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

Prabir De

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Acronyms

BPA	Business Process Analysis
CHA	Customs House Agent
EU	European Union
FTP	Foreign Trade Policy
ILFTA	India-Sri Lanka Free Trade Agreement
INR	Indian Rupees
LCS	Land Customs Station
OECD	Organisation for Economic Co-operation and Development
RIS	Research and Information System for Developing Countries
UAE	United Arab Emirates
UN/CEFACT	United Nations Centre for Trade Facilitation and Electronic Business
UNNExT	United Nations Network of Experts for Paperless Trade
UNESCAP	United Nations Economic and Social Commission for Asia and the Pacific
UNECE	United Nations Economic Commission for Europe
UML	Unified Modelling Language
US	United States
USD	United States Dollars
WTO	World Trade Organization

Executive Summary

Moving goods across borders requires meeting a vast number of commercial, transport and regulatory requirements. Inefficiencies in these requirements often create unnecessary delays and costs. Tremendous inefficiencies are associated with the preparation of transport and regulatory documents, unclear border procedures, and overzealous cargo inspection. It is necessary to understand how much these add to the costs of doing business across borders and how they affect growth in trade. Estimating the time and costs of trade procedures can assist policy makers and other stakeholders to increase regional and global trade. This study undertakes Business Process Analysis to assess trade procedures and identify the administrative and procedural barriers that unnecessarily impede trade, and to propose solutions.

This study examined India's export of cotton yarn to Bangladesh, fresh vegetables to the United Arab Emirates (UAE) and fruit to the European Union (EU), and India's import of rubber tyres from Sri Lanka. The findings of the Business Process Analysis for these trade processes indicate that these export and import processes take considerable time and have high costs.

For the export of cotton yarn to Bangladesh, a total of 12 export documents are required and the process involves 13 parties. The time-procedure chart shows that the total time taken to complete the export procedures is about 32 days, on average, which is very high compared to international standards. The process costs USD 542.39, on average. This study suggests that bottlenecks are in the areas of inland transportation, customs clearance and getting payment.

For the export of vegetables to the UAE and fruit to the EU, this study indicates that about 10 parties are involved in 12 major procedures in exporting fresh vegetables to the UAE, whereas 13 major trade procedures are managed by 10 parties in the export of fresh fruit to the EU. It takes about 29 days for the export of vegetables and 33 days for the export of fruits, on average. The process of exporting vegetables to the UAE costs

USD 1,573 per container, on average, whereas the process of exporting fruit to the EU costs USD 2,031 per container, on average. In both cases, transportation costs (domestic and international) are the major barrier. Bottlenecks also exist in the areas of customs clearance and getting payment.

For the import of rubber tyres from Sri Lanka, the trade procedures are relatively simple. This study found that nine parties are involved in 12 major procedures. It takes about 22 days to import rubber tyres from Sri Lanka, on average. The cost of inland transportation is the major barrier to trade. The process of importing rubber tyres costs USD 360 per container, on average.

The length of time and high cost of the trade processes identified in this study indicate a need for further trade facilitation efforts in India. It is necessary to implement a comprehensive policy to remove unnecessary procedures (commercial, transport and regulatory requirements) associated with trade as complying with these requirements creates unnecessary delays and costs.

1. Introduction

Countries across the world were affected by the global economic and financial crisis of 2008. India was no exception. India's exports suffered a decline as a result of the contraction in demand in the traditional markets for Indian exports. Before the crisis took effect, Indian exports had witnessed robust growth and reached a high of 168 billion United States Dollars (USD) in 2008/09, up from USD 63 billion in 2003/04. Furthermore, India's share of global merchandise trade had increased to 1.45 per cent in 2008 from 0.83 per cent in 2003.[1] Although affected by the global financial crisis during the years 2008 and 2009, India's trade rebounded quite strongly in 2010.

The Indian agriculture sector, like the other sectors, could not escape the heat of the global financial crisis; its exports decelerated by 23.46 per cent in 2009, compared to 2008.[2] Exports of agricultural products have continued to play an important role in the economy, however, and India is still one of the leading net exporters of agricultural products in the world. In 2009, India exported USD 16.66 billion of agricultural products, a share of 1.43 percent of world exports in agricultural goods.[3] Agriculture's share in the country's total exports has been hovering around 10 to 12 per cent since 2004-05. The share of agricultural exports in the country's total exports marginally increased to 10.59 per cent in 2009/10 from 10.22 per cent in 2008/09. Even though India is a large, low cost agricultural producer, its share in global agriculture exports is minuscule. India produces nearly 11 per cent of all the world's vegetables and 15 per cent of all fruits, yet in 2007 its share in global exports of vegetables was only 1.7 per cent and in fruit a small 0.5 per cent.[4] To increase exports and reap the benefits of global trade, more efficient supply chains and better access to services is needed. This will make Indian agriculture globally competitive and create the conditions for mutually beneficial trade negotiations.

[1] Calculated based on the Export-Import Databank, Ministry of Commerce and Industry, Government of India.
[2] World Trade Organization (2010). "International Trade Statistics 2010", Table II.15.
[3] Ibid.
[4] World Bank (2007).

To a great extent, simplification of trade processes and procedures is envisaged as key to improving the competitiveness of India's agricultural exports.

In 2009, India announced its Foreign Trade Policy 2009-2014 (FTP). Under this policy, the country aims to arrest and reverse the declining trend of exports and provide additional support to those sectors that were badly affected by the global crisis. By 2014, India expects to double its exports of goods and services in the world market.[5] In order to bring down transaction costs, two important policy measures will be undertaken through the FTP 2009-2014: procedural rationalization and improvements in infrastructure related to exports. In 2010, the Ministry of Commerce and Industry established a task force to examine how to reduce transaction costs in exports. This task force and the report it produced was perhaps the first formal recognition by India's policy makers of the importance of minimizing trade costs for enhancing India's trade (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 and meeting documentation requirements. The Government of India constituted a task force to examine how to reduce the costs involved in trade processes in India. The report of the task force to reduce transaction costs in exports, released in February 2011 by the Ministry of Commerce and Industry, recommended measures that are expected to save exporters 210 billion Indian Rupees (INR), the equivalent of about USD 450 million, every year. This amount represents about 0.02 per cent of India's exports, as exporters suffer transaction costs to the extent of between 7 and 10 per cent of exports. The task force report identified 44 issues, and as of 2011, closure has been achieved on 23. These include the standardisation of charges across ports, rationalisation of freight rates charged by the Container Corporation of India, initiating a single-window facility for 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 facilities at plant quarantine stations and availability of the facilities round-the-clock at selected customs stations, reduction in screening charges for air cargo and express cargo, reduction in charges for booking foreign currency and pre-shipment credit in foreign currency at lower rates.
Source: Ministry of Commerce and Industry, Government of India

[5] Government of India, (2009).

While India's exports were formerly mainly directed to developed markets, in recent years emerging developing countries have become India's major trade partners (e.g. China). The share of Indian exports to the United States (US) decreased by 50 per cent over the past decade, falling from 22.8 percent in 1999 to 11 percent in 2009 and the share going to Europe slipped from 27.6 percent in 1998 to 20.9 percent in 2009.[6] Meanwhile, the portion going to Asia essentially doubled, rising from 5.6 percent in 1999 to 12.3 percent in 2009.[7]

There has been a compositional change in India's trade since the mid 1990s 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 per cent), iron and steel and their products (8.11 per cent), apparel and clothing (7.61 per cent) and organic chemicals (4.40 per cent), keeping aside minerals and gems and jewellery.[8] India's imports were driven by intermediate and finished goods, keeping aside minerals and gems and jewellery. For example, in 2008/09 machinery and mechanical appliances, including electrical machinery and equipment made up 11.43 per cent of imports, while other main imports included iron and steel and their products (4.69 percent), organic and inorganic chemicals (5.36 percent), and plastic and articles (1.41 percent).[9] India's trade is likely to witness a major shift in the short to medium term, due to increasing global demand. Sustaining this trade requires lower trade costs, however. It is therefore necessary for India to reduce the elements of trade costs that are critical to India's trade.

Moving goods across borders requires meeting a vast number of commercial, transport and regulatory requirements.[10] Inefficiencies in complying with these requirements often create unnecessary delays and costs. Tremendous inefficiencies are associated with the preparation of transport and regulatory documents, unclear border procedures, and overzealous cargo inspection. It is necessary to understand how much

[6] Calculated based on the IMF Direction of Trade Statistics Online Database.
[7] Ibid
[8] Export-Import Databank, Ministry of Commerce and Industry, Government of India.
[9] Ibid.
[10] Refer, for example, Duval and Utoktham (2009).

these add to the costs of doing business across borders and how they affect growth in trade.[11] Therefore, there is a need to conduct a detailed analysis of the procedures involved in India's trade processes. Besides, estimating the time and costs of the procedures and processes will help policy makers and other stakeholders to identify bottlenecks and other issues. Removing such obstacles would enhance regional and global trade.

In order to reduce the complexity of international trade transactions and the costs related to them, the United Nations Centre for Trade Facilitation and Electronic Business (UN/CEFACT) recommends the implementation of the following measures:

- Simplify and harmonize trade procedures and, where possible, eliminate unnecessary ones.
- Simplify and coordinate administrative procedures at border crossings.
- Simplify payment systems.
- Simplify, standardize and harmonize the documents required for trade transactions.
- Facilitate the flow of information that controls the movement of goods throughout the transaction (e.g. by applying information and communication technology).
- Enhance trust assessment through better exchange of information.[12]

Business Process Analysis (BPA) is one technique to assess 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 routes, origins and destinations of these products. Undertaking deeper analysis of the processes small and large firms face when engaging in international trade can provide useful insights into the issues that exist, and result in practical and specific policy recommendations.

The successful implementation of trade facilitation measures needs not only economic and political resources, but also an in-depth understanding of existing business

[11] Refer, Duval and Utoktham (2011) which attempted to asses the trade facilitation benefits in Asia and the Pacific region.
[12] UNNExT, UNESCAP and UNECE (2009).

processes. A BPA survey is therefore highly recommended in order to assess the requirements for improvements in the trading environment, in particular reducing its complexities and corresponding costs.

Given the above, this study conducted a BPA for the export of cotton yarn and vegetables and fruit from India, and the import of rubber tyres. This report is arranged as follows. Section 2 explains the BPA method. Section 3 briefly discusses India's trade in cotton textiles (export), vegetables (export) and rubber tyres (import). A discussion on India's performance in cross-border trade, compared with other countries, follows in Section 4, after which Section 5 describes the findings of the BPAs of the selected export and import processes.

2. The BPA method

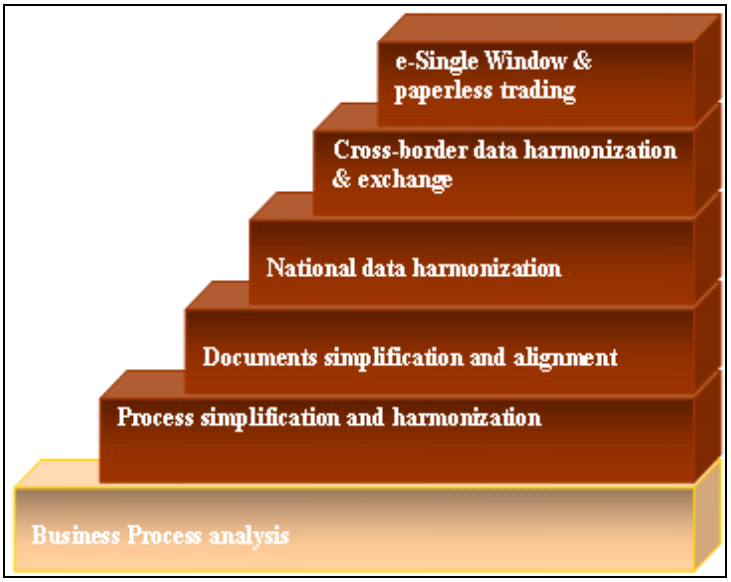
The *Business Process Analysis Guide to Simplify Trade Procedures* published by the United Nations Network of Experts for Paperless Trade (UNNExT), the United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP) and the United Nations Economic Commission for Europe (UNECE) was used as the basis for this study.[13]

As noted in the *Business Process Analysis Guide to Simplify Trade Procedures*, in order to improve the efficiency and effectiveness of processes and information flows in the international supply chain, it is necessary to first understand the existing ("as-is") conditions of business processes. This study therefore attempted to provide a detailed overview of the trade processes; mapping each of the documents involved in the transactions and the various actors involved in each process, and the amount of time and costs associated with them.

BPA is based on Unified Modelling Language (UML),[14] which provides a set of standard graphical notations for business process modelling. According to the *Business Process Analysis Guide to Simplify Trade Procedures*, if the ultimate goal of 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.[15] BPA is the basis for moving towards a Single Window and paperless environment, as shown in Figure 1.

[13] For further technical details regarding BPA, please refer to UNNExT, UNESCAP and UNECE (2009).
[14] Refer, UML Resource Page, http://www.uml.org.
[15] 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.

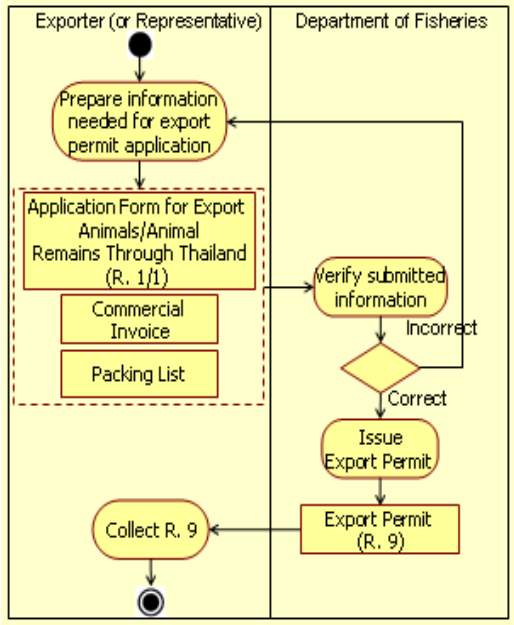
Figure 1: Steps towards an electronic Single Window and paperless trade environment



Source: UNNExt, UNESCAP and UNECE (2009)

In business process analysis, a use case diagram serves as a frame of reference. Its purpose is to present a graphical overview of core business processes. It indicates all stakeholders involved in these business processes and demonstrates all actual associations between these business processes and stakeholders. An activity diagram is an elaboration of each business process displayed in the use case diagram. It portrays the sequence of activities and documentary flows from one responsible party to another. This diagram informs the audience of not only who is doing what in which order, but also of the documentary inputs that serve as prerequisites to activities and the documentary outputs that can be obtained after completing certain activities. Figure 2 shows examples of use case and activity diagrams.

Figure 2: Use case and activity diagrams

UML Use Case Diagram	UML Activity Diagram
	
For the purpose of this guide, only Business Domain View and Business Requirement View are relevant. *UML Use Case Diagram and Activity Diagram are used to visualize the captured knowledge of the business processes.*	

Source: UNNExt, UNESCAP and UNECE (2009)

3. India's trade in the selected products

This study selected cotton textiles, vegetables, fruit and rubber tyres as the commodities whose trade procedures would be examined. This section describes the trends in the trade of these commodities and the key trading partners for these commodities.

Exports of cotton

Bangladesh occupies second place, after China, in terms of the volume of cotton received from India. In 2009/10, India exported cotton to the value of USD 455.29 million to Bangladesh, representing 9.87 per cent of total Indian exports of cotton that year (see Table 1).

Table 1: India's top 15 export destinations for cotton, 2008-2010

Country	2008-2009		2009-2010	
	Value (USD millions)	Share (%)	Value (USD millions)	Share (%)
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)

Due to the global crisis, Indian exports of cotton to Bangladesh declined in 2008/09, but regained momentum in 2009/10 (Table 2). Bangladesh sources cotton yarn primarily from India. In 2009/10, exports of cotton yarn contributed about 19 per cent of India's total exports to Bangladesh (USD 189 million), up from 16 per cent in 2008/09. Therefore, Bangladesh is a huge market for Indian exporters of cotton yarn. Bangladesh's

share in India's global cotton exports has not increased much, however; it has been hovering around 10 per cent for some years.[16]

Table 2: Exports of cotton (HS 52) from India to Bangladesh, 2005-2010

Particulars	Unit	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010
India's exports of cotton to Bangladesh	Value (USD millions)	289.37	271.74	648.97	402.8	455.29
	Annual growth (%)		-6.09	138.82	-37.93	13.03
India's global exports of cotton	Value (USD millions)	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 exports to Bangladesh	Value (USD millions)	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)

Four specific items, HS5201, HS5205, HS5209 and HS5407, are the main Indian cotton exports to Bangladesh (Table 3), of which raw cotton and cotton yarn make up the majority of exports.

Table 3: Exports of cotton to Bangladesh, by HS Code, 2008-2010

HS Code	Commodity	2008-2009		2009-2010	
		Value (USD millions)	Share (%)	Value (USD millions)	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	59.37	2.377	55.09	2.261

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

	PER SQM				
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)

Exports of fruit and vegetables

Although India is the second largest producer of fruit and vegetables in the world, after China, its contribution has been very low in terms of global exports, compared to other Asian countries. In general, countries from the Gulf, the Middle East and South Asia are India's major markets for fruit and vegetables. Bangladesh is India's biggest export destination for fruit and vegetables. Table 4 presents the top 15 export destinations of fruits and vegetables. In 2009/10, India exported fruit and vegetables to the value of USD 290.46 million to Bangladesh, representing almost 18 per cent of India's total exports of fruits and vegetables. With exports of USD 176.33 million and USD 111.91 million respectively, the United Arab Emirates (UAE) and the USA come next in terms of destinations for Indian exports of fruit and vegetables.

Table 4: India's top 15 export destinations of fruit and vegetables

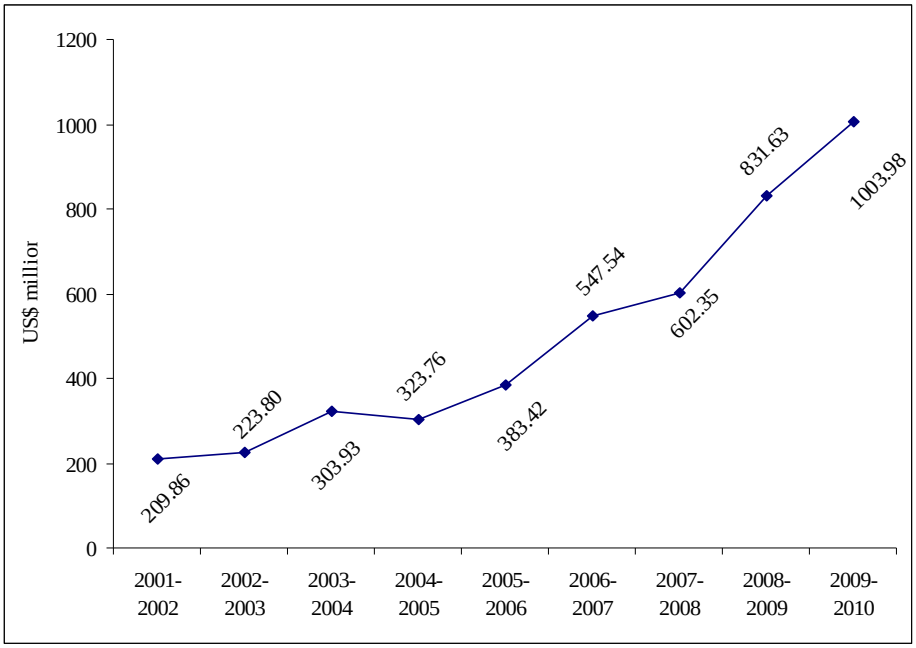
Country	2008-2009		2009-2010	
	Value (USD millions)	Share (%)	Value (USD millions)	Share* (%)
BANGLADESH	214.33	14.56	290.46	17.95
UAE	170.11	11.56	176.33	10.90
USA	115.33	7.84	111.91	6.92
NETHERLANDS	110.30	7.49	109.67	6.78
SAUDI ARABIA	91.90	6.24	105.62	6.53
MALAYSIA	76.18	5.18	94.73	5.85
UNITED KINGDOM	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)

Exports of fresh fruit and vegetables have witnessed healthy growth over the past decade. Exports grew by 18.31 per cent (compound annual growth rate) during the period between 2001/02 and 2009/10. Apart from a slight decline in 2004-05, exports of fresh fruits and vegetables have risen continuously since 2001 and the value of these exports reached the USD 1 billion mark in 2009/10 (Figure 3). The export of fruit and vegetables faces numerous barriers in partner countries; these are mostly non-tariff barriers to trade.[17]

[17] APEDA, 2007

Figure 3: Trends in exports of fresh fruit and vegetables from India, 2001-2010



Source: APEDA (2011)

Barring exports of floriculture, pulses and mango pulp, exports of other fruit and vegetable commodities from India increased in 2009/10, compared to 2008/09.

Table 5a: Indian exports of fruit and vegetables, 2008-2010

Commodity	**2008-09**	**2009-10**
	(USD millions)	
Floriculture	83.82	65.44
Fruit and vegetable seeds	27.27	32.24
Fresh fruit and vegetables	831.63	1003.98
Processed fruits and vegetables	718.98	693.45
Total	1661.70	1795.10

Source: APEDA (2011)

The export of fresh onions has the largest share among all fruit and vegetable exports, making up one quarter of India's total exports of fruit and vegetables. As shown in Table 5b, India exported USD 515.429 million (28.713 per cent) of fresh onions in 2009/10, an increase from USD 415.346 million in 2008/09.

Table 5b: Break-down of exports of fruit and vegetables

Commodity	2008-09		2009-10	
	Value (USD millions)	Share* (%)	Value (USD millions)	Share* (%)
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: *Shareof India's total export of fruit and vegetables to the world
Source: APEDA (2011)

The UAE is second largest importer of fruits and vegetables from India. In 2009/10, India exported USD 176.33 million of fruit and vegetables to the UAE, making up about 11 per cent of India's total exports to fruits and vegetables, an increase from USD 170.11 million in 2008/09. Therefore, the UAE is a huge market for Indian exporters of fruit and vegetables.

A number of "behind-the-border" issues and concerns exist in the context of the export of fruit and vegetables from India.[18] It is believed that without well-crafted policies and strategies to simplify trade processes and procedures, the trade potential of fruit and vegetables could remain unrealised.

Imports of tyres

The burgeoning growth in the automobile sector since 2001 has made India a significant manufacturer of automobiles in the global market. India's trade liberalization

[18] Refer, for example, APEDA (2007), World Bank (2007), etc.

strategies have helped this sector by enabling the sourcing of components, including tyres and tubes, at relatively cheaper rates.

Table 6 provides the figures for India's imports of rubber tyres and tubes between 2008 and 2010. In 2009/10, imports of new pneumatic rubber tyres (HS 4011) were worth USD 300.55 million in 2009-10, an increase from USD 271.30 million in 2008/09.

Table 6: Imports of rubber tyres and tubes into India, 2008-2010

HS	Commodity	2008-2009		2009-2010		Annual growth
		Value (US$ millions)	Share* (%)	Value (US$ millions)	Share* (%)	(%)
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)

Rubber tyres and tubes are mostly sourced from Asian countries, with China providing the largest share of India's imports of this product (55 percent) in 2009/10 (Table 7). Among the South Asian countries, Sri Lanka is a prominent source of new pneumatic rubber tyres. In 2009/10, In 2009/10, India imported rubber tyres to the value of USD 8.39 million rubber tyres from Sri Lanka, representing 3 per cent of all imports of rubber tyres. (Table 7). These tyres are mostly used in passenger and commercial vehicles.

Table 7: India's top 10 sources of rubber tyres (HS 4011) in 2009/10

Country	Value (US$ millions)	Share* (%)
CHINA PRP	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)

Imports of rubber tyres into India from Sri Lanka have been facilitated by the India-Sri Lanka Free Trade Agreement (ILFTA). The ILFTA provides for zero tariffs on import of new pneumatic rubber tyres (HS 4011). Several other raw materials for the automobile industry are eligible for duty concessions under the ILFTA. The ILFTA has therefore encouraged Indian foreign direct investment in Sri Lanka and has generated new trade.[19] A number of trade barriers continue to impede the import of rubber tyres from Sri Lanka and other countries, however.[20] Assessment of the import processes and procedures through conducting a BPA will help in understanding these barriers.

[19] Indian tyre companies (e.g. CEAT) have taken advantage of the ILFTA and set up plants in Sri Lanka, and exported back to India new pneumatic rubber tyres. See Kelegama and Mukherjee (2007).
[20] See, for example, Automotive Tyre Manufacturers' Association (ATMA), New Delhi.

4. India's performance in cross border trade

Compared to other countries, India has had poor performance in trading across borders. According to the World Bank Doing Business Survey Reports for 2009 and 2010, among 183 economies worldwide India was ranked at 97 in 2009 and 94 in 2010. Table 8a shows India's performance in terms of the World Bank's trading across borders indicators, compared to averages in South Asia and among member countries of the Organisation for Economic Co-operation and Development (OECD). Although India's performance is better than the South Asian average, it is still far behind the OECD average, except in terms of the cost to export and import.

Table 8a: India's performance in trading across borders, 2010, compared with South Asia and OECD averages

Indicator	India	South Asia average	OECD average
Documents to export (number)	8	8.5	4.3
Time to export (days)	17	32.4	10.5
Cost to export (USD 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 (USD per container)	960	1,509.10	1,145.90

Source: World Bank (2010)

According to the World Bank figures, document preparation for export and import take the bulk of the time required to complete trade procedures in India, with documentation requirements for both export and import consignments taking eight days in 2010. The costs of export and import documentation are high, with export documentation costing USD 350 and import documentation costing USD 390 in 2010.

