



Trade Facilitation in India: An Analysis of Trade Processes and Procedures

by

*Prabir De**

*Fellow, Research and Information System for Developing Countries (RIS), New Delhi, India. Author is grateful to Sandip Singha Roy for his sincere assistance in the field survey. Discussions with Yann Duval were extremely useful in carrying out the technical part of the study. Consultations with Sailendra Jain, Rajnish Tewari, Pradeep Singla, B K Singh, Sandeep Gulati, Rajesh and Dhanushri Shukla, as well as comments from anonymous referees and participants to the ARTNeT Research Team Meeting on Improving Regional Trade Procedures, 4 October 2010 in Kuala Lumpur are gratefully acknowledged. This work was carried out with the aid of a grant from IDRC, Canada and is part of an ARTNeT Trade Facilitation Study on Improving Regional Trade Procedures and Process. The support of the United Nations Economic and Social Commission for Asia and the Pacific is gratefully acknowledged. The opinion figures and estimates are the responsibility of the author and should not be considered as reflecting the views or carrying the approval of the United Nations, ARTNeT and RIS. Any errors are the responsibility of the author, who can be contacted at prabirde@hotmail.com

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Executive Summary

Moving goods across borders requires meeting a vast number of commercial, transport and regulatory requirements. Inefficiencies in complying with these requirements often create unnecessary delays and costs. A source of tremendous inefficiencies is associated with the preparation of transport and regulatory documents, unclear border procedures, and overzealous cargo inspection. We need to understand how much these add to the costs of doing business across border and which way they affect the growth in trade. Besides, estimating time and costs of the procedures and processes would help policy makers and other stakeholders to enhance the regional and global trade. This study undertakes Business Process Analysis (BPA) to help assess the trade processes and procedures. One of the research objectives in BPA is to identify administrative and procedural barriers that unnecessarily impede the participation of more firms and more countries in regional and global trade, and propose solutions.

Our BPA covers India's exports of cotton yarn to Bangladesh, fresh vegetables to Gulf and fruits to EU, and India's import of rubber tyres from Sri Lanka. The BPA maps show total time taken to complete the export procedures is about 31 days, which is very high compared to any international benchmark. The maximum time goes into getting payment from Bangladeshi importer, whereas transportation of goods comes next to it. The whole process costs an average of US\$ 542 per container, of which insurance and inland transportation cost are the major components. This study also suggests that besides tariff, bottlenecks are in inland transportation, customs clearance and getting payment from importer.

Unlike export of cotton yarn, the export of vegetables to Gulf is not executed through letter of credit or advance payment. However, the export of fruits to EU is done on the basis of advance payment in our particular case study. It takes about 29 days for export of vegetables and 33 days for export of fruits till the payment is received from the importers. The maximum time goes into sending the goods from India to EU, whereas payment comes next to it. In case of export of vegetables, getting payment from importer takes the most of the time, whereas transportation time comes next to it. The whole process of exporting vegetables costs an average of US\$ 1573 per container, whereas the average cost is US\$ 2031 per container in case of export of fruits to EU. However, in both cases, transportation cost (domestic and international) has been the major trade barrier. The time-procedure charts show that total time taken to complete the trade procedures is about 29 days for vegetables and 33 days for fruits. It also suggests that bottlenecks are in transportation, customs clearance and getting payment from importer.

In case of import of rubber tyres from Sri Lanka, the trade processes and procedures are relatively simple. The import procedure of rubber tyres consists in placing order from Indian office to Sri Lankan subsidiary, clearing custom at Indian port, unloading the goods and inland transportation. It takes about 17 days to import rubber tyres from Sri Lanka including settling the payment. Contrary to popular belief, the maximum time actually goes into making the payment. Cost of inland transportation is also major barrier to trade. The whole process of importing rubber tyres costs an average of US\$ 360 per container with a maximum and minimum range of US\$ 393 and US\$ 326, respectively. Overall, the time and cost of trade processes and procedures estimated in this study call for greater attention to trade facilitation.

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1. Introduction

Countries across the world have been affected by the outgoing global economic and financial crisis. India is no exception. India's exports have suffered a decline in the last one and a half years due to a contraction in demand in the traditional markets of Indian exports. Before the crisis turned severe, Indian exports witnessed a robust growth and reached a level of US\$ 168 billion in 2008-09 from US\$ 63 billion in 2003-04. India's share of global merchandise trade also increased to 1.45 percent in 2008 from 0.83 percent in 2003.¹ Indian agriculture sector could not escape the heat of the global financial crisis; its export decelerated by 23.46 percent in 2009, compared to 2008². However, export of agriculture continued to play an important role. India still is one of the leading net exporters of agricultural products in the world. In 2009, India had an export of US\$ 16.66 billion of agricultural products in 2009, sharing 1.43 percent of world exports in agricultural goods.³ The share of agricultural exports in the country's total exports has marginally increased to 10.59 percent in 2009-10 from 10.22 percent in 2008-09. However, agriculture's share in country's total merchandise export has been hovering around 10-12 percent since 2004-05. The paradox is while India is a large, low cost agricultural producer, its share in global agriculture exports is minuscule. India produces nearly 11 percent of all the world's vegetables and 15 percent of all fruits, yet its share in global exports of vegetables is only 1.7 percent and in fruits a small 0.5 percent.⁴ To reap the benefits of global market, a group of literature concludes that more efficient supply chains and better access to services will make Indian agriculture globally competitive and create the conditions for mutually beneficial trade negotiations. To a great extent, simplification of trade processes and procedures is envisaged as key to improving competitiveness of agricultural exports from India.

India announced the Foreign Trade Policy 2009-2014 (FTP), and the country aims to arrest and reverse the declining trend of exports and to provide additional support

¹ Calculated based on Export – Import Databank, Ministry of Commerce & Industry, Government of India.

² Refer Table II.15, International Trade Statistics 2010, World Trade Organisation (WTO).

³ Ibid

⁴ Refer, for example, World Bank (2007)

especially to those sectors which have been hit badly by recession in the developed world. By 2014, India expects to double its exports of goods and services in the world market (Government of India, 2009). In order to bring down transaction costs, two important policy measures undertaken through FTP 2009-2014 are procedural rationalization and improvement in infrastructure related to exports. Nonetheless, importance of trade costs in enhancing India's trade is thus realized by the policy makers, perhaps for the first time ever since India embraced to globalisation process (see Box 1).

Box 1: Report of the Task Force to Reduce Transaction Costs

Exporters incur transaction costs not only in transportation of goods to various destinations and dealing with banks, but also in complying with various laws and procedures, besides meeting onerous documentation requirements. Government of India constituted a task force to rationalise trade process in India. The report of the task force to reduce transaction costs in exports, released in February 2011 by the Commerce and Industry Ministry, Government of India has recommended certain measures that are expected to save Rs 210 billion (about US\$ 450 million) for exporters every year. This amount represents about 0.02 percent of India's exports where exporters suffer transaction costs to the extent of 7-10 percent of exports. The task force report identified 44 issues, where closure has been achieved on 23. Some of these relate to standardisation of charges across ports, rationalisation of freight rates charged by the Container Corporation of India, single-window facility to business users in place of the present method of going to the independent systems of each partner agency in the e-Trade project, extension of single-bond facility for Customs, upgrade of facility at plant quarantine stations and its availability round-the-clock at select Customs stations, reduction in screening charges for air cargo and express cargo, reduction in charges for booking foreign currency, pre-shipment credit in foreign currency at lower rates, etc.

Source: Ministry of Commerce and Industry, Government of India

While India's exports are directed to traditional developed markets, emerging developing countries have become India's major trade partners (e.g. China). There has been a compositional change in India's trade during the last decade and a half in terms of commodity groups and trading countries. India's exports in 2008-09 were primarily driven by machinery and mechanical appliances including electrical machinery and equipment (8.32 percent), iron and steel and their products (8.11 percent), apparel and clothing (7.61 percent), and organic chemicals (4.40 percent), if we keep aside minerals

and gems and jewellery.⁵ On the other, India's imports are driven by intermediate and finished goods, keeping aside minerals and gems and jewellery. For example, machinery and mechanical appliances including electrical machinery and equipment (11.43 percent), iron and steel and their products (4.69 percent), organic and inorganic chemicals (5.36 percent), and plastic and articles (1.41 percent) were the major commodity groups imported by India in 2008-09.⁶ India's trade is likely to witness a major shift in the short to medium term, perhaps due to burgeoning global demand. At the same time, sustaining the trade needs lower trade costs. What is important is how India could bring down those trade costs elements which are critical to India's trade.

Moving goods across borders requires meeting a vast number of commercial, transport and regulatory requirements.⁷ Inefficiencies in complying with these requirements often create unnecessary delays and costs. A source of tremendous inefficiencies is associated with the preparation of transport and regulatory documents, unclear border procedures, and overzealous cargo inspection. We need to understand how much these add to the costs of doing business across border and which way they affect the growth in trade.⁸ Therefore, there is a need to conduct a detailed analysis of procedures and processes involved in India's trade with South Asia and Southeast Asia. Besides, estimating time and costs of the procedures and processes would help policy makers and other stakeholders to enhance the regional and global trade. Business Process Analysis (BPA) is one such technique which helps assess the trade processes and procedures.

One of the research objectives in BPA is to identify administrative and procedural barriers that unnecessarily impede the participation of more firms and more countries in regional and global trade, and propose solutions. As the growing body of research and surveys of those engaging in trade have made it clear, the situation varies greatly across products traded, as well as trade route, origin and destination of these products.

⁵ Data taken from Export Import Databank, Ministry of Commerce and Industry, Government of India.

⁶ Ibid

⁷ Refer, for example, Duval and Utoktham (2009)

⁸ Refer, Duval and Utoktham (2011) which attempted to assess the trade facilitation benefits in Asia and the Pacific region.

Undertaking deeper analysis of the processes small and large firms face when engaging in international trade in various industries may provide useful insights and more practical and specific policy recommendations.

Given above, we propose to conduct the BPA for trade in intermediate and final products of India's exports of cotton yarn, and vegetables and fruits, and import of rubber tyres. The reason for selecting the aforesaid major commodity groups is that the trade in these commodities is very likely to be facilitated by tariff liberalization. Therefore, it is important to understand the detailed procedures and processes including time and costs involved in trade of these major commodity goods, on which India has been gaining comparative advantages.

The UNNEXT/UNESCAP/UNECE Business Process Analysis (BPA) Guide to Simplify Trade Procedures has been used as the core methodology for this study.⁹ We have attempted to provide a detailed outlook of the process mapping of how each of the documents involved in the transaction are processed [and the various actors involved in the process] and the amount and type of time and cost associated with them.

As noted in UN (2009), to reduce the complexity of the international trade transaction and thus costs related to it, UN/CEFACT recommends the implementation of the following measures:¹⁰

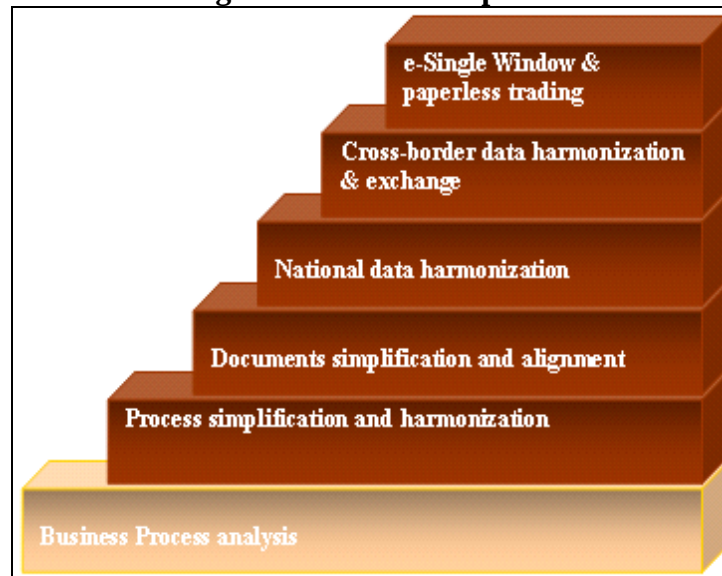
- The simplification and harmonization of trade procedures and where possible, eliminate unnecessary ones;
- The simplification and coordination of administrative procedures at border crossings;
- The simplification of payment systems;
- The simplification, standardization and harmonization of documents required for a trade transaction;

⁹ For further technical details of BPA, please refer UN (2009).

¹⁰ See, for example, UNECE (2006).

- The facilitation of flow of information that controls the movement of goods throughout the transaction (e.g. by applying information and communication technology); and
- The enhancement of trust assessment through a better exchange of information.

Figure 1: Electronic Single Window and Paperless Trade Environment



Source: UN (2009)

International trade transaction encompasses several activities related to trading across border. In one hand, it covers trade procedures relating to commercial, transportation, financial and regulation, while, on the other, it deals with actors and stakeholders engaged in international trade such as traders, government agencies and services providers, to mention a few (UN, 2009). A smooth and simplified trade operation needs wholehearted cooperation among all the actors and stakeholders. As noted in UN (2009), 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.

BPA would lead, according to UN/CEFACT, toward a single window paperless environment as shown in Figure 1. BPA is therefore recommended as the first step to be

taken before undertaking other trade facilitation measures related to the simplification, harmonization, and automation of trade procedures and documents.¹¹

BPA Methodology

BPA is drawn based on Unified Modelling Language (UML)¹² which provides a set of standard graphical notations for business process modelling. According to UN (2009), if the ultimate goal of the business process modelling and analysis is to automate the international trade transaction and move to electronic trade documents exchangeable through the Single Window and paperless trade systems, the use of common standard graphical notations in business process modelling is vital.¹³

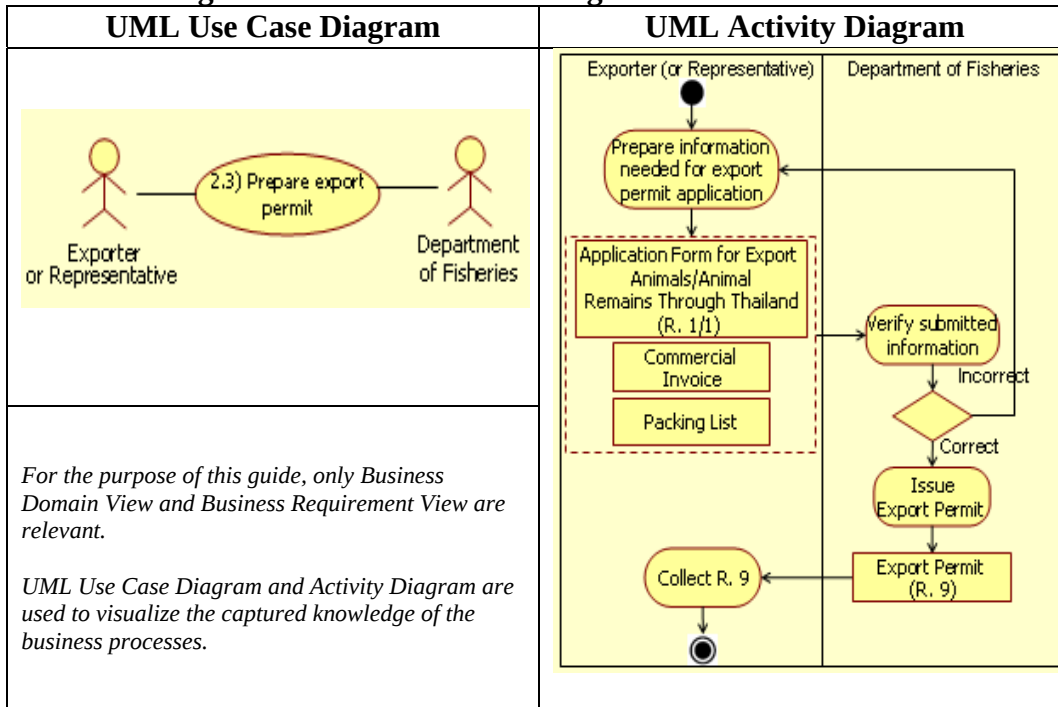
In business process analysis, the **use case diagram** serves as a project's frame of reference. Its purpose is to present a graphical overview of core business processes that are subject to further examination at a greater depth. It indicates all stakeholders that are involved in these business processes and demonstrates all actual associations between these business processes and stakeholders. The **activity diagram** is an elaboration of each business process displayed in the use case diagram. It portrays a sequence of activities and documentary 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 after completing certain ones. Figure 2 shows the UML use case and activity diagrams.

¹¹ Refer, UNECE (2006)

¹² Refer, UML Resource Page, <http://www.uml.org>.

¹³ 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.

Figure 2: The Use of UML Diagram in the BPA Guide



Source: UN (2009)

Rest part of the paper is arranged as follows. Section 2 briefly discusses India's trade in cotton textile (export), vegetables (export) and rubber tyres (import) which we have selected in this study. A discussion on barriers to trade in goods in India is carried out in Section 3, following which BPA maps are drawn for selected export goods in Section 4. This section also provides key messages for policy implications and recommendations. Conclusions are drawn in Section 5.

2. Business Process Analysis (BPA) and India's Trade in Selected Products

India's trade has rebounded in 2010 quite strongly, after facing the global financial crisis during the years 2008 and 2009. Over time, the composition of Indian exports has shifted dramatically away from the developed world toward its neighbours in developing Asia. The US share of Indian exports was cut in half—falling from 22.8 percent in 1999 to 11 percent in 2009—whereas the share going to Europe slipped from 27.6 percent in 1998 to 20.9 percent in 2009.¹⁴ Meanwhile, the portion going to

¹⁴ Calculated based on Direction of Trade Statistics Online Database, IMF

developing Asia essentially doubled from 5.6 percent in 1999 to 12.3 percent in 2009¹⁵. India's trade with South and Southeast Asia follows the same direction. These shifts in the mix of Indian exports underscore a lessening growth impetus from developed markets and an increased reliance on demand from developing Asia. Bangladesh is the major destination of India's export of cotton (HS 52) and textile and clothing. Bangladesh occupies the second rank, next to China, in terms of volume of export of cotton. In 2009-10, India exported US\$ 455.29 million of cotton to Bangladesh, shares 9.87 percent of total Indian export of cotton (Table 1). Likewise, other South Asian countries increasingly source cotton from India.

Table 1: India's Top 15 Export Destinations of Cotton

COUNTRY	2008-2009		2009-2010	
	VALUE	SHARE	VALUE	SHARE
	(US\$)	(%)	(US\$)	(%)
CHINA	391.25	12.43	1,265.68	27.44
BANGLADESH	402.80	12.79	455.29	9.87
PAKISTAN	97.25	3.09	242.77	5.26
KOREA	141.13	4.48	233.56	5.06
TURKEY	91.02	2.89	177.96	3.86
SRI LANKA	143.79	4.57	152.86	3.31
HONG KONG	60.09	1.91	122.94	2.67
INDONESIA	64.11	2.04	106.75	2.31
ITALY	123.10	3.91	106.11	2.30
VIETNAM	30.66	0.97	105.25	2.28
BRAZIL	112.34	3.57	102.08	2.21
EGYPT	122.10	3.88	91.58	1.99
U A E	69.83	2.22	81.30	1.76
TAIWAN	44.91	1.43	81.00	1.76
PERU	56.50	1.79	67.38	1.46

Source: Government of India (2011)

Table 2: Export of Cotton (HS 52) to Bangladesh

Particular	Unit	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010
India's Export of Cotton to Bangladesh	Value (US\$ million)	289.37	271.74	648.97	402.8	455.29
	Annual growth (%)		-6.09	138.82	-37.93	13.03
India's Global Export of Cotton	Value (US\$ million)	2,984.21	3,940.94	5,171.64	3,148.70	4,612.10
	Annual growth (%)		32.06	31.23	-39.12	46.48
Country Performance	Share of country (%)	9.70	6.92	12.55	12.79	9.87
India's Total Export to Bangladesh	Value (US\$ million)	1,664.36	1,629.57	2,923.72	2,497.87	2,432.51
	Annual growth (%)		-2.09	79.42	-14.57	-2.62
Commodity Performance	Share of commodity (%)	17.39	16.68	22.2	16.13	18.72

Source: Government of India (2011)

¹⁵ Ibid

Table 3: Export of Cotton to Bangladesh at 4-digit HS

HS CODE	COMMODITY	2008-2009		2009-2010	
		VALUE (US\$ MILLION)	SHARE (%)	VALUE (US\$ MILLION)	SHARE (%)
5201	COTTON, NOT CARDED OR COMBED	78.71	3.151	176.80	7.268
5205	COTN YRN(OTHR THN SWNG THRD)CNTNG 85% OR MORE BY WT OF COTON NT PUT UP FR RETL SALE	222.33	8.901	189.33	7.783
5207	COTTON YARN(OTHER THAN SEWING THREAD) PUT UP FOR RETAIL SALE	11.9	0.476	3.6	0.148
5208	WOVN FBRCS OF COTON CONTNG>=85% BY WT OF COTON WEGHNG NT MORE THN 200 G/M2	20.5	0.821	23.51	0.966
5209	WOVN FBRCS OF COTTON, CONTNG >=85% COTN BY WT WEIGHING>200 GM PER SQM	59.37	2.377	55.09	2.261
5210	WOVN FBRCS CONTNG<=200G/M2	2.15	0.086	1.37	0.056
5211	WOVN FBRCS OF COTON,CONTNG200 G/M2	3.38	0.135	2.37	0.097
5212	OTHER WOVEN FABRICS OF COTTON	2.49	0.100	2.83	0.116
5402	SYNTHTC FILAMNT YRN(OTHR THN SEWNG THRD) NOT PUT UP FOR RETAIL SALE INCL SYNTHETIC MONOFILAMENT OF LESS THAN 67 DECITEX	7.60	0.304	7.03	0.289
5407	WOVN FBRCS OF SYNTHTC FILAMENT YARN INCL WOVN FBRCS OBTND FROM MTRLS OF HDG NO.5404	34.18	1.368	66.12	2.718
5408	WOVEN FABRICS OF ARTFCS FILAMENT YARN,INCLFBRCS OBTND FROM MATERIALS OF HDG NO.5405	2.19	0.088	1.74	0.072
5503	SYNTHETIC STAPLE FIBRES,NOT CARDED, COMBED/OTHERWISE PROCESSED FOR SPINNING	8.35	0.334	6.99	0.287
5504	ARTIFICIAL STAPLE FIBRES NOT CARDED, COMBED/OTHERWISE PROCESSED FOR SPINNING	5.69	0.228	7.51	0.309
5509	YARN(OTHR THN SWNG THREAD)OF SYNTHTC STAPLE FIBRES,NOT PUT UP FOR RETAIL SALE	13.85	0.554	13.09	0.538
5510	YARN(OTHR THN SWNG THREAD)OF ARTFCL STAPLE FIBRES NOT PUT UP FR RTL SALE	3.29	0.132	8.85	0.364
	Total	2,497.87		2,432.51	

Source: Government of India (2011)

Riding on the tide of global crisis, Indian export of cotton to Bangladesh too declined in 2008-09, but gained the momentum in 2009-10 (Table 2). Today, export of cotton contributes about 19 percent of India's total export to Bangladesh, up from 16 percent in 2008-09. Contrary to popular belief, Bangladesh's share in India's global

cotton exports has not increased much; it has been hovering around 10 percent.¹⁶ Not all the cotton and textile and clothing items are exported to Bangladesh. Four specific items, mainly 5201, 5205, 5209 and 5407, are the major Indian exports to Bangladesh (Table 3), of which raw cotton and cotton yarn are the major exports to Bangladesh. Bangladesh, on the other, exports ready-made garments (HS 63) and raw jute (HS 53) to India and the world. Trade competitiveness of India and Bangladesh would very much depend upon how both the countries reduce trade costs associated with cotton and textile and garments.

Bangladesh also appears as India's biggest export destination of fruits and vegetables. Although India is second largest producer of fruits and vegetables, only after china, its contribution has been very low in world export markets, compared to other Asian countries. Table 4 presents top 15 export destinations of fruits and vegetables. In 2009-10, India exported US\$ 290.46 million of fruits and vegetables to Bangladesh, thus sharing almost 18 percent of India's global exports of fruits and vegetables. With exports of US\$ 176.33 million and US\$ 111.91 million, UAE and USA come next, respectively. In general, countries from Gulf and Middle East and South Asia are the major markets of fruits and vegetables.

Table 4: India's Top 15 Export Destinations of Fruits and Vegetables

COUNTRY	2008-2009		2009-2010	
	VALUE	SHARE*	VALUE	SHARE*
	(US\$ MILLION)	(%)	(US\$ MILLION)	(%)
BANGLADESH	214.33	14.56	290.46	17.95

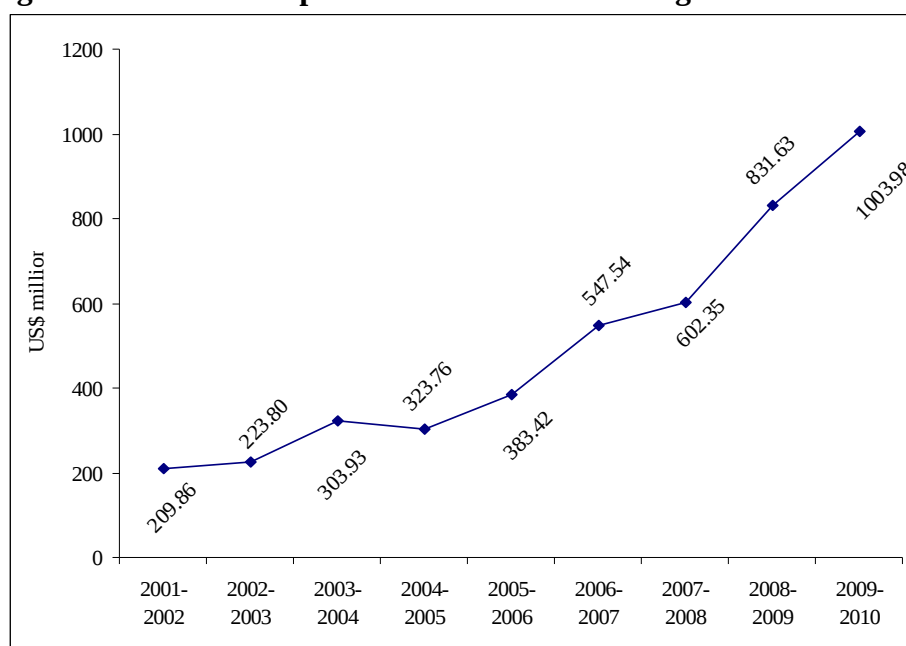
¹⁶ Appendix 1 provides the trend in tariff of Bangladesh on Indian export of cotton and cotton yarn.

UAE	170.11	11.56	176.33	10.90
USA	115.33	7.84	111.91	6.92
NETHERLAND	110.30	7.49	109.67	6.78
SAUDI ARABIA	91.90	6.24	105.62	6.53
MALAYSIA	76.18	5.18	94.73	5.85
UK	79.03	5.37	91.73	5.67
PAKISTAN	76.62	5.21	50.35	3.11
SRI LANKA	47.96	3.26	47.77	2.95
GERMANY	31.29	2.13	35.45	2.19
NEPAL	29.23	1.99	32.73	2.02
RUSSIA	39.13	2.66	32.26	1.99
KUWAIT	22.86	1.55	28.53	1.76
CANADA	26.01	1.77	28.45	1.76
BELGIUM	28.71	1.95	28.06	1.73

Note: *Share in India's total export of fruits and vegetables to the world

Source: APEDA (2011)

Figure 3: Trends in Export of Fresh Fruits and Vegetables from India



Source: APEDA (2011)

Table 5(a): Indian Export of Fruits and Vegetables

COMMODITY	2008-09	2009-10
	(US\$ MILLION)	
FLORICULTURE	83.82	65.44
FRUIT AND VEGETABLE SEEDS	27.27	32.24

FRESH FRUITS & VEGETABLES	831.63	1003.98
PROCESSED FRUITS AND VEGETABLES	718.98	693.45
TOTAL	1661.70	1795.10

Source: APEDA (2011)

Table 5(b): Break-up of Export of Fruits and Vegetables

COMMODITY	2008-09		2009-10	
	VALUE	SHARE*	VALUE	SHARE*
	(US\$ MILLION)	(%)	(US\$ MILLION)	(%)
FLORICULTURE	83.821	5.044	65.436	3.645
FRUIT AND VEGETABLE SEEDS	27.271	1.641	32.239	1.796
FRESH ONIONS	415.346	24.995	515.429	28.713
OTHER FRESH VEGETABLES	154.592	9.303	162.635	9.060
WALNUTS	32.099	1.932	43.977	2.450
FRESH MANGOES	38.798	2.335	44.564	2.483
FRESH GRAPES	92.867	5.589	121.186	6.751
OTHER FRESH FRUITS	97.925	5.893	116.185	6.472
DRIED AND PRESERVED VEGETABLES	112.822	6.790	118.239	6.587
MANGO PULP	171.134	10.299	165.468	9.218
OTHER PROCESSED FRUITS AND VEGETABLES	311.770	18.762	319.001	17.771
PULSES	123.256	7.417	90.739	5.055
TOTAL	1661.700	100.000	1795.100	100.000

Note: *Share in India's total export of fruits and vegetables to the world

Source: APEDA (2011)

Contrary to popular belief, fresh onion drives the fruits and vegetable export in India, contributing 1/4th of India's global export of fruits and vegetables. As reported in Table 5(b), India exported US\$ 515.429 million (28.713 percent share) of export of fresh opinions in 2009-10, increased from US\$ 415.346 million in 2008-09. Barring export of floriculture, pulses and mango pulp, exports of other commodities from India increased in 2009-10, compared to 2008-09. Export of fresh fruits and vegetables in fruits and vegetables category have witnessed a healthy growth; it witnessed about 18.31 percent CAGR (compound annual growth rate) during the period 2001-02 to 2009-10. Barring 2004-05, the export of fresh fruits and vegetables never witnessed a fall in the last decade. While its rise has been continuous and touched US\$ 1 billion mark in 2009-10 (Figure 3), export of fruits and vegetables faces enumerable barriers of partner countries, which are mostly NTBs (APEDA, 2007). There are a number of "behind-the-border" issues and

concerns in the context of export of fruits and vegetables from India.¹⁷ It is apprehended that without well-crafted policies and strategies on trade processes and procedures, the underlying trade potential of fruits and vegetables might remain unrealised. Motivated by this argument, we attempt to assess the trade processes and procedures associated with this item through BPA.

