

# **MARITIME LOGISTICS AND DOCUMENTATION**

**MBA [Logistics Management]  
Paper 4.2**



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# SYLLABI-BOOK MAPPING TABLE

## Maritime Logistics and Documentation

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Syllabi	Mapping in Book
<p><b>UNIT 1</b> <b>Maritime Logistics:</b> Concept, objectives, Importance and relevance to global marketing and Supply chain management-Coastal and Ocean transportation-World Sea-borne Transport-Global Sea Routes and the trade volume-Characteristics of shipping transport-Types of Ships-Container, Roll-on/roll-off (ro-ro) vessels, General cargo ships, Bulk carriers, Tankers, etc-Busiest Sea routes: East-West and North-South and Intra Region-International Maritime Organization (IMO): Formation and functions-Regulations concerning dangerous and polluting cargoes, including the class structure.</p>	<p><b>Unit 1:</b> Maritime Logistics (Pages: 3-29)</p>
<p><b>UNIT 2</b> <b>Chartering Principles and Practices:</b> Types of Charters-Voyage, Time and Bare Boat charters-Freight Determination and Determinants-Conference System Vs Competitive System-Freight structure and practice-Rate Dynamics-Multi-modal Transport system- Technological developments in ocean transportation: Size, Tracking, Speed and Security.</p>	<p><b>Unit 2:</b> Chartering Principles and Practices (Pages: 31-57)</p>
<p><b>UNIT 3</b> <b>Arrangement for Shipment of Cargo:</b> Role of intermediaries-Functions and services of clearing and forwarding agents, freight brokers, stevedores, shipping agents and surveyors-House and Terminal Stuffing-Port: Types of port-Major Port of India and world-Structural and cargo handling facilities-Warehousing and storage in ports- Demurrage-Loading and unloading in warehouses-Organization, functions and Performance of Trans-chart of Ministry of Shipping.</p>	<p><b>Unit 3:</b> Arrangement for Shipment of Carg (Pages: 59-92)</p>
<p><b>UNIT 4</b> <b>Maritime Insurance:</b> Cargo insurance-Marine Insurance-Institute cargo clauses-specific policy-Open policy-procedure for cargo insurance-Procedure for marine insurance claims-Necessary documents for filing claim.</p>	<p><b>Unit 4:</b> Maritime Insurance (Pages: 93-116)</p>
<p><b>UNIT 5</b> <b>Choice of a Shipping Service:</b> Factors influencing: Reliable WorldwideNetwork, One-stop for Total Logistics Solutions, Committed to High Quality Services, Transparency, Positive Approach, Highly Trained, Motivated and Result Oriented Staff, Competitive Rates, Excellent Team Work, Provide alternatives/options to the client.</p>	<p><b>Unit 5:</b> Choice of a Shipping Service (Pages: 117-129)</p>
<p><b>UNIT 6</b> <b>Export Procedure and Documentation:</b> Offer and receipt of orders-Shipmentprocedure-Banking Procedure Export Documentation-Framework-Standardized pre-shipment Export Documents-Commercial and Regulatory Documents-Export credit instruments and procedures: Letters of credit and types-Documents required for export credit. Export credit insurance-services of Export Credit and Guarantee Corporation in export credit insurance-Specific Policy and Small Exporters Policy-Guarantees-Procedure for availing credit insurance and necessary documents-Multimodal transport-Procedure and documentation-Central Excise and Customs clearance of export cargo-Procedure and documents.</p>	<p><b>Unit 6:</b> Export Procedure and Documentation (Pages: 131-191)</p>

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## INTRODUCTION

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Maritime logistics aim at ensuring the effective and efficient flow and storage of goods and services from the point of origin to the point of destination. Maritime Logistics examines the latest developments, knowledge and practices taking place in logistics and supply chain within the port and shipping industry. Maritime Logistics Management is a part of the supply chain process that plans, implements and controls the efficient, effective flow and storage of goods, services, and related information from the point of origin to the point of consumption in order to meet customer requirements in the maritime and business environments.

Documents are the support to collect information and data. Document requirements in international trade serve different purposes. These may include for example documents required as part of governmental procedures, supply chain management and payment requirements. Any export shipment involves a number of documents required mainly

by the Customs/Port Authorities. Mostly the format of these documents is common in most cases, but may differ in respect to documents used at different ports. This book deals with maritime logistics and documentation.

In the book, *Maritime Logistics and Documentation*, each unit begins with an Introduction to the main topic, followed by an outline of Unit Objectives. The topic is then explained in detail, in a way that is easy to understand. The units comprise of 'Check Your Progress' questions to test the understanding of the reader. Each unit has a Summary, a glossary of Key Terms, Answers to 'Check Your Progress' and Questions and Exercises.

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# UNIT 1 MARITIME LOGISTICS

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## Structure

- 1.0 Introduction
- 1.1 Unit Objectives
- 1.2 Concepts and Objectives of Maritime Logistics
  - 1.2.1 Importance of Shipping
- 1.3 Importance and Relevance to Global Marketing and Supply Chain Management
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- 1.5 World Sea-borne Transport and Global Sea Routes
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- 1.6 Characteristics of Shipping Transport
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- 1.9 Answers to 'Check Your Progress'
- 1.10 Questions and Exercises

## NOTES

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## 1.0 INTRODUCTION

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The concept of logistics has been used in business for more than two decades. Logistics management—also referred to as supply chain management—until the beginning of the 21st century meant the physical process of planning, organizing and controlling the flow of materials and services from the supplier's point to the customers as the end point. Besides these aspects, the concept of supply chain management also includes customer satisfaction, customer relations, financial flow and information flow by making logistics functions a more integrated and complex group of activities.

Here, it is important to take a look at the broad idea of logistics and its interaction with international trade providing general characteristics of logistics and the interrelation of various business areas. It is also important to see how the background to the interaction between logistics and the transport industry correlates with the global economy. Most important are the developments in the global economy and the maritime transport industry in relation to international trade. Developments in international maritime transport also emphasize the developments in global trade. Approximately 85 per cent of international trade has been carried out by maritime transport by using either ocean transport, seaways and inland waterways, hence, the role of maritime transport is considered to be crucial in international trades.

Sea transport is an essential factor of world economic progress for the oceanic nations. Its essential endeavour is to give transportation services which means that they should be instrumental in the transportation of goods via waterways, especially through the sea routes, from one point to another to carry forward an economic activity (Y. H. V. Lun, 2010).

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With respect to the current marine delivery crisis, the way to achieving transport objective for an oceanic nation lies in proficiency and security of its sea shipping organizations. Along these lines, there is a solid association between the administrative framework and the arrangement of delivery organizations. This association is in light of the association of all subjects joining in this arrangement of transportation organizations including vessels, shipping organizations, ports, charterers, deliver merchants, port experts, pilots, and so on, since they all together constitute the coordinated sea transport framework.

Today, serious rivalry between transportation organizations in the shipping industry makes the shipping business crucial to their reality and future improvements. Exceptional emphasis ought to be put on well-being and safe routes bringing about impressive reduction in the number of oceanic accidents ensuring the protection of marine regular assets. This unit deals with maritime logistics and its various facets.

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### 1.1 UNIT OBJECTIVES

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After going through this unit, you will be able to:

- Discuss the concept and objectives of maritime logistics and supply chain management
- Describe the importance of maritime logistics to global marketing and supply chain management
- Assess the methods of ocean and coastal transportation
- Analyse the various global and busiest sea routes and the trade volume
- Evaluate the characteristics of shipping transport and the types of ships
- Explain the formation and functions of the International Maritime Organization (IMO)
- Discuss the regulations concerning dangerous and polluting cargoes

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### 1.2 CONCEPTS AND OBJECTIVES OF MARITIME LOGISTICS

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Globalization and the rapid increase in world trade in the past decade have contributed to greater demand for international transport and logistics and, consequently, the expansion of the maritime industry. The dramatic changes in the mode of world trade and cargo transportation make it more important than ever to have a clear understanding of the way in which freight is transported by sea and the role of ports in this exchange.

**Maritime Logistics** examines the latest developments, knowledge and practices taking place in logistics and supply chain within the port and shipping industry.

Maritime transport is essential to the world's economy as over 90 per cent of the world's trade is carried by sea and it is, by far, the most cost-effective way to move en masse goods and raw materials around the world.

Maritime activity has a key role to play in the alleviation of extreme poverty and hunger as it already provides an important source of income and employment for many developing countries, such as the supply of seagoing personnel and ship recycling, shipowning and operating, shipbuilding and repair and port services, among others.



**Maritime Logistics:** Maritime Logistics examines the latest developments, knowledge and practices taking place in logistics and supply chain within the port and shipping industry.

## 1.2.1 Importance of Shipping

Maritime transportation is all about the vessel load transported between seaports by ships. ‘Transportation’ is a term that has various connotations. For some, ‘shipping’ implies ships and seaborne organizations. For others, ‘shipping’ alludes to any method of transport that moves merchandise between two places. Delivery business patterns are moving towards the idea of economies of scale in operations, the advancement of system based administration, and the adoption of innovation to enhance productivity and viability. The various explanations of transportation suggests that the transportation business has turned out to be progressively unique and complex.

Delivery is one of the world’s most global business ventures. Transportation should not be seen just from a limited national viewpoint. Or maybe, it needs to be looked at from a wider perspective of world development, especially in the universal trade segment. In a nutshell, we can say that in the delivery business, we need to understand the world economy also. Transportation is important to universal trade as it gives a practical method to transport large volumes of ship load around the globe. Transportation and seaborne trade have made it possible to move goods from a universe of different time zones to a worldwide destination. For instance, China and India have been quickly developing their trade of modern parts and items which brought about a worldwide shortage of load vessels in 2004.

From ages, shipping has been the main component of economic developments. Adam Smith, the father of financial economics, considered shipping as a source of transport that could open up business sectors. Shipping of merchandise by ocean routes is the financial backbone of many nations. The shipping business has been essential in the economic activities of a country since it requires the transportation of goods from the place of manufacturing to the place of utilization of the goods.

### Why is there a Demand for Shipping?

**Shipping** can be defined as the physical movement of goods and passengers to the ports of demand from the ports of supply. It also involves all other related activities required to support and facilitate such movement. The movement of goods by sea is the economic lifeline of many nations. This is because roughly three-fourth of the earth’s surface is covered with water, thus shipping plays an important role in world trade. Commodities that are transported by sea are usually heavy, dense and have low economic value raw materials such as coal and iron ore. Transporting these goods over vast distances through ships is cheap and economical. Ocean transport costs are relatively cheaper in comparison to other means of transport and there are also no substitutes to shipping. On the other hand, shippers of finished/manufactured goods also take advantage of the comparatively inexpensive rates charged for ocean transport. Ships also have a lot of cargo space and are therefore reasonably free of capacity constraints. Moreover, ships have acceptable transit times.

Due to all these reasons, 90 per cent of the trade is carried out through the sea. Also, the operation of cargo ships brings in an annual income of about USD 380 billion in freight. This amount is about 5 per cent of the total world economy. The prospects for the industry’s continued growth seems to be strong on account of globalization and on account of the fact that seaborne transport is becoming more efficient. Moreover, marine casualties have progressively decreased over the last many

## NOTES



**Shipping:** Shipping can be defined as the physical movement of goods and passengers to the ports of demand from the ports of supply.

## NOTES

years, and in comparison to land transportation it is also more environment friendly and less polluting. In his book *The Economic History of World Population*, Carlo Cipolla suggests that ‘the transport industry has been one of the prime forces responsible for shifting the world from an essentially national system to the global economy that exists today’. Shipping has made the world a compact place and it has also succeeded in connecting isolated economies. On account of all these reasons, the demand for sea transportation has been increasing continuously at an exponential rate. Since the 1950s, the economic evolution of the shipping industry has been immense. Since 1990, maritime transportation has been experiencing new heights which lasted to the first years of the new millennium. However, the economic crisis in 2008 brought a downturn in the shipping sector resulting in a decrease in freight rates and a fall in demand for shipping services.

### What is a Shipping System?

The shipping system includes the physical transport of cargoes from a region of supply to a range of interest, together with the exercises required to help and encourage such transport. A transport network includes three key parts that are used for the porting of goods to the hubs connecting them together, they are:

- Fixed infrastructure, for example, ports or terminals
- Vessels, for example, ships or canal boats utilizing the settled foundation to move cargoes
- Structured infrastructure for smooth operations of the vessels

Many countries take interest in different verticals of the shipping business, through which they are able to create wages and business. For instance, in January 2016, the top five shipowning economies were Greece, Japan, China, Germany and Singapore, while the best five economies in terms of ports were Panama, Liberia, the Marshall Islands, Hong Kong (China) and Singapore. The biggest shipbuilding countries are China, Japan and the Republic of Korea, representing 91.4 for every penny of gross tonnage developed in 2015. Most activities concerning ship breaking/grinding occur in Asia. Four countries—Bangladesh, India, Pakistan and China—represented 95 for every penny of ship rejects net tonnage in 2015. The biggest providers of sailors are China, Indonesia and the Philippines. As countries spend significant time in various maritime activities, the consolidation of business takes place.

Policymakers are encouraged to recognize and put resources into those areas of maritime business in which their countries may have a relative advantage, or in other words, it can be said that the challenge is to identify and encourage shipping companies.

#### Check Your Progress

1. What has led to the expansion of the maritime industry?
2. What are the three key parts that are used for the porting of goods to the hubs connecting them together?



#### Marine Transportation

**System:** The marine transportation system is a network of specialized vessels, the ports they visit, and transportation infrastructure from factories to terminals to distribution centres to markets.

## 1.3 IMPORTANCE AND RELEVANCE TO GLOBAL MARKETING AND SUPPLY CHAIN MANAGEMENT

Marine transportation is an integral, if sometimes less publicly visible, part of the global economy. The **marine transportation system** is a network of specialized vessels, the ports they visit, and transportation infrastructure from factories to terminals to distribution centres to markets. Maritime transportation is a necessary complement to and occasional substitute for other modes of freight transportation. For many

commodities and trade routes, there is no direct substitute for waterborne commerce. (Air transportation has replaced most ocean liner passenger transportation and transports significant cargo value, but carries only a small volume fraction of the highest value and lightest cargoes; while a significant mode in trade value, aircraft move much less global freight by volume, and at significant energy per unit shipped.) On other routes, such as some coastwise or short sea shipping or within inland river systems, marine transportation may provide a substitute for roads and rail, depending upon cost, time, and infrastructure constraints. Other important marine transportation activities include passenger transportation (ferries and cruise ships), national defence (Naval vessels), fishing and resource extraction, and navigational service (vessel-assist tugs, harbour maintenance vessels, etc.).

Globalization is motivated by the recognition that resources and goods are not always collocated with the populations that desire them, and so global transportation services are needed (and economically justified if consumer demand is great enough). For example, until the 1950s, most crude oil was refined at the source and transported to markets in a number of small tankers (sized between 12,000 and 30,000 deadweight tonnage [dwt]). However, economies of scale soon dictated that oil companies would be better off if they shipped larger amounts of crude from distant locations to refineries located closer to product markets. Product could then be more efficiently distributed to points of consumption using a host of transportation modes. This realization ultimately led to the emergence of large tanker vessels (*e.g.*, greater than 200,000 deadweight tons) and drove down the per-unit cost of intercontinental energy transportation.