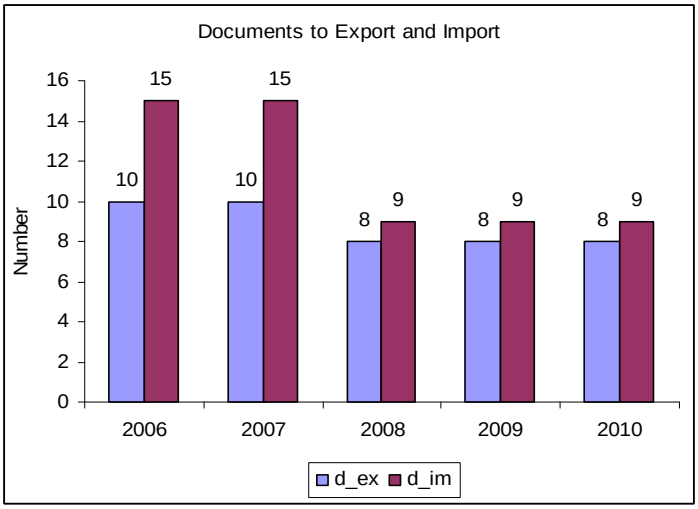
Table 8b: India's performance in trading across borders, 2010

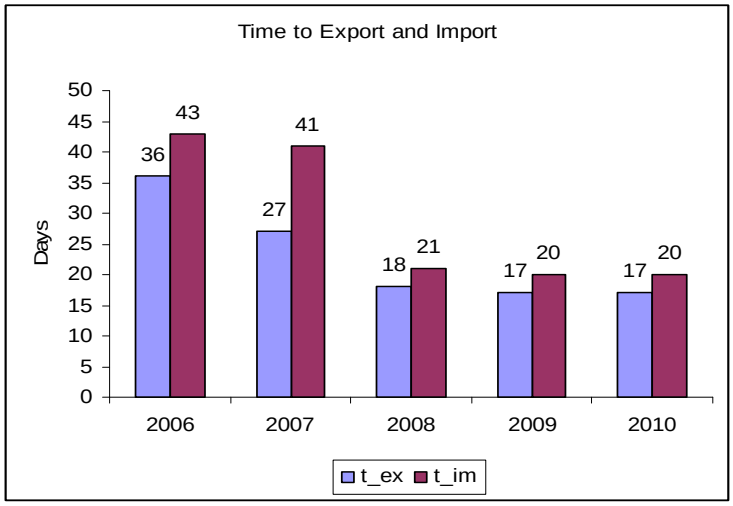
Nature of export procedures	Duration (days)	Cost (USD)
Documents preparation	8	350
Customs clearance and technical control	2	120
Ports and terminal handling	3	175
Inland transportation and handling	4	300
Total	17	945
Nature of import procedures	**Duration (days)**	**Cost (USD)**
Documents preparation	8	390
Customs clearance and technical control	4	120
Ports and terminal handling	6	200
Inland transportation and handling	3	250
Total	20	960

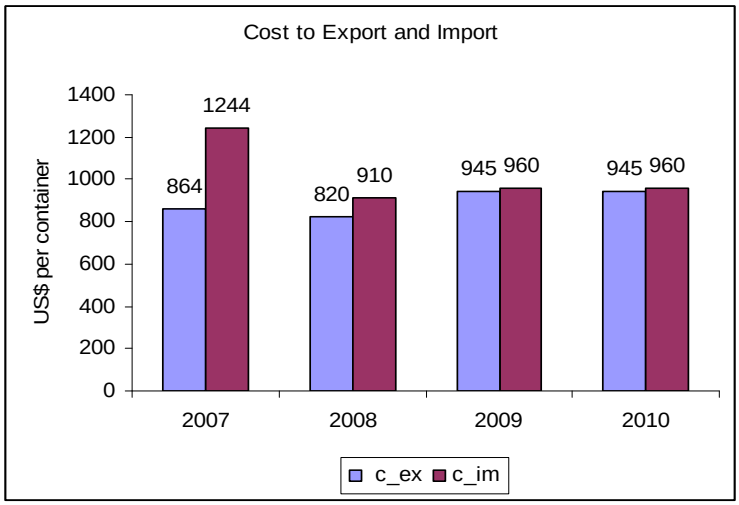
Source: World Bank (2010)

Between 2006 and 2010, presumably due to trade facilitation initiatives, India managed to reduce the number of documents needed for exporting and importing and also reduced the time required to export and import (Figure 4).

Figure 4: Costs of trading across borders: India







Source: Based on World Bank (2010)

5. BPAs of the selected products

5.1. BPA of exports of cotton yarn to Bangladesh

The BPA of exports of cotton yarn from India to Bangladesh was conducted via a primary survey of the Ginni Filaments company, located on the outskirts of Delhi. The company exports to various countries, including Bangladesh. Appendix 2 provides a brief description of the company.

The study found that 16 actors are involved in the export of cotton yarn from India to Bangladesh. From the survey, it was found that the procedure for exporting cotton yarn to Bangladesh mainly consists of getting an order, obtaining an inspection report and a certificate of origin, completing transportation documentation and a custom declarations and paying for transit haulage. Annex 1 provides the BPA diagrams relating to the export of cotton to Bangladesh. The export procedures are described in more detail below.

(i) Getting an order

The steps involved in getting an order are as follows:

- An importer in Bangladesh shows interest in importing cotton yarn from India.
- The Indian exporter sends a quotation to the Bangladeshi importer.
- The Bangladeshi importer confirms intent to purchase.
- Both parties sign a contract, which determines the shipping date and commercial terms and conditions.

(ii) Transportation and customs declaration at the border

The exporter prepares the export documents, including the invoice, packing list, bill of lading, certificate of origin, customs declaration and pre-shipment inspection certificate. Appendix 2 provides the list of documents needed for the export of cotton yarn. These documents are needed for customs clearance at Petrapole in West Bengal.[21]

[21] The Petrapole-Benapole land customs station is the official trade route for exports of cotton yarn to Bangladesh.

The procedure for transportation and customs declaration on the Indian side of the border are as follows:

- The exporter or a representative prepares a confirmation of remittence transfer at the exporter's bank.
- The exporter prepares all the documents required by customs.
- The exporter transports the goods to the border.
- The exporter submits all documents and declares the products to the customs at Petrapole LCS.
- The customs officer checks the documents (including the documents related to travel of truck driver and accompanying porter) and, if the documents are in order and correct, the officer designates officers to physically inspect the goods. If everything is in order, transfer of the goods is approved.
- Indian truck drivers take the cargo to the designated warehouse on the Bangladesh side of the border, unload the cargo and return to India.

The UML use case and activity diagrams regarding the process of exporting cotton yarn to Bangladesh are presented in Annex 1. These diagrams list all procedures involved and illustrate the core business processes involved when exporting yarn from India to Bangladesh.

Time and costs of exporting cotton yarn to Bangladesh

The study found that it takes at least 27 days and maximum 37 days to complete the process of exporting cotton yarn from India to Bangladesh. The most time is spent waiting for payment from the Bangladeshi importer, followed by the time required for transportation of the goods. Table 9 presents the maximum, minimum and average times for each procedure involved in the process of exporting cotton yarn to Bangladesh through the Petraopole – Benapole land customs station (LCS).

Table 9: Time of export processes of cotton yarn to Bangladesh

Sr. No.	Export procedures	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
	TOTAL	37	27	32

The whole process of exporting cotton yarn from Bangladesh to India costs USD 542.39 on average, with a maximum and minimum range of USD 642.39 and USD 442.39, respectively, of which insurance and inland transportation costs are the major components.

Table 10: Costs involved in export of cotton yarn to Bangladesh

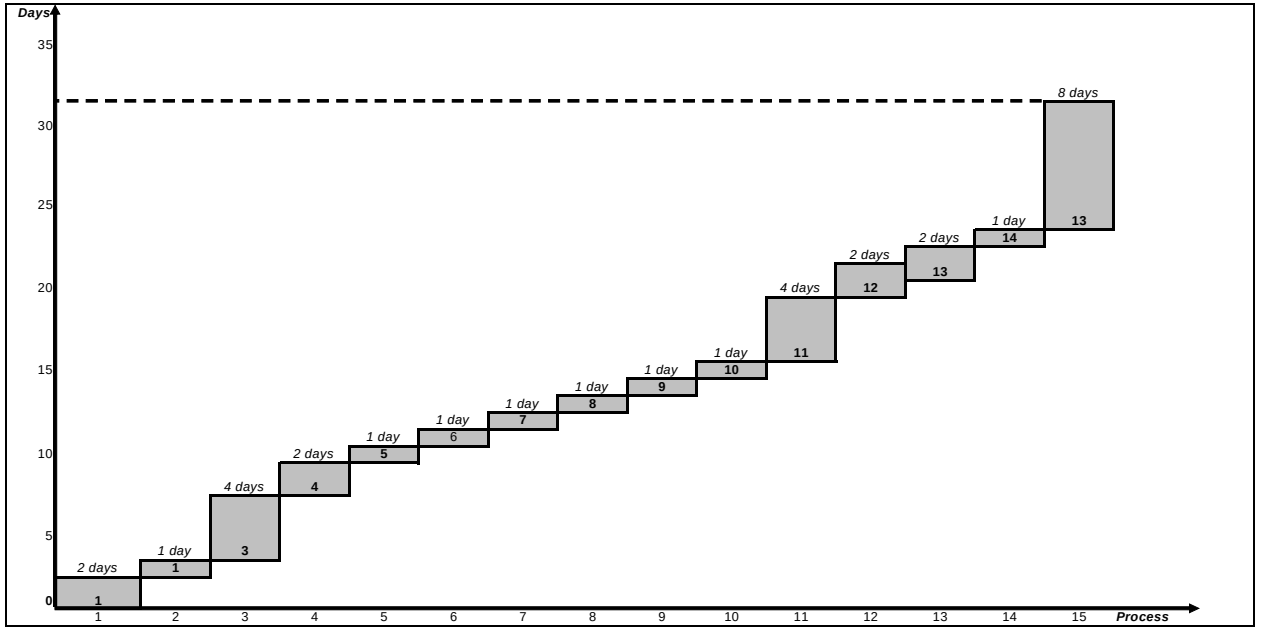
Sr. No	**Export procedures**	**Costs involved (USD)***		
		Max	**Min**	**Average**
1	Obtain export permit	54.35	39.13	46.74
2	Contract registration and inspection	5.43	0.00	2.72
3	Excise inspection	10.87	0.00	5.43
4	Obtain cargo insurance	260.87	184.78	222.83
5	Arrange pre-shipment inspection	30.43	18.48	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
	TOTAL	642.39	442.39	542.39

*per container

The time-procedure chart (Figure 5) is an illustration of the time required to complete the process of exporting cotton yarn from India to Bangladesh. This chart shows that total time taken to complete the trade procedures is about 32 days, on average. It suggests that the bottlenecks are in the areas of inland transportation, customs clearance at the border and getting payment. The delay in customs clearance is mainly due to limited cargo handling capacity of the LCS and lack of customs personnel. Furthermore,

physical inspection of the goods at the border and the break-bulk non-containerised nature of the traded also increases the time required to complete the trade transaction.

Figure 5: Time-procedure chart of exporting cotton yarn from India to Bangladesh



1	Buy	9	Submit customs declaration online
2	Obtain export permit	10	Arrange transport for loading
3	Contract registration and inspection	11	Transfer to LCS
4	Excise inspection	12	Parking of goods
5	Obtain cargo insurance	13	Customs clearance
6	Arrange pre-shipment inspection	14	Send the goods to importer's warehouse
7	Obtain certificate of origin	15	Pay
8	Obtain SAFTA certificate		

5.2. BPA of export of fresh fruit and vegetables to the UAE and Europe

The BPA of exporting fresh fruit and vegetables was conducted via a primary survey of the FarmPack India company, located in Pune in Maharastra State of India. The company exports fresh fruit and vegetables to Gulf and European countries. Appendix 4 presents a brief note about the company. While the United Arab Emirates is the main destination of vegetables; fruit, mainly grapes and pomegranates, are exported to European Union (EU) countries, mainly to the Netherlands.

The study found that a total of 10 parties are involved in the 15 major procedures involved in exporting fresh vegetables to the UAE, whereas 16 major procedures are managed by 10 parties in exporting fruit to the EU. Annex 2 presents a list of the parties involved in the export of fresh vegetables to the UAE and fruit to the EU.

The process of exporting fresh fruit and vegetables mainly consists of getting an order, obtaining an inspection report and certificate of origin, preparing the custom declaration form, and arranging and paying for transportation and transit haulage.

(i) Getting an order

The steps for getting an order are as follows:

- The importer in the UAE or EU shows an interest in importing fresh vegetables or fruit from India.
- The Indian exporter sends a quotation to the UAE or EU importer.
- The UAE or EU importer confirms the intent to purchase.
- Both parties sign a contract, which determines the shipping date and commercial terms and conditions.

(ii) Transportation and custom declaration at the port

The exporter prepares the export documents, including the commercial invoice, packing list, bill of lading, certificate of origin, customs declaration, residual analysis certificate (for exporting fruit to the EU), sanitary and phytosanitary certificate. These are needed for customs clearance at Jawaharlal Nehru Port in Navi Mumbai.[22]

[22] Jawaharlal Nehru Port customs station is the official customs point for the export of fresh vegetables and fruit to the UAE and EU.

The procedure of transportation and customs declaration on the Indian side of the border are as follows:

- The exporter (through the customs house agent) collects all necessary approvals such as the sanitary and phytosanitary certificate.

- The exporter declares the products to the customs section at Jawaharlal Nehru Port customs station by submitting all of the required documents. The customs officer verifies the application and provides approval, if the documents are in order and correct.
- The customs officer allows cargo inspection by designating officers to physically inspect the goods. If everything is in order, transfer of the goods is approved.
- Indian truck drivers take the cargo to the designated warehouse in the port.

The UML use case and activity diagrams of the process of exporting fruit and vegetables are presented in Annex 2. The diagrams list all procedures involved in the export process and illustrate core business processes used when exporting vegetables from India to the UAE and when exporting fruit to the EU.

Time and cost involved in exporting fruit and vegetables to the UAE and the EU

The study found that it takes at least 23.5 days and maximum of 34.5 days to complete the process of exporting vegetables from India to the UAE. The most time is spent waiting for payment from the importer, followed by the time required for transportation. For the export of fruit to the EU, the minimum time required to complete the process is 27 days and the maximum time required is 41 days. The most time is spent transporting the goods from India to the EU, followed by the time required to receive payment. Tables 11a and 11b present the times required for each procedure in the export of vegetables to the UAE and fruit to the EU.

Table 11a: Time of procedures for exporting vegetables to the UAE

Sr. No.	Procedure	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	34.5	23.5	29

Table 11b: Time of procedures for exporting fruit to the EU

Sr. No.	Procedure	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	41	27	33

The process of exporting vegetables to the UAE costs about USD 1,573 per container, on average, with a maximum and minimum of USD 1,672 and USD 1,473 (Table 12a). In the case of exporting fruit to the EU, the average cost is USD 2,031 per

container (Table 12b). In both cases, the transportation cost (inland and international) is the major component of the costs.

Table 12a: Costs involved in export of vegetables to the UAE

Sr. No.	Procedures	Costs involved (USD)*		
		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	1,044.44	1,000.00	1,022.22
	Total	1,672.22	1,473.33	1,572.78

* Per container

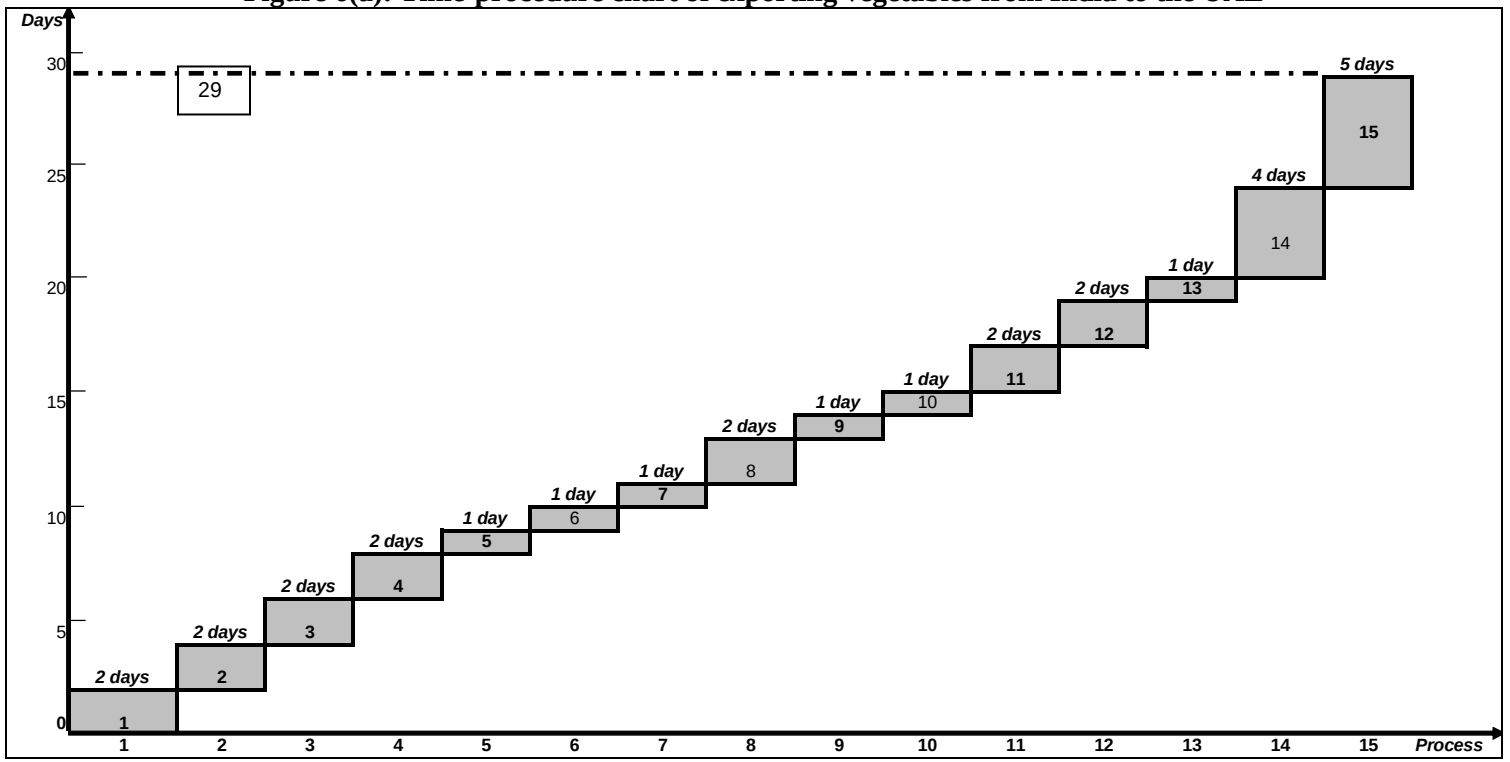
Table 12b: Costs involved in export of fruit to the EU

Sr. No.	Procedures	Costs involved (USD)*		
		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 and 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	1,422.22	1,377.78	1,400.00
	Total	2,130.00	1,932.22	2,031.11

* Per container

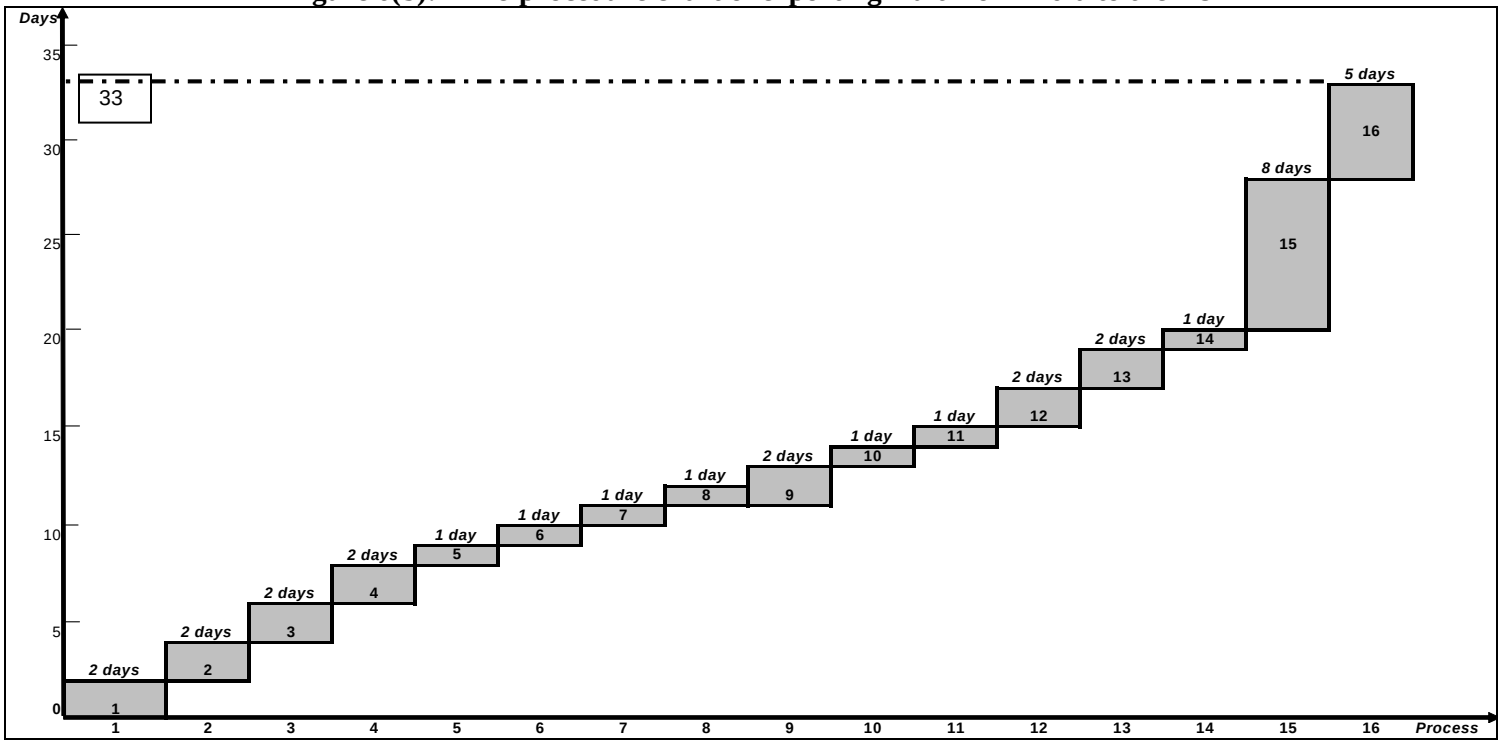
The time-procedure chart is an illustration of the time required to complete a trade process. Figure 6a and Figure 6b present the time-procedure charts for exporting vegetables from India to the UAE and fruit to the EU, respectively. These charts show that the total time required to complete the export procedures is about 29 days, on average, for vegetables, and 33 days, on average, for fruit. The charts indicate that bottlenecks exist in the areas of domestic transportation, customs clearance and payment.

Figure 6(a): Time-procedure chart of exporting vegetables from India to the 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): Time-procedure chart of exporting fruit from India to the EU



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

5.3. BPA of the import of rubber tyres from Sri Lanka

The BPA of importing rubber tyres from Sri Lanka was conducted via a primary survey of CEAT India Ltd., a company located in Mumbai in Maharashtra State of India. The company imports rubber tyres from its Sri Lankan subsidiary. CEAT India has two tyre manufacturing plants in Sri Lanka. Appendix 5 presents a brief note about CEAT India.

The study found that nine parties are involved in 12 major procedures in importing rubber tyres from Sri Lanka. The process for importing rubber tyres mainly consists of placing an order with the Sri Lankan subsidiary, customs clearance at the Indian port, inland transportation and unloading the goods. BPA diagrams are presented in Annex 3.

(i) Placing an order

The steps for placing an order are as follows:

- The importer in India expresses an interest in importing rubber tyres from Sri Lanka.
- The Sri Lankan exporter sends a quotation to the Indian importer.
- The Indian importer confirms intent to purchase.
- Both parties sign a contract, which determines the shipping date and commercial terms and conditions.
- The Sri Lankan exporter sends the rubber tyres to the Indian importer.

(ii) Transportation and customs declaration at the port

The importer prepares the import documents, including the import general manifest, commercial invoice, packing list, bill of lading, bill of entry, certificate of origin and customs declaration, which are needed for clearing the cargo through customs at the Jawaharlal Nehru Port.[23] These documents are listed in Annex 3. The procedures for transportation and customs declaration on the Indian side of the border are as follows:

- The importer (through a customs house agent) collects all necessary approvals and obtains permission to move the goods from the vessel to the yard.
- The importer declares the products to the customs office at Jawaharlal Nehru Port customs station by submitting the required documents.

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

- The customs officers verify the application and provide approval, after physically inspecting the goods.
- The importer then transports the goods to the importers' warehouse.

The use case and activity diagrams are presented in Annex 3. The diagrams lists all procedures involved in the process of importing tyres from Sri Lanka and illustrate the core business processes used when importing rubber tyres in India from Sri Lanka.

Time and cost involved in importing rubber tyres from Sri Lanka

It takes about 22 days, on average, to import rubber tyres from Sri Lanka, including the time required for settling the payment. The most time taken in the process is for making the payment. Table 13 presents the time needed for each procedure involved in the process of importing rubber tyres from Sri Lanka.

Table 13. Time required for the procedures involved in importingrubber tyres

Sr. No.	Procedure	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

The whole process of importing rubber tyres costs an average of USD 360 per container with a maximum and minimum of USD 393 and 326, respectively. Transportation cost the main cost component. Table 14 lists the minimum, maximum and average costs of each procedure.

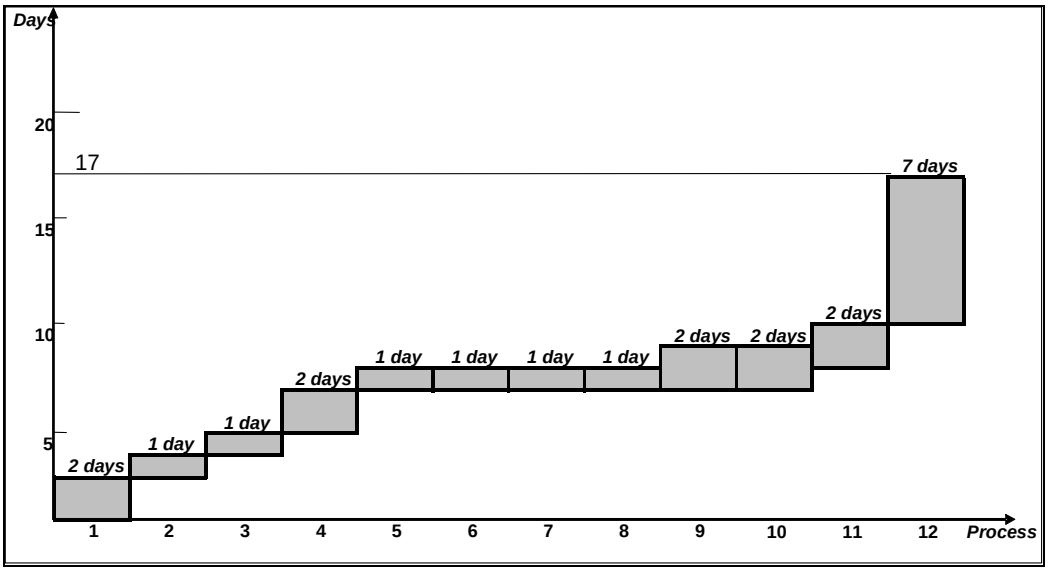
Table 14. Costs involved in import of rubber tyres by India

Sr. No.	Procedure	Costs involved (USD)*		
		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	Transport to importer's warehouse	120.00	100.00	110.00
	Total	393.00	326.00	359.50

* Per container

The time-procedure chart (Figure 7) is an illustration of the time required to complete the process of importing rubber tyres.

