the establishment and operation of exporters' company, must be met.</p>	<p>The information about time required, the procedures used, and the fees are made available on the internet.</p>	<p>Rethink the necessity of the procedural requirements related to the acquisition of yearly permit for jasmine rice export from Department of Internal Trade.</p> <ul style="list-style-type: none"> <li>The yearly permit for exporting jasmine rice may not contribute toward the vision of Department of Internal Trade, i.e., promoting trade, ensuring fair competition, and developing market mechanisms favorable to agriculturists, consumers, and business operators.</li> </ul> <p>Consider merging procedural requirements related to the acquisition of yearly permit for jasmine rice export from Department of Internal Trade and the registration of jasmine rice exporter with Office of Commodity Standards and designating Office of Commodity Standards as the organization in charge.</p> <p>Consider eliminating the permit application fee.</p>

Core business process (use case)	Observations			Recommendations
	Procedural requirements	Data and documentary requirements	Transparency / predictability	
	Qualifications of jasmine rice exporter set by laws and regulations create high barriers for traders to enter jasmine rice export business.			
<b>2 Ship</b>				
2.1. Obtain export permit	In addition to obtaining a permission from Department of Internal Trade, jasmine rice exporters have to get a permission from Department of Foreign Trade. This permit (A. 4) is valid for one-time export of jasmine rice. Exporters can submit the application for the permit in person or via web-based EDI system. Regardless of the application submission methods, exporters still have to travel to the pre-specified location to collect the permit.	<p>There are many redundant data requirements in the manual process. Exporters have to prepare 5 documents that require just about the same data.</p> <p>With the electronic process data redundancies are removed. Data requirements of existing paper forms have been harmonized to some extent. To apply for the permit, exporters only have to fill in one application form and attach the evidence of sales as an attachment when submitting the application.</p> <p>A. 4 is a regulatory document that is only used by Thai government agencies, including Board of Trade of Thailand, Royal Thai Customs, and Office of Commodity Standards.</p>	Department of Foreign Trade's permit/certificate issuing system does not have "help" features, such as auto-correct and auto-calculation. Given no detailed instructions provided, exporters provide requested data on the basis of their interpretation. There are no standard ways for providing data for each requested field. (based on the interview conducted in 2009)	<p>Implement a fully paperless permit and certificate issuing system that allows the electronic application, approval, and issuance of the permits and certificates, especially those that are used domestically.</p> <p>Equip the system with auto-correct and auto-calculation features to assist the applicants in completing the online application forms. Additional instructions on how to complete the application for permits/certificate should be provided.</p> <p>Enable electronic sharing of A. 4 and supplementary document used in A. 4 application, i.e., Evidence of Sales. The need for exporters to resubmit Evidence of Sales to other government agencies and to collect A. 4 can be eliminated.</p>
2.2. Arrange transport	<p>The transport is arranged from exporter's premise to port of destination. Often, this process is handled by exporter's representative, i.e., freight forwarders.</p> <p>The reservation for cargo space, vessel, and inland transport can be done using various means, such as online reservation system, email, phone, or fax, depending on the facilities that carriers (shipping lines) and inland haulage operators have.</p>	<p>Data required for the arrangement of inland and border-crossing transports are kept at the minimum. Carriers (shipping lines) and inland haulage operators do not ask for data that they do not need.</p> <p>Data and forms used in the arrangement of inland and border-crossing transports are not standardized.</p>		