Another trend associated with globalization is the pace at which trade occurs. Globalization has encouraged transactions of goods and services in smaller packets delivered ‘just-in-time’. This has increased the ‘velocity of freight’ which justified in the 1970s faster, small containerized vessels, and over the last two decades justified faster, large containerized vessels. In a globalized economy, containerization offers the advantage of integrated freight transportation across all modes. Analogous to the more uniform transport of liquid crude oil or unprocessed grains, containerization standardized the shipping package, reducing the per-unit cost of transporting most finished goods.

Since shipping is an international business, the companies operating in different countries with different cultures have to adapt their marketing strategies to cope with the business processes that are prevalent in their countries as well as other countries. Marketing is likened with knowing the market to find out the needs of clients and fulfilling them by using most proper marketing strategy in comparison to that particular market. Similarly, it is a difficult task to cross worldwide limits keeping in mind the various market conditions. Today, the global advertiser is concerned with discovering the best approach to adjust to the prevalent unique situations of the world. The real, multifaceted qualities of advertising lies in the new ways and means that companies will need to use. Despite the fact that marketing and advertising standards are all comprehensive, the controllable factors (marketing mix) still must be adjusted to the unique situations arising in different nations. Situations like rivalry, traditions, clients’ taste, political issues or climate which may influence the result of the marketing plan are some examples of the difficult state of vulnerability which concern the advertisers, especially in remote nations.

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Therefore, advertisers need to find out and analyse the market situations in a planned manner before setting up a business in another country. With a specific end goal to accomplish the advertising target of recognizing the needs of clients and creating systems to fulfill them, three key areas must be taken into account—analysis, planning, execution and control. The examination organized is tied in with social event data. Looking into the market or the new condition, the best approach to discover the market is through a SWOT (strengths, weaknesses, opportunities, and threats) investigation. The SWOT investigation helps the advertiser in recognizing the quality, shortcomings, openings and dangers existing in the outside market. This analysis also helps the advertiser in creating a database and figures for marketing strategies. During delivery, it is significant to recognize wild factors, for example, port controls and giving them orders as indicated by the SWOT investigation. This needs analysis and unquestionably adds to setting more beneficial plans and systems. The initial stage of arrangement includes vital arrangement, destination and objectives detailing with the view of investigating the market, after which the advertiser sets goals and plans related to the market circumstance. For instance, determining which ports to call and in which arrangement the vessels will set sail. The arrangement stage likewise includes separating the vital plans into strategies or operational plans to cover the tactical operations. Here, it is very important that the plans are executed properly, keeping in mind the end goal. It includes ensuring the position of the ship to sail through a particular route, the accessibility of goods, time scale and budgetary plan.

The last stage is the measurement and control stage, where the progress of the marketing plan must be checked to ensure the initial plan and the advertising goals to be accomplished, if not why and what can be changed. It reflects the techniques adopted by the industry and perhaps requires all the more promoting examination and investigation. New marketing research strategies may be required due to the criticism. These phases may help the advertiser to conquer the trouble of managing the uncontrollable factors in a new territory/foreign land. Appropriately, the real test for the marketer is modifying or adjusting the controllable components of marketing (product, price, promotion, place or distribution) in a way that best manages the uncontrollable factors (competition, customs, customers' taste, political issues, level of technology) of the foreign market in order to achieve the marketing objectives. The result for the organization will be decided doing this the correct way, i.e., after gathering and analyzing enough data. It is difficult to use a single advertising strategy throughout the world; however operational tactics and techniques may remain same or change from nation to nation. The marketing tools and practices that are effective in a specific nation may not really be effective at all in another nation. All things taken into account, some shipping companies like Maersk Line have the capacity and the tools to change and build business and show the path to other companies as to how marketing is done; however, it does not happen overnight but they are effective in the long-run.

### **Sales Promotion**

Sales promotion is a component of the marketing mix that gives an additional boost to buyers to choose a particular product or a service like value bargains, rebates, and incentives to clients which are activities not given by other companies. Promotional deals need to be unique and imaginative and advertisers should think of new ideas.

Loyalty programmes or reward programmes are time tested methods to offer the promotion of products where the customers are given incentives to use more services of the companies. Other methods are ‘buy one get one free’ kind of offer programmes that are not very common to this service industry.

**Publicity/Public Relations:** This is an essential component of the tactical marketing mix which manages information flow between the shipping companies and its customers. It is not a specific case of performance highlight but a general update about the company and how well it is doing. Public relations expects to pick a positive presentation towards an organization’s key partners, while controlling any negative exposures and managing issues and protestations skillfully.

Common activities include working with the press, groups, articles, winning industry awards, shipping presentations, organizing fairs and sponsorships. It is important for a shipping industry to keep up its image amongst its shipper’s fraternity, especially in the times when natural issues and contamination issues are on the rise and one incident can single out the company which is doing it. Similarly companies undertaking green initiatives highlight their achievements through this initiative. Taking part in shipping trade fairs where target shippers are available is a successful PR tool.

Moreover, sponsoring social programmes is a good way for gaining positive public interest. Maersk Line is the official sponsor of the Dutch National Olympic Team and the America’s Cup. They also hold regular press releases with the shippers making them feel in the center of Maersk’s attention.

**Personal selling:** This is one of the oldest forms of promotion applied in shipping. Personal selling is based on direct communication, where one party (e.g., salesperson) uses his personal skills and techniques for building personal relationships with another party (e.g., the shipper) which results in both parties obtaining value.

Normally, the incentive for the salesperson is known through the value of the deal while the incentive for the client is known through the benefit got from availing the shipping service. As opposed to mass media, personal selling involves personal contact, which in turn involves direct contact between the involved parties through face-to-face meetings or via teleconferencing such as a telephone conversation, or through modern technologies allowing contact to take place from distant geographical locations over the Internet including video conferencing or text messaging.

As personal selling is often costly it should be used for those customers with high profitability towards the shipping line. Therefore, Maersk and CMA-CGM implemented this concept through their specialized sales team for their profitable key client and global accounts. Therefore, in order to have an effective integrated marketing communication strategy, shipping companies should integrate all the above elements of the marketing mix in synergy, keeping the brand identity, one positioning message and consistent elements of differentiation (Haddad, 2008).

## 1.4 COASTAL AND OCEAN TRANSPORTATION

Coastal transportation is the movement of goods in the ocean by sea waves. The movement of materials along the drift is called **longshore float**. Despite the fact that

### NOTES

#### Check Your Progress

3. What are the important marine transportation activities?
4. What is the main concern of the global advertiser today?
5. What is the basis of personal selling form of promotion?



**Longshore Float:** The movement of materials along the drift is called longshore float.

## NOTES



**Longshore Drift:** Longshore drift is the movement of materials along the shore by sea wave activity.

longshore float is the fundamental procedure of transportation, the materials move in four distinctive ways. These are:

- Traction: Huge material is moved along the ocean bottom
- Saltation: Shoreline material is recoiled and bounced along the ocean bottom
- Suspension: Shoreline material is suspended and shipped by the waves
- Solution: Material is dissolved and transported by the water

### What is Longshore Drift?

**Longshore drift** is the movement of materials along the shore by sea wave activity. Longshore float happens when waves approach the shoreline at a point. The swash (waves reaching the shoreline) brings the material along the shoreline. The discharge makes sure that the material withdraws the shoreline at right points. This is the consequence of gravity. This procedure gradually moves the material along the shoreline. Longshore float gives a connection between disintegration and statement. The material in one place is dissolved, transported and then stored somewhere else.

### Ocean Transportation

Sea transport is a way of transporting individuals, merchandise and things using canal boats, pontoons, boats or sailboat over waterways, channels, seas, or oceans. The principal reason for using this method is that it can be used for business, relaxation/recreational, or military purposes.

This was fundamentally used to transport individuals over little stretches of water such as sections and channels. There has been exceptionally obscure data about the development of sea transportation. It goes back to 3000 BC; prior to that the Egyptians utilized extensive vessels to transport there freight over the sea. The Phoenicians were the first to arrange the transport of merchandise by cruising vessels over the Mediterranean locale region. The merchandise transported mostly were of high esteem/quality and little volume things, for example, flavours, fragrances, pearls, and fine carefully assembled works. Ivory, silver, gold, chimps and peacocks were additionally transported. It was not until the late medieval times that transportation extended through the seas reached as far as Spain and Portugal. During the sixteenth and early seventeenth century water transportation developed broadly and we also saw the development of trenches.

The primary transport used to cross waters is a vessel. Water vessels are generally small open vessels that are powered by cruise, paddle, by paddling or with the utilization of a fuel controlled engine. Generally, the expression 'watercraft' is used to portray bigger ships which may not be completely the right thing to do. Watercrafts are smaller and do convey considerably less individuals and merchandise. Boats are bigger vessels in which individuals and products might be transported across the water, for example, sea, ocean and significantly larger water bodies.

The most widely recognized vessel that transports travelers over short distances or little stretches of water such as rivers and lakes are 'ships'. Water taxi or water transports like those in Venice, Italy are well-known as they are foot-traveler ships which have many stops. Other traveler vessels are expensive journey ships, private pontoons and so on.

Large freight ships and scows are ordinarily used to transport merchandise crosswise over water bodies. It is typically used to transport extensive things like autos, enormous holders and so on. Sea transportation is a less expensive method of transporting merchandise in comparison to air transportation.

## 1.5 WORLD SEA-BORNE TRANSPORT AND GLOBAL SEA ROUTES

Up to 90 per cent of the world's goods are shipped via ocean. The reason for this is that it has numerous advantages in comparison to foreign trade carried out by air, rail or street transport.

In a consistently developing globalized economy, the need to deliver greater volumes of load in a lesser timeframe is increasing day-by-day. This has prompted the development of large vessels with the ability to transport huge volumes of goods to different places instantly. This capacity to transport huge loads brings the economy of scale and foreign exchange.

In this way, the shipping business has existed to improve the quality of our everyday lives, and most of us are not even aware of the fact that volumes of goods are being shipped via the ocean. The reasons why shipping is the best method of transport are:

- **It is less expensive:** The shipping industry has the most optimized cargo costs, as it is a unique method amongst the other methods for transporting goods through long distances.
- **It is the perfect approach to move large volumes of freight:** Ships are designed to transport large volumes of goods and crude oil and is not limited as in planes or trucks. Not only this, shipping also allows the transportation of fluids, gas and hazardous freight. For this, there are controls to keep the ships secure and the goods in place.
- **It is protected:** The rates of accidents and mishappenings in ocean transports have dropped to minimal since last 10 years.
- **It is eco-friendly:** In comparison to road transport, the oceanic business is more eco-friendly for the earth.

It is difficult to find the value of the total value of world seaborne business in real monetary terms as the figures for trade numbers are conventionally in terms of tonnes or tonne-miles, and are therefore not possible to put a comparable monetary-based data for the value of the total world sea based business economy.

However, the United Nations Conference on Trade and Development (UNCTAD) estimates that the operation of merchant cargo ships is pegged at about US\$380 billion in freight rates within the world economy, while is equal to about 5 per cent of the total world business.

Shipping trade figures are often calculated in tonne-miles, as a way of reaching the volume of trade (or 'shipping work', as it is sometimes referred).

Throughout the last hundred years of the shipping industry, it has witnessed a general trend of increase in total trade volume. Improvement in the world economy

### NOTES

#### Check Your Progress

6. What is longshore float?
7. State the principal reason for using the sea transport method.

## NOTES

and liberalization of national economies have given a boost to free trade and a rising demand for consumer goods. Progress in technology has also made the shipping world an ever increasingly suitable, efficient and swift method of transportation. Over the last four decades, the total sea trade estimates have increased four times, from just over 8 thousand billion tonne-miles in 1968 to over 32 thousand billion tonne-miles in 2008.

Similar to the other industrial sectors, shipping too can be vulnerable to economic failures. Indeed, the shipping business has fallen flat due to the worldwide economic slump. Shipping is by nature the ‘servant’ of the economy, hence the result was a slowdown in trade, following the start of the ‘credit crisis’ in late 2008, due to which there has been a dramatic and abrupt decrease in the demand for shipping.

If we ignore the current situation, the longer term forecast for the industry continues to remain very good. The world population is growing, and developing economies will keep on increasing their need for goods and raw materials which the shipping business transports and that too, safely and efficiently. The volume of international trade carried out by sea has once again begun to steadily improve in recent years. In the longer run, the fact that sea trade is the most eco-friendly, fuel efficient and carbon friendly form of business transport, should work in favour of more and more of world trade being carried out by sea.

### 1.5.1 Global Sea Routes and Trade Volume

Shipping routes or shipping canals are narrow passage of waterways in oceans and seas to help facilitate the passage of cargo ships. Sea ports are the restricted areas or channels in oceans and seas to help facilitate the entry of cargo ships. They have been especially made to park large ships. They are of huge sizes. They give alternate shorter ways to cargo ship vessels in oceans and seas to avoid accidents.

The Strait of Malacca is one of the most essential shipping routes in the world. Almost 40 per cent of all the world trade is carried out through this route. The reason for this is that it is the shortest route between the Pacific and Indian Oceans. This heavy trading leads to numerous pirate attacks that consequently results into large commercial losses. Hence, countries like the United States, India, China, and Japan have helped Singapore, Malaysia, and Indonesia that theoretically are responsible for the security of the region, that work to protect the Canal. Even when this route is a short one, some ships due to their size are not able to cross it. Hence, they require to draw a largest one route to reach their destination. Therefore, big ocean disposal, narrow and land close routes are preferred.

In 2015, a number of infrastructure development and expansion projects were announced, launched or completed, with a view to improving connectivity, enhancing access to suppliers and consumers and enabling trade and regional integration. Such initiatives included the construction, expansion and improvement of logistics infrastructure and physical assets such as the Panama Canal and Suez Canal, as well as the One Belt, One Road Initiative in China and the joint Japan–Asian Development Bank Partnership for Quality Infrastructure. The latter two initiatives have the potential to stimulate growth, boost trade and drive up demand for transport and logistics services.

### (a) Panama Canal and Suez Canal

A landmark development in 2015 was the completion of the \$8.2 billion expansion project of the Suez Canal, from the original 60 km to 95 km. The expanded Canal is expected to allow for the transit of 97 ships per day, for two-way traffic in some parts and for larger ships in others. The aim is also to cut transit and waiting times. Another milestone was reached in June 2016 when the expanded Panama Canal opened for operations. The Canal will allow for the passage of larger neo-Panamax ships that, in turn, may result in Panamax ships being redeployed on intraregional routes.

### (b) One Belt, One Road Initiative

A recent development with potentially significant implications for seaborne trade is China's One Belt, One Road Initiative. Launched in 2013, this initiative aims to establish new trading routes, links and business opportunities by further connecting China, Asia, Europe, Africa and countries with economies in transition along five routes. The implementation process was initiated in 2015, and full implementation across all the countries involved is a long-term endeavour (China–Britain Business Council, 2015). If the initiative is fully implemented, the expected benefits are likely to be broad-based and to span a number of areas and various countries and regions. The initiative envisages the construction of a trade and transport infrastructure network involving 60 countries, accounting for 60 per cent of the world's population and representing a collective GDP equivalent to 33 per cent of the world's total (China–Britain Business Council, 2015). The surface transport component focuses on linking China to Europe through Central Asia and the Russian Federation; China with Western Asia through Central Asia; and China with South-East Asia, South Asia and the Indian Ocean, while the maritime transport component focuses on linking China with Europe through the Indian Ocean and China with the southern Pacific Ocean (Hong Kong [China] Trade Development Council, 2016). Six international economic cooperation corridors have been identified.