Figure 7: Time-procedure chart of importing rubber tyres from Sri Lanka



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

6. Concluding remarks

The BPAs of the processes of exporting cotton yarn to Bangladesh, fresh vegetables to the UAE and fruit to the EU, and the process of importing rubber tyres from Sri Lanka were done through field surveys.

The findings of the BPAs indicate that a total of 12 export documents, involving 13 parties, are required to export cotton yarn to Bangladesh. These figures are undoubtedly high. The time-procedure chart shows that total time taken to complete these export procedures is about 32 days, which is also very high, compared to international standards. The maximum time was spent waiting for payment from the Bangladeshi importer, followed by the time taken for the transportation of goods. The whole process costs an average of USD 542.39, with a maximum and minimum of USD 603.26 and USD 429.57, respectively, of which insurance and inland transportation cost are the major components. The findings of the study suggest that besides tariffs, the bottlenecks are in the areas of inland transportation, customs clearance and getting payment.

For the export of vegetables to the UAE the study found that about 10 parties are involved in 12 major procedures, whereas 13 major trade procedures are being managed by 10 parties for the export of fruit to the EU. The process of exporting vegetables to the UAE takes about 29 days, while the process of exporting fruit to the EU takes about 33 days. The maximum time goes into transporting the goods from India to the EU, followed by the time required to get payment. In the case of exporting vegetables to the UAE, getting payment from the importer takes the most time, followed by the time required for transportation. The whole process of exporting vegetables to the UAE costs USD 1,573 per container, on average, whereas the cost of exporting fruit is USD 2,031 per container, on average. In both cases, transportation costs (domestic and international) were the highest costs. The time procedure chart suggests that the bottlenecks are in the areas of transportation, customs clearance and getting payment.

For the process of importing rubber tyres from Sri Lanka, the trade procedures are relatively simple. This process consists of placing an order with the Sri Lankan subsidiary, custom clearance at the Indian port, unloading the goods and domestic transportation. This study shows that total 9 parties are involved in 12 major import procedures. It takes about 22 days to import rubber tyres from Sri Lanka, including settling the payment. The whole process of importing rubber tyres costs an average of USD 360 per container, with a maximum and minimum of USD 393 and 326. The most time is spent in making the payment. The cost of inland transportation is the major barrier to trade.

Moving goods across borders requires meeting a vast number of commercial, transport and regulatory requirements. Inefficiencies in complying with these requirements create unnecessary delays and costs. This study found that the main barriers to trade are customs documentation, absence of testing facilities and transportation.

The trade procedures and the time and costs of the export and import processes identified in this study call for greater trade facilitation efforts. India must implement a comprehensive policy to remove unnecessary procedures associated with trade in order to improve efficiency and reduce trade costs. Trade liberalization is important, but sometimes it is not adequate enough to enhance a country’s trade. Trade facilitation can complement that effort.

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Appendices

Appendix 1: Tables showing tariffs on cotton and cotton yarn

Appendix Table 1a. 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	Import 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: World Integrated Trade Solution

Appendix Table 1b. 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: World Integrated Trade Solution

Appendix 2: Ginni Filaments Limited

In 1990, Ginni Filaments Ltd. (GFL) was commissioned, with 26,208 spindles, to produce ultrafine combed cotton yarn. A 100 per cent export oriented unit, it was designed to produce world class quality products. Sophisticated plant and machinery from the world-renowned machinery manufacturers, viz. Rieter, Schlafhorst and Volkmann, with top of the line support systems for quality monitoring, were installed. Located in Tehsil Chatta, Mathura District, Uttar Pradesh, GFL's installed capacity in 2011 stands at 60,336 spindles with a capacity of 1,000 tonnes per month. The product range includes 100 per cent combed cotton yarn from Ne16 to Ne50, both in single and double ply construction. The company also manufactures TFO doubled, compact spun, elitwist and gassed yarns. In April 2005, GFL expanded into processed knitted fabrics. The company is recognised as a trading house by the Government of India. Ginni Filaments entered the garment business, with its first unit in Noida, in September 2006, with a capacity of 250,000 pieces per month. The capacity is expected to be increased to one million pieces per month in a phased manner. GFL also has a plant in Gujarat State. Source: Ginni Filaments

Appendix 3: List of documents required for the export of 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 in Pune in the western part of India, Farmpack India is engaged in the export of agricultural products from India. The existence of Farmpack came about during an informal business meeting from a European buyer who was in India to procure grapes and pomegranates for distribution in Europe. Motivated by the growing demand for fruit and vegetables, the Shukla family started this business in the 1990s. It grew from a business worth less than 10 million INR to worth 100 million INR over a period of five years. It has a young team, but vast experience in agriculture and management. The company has vast network of farmers who are growing vegetables and fruit. The Farmpack product line in 2011 includes pomegranate, papaya, mangoes, grapesgreen chilies, bitter gourd (karela), okara (bhendi), tendly and gawar. The agro products are exported to Europe and Middle East markets by ship and by air. Farmpack exports to companies in different countries who have their own distribution channels or supermarkets.
Source: Farmpack India

Appendix 5: CEAT India Limited

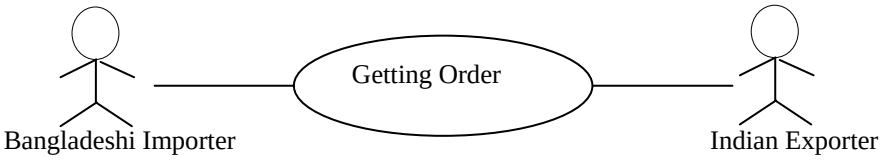
CEAT India Limited is a tyre manufacturing company based in Mumbai, India. CEAT is an abbreviation for Cavi Electrici Affini Torino (Electrical Cables and Allied Products of Turin). Founded in Italy as CEAT Tyres by Virginio Bruni Tedeschi, the company established its manufacturing facility in India in 1958. The company's Indian division was taken over by RPG Enterprises in 1982, which also got the rights to the CEAT brand and renamed the company CEAT Limited. CEAT is one of the largest tyre manufacturers in India and has considerable share in the local truck and light truck tyre market. CEAT owns four manufacturing plants: two in India and two in Sri Lanka. In India it has manufacturing plants in Mumbai and Nashik in Maharastra State. CEAT manufactures a wide range of tyres 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

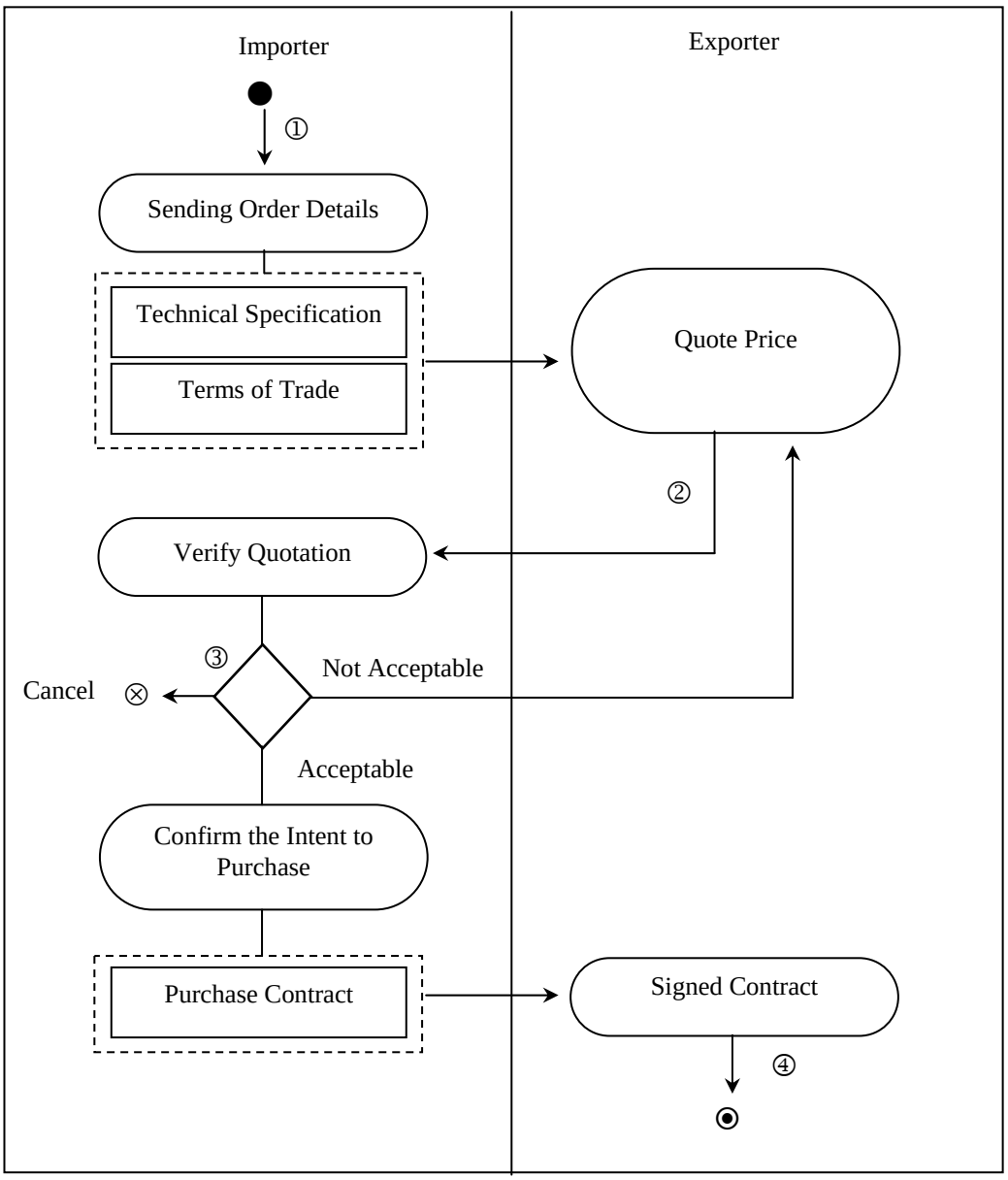
Annexes: BPA Diagrams

Annex 1

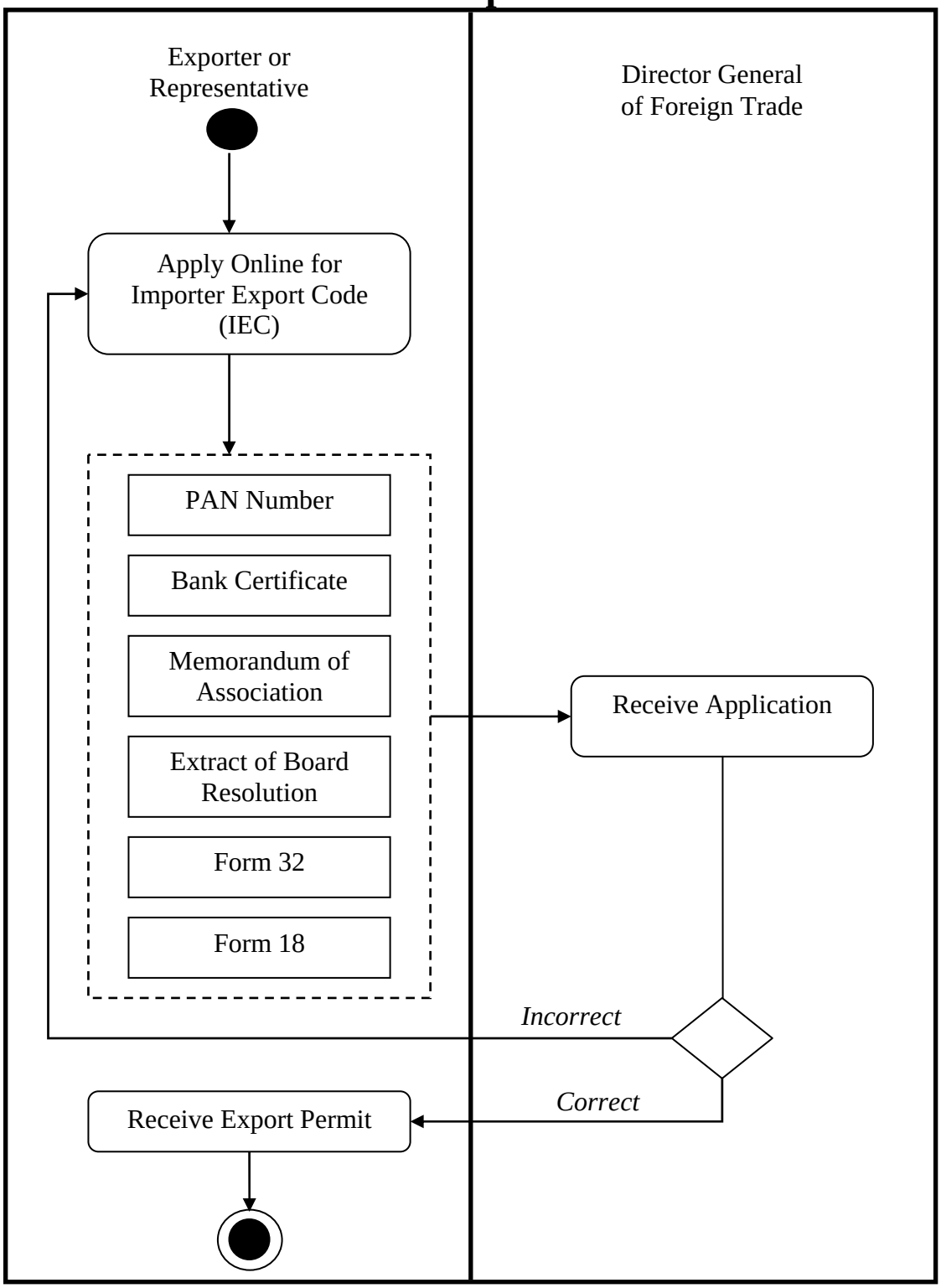
Business Processes Analysis Diagrams for the Export of Cotton Yarn to Bangladesh

1. Buy

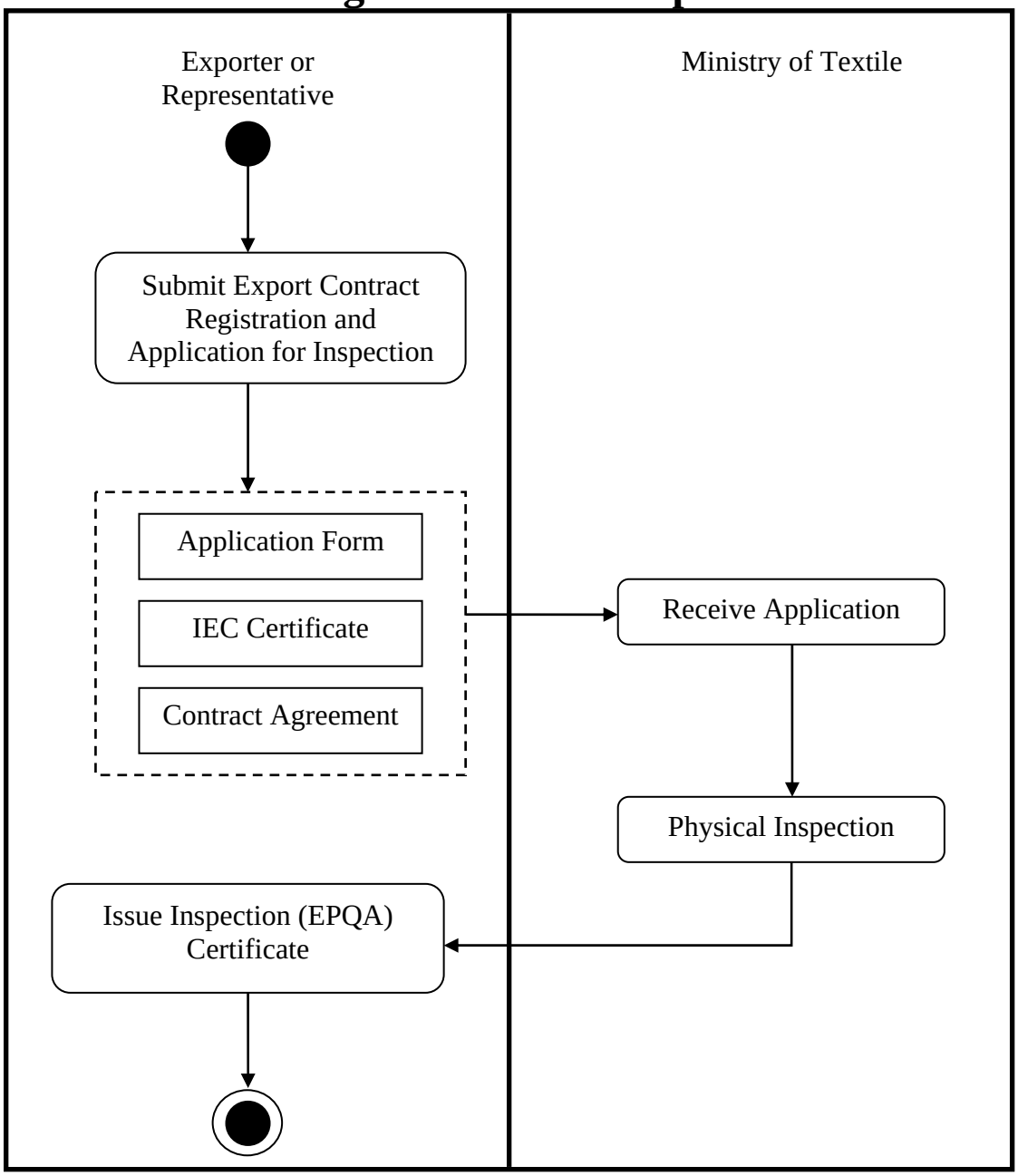

Getting Order
Bangladeshi Importer
Indian Exporter


Importer
Exporter
①
Sending Order Details
Technical Specification
Terms of Trade
Quote Price
②
Verify Quotation
③
Cancel
Not Acceptable
Acceptable
Confirm the Intent to Purchase
Purchase Contract
Signed Contract
④

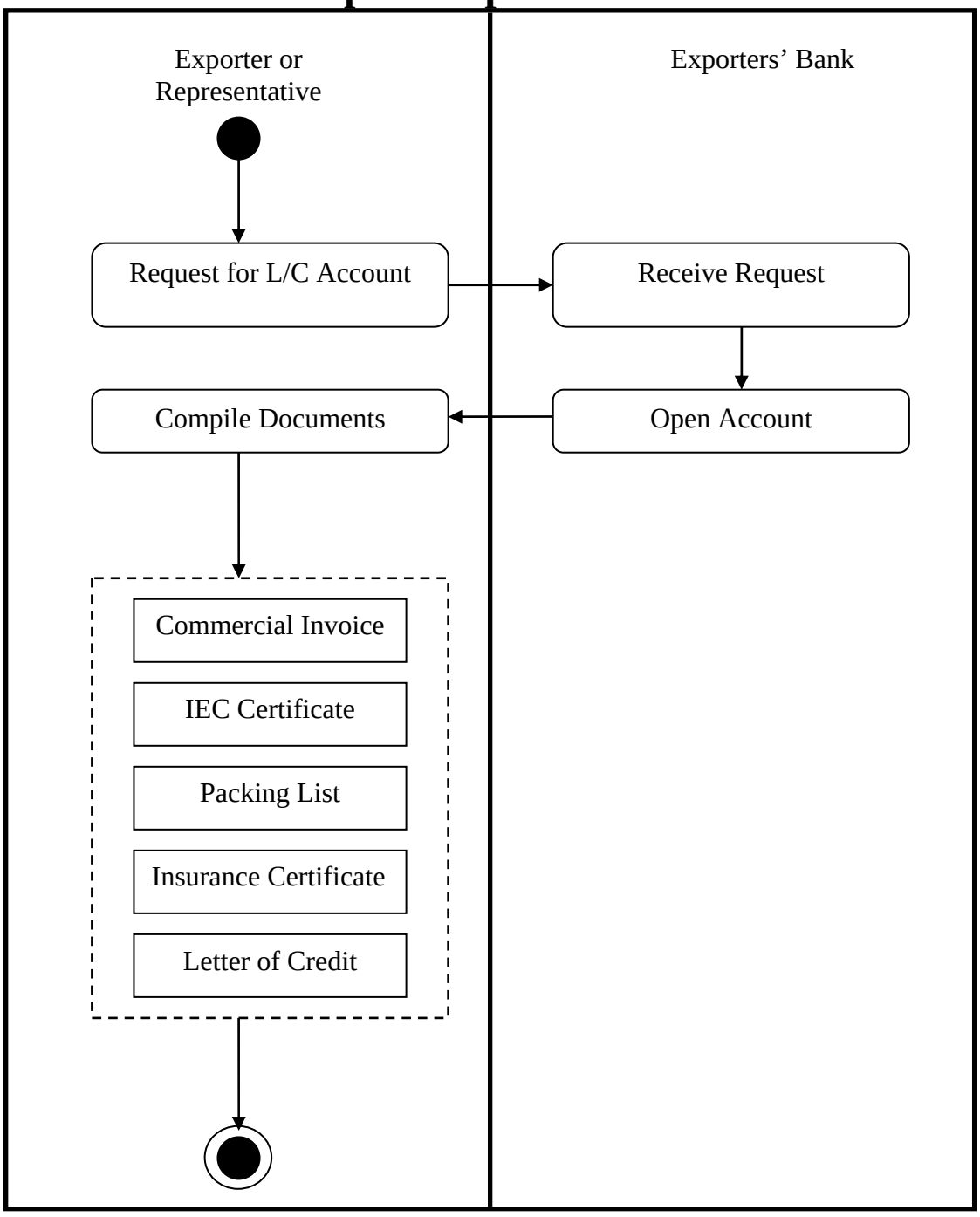
2.1 Obtain Export Permit



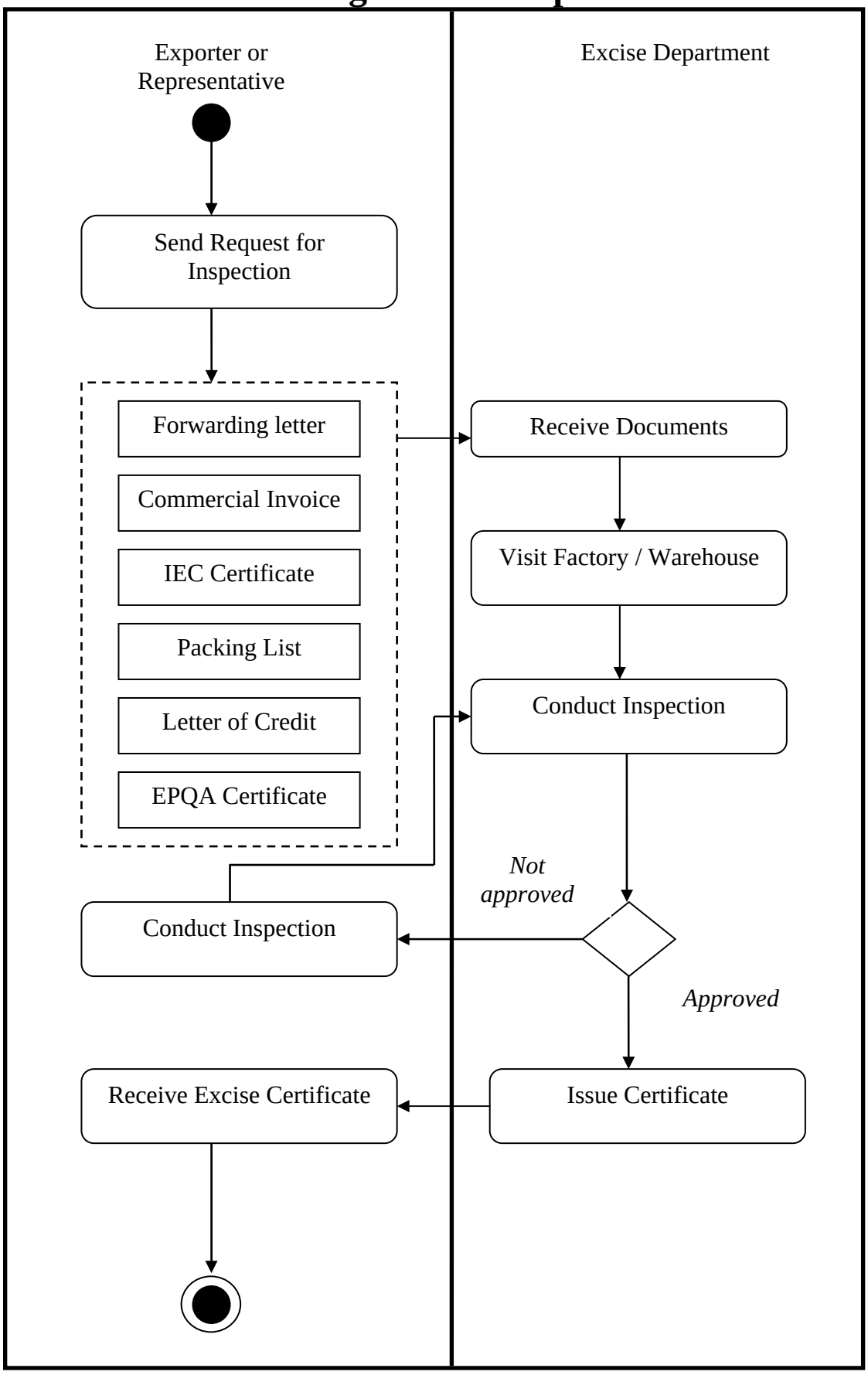
2.2 Contract Registration and Inspection of Yarn