The growth in automobile sector has been an unprecedented development that India has ever achieved since embracing the globalisation initiative in 1991. Its burgeoning growth, both domestic and international, has transformed India as an important manufacturing source of automobiles in recent years. India's trade liberalization has indeed helped this sector to source components including tyres and tubes globally at a relatively cheaper rate.

Table 6. Indian Import of Rubber Tyres and Tubes

HS	COMMODITY	2008-2009		2009-2010		ANNUAL GROWTH
		VALUE	SHARE*	VALUE	SHARE*	
		(US\$ MILLION)	(%)	(US\$ MILLION)	(%)	
4011	NEW PNEUMATIC TYRES OF RUBBER	271.30	0.089	300.55	0.104	10.78
4012	RETREADED/USD PNMTC TYRS OF RUBR SOLID/ CUSHION TYRS INTRCHNGBL TYR TREADS & TYRE FLAPS OF RUBBER	3.98	0.001	3.77	0.001	-5.28
4013	INNER TUBES OF RUBBER	2.19	0.001	3.77	0.001	72.15
	TOTAL (ABOVE 3)	277.47	0.091	308.09	0.107	11.04
	INDIA'S TOTAL IMPORT	303696.31		288372.88		

Note: *Share in India's total import

Source: Government of India (2011)

Tabled 7: India's Top 10 Import Sources of Rubber Tyres (HS 4011) in 2009-10

¹⁷ Refer, for example, APEDA (2007), World Bank (2007), etc.

COUNTRY	VALUE	SHARE*
	(US\$ MILLION)	(%)
CHINA P RP	164.31	54.67
JAPAN	24.28	8.08
THAILAND	24.08	8.01
KOREA RP	19.98	6.65
SPAIN	12.67	4.22
SRI LANKA	8.39	2.79
FRANCE	7.16	2.38
U S A	6.51	2.17
BRAZIL	6.11	2.03
TAIWAN	3.78	1.26
TOTAL (ABOVE 10)	277.27	92.26
TOTAL (HS 4011)	300.54	

Note: *Share in India's total import

Source: Government of India (2011)

Table 6 provides India's import of rubber tyres and tubes in recent years. In 200-10, India witnessed 11 percent rise in import of new pneumatic rubber tyres (HS 4011), which increased from US\$ 271.30 million in 2008-09 to US\$ 300.55 million in 2009-10. The import is mostly sourced from Asian countries, where China has the highest share of 55 percent in 2009-10 (Table 7). Among South Asian countries, Sri Lanka is a prominent source of new pneumatic rubber tyres. In 2009-10, India imported US\$ 8.39 million new pneumatic rubber tyres from Sri Lanka (Table 7), which are mostly used in passenger and commercial vehicles. Import of rubber tyres from Sri Lanka has been facilitated by the India-Sri Lanka FTA (ILFTA). Although import of natural rubber is in the negative list of India in the India-Sri Lanka FTA (ILFTA), it offers zero tariff on import of new pneumatic rubber tyres (HS 4011), and several other raw-materials of tyre industry are eligible for duty concessions of varying magnitude under the ILFTA. The FTA has therefore encouraged Indian FDI in Sri Lanka and generated new trade.¹⁸ However, a number of trade barriers continue to impede the import of rubber tyres from Sri Lanka and other countries.¹⁹ Therefore, assessment of the import processes and procedures through BPA would help us understand the barriers to import of rubber tyres from Sri Lanka.

¹⁸ Indian tyre companies (e.g. CEAT) has taken the advantage of this FTA and the available local resources, set-up a plant in Sri Lanka, and exported back to India the new pneumatic rubber tyres. Also refer, Kelegama and Mukherjee (2007)

¹⁹ Read, for example, Automotive Tyre Manufacturers' Association (ATMA), New Delhi

3. Barriers to Trade across the Border in India

India being a developing economy witnesses a series of barriers to trade, investment and other economic fields. Barriers free world does not exist either. However, those barriers which are policy related need to be addressed in order to cope-up the changing demand in the era of globalization.

The compelling reason for having a BPA survey done in selected commodities is India's volatile and seemingly poor performance in trading across border. According to the Doing Business Survey Database (World Bank, 2010), India's global rank falls at bottom 100 such as 97 in 2009 and 94 in 2010. Table 8(a) provides India's performance in trading across border indicators. No doubt, India's performance is better than South Asian average, but is still far behind than OECD average except for the cost to export and import. Over time, India has successfully managed to reduce documents needed for export and import and time to export and import, presumably due to improved trade facilitation initiatives, there is a rising trend in costs to export and import in recent years, particularly during 2009 and 2010 (Figure 4).

Table 8(a): India's Performance in Trading across Border in 2010

Indicator	India	South Asia	OECD Average
Documents to export (number)	8	8.5	4.3
Time to export (days)	17	32.4	10.5
Cost to export (US\$ per container)	945	1,364.10	1,089.70
Documents to import (number)	9	9	4.9
Time to import (days)	20	32.2	11
Cost to import (US\$ per container)	960	1,509.10	1,145.90

Source: World Bank (2010)

Table 8(b): India's Performance in Trading across Border in 2010

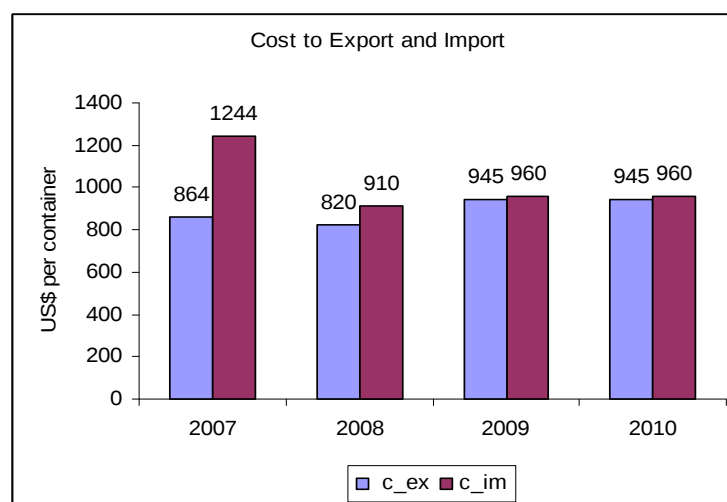
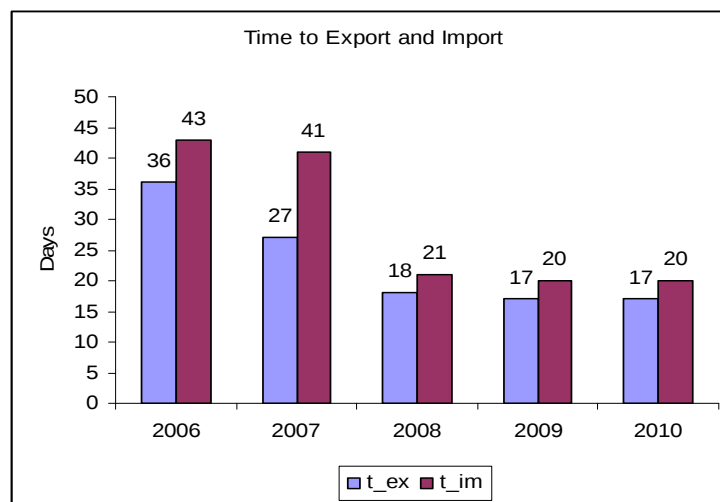
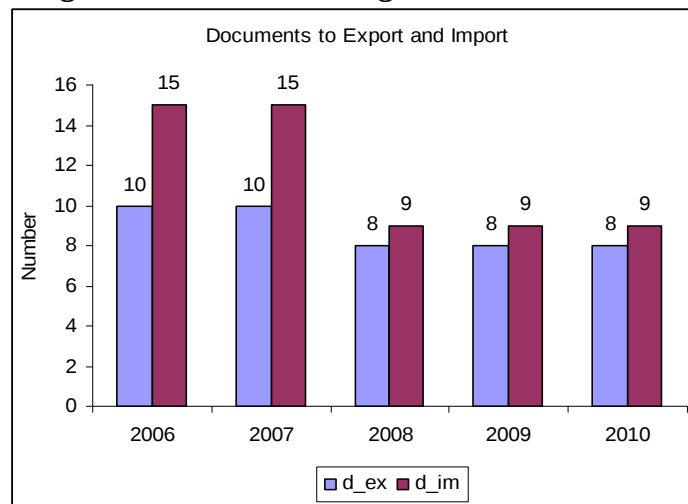
Nature of Export Procedures	Duration (days)	US\$ Cost
Documents preparation	8	350
Customs clearance and technical control	2	120
Ports and terminal handling	3	175
Inland transportation and handling	4	300
Total	17	945
Nature of Import Procedures	Duration (days)	US\$ Cost
Documents preparation	8	390
Customs clearance and technical control	4	120
Ports and terminal handling	6	200
Inland transportation and handling	3	250
Total	20	960

Source: World Bank (2010)

India lacks in a friendlier trade facilitating environment. Documents preparation for export and import take bulk of the trade procedures; both export and import consignments take 8 days (Table 8(b)). As a result, costs of export and import are relatively higher in case of preparation of documents (US\$ 350 in export and US\$ 390 in import in 2010). Both importing time and cost are higher than that of export in India. When total imports of goods outstrip that of exports, higher import cost and time, as happened in case of India, certainly offset the gains achieved through improving export time and cost. Regrettably, India pays a lot towards trading across border.

What follows is that India needs drastic improvement in trade facilitation, and a series of trade facilitation measures is required to be implemented in India (World Bank, 2010). The successful implementation of trade facilitation measures, however, needs not only economic and political resources, but also an in-depth understanding about existing business processes. A BPA survey is therefore highly recommended in order to assess the requirement for improvement in trading environment, in particular reducing its complexities and corresponding costs.

Figure 4: Costs of Trading across Border: India



Source: Drawn based on World Bank (2010)

4. Facilitating the Trade: BPA Mappings of Selected Commodities

(a) Indian Export of Cotton Yarn to Bangladesh

The BPA mapping for export of cotton textile and yarn to Bangladesh has been done through a primary survey at Ginni Filaments, located at Noida, outskirts of Delhi. The company has been recognised as ‘Trading House’ because of its rising exports to different parts of the world including Bangladesh. Appendix 2 highlights company’s business performance in recent years.

The export procedure of cotton yarn is mainly consisting of getting order, inspection report, certificate of origin, transportation and custom declaration and transit haulage. Annexure 1 provides the BPA maps. We discuss here some broad outcomes of the export procedures and processes.

Getting order

Bangladesh is one of the largest exporters of ready-made garments in South Asia. However, its sources cotton textile yarn primarily from India. The main order of garment companies in Bangladesh relies on order from Indian producer in India. In 2009-10, export of cotton yarn contributes about 19 percent of India’s total export to Bangladesh (US\$ 189 million), up from 16 percent in 2008-09. Therefore, export of cotton yarn to Bangladesh is a huge market for Indian exporters / producers. We start the BPA map through getting order as the first contact between exporter and importer. The steps of getting order are as follows:

- Importer in Bangladesh shows interest in import of cotton yarn from India.
- Indian exporter sends quotation to Bangladeshi importer.
- Bangladeshi importer verifies the quotation and confirms the intent to purchase.
- Both parties sign contract which determined the shipping date and commercial terms and conditions.

- Indian exporter sends yarn to Bangladeshi importer.

The UML use case and activity diagrams of aforesaid order are presented in Annexure 1. It illustrates core business processes used when exporting yarn from India to Bangladesh. The diagram lists all process involved in getting and delivery order. It also shows that the scope of analysis covers all activities in the international trade transaction which include commercial and financial procedures.

Transportation and Custom Declaration at the Border

The exporter prepares export documents including invoice, packing list, bill of lading, certificate of origin, customs declaration, pre-shipment inspection certificate, etc. that are mainly needed for customs clearance at Petrapole in West Bengal part of India.²⁰ The procedure of transportation and Customs declaration at Indian side are as follows:

- Exporter or its representative prepares a confirmation of remittent transfer at the bank
- Exporter collects all necessary documents such as certificate of origin. Appendix 2 provides the list of documents needed for export.
- Exporter declares products to Custom section at Petrapole LCS by submitting all documents. The Customs officer verifies application and provides approval, if found documents are in order and correct. Immigration verifies the documents related to travel of truck driver and accompanying porter, and approval of Customs.
- Exporter submits all documents to the Custom officer, for approval of the customs declaration form and allows cargo inspection by designating officers to physically inspect the goods.
- Exporter declares an application to custom officer and approved if export quantities match, and;

²⁰ We consider Petrapole – Benapole land customs station as official trade route for export of cotton yarn to Bangladesh.

- Exporter's driver and porter declare personal passport and international transport permit to immigration. This is the final export procedure at the LCS.
- Indian truck drivers take the cargo to the designated warehouse in Bangladesh side, unload the cargo and return to India.

Tables 9 and 10 present time and costs needed to export of cotton yarn with maximum and minimum range to Bangladesh through Petraopole – Benapole LCS. It takes about 31 days to get the payment from Bangladeshi importer for export from Delhi region. The maximum time goes into getting payment from Bangladeshi importer, whereas transportation of goods comes next to it. The whole process costs an average of US\$ 542.39 with a maximum and minimum range of US\$ 642.39 and 442.39, respectively, of which insurance and inland transportation cost are the major components.

Figure 5: The Times – Procedures Chart of Exporting Cotton Yarn from India to Bangladesh

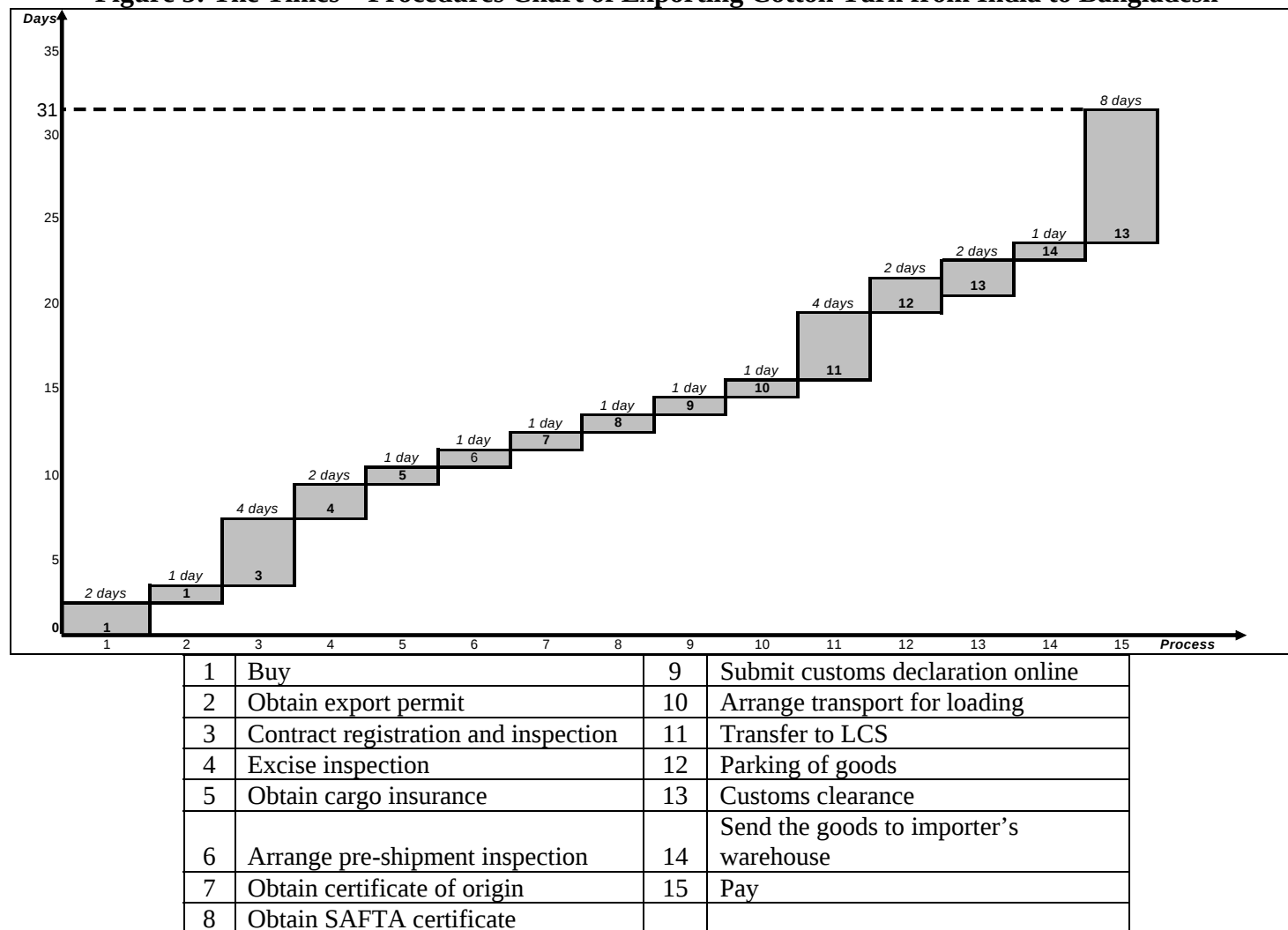


Table 9: Time of Export Processes of Cotton Yarn to Bangladesh

Sr. No.	Process	Time Needed (Days)		
		Max	Min	Average
1	Buy	2	2	2
2	Obtain export permit	1	1	1
3	Contract registration and inspection	5	3	4
4	Excise inspection	2	2	2
5	Obtain cargo insurance	1	1	1
6	Arrange pre-shipment inspection	1	1	1
7	Obtain certificate of origin	1	1	1
8	Obtain SAFTA certificate	1	1	1
9	Submit customs declaration online	1	1	1
10	Arrange transport for loading	1	1	1
11	Transfer to LCS	5	3	4
12	Parking of goods	2	2	2
13	Customs clearance	3	1	2
14	Send the goods to importer's warehouse	1	1	1
15	Pay	10	6	8

Table 10: Costs Involved in Export of Cotton Yarn to Bangladesh

Sr. No	Export Process	Costs Involved (US\$)*		
		Max	Min	Average
1	Obtain export permit	54.35	39.13	46.74
2	Contract registration and inspection	5.43	0.00	2.72
3	Excise inspection	10.87	0.00	5.43
4	Obtain cargo insurance	260.87	184.78	222.83
5	Arrange pre-shipment inspection	30.43	18.48	24.46
6	Obtain certificate of origin	10.87	10.87	10.87
7	Obtain SAFTA certificate	26.09	17.39	21.74
8	Submit customs declaration online	26.09	10.87	18.48
9	Arrange transport for loading	26.09	2.17	14.13
10	Transfer to LCS (inland transportation charge)	169.57	139.13	154.35
11	Parking of goods	10.87	8.70	9.78
12	Customs clearance	0.00	0.00	0.00
13	Send the goods to importer's warehouse	10.87	10.87	10.87
		642.39	442.39	542.39

*per container

Annexure 1 provides parties involved in trade transaction of Indian export of cotton yarn to Bangladesh. This BPA map indicates 16 actors are involved to export of cotton yarn to Bangladesh through Indian LCS.

The time-procedure chart (Figure 5) is an illustration of the time required to complete cotton yarn export process. This chart shows that total time taken to complete the trade procedures is about 31 days. It also suggests that bottlenecks are in inland transportation, customs clearance at border and getting payment. The delay in customs clearance has been observed mainly due to overburdened cargo handling capacity of the LCS and shortfall of adequate customs personnel. On top, physical inspection of break-bulk non-containerised nature of traded goods at border makes this trade a delayed journey always.

(b) Indian Export of Fresh Fruits and Vegetables to Middle East and Europe

The BPA mapping for export of fresh fruits and vegetables has been done through a primary survey at FarmPack India, the company located at Pune city in Maharashtra State of India. The company has been exporting fresh fruits and vegetables to Gulf and European countries. While Dubai in Gulf is the main destination of vegetables, fruits, mainly grapes and pomegranates are exported to European countries, mainly in Netherlands. Appendix 4 presents a brief note about the company. The export procedure of fruits and vegetables is mainly consisting of getting order, inspection report, standard and certificate of origin, transportation and custom declaration and transit haulage.

Getting order

The UAE is second largest importer of fruits and vegetables from India. In 2009-10, India exported US\$ 176.33 million of fruits and vegetables to UAE, contributing about 11 percent of India's global export to fruits and vegetables, increased from US\$ 170.11 million in 2008-09. Therefore, export of fruits and vegetables to UAE is a huge market for Indian exporters / producers. We start the BPA mapping through getting order

as the first contact between exporter and importer. The steps of getting order are as follows:

- Importer in UAE (at Dubai) shows interest in import of fresh vegetables from India.
- Indian exporter sends quotation to Dubai importer.
- Dubai importer verifies the quotation and confirms the intent to purchase.
- Both parties sign contract which determined the shipping date and commercial terms and conditions.
- Indian exporter sends fruits and vegetables to Dubai importer.

The UML use case and activity diagrams of aforesaid order are presented in Annexure 2. It illustrates core business processes used when exporting vegetables from India to UAE. The export of vegetables to Gulf is not executed through letter of credit or advance payment. However, the export of fruits to EU is channelled through advance payment. The diagram lists all process involved in getting and delivery order. It also shows that the scope of analysis covers all activities in the international trade transaction which include commercial and financial procedures.

Transportation and Custom Declaration at the Port

The exporter prepares export documents including commercial invoice, packing list, bill of lading, certificate of origin, customs declaration, residual analysis certificate (for exporting fruits to EU), sanitary and phytosanitary certificate, etc. that are mainly needed for customs clearance at Jawaharlal Nehru Port in Navi Mumbai.²¹ The procedure of transportation and Customs declaration at Indian side are as follows:

- Exporter (through CHA) collects all necessary approvals such as sanitary and phytosanitary approval
- Exporter declares products to Custom section at Jawaharlal Nehru Port customs station by submitting all documents. The Customs officer verifies

²¹ We consider Jawaharlal Nehru Port as customs station of official trade route for export of fresh vegetables and fruits to Gulf and EU.

application and provides approval, if found documents are in order and correct..

- Exporter submits all documents to the Custom officer, for approval of the customs declaration form and allows cargo inspection by designating officers to physically inspect the goods.
- Exporter declares an application to custom officer and approved if export quantities match, and;

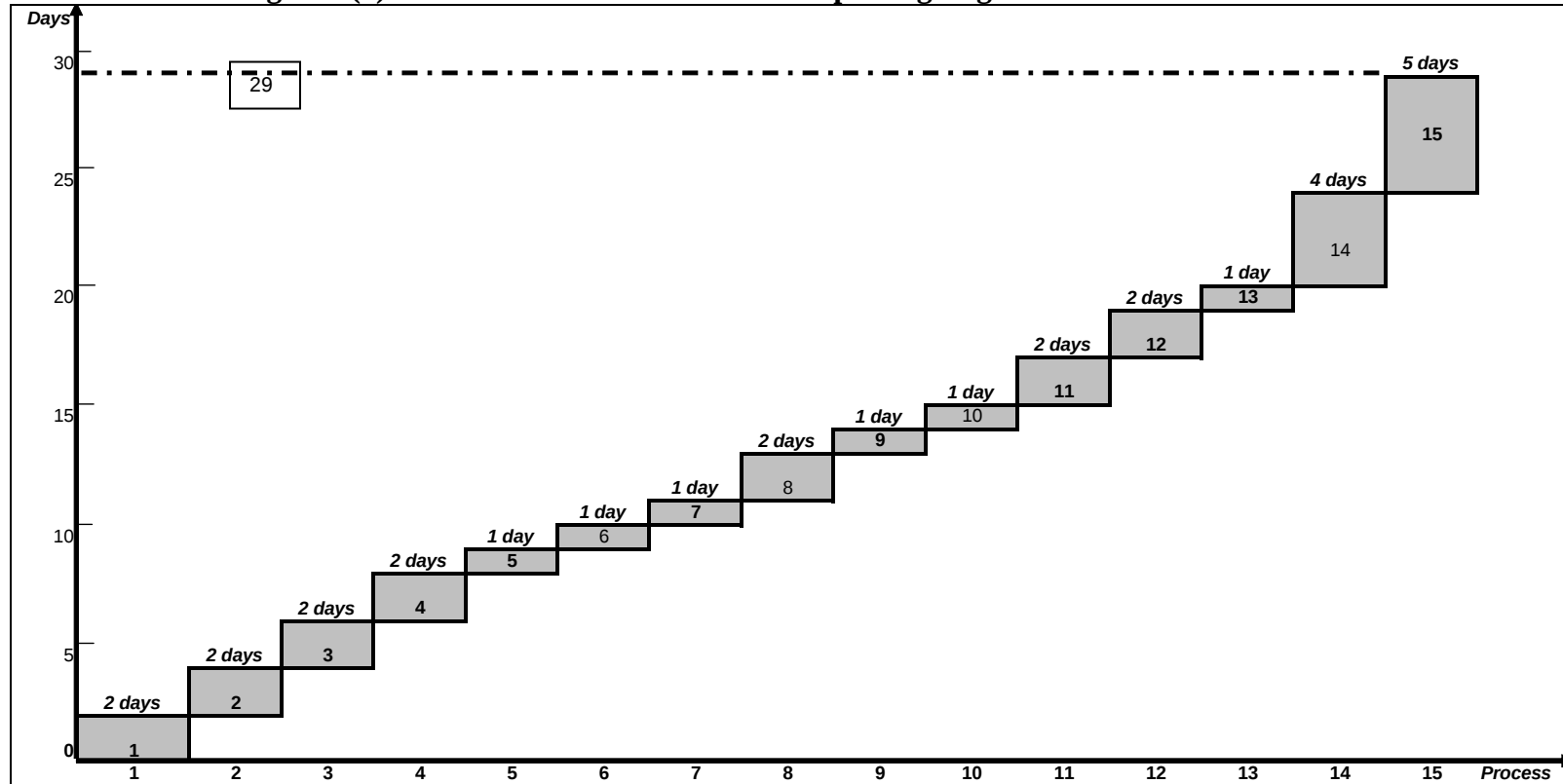
Parties Involved in Exports

Annexure 2 presents parties involved in export of fresh vegetables to Gulf and fruits to EU respectively. Total 10 parties are involved to deal 12 major processes in exporting fresh vegetables to Gulf, whereas 13 major trade processes are being managed by 10 parties in exporting fruits to EU.