In China, the initiative is expected to help revitalize domestic industries; bring higher returns for Chinese capital and higher demand for Chinese goods and services; absorb China's labour; and use China's excess industrial capacity, such as cement for ports and roads and steel for rails and trains, among others (Zhu and Hoffman, 2015). China's western region is expected to benefit through the building of hinterland connections and infrastructure, and the generation of demand for high value-added steel products, such as for pipelines and high-speed railways (Zhu and Hoffman, 2015). Greater energy security for China may also be achieved by making use of alternative routes to the Straits of Malacca through Pakistan, Myanmar and Thailand.

Beyond China, the initiative may help reduce transport costs, increase trade flows and open new markets to all involved countries, as well as promote the development of emerging industries (China–Britain Business Council, 2015). Another important expected contribution is to closing the persistent infrastructure gap in developing regions, especially in transport. Infrastructure investment needs for Asia are estimated at \$50 billion per year through 2020 and for Africa are estimated to exceed \$93 billion (Bloomberg Brief, 2015). Beyond the initiative, China has already committed over \$10 billion in investment to develop the Bagamoyo port in the United

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## NOTES

Republic of Tanzania and has contracts to build railways connecting the ports of Dar es Salaam and Mombasa, with inland countries (Bohlund and Orlik, 2015). Such investments may stimulate trade, as shown in Africa, where a tripling of China's investment value in 2008–2013 was associated with a doubling of exports, from \$55 billion in 2008 to \$116 billion in 2014 (Bohlund and Orlik, 2015).

From the transport sector perspective, the success of the initiative rests heavily on optimization of the transport infrastructure and services, including shipping and logistics, required to support connectivity in China and beyond. In turn, the transport sector may benefit from the trade growth opportunities generated by the initiative and growth in volumes stemming from reduced transport costs, greater market access and connectivity, and infrastructure and industrial development. With regard to shipping, these may provide an additional boost to lift volumes and reverse the recent trends of weak demand and slowly growing trade, and help bring balance to the market, which currently faces a mismatch between supply and demand, as well as continued excess. Maritime connections linking China to the Port of Piraeus, Greece, through the Indian Ocean and Suez Canal are expected to provide an alternative to ports such as Antwerp, Belgium; Hamburg, Germany; and Rotterdam, the Netherlands, while cutting 10 days off the journey to Central or Eastern Europe (Pong, 2015). The expanded Suez Canal is likely to benefit from the new traffic to be generated by the initiative, the trade flows from the Islamic Republic of Iran stemming from the removal of international sanctions and the oil trade expected to result from the growing importance of the refinery market in India (SAFETY4SEA, 2016). Surface transport offers alternative logistics options for business and trade, especially for high value added and time-sensitive goods (Pong, 2015). Several railways that already operate between China and Europe provide an advantage with regard to average travel days, which hover at 15 compared with 30–40 by sea. In addition, rail compares favourably with air with regard to shipping costs, and constitutes a more environmentally friendly mode of transport.

### **Maritime Silk Route: New Initiatives in Maritime Transport (Chaturvedy, 2017)**

China has proposed to revive the age old 'Silk Street of the Ocean' into a 21st century Maritime Silk Route (MSR). This initiative has pulled in a huge response among strategy creators and researchers. Is there a convergence of sea interests or is the thought to revive the Silk Street of the Ocean an instrument of Chinese 'grand strategy'?

As an important ingredient of its system, China is building streets, railroads and ports, through its western area, across South Asia and beyond with an idea of restoring the MSR. This clearly indicates the Chinese innovative approach and its incredible approach strategy to world business.

Maritime access takes a huge part in the bringing together of key organizations and security ties. The proposition to reinstate the MSR should be seen in this light. This activity will grab the initiative of changing Asia into a key sea business player in this part of the world.

The MSR will begin in the Fujian area and pass Guangdong, Guangxi, and Hainan before reaching south to the Malacca Strait. From Kuala Lumpur, the MSR heads to Kolkata and Colombo, and at that point crosses whatever is left of the Indian Sea to Nairobi. From Nairobi, it goes north around the Horn of Africa and travels through the Red Ocean into the Mediterranean, with a stop in Athens before meeting

the land-based Silk Street in Venice. In another guide, South Pacific has likewise been incorporated.

### **Aims and Objectives of Reviving the MSR**

The MSR aims to reunite the Asia-Pacific monetary power in the east and the European financial clout in the West by building a system of ports in urban areas along the Silk Course connecting it to China. As indicated by one report, *One Belt and One Road Strategy* is at present the biggest economic corridor with the most visible potential business strategy in the world—this directly impacts 4.4 billion individuals, around 63 per cent of the total population. Furthermore, it tries to enhance the Chinese geo-vital position on the planet.

The main objective of this for the Chinese is to regain supremacy in the world shipping transport. Second, China can get the rewards of its developing monetary power and growing impact over the globe. Third, the activity reflects China's developing certainty and a response to the American 'shift' procedure. Through this complex vision, the aspiration of China's new pioneer is to provide a complete makeover of China's status on the planet.

While the MSR proposition is an innovative thought to bring peace, prosperity and stability in the region, it is not yet clear as to why China is doing so. China's oceanic rebuilding, in any case, is being driven by its dynamic trade, with sea trade business leading the way. Maritime improvement is following the shipping sea developments. China's approach to ocean trade is extraordinary, and is reflected by the ship building industry and the hauling industry. Following two years of quick development, Beijing is again looking past its legacies for business opportunities and trade. China is aware of the fact that the times to come will be tough for the sea trade and MSR can play a major role in bringing back the supremacy of China. The MSR places China in the 'middle' of the 'Middle Kingdom' attitude and is an initiative in the impending worldwide changes. The MSR offers few possibilities for South and Southeast Asia in its new symbol. China needs to persuade the MSR-affected countries and areas that the proposition is for a win-win collaboration and to do this Beijing needs to work with different countries to make this activity more comprehensive.

### **1.5.2 Busiest Sea Routes: East-West, North-South and Intra Region**

Some waterways and routes are very common due to certain advantages or due to their frequent usage. The 10 most critical yet busiest delivery paths around the globe are given in this section.

#### **(i) Suez Canal**

One of the most seasoned transporting canal was developed over 200 years ago for all the countries over the globe. It was chosen that the trench would stay open always regardless of any claim, and as a result it became a global shipping route. The channel linked the Mediterranean Ocean to the Red Sea and is known to be amongst the busiest delivery courses on the planet.

#### **(ii) Rhine-Main-Danube Canal**

This canal, situated at the heart of Western Europe, is otherwise called the Europa waterway. It connects the three important streams of Europe. The link with North and

## **NOTES**

Dark Ocean is built up by means of the Atlantic Sea on this port. This shipping port is of prime significance to Europe.

**(iii) Volga-Don Canal**

The two essential streams of Russia get interlinked to give an entry to the maritime world by means of the Caspian Ocean and Azoff Sea which is an inlet of the Dark Ocean. This waterway is responsible for the trade between Eastern and Western Europe. This is an important old canal whose development began in the sixteenth century initially.

**(iv) Houston Ship Canal**

This canal exists and is operational since the 1830s. Most ships enter the Houston harbour through the inlet of Mexico by means of this canal. This route operated only for small ships in the beginning, however, later further expansions were made to facilitate bigger ships easily. This is also utilized for the internal shipping transportation for the United States of America.

**(v) Kiel Canal**

This route had guaranteed the bypassing of the Denmark route which is a significant unreliable route as well. It passes through German territory. This was initially built around the 1700s, while the present day progress occurred in the 1890s. This is responsible for connecting the Baltic Ocean with the North Ocean.

**(vi) White Sea-Baltic Sea Canal**

This route is an internal sea route of Russia. This unites the far north White Ocean to the Baltic Ocean in the south going through numerous different sea routes and canals. The development goes back to the 1930s. This waterway is however not suitable for the entry of large ships/boats and cargoes.

**(vii) Welland Canal**

This channel interlinks two important water bodies of Canada—Ontario and Erie Lakes. Its development began in 1924 and ended in 1932. It is important because it helps the entry of ships on the dikes of Niagara Falls and maintains a strategic distance from the Niagara Falls section.

**(viii) Manchester Ship Canal**

It starts in the region of Liverpool and continues up to Manchester. This canal joins two waterways—Irwell and Mersey. This canal has been operational since the nineteenth century. It is important for the English oceanic transportation.

**(ix) Panama Canal**

This canal route is operational since 1914. It manages a two-way business trade from both sides of the route. This canal is the bridging water body between the Pacific and the Atlantic Oceans.

**NOTES**

**(x) Strait of Dover**

This is the narrowest section of the English Channel. The strait is responsible for the division of England from the territory of Europe. This has been the world's busiest shipping route for a long time.

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## 1.6 CHARACTERISTICS OF SHIPPING TRANSPORT

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Sea transport deals with the trading of international goods and is a very important and essential method of transport. Cargo transport measured by volumes of worldwide transport of goods accounted for almost 80 per cent of all goods transported.

Basically, sea transport can be sub-divided into land based and water-based transportation or transportation via air. The transportation business usually competes in transportation costs, limit, speed, time conveyance, and the network density.

### 1.6.1 Types of Ships

The various types of ships are described in this section. They are as follows.

#### 1. Cargo Ships

Cargo or freight ships are majorly used to transport goods securely from one place to another. These are ships with a multi-deck or single-deck structure. There are a lot of cargo dispatches happening across the world. Cargo ships are key to universal trade. Freight boats can transport goods, for example, food, oil, furniture, metals, garments and apparatus.

Cargo ships/vessels can be classified into five groups, as per the sort of load they carry. These groups are:

- General cargo vessels
- Holder ships
- Tankers
- Dry mass Carriers
- Multi-reason vessels
- Reefer ships

General cargo vessels carry bulk goods such as chemicals, substances, furniture, hardware, engine and military vehicles, footwear, pieces of clothing, and so on.

Tankers carry oil based goods or other fluid load.

Dry mass carriers carry coal, grain, metal and other comparable items in free shape.

Multi-reason vessels, as the name recommends, conveys diverse classes of load—e.g. fluid and general freight.

A reefer (or Refrigerated) ship is particularly designed and used for the transportation of perishable goods which require controlled temperature—generally organic products, meat, vegetables, dairy items and different foodstuffs.

## NOTES

### Check Your Progress

8. Give any one reason to prove that shipping is the best method of transport.
9. Name the most essential shipping route in the world.
10. Name the bridging water body between the Pacific and the Atlantic Oceans.

**NOTES**

Specific types of load vessels include holder ships and mass transporters (in fact tankers of all sizes are cargo ships, in spite of the fact that they are routinely thought of as a different class). Freight ships can be classified under two further classes according to the utility they offer to the industry: liner and tramp administrations. Those on a fixed shared timetable and settled duty rates are freight liners. Tramp ships do not have fixed timetables. Clients contract them to carry shipments. Usually, the smaller shipping companies and private shippers use tramp ships. Cargo liners keep sailing on fixed timetables shared by the shipping companies. Each time a cargo sets sail, it is known as a voyage. Liners usually carry general freight. In fact, some freight liners may also carry travelers. A cargo liner that carries at least 12 travelers is known as a combination or passenger-cum-cargo line.

Cargo ships are classified by cargo capacity, some by weight (deadweight tonnage—DWT), and some by measurements. Basic classes include:

**(i) Dry freight**

These are of the following sizes:

- Small handy size, carrying a capacity of 20,000-28,000 DWT.
- Seawaymax, 28,000 DWT: The biggest ship that can navigate the St. Lawrence Seaway. These are ships under 740 feet (225.6 m) long, 78 feet (23.8 m) wide, and have a draft under 26.51 feet (8.08 m) and a tallness over the waterline close to 35.5 meters (116 ft).
- Handy size, bearers of 28,000-40,000 DWT.
- Handymax, bearers of 40,000-50,000 DWT.
- Panamax: The biggest size that can navigate the first bolts of the Panama Canal, a 294.13 m (965.0 ft) length, a 32.2 m (106 ft) width, and a 12.04 m (39.5 ft) draft and a record breaking point of 57.91 m (190.0 ft). Limited to 52,000 DWT stacked, 80,000 DWT load.
- Neopanamax, updated Panama locks with 366 m (1,201 ft) length, 55 m (180 ft) shaft, 18 m (59 ft) profundity, 120,000 DWT.
- Capesizeships are bigger than Suezmax and Neopanamax, and must navigate the Cape of Good Expectation and Cape Horn to go between seas.
- Chinamax, bearers of 380,000-400,000 DWT up to 24 m (79 ft) draft, 65 m (213 ft) bar and 360 m (1,180 ft) length; these measurements are constrained by port foundation in China.

**(ii) Wet load**

These are of the following sizes:

- Aframax: Oil tankers in the vicinity of 75,000 and 115,000 DWT. This is the biggest size characterized by the normal cargo rate measurement.
- Q-Max: Melted flammable gas transporter for Qatar sends out a ship of Q-Max. It is estimated to be 345 m (1,132 ft) long and measures 53.8 m (177 ft) wide and 34.7 meters (114 ft) high, with a shallow draft of around 12 m (39 ft).

- Suezmax: Ordinarily ships of around 160,000 DWT, most extreme measurements are a light emission m (254 ft), a draft of 20.1 m (66 ft) and in addition a maximum height of 68 m (223 ft) can navigate the Suez Waterway.
- VLCC (Very Large Crude Carrier): Supertankers in the vicinity of 150,000 and 320,000 DWT.
- Malaccamax: Ships with a size under 20.5 m (67.3 ft) that can navigate the Strait of Malacca, commonly 3,00,000 DWT.
- ULCC (Ultra Large Crude Carrier): Tremendous supertankers in the vicinity of 3,20,000 and 5,50,000 DWT.

## 2. RoRo (Roll on Roll Off)

Most businesses being operated over water universally are done on a RoRo (Roll on Roll Off) ship. The reason why this ship is so well-known for transporting vehicles is that it is more secure and significantly speedier to simply drive an auto onto the ship than utilizing a crane. Once the autos are on board, they are supported and tied to the ship's deck to shield them from moving around while the ship is adrift.

## 3. Tankers

Tankers are ships that fundamentally carry huge amounts of fluid. They can carry a large variety of fluids, for example, oil, water, wine and heaps of various chemicals that need transporting. They come in groups of various sizes, however, a portion of the bigger vessels have the ability to carry a few hundred thousand tonnes.

## 4. Traveler Boats/Passenger Ships

Boats that carry more than 12 passengers are called traveler boats/passenger ships. Lately, there have been few problems with traveler ships, hence, the standards and directions have been reworked to increase the security and safety of the passengers. Traveler ships additionally include voyage and occasion ships.

## 5. Fishing Ships

Fishing/Angling ships are watercrafts/ships used to catch fishes and other marine natural lives. They are utilized for both pleasure fishing as well as trade fishing. There are a large number of angling ships being used to catch fish far and wide. As pointed out by the Universal Oceanic Association (IMO), there are around 24,000 trips on fishing ships every year. All boats used with international trips must have an Electronic Chart Display and Information System (ECDIS) permission. Data shows that the fishing boat users should beware of bad climate while travelling through the world ocean routes.

## 6. High Speed Boats

High speed boats are sometimes called 'quick ships'. They are essentially made for non-military personnel use or as traveler ships. They accordingly use air cushion boats, sailboats and hydrofoil pontoons.