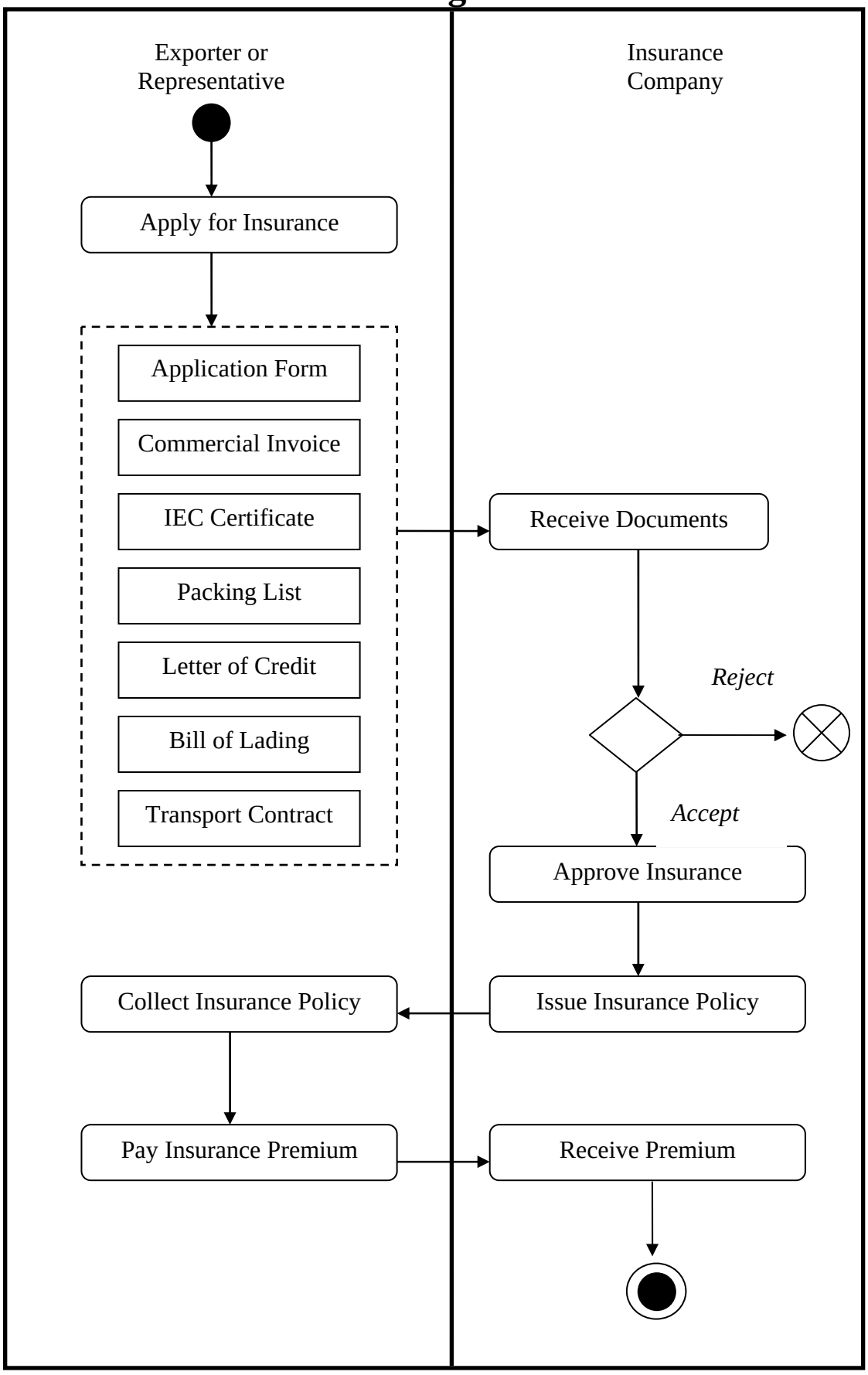
2.3 Prepare Export Document



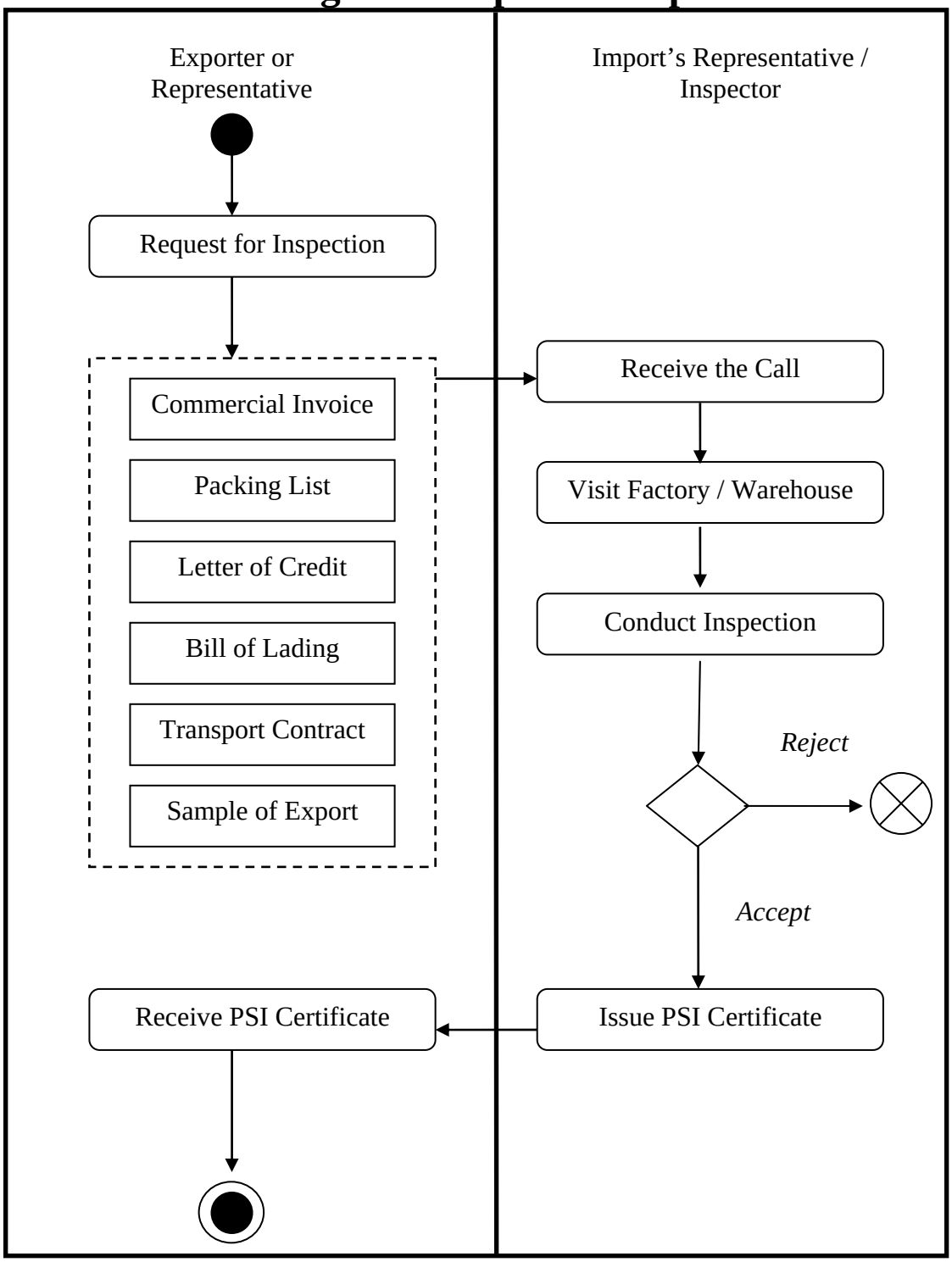
2.4 Arrange Excise Inspection



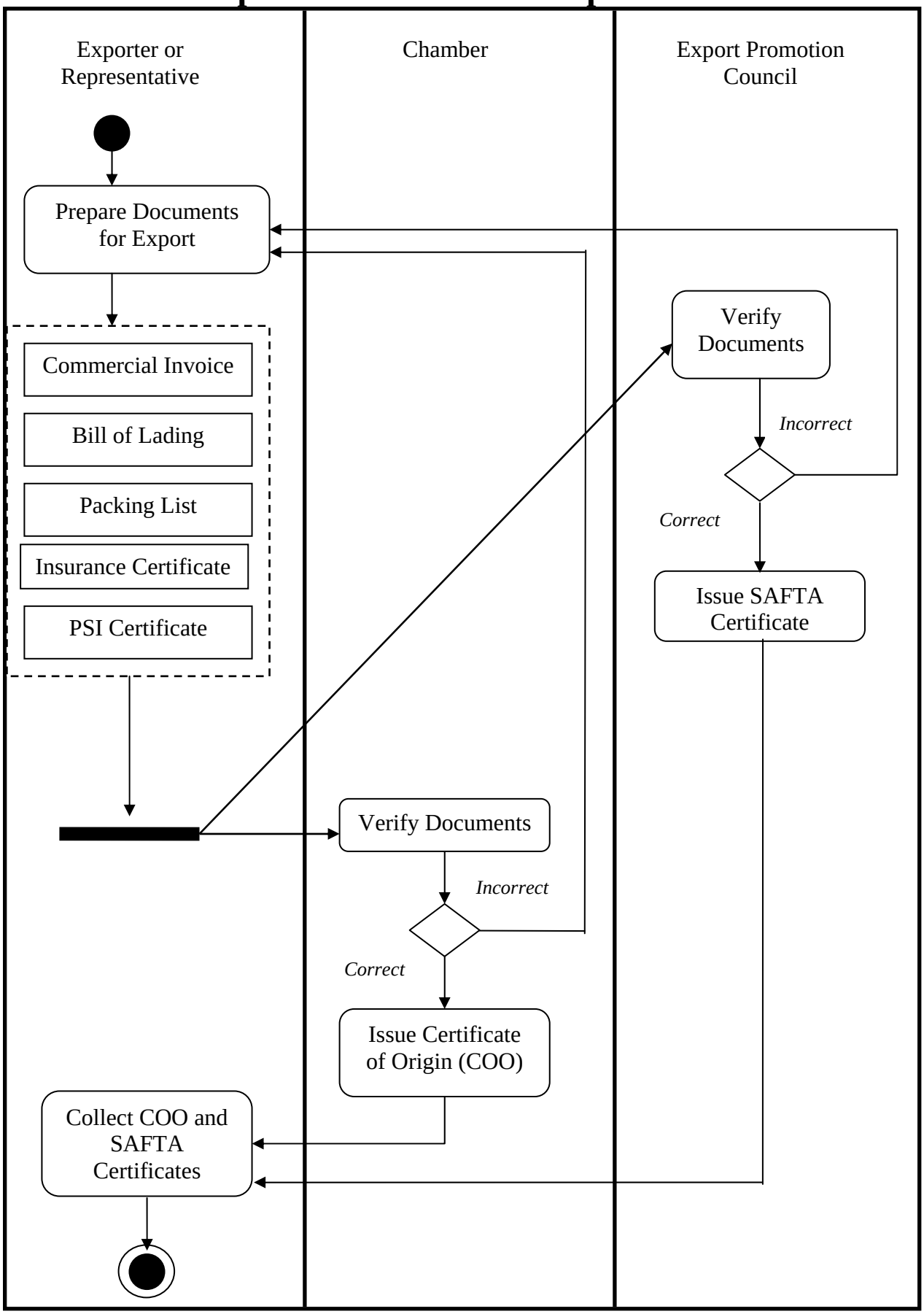
2.5 Obtain Cargo Insurance



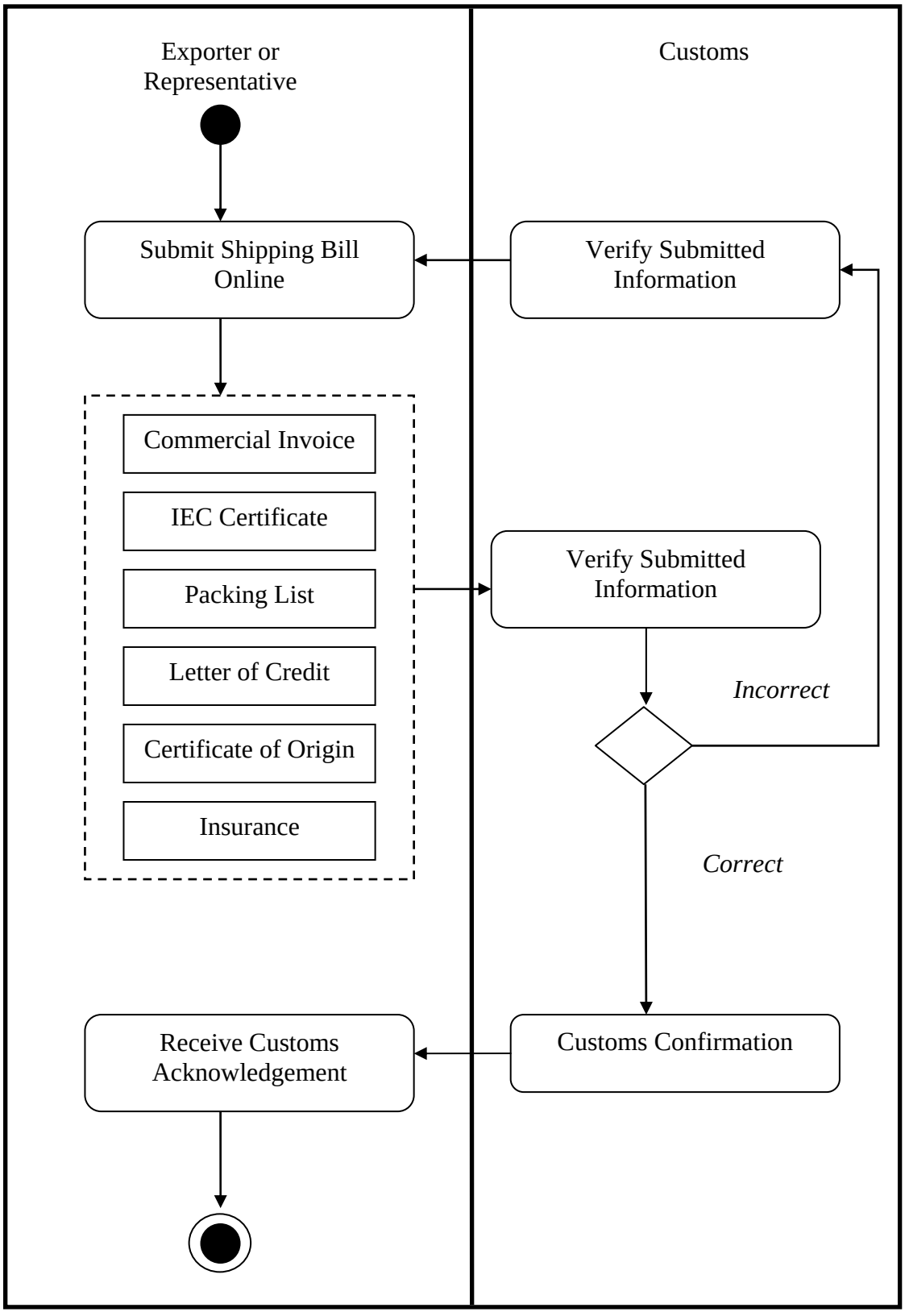
2.6 Arrange Pre-shipment Inspection



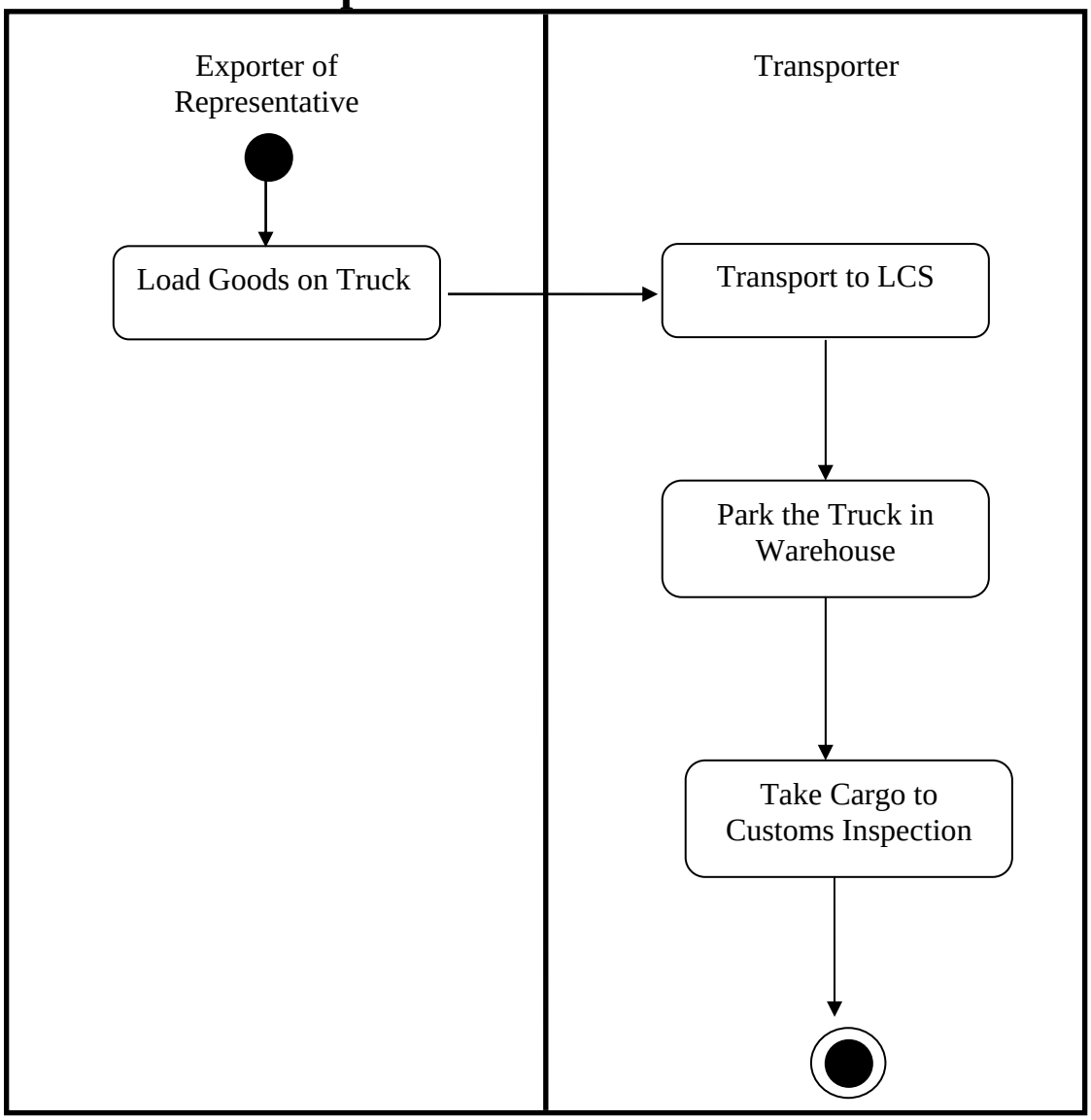
2.7 Prepare Documents for Importer



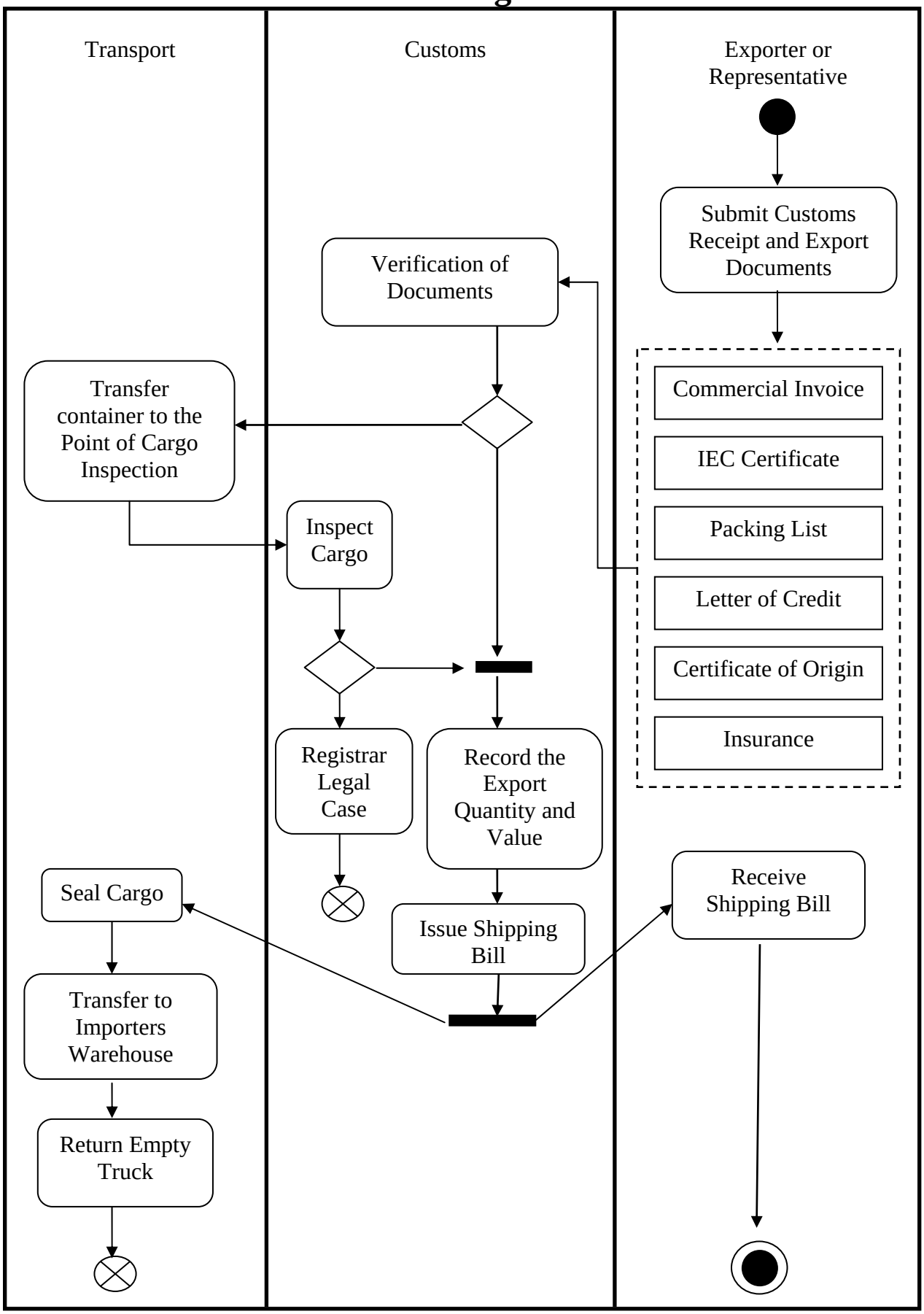
2.8 Provide Customs Declaration Online



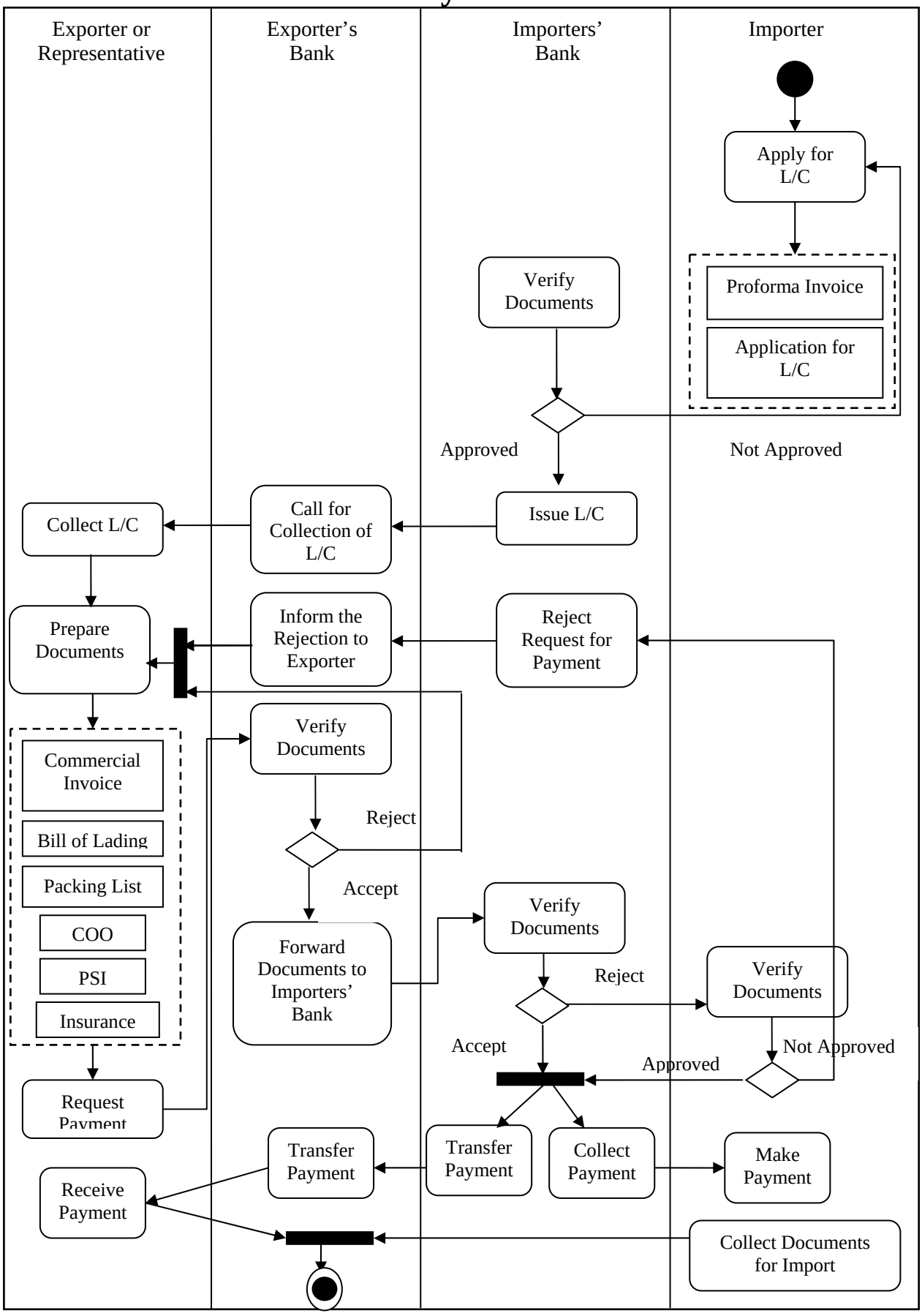
2.9 Transport to Land Customs Station



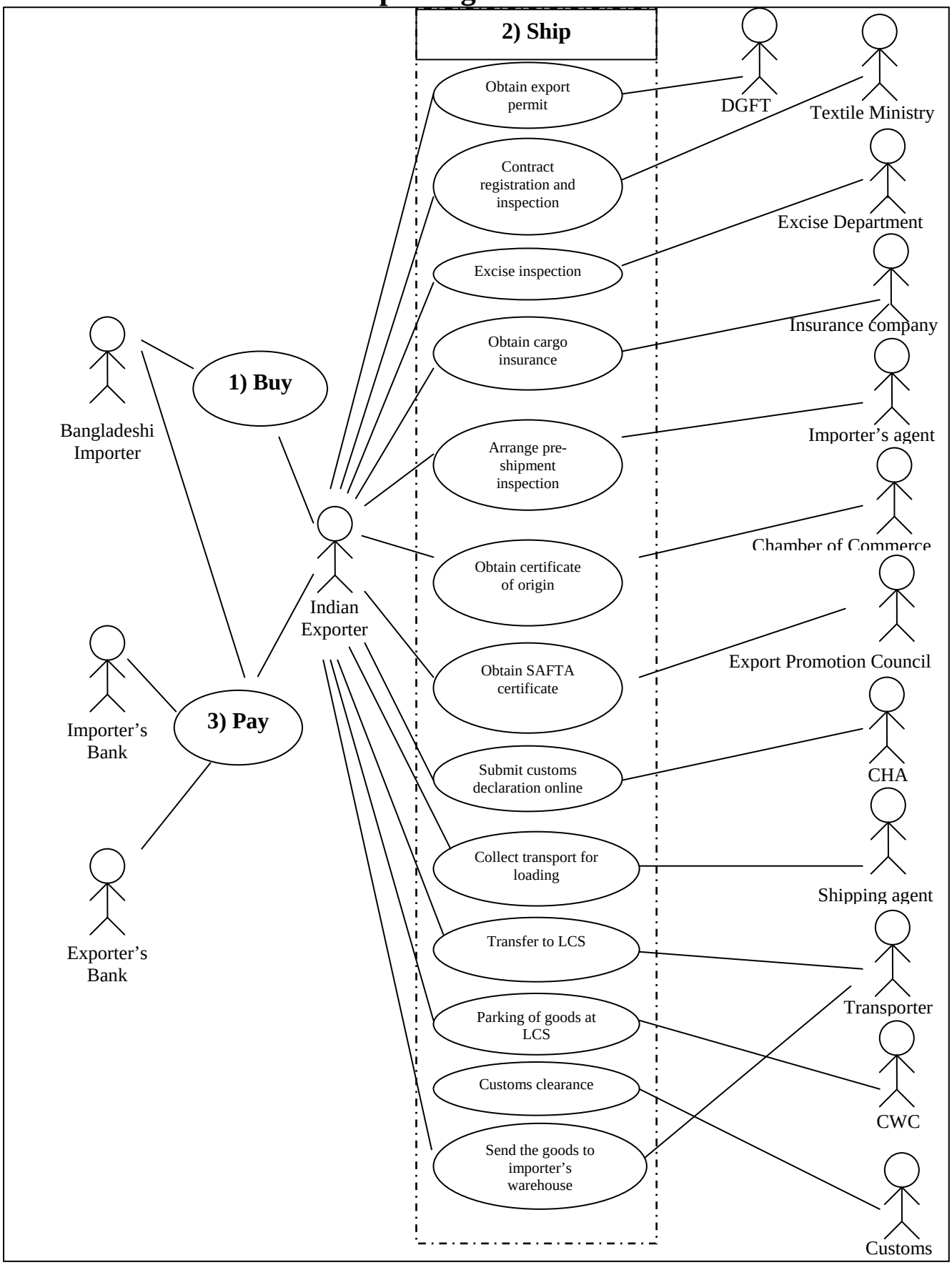
2.10 Clear Goods through Customs



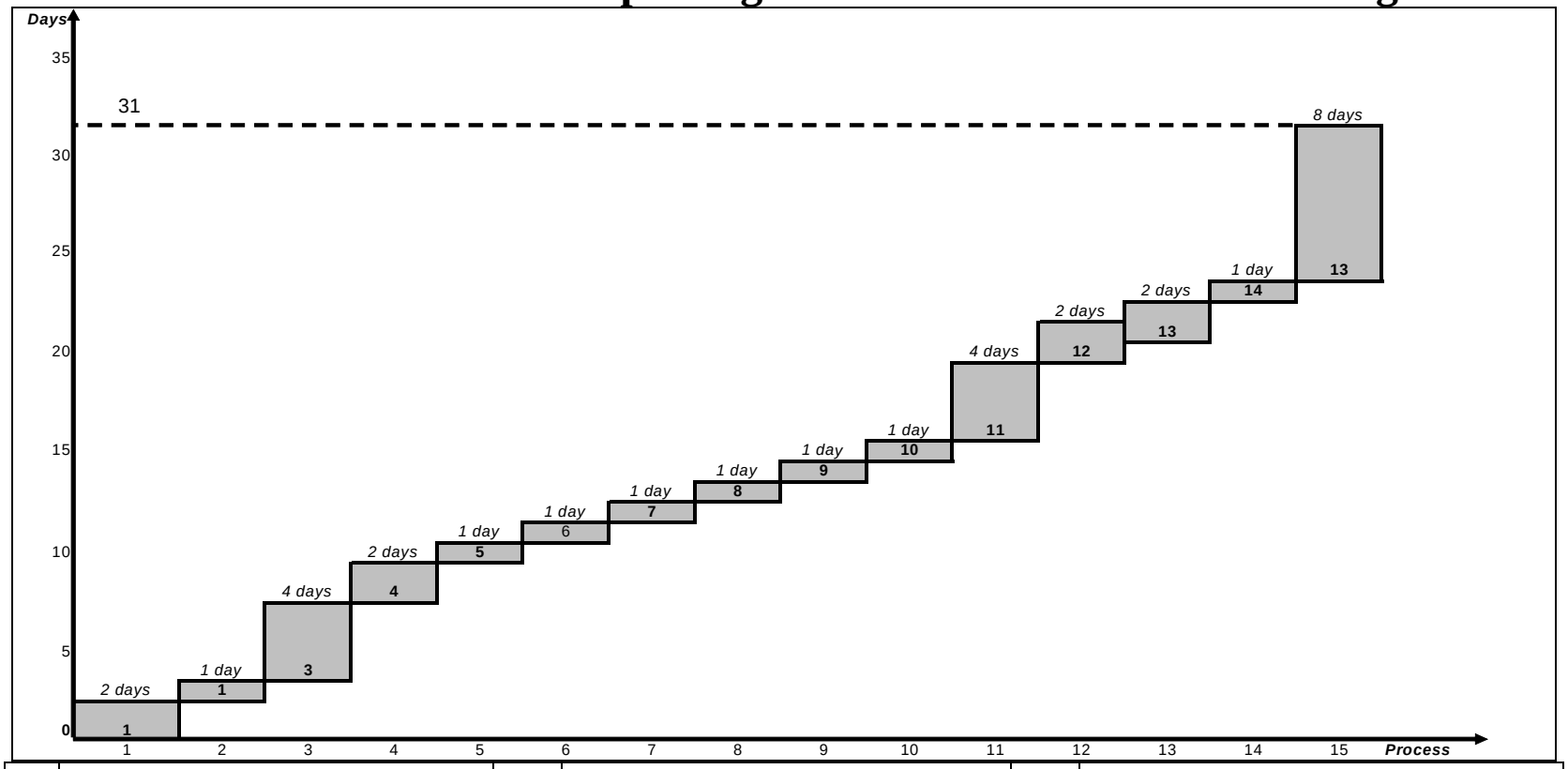
3. Pay


Exporter or Representative
Exporter's Bank
Importers' Bank
Importer
Apply for L/C
Proforma Invoice
Application for L/C
Verify Documents
Approved
Not Approved
Issue L/C
Call for Collection of L/C
Collect L/C
Prepare Documents
Inform the Rejection to Exporter
Reject Request for Payment
Commercial Invoice
Bill of Lading
Packing List
COO
PSI
Insurance
Verify Documents
Reject
Accept
Forward Documents to Importers' Bank
Verify Documents
Reject
Verify Documents
Accept
Approved
Not Approved
Request Payment