Time and Cost Involved in Exports

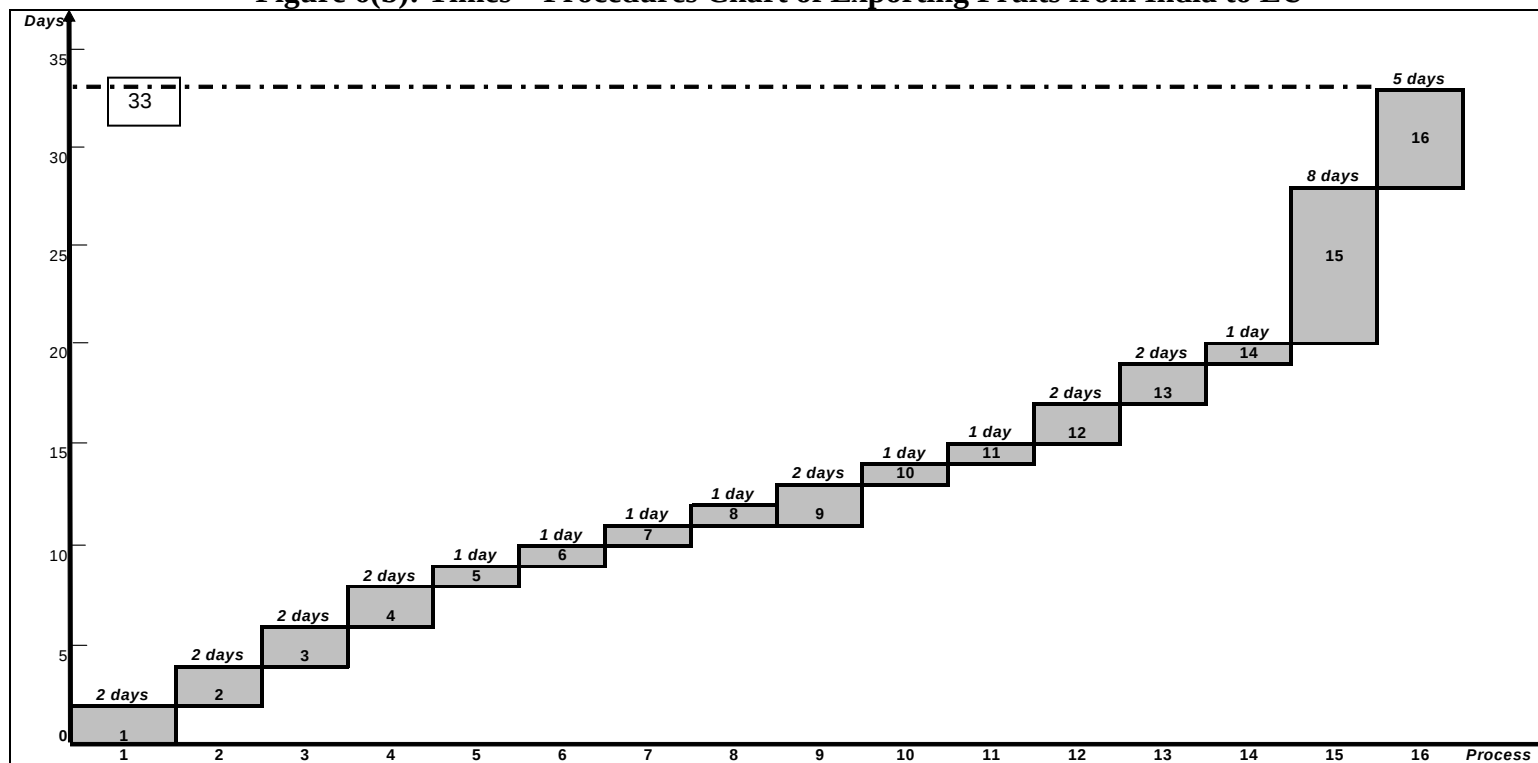
Tables 11 (a, b) and 12 (a, b) present time and costs needed to export of vegetables and fruits with maximum and minimum range to Gulf and EU. It takes about 29 days for export of vegetables and 33 days for export of fruits to receive the payment from importers. The maximum time goes into sending the goods from India to EU, whereas payment comes next to it. In case of export of vegetables, getting payment from importer takes the most of the time, whereas transportation time comes next to it. The whole process of exporting vegetables costs an average of US\$ 1573 per container with a maximum and minimum range of US\$ 1672 and 1473, respectively. In case of export of fruits to EU, the average cost is appeared to be US\$ 2031 per container (Table 12(b)). In both cases, transportation cost (inland and international) is the major component. Figure 6 (a, b) presents time – procedure chart of exporting vegetables from India to UAE and fruits to EU, respectively.

Figure 6(a): Times – Procedures Chart of Exporting Vegetables from India to UAE



1	Buy	9	Obtain certificate of origin
2	Obtain export permit	10	Collect containers for loading
3	Company stuffing permission	11	Transfer to warehouse in port
4	Export registration	12	Customs clearance
5	Inform shipping line	13	Send the goods to vessel in port
6	Excise Inspection	14	Send the goods to importer's warehouse
7	Obtain cargo insurance	15	Pay
8	Getting sanitary & phytosanitary approval		

Figure 6(b): Times – Procedures Chart of Exporting Fruits from India to EU



1	Buy	7	Excise Inspection	13	Customs clearance
2	Obtain export permit	8	Obtain cargo insurance	14	Send the goods to vessel in port
3	Company stuffing permission	9	Sanitary & phytosanitary approval	15	Send goods to importer's warehouse
4	Export registration	10	Obtain certificate of origin	16	Pay
5	MRL testing	11	Collect containers for loading		
6	Inform shipping line	12	Transfer to warehouse in port		

Table 11(a): Time of Export Processes of Vegetables to UAE

Sr. No.	Process	Time Needed (Days)		
		Max	Min	Average
1	Buy	2	2	2
2	Obtain export permit	2	2	2
3	Company stuffing permission	3	1	2
4	Export registration	2	2	2
5	Inform shipping line	1	1	1
6	Excise Inspection	1	1	1
7	Obtain cargo insurance	1	1	1
8	Getting sanitary & phytosanitary approval	3	1	2
9	Obtain certificate of origin	1	1	1
10	Collect containers for loading	1	1	1
11	Transfer to warehouse in port	2	2	2
12	Customs clearance	3	1	2
13	Send the goods to vessel in port	1	1	1
14	Send the goods to importer's warehouse	5.5	2.5	4
15	Pay	6	4	5
	Total			29

Table 11(b): Time of Export Processes of Fruits to EU

Sr. No.	Process	Time Needed (days)		
		Max	Min	Average
1	Buy	2	2	2
2	Obtain export permit	2	2	2
3	Company stuffing permission	3	1	2
4	Export registration	2	2	2
5	MRL testing	1	1	1
6	Inform shipping line	1	1	1
7	Excise Inspection	1	1	1
8	Obtain cargo insurance	1	1	1
9	Getting sanitary & phytosanitary approval	3	1	2
10	Obtain certificate of origin	1	1	1
11	Collect containers for loading	1	1	1
12	Transfer to warehouse in port	2	2	2
13	Customs clearance	3	1	2
14	Send the goods to vessel in port	1	1	1
15	Send the goods to importer's warehouse	10	6	8
16	Pay	7	3	5
	Total			33

Table 12(a): Costs Involved in Export of Vegetables to UAE

Sr. No.	Processes	Costs Involved (US\$)*		
		Max	Min	Average
1	Obtain export permit	44.44	33.33	38.89
2	Company stuffing permission	44.44	26.67	35.56
3	Export registration	31.11	26.67	28.89
4	Inform shipping line	11.11	5.56	8.33
5	Excise Inspection	66.67	40.00	53.33
6	Obtain cargo insurance	122.22	88.89	105.56
7	Getting sanitary & phytosanitary approval	26.67	17.78	22.22
8	Obtain certificate of origin	33.33	22.22	27.78
9	Collect containers for loading	7.78	5.56	6.67
10	Transfer to warehouse in port	122.22	106.67	114.44
11	Customs clearance	77.78	66.67	72.22
12	Send the goods to vessel in port	40.00	33.33	36.67
13	Send the goods to importer's warehouse	1044.44	1000.00	1022.22
	Total	1672.22	1473.33	1572.78

* Per container

Table 12(b): Costs Involved in Export of Fruits to EU

Sr. No.	Process	Cost Involved (US\$)*		
		Max	Min	Average
1	Obtain export permit	44.44	33.33	38.89
2	Company stuffing permission	44.44	26.67	35.56
3	Export registration	31.11	26.67	28.89
4	MRL testing	80.00	77.78	78.89
5	Inform shipping line	11.11	8.89	10.00
6	Excise Inspection	66.67	40.00	53.33
7	Obtain cargo insurance	122.22	88.89	105.56
8	Getting sanitary & phytosanitary approval	26.67	17.78	22.22
9	Obtain certificate of origin	33.33	22.22	27.78
10	Collect containers for loading	7.78	5.56	6.67
11	Transfer to warehouse in port	122.22	106.67	114.44
12	Customs clearance	77.78	66.67	72.22
13	Send the goods to vessel in port	40.00	33.33	36.67
14	Send the goods to importer's warehouse	1422.22	1377.78	1400.00
	Total	2130.00	1932.22	2031.11

* Per container

The time-procedure chart (Figure 6 (a, b)) is an illustration of the time required to complete vegetable and fruit export processes. These charts show that total time taken to complete the trade procedures is about 29 days for vegetable and 33 days for fruits. It also suggests that bottlenecks are in domestic transportation, customs clearance and getting payment. The BPA maps also indicate a total of 15 and 16 trade processes through 10 major authorities are involved in exporting vegetables to Gulf and fruits to EU from India.

(c) Indian Import of Rubber Tyres from Sri Lanka

The BPA mapping for import of rubber tyres has been done through a primary survey at Ceat India Ltd., located at Mumbai city in Maharashtra State of India. The company has been importing rubber tyres from its Sri Lankan subsidiary. Appendix 5 presents a brief note about Ceat India. The import procedure of rubber tyres is mainly consisting of placing order from Indian office to Sri Lankan subsidiary, custom clearance at Indian port, unloading the goods and inland transportation. BPA maps are presented in Annexure 3.

Placing order

India imported US\$ 8.39 million rubber tyres from Sri Lanka in 2009-10, 3 percent of total import of the rubber tyres. The tariff concessions in the FTA between India and Sri Lanka have facilitated Sri Lanka's export of rubber tyres to India. India's rising automobile market provides a great opportunity for Sri Lankan exports of rubber tyres. Ceat India has two tyres manufacturing plants in Sri Lanka. We start the BPA map through getting order as the first contact between importer (India) and exporter (Sri Lanka). The steps of getting order are as follows:

- Importer in Mumbai shows interest to import of rubber tyres from Sri Lanka.
- Sri Lankan exporter sends quotation to Indian importer.
- Indian importer verifies the quotation and confirms the intent to purchase.
- Both parties sign contract which determined the shipping date and commercial terms and conditions.

- Sri Lankan exporter sends rubber tyres from Colombo to Indian importer.

The UML use case and activity diagrams are presented in Annexure 3. It illustrates core business processes used when importing rubber tyres in India from Sri Lanka. The diagram lists all process involved in getting and delivery order. It also shows that the scope of analysis covers all activities in the international trade transaction which include commercial and financial procedures.

Transportation and Custom Declaration at the Port

The importer prepares import documents including import general manifest, commercial invoice, packing list, bill of lading, bill of entry, certificate of origin, customs declaration, etc. that are needed for arrival of cargo, customs clearance and other statutory clearances at the Jawaharlal Nehru Port.²² The procedure of transportation and Customs declaration at Indian side are as follows:

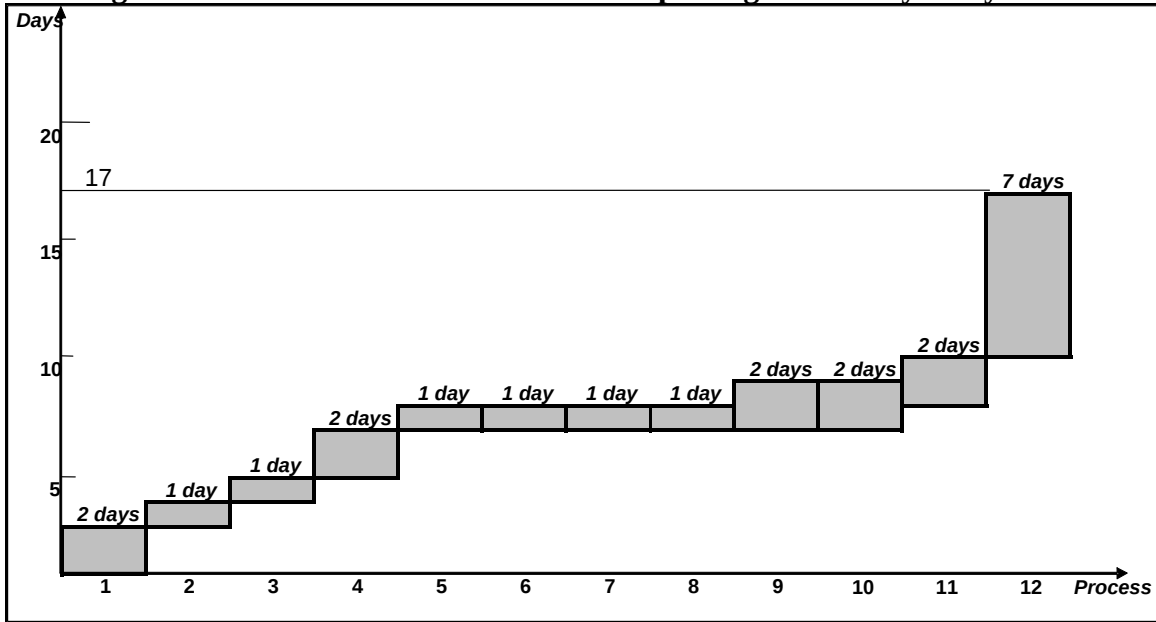
- Importer (through CHA) collects all necessary approvals, obtain permission to discharge the goods from vessel to yard and then transport to importers' warehouse.
- CHA declares products to Custom office at Jawaharlal Nehru Port customs station by submitting the documents as listed in Annexure 3.
- The Customs officers verify application and provide approval, after physically inspecting the goods.

Parties Involved in Imports

There are 9 parties are involved to deal 12 major processes in importing rubber tyres from Sri Lanka.

²² We consider Jawaharlal Nehru Port as customs station of official trade route for import of rubber tyres from port of Colombo.

Figure 7: Times – Procedures Chart of Importing Rubber Tyres by India



1	Buy	7	Immigration
2	Obtain IEC code	8	Plant quarantine
3	Vessel information and filling IGM	9	Unloading of goods from vessel
4	Allocation of berth	10	Verification of cargo
5	Filing Bill of entry & other import papers	11	Send the goods to importer's warehouse
6	Filing Delivery Order	12	Pay

Table 13. Time of Import Processes of Rubber Tyres by India

Sr. No.	Process	Time Needed (Days)		
		Max	Min	Average
1	Buy	2	2	2
2	Obtain IEC code	1	1	1
3	Vessel information and filling IGM	1	1	1
4	Allocation of berth	2	2	2
5	Filing Bill of entry & other import papers	1	1	1
6	Filing Delivery Order	1	1	1
7	Immigration	1	1	1
8	Plant quarantine	1	1	1
9	Unloading of goods from vessel	2.6	1.4	2
10	Verification of cargo	1	1	1
11	Send the goods to importer's warehouse	2.2	1.8	2
12	Pay	9	5	7
	Total	24.8	19.2	22

* Per container

Table 14. Costs Involved in Import of Rubber Tyres by India

Sr. No.	Process	Costs Involved (US\$)*		
		Max	Min	Average
1	Obtain IEC code	25.00	18.00	21.50
2	Vessel information and filling IGM	10.00	8.00	9.00
3	Allocation of berth	15.00	10.00	12.50
4	Filing Bill of entry & other import papers	75.00	70.00	72.50
5	Filing Delivery Order	10.00	8.00	9.00
6	Immigration	0.00	0.00	0.00
7	Plant quarantine	0.00	0.00	0.00
8	Unloading of goods from vessel	88.00	72.00	80.00
9	Verification of cargo	50.00	40.00	45.00
10	Send the goods to importer's warehouse	120.00	100.00	110.00
	Total	393.00	326.00	359.50

* Per container

Time and Cost Involved in Imports

Tables 13 and 14 present time and cost needed to import rubber tyres with maximum and minimum range from Sri Lanka. It takes about 17 days to import rubber tyres from Sri Lanka including settling the payment. Contrary to popular belief, the maximum time actually goes into making the payment. The whole process of importing rubber tyres costs an average of US\$ 360 per container with a maximum and minimum range of US\$ 393 and 326, respectively. Transportation cost is another major component. Figure 19 presents time – procedure chart of importing tyres from Sri Lanka to India. The time-procedure chart (Figure 7) is an illustration of the time required to complete rubber tyres import processes. These charts show that total time taken to complete the trade procedures is about 17 days.

5. Concluding Remarks

The BPA mappings of export of cotton yarn to Bangladesh, fresh vegetables to Gulf and fruits to EU, and import of rubber tyres from Sri Lanka were done through field survey. The BPA maps indicate a total of 12 export documents involving 13 parties are required to export of cotton yarn to Bangladesh through Indian LCS. These are undoubtedly high in order. The time-procedure chart shows that total time taken to complete the export procedures is about 29 days, which nonetheless is very high, compared to any international standard. The maximum time goes into getting payment from Bangladeshi importer, whereas transportation of goods comes next to it. The whole process costs an average of US\$ 516.41 with a maximum and minimum range of US\$ 603.26 and US\$ 429.57, respectively, of which insurance and inland transportation cost are the major components. This study also suggests that besides tariff, bottlenecks are in inland transportation, customs clearance and getting payment.

Unlike export of cotton yarn, the export of vegetables to Gulf is not executed through letter of credit or advance payment, whereas the export of fruits to EU is channelled through advance payment as found in the case studies we conducted. This study indicates that about 10 parties are involved in 12 major processes in exporting fresh vegetables to Gulf, whereas 13 major trade processes are being managed by 10 parties while exporting fruits to EU. It takes about 29 days for export of vegetables and 33 days for export of fruits till receive the payment from the importers. The maximum time goes into sending the goods from India to EU, whereas payment comes next to it. In case of export of vegetables, getting payment from importer takes the most of the time, whereas transportation time comes next to it. The whole process of exporting vegetables costs an average of US\$ 1573 per container, whereas the average cost is appeared to be US\$ 2031 per container in case of export of fruits to EU. However, in both cases, transportation cost (domestic and international) has been the major barrier. The time-procedure charts show that total time taken to complete the trade procedures is about 29 days for vegetable and 33 days for fruits. It also suggests that bottlenecks are in transportation, customs clearance and getting payment. The BPA maps also indicate a total of 15 and 16 trade

processes through 10 major parties are involved in exporting vegetables to Gulf and fruits to EU from India, respectively.

In case of import of rubber tyres from Sri Lanka, the trade processes and procedures are relatively simple. The import procedure of rubber tyres is consisting of placing order from Indian office to Sri Lankan subsidiary, custom clearance at Indian port, unloading the goods and domestic transportation. This study shows that total 9 parties are involved to deal 12 major import processes. It takes about 17 days to import rubber tyres from Sri Lanka including settling the payment. Contrary to popular belief, the maximum time actually goes into making the payment. Cost of inland transportation is also major barrier to trade. The whole process of importing rubber tyres costs an average of US\$ 360 per container with a maximum and minimum range of US\$ 393 and 326, respectively.

The trade processes and procedures along with time and costs of export and import identified in this study calls for greater role of trade facilitation. India has to undertake a comprehensive policy to remove unnecessary processes and procedures associated with trade in order to improve economic efficiency and reduce trade costs. Moving goods across borders would require meeting a vast number of commercial, transport and regulatory requirements. Inefficiencies in complying with these requirements would create unnecessary delays and costs. The trade barriers such as standards, customs documentations, absence of testing facilities, transportation, etc. are some of the common barriers found in this study. Trade liberalization is important, but sometimes it is not adequate enough to enhance country's trade. Therefore, trade facilitation can complement that effort.

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Appendices

Appendix 1

(a) Tariff on Imports of Cotton (HS 52) by Bangladesh from India

Reporter Name	Partner Name	Tariff Year	Duty Type	Simple Average (%)	Weighted Average (%)	No. of Total Lines	Imports Value (US\$ mn.)
Bangladesh	India	2000	MFN	25.27	16.25	115	234.27
Bangladesh	India	2002	MFN	25.18	16.24	113	234.27
Bangladesh	India	2003	MFN	25.42	20.40	102	162.31
Bangladesh	India	2004	MFN	22.10	13.76	105	218.38
Bangladesh	India	2005	MFN	18.49	11.76	105	218.38
Bangladesh	India	2006	MFN	18.49	11.76	105	218.38
Bangladesh	India	2007	MFN	18.08	11.34	105	218.38

Source: WITS

(b) Tariff on Imports of Cotton Yarn (HS 5205) by Bangladesh from India

Reporter Name	Partner Name	Tariff Year	Duty Type	Simple Average (%)	Weighted Average (%)	No. of Total Lines	Imports Value (US\$ mn.)
Bangladesh	India	2000	MFN	5.00	5.00	21	126.42
Bangladesh	India	2002	MFN	5.00	5.00	21	126.42
Bangladesh	India	2003	MFN	15.00	15.00	16	63.85
Bangladesh	India	2004	MFN	15.00	15.00	21	82.10
Bangladesh	India	2005	MFN	13.00	13.00	21	82.10
Bangladesh	India	2006	MFN	13.00	13.00	21	82.10
Bangladesh	India	2007	MFN	12.00	12.00	21	82.10

Source: WITS

Appendix 2: Ginni Filaments Limited

In 1990, Ginni Filaments Ltd. (GFL) was commissioned with 26208 spindles to produce ultrafine combed cotton yarn. A 100 percent export oriented unit, it was designed to produce a quality that was genuinely world class. Sophisticated plant & machinery from the world renowned machinery manufacturers viz. Rieter, Schlafhorst, Volkmann etc. with top of the line support systems for quality monitoring were installed. Located in Tehsil Chatta, Dist. Mathura, Uttar Pradesh, GFL's installed capacity today stands at 60336 spindles with a capacity of 1000 tonnes per month. The product range includes 100 percent combed cotton yarns from Ne16 to Ne50, both in single and double ply construction. The company also manufactures TFO doubled, compact spun, elitwist and gassed yarns. Since April 2005, GFL has expanded into processed knitted fabrics. The company is recognised as trading house by the Government of India. In order to get fully vertically integrated and be present from fibre to fashion, Ginni Filaments has entered garment business with it's first unit in Noida in Sept. 2006, with a capacity of 2,50,000 pcs. per month. According to the company source, the capacity would be increased to one million pcs. per month in a phased manner. It also has a plant in Gujarat state of India.

Source: Ginni Filaments

Appendix 3: List of Documents Required to Export Cotton Yarn to Bangladesh

- Shipping Bill
- Application for Removal 4 (AR-4) Form
- Quality Control Certificate
- IEC Code
- Letter of Credit
- Guaranteed Receipt Form (GR Form)
- Export Trade Control Licence
- Export General Manifesto
- Bill of Export
- Purchase Order
- Inspection / Examination Certificate
- Packing List
- Commercial Invoice
- Certificate of Origin
- Bill of Lading
- Airway Bill (in case of air cargo)

Appendix 4: Farmpack India

Located at Pune city in western part of India, Shukla family runs Farmpack India - one of the best promising companies engaged in export of farm products from India. The existence of Farmpack came with the simple information during an informal business meeting from a European buyer who was in India to procure grapes and pomegranate for distribution in Europe. Motivated by growing demand of fruits and vegetables, Shukla family started this business way back in 1990s. It has grown from less than Rs. 10 million to Rs. 100 million in a period of five years. It has a young team, having vast experiences in agriculture and management. The company has very rich network with farmers who are growing vegetables and fruits. Farmpack product line presently includes a range of fresh vegetables and fruits including exotic vegetables and other agro products grown in India such as pomegranate, papaya, mangoes, grapes, and vegetables include drumsticks, green chilies, bitter gourd (Karela), okara (bhendi), tendli, gawar, etc. The agro products are exported to Europe and Middle East markets as per demands and seasonal requirements by ship as well as by air. Farmpack exports to companies in different countries who have their distributions channels or super market, having their own chain of stores.

Source: Farmpack India

Appendix 5: Ceat India Limited

Ceat India Limited is a tyre manufacturing company based in Mumbai, India. CEAT is an abbreviation for Cavi Electrici Affini Torino (Electrical Cables and Allied Products of Turin). Founded in Italy as CEAT Tyres by Virginio Bruni Tedeschi, the company established its manufacturing in India in 1958. The company's Indian division later was taken over by RPG Enterprises in the year 1982 which also got the rights to the CEAT brand and renamed the company as CEAT Limited. CEAT is one of the largest tyre manufacturers in India and Sri Lanka and has considerable share in the local truck and light truck tyre market. The company is headquartered in Mumbai. It has manufacturing plants in Mumbai and Nashik in Maharashtra state of India. CEAT owns 4 Manufacturing plants - 2 in India and 2 in Sri Lanka. CEAT manufactures a wide range of tyres for various customer radials for Indian vehicles and caters to various user segments including (i) Heavy-duty Trucks and Buses, (ii) Light Commercial Vehicles, (iii) Earthmovers, (iv) Forklifts, (v) Tractors, (vi) Trailers, (vii) Cars, (viii) SUVs, (ix) Motorcycles and Scooters, and (x) Auto-rickshaws. It exports to over 110 countries across the world.