Core business process (use case)	Observations			Recommendations
	Procedural requirements	Data and documentary requirements	Transparency / predictability	
	According to the World Bank's LPI Report 2010, the quality of logistics quality and competence in Thailand was 3.16 (1=low, 5=high).			
2.3. Arrange the inspection and fumigation	Jasmine rice exporters have to schedule the inspection and fumigation date with Board of Trade of Thailand and Department of Agriculture. Officers from Board of Trade of Thailand and Department of Agriculture have to be aware of when the inspection and fumigation are going to take place as they may go observe.	<p>A. 4 and Evidence of Sales have to be attached as supplementary documents when submitting MS. 13/1 to Board of Trade of Thailand. Evidence of Sales is also a supplementary document for the application of A. 4.</p> <p>MS. 13/1 has to be signed by exporter, officer from Board of Trade of Thailand, and authorized private inspector.</p> <p>Data requirements of A. 4, MS. 13/1, and PQ. 9 are almost identical.</p> <p>PQ. 9's data requirements are consistent with the International Standards for Phytosanitary Measures No. 12: Guidelines for Phytosanitary Certificates (2001).</p> <p>The formats of MS. 13/1 and PQ. 9 are not in line with UN Layout Key.</p>	<p>Laws, rules, and regulations from Ministry of Commerce and government agencies under its administration stress the need for exporters to have to-be-exported jasmine rice examined. They do not provide instructions on how to apply for Certificate of Product Standards (MS. 24/1).</p> <p>Ministry of Agriculture and Cooperatives Regulation on the Application for and the Issuance of Phytosanitary Certificate (B.E. 2550) and Notification of Department of Agriculture Re: Application Form for Phytosanitary Certificate do not provide clear instructions on what exporters have to do to apply for Phytosanitary Certificate. The latter only identifies relevant forms.</p>	<p>Harmonize data requirements across different permit/certificate application forms in order to remove multiple submissions of identical pieces of data.</p> <p>Make available electronic submission and processing of MS. 13/1.</p>
2.4. Obtain cargo insurance	Procedural requirements are straightforward. It can be done right after exporters have successfully arranged inland and border-crossing transports and in parallel with 2.3.	Data that exporters provide to insurance companies include data about description of goods and transport arrangements.		
2.5. Provide customs declaration	The provision of Export Declaration is simple. It can be completed via e-Export system in 30 minutes.	<p>The provision of Export Declaration must be in the format that Royal Thai Customs specifies.</p> <p>Data requirements have been standardized across Royal Thai Customs' information systems, but have not been harmonized with the international standard.</p>	Instructions on how to provide Export Declaration are clearly provided in Notification of Royal Thai Customs No. 116/2549 Re: Electronic Customs Clearance and Notification of Royal Thai Customs No. 39/2550 Re: Manual for e-Export System.	Harmonize customs data requirements with the international standard.

Core business process (use case)	Observations			Recommendations
	Procedural requirements	Data and documentary requirements	Transparency / predictability	
2.6. Collect empty container from yard	The collection of empty container from the container yard requires a coordination among carrier, port authority, and inland haulage. The process is manual, but straight forward.	Data requirements of TKT 306 are kept to the minimum. It requires 4 signatures, i.e., 1 from carrier and 3 from port officers working in 3 different departments.	Rules and regulations regarding the collection of empty container from the container yard are not found.	<p>Make Rules and regulations regarding the collection of empty container from the container yard publicly accessible.</p> <p>Automate processes related to port administration and management.</p>
2.7. Stuff container	Laboratory examination is conducted after the fumigation. If laboratory examination shows negative results, exporters have to bring in a new lot of jasmine rice. The new lot of jasmine rice has to go through physical examination, fumigation, and laboratory examination again.	<p>This process requires authorized private inspector to record inspection results in MS. 13/1 as well as issue Certificate of Analysis and Certificate of Fumigation.</p> <p>Jasmine rice exporters use completed MS. 13/1 and Certificate of Analysis to request Board of Trade of Thailand to issue MS. 24/1.</p> <p>MS. 24/1 is a regulatory document that is only used by Thai government agencies.</p> <p>Jasmine rice exporters use Certificate of Fumigation to supplement PQ. 9 when requesting the issuance of Phytosanitary Certificate from Department of Agriculture.</p>	<p>Notification of Ministry of Commerce No. 1 (B.E. 2545) and 2 (B.E. 2549 Re: Instructions for Standard-based Inspection of Goods under the Standard Scheme and Thai Jasmine Rice explains in details what authorized private inspectors have to do when conducting both physical and laboratory examination on jasmine rice to be exported.</p> <p>Notification of Ministry of Commerce Re: The Classification of Jasmine Rice as a Controlled Product under the Standard Scheme and Specifications of Thai Jasmine Rice (B.E. 2549) identifies different types of jasmine rice and their standard specifications.</p>	<p>Consider rearranging the sequence of inspection and fumigation, i.e., to-be exported jasmine rice should go through physical examination and laboratory examination to make sure that it has the quality specified by importer prior to having it fumigated.</p> <p>Allow exporters to electronically submit Certificate of Analysis to Board of Trade of Thailand.</p> <p>Enable electronic approval of MS. 13/1, as well as issuance and sharing of MS. 24/1 among relevant government agencies so that the need for exporters to travel to Board of Trade of Thailand to physically submit Certificate of Origin and collect MS. 24/1 can be removed.</p>
2.8. Transfer to port of departure	<p>Exporters have to inform Port Authority about the transfer of to-be exported jasmine rice to port 1 hour prior to the arrival of the containerized cargo at port. To do so, exporters need to submit TKT. 308.2 in person or via fax. If TKT. 308.2 is submitted via fax, exporters have to present the original copy when the cargo is about to enter port.</p> <p>Port officer has to enter the data provided in TKT. 308.2 into port information system.</p>	<p>Prior to having to-be exported jasmine rice transferred to port of exit, exporters have to submit 2 documents, i.e., Goods Transition Control List to Royal Thai Customs and TKT. 308.2 to Port Authority. Goods Transition Control List contains data about a to-be exported consignment, an inland transport, border-crossing transport, a container that to-be exported jasmine rice has been stuffed in, and port of destination. Data required by TKT. 308.2 is a subset of Goods Transition Control List, i.e., border-crossing transport, a container that to-be</p>	<p>Notification of Port Authority of Thailand Re: The Delivery of Outward Containerized Cargo to Port's Container terminal (B.E. 2547) explains to some extent what exporters have to do.</p> <p>Instructions on how to complete Goods Transition Control List are clearly provided in Notification of Royal Thai Customs No. 116/2549 Re: Electronic Customs Clearance and Notification of Royal Thai Customs No. 39/2550 Re: Manual for e-Export System.</p>	<p>Harmonize data requirements of Royal Thai Customs and Port Authority of Thailand.</p> <p>Enable electronic data sharing between Royal Thai Customs and Port Authority of Thailand.</p>