## NOTES



**Tankers:** Tankers are ships that fundamentally carry huge amounts of fluid.



**Traveler Boats:** Boats that carry more than 12 passengers are called traveler boats/passenger ships.



**Passenger Ships:** Fishing/Angling ships are watercrafts/ships used to catch fishes and other marine natural lives.

### Check Your Progress

11. How can sea transport be categorized?
12. What is a reefer ship?
13. What are fishing/angling ships?

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## 1.7 INTERNATIONAL MARITIME ORGANIZATION (IMO): FORMATION AND FUNCTIONS

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### NOTES



**International Maritime Organization (IMO):**

International Maritime Organization (IMO) is the global standard-setting authority for the safety, security and environmental performance of international shipping.

As a specialized agency of the United Nations, **International Maritime Organization (IMO)** is the global standard-setting authority for the safety, security and environmental performance of international shipping. Its main role is to create a regulatory framework for the shipping industry that is fair and effective, universally adopted and universally implemented.

In other words, its role is to create a level playing-field so that ship operators cannot address their financial issues by simply cutting corners and compromising on safety, security and environmental performance. This approach also encourages innovation and efficiency.

Shipping is a truly international industry, and it can only operate effectively if the regulations and standards are themselves agreed, adopted and implemented on an international basis. And IMO is the forum at which this process takes place.

International shipping transports more than 80 per cent of global trade to peoples and communities all over the world. Shipping is the most efficient and cost-effective method of international transportation for most goods; it provides a dependable, low-cost means of transporting goods globally, facilitating commerce and helping to create prosperity among nations and peoples.

The world relies on a safe, secure and efficient international shipping industry and this is provided by the regulatory framework developed and maintained by IMO.

IMO measures all aspects of international shipping—including ship design, construction, equipment, manning, operation and disposal—to ensure that this vital sector remains safe, environmentally sound, energy efficient and secure.

Shipping is an essential component of any programme for future sustainable economic growth. Through IMO, the Organization's Member States, civil society and the shipping industry are already working together to ensure a continued and strengthened contribution towards a green economy and growth in a sustainable manner. The promotion of sustainable shipping and sustainable maritime development is one of the major priorities of IMO in the coming years.

Energy efficiency, new technology and innovation, maritime education and training, maritime security, maritime traffic management and the development of the maritime infrastructure: the development and implementation, through IMO, of global standards covering these and other issues will underpin IMO's commitment to provide the institutional framework necessary for a green and sustainable global maritime transportation system.?

The first and only global association of its kind, the IMO comprises a union, which consists of all states and is the most well-administered body. It has a board chosen by a meeting for an interval of two years and five councils made out of the delegates: The Sea Well-being Board of Trustees, the Marine Condition Security Advisory Group, the Lawful Board of Trustees, the Specialized Co-operation Council, and the Help Board of Trustees. The board of trustees are supported by a number of subcommittees.

The IMO is a specialized organization, with greater part of its work carried out by its advisory groups and subcommittees. The IMO has been drafted after careful examination of fifty traditions, and more than 1,000 codes and proposals identified with sea security and different issues of global shipping. The quickly changing methodology for shipping has made it particularly important for the IMO to guarantee that traditions and codes are avant-garde. For example, the International Convention for the Safety of Life at Sea (SOLAS) has been revised six times since it went into drive in 1965 (in 1966, 1967, 1968, 1969, 1971, and 1973).

In the light of the attacks on the Unified States on 11 September 2001, there was an expanded worry over the risk posed by transnational psychological terrorists and criminal groups to the safety and security of boats and their group individuals. With solid support by the US delegates to the IMO (the US Drift Protect), the IMO, in 2002, agreed upon compulsory safety efforts as the Global Delivering and Port Offices Security (ISPS) Code—a correction to the 1974 SOLAS Tradition. These measures expect governments to accumulate and evaluate data identified with security dangers and trade such data with different governments. It additionally expects states to have a system for security evaluations to guarantee that there are plans and methods set up to react to a security danger. The correction was embraced in 2004 and now has 159 part signatories speaking to 99 per cent of the world’s trader armada (around 40,000 boats) occupied with worldwide voyages. What’s more, roughly 10,000 port offices all-inclusive have created consistent security designs. Furthermore, the IMO is executing new mandatory long-range tracking and identification (LRIT) framework to allow the following of boats all-inclusive. The reception of two new conventions (compelling 28 July 2010) to Convention on the Suppression of Unlawful Acts Against the Safety of Navigation (SUA), have broadened the extent of the tradition to cover new offenses, for example, utilizing ships in a way that causes demise or genuine damage, and the unlawful carriage of weapons or material that could be utilized as, or used to create, weapons of mass annihilation. To enable states to create and reinforce their abilities to guarantee sea security, the IMO has directed nation needs appraisals and counseling missions. It has additionally directed national and local classes, workshops, and courses that have brought about the preparing of around 6,000 people. These activities intend to advance more noteworthy comprehension and execution of SOLAS and the ISPS Code.

For the IMO, enrollment in the Counter-Terrorism Implementation Task Force offers a chance to expand on earlier collaborations with other UN substances associated with oceanic security issues and furnish part states with a more incorporated way to deal with actualizing the UN’s Worldwide Counter-Psychological Oppression System. The IMO has connected with the Security Board through a preparation on the theft off the shore of Somalia. It has likewise worked with the Counter-Psychological Warfare Advisory Group on endeavours to upgrade oceanic security among states, and to talk about the ramifications of such endeavours in the more extensive battle against worldwide fear mongering. Specifically, the IMO has worked with the Counter-Fear Mongering Official Directorate of the Counter-Fear Mongering Board of Trustees on nation visits. IMO additionally participates with other CTITF elements on initiatives in the Gulf of Aden (Djibouti Code of Conduct implementation) and West and Central Africa (Integrated Coast Guard network capabilities).

## NOTES

### 1.7.1 Regulations Concerning Dangerous and Polluting Cargoes, Including the Class Structure

#### NOTES

Transportation is a key client of the seas, conveying more than 80 for each penny of world exchange, taking ship travelers to their destinations and carrying a large number of sightseers on travels. Every year, more than 50,000 seagoing boats carry on board more than 10 billion tonnes of indispensable and wanted cargoes, including items, fuel, crude materials and shopper products.

As the United Nations' agency in-charge of creating and receiving measures to enhance the well-being and security of worldwide sending and to keep pollution from ships, the International Maritime Organization (IMO) has an essential part in meeting the objectives set out in the United Nations Sustainable Development Goal (SDG)—Protect, conserve and sustainably use the seas, ocean and marine resources for long term development.

The increase in the number and the measure of shipping vessels and the volume of load continued in the previous five decades has been the primary work of IMO. Through its 172 part States, legitimate and specialized structure has been created inside which shipping has moved towards becoming continuously cleaner and more secure. Obviously, there remains a lot still to be done. IMO will proceed with its endeavours, in association with part States and different associations, to execute and bolster the requirement of its controls.

Framed by methods in the 1948 Convention on the International Maritime Organization, IMO at first centered on sea security and route. At that point, in the 1960s, the world turned out to be more mindful of the spillage of oil into the seas and oceans through mischance or because of poor working practices. Impelled by significant oil contamination episodes, for example, the Torrey Gorge catastrophe off the south-west shoreline of the United Kingdom in 1967, IMO set out on a yearning project of work on marine contamination anticipation and reaction, and on obligation and pay issues. A key result was the selection, in 1973, of International Convention for the Prevention of Pollution from Ships, universally known as MARPOL.

From the beginning MARPOL tended to not only contamination by oil from ships (canvassed in Attach I) yet additionally, poisonous fluid substances, for example, chemicals, conveyed in mass (Add II); hurtful substances conveyed in bundled shape (Add III); sewage releases into the ocean (Add IV); and the transfer adrift of ship-produced rubbish (Add V). Under Add V, a general denial applies to releasing all junk from ships, while releasing plastics is liable to an aggregate, all-inclusive material boycott.

Afterwards, in 1997, IMO added another Add VI to MARPOL, managing environmental contamination from ships. Today, Annexure VI tends to air contamination from sulphur and other hurtful releases, for example, nitrogen oxides and particulate issue. In 2011, IMO turned into the principal universal controller for a vehicle segment to embrace the all-inclusive restricting vitality productivity necessities, which apply to all boats comprehensively, paying little heed to exchanging example or banner State, and went for lessening ozone harming substance outflows from worldwide delivery.

MARPOL Annexure VI additionally includes controls for ozone-draining substances, unpredictable natural mixes, shipboard incinerators, gathering offices and fuel oil quality. Every one of these measures has a critical, helpful effect on the condition

of air, and furthermore on the human well-being for individuals living in or close to port urban areas and seaside groups.

Under MARPOL Annexure VI, Emission Control Areas (ECAs) for sulphur oxide and nitrogen oxide releases have been assigned, with a strict 0.10 for each penny by mass (m/m) restrict on sulphur in fuel oil. In a move that exhibits an unmistakable duty by IMO to guaranteeing that transportation meets its ecological commitments, the worldwide sulphur restrain outside ECAs will be sliced to 0.50 for each penny m/m, from 3.5 for every penny m/m, from 1 January 2020.

Today, the extended, changed and refreshed MARPOL Tradition remains the most imperative, and additionally the most thorough, universal arrangement covering the counteractive action of both marine and air contamination by ships, from operational or unplanned causes.

MARPOL likewise perceives the requirement for more stringent necessities to oversee and ensure purported Special Areas, because of their biology and their ocean activity. A sum of 19 Extraordinary Regions have been assigned. They incorporate encased or semi-encased oceans, for example, the Mediterranean Ocean, Baltic Ocean, Dark Ocean and Red Ocean ranges, and substantially bigger sea breadths, for example, the Southern South Africa waters and the Western European waters. This acknowledgment of Extraordinary Ranges, alongside worldwide control, is a reasonable sign of a solid IMO consciousness of and adds up to a sense of duty regarding the key significance of securing and saving the world's oceans and seas as fundamental life emotionally supportive networks for all people groups.

The Antarctic has delighted in Uncommon Zone status since 1992. Slick releases into the ocean and trash transfer over the edge are completely disallowed. Likewise, an aggregate restriction on the carriage or utilization of substantial fuel oils produced results on 1 August 2011 under another MARPOL Annexure I direction. Polar waters likewise seek advantage from extraordinary measures under the IMO Polar Code, which went into constrain on 1 January 2017 for ships working in both Antarctic and Cold waters.

IMO similarly has a procedure to assign Particularly Sensitive Sea Areas (PSSAs), which are liable to related defensive measures, for example, required ship-routing frameworks. There are as of now 14 regions (in addition to two expansions) ensured along these lines, including those covering UNESCO World Heritage Marine Sites, such as the Great Barrier Reef (Australia), the Galápagos Archipelago (Ecuador), the Papahānaumokuākea Marine National Monument (United States of America), and the Wadden Sea (Denmark, Germany, the Netherlands).

While MARPOL particularly targets coincidental and operational releases from send operations, IMO additionally effectively addresses marine contamination from the arrived sources, through the London Tradition on the Anticipation of Marine Contamination by Dumping of Squanders and Other Issue, 1972, and its 1996 Convention.

The London Convention and Protocol regime additionally adds to environmental change moderation by directing for carbon catch and sequestration in sub-sea geographical arrangements and giving controls and direction on the most proficient method to evaluate proposition for marine geo-engineering.

## NOTES

## NOTES

The way toward embracing each one of these measures at IMO starts with an organized foray, in which part States discuss, concur and receive general measures and go for protected and reasonable delivery with insignificant antagonistic natural effects.

The fundamental way to execution at that point takes after. IMO works with different partners and accomplices to assemble limit and aptitude among its part States to compose IMO guidelines into their own particular national oceanic enactment, and afterward to actualize and authorize that enactment viably.

IMO has a long history of working with key benefactors, including the European Union, the Global Environment Facility (GEF), and the Norwegian Agency for Development Cooperation, the Korea International Cooperation Agency, and maritime organizations such as, for example, IPIECA (the global oil and gas industry association for environmental and social issues).

Countless natural ventures have been actualized, with the help of local associations, including the Secretariat of the Pacific Territorial Condition Programme, the Provincial Marine Contamination Crisis Reaction Place for the Mediterranean Ocean, the Local Association for the Preservation of the Earth of the Red Ocean and Bay of Aden, the Local Association for the Insurance of the Marine Condition, the Commission on the Protection of the Black Sea Against Pollution, and the South Asia Co-operative Environment Programme.

IMO has directed a progression of activities in view of a worldwide organization display known as Glo-X. Activities of this nature are being utilized to quicken legitimate, approach and institutional changes in creating countries to actualize universal traditions while, in the meantime, utilizing private division associations to quicken innovative work and mechanical developments by shaping worldwide industry collusions and encouraging data trade.

The GloBallast Partnerships Project (2007-2017), a joint initiative of GEF, the United Countries Development Programme (UNDP) and IMO, has been fruitful in helping creating countries in lessening the exchange of possibly unsafe oceanic life forms and pathogens in ships; counterbalance water and actualizing the IMO Ballast Water Management (BWM) Convention. The BWM Convention entered into force on 8 September 2017. Under the Convention, all ships in international traffic are required to manage their ballast water and sediments to a certain standard, according to a ship-specific ballast water management plan. All ships have to carry a ballast water record book and an international ballast water management certificate. The ballast water management standards are being phased in over a period of time. New ships must meet the ballast water treatment standard. Existing ships should exchange ballast water mid-ocean but they will need to meet the ballast water treatment standard by the date of a specified renewal survey. Eventually, most ships will need to install an on-board ballast water treatment system.

A moment worldwide associations extend is the GEF-UNDP-IMO Global Maritime Energy Efficiency Partnership Project (GloMEEP), which is working in 10 lead pilot countries (Argentina, China, Georgia, India, Jamaica, Malaysia, Morocco, Panama, Philippines and South Africa). It expects to make worldwide, territorial and national organizations to manufacture ability to address oceanic vitality proficiency—

as such, to address ozone harming substance discharges from ships—and for countries to bring this into the standard inside their own particular improvement arrangements, projects and exchanges.

Another present venture, supported by the European Union, is the Global Maritime Technology Cooperation Centre (MTCC) Network (GMN), which is building up a worldwide system of five MTCCs in Africa, Asia, the Caribbean, Latin America and the Pacific. The aim is to enable recipient countries to confine and reduce ozone depleting substance outflows from their delivery segments. The venture will energize the take-up of vitality productivity innovations through the scattering of specialized data and know-how.

Through this system of MTCCs, the venture will empower creating countries in these districts, and specifically, minimum created countries and little island creating States, to successfully execute vitality productivity measures in sea transport through specialized help and capacity building. Both the GloMEEP and GMN tasks will bolster IMO part States in environmental change moderation, the key point of SDG 13.

In different seas related organizations, IMO is an accomplice in, and secretariat for, Joint Group of Experts on the Scientific Aspects of Marine Environmental Protection (GESAMP), which exhorts the UN framework on logical segments of marine ecological security. GESAMP assesses the natural risks of hurtful substances conveyed by boats and surveys applications for ‘dynamic substances’ to be utilized as a part of weight water administration frameworks, in this way giving contributions to the administrative procedure at IMO. GESAMP likewise gives a deliberate diagram of new and developing issues to illuminate its nine supporting UN associations.

Late key reports by GESAMP on micro plastics in the seas have added to the enlarging learning of the sources and destiny of marine litter, particularly micro plastics in the seas. IMO is additionally a co-lead for ocean based wellsprings of marine litter, together with the Food and Agriculture Organization of the United Nations, in the Global Partnership on Marine Litter, which is managed by the United Nations Environment Programme.