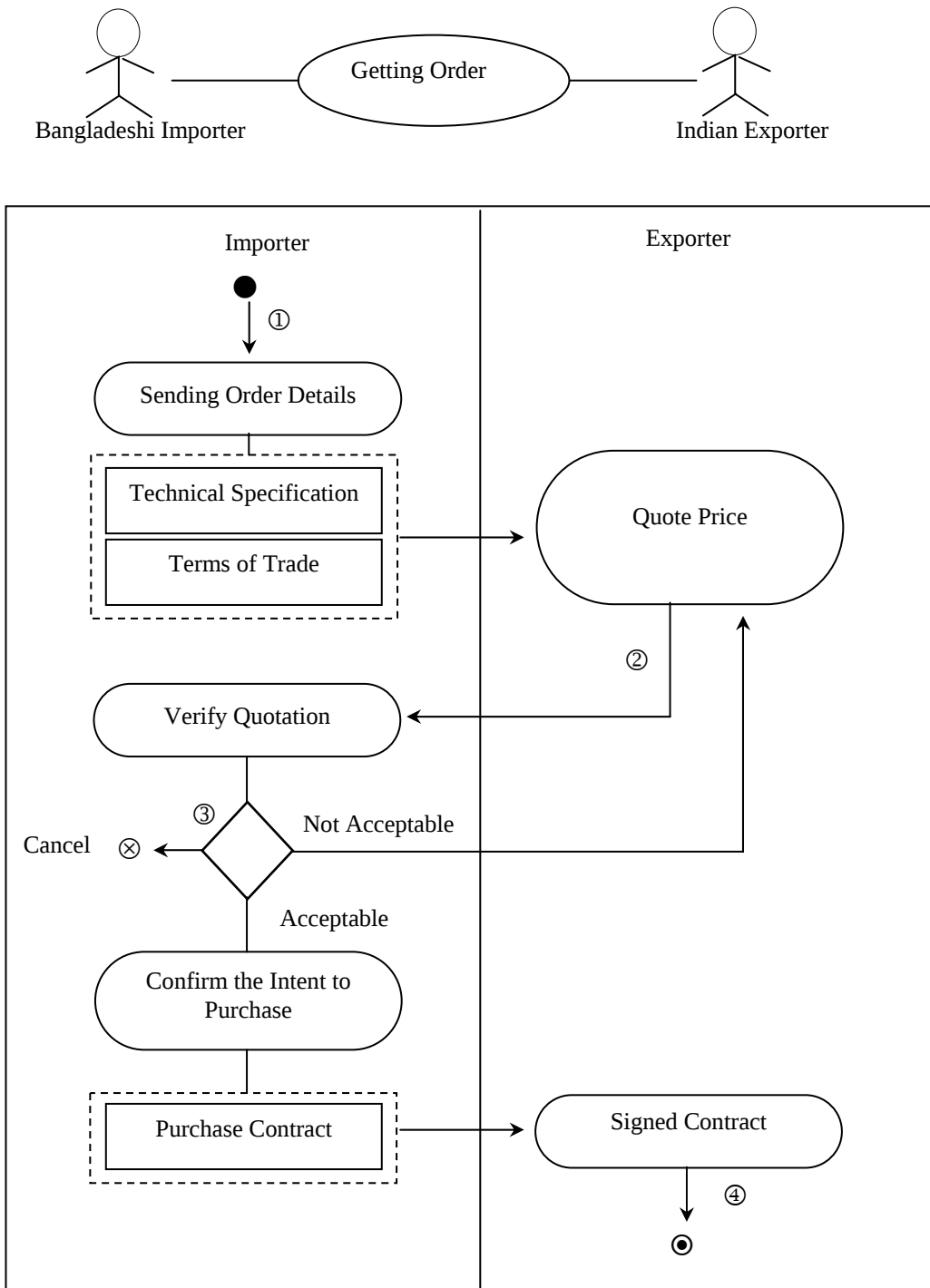
Source: CEAT India

Annex: BPA Charts

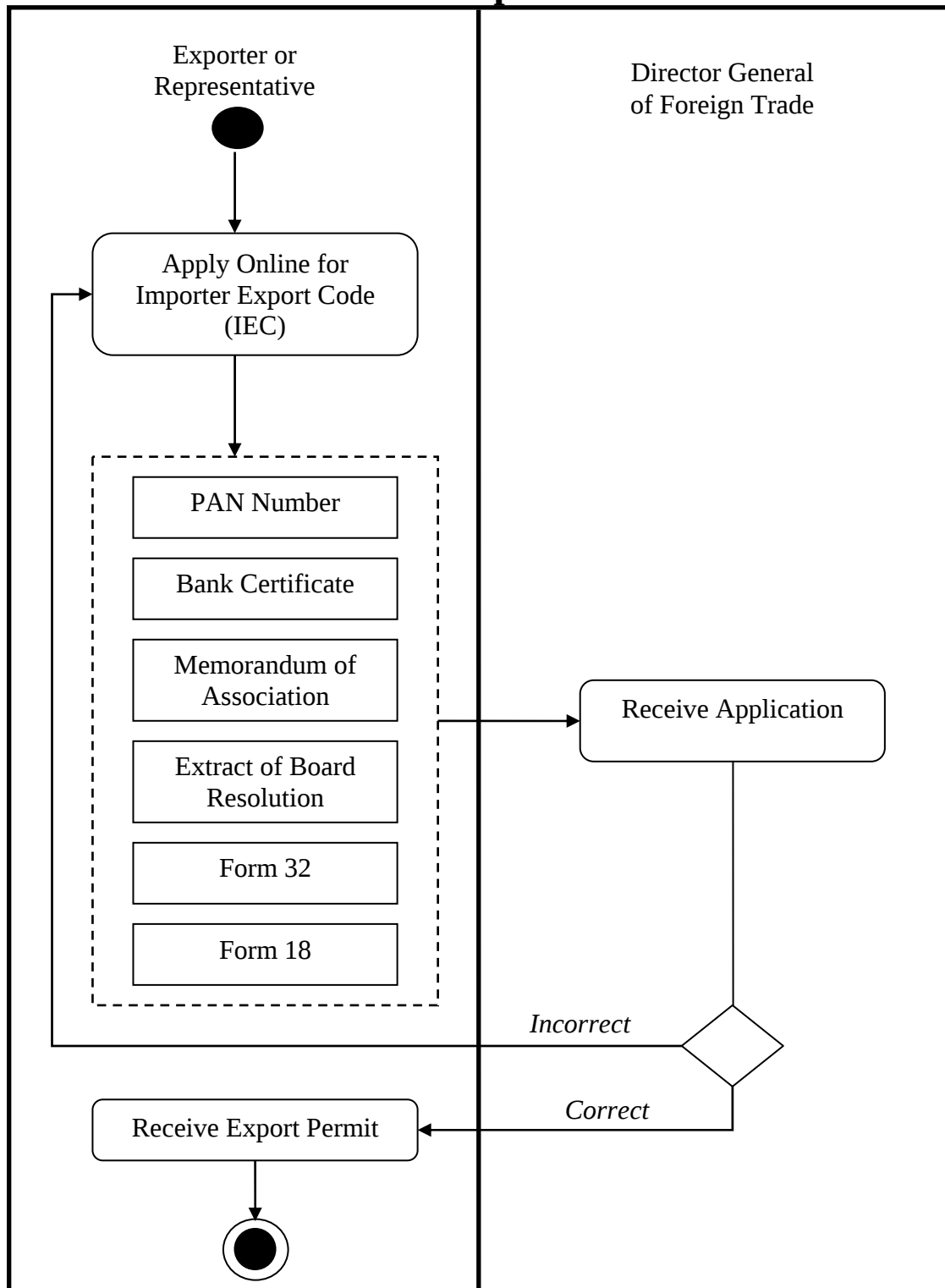
Annexure 1

Business Processes Analysis (BPA) Maps of Cotton Yarn Export to Bangladesh

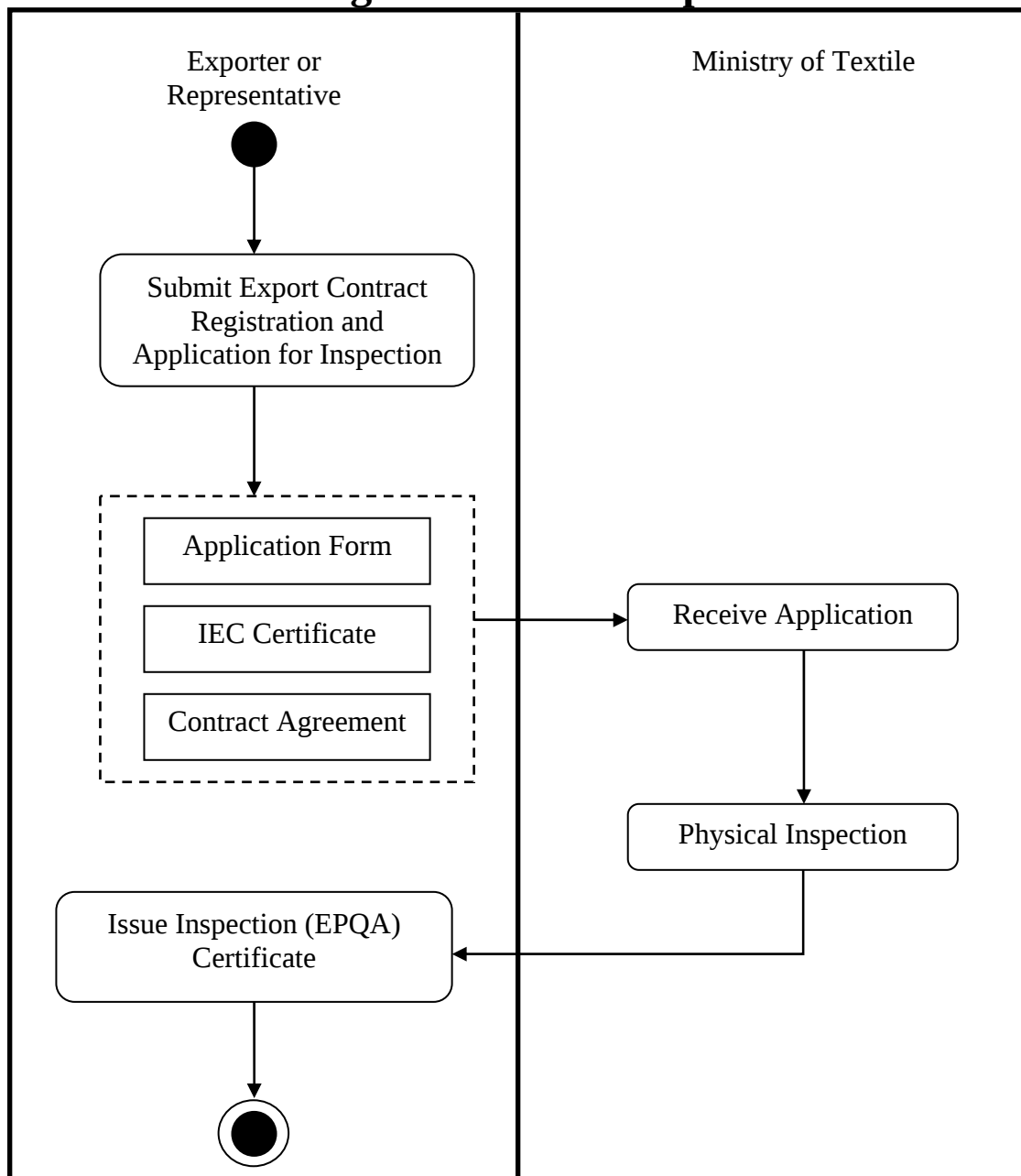
1. Buy



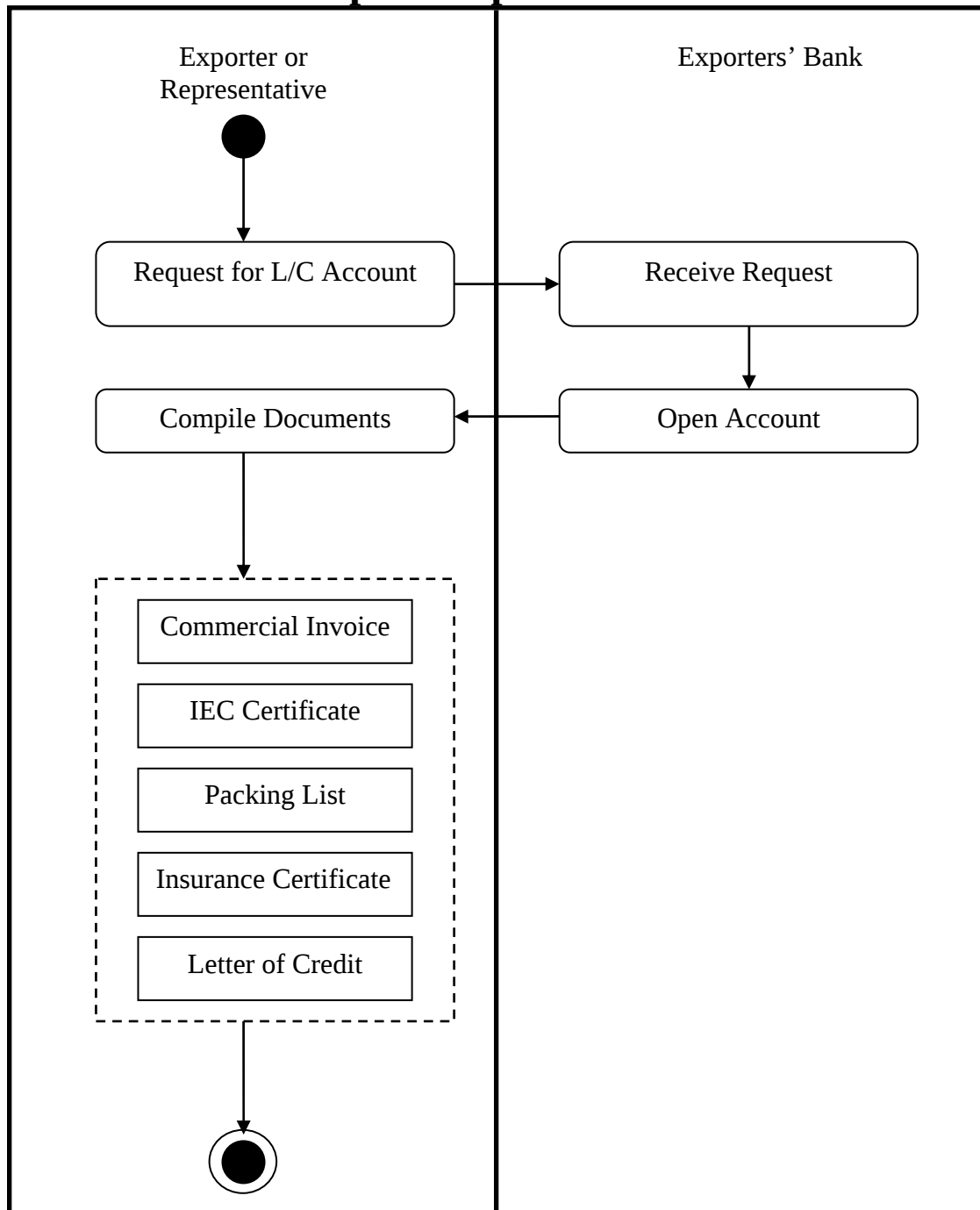
2.1 Obtain Export Permit



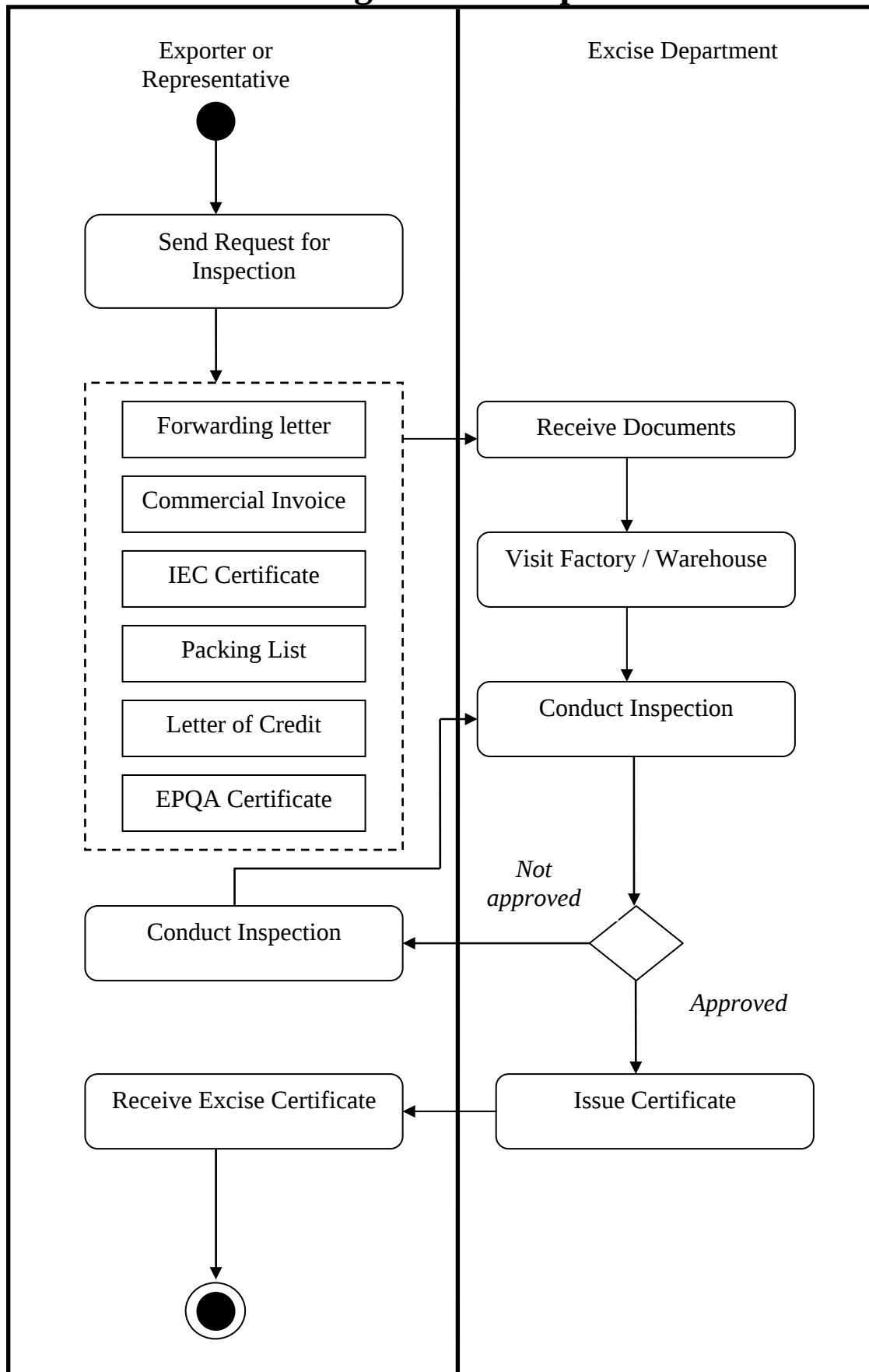
2.2 Contract Registration and Inspection of Yarn