Core business process (use case)	Observations			Recommendations
	Procedural requirements	Data and documentary requirements	Transparency / predictability	
	Exporters also have to pay port entry fee. Without a proof of port entry fee payment, port officer will not let inland haulage in.	exported jasmine rice has been stuffed in, and port of destination.		
		Port officer have to prepare Equipment Interchange Receipt (EIR) twice, i.e., one in the information system of Port Authority and another in the information system of Royal Thai Customs.	The need for port officer to enter EIR data in the information system of Royal Thai Customs is addressed in Notification of Royal Thai Customs No. 116/2549 Re: Electronic Customs Clearance.	
2.9. Clear goods through customs	<p>Customs clearance process is simple and straightforward.</p> <p>In this process, customs officer needs to make sure that the to-be exported cargo is exactly the same as the declared one.</p> <p>Inspection of outward containerized cargo is subject to customs risk assessment.</p>	Toward the end of the process, customs officer has to record the actual quantity exported into customs information system.	<p>Instructions on customs clearance and customs inspection are clearly provided in Notification of Royal Thai Customs No. 116/2549 Re: Electronic Customs Clearance.</p> <p>Export Commodity Standards Act (B.E. 2503) and Amended (B.E. 2523) and Notification of Ministry of Commerce Re: Customs Checkpoints where Exporter of Jasmine Rice Must Present Certificate of Product Standards (MS. 24/1) state that exporters of products under the standard scheme must present MS. 24 to Customs officer at certain ports of exit. The law, however, does not indicate when exactly.</p>	
2.10. Handle cargo and stow on vessel	<p>Carrier agents submit Container List Message, Manifest, and Tally Sheet, that have been prepared using customs specified format, to Royal Thai Customs via the information system of Royal Thai Customs.</p> <p>Carrier agents, on the other hand, submit Container Loading List to Port Authority by fax or in person. According to Port Authority of Thailand Regulation No. 3: Practical Guideline on the Use of Port Facilities and Services (B.E. 2547), they are also required to bring in a</p>	<p>There are 5 documents that provide data related to multiple consignments. These 4 documents are prepared in this process. Carrier agents need to prepare Container Loading List for Port Authority as well as Container List Message, Manifest, and Container Tally Sheet for Royal Thai Customs. Port Authority needs to prepare Outward Container List for carrier agents and seeks their approval prior to claiming the payment for service charge.</p> <p>These 5 documents contain 135 data</p>	<p>Notification of Royal Thai Customs No. 116/2549 Re: Electronic Customs Clearance and Port Authority of Thailand Regulation No. 3: Practical Guideline on the Use of Port Facilities and Services (B.E. 2547) clearly outline procedural and documentary requirements that carrier agents have to fulfill when handling cargo and stow it on vessel.</p>	Harmonize data requirements of Royal Thai Customs and Port Authority of Thailand.