Transfer Payment
Transfer Payment
Collect Payment
Make Payment
Receive Payment
Collect Documents for Import

3.1 Parties Involved in Exporting Cotton Yarn in India



Time-Procedure Chart for Exporting Cotton Yarn from India to Bangladesh

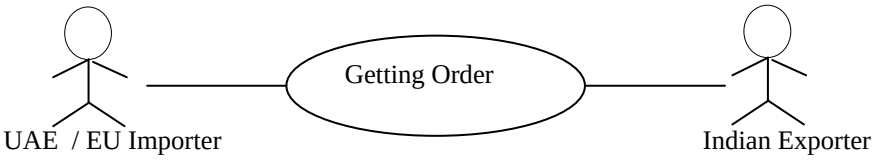


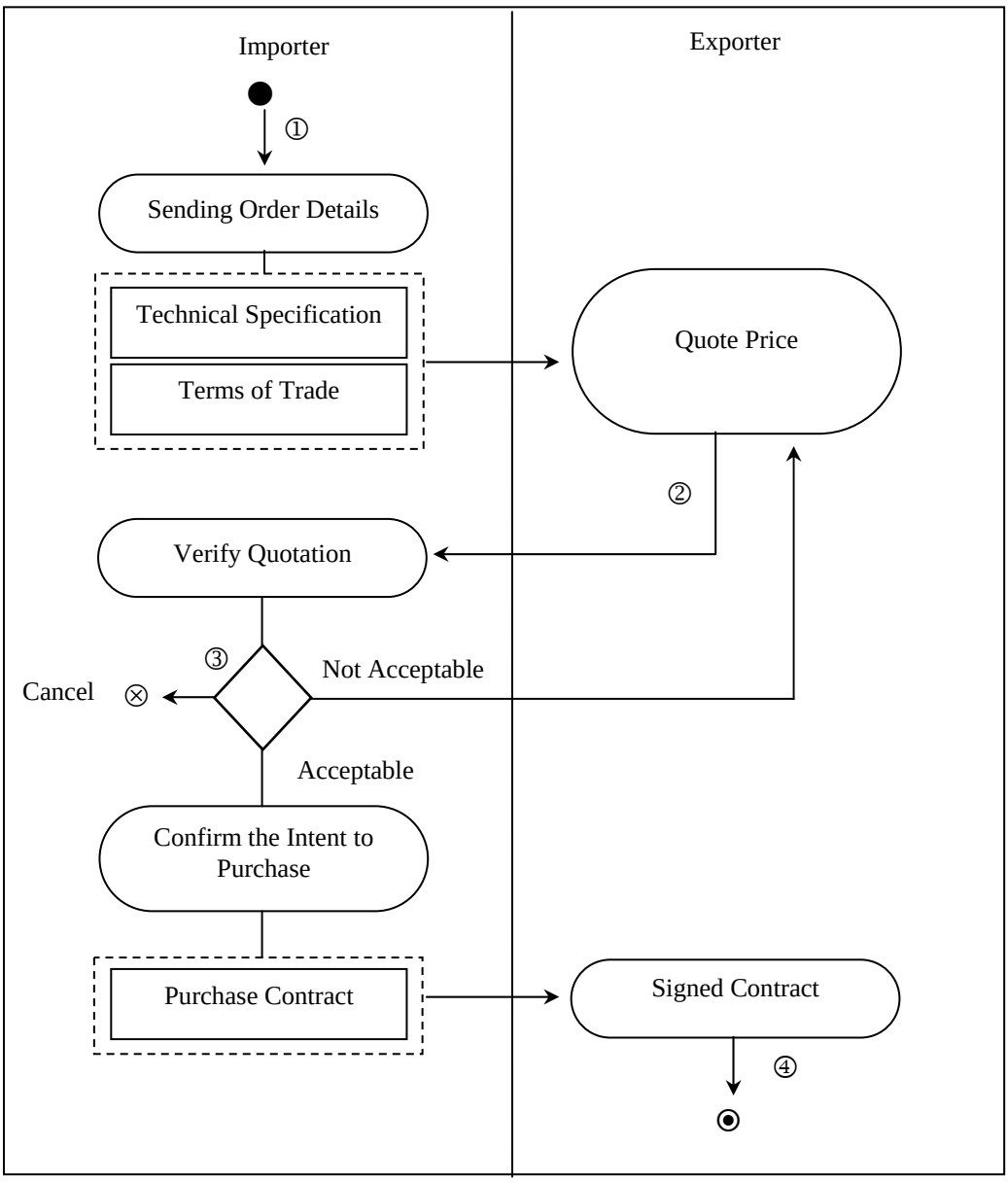
1	Buy	6	Arrange pre-shipment inspection	11	Transfer to LCS
2	Obtain export permit	7	Obtain certificate of origin	12	Parking of goods
3	Contract registration and inspection	8	Obtain SAFTA certificate	13	Customs clearance
4	Excise inspection	9	Submit customs declaration online	14	Send the goods to importer’s warehouse
5	Obtain cargo insurance	10	Arrange transport for loading	15	Pay

Annex 2

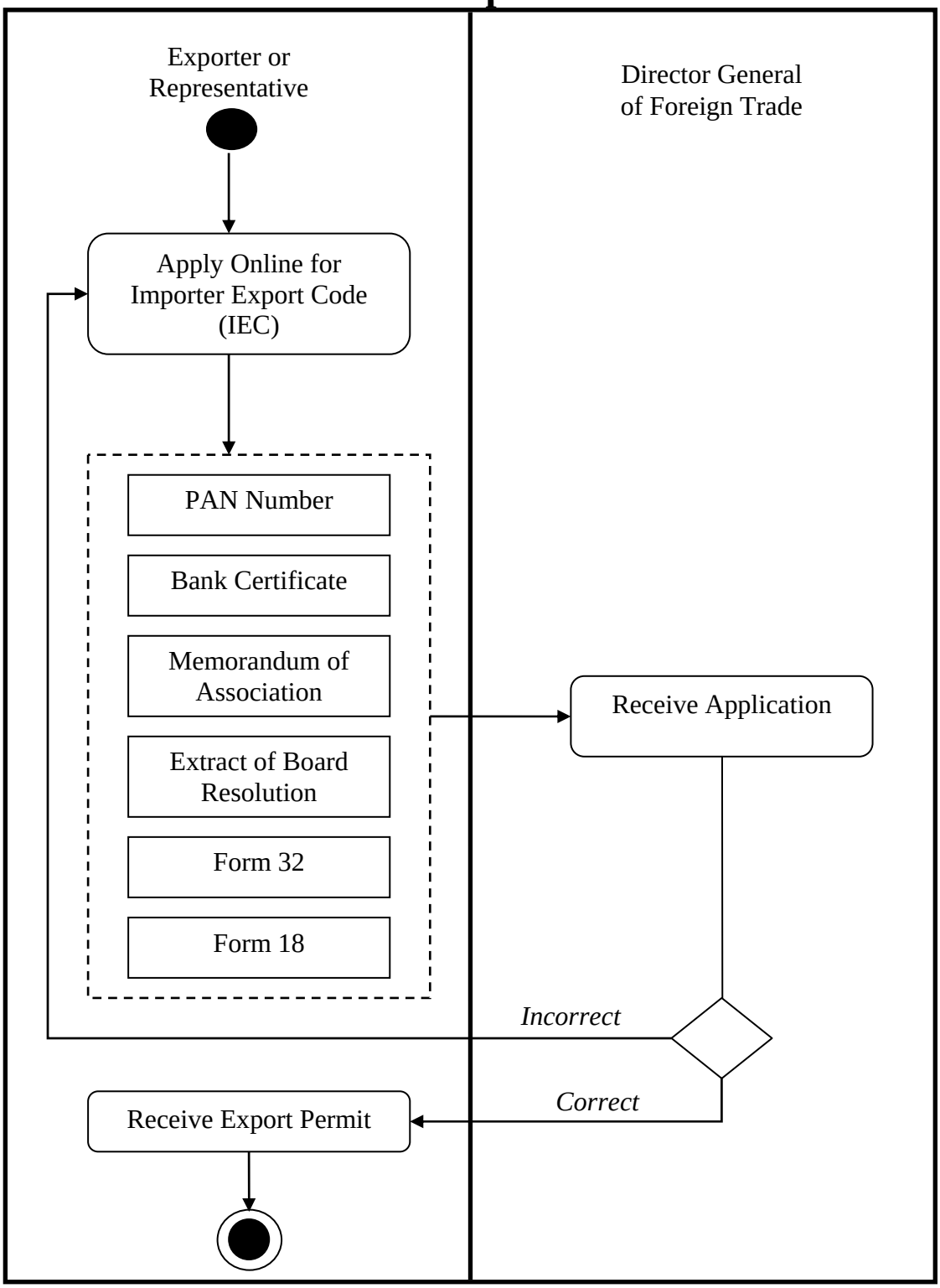
Business Processes Analysis Diagrams of the Export of Fresh Fruit and Vegetables to the Middle East and Europe

1. Buy

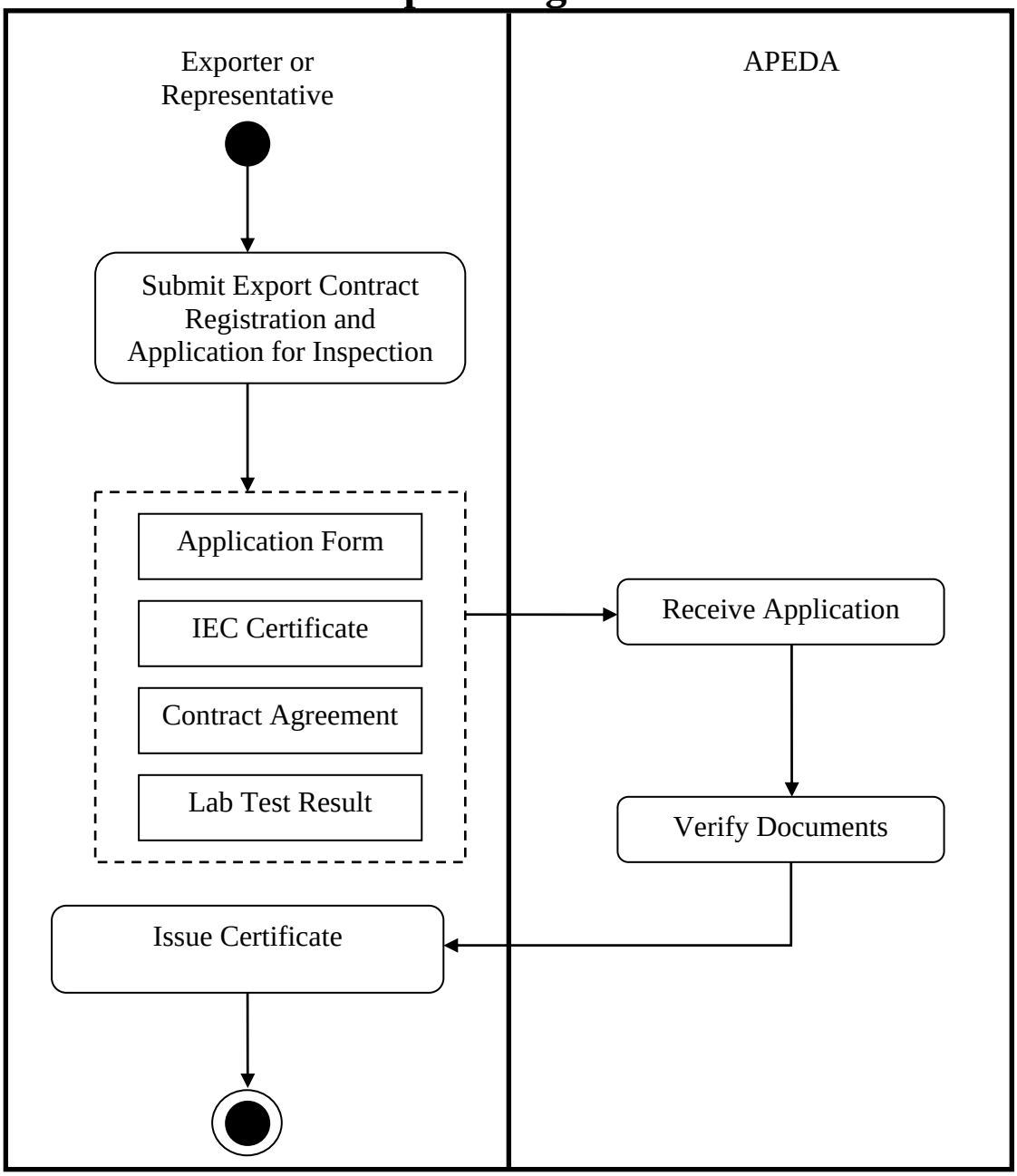

Getting Order
UAE / EU Importer
Indian Exporter


Importer
Exporter
①
Sending Order Details
Technical Specification
Terms of Trade
Quote Price
②
Verify Quotation
③
Cancel
Not Acceptable
Acceptable
Confirm the Intent to Purchase
Purchase Contract
Signed Contract
④