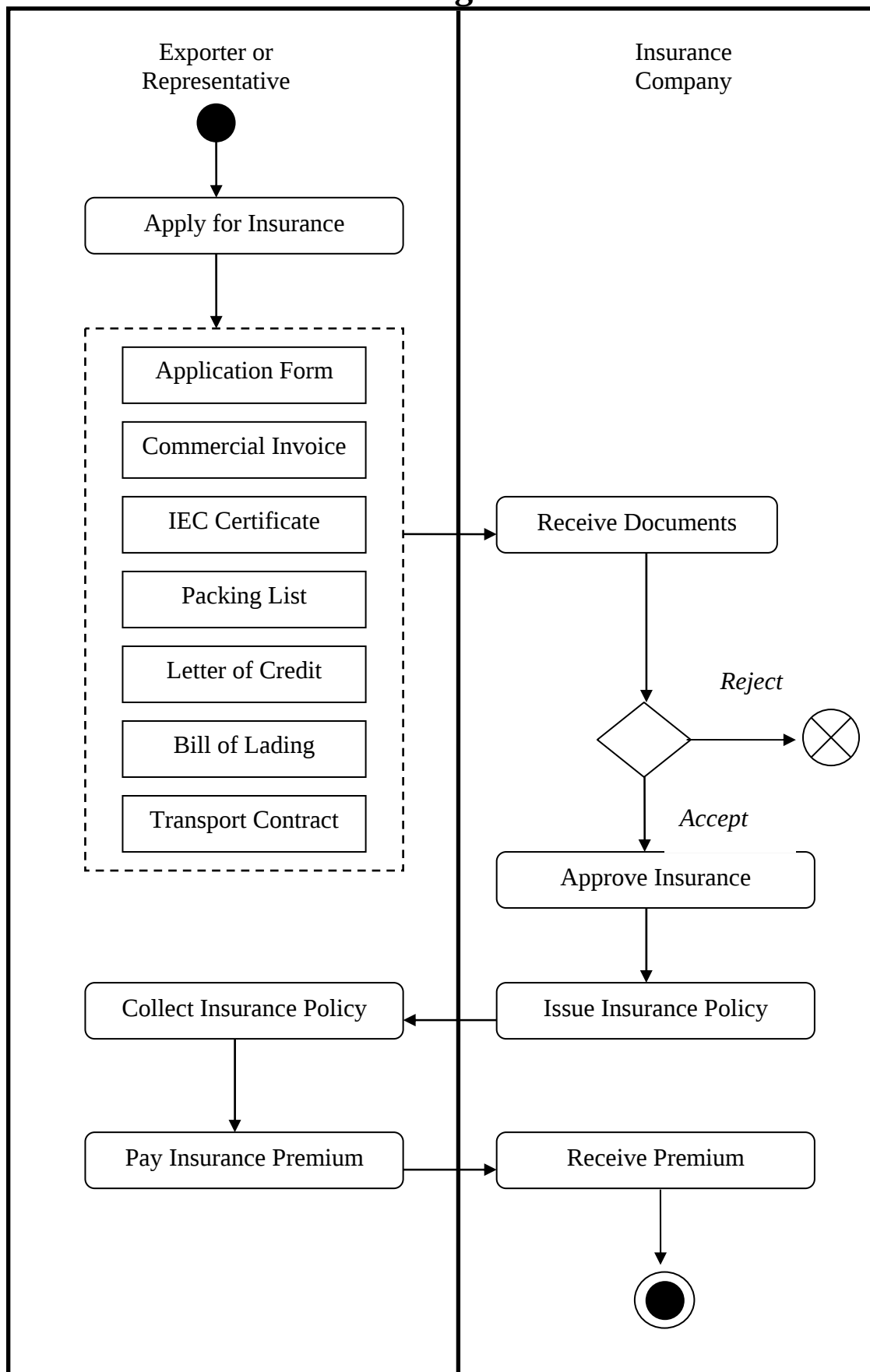
2.3 Prepare Export Document



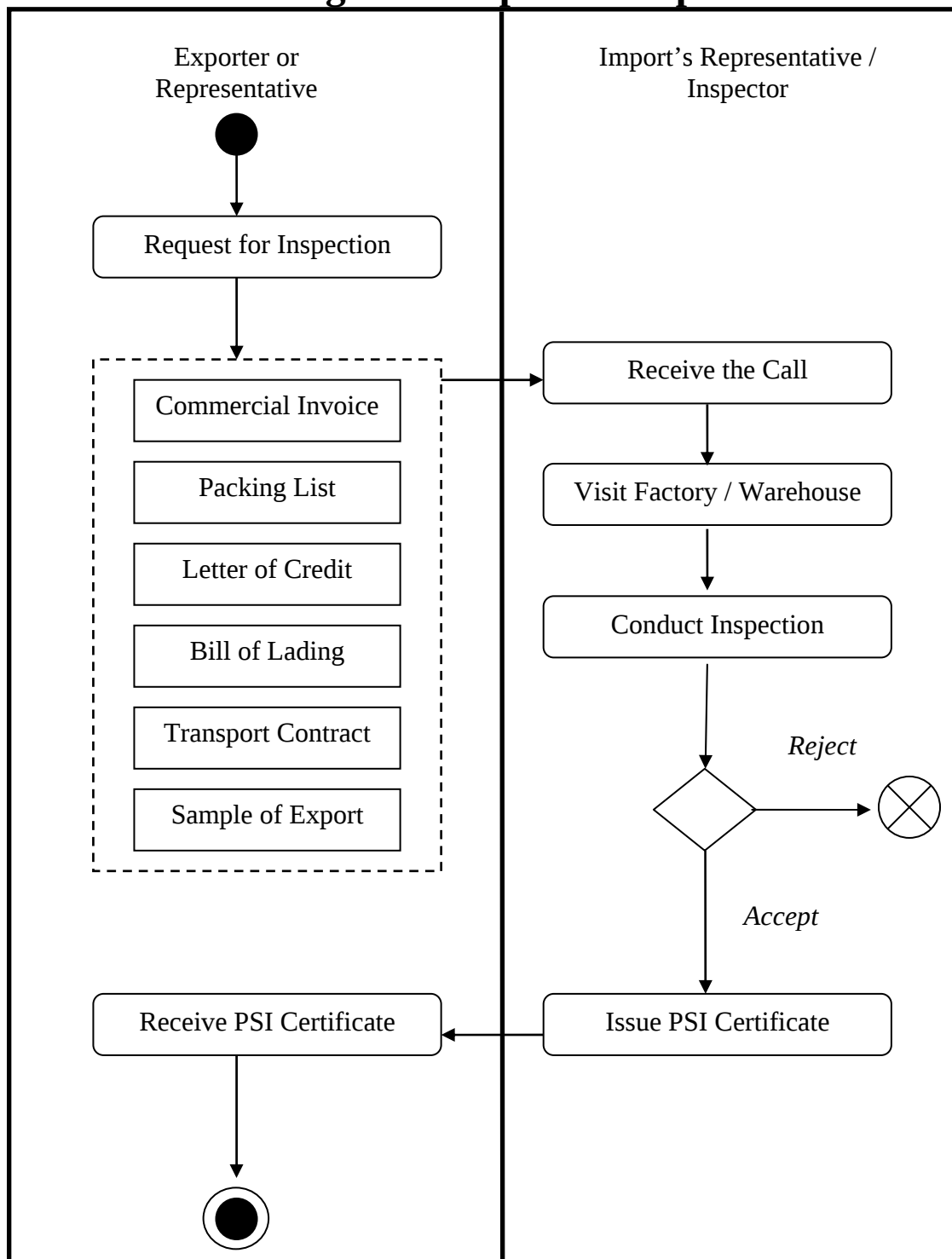
2.4 Arrange Excise Inspection



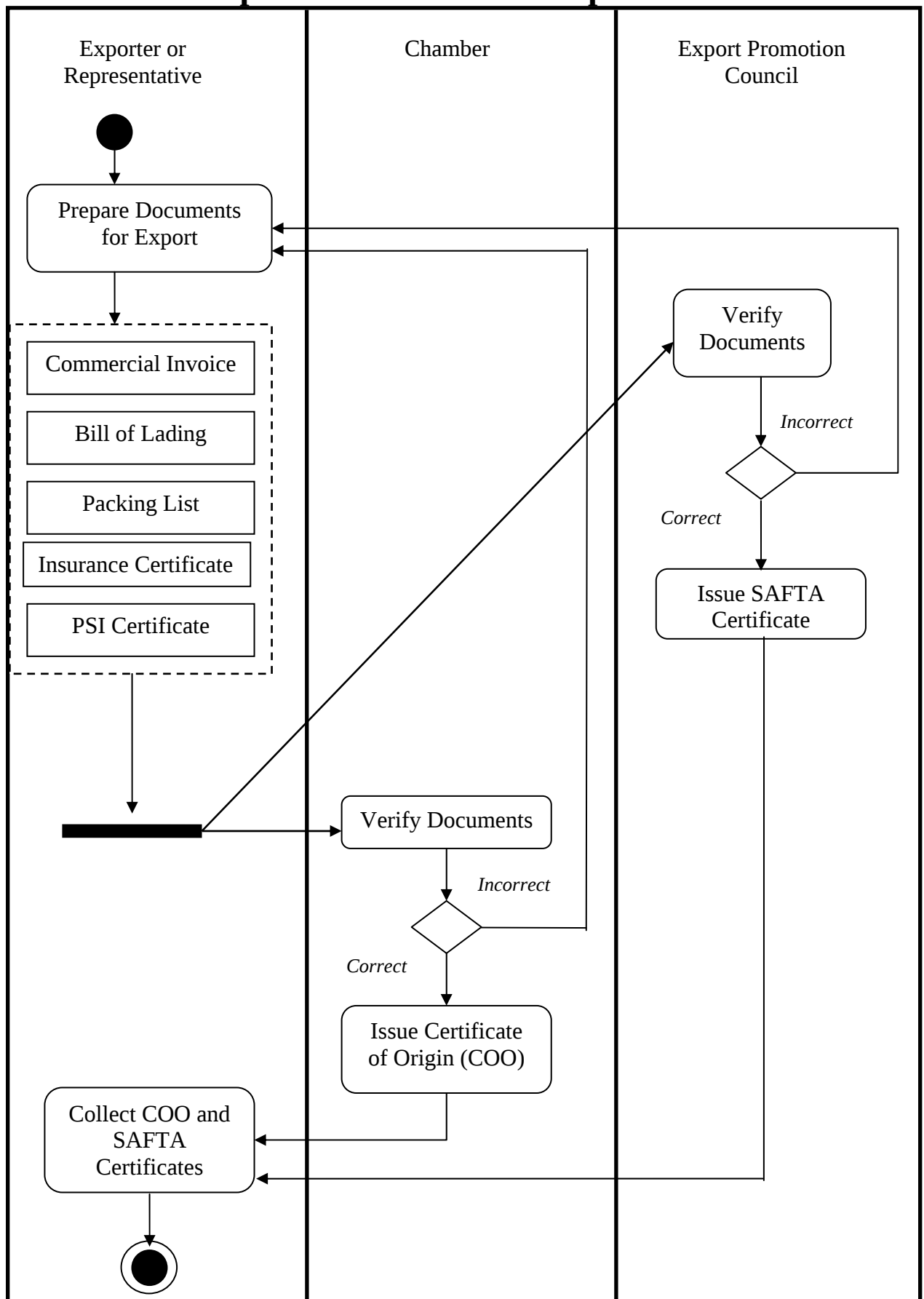
2.5 Obtain Cargo Insurance



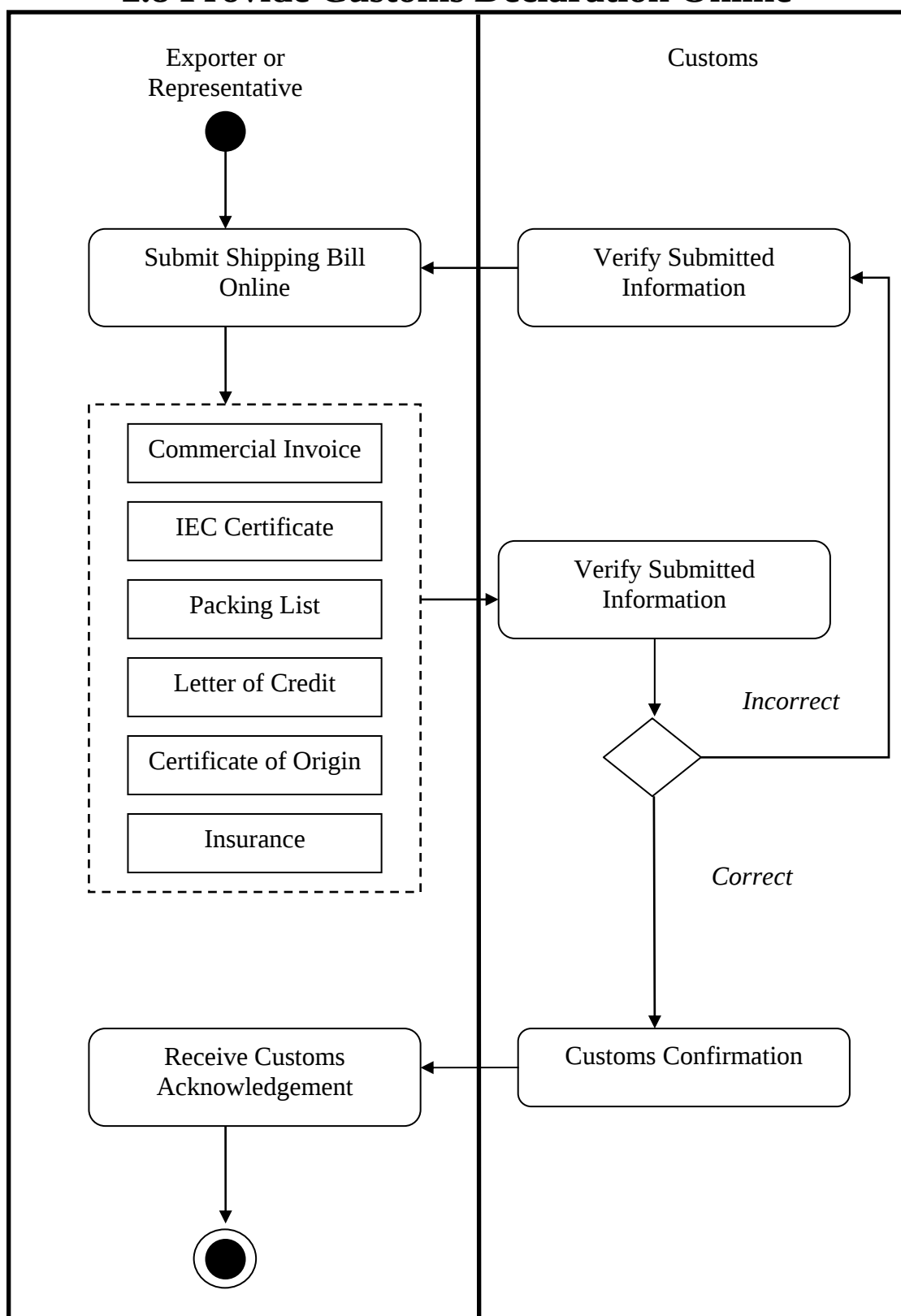
2.6 Arrange Pre-shipment Inspection



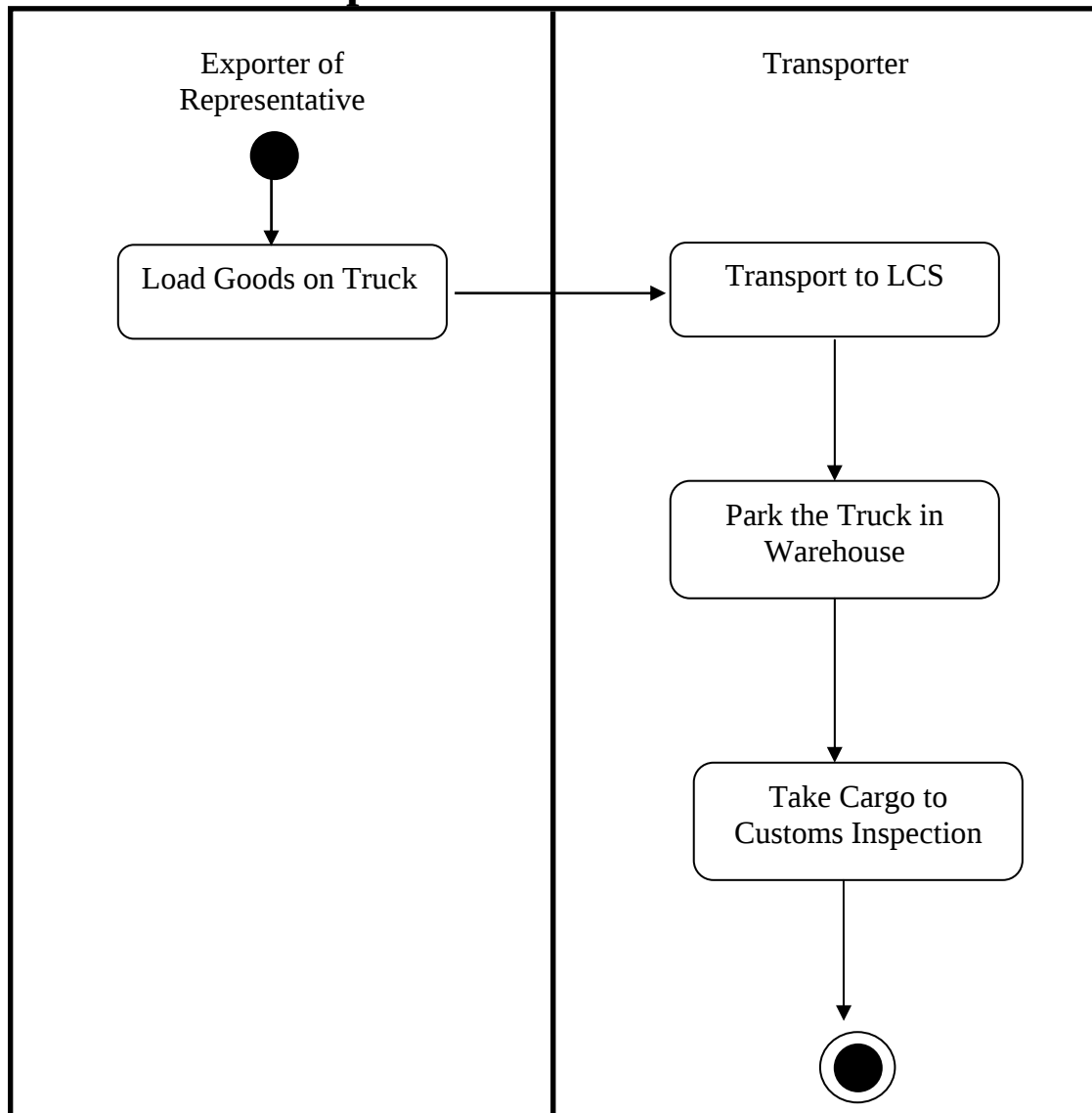
2.7 Prepare Documents for Importer



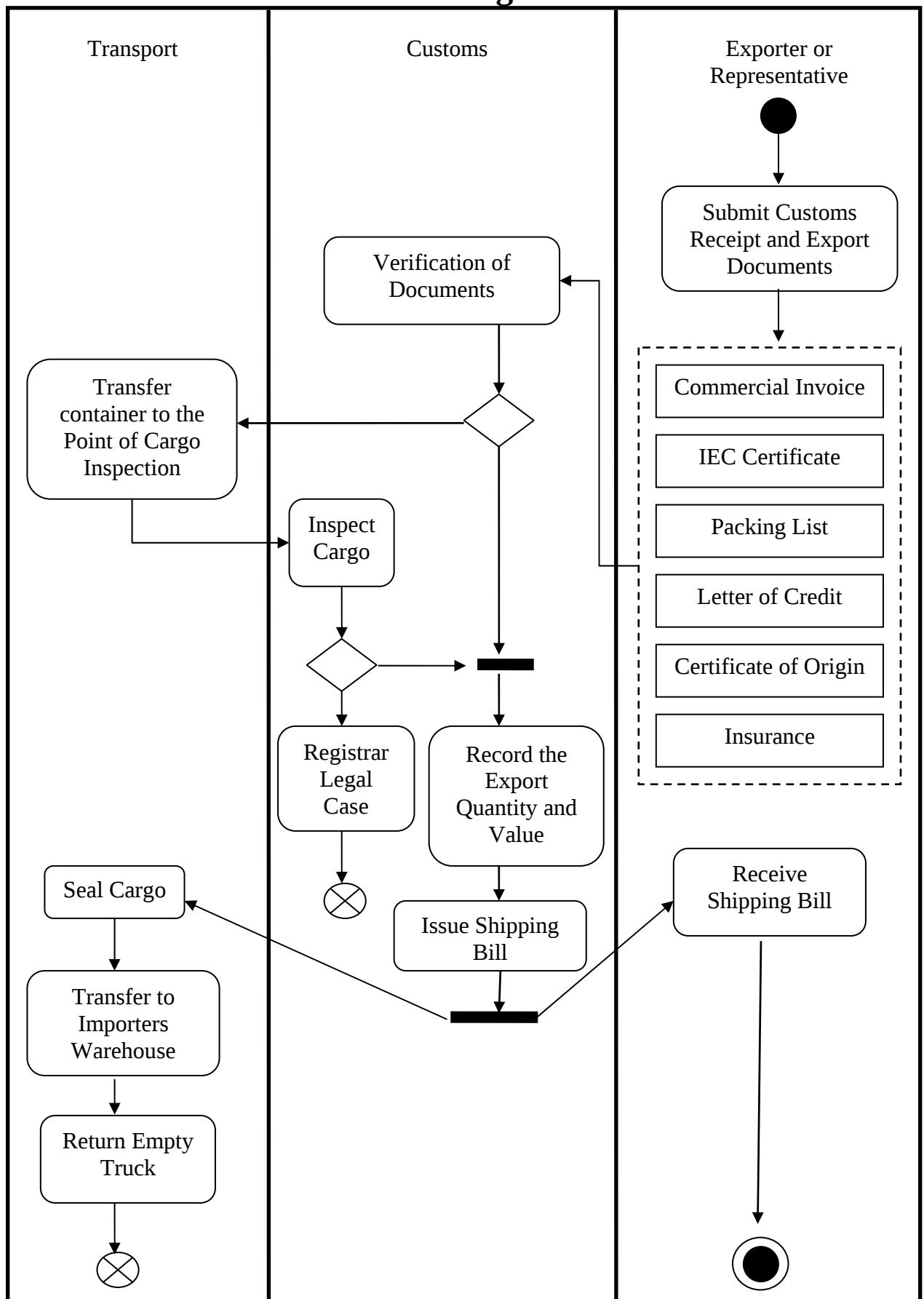
2.8 Provide Customs Declaration Online



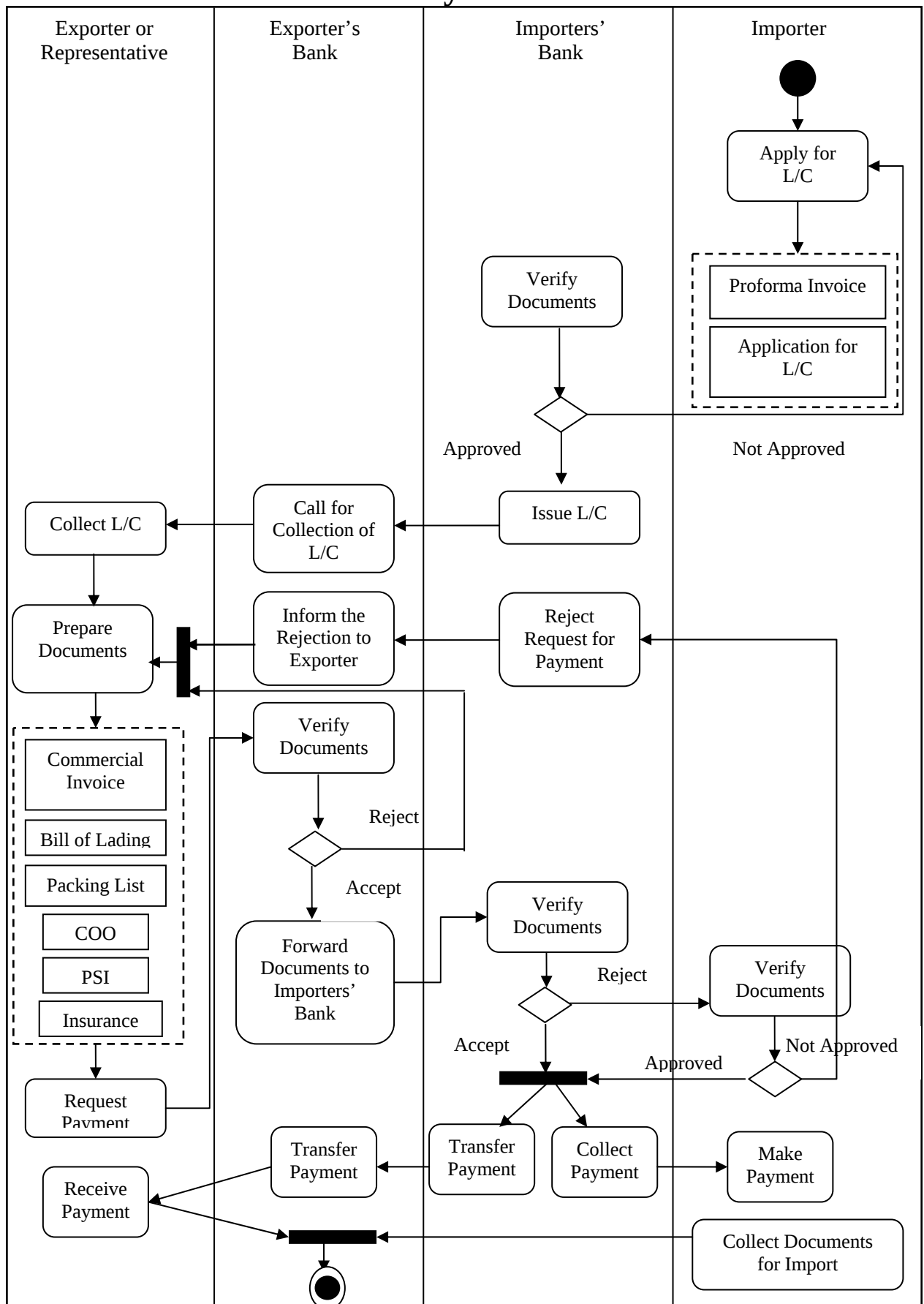
2.9 Transport to Land Customs Station



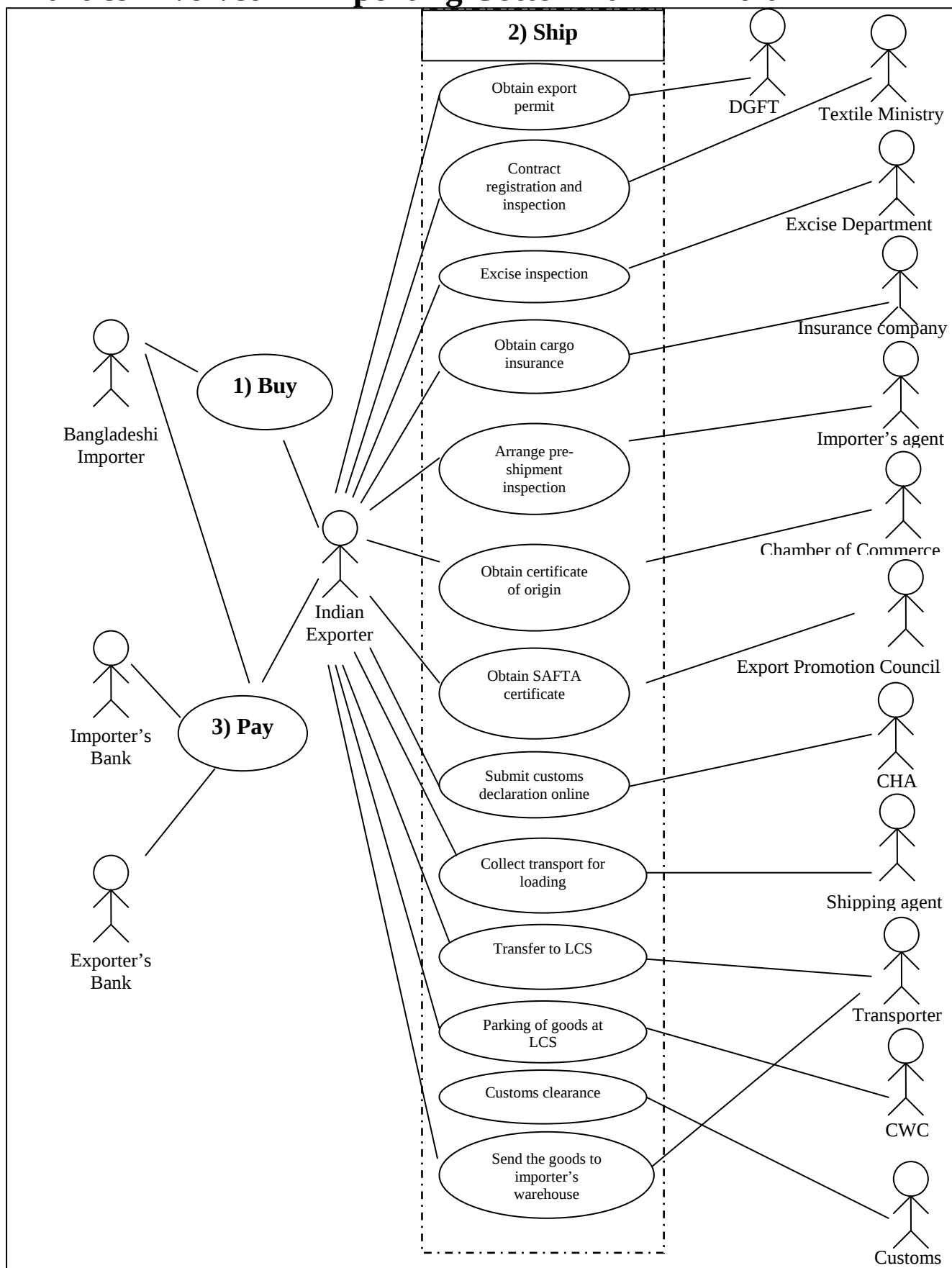
2.10 Clear Goods through Customs



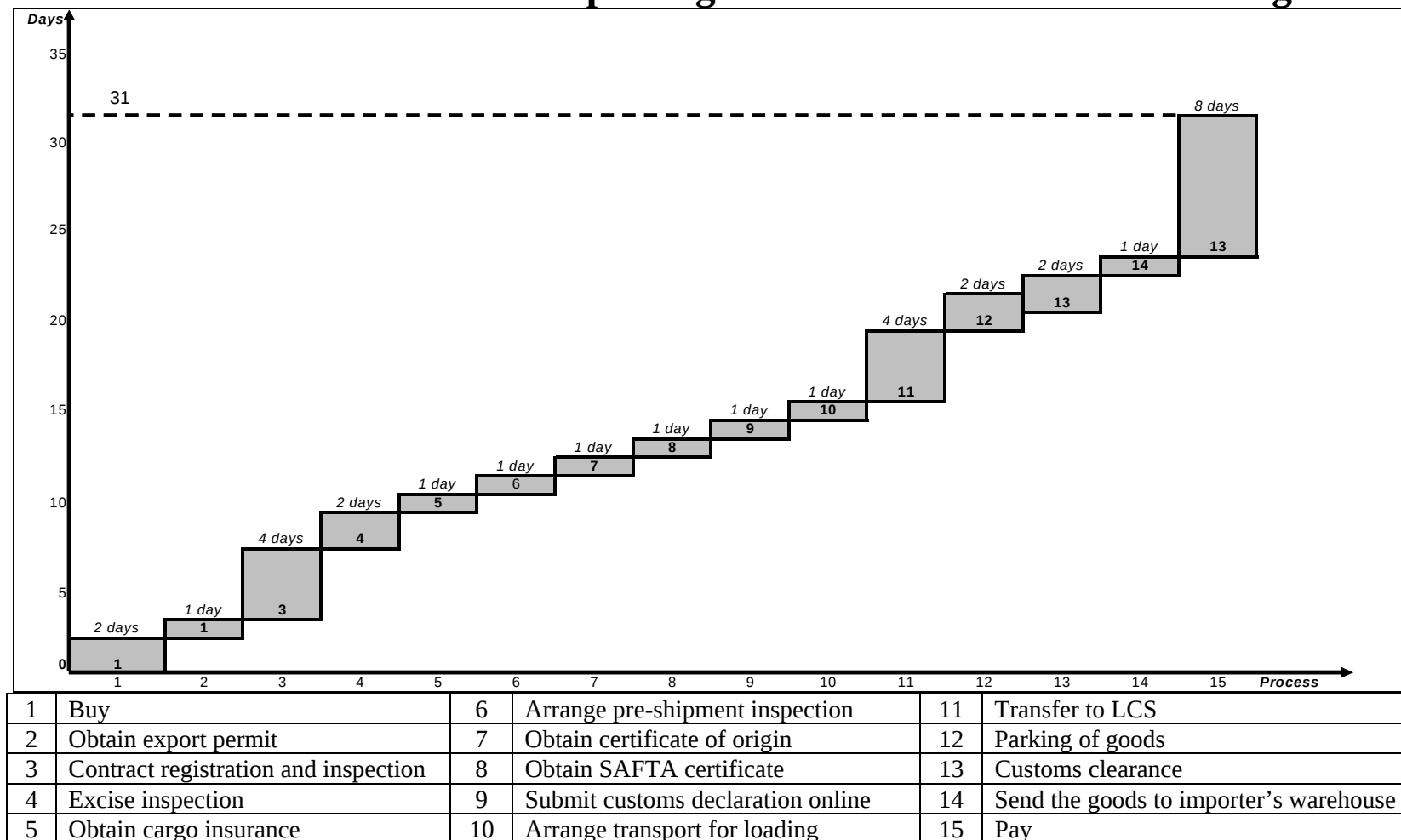
3. Pay



Parties Involved in Exporting Cotton Yarn in India



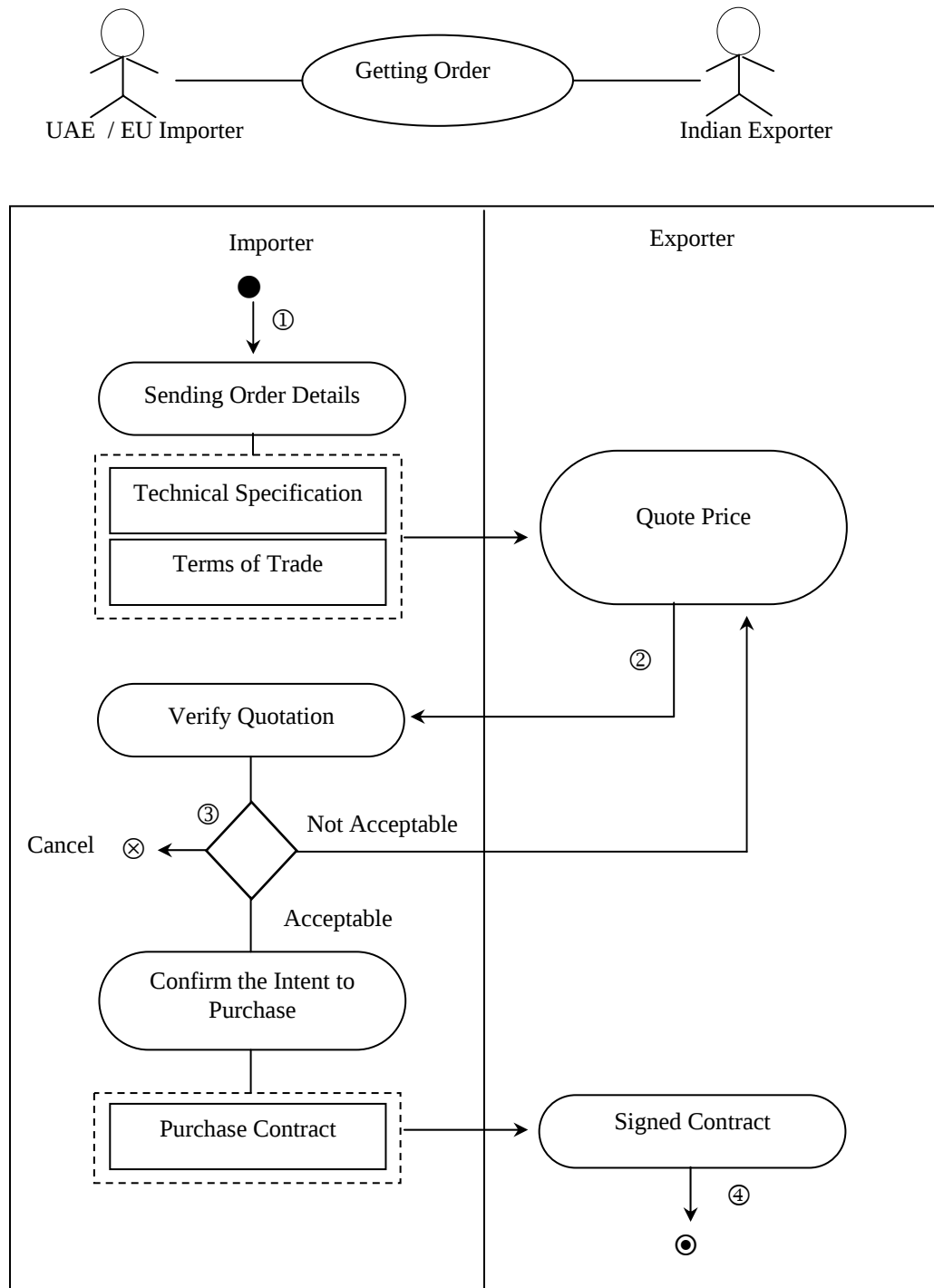
Times – Procedures Chart of Exporting Cotton Yarn from India to Bangladesh



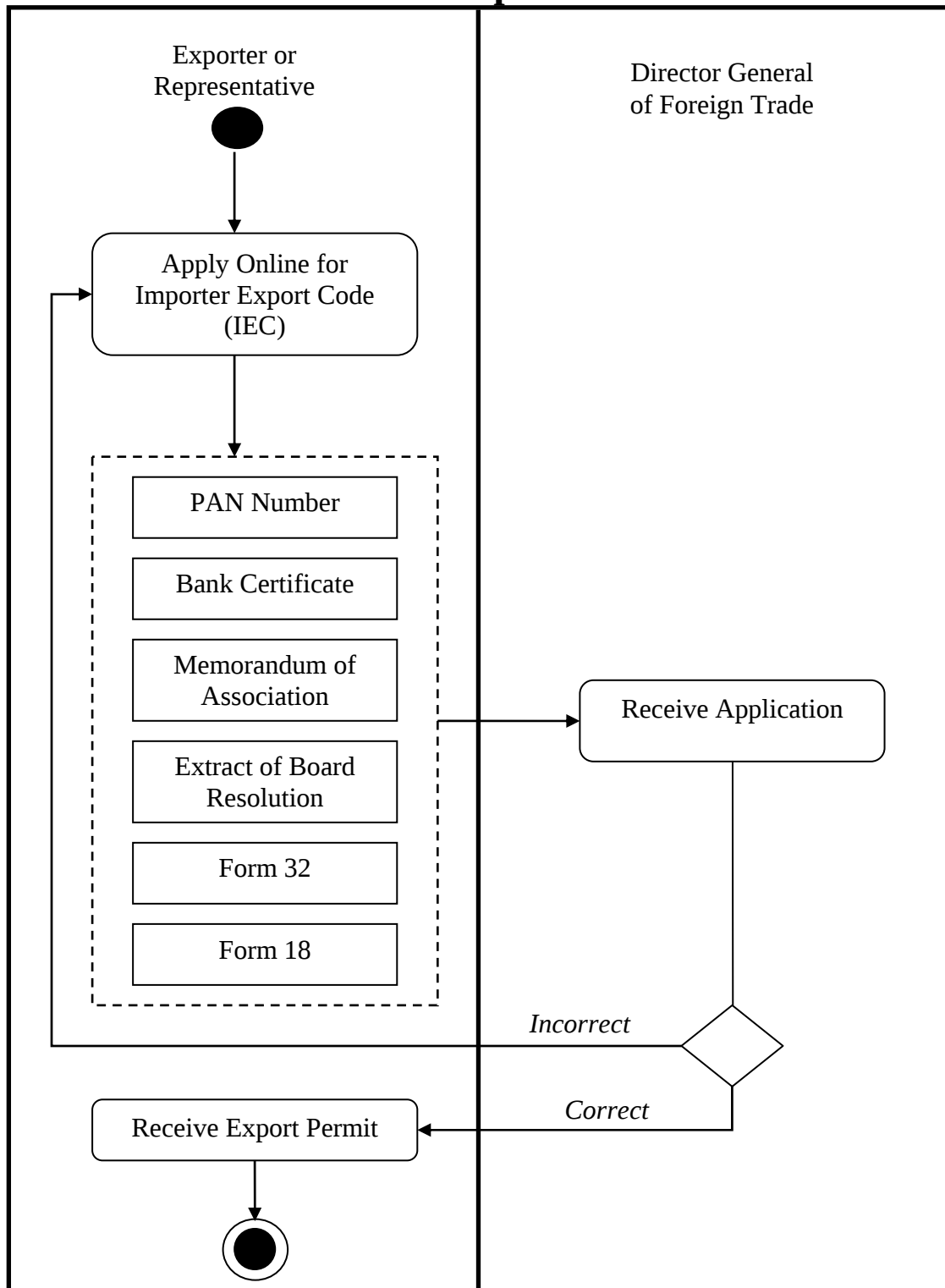
Annexure 2

Business Processes Analysis (BPA) Maps of Fresh Fruits & Vegetables Export to Middle East and Europe