Core business process (use case)	Observations			Recommendations
	Procedural requirements	Data and documentary requirements	Transparency / predictability	
	diskette containing Container Loading List to the office of port officer-in-charge.	elements. They all require data about vessels, i.e., their name, identifier, and voyage no. They, except the Manifest, require data about containers that will travel with the vessels. One-time submission data mostly are message / document specific.		
2.11. Prepare documents required by importer	<p>The process of obtaining Certificate of Origin from Thai Chamber of Commerce is fully electronic. The application for and the collection of the Certificate can be done electronically.</p> <p>The process of obtaining Certificate of Origin from Department of Foreign Trade is semi-electronic. The application can be done online, but exporters have to go to pre-specified location to collect the Certificate.</p> <p>The process of obtaining Phytosanitary Certificate is fully manual.</p>	The data requirements of Certificate of Origin and Phytosanitary Certificate are in line with those used internationally.	<p>The information on how to obtain Certificate of Origin from Thai Chamber of Commerce can be found on Thai Chamber of Commerce's website.</p> <p>Department of Foreign Trade's permit/certificate issuing system does not have "help" features, such as auto-correct and auto-calculation. Given no detailed instructions provided, exporters provide requested data on the basis of their interpretation. There are no standard ways for providing data for each requested field. (based on the interview conducted in 2009)</p> <p>Ministry of Agriculture and Cooperatives Regulation on the Application for and the Issuance of Phytosanitary Certificate (B.E. 2550) and Notification of Department of Agriculture Re: Application Form for Phytosanitary Certificate do not provide clear instructions on what exporters have to do to apply for Phytosanitary Certificate. The latter only identifies relevant forms.</p>	Explore the possibility to exchange Certificate of Origin and Phytosanitary Certificate with relevant government agencies of importing country.
2.12. Verify the accuracy/authenticity of exported cargo	MS. 25 can be prepared and submitted to Office of Commodity Standards electronically. A. 4, MS. 24/1, and Evidence of Sales have to be submitted to Office of Commodity Standards in person.	Exporters are required to record the issuing date and identifier of both Commercial Invoice and Bill of Lading as well as payment information in MS. 24/1. They are required to provide the details of actual jasmine rice exported to Office	<p>Notification of Royal Thai Customs No. 116/2549 Re: Electronic Customs Clearance specifies when and how exporters submit A. 4 and MS. 24/1 to Royal Thai Customs.</p> <p>Laws and regulations of Ministry of</p>	<p>Eliminate</p> <ul style="list-style-type: none"> <li>The need for exporters to record the issuing date and identifier of both Commercial Invoice and Bill of Lading as well as payment information in MS.</li> </ul>

Core business process (use case)	Observations			Recommendations
	Procedural requirements	Data and documentary requirements	Transparency / predictability	
	<p>A. 4 and MS. 24/1 can be submitted to Royal Thai Customs at port of exit either in person or by mail.</p>	<p>of Commodity Standards in MS. 25.</p> <p>Exporters are required to send a copy of A. 4 and MS. 24/1 to Royal Thai Customs. Another copy of A. 4 and MS. 24/1 together with Evidence of Sales have to be submitted to Office of Commodity Standards. Evidence of Sales is also a supplementary document for the application of A. 4 and MS. 24/1.</p> <p>Royal Thai Customs is required to record the actual quantity of jasmine rice exported and the released date in A. 4 and MS. 24/1. It should be noted that Royal Thai Customs has already recorded these data in its information system in 2.9. Royal Thai Customs is also required to forward completed A. 4 and 24/1 to both Department of Foreign Trade and Office of Commodity Standards.</p> <p>It should be noted that Office of Commodity Standards is one division of Department of Foreign Trade.</p>	<p>Commerce address the need for exporters to report the details of actual jasmine rice exported.</p> <p>Export Commodity Standards Act (B.E. 2503) and Amended (B.E. 2523) and Notification of Ministry of Commerce Re: Customs Checkpoints where Exporter of Jasmine Rice Must Present Certificate of Product Standards (MS. 24/1) state that exporters of products under the standard scheme must present MS. 24 to Customs officer at certain ports of exit. The law, however, does not indicate when exactly.</p> <p>Ministry of Commerce Regulation on the Export of Products under the Standard Scheme (B.E. 2504) indicates when exporters have to submit MS. 25.</p>	<p>24/1 as well as to provide the details of actual jasmine rice exported to Office of Commodity Standards in MS. 25.</p> <ul style="list-style-type: none"> <li>• The need for exporters to send a copy of A. 4 and MS. 24/1 to Royal Thai Customs.</li> <li>• The need for Royal Thai Customs to record the actual quantity of jasmine rice exported and the released date in A. 4 and MS. 24/1 and forward completed A. 4 and 24/1 to both Department of Foreign Trade and Office of Commodity Standards.</li> </ul> <p>Enable Royal Thai Customs to electronically share data about the actual quantity of jasmine rice exported and the released date with Department of Foreign Trade and Office of Commodity Standards. With efficient sharing of electronic data, process 2.12 can be combined with process 2.9. Figure A5-1 presents a to-be business process of combined process 2.9 (Clear goods through Customs) and process 2.12 (Verify the accuracy/authenticity of exported cargo). As shown in Figure A5-2, doing so allows the elimination of process 2.12 as an unnecessary regulatory burden to exporters.</p>
3. Pay				
3.1. Establish payment guarantee			This process follows Uniform Custom and Practice for Documentary Credit, International Chamber of Commerce Publication No. 500.	
3.2. Claim payment for			This process follows Uniform	