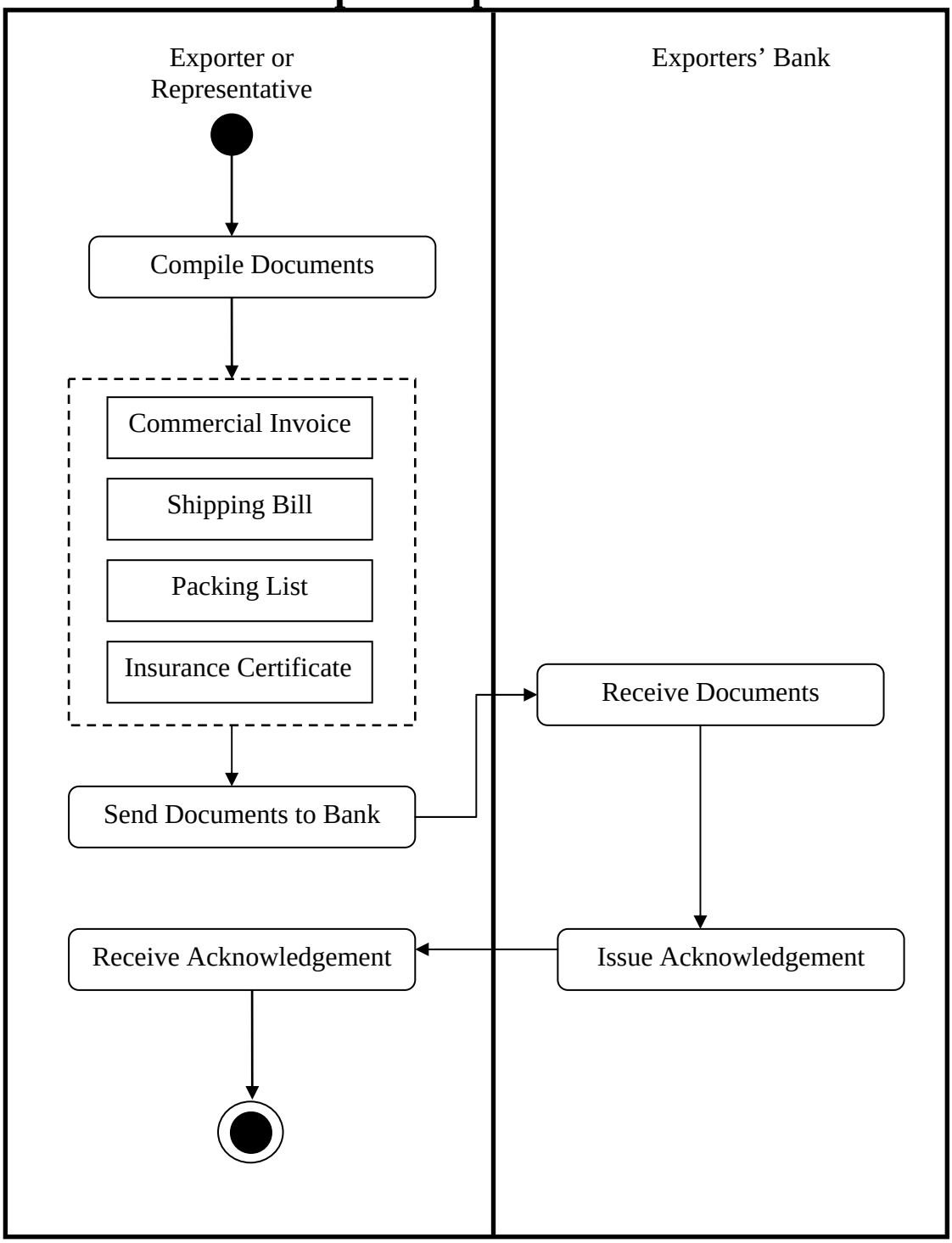
2.1 Obtain Export Permit



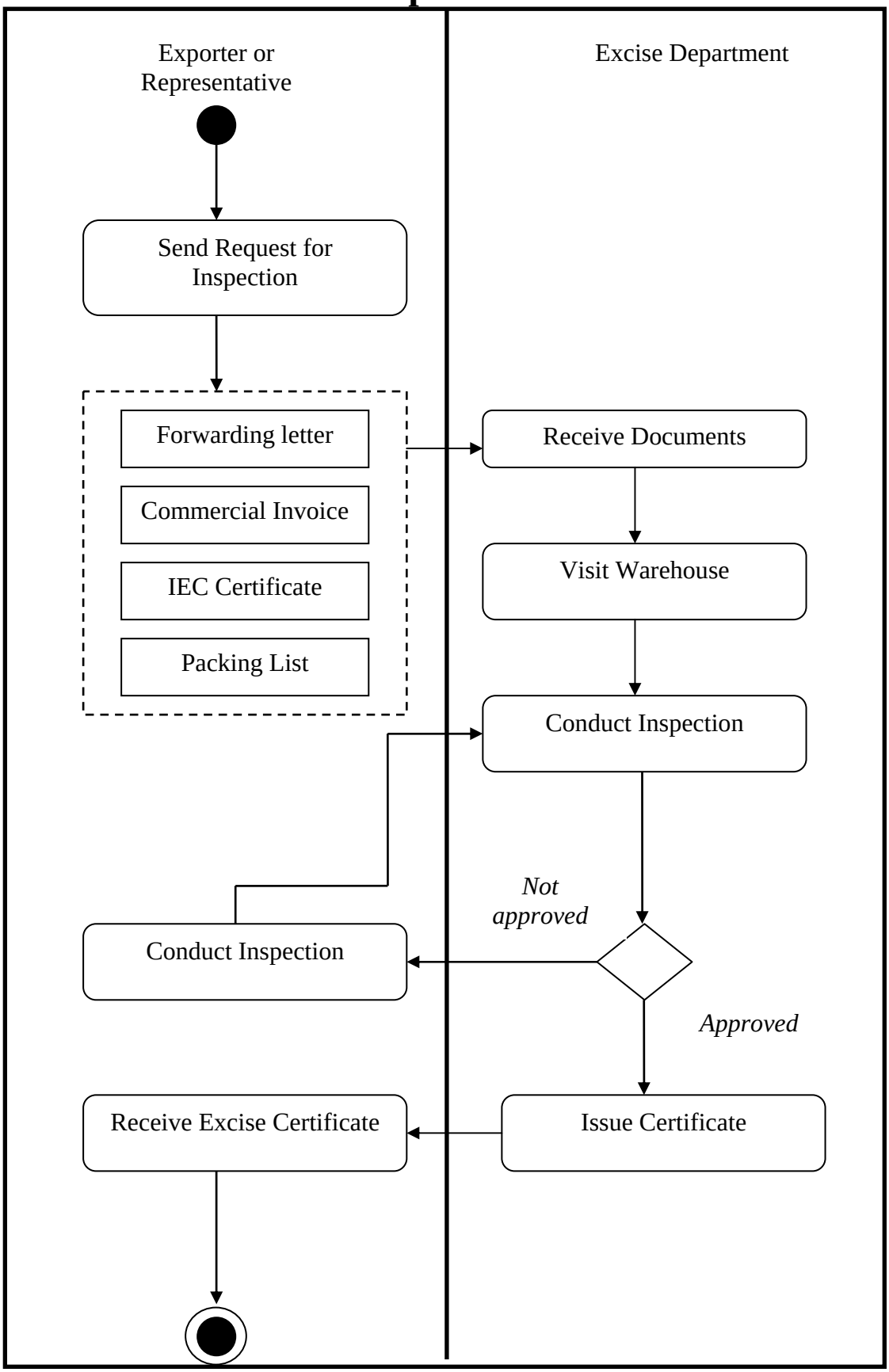
2.2 Export Registration



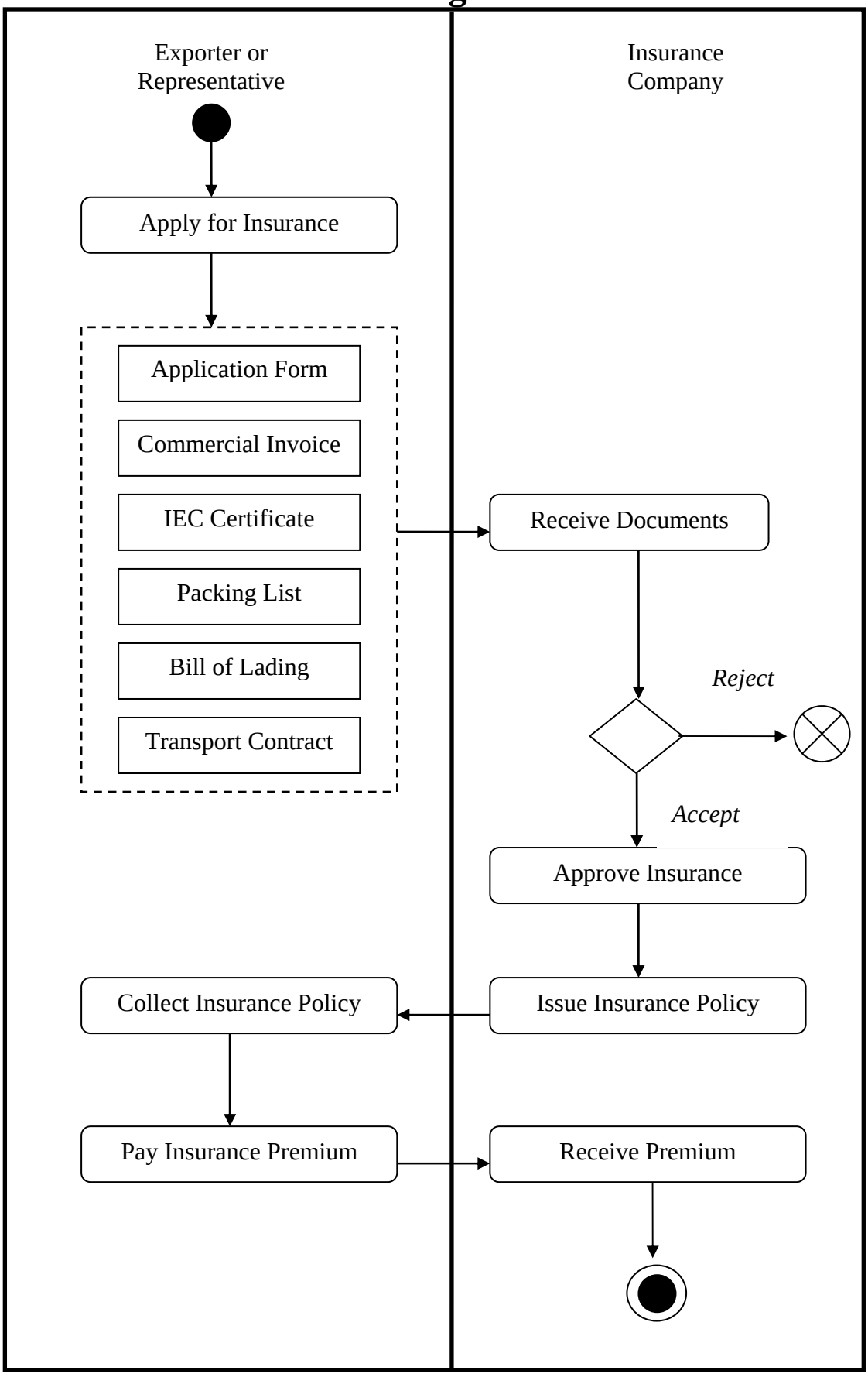
2.3 Prepare Export Document



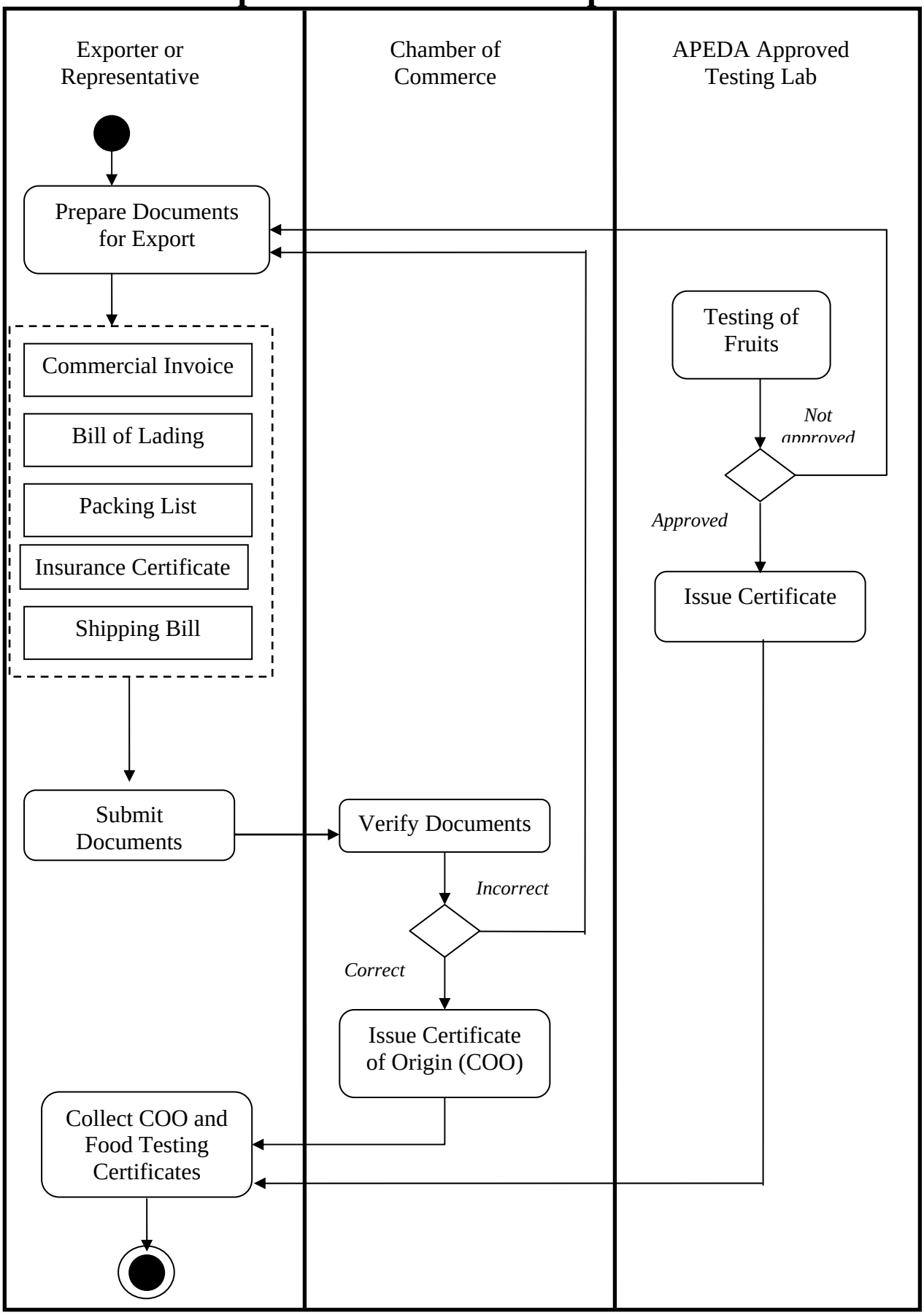
2.4 Company Stuffing Permission and Excise Inspection



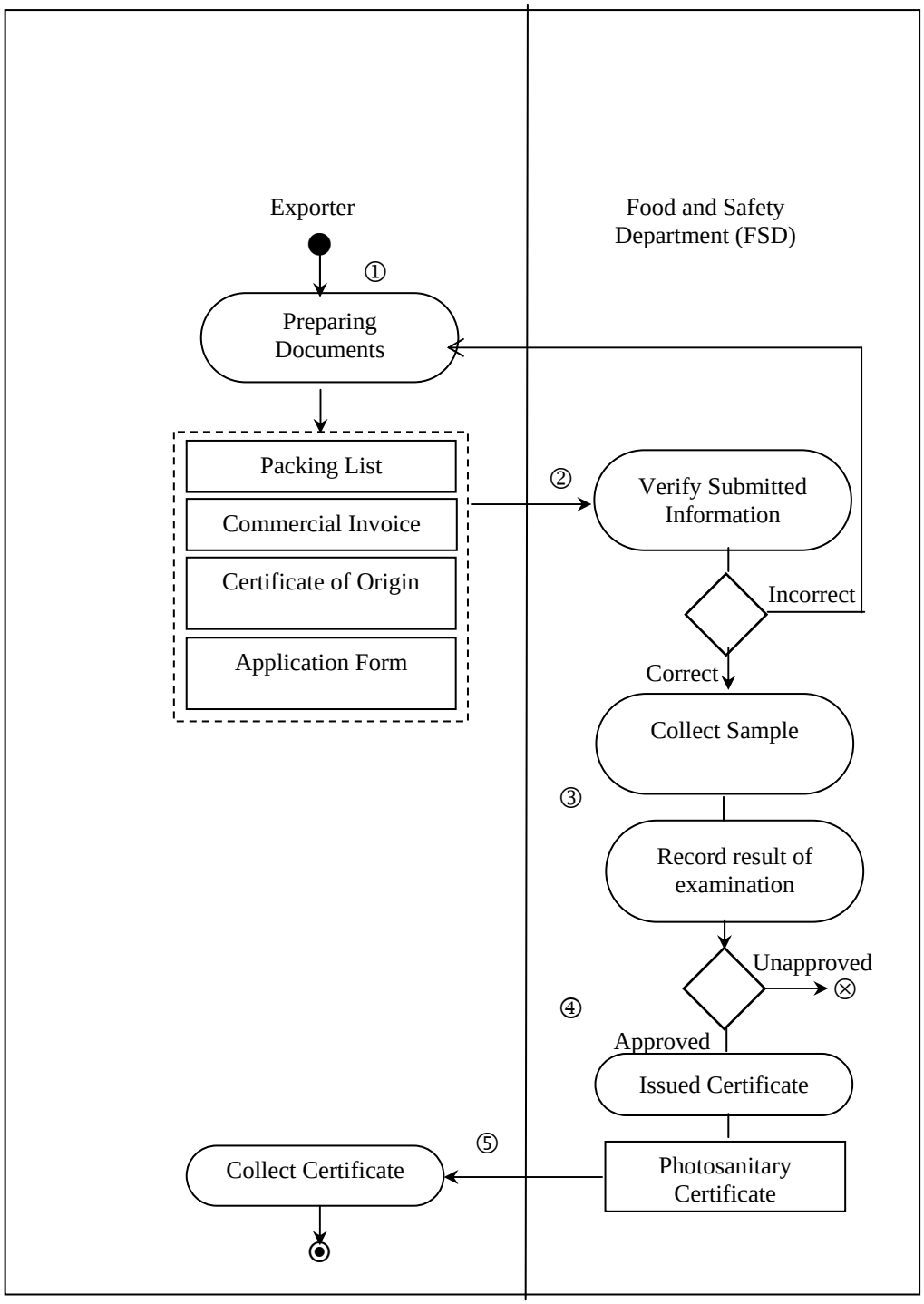
2.5 Obtain Cargo Insurance



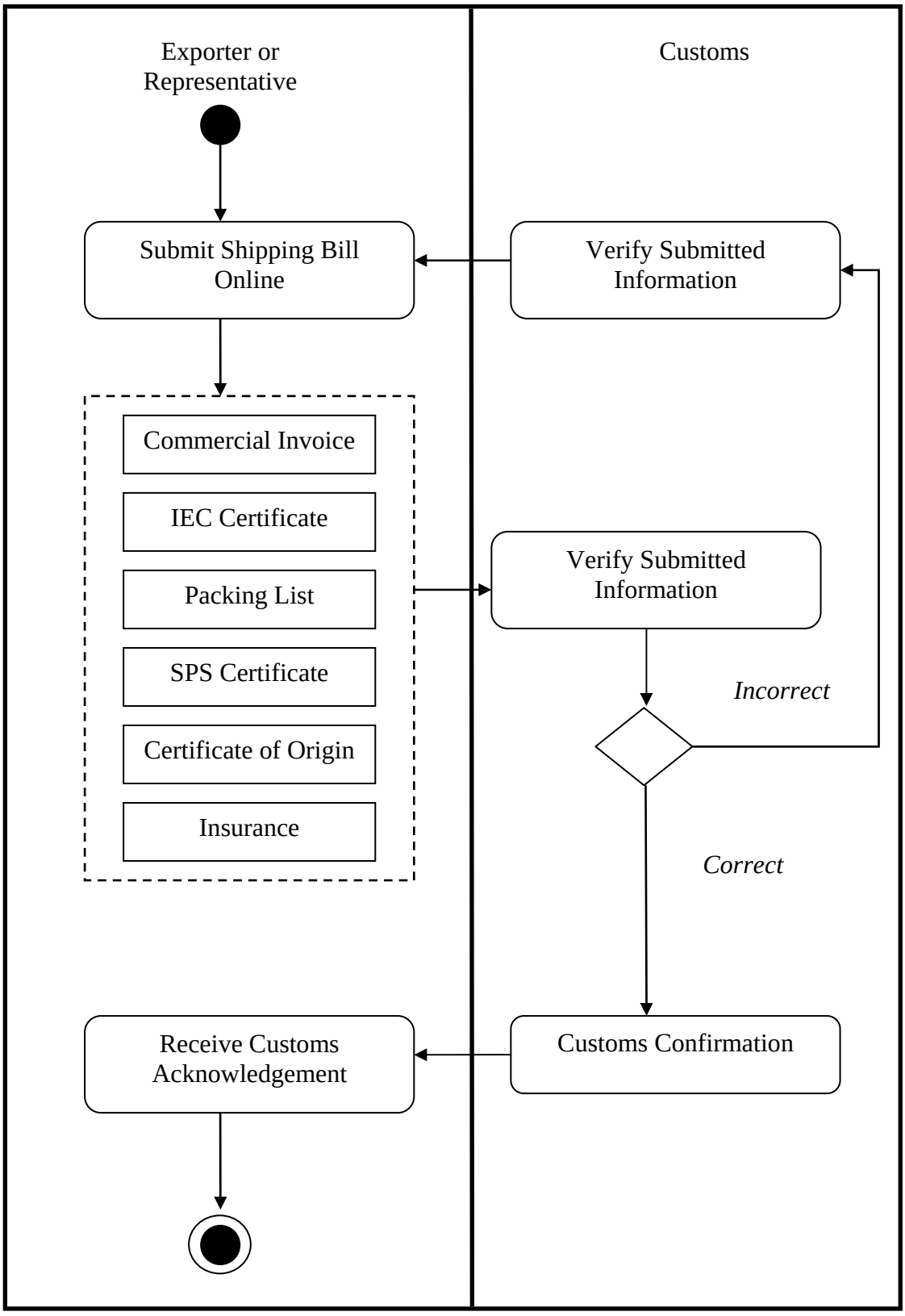
2.6 Prepare Documents for Importer



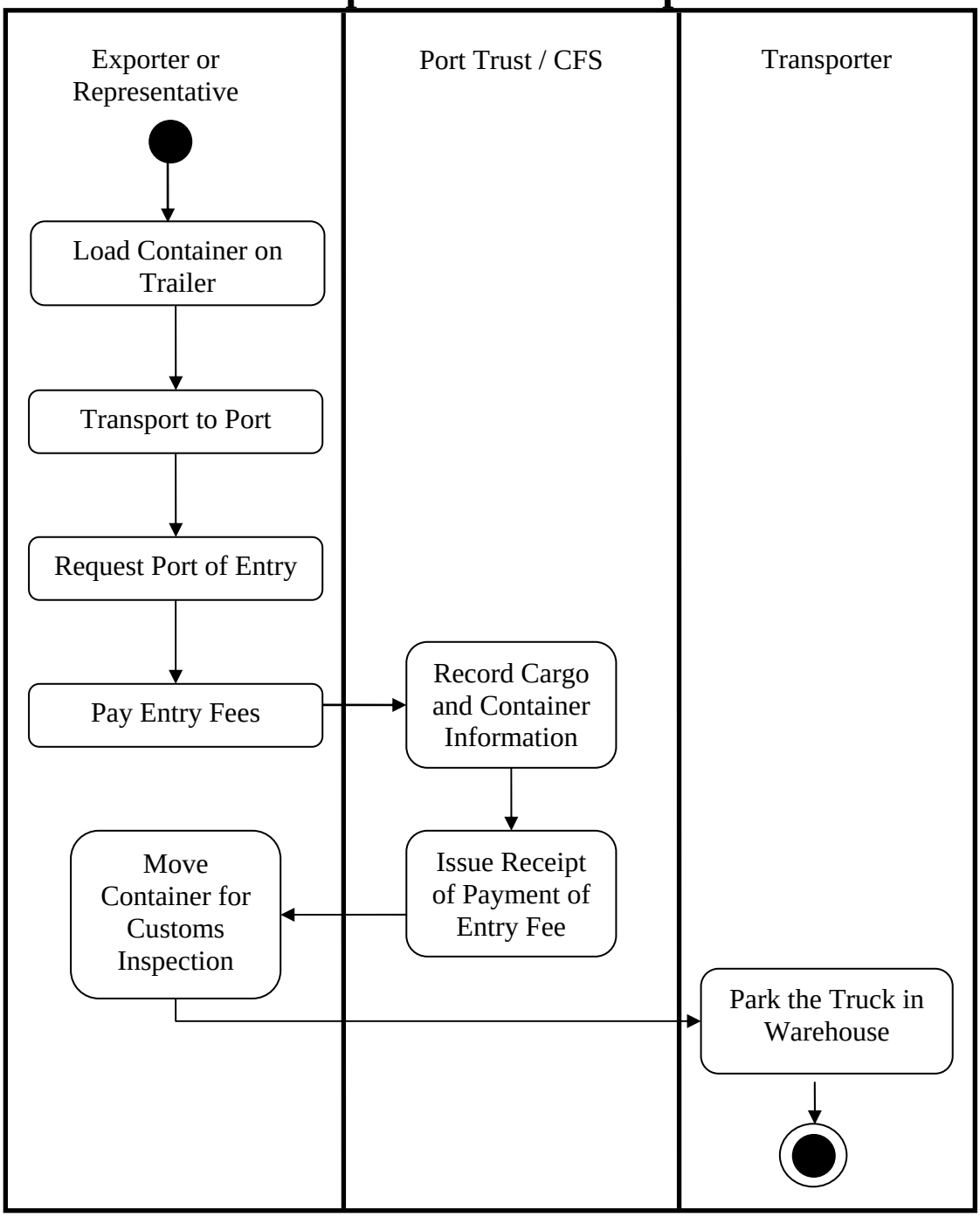
2.7 Getting Sanitary and Phytosanitary Certificate