IMO’s reputation in limiting contamination from ships, both into the oceans and seas and into the environment, represents itself without doubt. The Association is completely dedicated to working through its part States and with its accomplices to keep on developing, keep up and actualize an arrangement of worldwide directions to guarantee transportation’s manageable utilization of the seas (UNCTAD, 2016).

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## 1.8 SUMMARY

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Some of the important concepts discussed in this unit are:

- The concept of logistics has been used in business for more than two decades. Logistics management—also referred to as supply chain management—until the beginning of the 21st century meant the physical process of planning, organizing and controlling the flow of materials and services from the supplier’s point to the customers as the end point.
- Developments in international maritime transport also emphasize the developments in global trade.

## NOTES

### Check Your Progress

14. State the main role of the IMO.
15. What was the initial concern of the IMO?
16. What are the areas where the GloBallast Partnerships Project has been fruitful?

## NOTES

- Sea transport is an essential factor of world economic progress for the oceanic nations. Its essential endeavour is to give transportation services which means that they should be instrumental in the transportation of goods via waterways, especially through the sea routes from one point to another to carry forward an economic activity.
- Globalization and the rapid increase in world trade in the past decade have contributed to greater demand for international transport and logistics and, consequently, the expansion of the maritime industry.
- Maritime transport is essential to the world's economy as over 90 per cent of the world's trade is carried by sea and it is, by far, the most cost-effective way to move en masse goods and raw materials around the world.
- The shipping system includes the physical transport of cargoes from a region of supply to a range of interest, together with the exercises required to help and encourage such transport.
- Marine transportation is an integral, if sometimes less publicly visible, part of the global economy. The marine transportation system is a network of specialized vessels, the ports they visit, and transportation infrastructure from factories to terminals to distribution centres to markets.
- Since shipping is an international business, the companies operating in different countries with different cultures have to adapt their marketing strategies to cope with the business processes that are prevalent in their countries as well as other countries.
- Sales promotion is a component of the marketing mix that gives an additional boost to buyers to choose a particular product or a service like value bargains, rebates, and incentives to clients which are activities not given by other companies.
- Coastal transportation is the movement of goods in the ocean by sea waves. The movement of materials along the drift is called longshore float.
- Longshore drift is the movement of materials along the shore by sea wave activity. Longshore float happens when waves approach the shoreline at a point.
- The most widely recognized vessel that transports travelers over short distances or little stretches of water such as rivers and lakes are 'ships'.
- Similar to the other industrial sectors, shipping too can be vulnerable to economic failures. Indeed, the shipping business has fallen flat due to the worldwide economic slump.
- Shipping routes or shipping canals are narrow passage of waterways in oceans and seas to help facilitate the passage of cargo ships.
- The Strait of Malacca is one of the most essential shipping routes in the world. Almost 40 per cent of all the world trade is carried out through this route.
- A landmark development in 2015 was the completion of the \$8.2 billion expansion project of the Suez Canal, from the original 60 km to 95 km. The expanded Canal is expected to allow for the transit of 97 ships per day, for two-way traffic in some parts and for larger ships in others.
- China has proposed to revive the age old 'Silk Street of the Ocean' into a 21st century Maritime Silk Route (MSR).

- The MSR aims to reunite the Asia-Pacific monetary power in the east and the European financial clout in the West by building a system of ports in urban areas along the Silk Course connecting it to China.
- One of the most seasoned transporting canal, the Suez Canal, was developed over 200 years ago for all the countries over the globe.
- Sea transport deals with the trading of international goods and is a very important and essential method of transport.
- Cargo or freight ships are majorly used to transport goods securely from one place to another. These are ships with a multi-deck or single-deck structure.
- Tankers are ships that fundamentally carry huge amounts of fluid. They can carry a large variety of fluids, for example, oil, water, wine and heaps of various chemicals that need transporting.
- As a specialized agency of the United Nations, International Maritime Organization (IMO) is the global standard-setting authority for the safety, security and environmental performance of international shipping.
- Framed by methods in the 1948 Convention on the International Maritime Organization, IMO at first centered on sea security and route.
- Impelled by significant oil contamination episodes, for example, the Torrey Gorge catastrophe off the south-west shoreline of the United Kingdom in 1967, IMO set out on a yearning project of work on marine contamination anticipation and reaction, and on obligation and pay issues.
- A key result was the selection, in 1973, of International Convention for the Prevention of Pollution from Ships, universally known as MARPOL.
- IMO's reputation in limiting contamination from ships, both into the oceans and seas and into the environment, represents itself without doubt. The Association is completely dedicated to working through its part States and with its accomplices to keep on developing, keep up and actualize an arrangement of worldwide directions to guarantee transportation's manageable utilization of the seas.

## NOTES

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### 1.9 ANSWERS TO 'CHECK YOUR PROGRESS'

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1. Globalization and the rapid increase in world trade in the past decade have contributed to greater demand for international transport and logistics and, consequently, the expansion of the maritime industry.
2. A transport network includes three key parts that are used for the porting of goods to the hubs connecting them together, they are:
  - Fixed infrastructure, for example, ports or terminals
  - Vessels, for example, ships or canal boats utilizing the settled foundation to move cargoes
  - Structured infrastructure for smooth operations of the vessels
3. The important marine transportation activities include passenger transportation (ferries and cruise ships), national defence (Naval vessels), fishing and resource extraction, and navigational service (vessel-assist tugs, harbour maintenance vessels, etc.).

## NOTES

4. The global advertiser is concerned with discovering the best approach to adjust to the prevalent unique situations of the world.
5. Personal selling is based on direct communication, where one party (e.g., salesperson) uses his personal skills and techniques for building personal relationships with another party (e.g., the shipper) which results in both parties obtaining value.
6. The movement of materials along the drift is called longshore float.
7. The principal reason for using the sea transport method is that it can be used for business, relaxation/recreational, or military purposes.
8. Shipping is the best method of transport since the shipping industry has the most optimized cargo costs, as it is a unique method amongst the other methods for transporting goods through long distances.
9. The Strait of Malacca is one of the most essential shipping routes in the world. Almost 40 per cent of all the world trade is carried out through this route.
10. The Panama Canal is the bridging water body between the Pacific and the Atlantic Oceans.
11. Sea transport can be sub-divided into land based and water-based transportation or transportation via air.
12. A reefer (or Refrigerated) ship is particularly designed and used for the transportation of perishable goods which require controlled temperature—generally organic products, meat, vegetables, dairy items and different foodstuffs.
13. Fishing/Angling ships are watercrafts/ships used to catch fishes and other marine natural lives. They are utilized for both pleasure fishing as well as trade fishing.
14. International Maritime Organization's (IMO) main role is to create a regulatory framework for the shipping industry that is fair and effective, universally adopted and universally implemented.
15. Framed by methods in the 1948 Convention on the International Maritime Organization, IMO at first centered on sea security and route.
16. The GloBallast Partnerships Project (2007-2017), a joint initiative of GEF, the United Countries Development Programme (UNDP) and IMO, has been fruitful in helping creating countries in lessening the exchange of possibly unsafe oceanic life forms and pathogens in ships; counterbalance water and actualizing the IMO Ballast Water Management (BWM) Convention.

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## 1.10 QUESTIONS AND EXERCISES

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### Short-Answer Questions

1. What is logistics management?
2. What is the importance of shipping?
3. How is Public Relations (PR) an essential component of the tactical marketing mix which manages information flow between the shipping companies and its customers?

4. Write a short note on longshore drift.
5. What is the One Belt, One Road initiative?
6. What are the aims and objectives of reviving the Maritime Silk Route (MSR)?
7. What are cargo ships? How can they be classified?
8. List the functions of International Maritime Organization (IMO).

### Long-Answer Questions

1. 'Sea transport is an essential factor of world economic progress for the oceanic nations.' Is the statement true? Justify your answer.
2. Describe the reasons for the use of sea trade over and above other modes of transportation.
3. How has marine transportation affected the global markets and supply chain management?
4. Explain the method of coastal and ocean transportation.
5. What were the infrastructure development and expansion projects announced, launched or completed, with a view to improving connectivity, enhancing access to suppliers and consumers and enabling trade and regional integration in 2015?
6. What are the busiest global sea routes?
7. Discuss the various types of ships.
8. Describe the regulations concerning dangerous and polluting cargoes, including the class structure.

### NOTES



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# UNIT 2 CHARTERING PRINCIPLES AND PRACTICES

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## NOTES

### Structure

- 2.0 Introduction
- 2.1 Unit Objectives
- 2.2 Types of Charters
  - 2.2.1 Voyage Charter
  - 2.2.2 Time Charter
  - 2.2.3 Bareboat Charter
- 2.3 Freight Structure and Practice and Rate Dynamics
  - 2.3.1 Determination of Freight Rate of Transported Goods
  - 2.3.2 Basic Principles Determining Freight Rate
  - 2.3.3 Individuals/Firms Affecting Freight Rate Determination
  - 2.3.4 Freight Determination and Determinants
- 2.4 Shipment System: Conference vs Competitive
- 2.5 Multimodal Transport System
  - 2.5.1 Advantages of Multimodal Transport
  - 2.5.2 Multimodal Transportation of Goods Act, 1993
- 2.6 Technological Developments in Ocean Transportation
  - 2.6.1 Current Trends in Ocean Transportation
  - 2.6.2 Development of Information Technology and its Impact on Ports
- 2.7 Summary
- 2.8 Answers to ‘Check Your Progress’
- 2.9 Questions and Exercises

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## 2.0 INTRODUCTION

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Contract chartering in maritime delivery is the enlisting of a ship and the team members for a voyage between the port where the voyage begins and the destination port. The charterer pays the vessel proprietor for each tonne or singular amount premise. The proprietor pays the port expenses (barring stevedoring), fuel expenses and group costs. The payment given for the usage of the ship is known as cargo.

Chartering is an activity within the shipping industry. There are cases where a charterer owning a cargo may employ a shipbroker, giving him a certain price called freight rate, to find a ship to transport the cargo. This freight rate can be on a per-tonne basis over a certain route or may be given in terms of a total sum—per day basis for the decided duration of the charter. For oil tankers, it may be given in the Worldscales points.

It can also happen that a charterer is a member of a party without a cargo and might take a vessel on charter from the proprietor for a certain time period and then trade the ship to transport cargoes at a higher rate than the rental rate. The charterer can also earn profit by re-letting the ship to other charterers in a rising market.

The charter party is a standard contract form used to pen down the exact rate, time period and other terms agreed upon by the charterer and the ship-owner. This may depend on the type of charter and the type of ship. The ship-owner keeps a control on the route and administration of the vessel, however, its conveying limit is locked in by the charterer. This unit discusses the chartering principles and practices.

## NOTES



**Charter party:** 'Charter party' is a contract by which the ship owner lets the ship to another person.

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## 2.1 UNIT OBJECTIVES

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After going through this unit, you will be able to:

- Describe the types of charters—voyage, time and bareboat
- Analyse the freight structure and practices
- Discuss the determinants of freight rate
- Assess the types of shipping system—conference and competitive
- Explain the significance of multimodal transport system
- Evaluate the technological developments in ocean transportation

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## 2.2 TYPES OF CHARTERS

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'**Charter party**' is a contract by which the ship owner lets the ship to another person. Charter parties' content is highly standardized and are grouped into three main types:

- **Voyage charter:** It is a contract of carriage for one or more voyages.
- **Time charter:** The ship is manned and operated by the owner but its capacity is let to the charterer for a specified time period.
- **Demise or bareboat charter:** The charterer takes full control of a ship as if it is his/her own ship; dealing with all ship aspects such as manning and maintenance.

### 2.2.1 Voyage Charter

The following clauses are present in a voyage charter:

#### (a) General

Under voyage agreements, the charterer pays for the utilization of the ship's cargo space for one, or in some cases more than one, voyage. In these cases, the owners earnings is normally based on the amount of cargo loaded, or as a lump sum, not depending on the amount of cargo loaded.

#### (b) Charter Party Agreement

- The operator must be aware of the contract party agreement or fixing telex and convey to the Manager any point that needs to be clarified.
- In conditions where the customer as well as merchant does not advance the contract party, the Commercial Ship Operator might ask for the voyage data essential.
- A voyage document should be maintained by the particular contract party for each ship which should be kept by the Operator. Electronic voyage documents must be made and kept in the organization's information body.
- These records are to be particularly documented and kept in the post installation office. These documents should be kept in the provincial office until every single remarkable thing relating to the voyage has been shut, after which they must be filed.

- The contract party archive is to be recorded in the voyage document if made accessible.
- Where the contract data is in the form of an e-mail, fax, telegram or a hand written letter, this data is to be recorded in the voyage document.

**(c) Instructions to the Administrator**

- The operator should make the following details known to the Administrator through an e-mail or telegram as soon as they are received after the accomplishment of charter party negotiations. In many cases, this data will take the form of a recap and/or charterers voyage orders. Also, in some cases the operator should be able to extract the significant data from the charter party:
  - o Charterer
  - o Laydays
  - o Ports
  - o Tendering of Notices
  - o Cargo
  - o Load/Discharge Rates
  - o Agents
  - o Bunker Arrangements
  - o Any other information which could affect the prosecution of the voyage
- On receiving the charter party, the operator should check the progress detail against the charter party, collect and take up any material disparities with the customer before sending a copy of the charter party to the Administrator.
- In cases where the charter party is not made accessible then the Operator is to advance whatever significant data that has been received from the customers/ charterers. If the administrator is instructed of any necessities of the charter directly by the charterer or by their agent, the administrator is required to convey these requirements to the Operator.

The above mentioned points must be documented in the voyage file.

**(d) Communications with the Vessel**

The operator should be accountable for the day-to-day communications on post fixture operation matters, the charterer's voyage orders and other significant matters, with the administrator. The particular means utilized and the conditions for communication rely upon the criticality of the circumstance.

**(e) Cargo**

The operator shall monitor the following points by communicating with the Administrator:

- The cargo spaces have been acknowledged by the shippers
- The correct quantity of cargo agreed under the charter party has been loaded/ discharged
- There are no inconsistencies in the bill of lading or shore to ship weights
- There are no problems unsettled before the parting of the ship

**NOTES**

## NOTES

Any issues involving business cargo matters might be taken care of by the Operator who shall communicate with the Administrator through telephone, e-mail or telegram, whatever suitable, to help him in settling these issues. Where required, the technical manager is to be involved. All the communications between the Operator and the Administrator and the other parties should be documented in the voyage file.

All other cargo related papers must also be documented in the voyage document. It is the responsibility of the Administrator to monitor the type and the storage of cargo, however, the Operator should also know as to how this relates to the working of the vessel. Also, it is significant that the Operator makes sure that the vessel is conforming to the charter party requirements in this respect.

### **(f) Freight Collection**

With the help of an Assistant, the Operator is accountable for making sure that the freight is billed and collected in the most proficient and precise manner possible. Also, if there are any problems relating to freight collection, the Manager should be informed at once.

### **(g) Claims and Expenses**

It is the responsibility of the Operator to ensure that all the expenses and entitlements applicable under a voyage charter are assembled as precisely as possible and submitted to the charterers in the most effective manner. This includes claims for cargo heating, demurrage/dispatch, hold cleaning, shifting, charterer's expenses, etc.

With the help of the Commercial Assistant, the Operator will monitor each claim closely until all outstandings have been recovered from the charterers. The manager should be informed about any problems faced in this area.