Core business process (use case)	Observations			Recommendations
	Procedural requirements	Data and documentary requirements	Transparency / predictability	
goods			Custom and Practice for Documentary Credit, International Chamber of Commerce Publication No. 500.	
<b>Overall</b>	<p>Each business process has value to the delivery of goods, the protection of national interests, and the prevention of the spread of quarantine pest. All activities that have to be carried out do contribute to the objectives of the business processes. They are not complicated and can be completed in reasonable time. However, some, the report of the actual jasmine rice exported in particular, are seen as duplications of work.</p>	<p>There are 38 documents involved in the export of jasmine rice from Thailand to the United States. Among 38 documents, 33 documents provide trade- and transport-related data of a single consignment. Examples of these documents include Commercial Invoice, Export Permits, and Certificates. These 33 documents contain altogether 1,058 data elements. Among these data elements, 237 of them are provided once while 160 of them are provided more than once. The top three data elements that are repeated the most are exporter's name, goods description, and exporter's address.</p> <p>These numbers suggest that trade- and transport-related data have not been efficiently shared among parties involved in the export of jasmine rice. It creates redundant and duplicate reporting more than needed.</p>	<p>Relevant laws, regulations, and rules are to a great extent published and readily accessible. The level of precision, however, varies.</p>	<p>Harmonize data requirements involved in the export of jasmine rice from Thailand to the United States and make sure that they are aligned with the international standard.</p> <p>Integrate information systems of government agencies involved in the export of jasmine rice.</p> <p>Ensure that all laws, regulations, and rules are publicly available and can be easily accessed.</p> <p>Review existing laws, regulations, and rules. Make sure that they are precise and straightforward for all relevant parties to effectively comply.</p>



Figure A5-1. Proposed Simplification of process 2.12. Verify the accuracy/authenticity of exported cargo