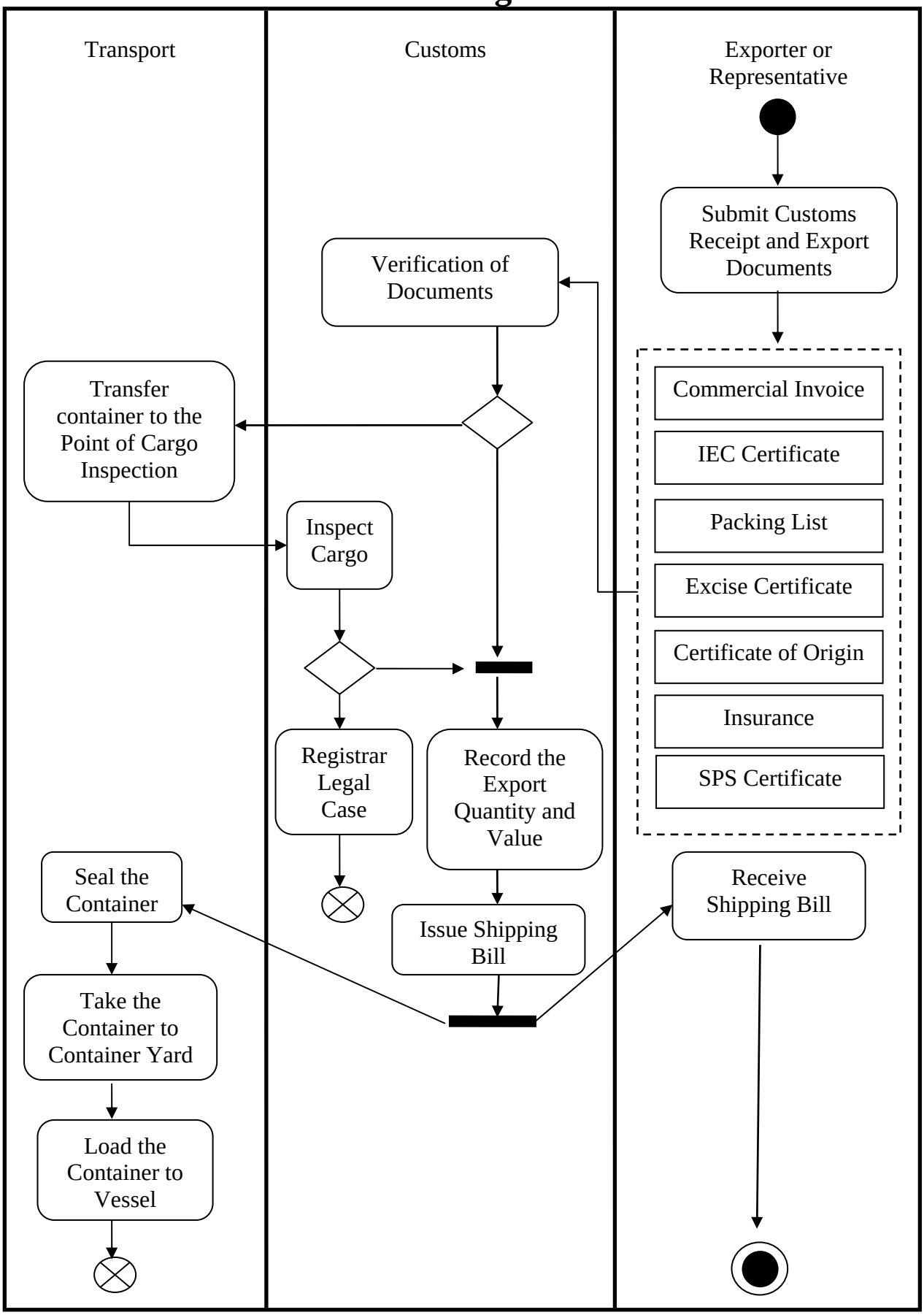
2.8 Provide Customs Declaration Online



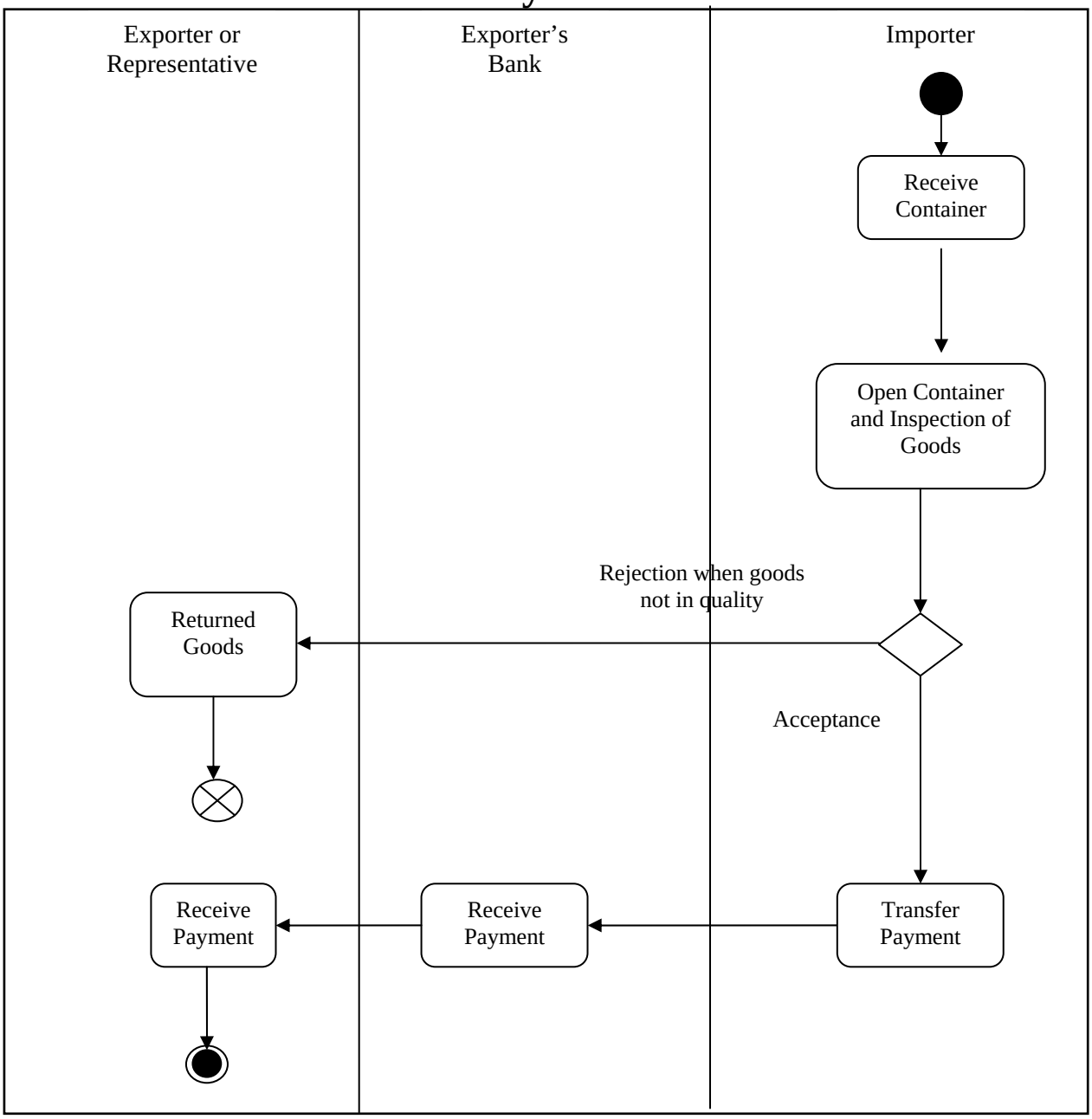
2.9 Transport to Port of Departure



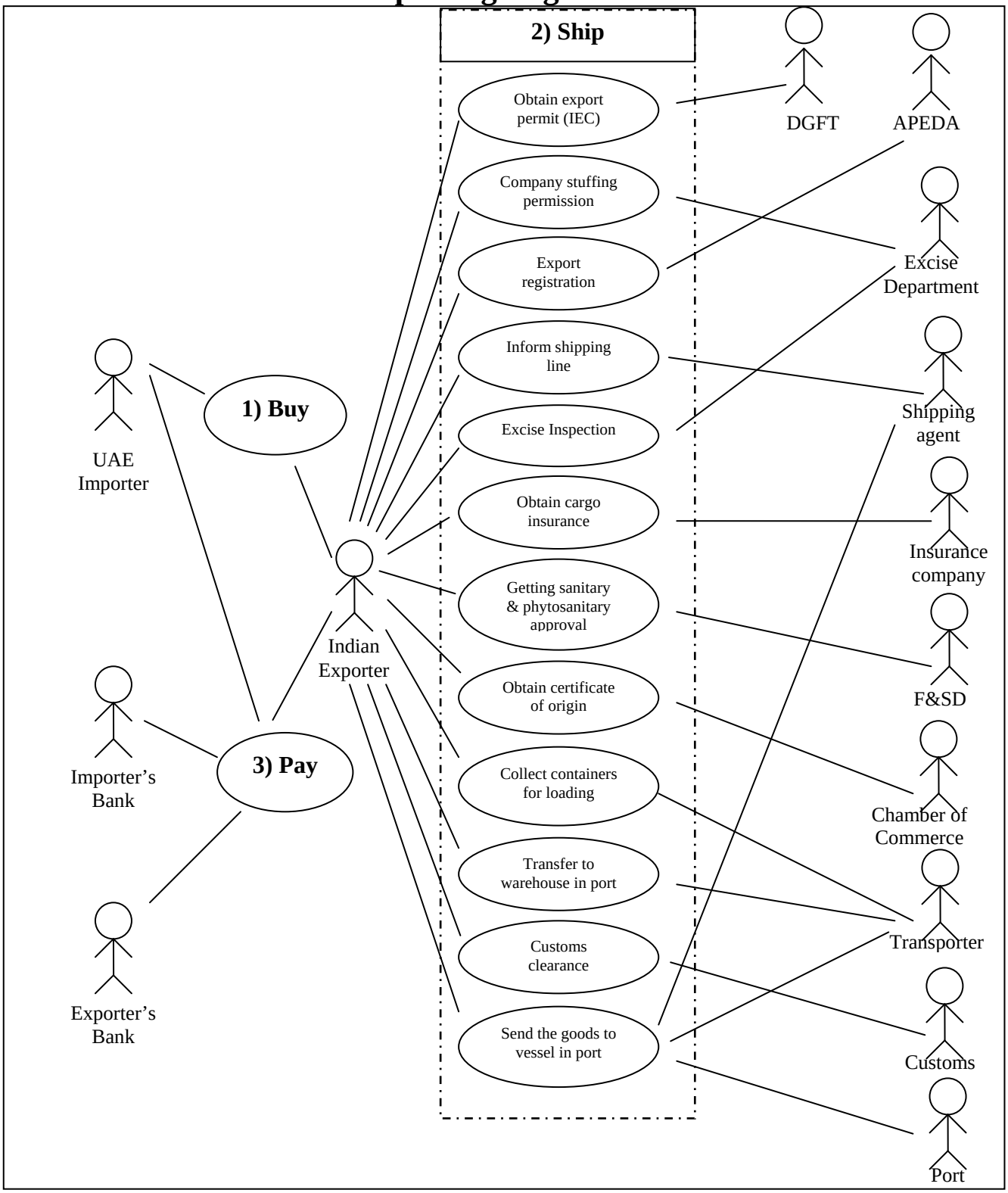
2.10 Clear Goods through Customs



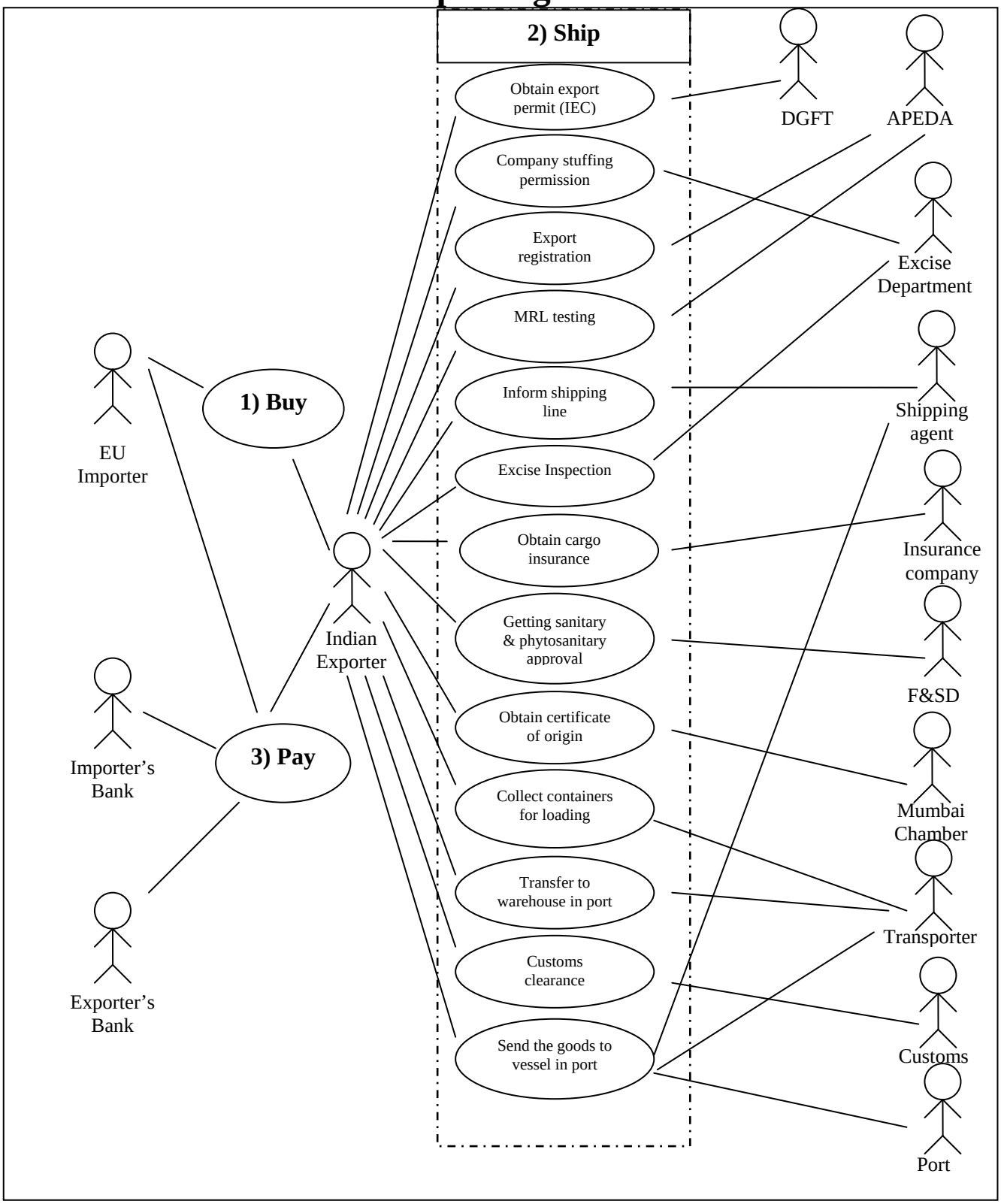
3. Pay


Exporter or Representative
Exporter's Bank
Importer
Receive Container
Open Container and Inspection of Goods
Rejection when goods not in quality
Returned Goods
Acceptance
Receive Payment
Receive Payment
Transfer Payment

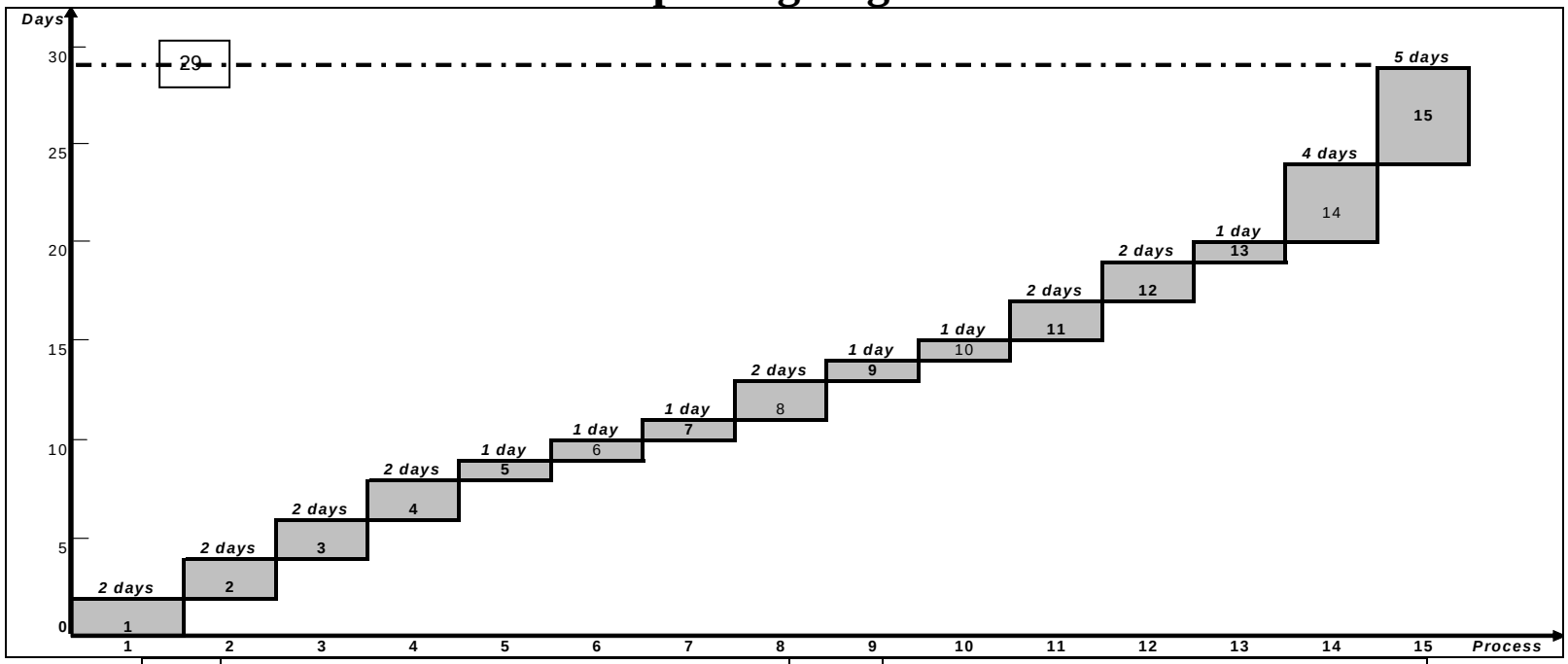
3.1. Parties Involved in Exporting Vegetables from India



3.2. Parties Involved in Exporting Fruit from India

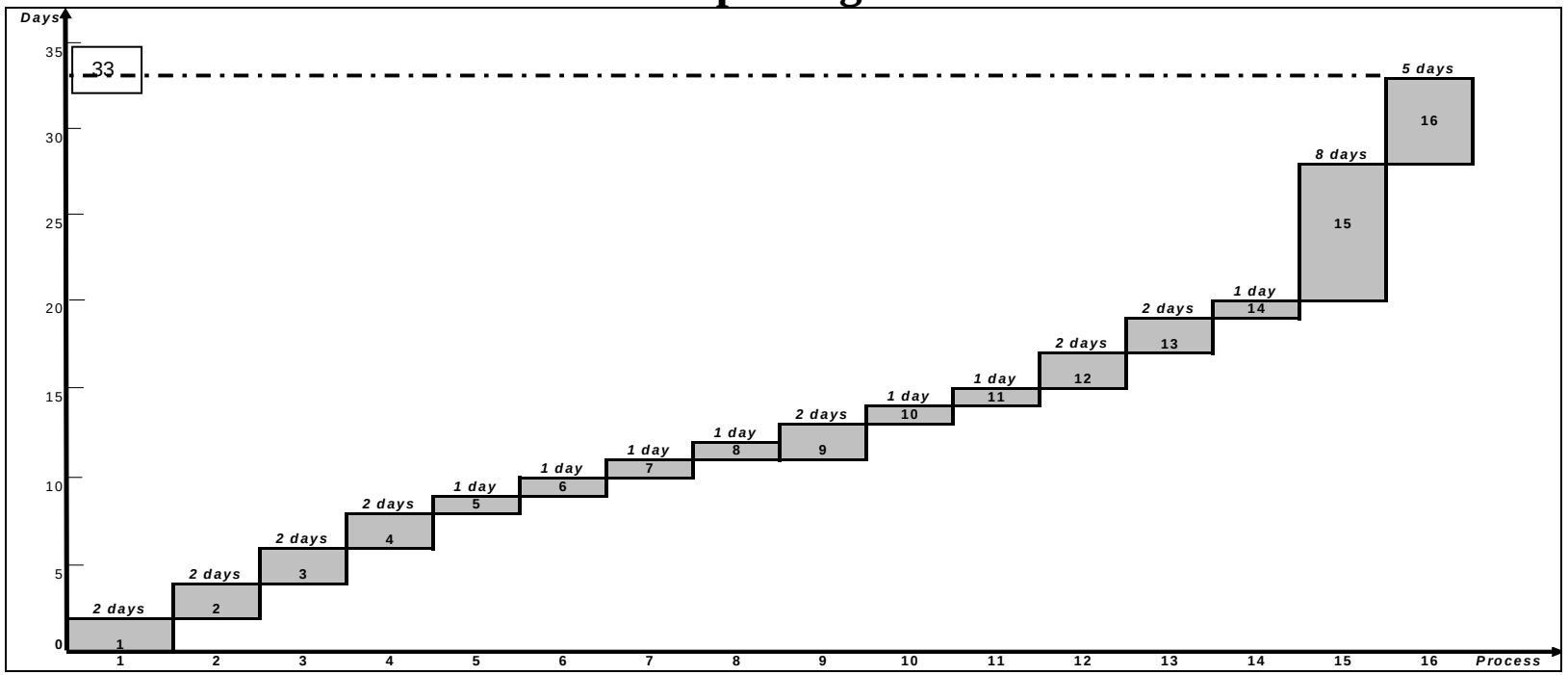


Time-Procedure Chart of Exporting Vegetables from India to the UAE



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		

Time-Procedure Chart of Exporting Fruits from India to the EU

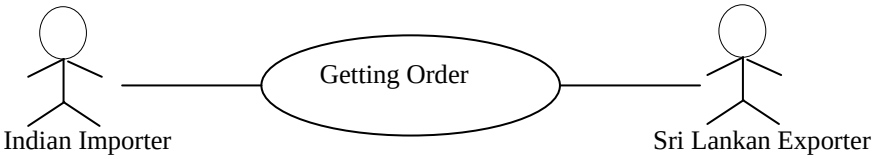


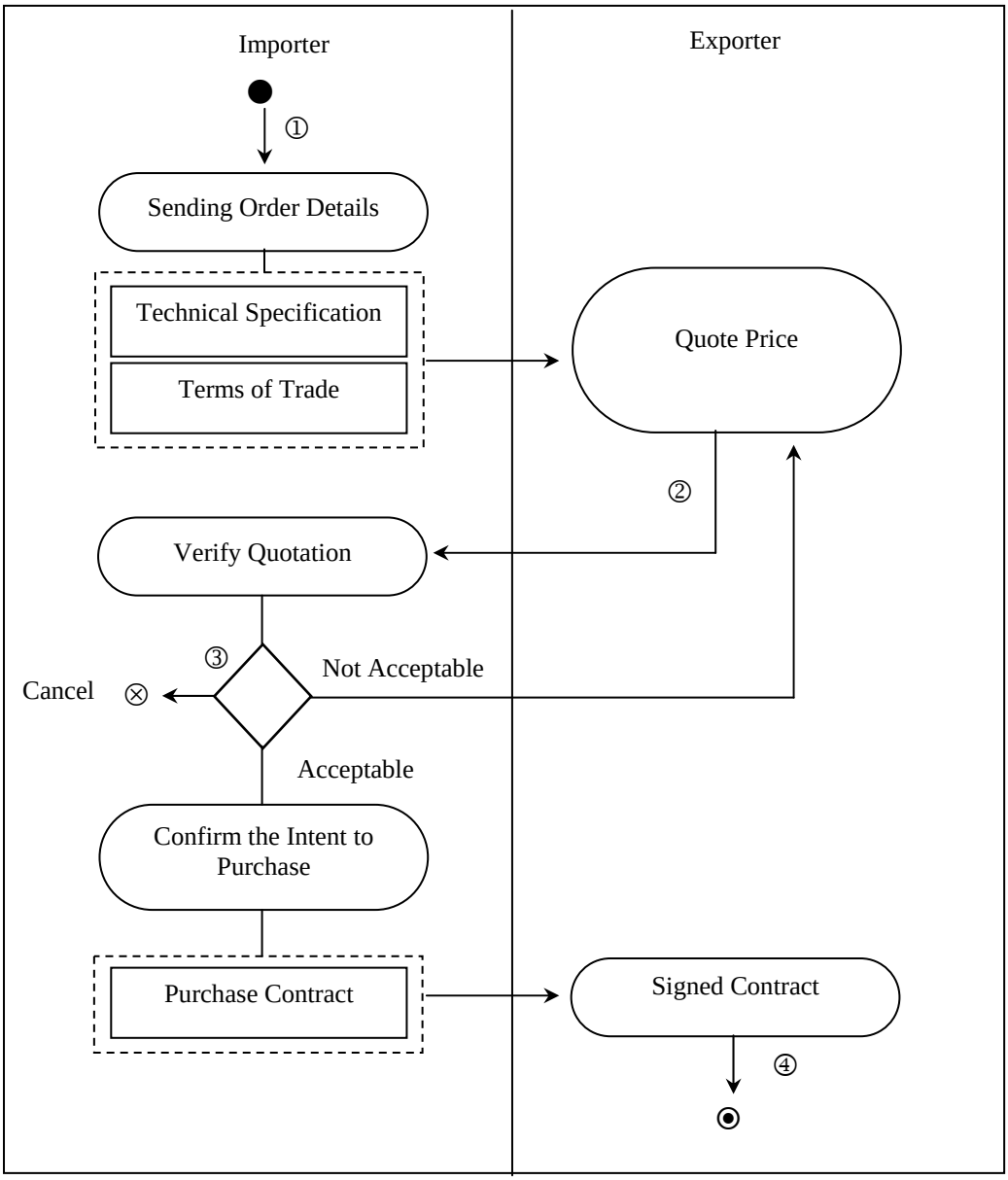
1	Buy	9	Getting sanitary & phytosanitary approval
2	Obtain export permit	10	Obtain certificate of origin
3	Company stuffing permission	11	Collect containers for loading
4	Export registration	12	Transfer to warehouse in port
5	MRL testing	13	Customs clearance
6	Inform shipping line	14	Send the goods to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

Annex 3

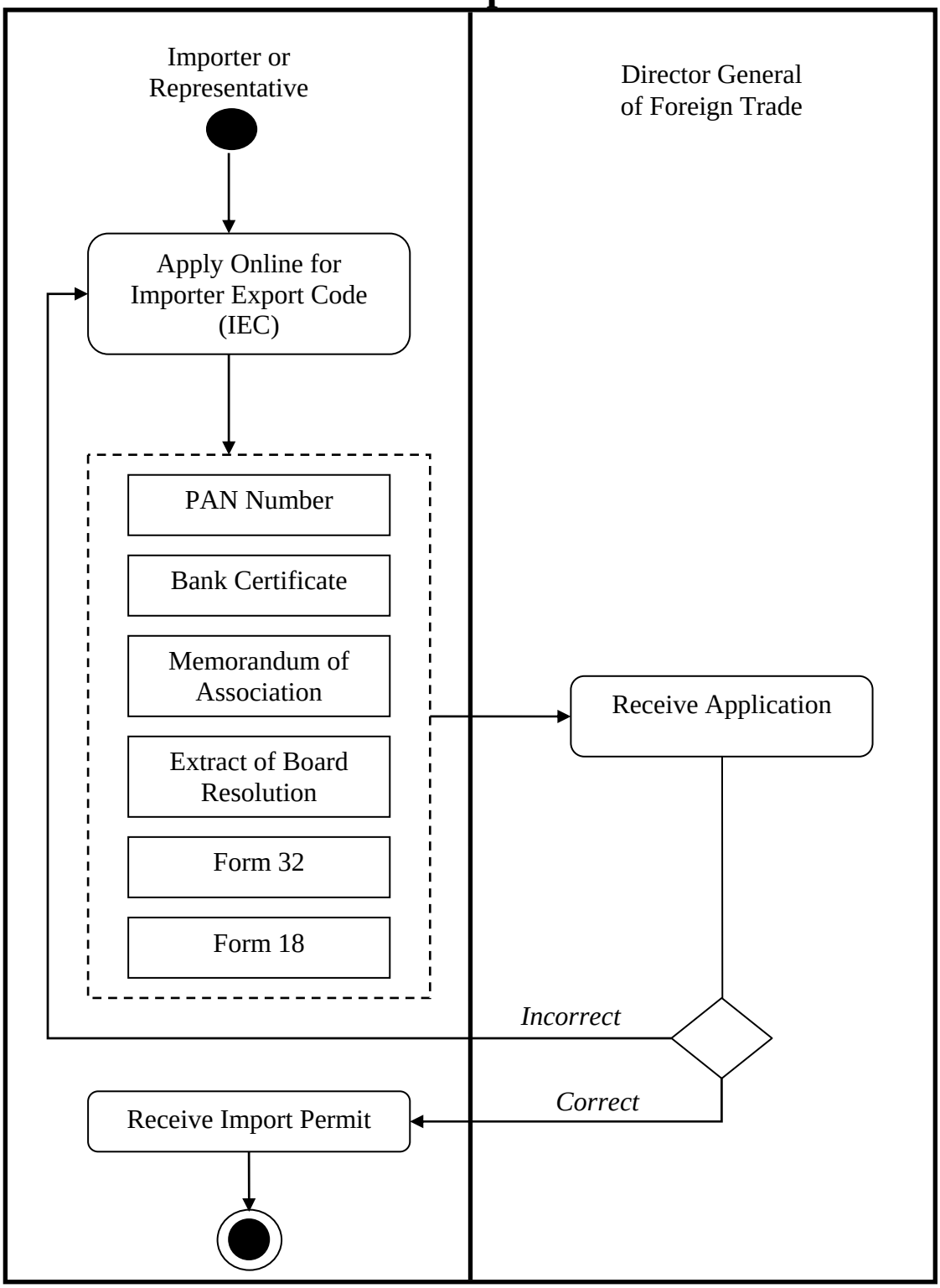
Business Processes Analysis Diagrams of the Import of Rubber Tyres from Sri Lanka