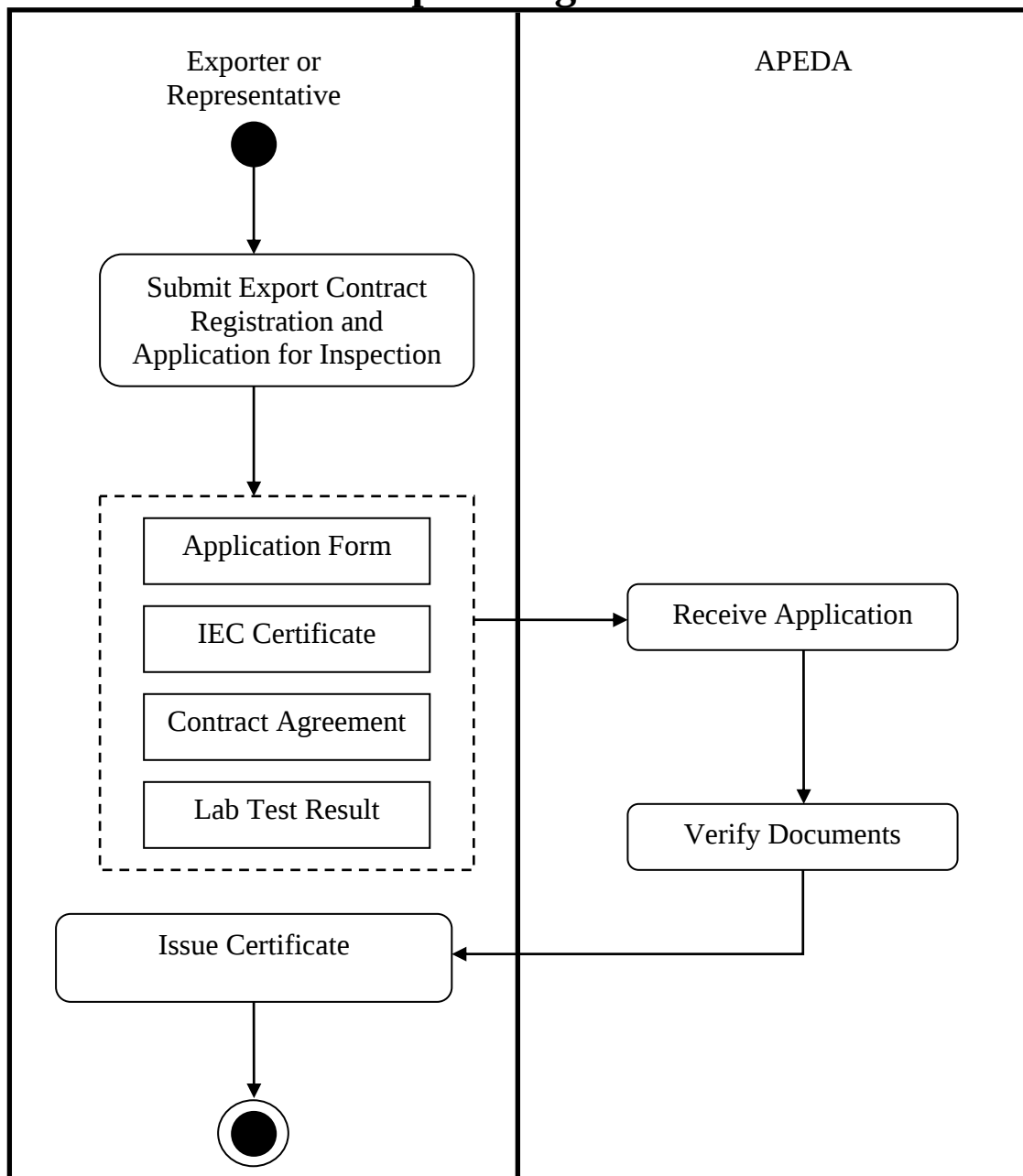
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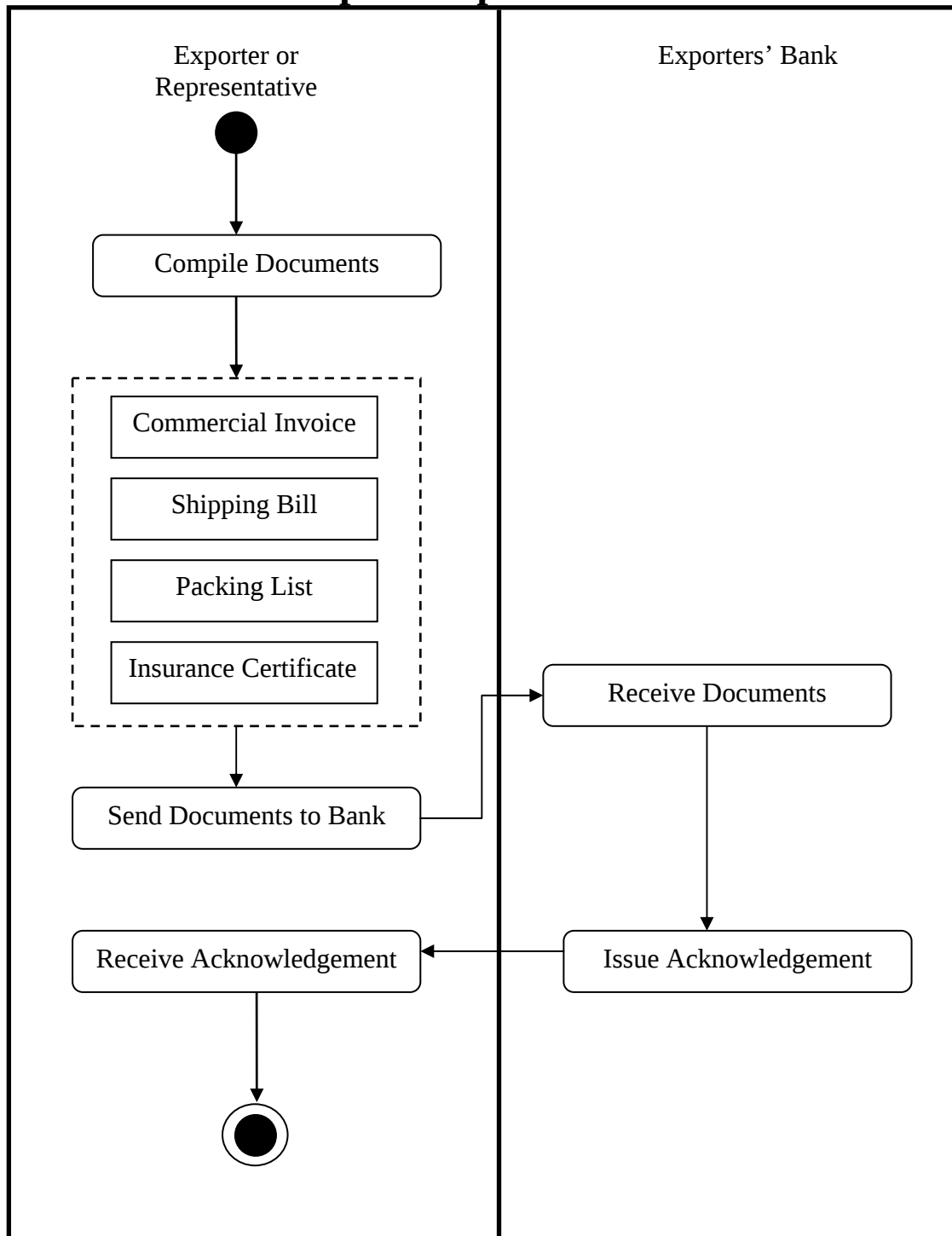
2.1 Obtain Export Permit



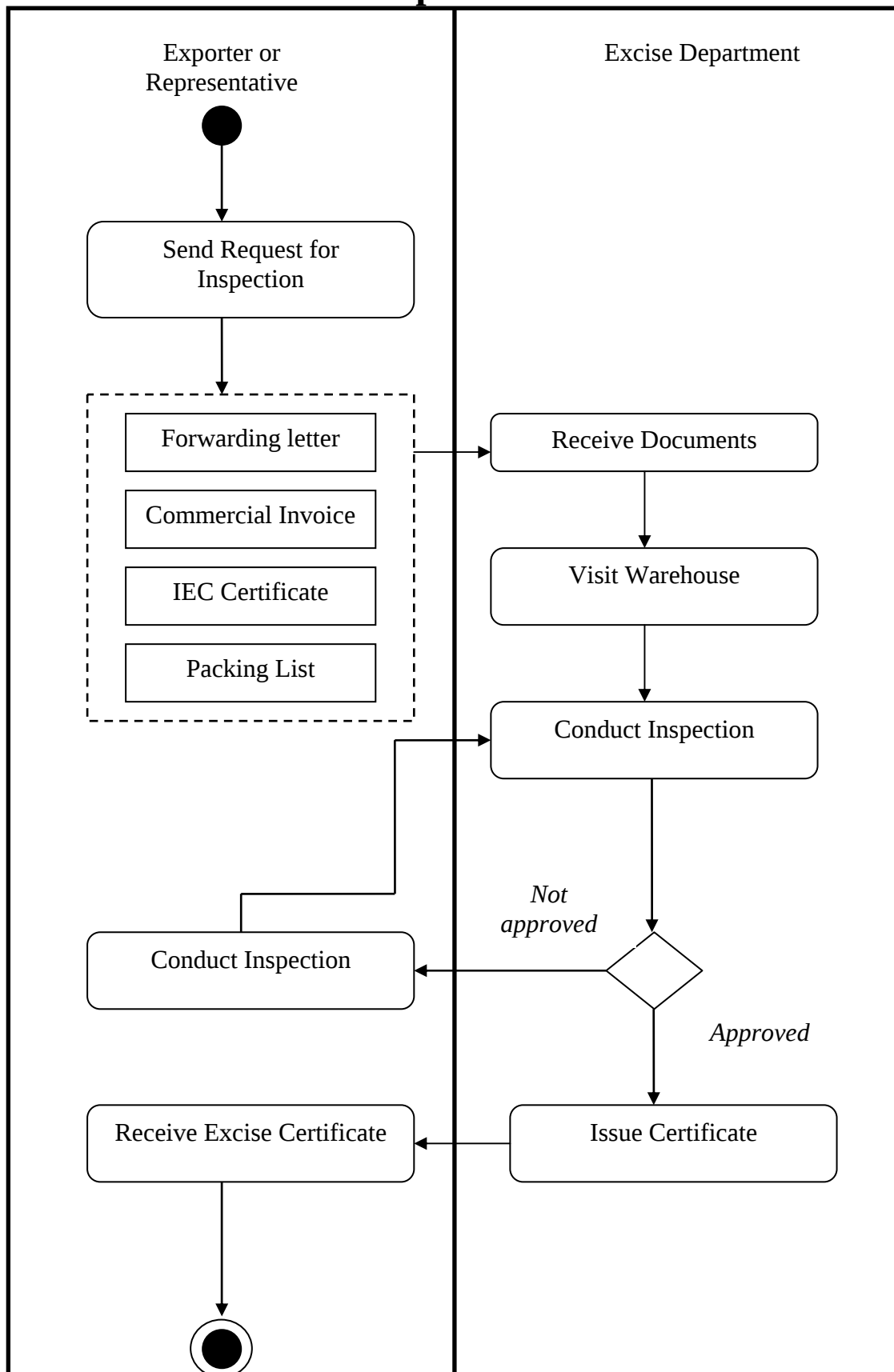
2.2 Export Registration



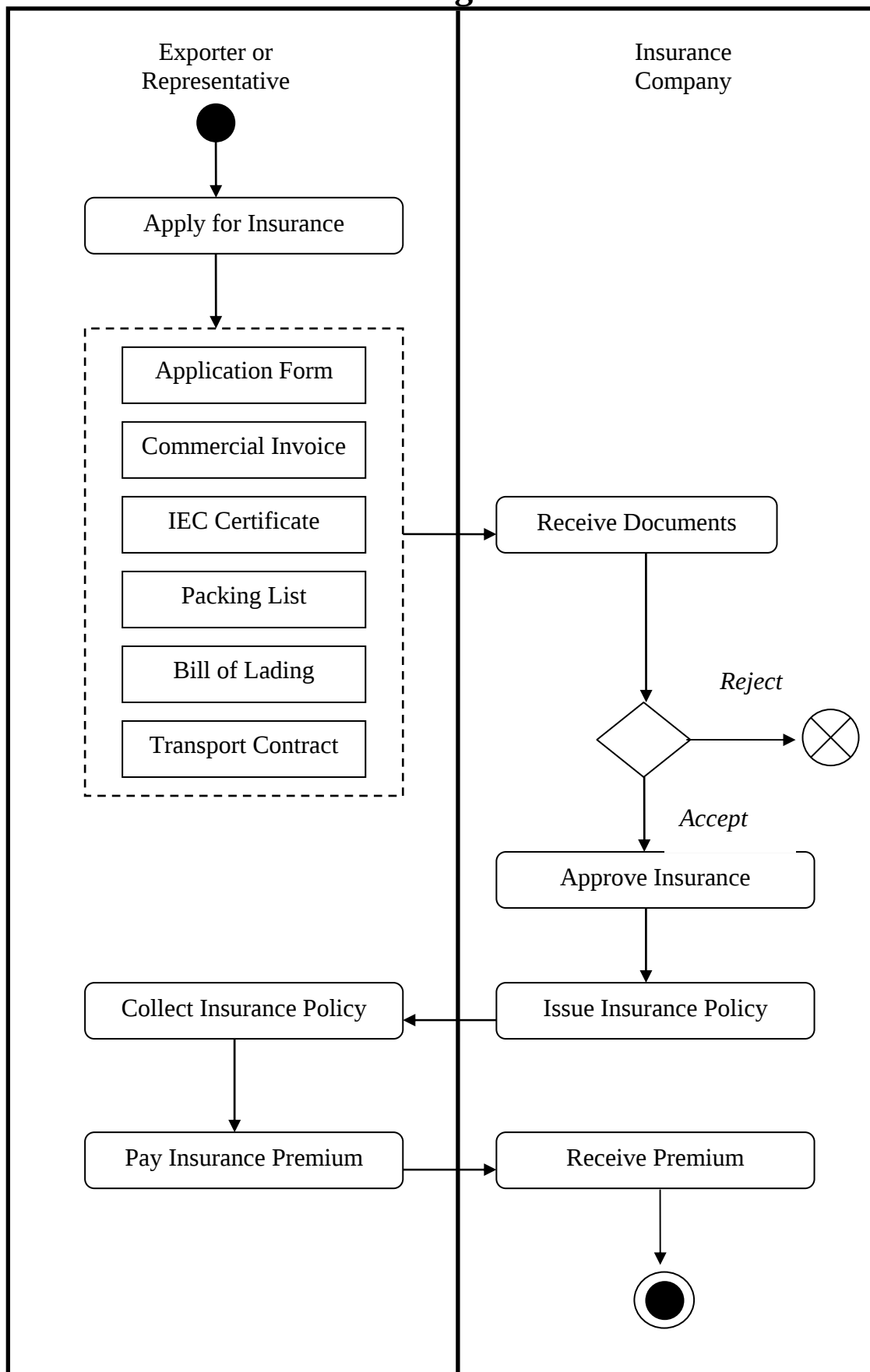
2.3 Prepare Export Document



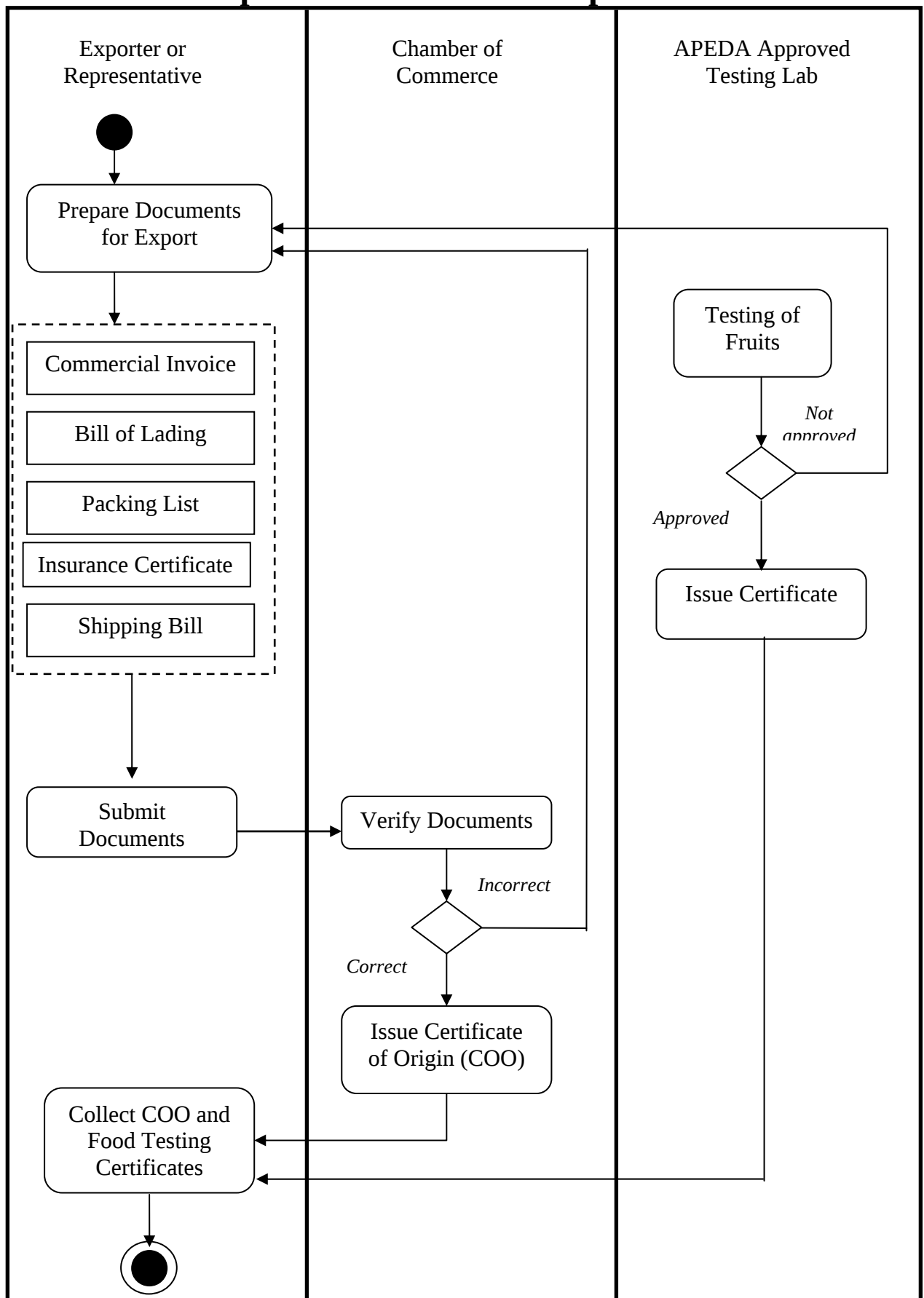
2.4 Company Stuffing Permission and Excise Inspection



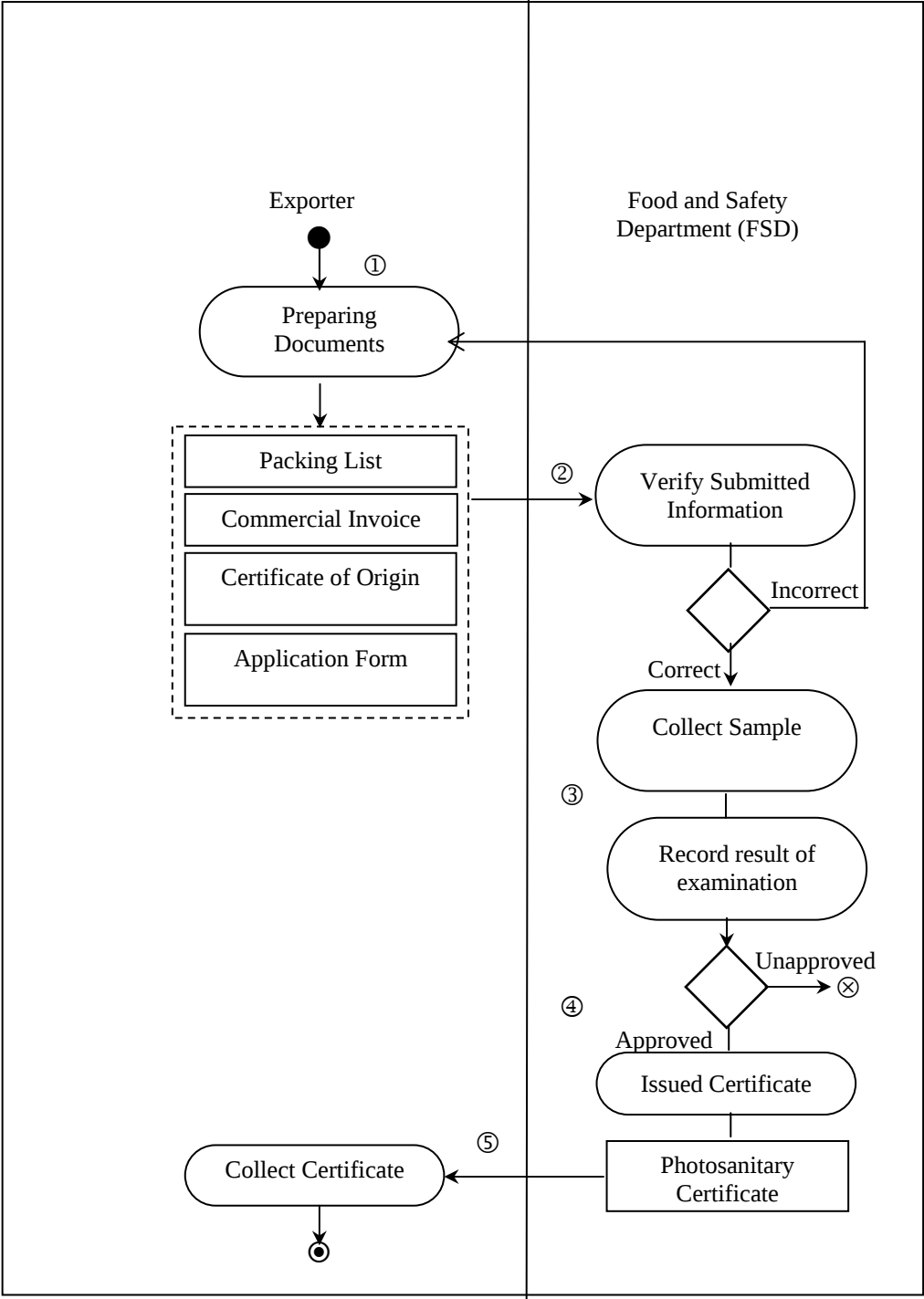
2.5 Obtain Cargo Insurance



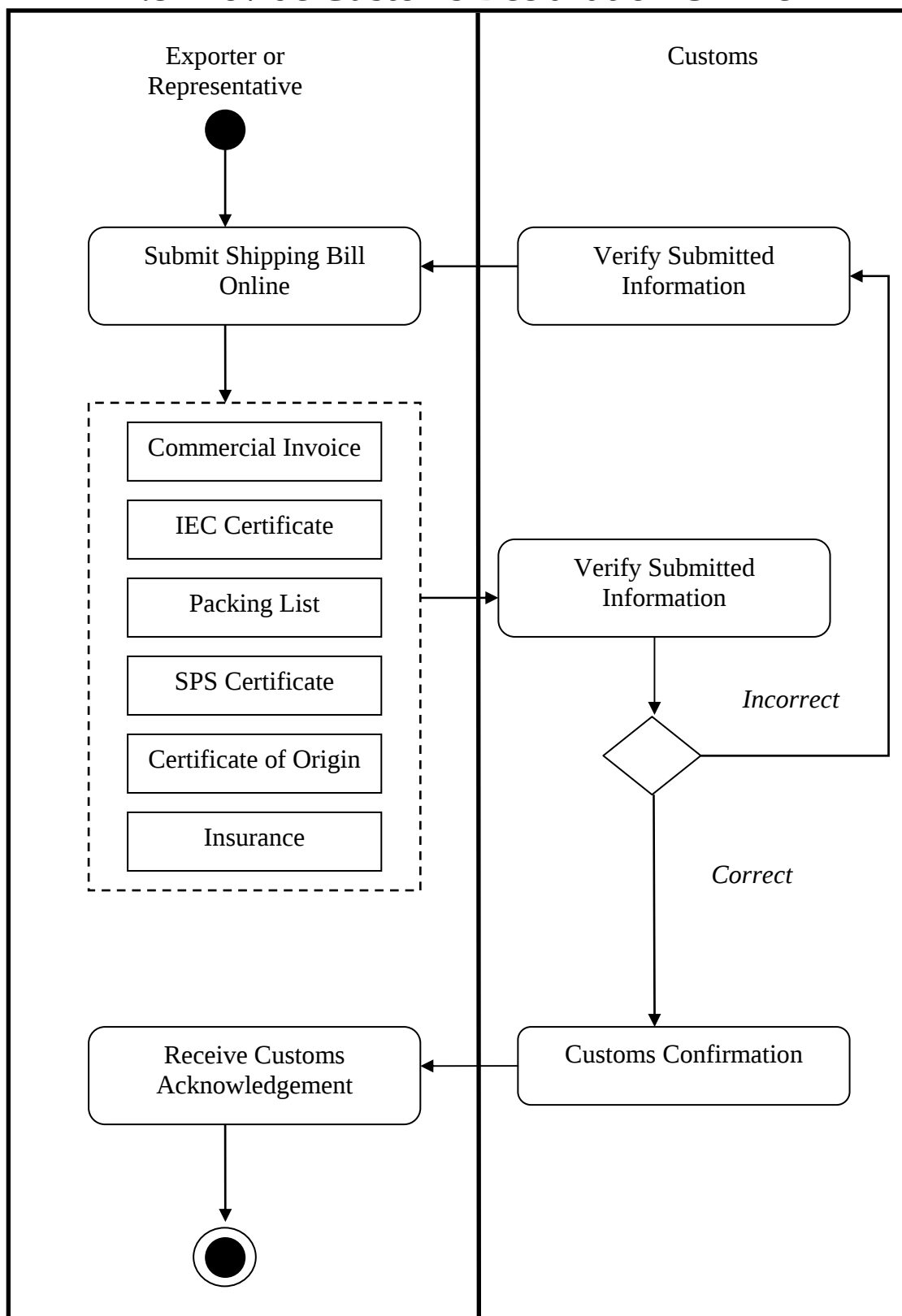
2.6 Prepare Documents for Importer



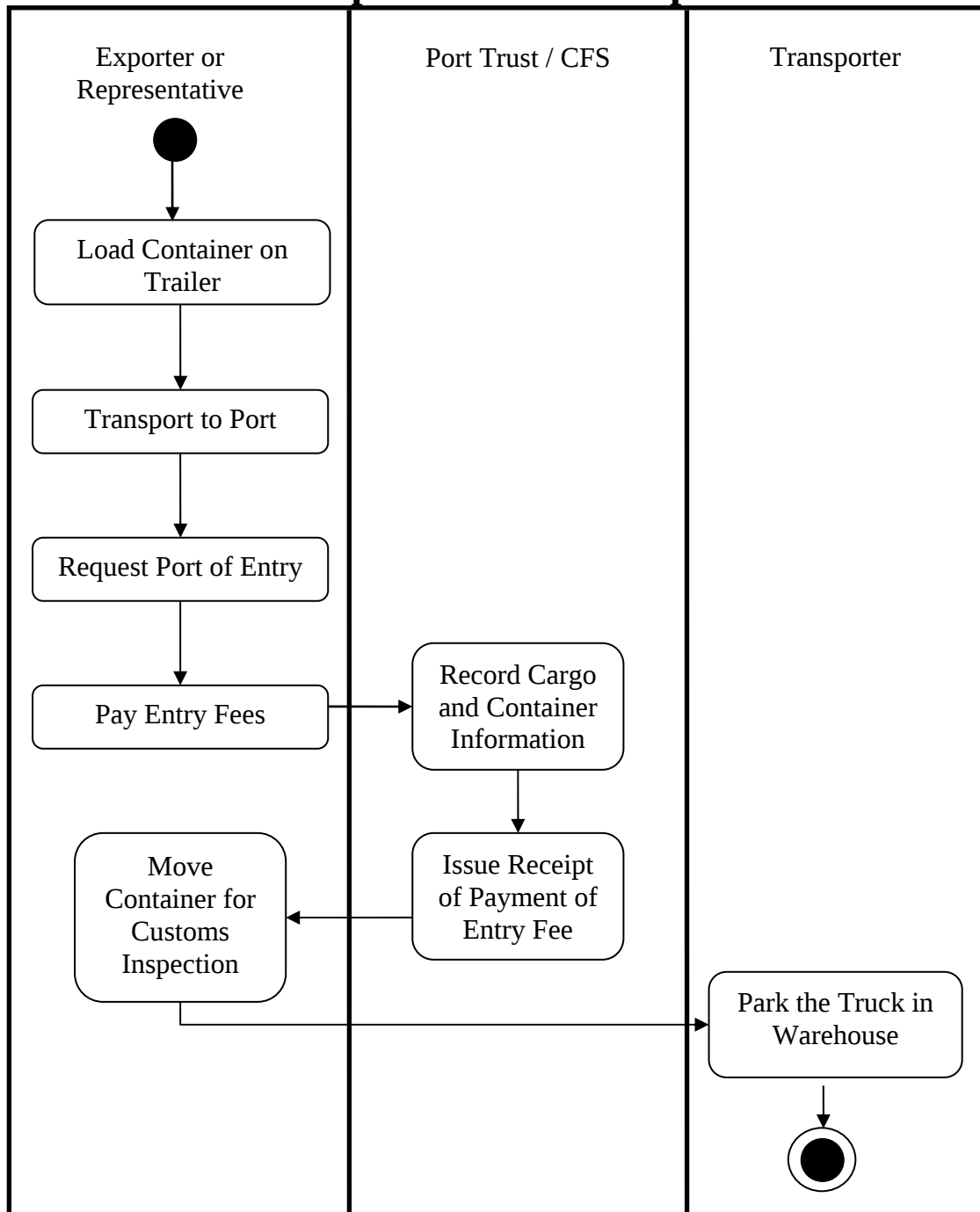
2.7 Getting Sanitary and Phytosanitary Certificate