### **(h) Agency**

With the help of the Commercial Assistant, the Operator is accountable for the appointment of agents for the ports that the vessel requires under the voyage instructions of the charterer. These agents will either be chosen by the charterer or by the Operator so that it provides the best cost and service. This is based on the clients past experience or preferred agency list. It is the duty of the Operator to make sure that the agents work in a proficient and cost effective manner and to bring it to the notice of the Manager, clients or charterers any underperformance issues. Additionally, the Operator is responsible for checking the agent's expenditure accounts when received to make sure that the voyage costs are properly allotted. The Operator should also check that all the charterers' expenses have been billed out appropriately.

## **2.2.2 Time Charter**

The following clauses are present in a time charter:

### **(a) General**

The time charter is different from the voyage charter. This is because here the owner keeps the crew, vessel and equipment at the disposal of the charterer. The vessel is then the entire responsibility of the charterer and has full commercial control over it. This includes handling operations, arranging bunkers, port charges and all the other

activities that is usually the responsibility of the owner under a voyage charter. The owner will receive under a time charter hire based on the period of the charter or per dead-weight tonne per month.

**(b) Charter Party**

It is the responsibility of the Operator, on receiving the fixture note or recap, to make sure that the Administrator receives all the necessary information in order to conform to the terms of the contract and to be able to work with the time charterers. The Operator should be particularly cautious about any cargo exclusions, performance warranties, hire rate and frequency of payment, trading limits and the period of the charter.

**(c) Hire**

It is the responsibility of the Operator to ensure that hire is billed according to the terms of the charter party and that it is collected on time. The Manager should be informed about any issues regarding the non-payment of hire.

**(d) On/Off Hire Surveys**

The Operator should make a point that on-hire and off-hire surveys are organized as per the requirement and that the customer's interests are safeguarded. It is also the task of the Operator to ensure that these surveys are carried out in a cost effective manner. This can be done by either sharing them with the charterer or by making sure that the on-hire survey coincides with the previous charter off-hire survey.

**(e) Speed and Performance**

The most significant aspect of time charters is speed and performance. The Operator should work towards ensuring that the Administrator has the entire knowledge of the provisions of the charter party warranties. It is the task of the Operator to make sure that proper arrangements are made to monitor and record speed and performance in order to collect any claims against the charterer or to check and counter any claims that may be received from the charterer.

**(f) Charter Reconciliation**

The Operator with the help of Assistants, should make sure that the time charter reconciliation is undertaken as soon as possible and it should be done accurately on the vessel being redelivered. This consists of delivery and re-delivery bunkers, owner's port expenses, off-hire claims, on/off-hire survey fees, performance claims and other similar matters.

**(g) Off-hire**

The Operator must communicate closely with the technical manager and the Master to make sure that the down time for owner's requirements is kept to a minimum. This will include communication regarding maintenance, stores deliver, crew changes and other such matters.

**(h) Claims**

It is the responsibility of the Operator for both collecting and countering any claims that may take place during the period of the time charter. The Manager should be consulted if disputes are to arise or in the event of difficult claims.

**NOTES**

## NOTES



**Freight rate:** Freight rate is the price at which a certain cargo is delivered from one point to another.

### Check Your Progress

1. What is contract chartering?
2. How is the content of the charter parties categorized?
3. How is the time charter different from the voyage charter?
4. Define bareboat charter.

### 2.2.3 Bareboat Charter

‘Bareboat charter’ means hiring of a ship for a stipulated period on terms which give the charterer possession and control of the ship, including the right to appoint the master and crew.

Article 12 of the United Nations Convention on Conditions for Registration of Ships provides the following provisions for bareboat charter:

1. Subject to the provisions of Article 11 and in accordance with its laws and regulations a State may grant registration and the right to fly its flag to a ship bareboat chartered-in by a charterer in that State, for the period of that charter.
2. When shipowners or charterers in States Parties to this convention enter into such bareboat charter activities, the conditions of registration contained in this Convention should be fully complied with.
3. To achieve the goal of compliance and for the purpose of applying the requirements of this Convention in the case of a ship so bareboat chartered-in the charterer will be considered to be the owner. This Convention, however, does not have the effect of providing for any ownership rights in the chartered ship other than those stipulated in the particular bareboat charter contract.
4. A State should ensure that a ship bareboat chartered-in and flying its flag, pursuant to paragraphs 1 to 3 of this Article, will be subject to its full jurisdiction and control.
5. The State where the bareboat chartered-in ship is registered shall ensure that the former flag State is notified of the deletion of the registration of the bareboat chartered ship.
6. All terms and conditions, other than those specified in this article, relating to the relationship of the parties to a bareboat charter are left to the contractual disposal of those parties.

## 2.3 FREIGHT STRUCTURE AND PRACTICE AND RATE DYNAMICS

**Freight rate** is the price at which a certain cargo is delivered from one point to another. The freight rate depends on the form of the cargo, the mode of transport (truck, ship, train and aircraft), the weight of the cargo, and the distance to the delivery destination.

The National Economic and Development Authority defines it as the price paid to the owner of a ship for the transportation of goods or merchandise by sea route from one specific port to another. The word ‘freight’ also means goods which are in the process of being transported from one particular place to another. The fee levied on the transport of supplies, materials, or equipment through a commercial carrier also may include packing, crating, and handling.

### Types of Freight Rates

The types of freight rates charged in normal business dealings are:

- **Advance freight:** This is payable in advance, before the delivery of goods used in liner cargo trade and tramping.

- **Lump sum freight:** This is payable for the usage of the entire ship or a portion of a ship.
- **Dead freight:** It is the charge payable on space booked on a ship but not utilized by the charterer or the shipper.
- **Back freight:** It is a payment that is owed to a maritime shipping company when the transportation of goods extends beyond the contracted destination port due to circumstances beyond the shipper's control.
- **Pro-rata freight:** This is charged when circumstances make it impossible to continue the voyage further and the shipper accepts delivery at the intermediate port.

### 2.3.1 Determination of Freight Rate of Transported Goods

The price which a transporter/shipper (party providing goods for shipping) or consignee (party to whom goods have been shipped) has to pay for the transportation of goods is determined by numerous factors.

The key factors which determine freight rates are as follows:

- Mode of transport
- Weight of the consignment
- Size of the parcel/consignment
- Distance of delivery port
- Pickup and delivery points
- Nature of goods being shipped

All the above mentioned factors play an independent role in determining the freight price or rate of transportation of goods. These factors generally work independently, yet many a times they are also related to each other. While determining the mode of transportation for delivering the freight to its designated place, a number of things needs to be kept in mind that affects the freight rates to be charged.

Freight transportation by railroad, ships, or airplanes are bound by their individual regulations which consider the federal, state, and local guidelines along with safety measures which form the basis of determining the freight rate.

On the whole, the freight rate decreases with the increase in the transportation of freight. This is a significant factor in the rate charged to individuals or businesses transporting freight. There are many industries whose only resolve is to provide cheaper freight transportation and facilitate small companies and people in moving freight from one place to another.

### 2.3.2 Basic Principles Determining Freight Rate

Some key principles which play a significant role in determining freight rates are:

- **Destination:** The destination or the end point is an important aspect for determination of oceanic freight rates. In other words, the longer the distance, the greater will be the ocean shipping rate and vice-versa.
- **Service charges:** The supplementary charges charged by port authorities like the security service charges have an effect on the sea freight rates.

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- **Seasons:** For particular types of goods, the season becomes a pertinent feature; grain and fruits conveyed during specific seasons will be levied greater freight rate.
- **Currency:** Currently, the common currency in vogue for international shipping purposes is the American dollar. Variations in currency exchange rate generally influences freight rates.
- **Fines and fees:** In case of any delay in the ship reaching the port due to overcrowding, a fine may be imposed which has an adverse effect on the sea shipping rates; the freight rates tend to increase to a great extent in certain cases.
- **Terminal fees:** Marine freight also depends on the fees due at the time of embarking the voyage from a port and after arriving the ultimate destination of the vessel. This fees also called terminal fees affects marine freight rates.
- **Bunker capacity:** Bunkers are containers made in ships to store fuel. Increase in fuel in the containers to their optimum capacity, it will affect the freight charges by way of the shipper having to pay more rather than of lesser quantity.

### 2.3.3 Individuals/Firms Affecting Freight Rate Determination

Consolidators, custom brokers, freight forwarders, and non-vessel operating common carriers (NVOCCs) can play an important role in determining freight rate due to their vast experience, good business dealings, and the expanse of their business operations. These factors are beneficial in keeping the freight rate to a minimum for small traders and people in need of shipping their goods. Usually shippers give load tenders to freight brokers who find competent carriers to carry freight at acceptable prices to all concerned parties. The brokers have a fair idea of technological tools that help in determining the most economical method of transporting cargo. Brokers have the capability to examine the market demand and capacity to ensure competitive freight rates. Let us briefly discuss the functions and responsibility of each:

- **Consolidators:** For the convenience of the shipper, the consolidator firm brings together freights from various companies into one shipment.
- **Customs broker:** A customs broker is either an individual or a company licensed by the treasury department of the country on the basis of requirement. The role of the broker is to enter and clear goods through customs for a client importing goods from another country.
- **Freight forwarder:** A freight forwarder is an individual whose job is to function as an agent on the shipper's behalf to arrange all transportation related services. A freight forwarder often makes the bookings or reservations. In the US, freight forwarders are authorized by the Forward Markets Commission (FMC) as Ocean Transportation Mediators and are the only designated freight forwarders for exporting shipments.
- **Non-vessel operating common carrier (NVOCC):** Cargo consolidators in the sea business generally buy space from a carrier and re-sell it to smaller shippers. The NVOCC issues bills of lading, announces tariffs and otherwise performs the role of an ocean common carrier, except that it does not provide the actual ocean or intermodal service.



**Customs Broker:** A customs broker is either an individual or a company licensed by the treasury department of the country on the basis of requirement.



**Freight Forwarder:** A freight forwarder is an individual whose job is to function as an agent on the shipper's behalf to arrange all transportation related services.

### 2.3.4 Freight Determination and Determinants

Policymakers and shippers have an interest in understanding the determinants of international maritime transport costs. Maritime transport handles over 80 per cent of the volume of global trade (and about 90 per cent of developing countries' volume of international trade is seaborne) and knowing the reasons for differences in what a trader pays for the international transport of merchandise goods can help identify possible areas for intervention by policymakers. Extensive recent research has helped identify the main determinants of freight costs (see Cullinane *et al.*, 2012; ECLAC, 2002; Sourdin and Pomfret, 2012; and Wilmsmeier, 2014; and the literature reviewed therein).

Figure 2.1 summarizes seven groups of determinants. In recent years, policymakers and industry players have increasingly mainstreamed environmental sustainability criteria into their planning processes, policies and structures, not only to respond to global challenges for reducing emissions and improving the environmental footprint but also as a means to improve energy savings and to achieve a more efficient allocation of available resources. Specific actions may involve developing fuel-efficient vessels, improving energy efficiency, reshaping transport architecture and networks, adapting and developing appropriate infrastructure, rethinking and optimizing operating procedures of freight logistics, harnessing new technologies, and supporting information and communications technology and intelligent transport systems.

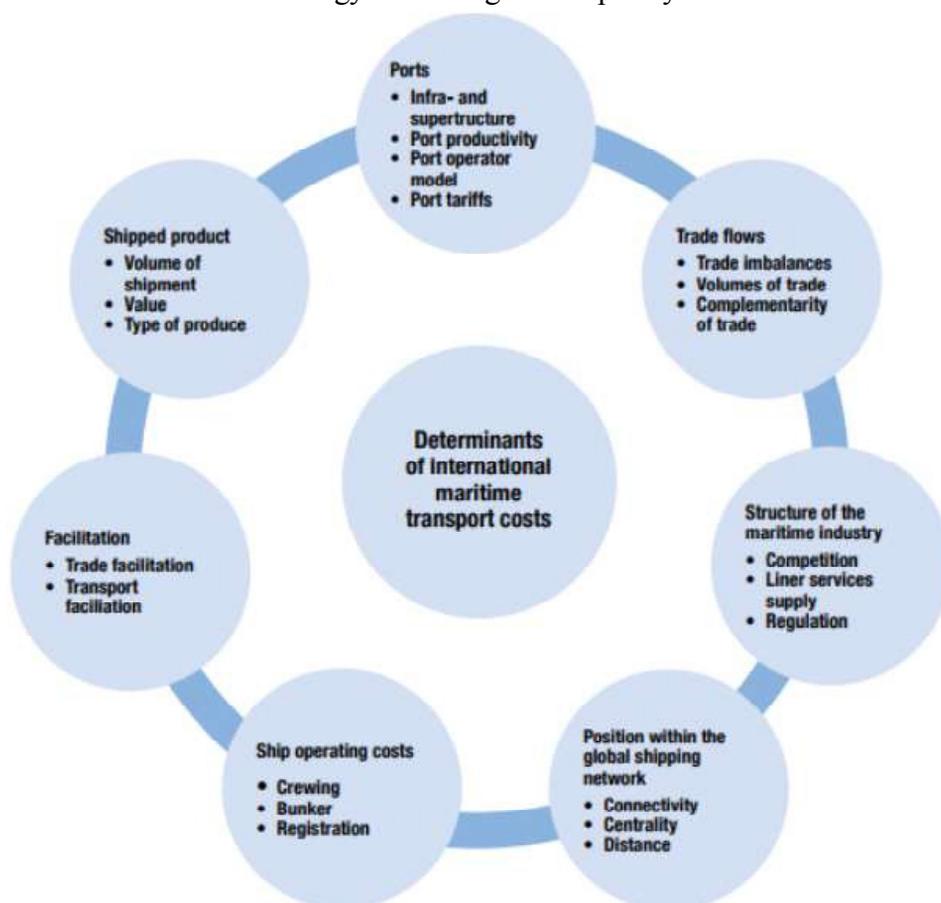


Fig. 2.1 Determinants of Maritime Transport Costs

Source: UNCTAD secretariat, based on Wilmsmeier, 2014.

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### 1. Trade and transport facilitation

Reducing waiting times in seaports for ships and their cargo has a direct bearing on trade costs. First, from the shippers' perspective, it implies lower costs associated with the holding of inventory en route to the final destination. It has been estimated that each additional day cargo spends in transit is equivalent to an ad valorem tariff of 0.6 to 2.1 per cent (Hummels and Schaur, 2013). Second, waiting times also imply costs to the carrier, which will ultimately have to be passed on to the client through higher freight charges. Wilmsmeier *et al.* (2006) estimated that a 10 per cent reduction of the time it takes to clear customs implies a reduction of the maritime freight of about 0.5 per cent.

Different trade facilitation measures can be implemented to reduce waiting times and improve the logistics performance of countries in other ways. It has been suggested by United Nations Conference on Trade and Development (UNCTAD, 2015) that the transparent publication of trade-related information (such as measures included in Article 1 of the WTO TFA) as well as the simplification and reduction of customs formalities (such as measures included in Article 10 of the WTO TFA) have a particularly high statistical correlation with a country's ranking in international logistics benchmarks, such as the World Bank Logistics Performance Index.

### 2. Ship operating costs

Technological advances have led to a continuous reduction in vessel operating costs over the decades. Improved fuel efficiency, economies of scale, and automation in port operations all help to reduce environmental and financial costs.

However, the drive to invest in lower operating costs may have some negative repercussion on freight rates. For example, as carriers invest in larger and more energy efficient vessels in the current market situation—to achieve economies of scale or to improve fuel efficiency—they inadvertently also contribute to a further oversupply of capacity. While the individual carrier may benefit from cost savings from deploying bigger vessels, all carriers bear the burden of the resulting oversupply and lower freight levels—to the benefit of importers and exporters.