1. Buy

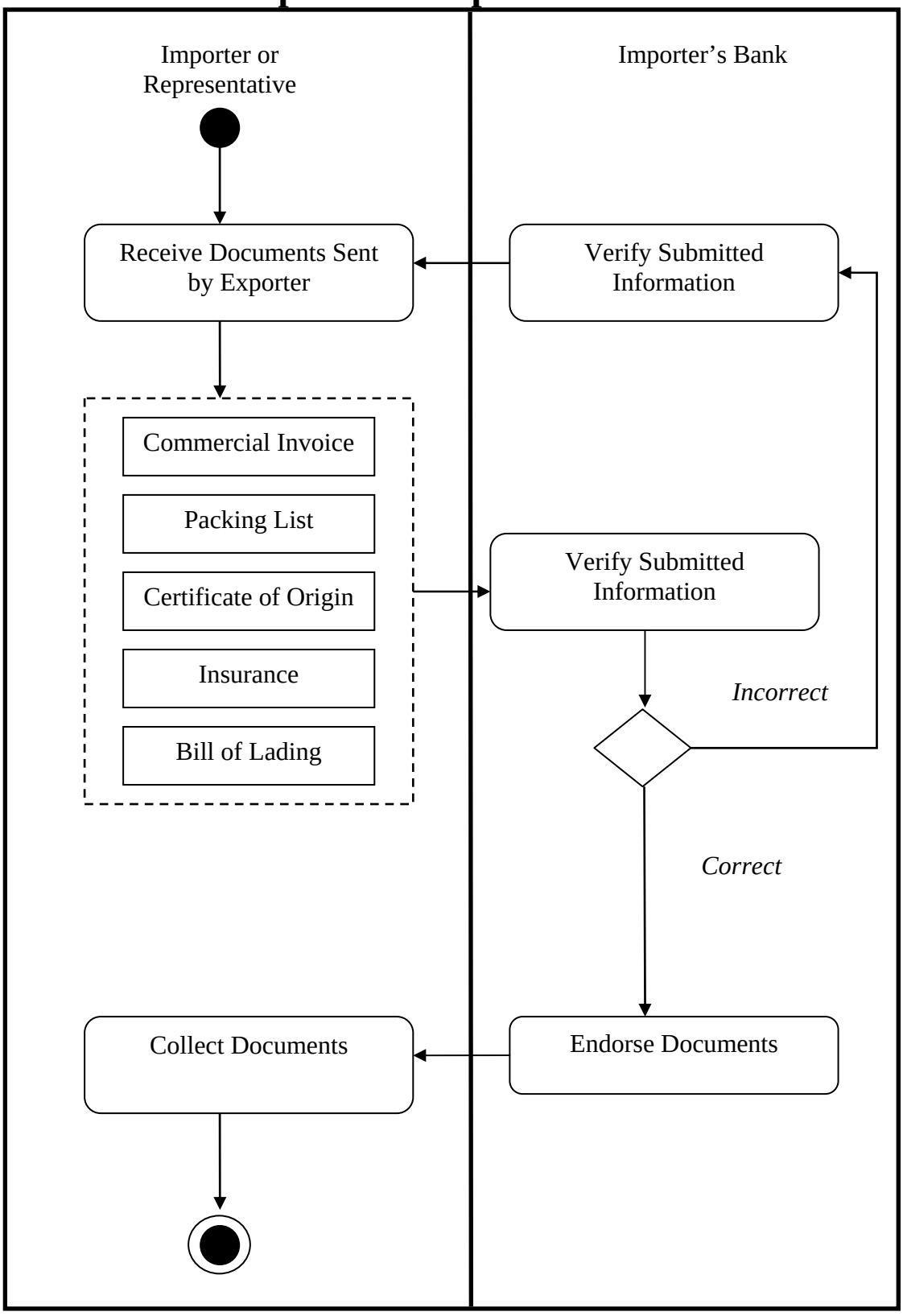

Getting Order
Indian Importer
Sri Lankan Exporter


Importer
Exporter
①
Sending Order Details
Technical Specification
Terms of Trade
Quote Price
②
Verify Quotation
③
Not Acceptable
Cancel
⊗
Acceptable
Confirm the Intent to Purchase
Purchase Contract
Signed Contract
④

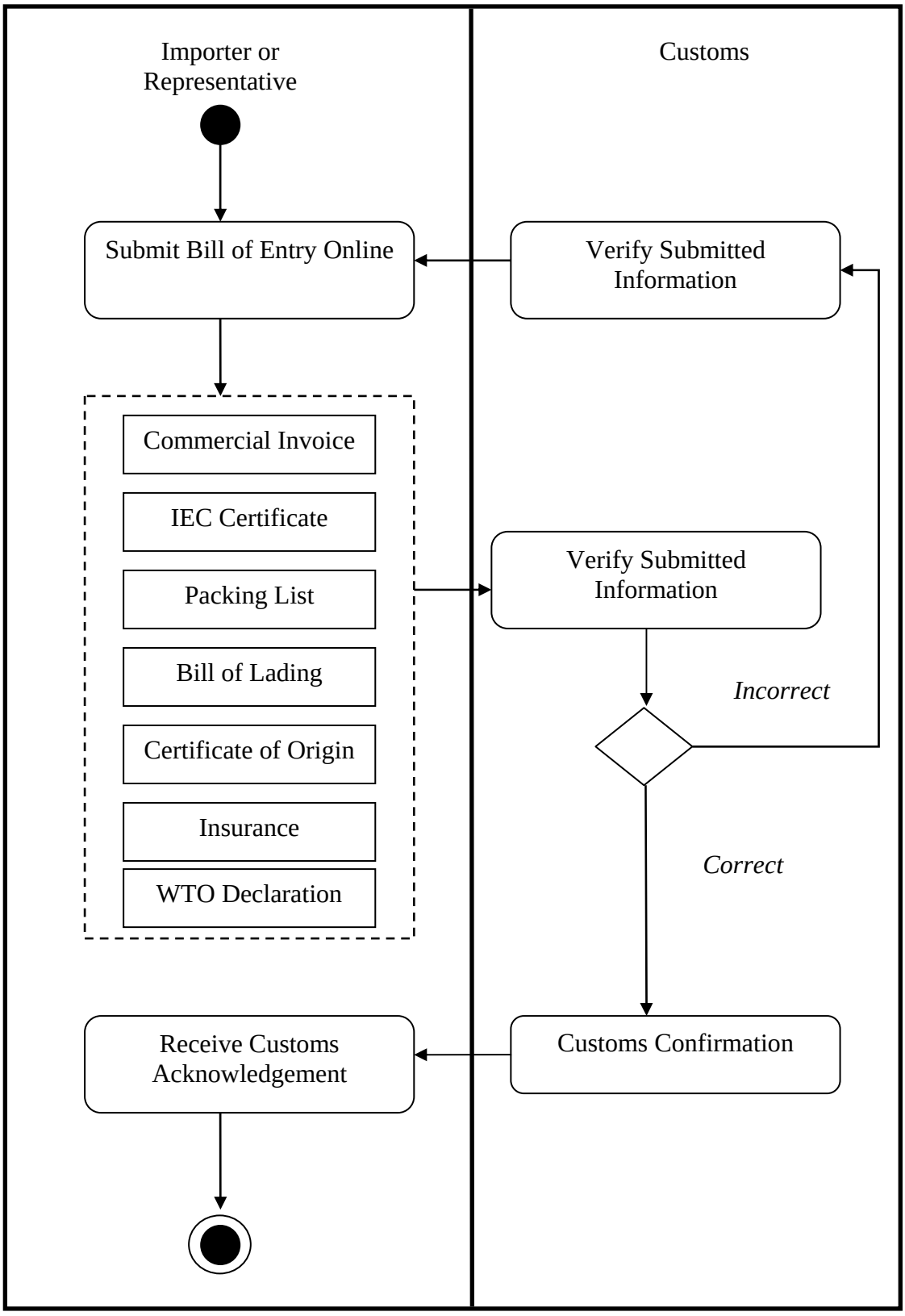
2.1 Obtain Import Permit



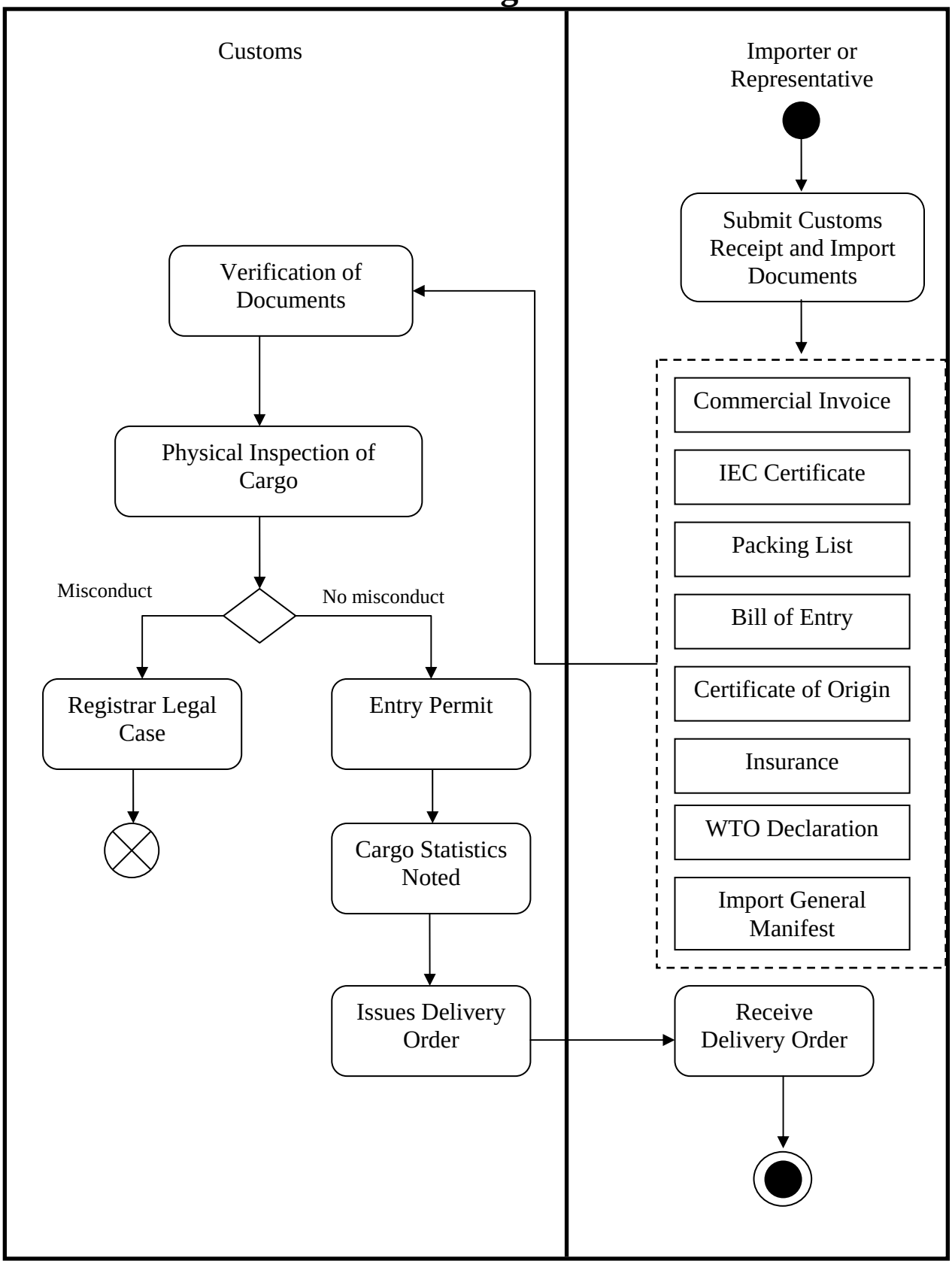
2.2 Prepare the Import Documents



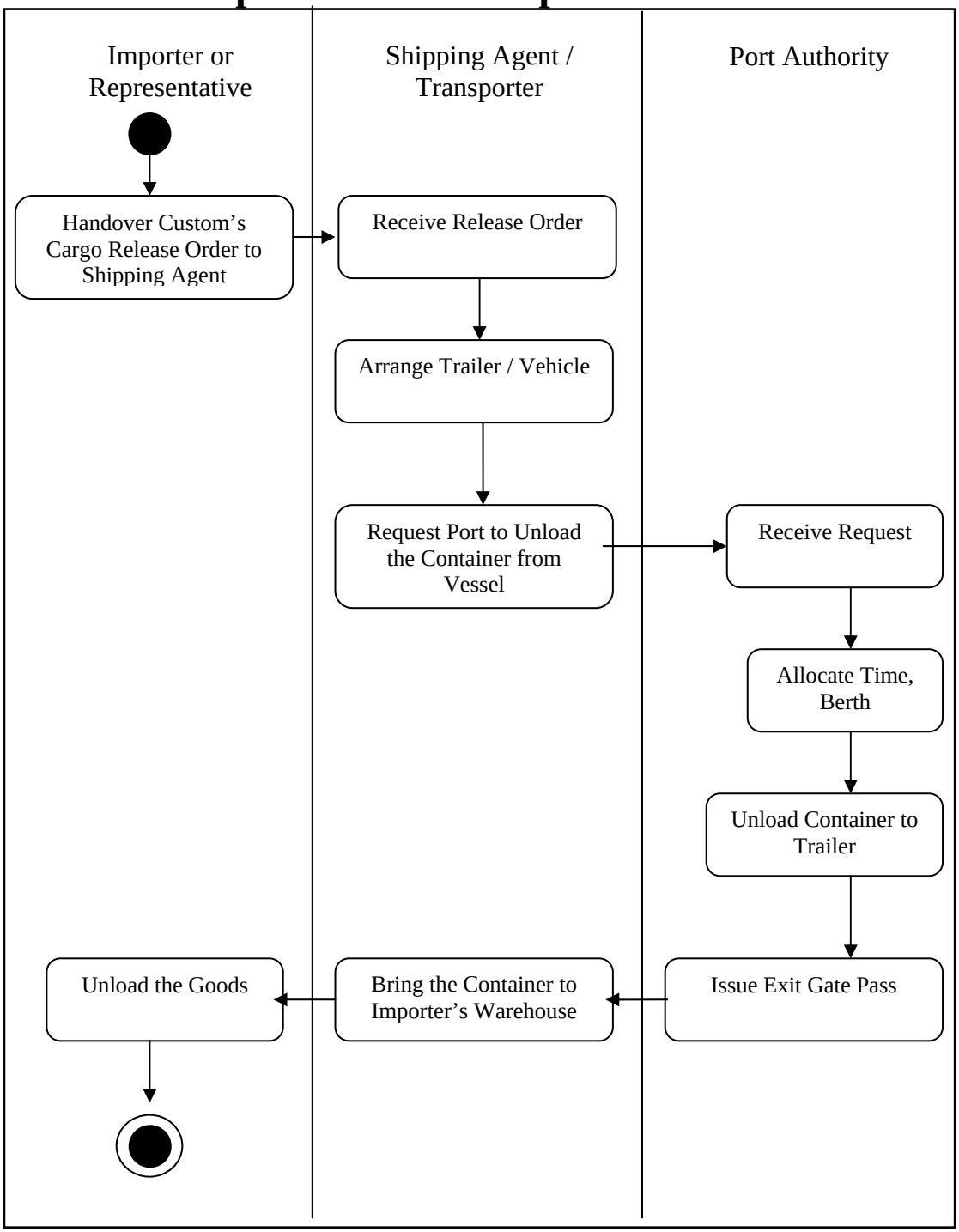
2.3 Provide Customs Declaration Online



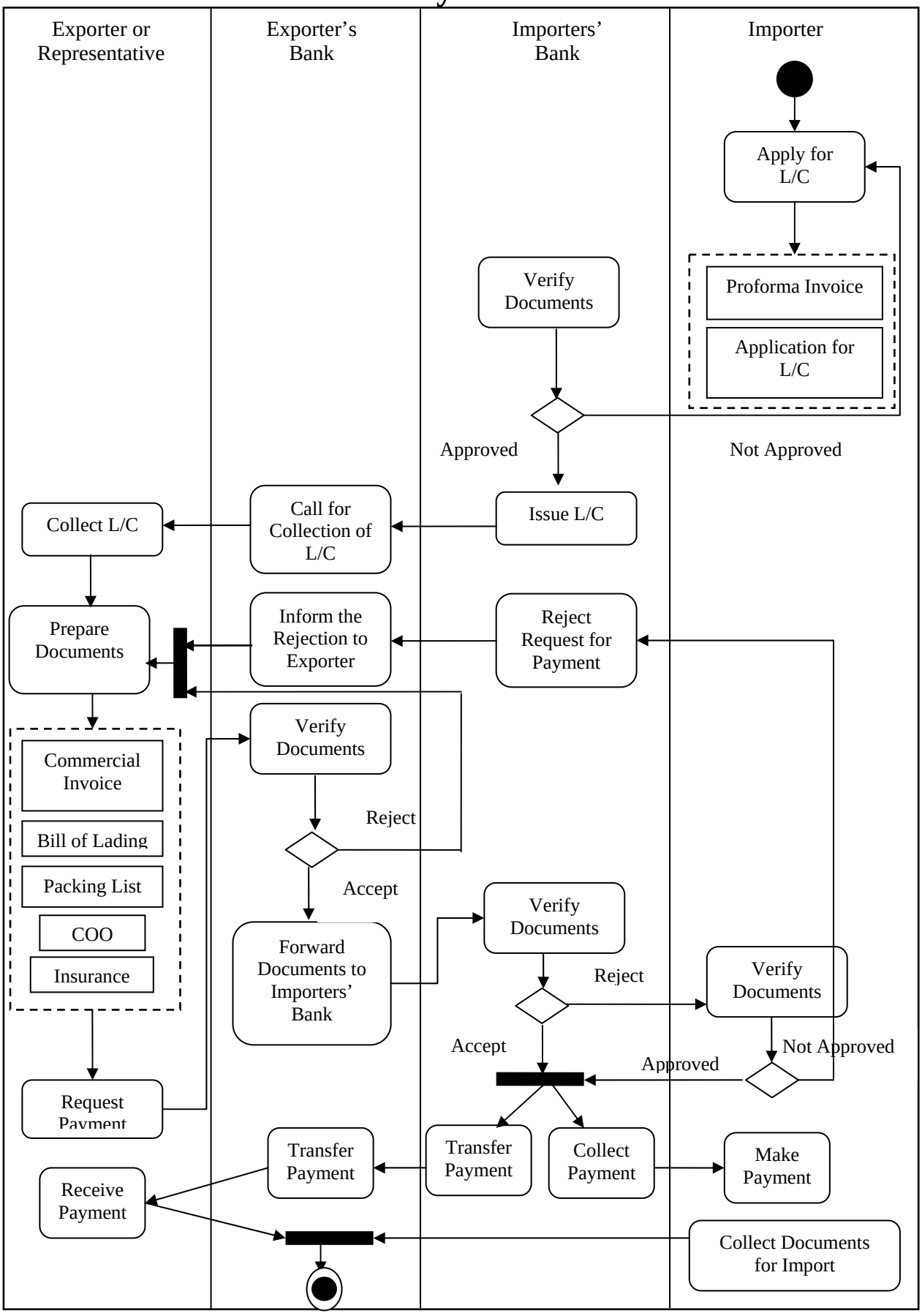
2.4 Clear Goods through Customs



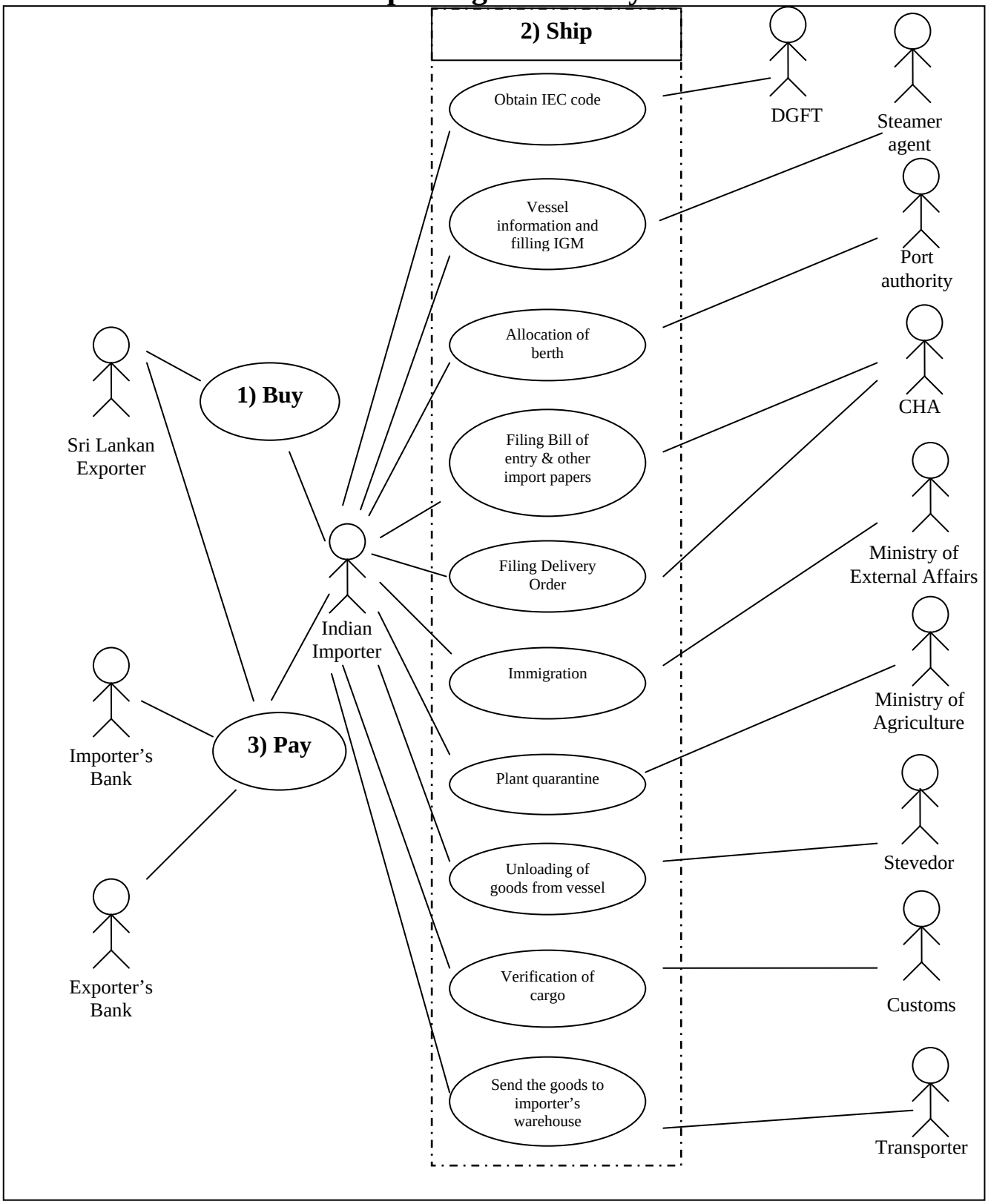
2.5 Transport Goods to Importer's Warehouse



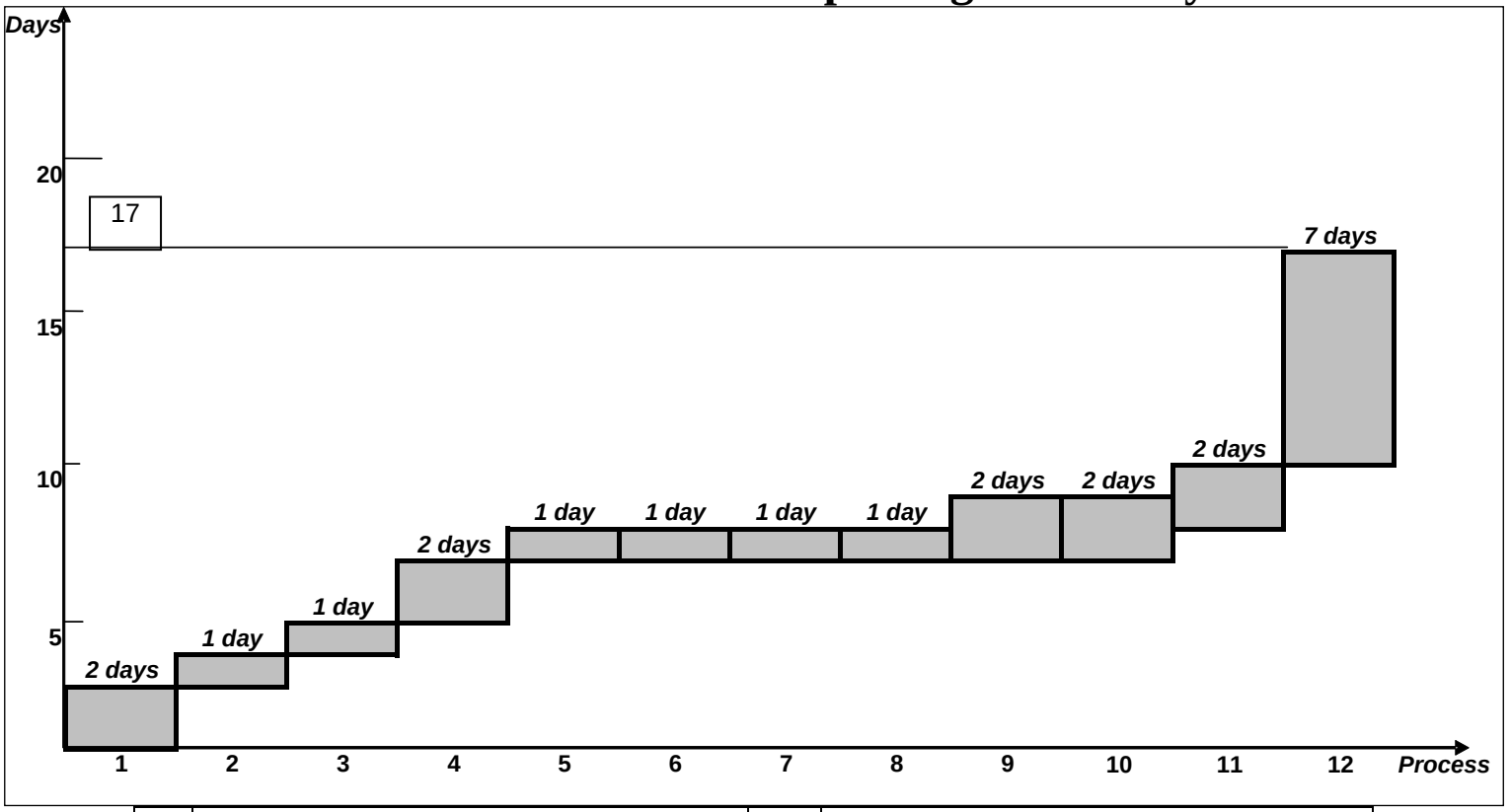
3. Pay


Exporter or Representative
Exporter's Bank
Importers' Bank
Importer
Apply for L/C
Proforma Invoice
Application for L/C
Verify Documents
Approved
Not Approved
Issue L/C
Call for Collection of L/C
Collect L/C
Prepare Documents
Inform the Rejection to Exporter
Reject Request for Payment
Commercial Invoice
Bill of Lading
Packing List
COO
Insurance
Verify Documents
Reject
Accept
Forward Documents to Importers' Bank
Verify Documents
Reject
Verify Documents
Accept
Approved
Not Approved
Request Payment
Transfer Payment
Transfer Payment
Collect Payment
Make Payment
Receive Payment
Collect Documents for Import

3.1 Parties Involved in Importing Rubber Tyres in India



Time-Procedure Chart of Importing Rubber Tyres



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