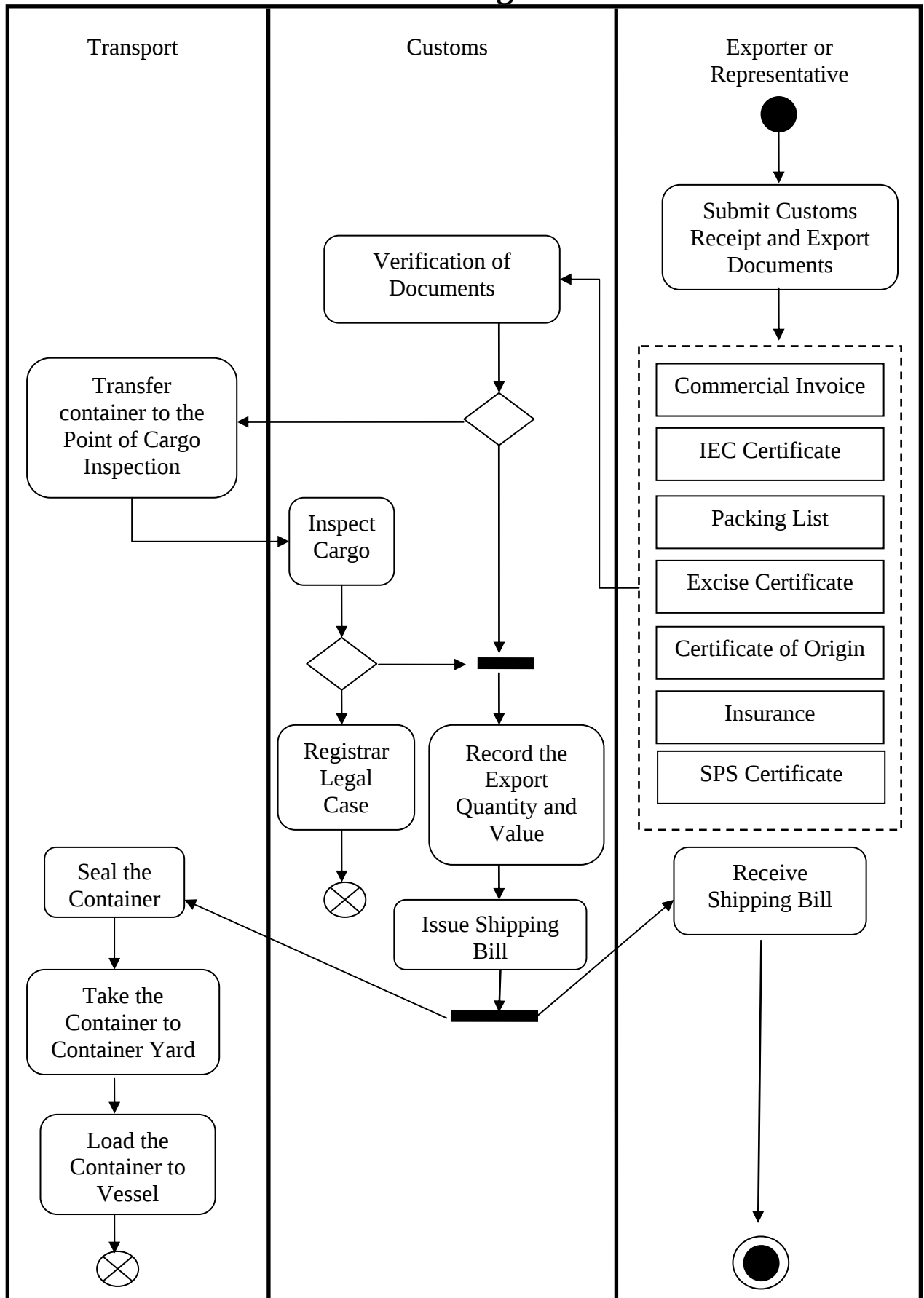
2.8 Provide Customs Declaration Online



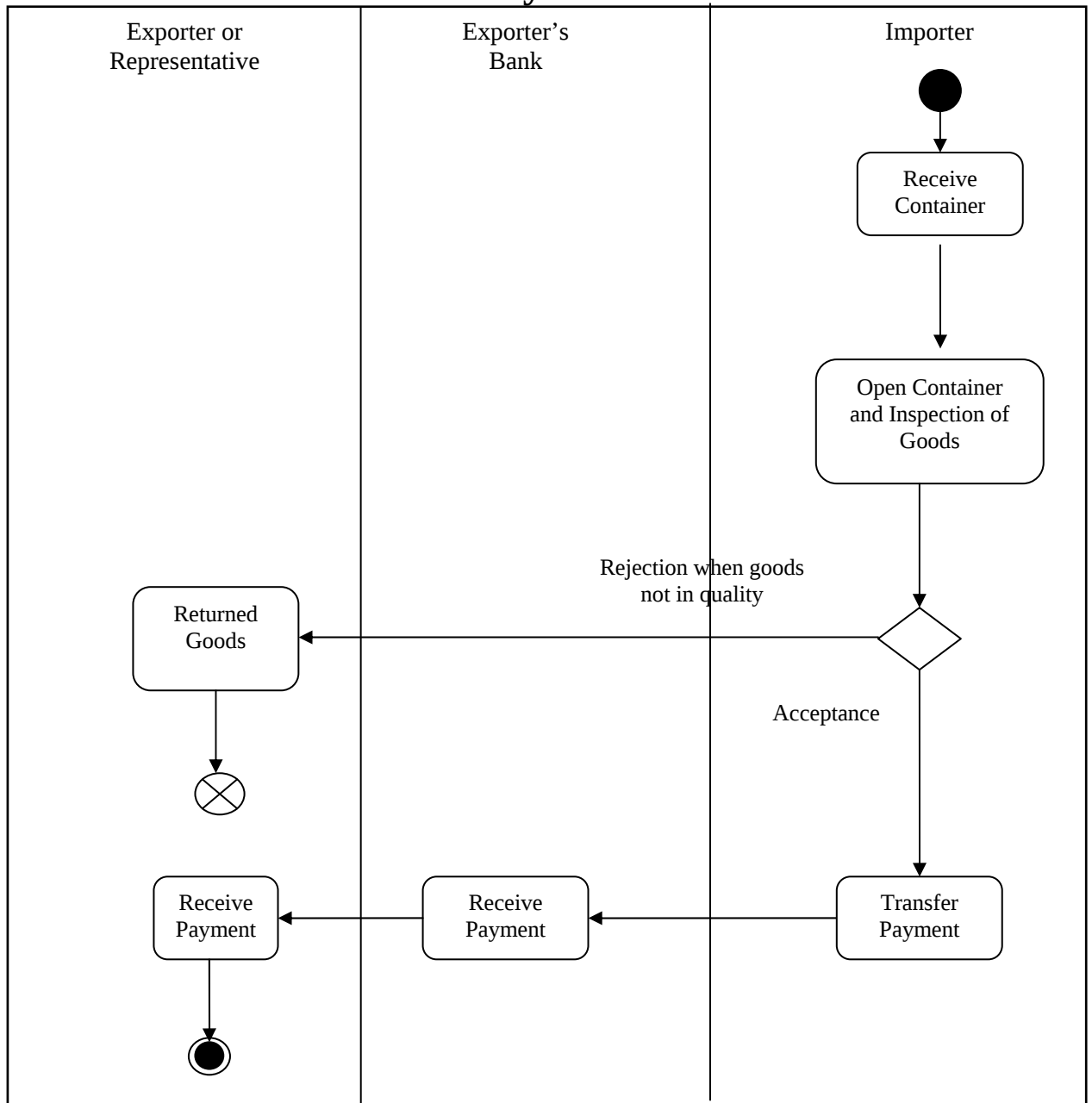
2.9 Transport to Port of Departure



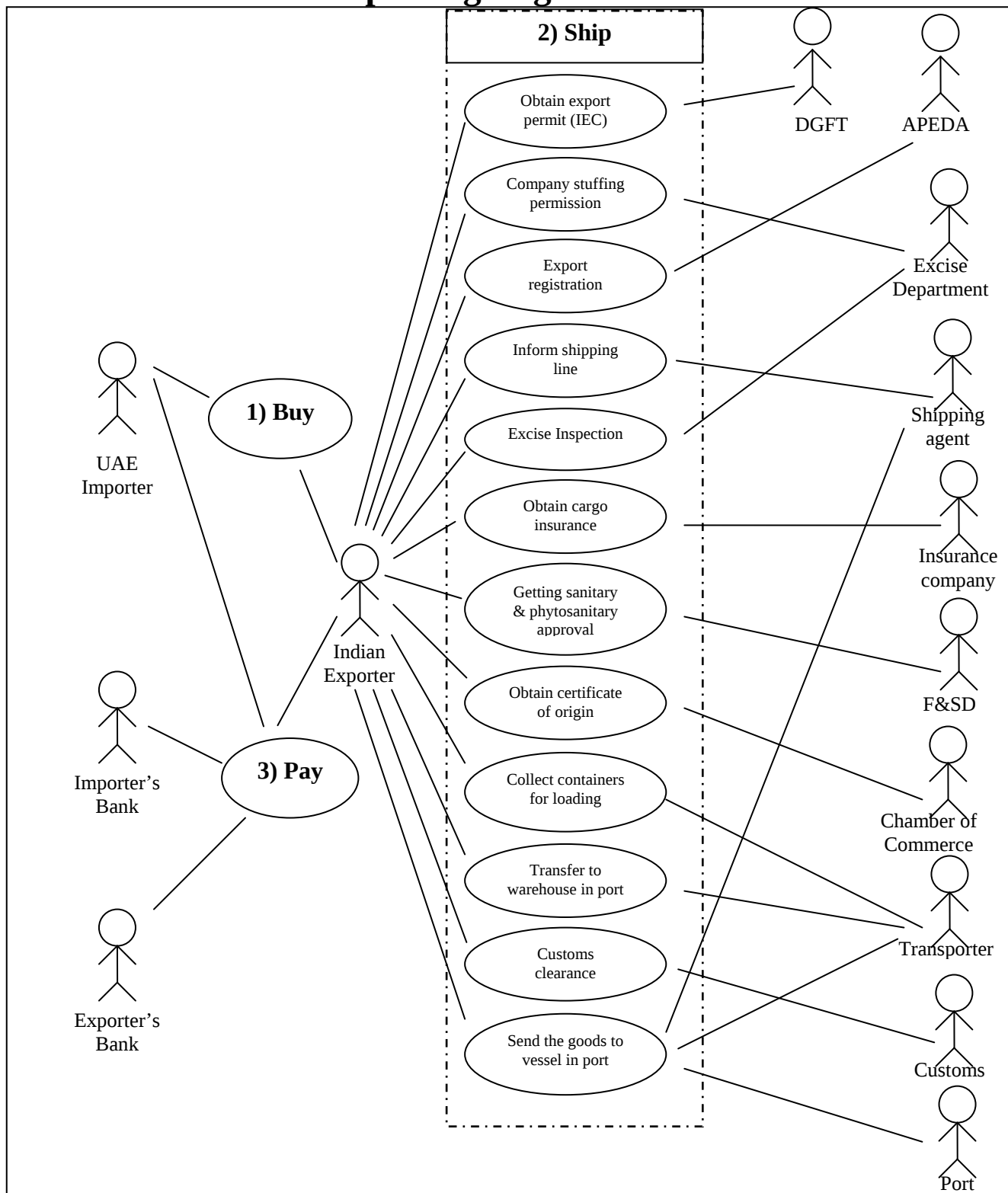
2.10 Clear Goods through Customs



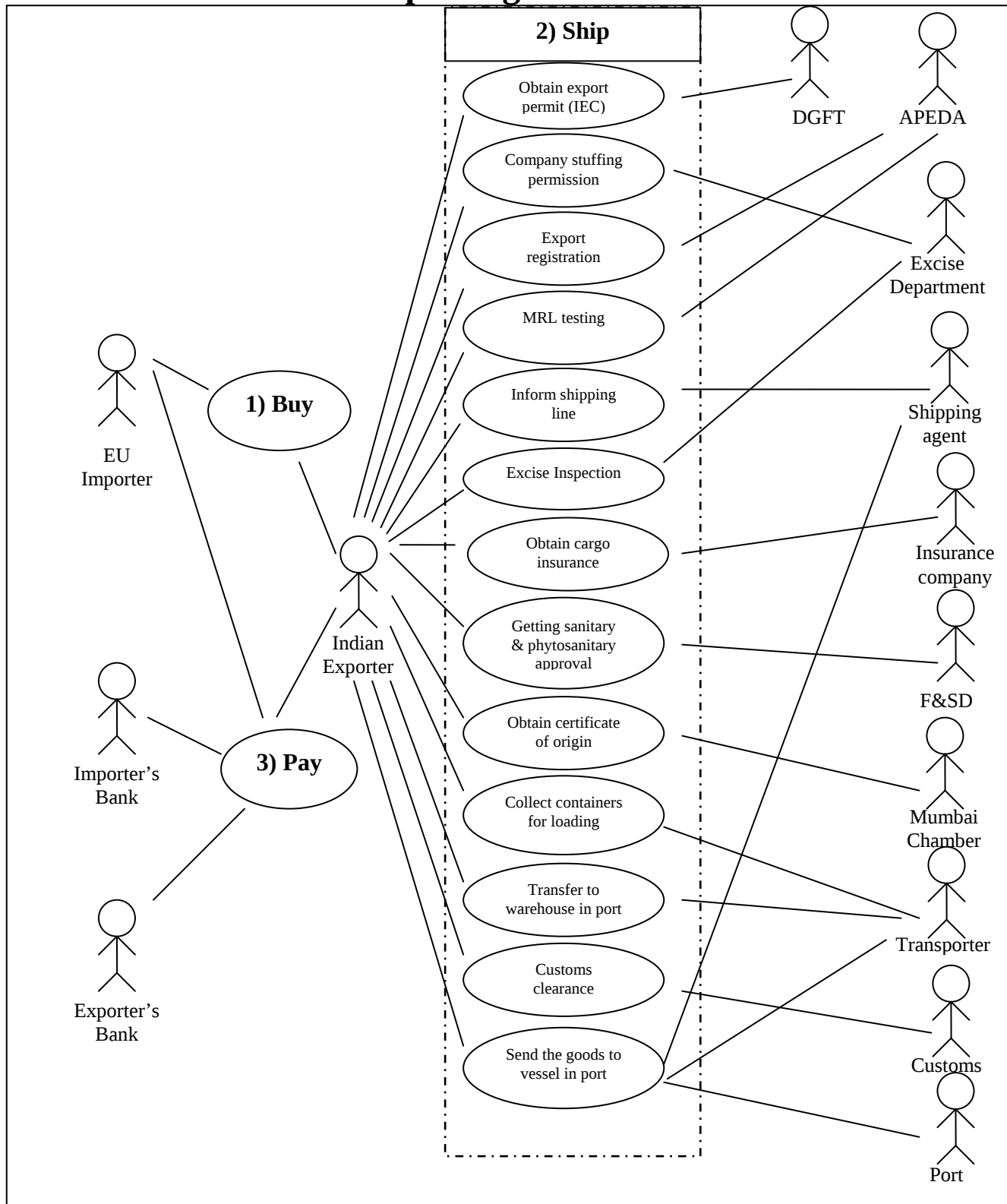
3. Pay



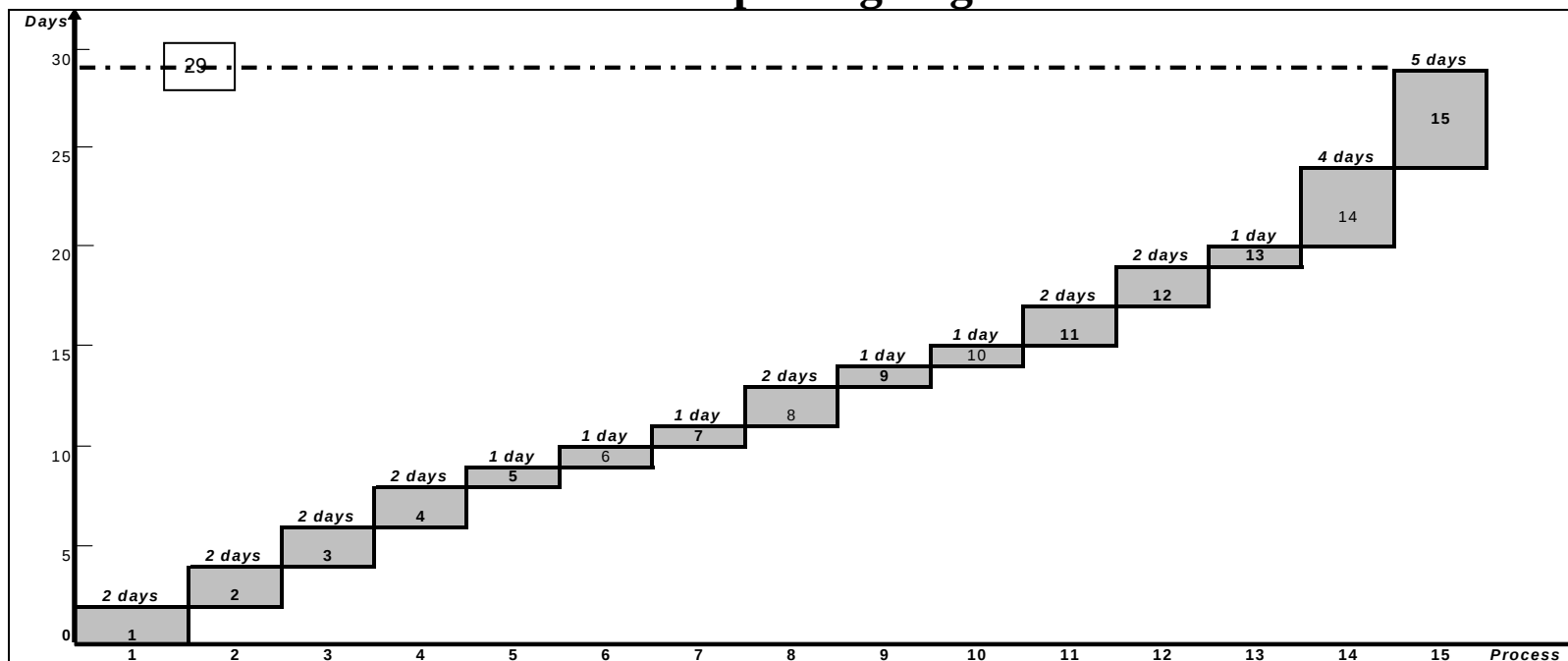
Parties Involved in Exporting Vegetables from India



Parties Involved in Exporting Fruits from India

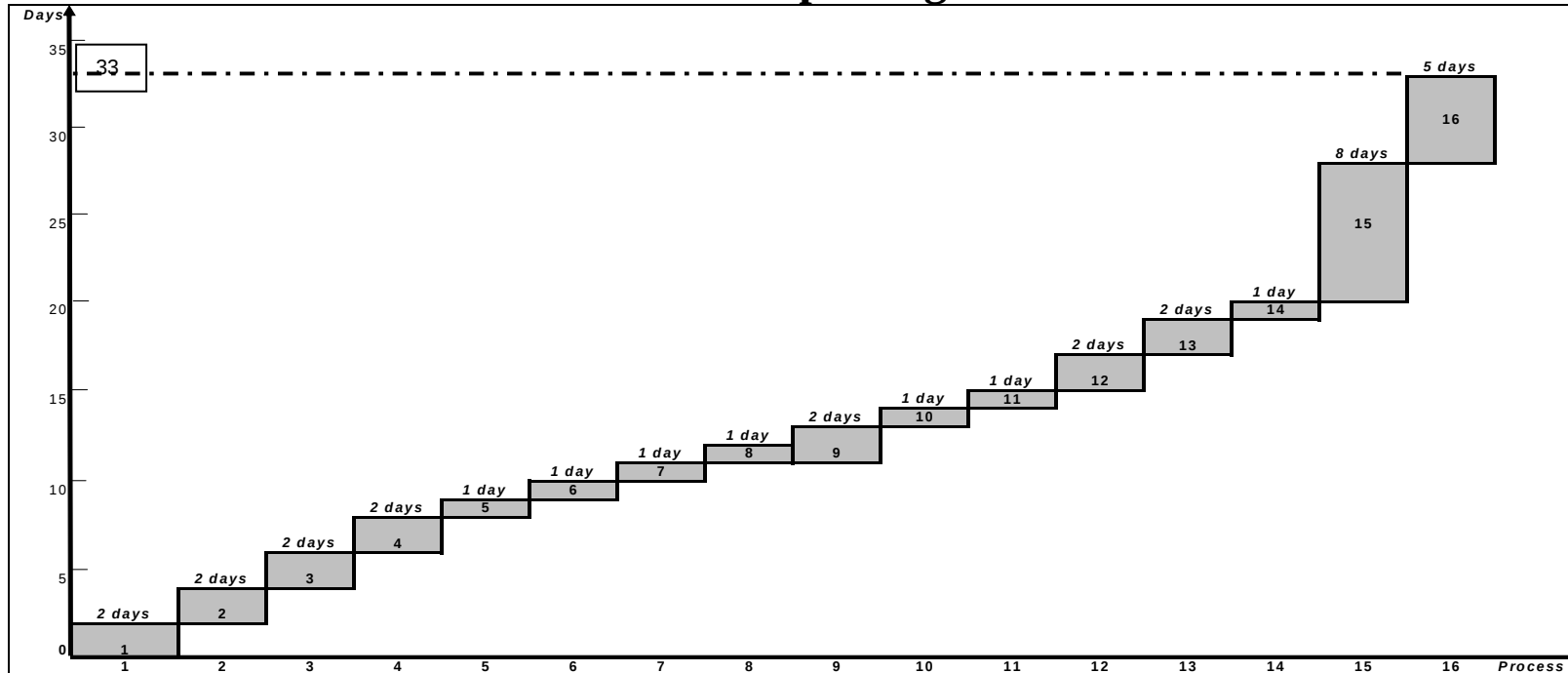


Times – Procedures Chart of Exporting Vegetables from India to UAE



1	Buy	9	Obtain certificate of origin
2	Obtain export permit	10	Collect containers for loading
3	Company stuffing permission	11	Transfer to warehouse in port
4	Export registration	12	Customs clearance
5	Inform shipping line	13	Send the goods to vessel in port
6	Excise Inspection	14	Send the goods to importer's warehouse
7	Obtain cargo insurance	15	Pay
8	Getting sanitary & phytosanitary approval		

Times – Procedures Chart of Exporting Fruits from India to EU

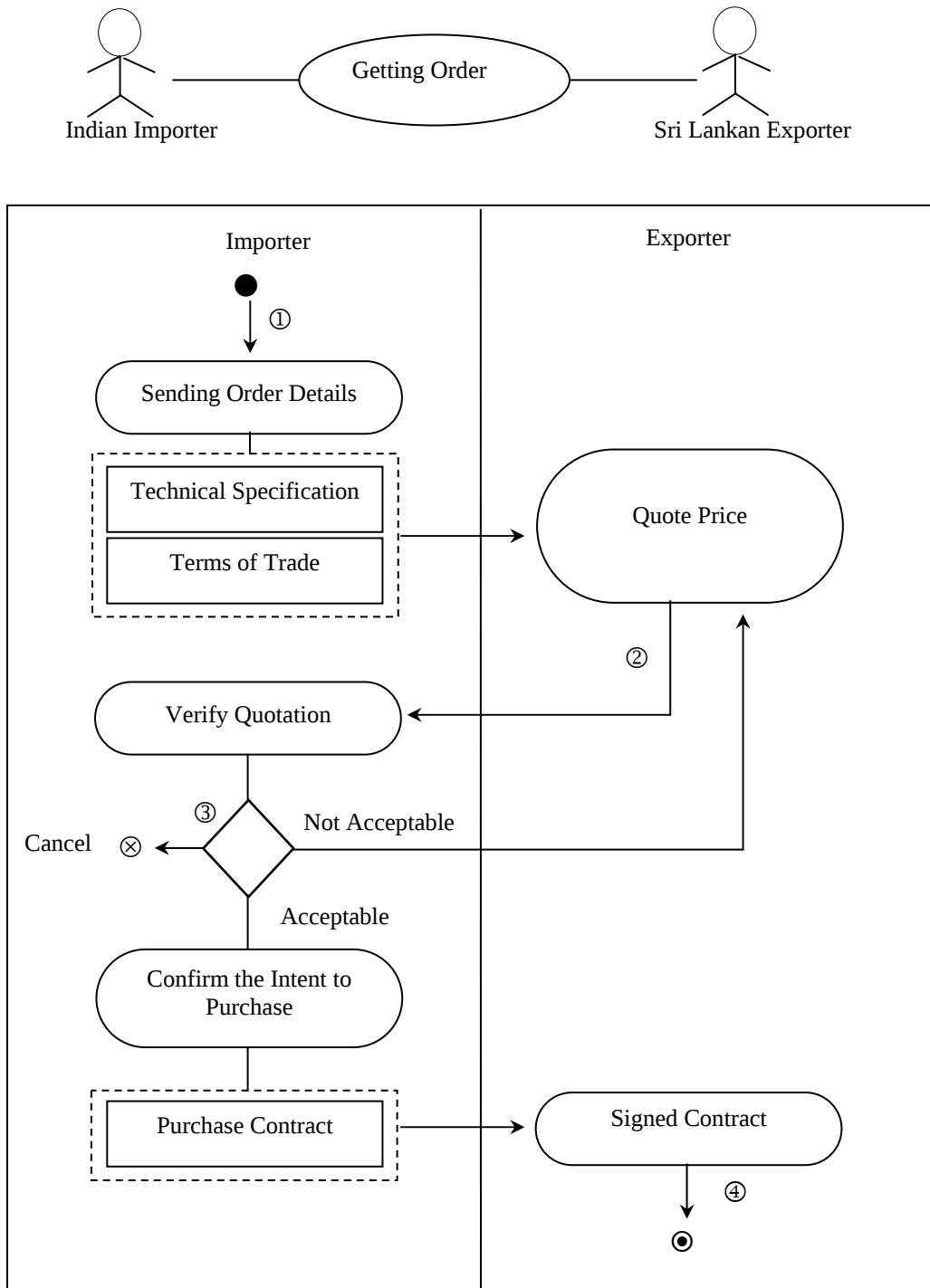


1	Buy	9	Getting sanitary & phytosanitary approval
2	Obtain export permit	10	Obtain certificate of origin
3	Company stuffing permission	11	Collect containers for loading
4	Export registration	12	Transfer to warehouse in port
5	MRL testing	13	Customs clearance
6	Inform shipping line	14	Send the goods to vessel in port
7	Excise Inspection	15	Send the goods to importer's warehouse
8	Obtain cargo insurance	16	Pay