Oversupply of shipping capacity combined with a weak global economy has been a main factor affecting freight rates in recent years. In an effort to deal with low freight rate levels and to leverage some earnings, carriers have looked at measures to improve efficiency and optimize operations in order to reduce unit operating costs. Some of these measures involved operational consolidation, slow steaming, idling, and replacing smaller and older vessels with newer and more fuel efficient ones.

Although operating costs in shipping have been decreasing, the total costs of the transport system have declined less. First, total costs for the carrier have to take into account the costs of investing in new assets. Second, larger ships and the increasing use of hub ports also require ports and port cities to invest in additional capacities for storage, handling and intermodal connections. These additional costs—including external social and environmental costs—are not born by the carrier, but by the ports and local communities.

Lower operating costs as compared to higher fixed costs (that is, the capital costs associated with larger and more fuel-efficient ships) will likely also lead to more

volatile freight rates. In the short term, the freight costs will have to cover at least the operating costs of the carrier; put differently, if the price of a transport service does not cover at least the fuel, communications and crewing costs, the carrier will anchor the ship and not offer the transport service. In the long term, however, the freight charges will have to cover the total average costs, including the fixed costs. As operating (variable) costs are lower today than in previous decades, this means that freight rates may also reach lower levels than in the past. Lower unit operating costs in bigger vessels, however, can only be reached if utilization rates are sufficient; if they are not, the carrier might be affected by diseconomies of scale. The risk of the latter also increases with ship size, particularly if demand and supply do not develop in line with each other. Effectively, freight rates appear to fluctuate more today than in earlier decades, and the changing structure of operating versus fixed costs is probably one of the reasons for this trend.

### 3. Distance and a country's position within shipping networks

Shipping goods over a longer distance requires more time (capital costs) and fuel (operating costs). Thus, trading partners that are further away from main markets might expect to be also confronted with higher bilateral freight costs. As regards the impact of distance, the traditional gravity model would suggest that countries that are further away from each other will trade less (see, for example, Tinbergen, 1962; Pöyhönen, 1963; and Linnemann, 1966). However, traditional gravity models ignore effective distance and connectivity as potentially described by network structures (for example, the regular shipping liner services configuration). Limão and Venables (2001) show, using the example of shipping costs to Baltimore, that geographic distance alone cannot explain price differences in freight rates.

The geographical maritime distance only has a small statistical correlation with freight costs. More than the geographical distance, it may be rather the economical distance, as for example captured by shipping connectivity and a country's position within global shipping networks that emerges as the relevant factor for international transport costs. Bilateral liner shipping connectivity, as captured by the UNCTAD Liner Shipping Bilateral Connectivity Index (LSBCI) has a stronger bearing on freight costs than distance.

Research on liner shipping connectivity frequently concludes that the position within a network has a more significant impact than the notion of geographical distance (Kumar and Hoffmann, 2002; Márquez-Ramos *et al.*, 2005; Wilmsmeier *et al.*, 2006; Wilmsmeier, 2014; Angeloudis *et al.*, 2006; and McCalla *et al.*, 2005). This important finding also needs to be seen in the context of the influencing variables of liner network connectivity such as ship size and frequency, which are determined by the overall level of trade, the geographic position and last but not least port infrastructure endowment and development options.

The functioning of the network and its structure involve complex interaction between the maritime and port industry, and also the country and international organizations acting as governing and regulating bodies. Decisions made by these actors will subsequently also influence the cost of transport for a country or region in trade with its counterparts.

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### 4. Competition and market regulation

Price-setting in transport and logistics markets significantly depends on the level of effective competition. Competition in the transport markets depends on the size of the market and effective market regulation. Any impediment to free competition and the potential existence of collusive behaviour, atomization and monopolies will have impacts on price structures, and these factors are discussed in the following paragraphs.

Historically, shipping lines have tried to concentrate activities in accordance with other market players at certain points, as they are aware of the benefits of economies of agglomeration and scope. This has given room for the development of hub-and-spoke strategies and share capacity, in which the hubs are nodes for high-volume services to interchange cargoes and to transfer cargo to secondary routes.

The different strategies of shipping lines, the balance of power between shipping lines, shippers and ports, and constraints related to inland transportation can impact on the evolution and characteristics of and competition in maritime shipping networks. Moreover, strategic alliances between the port and the shipping industry, which have both been driven by strong concentration processes and vertical integration at global level, have a profound influence on maritime network structure and also on the degree of integration of a region in the global maritime transport network.

Policymakers need to carefully observe concentration processes in the maritime industry and be aware of possible negative effects on the trade and competitiveness of a country's exports, predominantly in network peripheral countries and regions.

### 5. Value, volume and type of shipped product

The influence of the unitary value of the product on ocean freight rates has to be interpreted in the context of the history and structure of shipping markets. The value of the product also determines the elasticity of demand, that is, the willingness of the shipper to pay higher or even premium rates. Earlier works (Wilmsmeier, 2003; Wilmsmeier *et al.*, 2006; Martínez-Zarzoso and Suárez Burguet, 2005; and Wilmsmeier and Martínez-Zarzoso, 2010) all identify a relevance of the product unit value on transport costs. Palander (1935) had already proposed that transport costs were not regular but varied according to the weight, bulk, value and perishability of the product, and mode of transport and distance. Radelet and Sachs (1998) found that countries differed in their average 'cost, insurance, freight'/'free on board' ratios not only due to differences in shipping costs but also due to differences in composition of commodity mix in external trade.

Despite the fact that there is no obvious reason for the connection between the freight rate and value of a product, a wide range of works describe the relationship between a product's unit value and the freight charged. The reason is that operators assume that unit value is inversely related to the elasticity of demand for transport. Besides insurance costs, feeding in hub-and-spoke networks, modal switching and the like, can also have an influence. Each product has a certain risk sensibility during transport. Risk in this context can refer to timely delivery, the probability of theft and/or high sensitivity to changes in the environment (temperature and the like).

Wilmsmeier and Sánchez (2009) analysed transport cost determinants for containerized food imports to South America and showed that a 10 per cent rise in the value of the commodity increased transport costs by around 7.6 per cent. Special

transport conditions and needs for certain types of cargo are also reflected in the structure of international maritime transport costs. Containerization has produced standard units in terms of size; nevertheless the requirements for transporting goods vary and thus different types of containers exist to satisfy these demands. The transport of refrigerated cargo has certain implications.

Economies of scale occur at two different levels. First, system internal economies of scale, which reflect the decrease in transport costs per ton, as the size of the individual shipment increases. Second, system external economies of scale, which reflect the decrease in transport costs as the volume of trade between two countries increases. The latter is also linked to other determinants of transport costs, such as levels of competition, vessel operation costs and port infrastructure.

## 6. Port characteristics and infrastructure

Port performance is essential for the efficiency and effectiveness of the maritime network. Port infrastructure endowment can be described by variables such as number of cranes, maximum draught and storage area at origin and destination ports. The interaction of these variables is decisive. Installing ship-to-shore gantries, for example, may well lead to higher port charges for the shipping line. The line may still achieve an overall saving, because its ships spend less time in the port, or because it can change from geared to gearless vessels. This, in turn, will also lead to lower freight rates.

However, development of port infrastructure is only worthwhile if the entire transport system benefits and not if bottlenecks are only shifted to another element within the system. Factors influencing productivity are physical, institutional and organizational. Physical limiting factors include the area, shape and layout of the terminal, the amount and type of equipment available, and the type and characteristics of the vessels using the terminal. Lack of cranes, insufficient land, oddly shaped container yards, inadequate berthage, inadequate gate facilities, and difficult road access are all physical limiting factors. Productivity must be considered in a system perspective for it to be of maximum value to industry. This is important from a policy perspective, thus emphasizing the need for co-modality and multimodal visions in policy recommendations and guidance. All players should have an awareness of the entire system and be wary of becoming its weak link.

Empirical results presented by Wilmsmeier *et al.* (2006) are quite clear and straightforward: Increases in port efficiency, port infrastructure, private sector participation and inter-port connectivity all help to reduce the overall international maritime transport costs. If the two countries in their sample with the lowest port efficiency improved their efficiency to the level of the two countries with the highest indexes, the freight on the route between them would be expected to decrease by around 25 per cent. Improvements in port infrastructure and private sector participation, too, lead to reduced maritime transport costs. Unlike distance, port efficiency can be influenced by policymakers. Doubling port efficiency at both ends has the same effect on international maritime transport costs as would a 'move' of the two ports 50 per cent closer to each other.

Hence, improving port efficiency and productivity and introducing technical advances as well as port design and planning measures to improve efficiencies and reduce time can reveal important insights to policymakers.

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### Check Your Progress

5. What is freight rate?
6. What is back freight?
7. How does destination or the end point play an important role in determining oceanic freight rates?
8. On what does the competition in the transport markets depend?

## 7. Trade flows and imbalances

The volume and type of cargo has a direct bearing on the carrier's costs. The volume of cargo is important as it allows for economies of scale, both on the sea leg as well as in port, although at times the economies of scale achieved on the shipping side may lead to congestion and diseconomies of scale in the port.

The extent to which the costs incurred by the carrier are passed on to the client depend on the market structure and also on the trade balance. On many shipping routes, especially for most bulk cargoes, ships sail full in one direction and return almost empty in the other. Having spare capacity, carriers are willing to transport cargo at a much lower freight rate than when the ships are already full. Freight rates are thus far higher from China to North America than for North American exports to China. By the same token, freight rates for containerized imports into Africa are higher than for exports. To some extent the differences in freight rates that depend on the direction of trade may be considered, in order that a market mechanism may help reduce imbalances. Those that have a trade deficit pay less for the transport of their exports.

In containerized trade, balance of trade flows is key in price-setting for shipping lines. Shipping lines calculate the costs to move a container on a return-trip basis, taking probability for empty positioning into account. When trade balance is negative, a country's imports exceed its exports and the greater the imbalance, the lower the freight rates will be for the country's exports; but if exports exceed imports, then the larger the imbalance, the higher the expected freight rates for exports will be. This divergence, associated with the sign of trade imbalance, occurs as a result of the freight rate price-fixing mechanisms applying in the liner market. Liner companies know that recurrently on one of the legs of the turnaround trip, the percentage of vessel capacity utilization will be lower, and therefore adapt the pricing scheme to the direction of the trip and to its corresponding expected cargo. Freight rates will be higher for the shipments transported on the leg of the trip with more traffic, as the total amount charged for this leg must compensate the relatively reduced income from the return trip, when part of the vessel's capacity will inevitably be taken up with repositioned empty containers. Excess capacity on the return trip will increase the competition between the various liner services, and as a result freight rates will tend to be lower. Organization of the transport service market can reduce empty movements through information and equipment sharing, freight-pooling, and transnational cooperation of transport service providers.

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## 2.4 SHIPMENT SYSTEM: CONFERENCE VS COMPETITIVE

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Competition law is also known as 'antitrust law' (e.g., the United States), or 'anti-monopoly' law (e.g., China and the Russian Federation). In the past it was also known as 'restrictive trade practices law' in the United Kingdom and in Australia. Although the content and practice of competition laws, including those applicable to liner shipping, vary in different countries, their purpose is 'to control or eliminate restrictive agreements or arrangements among enterprises, or mergers and acquisitions or abuse of dominant positions of market power, which limit access to markets or otherwise unduly restrain

competition, adversely affecting domestic or international trade or economic development' (UNCTAD, 2010: 2).

Throughout its history, liner shipping, the business of offering regular time scheduled ocean shipping services in international trade, has enjoyed exemptions from the effect of certain competition rules and, as a result, conferences among oceans carriers, allowing for freight rate fixing, have been permitted. The main reason for this practice has been the belief that it was justified by the specific economic problems faced by liner shipping as compared to other industries. These include unusually high fixed costs, very large initial capital investment, other large non-cargo costs, overcapacity, etc. As a result, it was argued that without collective freight rate fixing, open and unrestrained competition would lead to 'destructive' competition, instability of prices and undesirable oligopoly.

Following discussion in many countries and regional organizations as to whether exemptions from competition rules, historically enjoyed by liner conferences, are still justified, there has been a tendency during the last decade towards review and narrowing of the scope of such exemptions. In addition, there appears to have been a shift of emphasis among shipping lines away from the traditional liner conferences, and towards the establishment of alliances and other forms of efficiency-enhancing operational types of agreements. In these circumstances, carriers continue to collaborate to achieve operational improvements, while the competition authorities ensure that there remains sufficient competition in the market so that eventual cost savings are passed on to the shippers.

Liner shipping has for a long time been governed by cooperative arrangements, originally in the form of conferences, and later, with the emergence of containerization, also in the form of consortia, vessel sharing agreements, strategic/global alliances, capacity stabilization agreements and discussion/talking agreements.

Liner conferences, also called 'shipping conferences' or 'ocean shipping conferences', have had the most significant influence on competition in the liner shipping market compared to other organizational forms of operation. Liner conferences are 'formal or informal private arrangements between carriers or between shipping lines which enable them to utilize common freight rates and to engage in other cooperative activities on a particular route or routes' (OECD, 2002b: 16).

The United Nations Convention on a Code of Conduct for Liner Conferences, 1974, defines liner conferences as: 'A group of two or more vessel-operating carriers which provides international liner services for the carriage of cargo on a particular route or routes within specified geographical limits and which has an agreement or arrangement, whatever its nature, within the framework of which they operate under uniform or common freight rates and any other agreed conditions with respect to the provision of liner services' (UNCTAD, 1974: 4).

Liner conferences have lasted for years, although individual conference membership may change according to carriers' business strategies. The first liner conference was established in 1875 covering routes between the United Kingdom and India, with the aim to control competition among its members and to reduce competition from outsiders. This model quickly spread around most of the main world trade routes. According to the Organization for Economic Cooperation and Development (OECD), as of 2002, there were around 150 shipping conferences

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operating in the international freight trade market, with a membership ranging from two to as many as forty separate lines. Although their relevance was declining since the 1970s, conferences still accounted for 60 per cent of TEU11 capacity in the major trades (see OECD, 2002a: 20).

In the last decade, the role of conferences has further declined. Only 18 per cent of existing conference agreements involve the main routes, while almost half of them involve the North-South routes. The top three carriers are included in many agreements but mostly on the North-South and Intraregional services, as the main routes are largely served through other cooperation agreements, mainly strategic alliances. Some conference agreements are still in force in the East Mediterranean and for some parts of the main Far East-Europe routes (e.g., those connecting Middle East countries with India or the Far East). Other conference agreements concern Australian or African connections and tend to serve those markets, mainly from Asiatic ports. The number of carriers involved in these agreements ranges from only two carriers to more than 10 in a few cases, with a maximum of almost 30 carriers. The majority of the carriers that are part of conferences are small-medium sized companies. Yet, almost all the top 30 players (in terms of vessels deployed capacity) are included in at least one conference agreement. Half of these liners are involved in just one conference while no more than 10 per cent are involved in more than ten (see OECD, 2015).

In terms of membership, liner conferences can be classified as being either open or closed. For instance, the United States approach has been that of open membership, with equal possibilities for all lines to become a member of a conference, while the rest of the world's approach, in general, has been in favour of closed conferences, where in order to be admitted, new members have to apply and meet certain specific conditions.

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## 2.5 MULTIMODAL TRANSPORT SYSTEM

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The basic feature of multimodal transport is that at least two modes of transport are used.