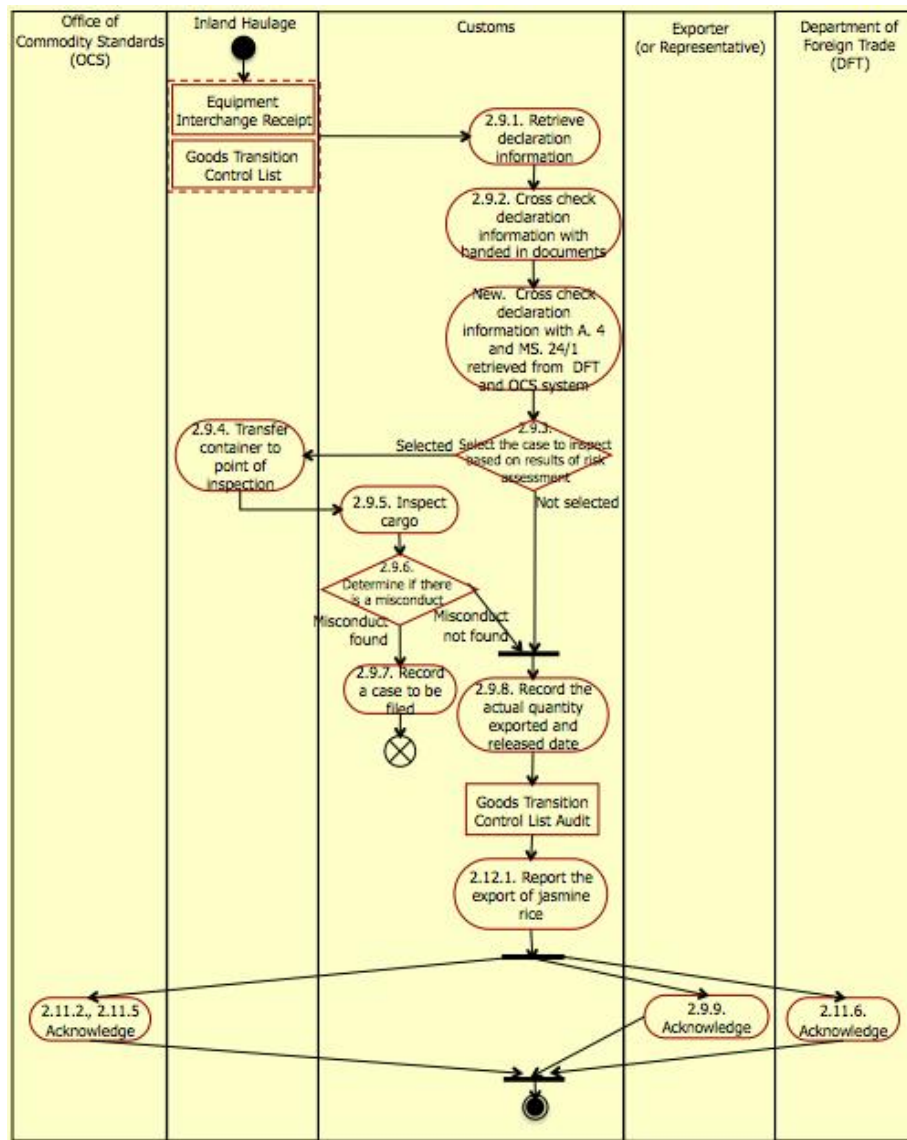
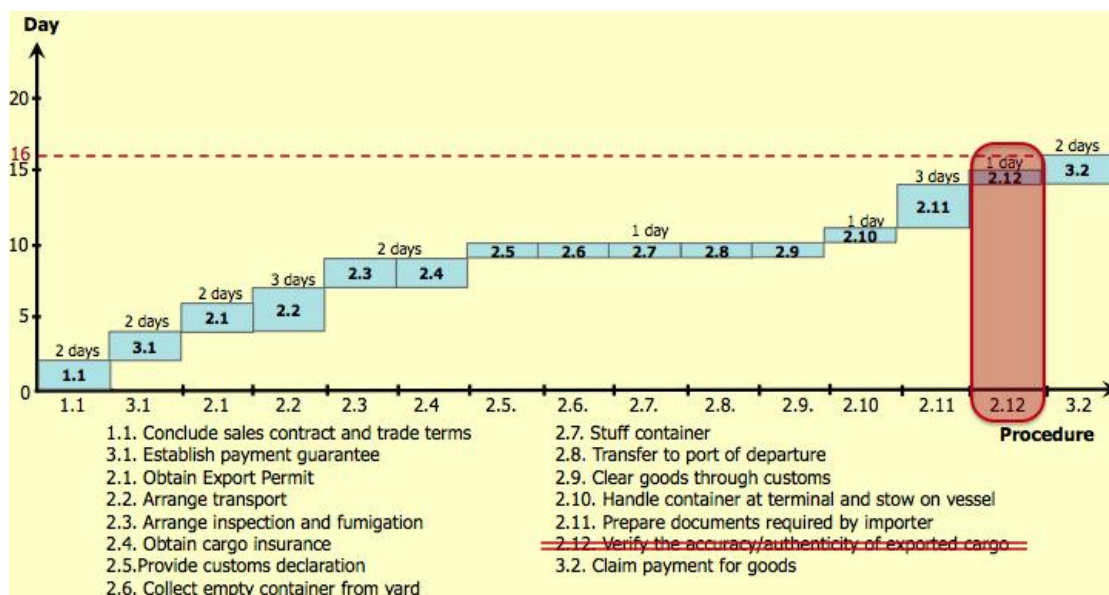


Figure A5-2. Elimination of regulatory burden to jasmine rice exporters



## A6. Conclusion

Following a discussion of the economic importance of jasmine rice export for the Thai economy, the scope of the business process analysis to be conducted was set out. The 15 key business processes that have to be completed in order to export jasmine rice from Thailand to the United States were then fully documented using the approach presented in the UNNExT BPA Guide. The related business and regulatory requirements were discussed and analyzed, resulting in several practical and specific recommendations for improvement. They ranged from:

- The reorganization of activities in more appropriate order;
- The improvement of existing laws, regulations, and rules in terms of their precision and completeness; and
- The elimination of redundant procedural and documentary requirements by combining those with similar objectives, harmonizing data requirements, and enabling electronic sharing of data between relevant government agencies.

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