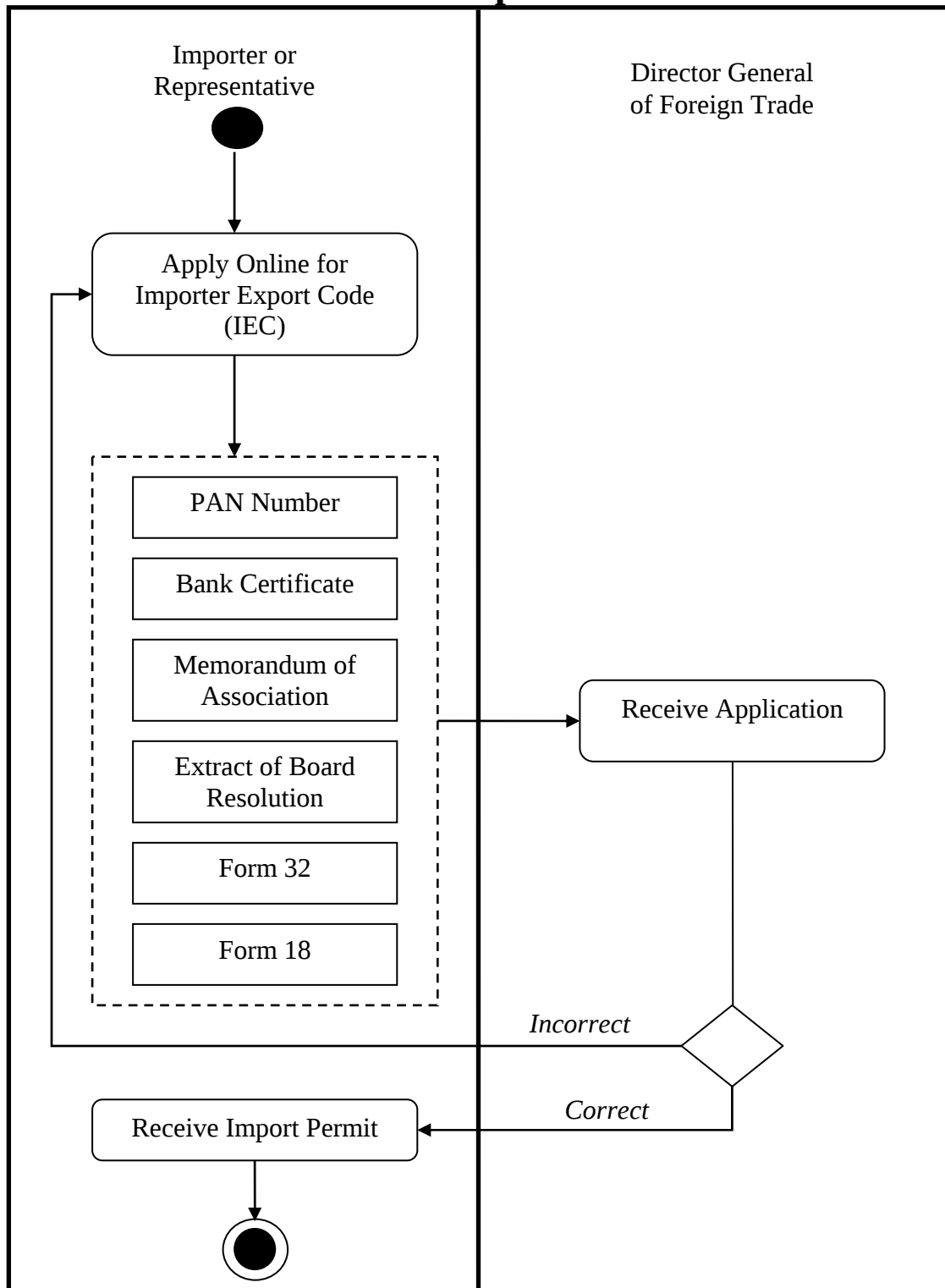
Annexure 3

Business Processes Analysis (BPA) Maps of Rubber Tyres Import from Sri Lanka

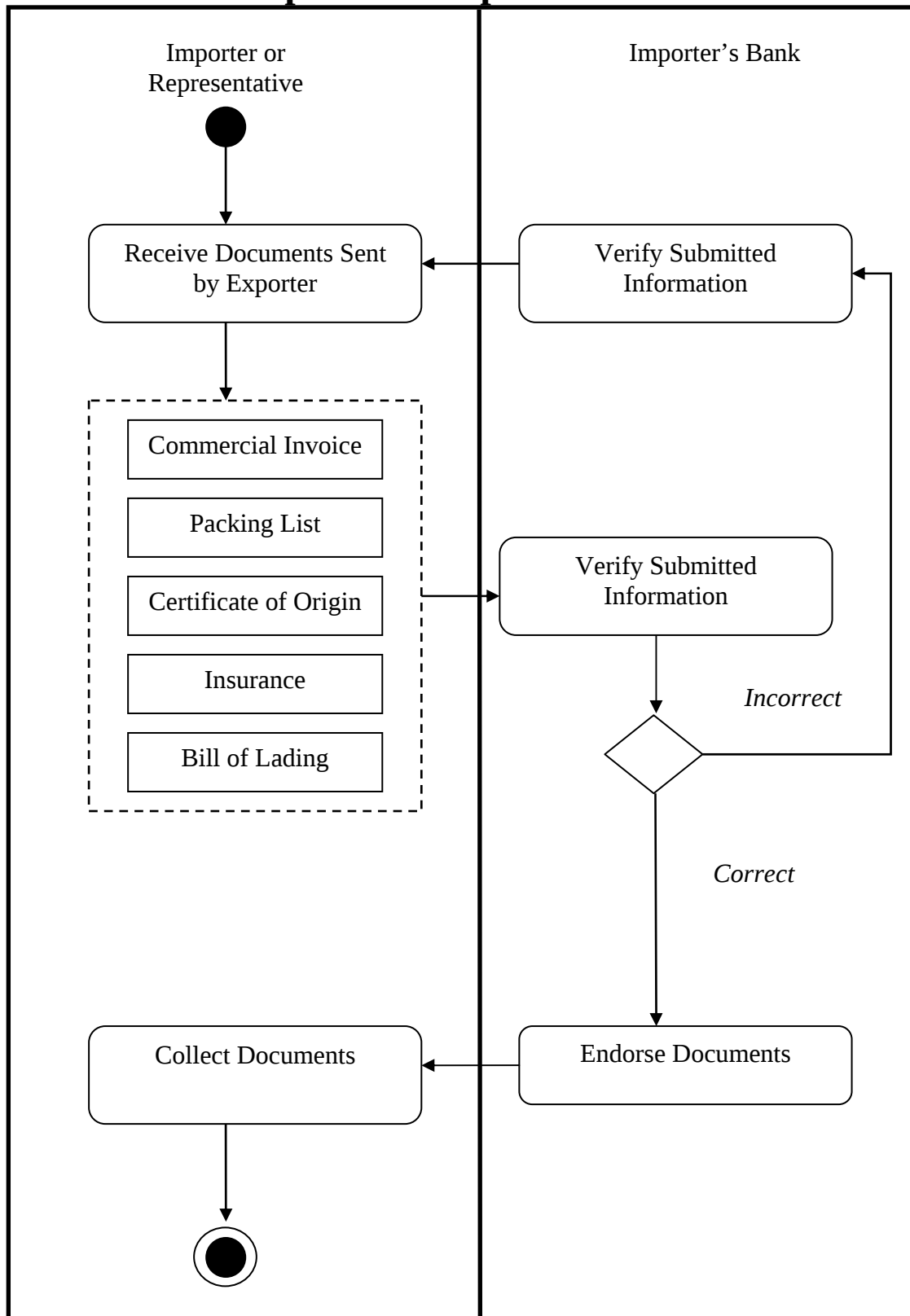
1. Buy



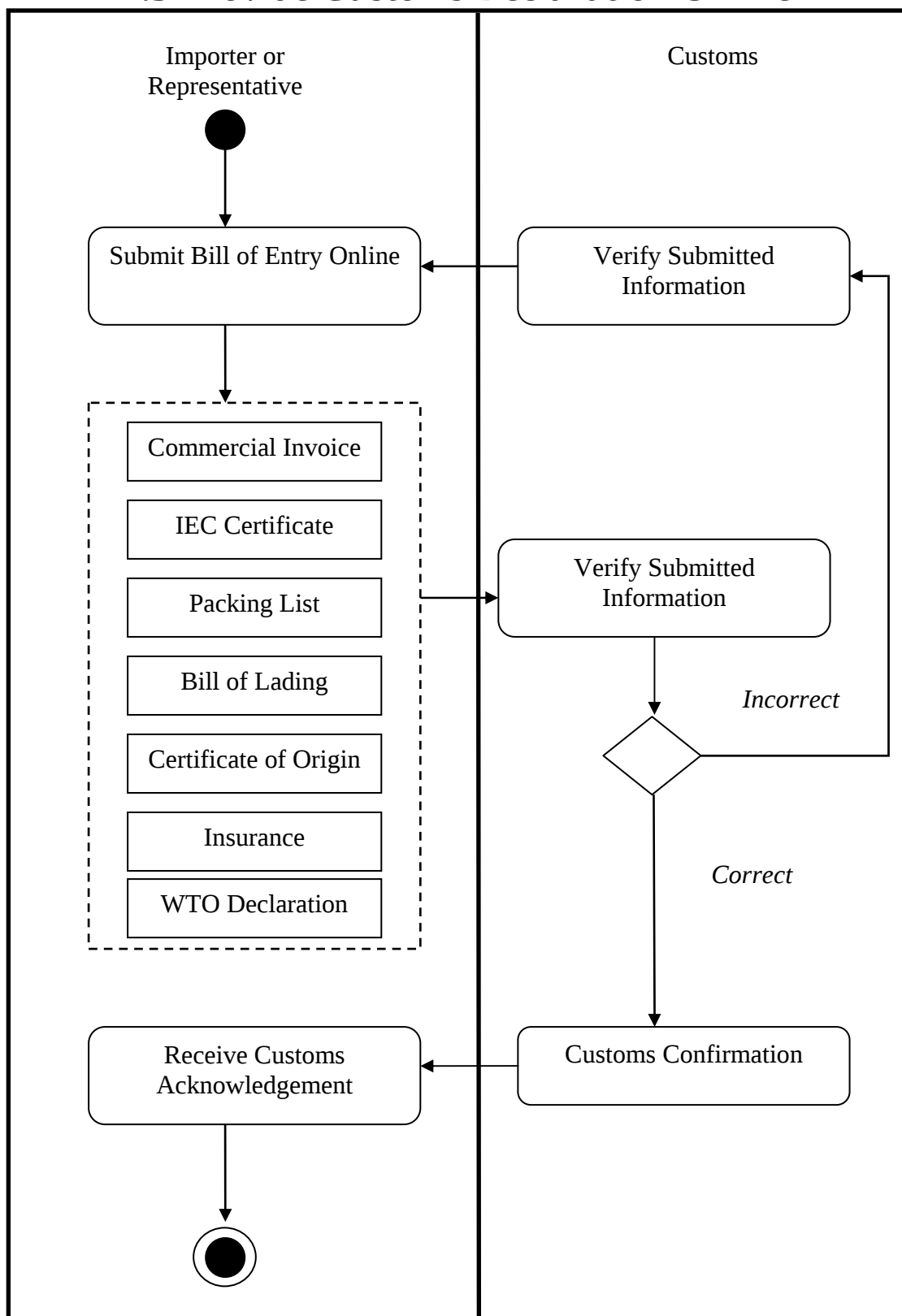
2.1 Obtain Import Permit



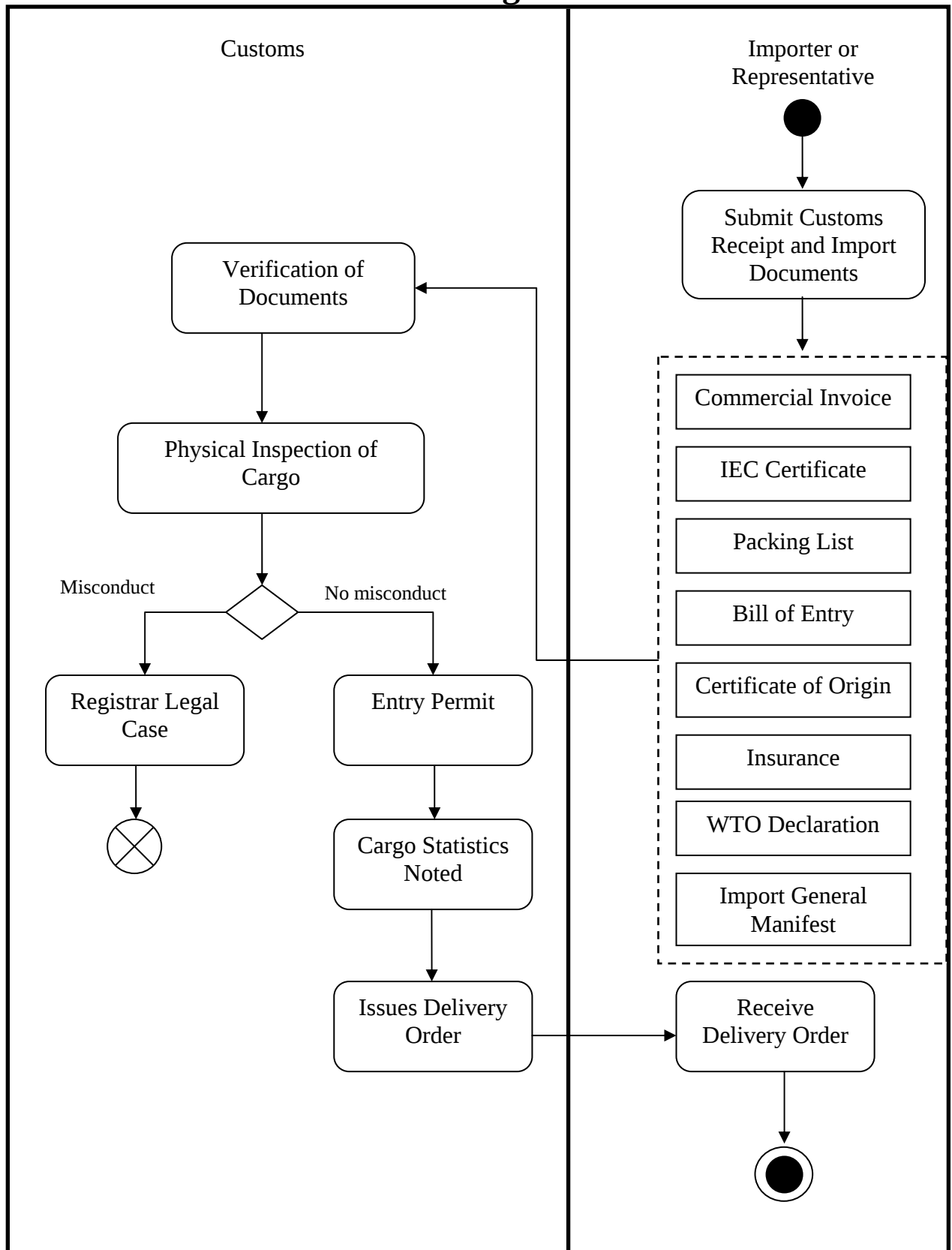
2.2 Prepare the Import Documents



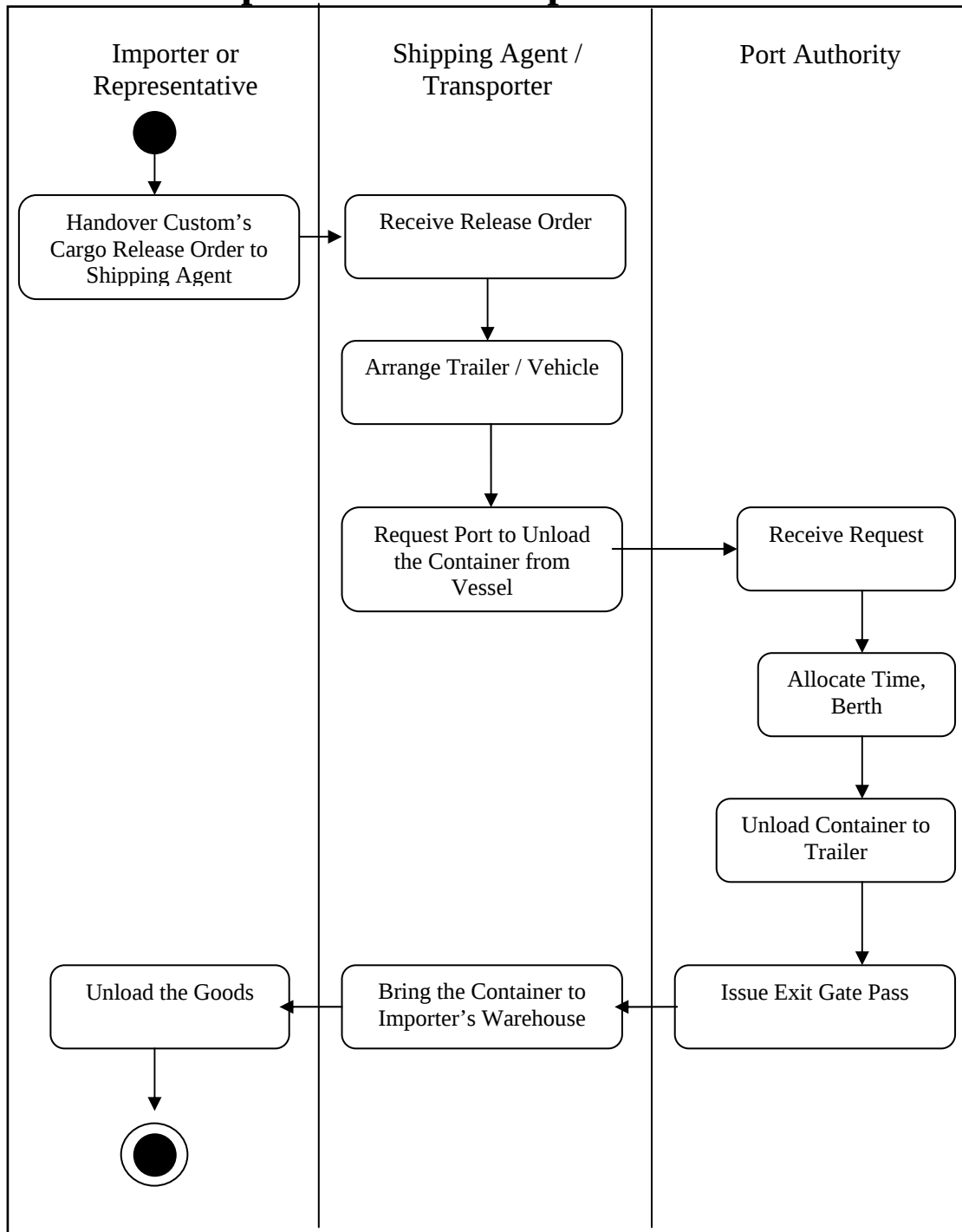
2.3 Provide Customs Declaration Online



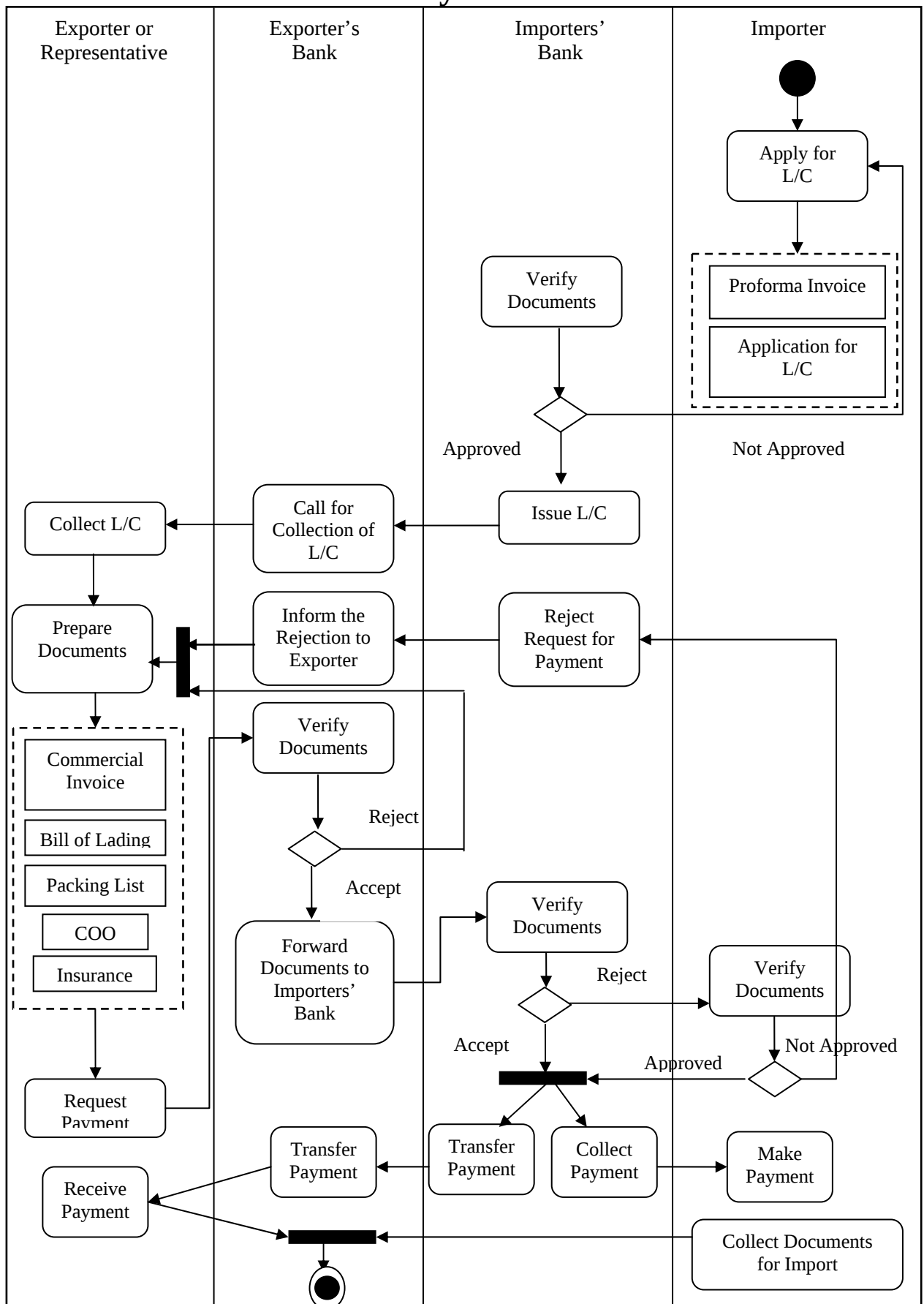
2.4 Clear Goods through Customs



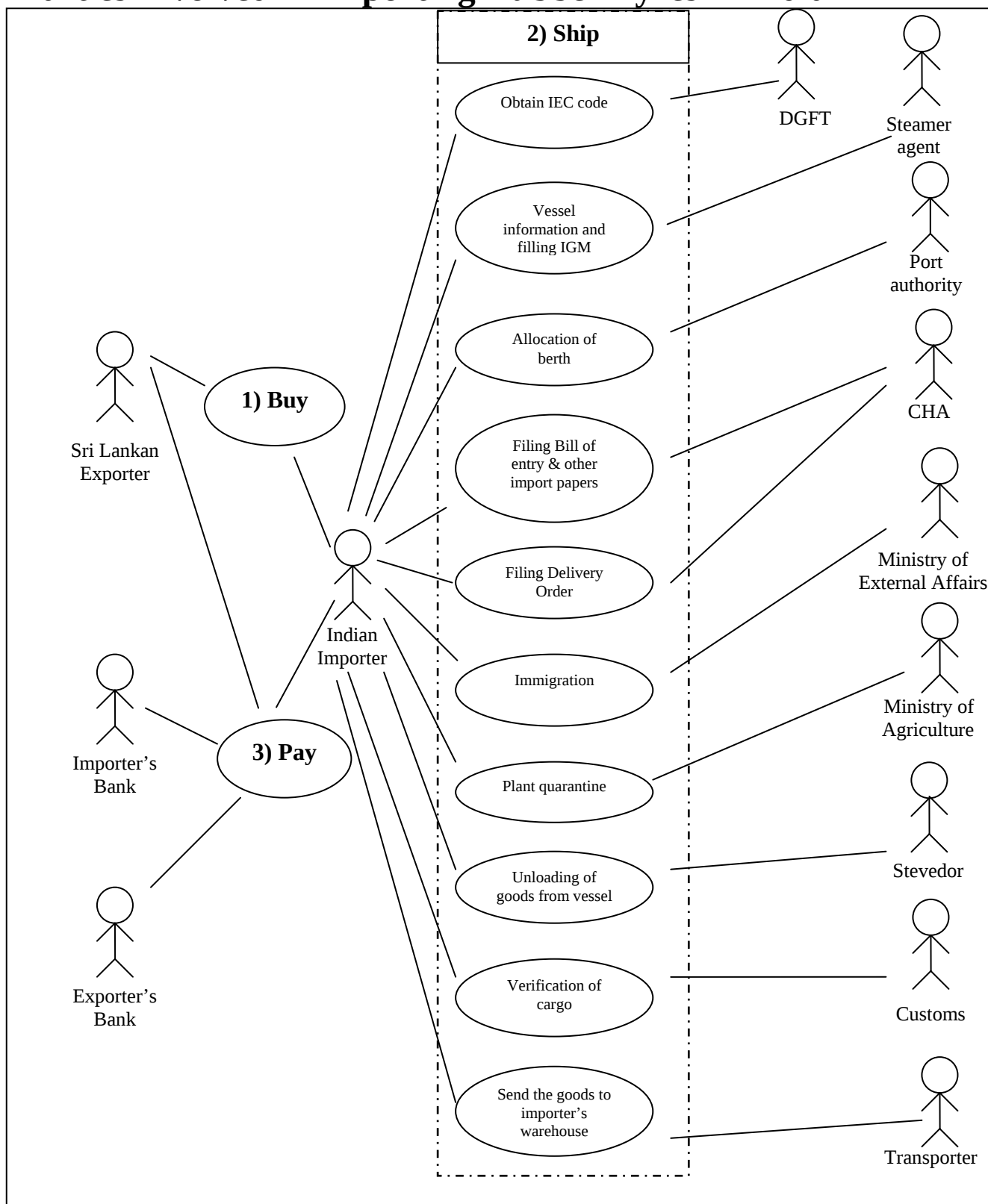
2.5 Transport Goods to Importer's Warehouse



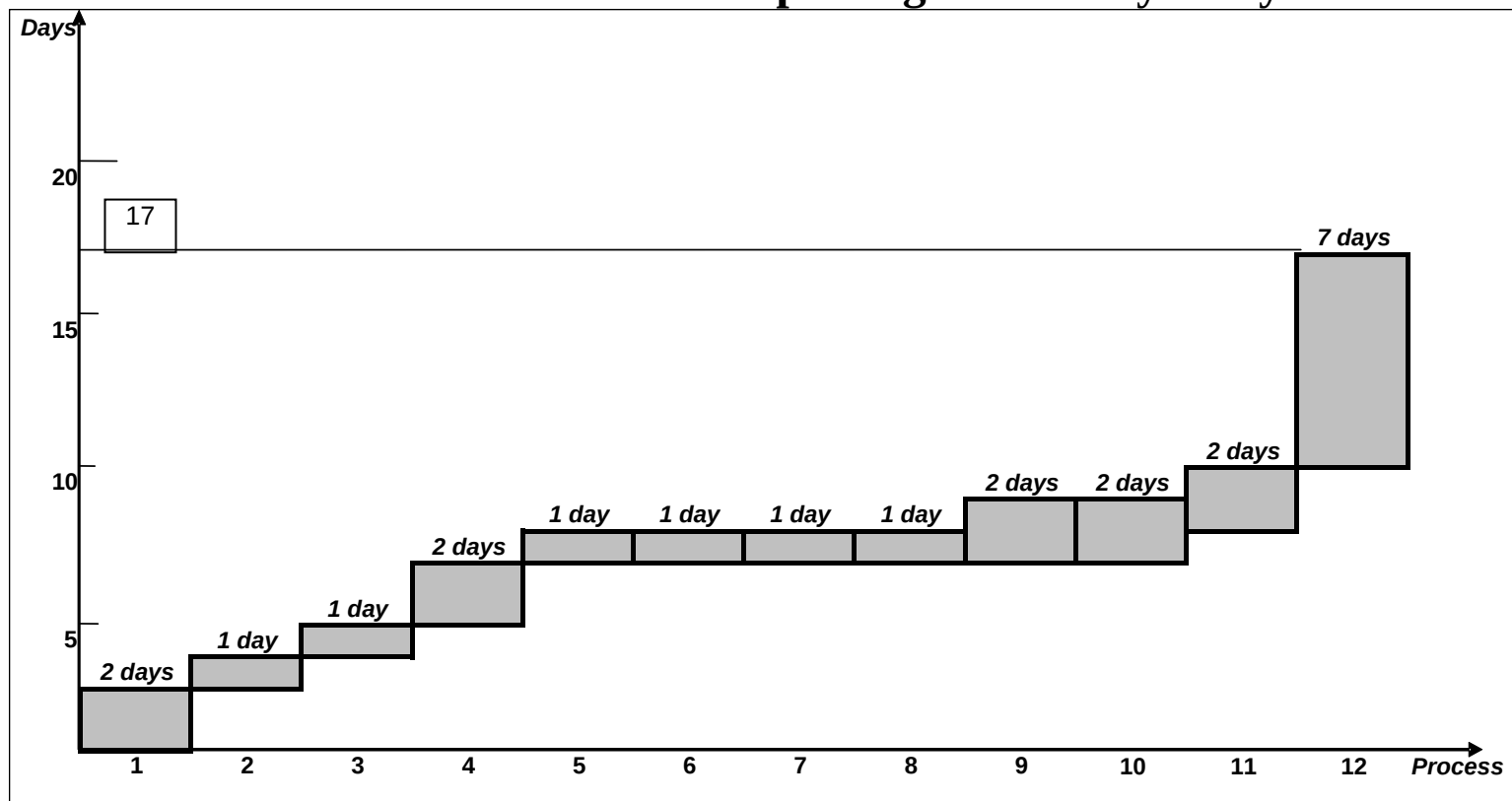
3. Pay



Parties Involved in Importing Rubber Tyres in India



Times – Procedures Chart of Importing Rubber Tyres by India



1	Buy	7	Immigration
2	Obtain IEC code	8	Plant quarantine
3	Vessel information and filling IGM	9	Unloading of goods from vessel
4	Allocation of berth	10	Verification of cargo
5	Filing Bill of entry & other import papers	11	Send the goods to importer's warehouse
6	Filing Delivery Order	12	Pay