The definition jointly given by the United Nations Economic Commission for Europe (ECE), the European Conference of Ministers of Transport (ECMT) and the European Commission (EC) is 'Multimodal transport: carriage of goods by two or more modes of transport.'

Sometimes, multimodal transport is connected to the international transport of containers and the need for transport facilitation. It derives its name from the United Nations Convention on International Multimodal Transport of Goods of 1980. The definition of the term 'international multimodal transport' is provided in article 1 of the Convention, which reads as follows:

'International multimodal transport' means the carriage of goods by at least two different modes of transport on the basis of a multimodal transport contract from a place in one country at which the goods are taken in charge by the multimodal transport operator to a place designated for delivery situated in a different country.

Therefore, **multimodal transport** means a mixture of various means of transport, in order to enable easy conveyance of cargo, thus making it more effective. In multimodal transportation of cargo, there is an involvement of more than one kind of mode/vehicle in order to facilitate the movement of goods from their original place to their destination.

### Check Your Progress

9. What kind of arrangements have governed liner shipping?
10. How can liner conferences be classified in terms of membership?



### Multimodal Transport:

Multimodal transport means a mixture of various means of transport, in order to enable easy conveyance of cargo, thus making it more effective.

Multimodal transport is carried out by the means of trucks, trains, ships, airplanes or some additional means of transport for the delivery of goods.

Multimodal transport has proven to be very advantageous as in it lies the most effective arrangement of multiple means of transportation. At the same time, it also helps in improving timelines and reducing inventory costs which keep the cost of goods under control. Moreover, multimodal transport also decreases the ecological trail of transportation which results in high sustainability of the environment.

Sometimes, in spite of the support provided by conservationists and freight shipping specialists, multimodal transport might bring about some extra cost due to the use of modal interfaces—transshipments, handling, etc. However, in order to overcome this problem, a Freight Forwarding Company may be hired by a shipper which provides an interface between the numerous available modes of transport without the involvement of the importer or the exporter.

For more complicated shipments or a more exhaustive exploration of the quality/price ratio of every portion of the shipment, multimodal transport is a good, generally the sole, choice to envisage, chiefly to/for countries that do not have their borders situated at the sea shore.

### 2.5.1 Advantages of Multimodal Transport

The advantages of multimodal transport are as follows:

- Concentration of obligation in one conveyance operator
- Use of international experience in conveyance as well as in the field of bureaucracy and commerce
- Economies of scale in transport negotiations
- Better use of available infrastructure and more efficient means of transport; focused on cost reduction
- Reduction of indirect costs (e.g., human resources)

### 2.5.2 Multimodal Transportation of Goods Act, 1993

The Multimodal Transportation of Goods Act, 1993 (MMTG) provides for the regulation of Multimodal Transportation of Goods from any place in India to any place outside India involving two or more modes of Transport on the basis of a single Multimodal Transport Contract. This Act came into force from 2 April 1993 and it provides for Registration of a person a Multimodal Transport operator and Multimodal Transportation can be carried out only by persons registered as MTO under MMTG Act, 1993. The Director General of Shipping has been notified as the competent authority to perform functions under the Act including registration of MTOs. The MTO registration is valid for a period of 1 year and may be renewed for further period of one year from time to time. The Director General of Shipping has, after obtaining the prior approval of Ministry of Surface Transport, prescribed the Multimodal Transport Document under Rule 3 of Multimodal Transport Document Rules, 1994.

The Multimodal Transportation of Goods Act, 1993 was introduced to facilitate the exporters and give them a sense of security in transporting their goods. The concept of door to door delivery, which is Multimodal Transportation is all about, is catching up fast in international trade. Reduction of logistics costs is one of the important aspects

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of Multimodal Transportation, thereby reducing the overall cost to the exporter and making his products more competitive in the international market. It is in this context that the Government of India thought it necessary to codify the rules and regulations governing Multimodal Transportation and enacted the Multimodal Transportation of Goods Act, 1993 based on the UNCTAD/ICC rules which have gained widespread acceptance. The Multimodal Transportation Act lays down the standard terms and conditions governing this activity. Under the provision of the Act only those companies who are registered by the competent authority which has been notified to be the Director General of Shipping, can carry out Multimodal Transportation. This requirement of registration has been imposed by the government to ensure that only such companies which have the necessary expertise infrastructure and financial capability are allowed to undertake Multimodal Transportation so that the interests of shippers are fully protected.

As per the MMTG Act three categories of companies are eligible to be registered as MTO's. They are: (i) shipping Companies (ii) Freight Forwarding Companies (iii) Companies which do not fall in either of the above two categories. In the case of Shipping Companies (which own and operate vessels) as well as Freight Forwarding Companies the turnover of the last three years should be <sup>1</sup> 50 lakhs or more to make them eligible for registration as MTO.

In the case of a company falling under third category above, the Subscribed share Capital of the company should be <sup>1</sup> 50 lakhs or more. In addition the applicant company should satisfy the following:

- Submit a certificate of turnover duly signed and issued by a Chartered Accountant within the meaning of C. A. Act, 1949
- Have offices/agents/representative in atleast two other countries

### **Multimodal Transport Document and its implementation in India**

The business environment is moving faster than ever before. Increased competition at home and abroad means quality as well as profitability must be preserved. We live in a constantly evolving world where harmonization is extremely important and the trade desperately requires an efficient and simple door to door liability system. This was one of the reasons why ICC and UNCTAD developed the new UNCTAD/ICC Rules for Multimodal Transport Documents.

Increased containerization has resulted in Multimodal Transport of Goods under a single transport document covering all modes of transport from the exporter's premises to the consignee's premises such Multimodal Transportation under a single document has a number of advantages like reduction in overall transport cost reduction in delays, smoother and quicker movement of and improvement in quality of services. In India there was no uniformity followed in respect of Multimodal Transport of goods. Government felt that absence of uniformity in such practices, leads to ambiguity and imbalance of interests between the operators and the cargo owners. A working ground was accordingly, set up to examine the prevalent situation and to recommend a law which should clearly determine the responsibilities and liabilities of Multimodal transport operators for loss or damage. The new law on Multimodal transport was enacted by issue of an ordinance in October 1992 and was later on replaced by the Multimodal Transportation of Goods Act, 1993.

## What is the multimodal transport document?

With the advent of containers, the ocean carriers started extending their services to inland locations, as containers, are smoothly and easily handled from one mode of transport to another. One of the most important ingredients involved in such Multimodal Transport is the existence of a legal regime to govern the terms of the contract and specify the basis of liability and responsibilities of the Multimodal Transport Operator. Previously, a document called Combined Transport Document (CTD) was being issued. However, although the format of the document broadly conformed to a specimen prescribed by the International Chamber of Commerce (ICC), the CTD has not been adopted by all operators uniformly. Thus, there was an absence of uniformity of liability and other condition. In India the Foreign Exchange Dealers Association of India (FEDAI) has evolved its own rules laying down the responsibilities and liabilities of Combined Transport Operators from the inland container depots. However, these rules could not obtain wide acceptance mainly because the Combined Transport Document evolved by FEDAI did not confer negotiability and title to the goods and also because such documents were required to be exchanged for a regular on-board ocean bill of lading at the port unless the letter of credit specifically permitted the production of a combined transport Document in place of a regular Bill of Lading.

Looking to the urgent need of Industry and keeping in view the provisions of the Multimodal Transportation of Goods Act, 1993 which is substantially based on the rules framed by the ICC and also taking into account the provisions of the UN Convention of 1980 on Multimodal Transportation of Goods, the Director General of Shipping, with the approval of the Government, has issued an Order on 17 March 1994 prescribing a model for the Multimodal Transport Document (MTD). The document has been prepared for carrying out the provisions of the Act keeping in view the primary objective of the legislation that the carriers are there to serve trade and not the other way around. The Multimodal Transport Document issued under the present law would be: (i) a contract for the Transportation of Goods by Multimodal Transport, (ii) a negotiable document unless it is marked non-negotiable at the option of the consignor, (iii) a document of title on the basis of which its holder can take delivery of the goods covered by it. The concerned parties who would have commercial interest who would be governed by the document once it is executed would be: (i) The MTO who is the person responsible for the execution of the Multimodal Transport Contract, (ii) The consignor who places the goods in question with the MTD for transporting the same and the consignee who is to take delivery at the destination, (iii) The bankers who would provide the mechanism for documentary credit, (iv) The insurers who insure the goods against loss or damage and the liability insurers who would cover the MTO's liability under contract.

### MTD as an instrument to enforce the provisions of the Act

Once the Multimodal Transport Operator executes the Multimodal Transport Document, he immediately assumes the role of the owner of the goods, the Principal thereby authorizing the MTO to exercise the rights as that of the owner for claiming damages and for other purposes, wherever necessary. The provisions of the Act shall have overriding effect over all other laws and any contract for Multimodal Transport made in contravention of the provisions of the Multimodal Transport Act would be null

## NOTES

## NOTES

and void. The issuance of the Multimodal Transport Document confers and imposes on all interested parties the rights, obligations and defences set out in the act. In issuing the MTD, the Multimodal transport operator assumes responsibility for the execution of the contract as well as would be liable for the loss or damage to goods or delay in delivery as contained in the Multimodal Transportation of Goods Act, 1993.

### **Contents of the MTD: General nature**

The document contains, inter-alia, particulars regarding general nature of goods, the name and principal place of business of MTD, the name of the consignor, the name of the consignee if specified by the consignor, the place and date of taking charge of the goods by the MTO, the place of delivery of the goods, the date or the period of delivery of the goods at the place of delivery, whether it is negotiable or non-negotiable, the place and date of its issue, etc. In addition, the standard terms and conditions regarding basis of liability of the MTO for loss or damage, delay etc. have been incorporated in the document. Relevant particulars contained in the internationally accepted documents recognized by International Chamber of Commerce have been taken into consideration while prescribing the document. The MTOs can now issue on a uniform basis Multimodal Transport Document as a negotiable instrument as per the Multimodal Transportation of Goods Act, 1993 and the banks will have no difficulty in discounting the bills when such a document is presented.

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## **2.6 TECHNOLOGICAL DEVELOPMENTS IN OCEAN TRANSPORTATION**

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Historically, civilizations have always been situated near water bodies. This is because travelling through water bodies is a more effective method than travelling by land. Waterways are extremely significant to the transportation of people and merchandise all over the world. The complex connectivity network between coastal ports, inland ports, rail, air, and truck routes constitutes a basis of material economic wealth throughout the world. A port is not just a linkage between land and sea. It can accommodate industrial complexes, cities and warehouses in order to meet the growing demands of customers. In many countries, ports will in the long term play a key role in efforts to achieve harmony among cities, industrial complexes, logistics facilities and gateways to markets.

In developing countries, waterways are important avenues for local and regional commerce. Fruit and vegetable sellers flock to floating markets on rivers and canals. Bangkok and Thailand are good examples of inland trade through waterways.

The speed and low cost of conveying goods through water affected the settlements close to the water bodies, viz., rivers, lakes, canals, and oceans. Goods produced in inland farms were ferried using inland waterways to the coastal ports. Goods transported by smaller vessels from nearby ports are transported to various cities and transferred onto bigger oceangoing ships. These ships from the smaller ports then convey imported goods back to the surrounding ports.

The economic growth post the Second World War led to improved levels of world trade. As new global markets developed, the United States took the opportunity

### **Check Your Progress**

11. State the basic feature of multimodal transport.
12. State the main provision of the Multimodal Transportation of Goods Act, 1993 (MMTG).
13. What are the results of increased containerization in the shipping industry?
14. For what reason is the Multimodal Transport Document (MTD) prepared?

to take advantage of the new prospects. Developing countries needed capital goods, agricultural products, consumer goods, and commercial services, which the US was in the position to provide.

The institution of **palletization**—the method of storing and transporting goods stacked on a pallet, and shipped as a unit load—and roll-on/roll-off cargoes empowered vessels to be loaded and unloaded in a lesser amount of time. The beginning of containerization in the late 1950s intensely affected the shipping industry and port organization. The advent of larger container ships has made large ships the key issue in port development. The demand for bigger ports with greater reach for cranes has grown rapidly, thus creating significant impact on shipping and port requirement.

### 2.6.1 Current Trends in Ocean Transportation

According to the World Trade Organization, in 2004, the worth of international trade grew by nearly 21 per cent. This characterized the maximum growth rate in 25 years. This overwhelming accomplishment was partially credited to the presence of a well-organized ocean transport system, and more definitely, to the current trends happening within the industry. The following are some of the current trends in ocean transportation:

- **Supply chain:** Recently the IAS added three new sections to its Dispatch Manager product in an effort to mechanize the container transport process seamlessly from beginning to end. The additional sections allow cargo owners and ocean carriers to connect efficiently. Another new change has been the steady decrease in trade operation costs and the time needed to clear goods. Today both time and cost of the business has been lowered considerably.
- **Technology:** Some of the recently adopted developments in the technological field are: introduction of advanced data capturing system, increased use of e-commerce, and the launch of an advanced supply chain management system. Agistix, a conveyance systems designer, lately introduced a new application for improving supply chain data capturing process.

The use of e-commerce in maritime exchange has increased tremendously. Presently, approximately two million container orders are made through e-portals. In the same measure, a new version of Ocean Tender, a popular supply chain management system was launched in the industry. The recent version is known as Ocean Tender 3.1.

- **Transportation:** Main advancement in the search for alternative fuels, and the growing requirement to control overweight containers are certainly the most recent development in matters concerning transport. It has been recently proclaimed by the Federal Maritime Commission that noteworthy progress had been made in order to find alternative fuels for commercial ships.
- **Size and structure of containerships:** Containerships are being altered to bring their structure in line with the features of the existing shipping containers and competencies of ports. Unlike the old container carriers which were predictably ultra large (yester years [396m]), present vessels are somewhat smaller (350-370m). The effort towards a more compressed size is aimed at supporting vessels to fit well in the recently introduced Panama Canal locks, as well as enhancing the maneuverability of vessels on bendy rivers.

#### NOTES



**Palletization:** It is the method of storing and transporting goods stacked on a pallet, and shipped as a unit load

## NOTES

- **Gateways, inland ports, and corridors:** Corridors are being established with the objective of creating connectivity to inland terminal facilities. Such inland terminal facilities may be used as load centers, satellite terminals, and trans modal facilities. Terminal operators, port authorities, commercial real estate developers and local governments are being included in the establishment of these facilities.

### 2.6.2 Development of Information Technology and its Impact on Ports

Nowadays, time-based competition is intensifying. Any delays to the ship and its cargo are costly to everyone in the supply chain. The creative use of information technology (IT) will create a benefit comparable to that of containerization or the construction of the Suez and Panama canals. Information technology, especially Internet-based systems, is increasingly being employed in all transport services. As shippers become more attuned to sophisticated supply chain management, ports will be faced with both opportunities and threats.

IT has transformed ship owners into valued-added logistics service providers. Electronic commerce will spur demand for shipping services by increasing trade volume in general. Shipbrokers and other intermediaries will have to adapt to such changes, by offering one-stop freight services, including arranging ocean carriages, port handling, storage, insurance and inland transportation. Ship owners and their suppliers also may soon use the Internet for innovative purposes such as bunker auctions, ship inspections using electronically transmitted data and Internet-based classification society records.

The application of e-commerce in ports could contribute to the efficiency of international trade. Ports are of crucial importance to many countries as they constitute a critical node in the transport chain linking international transport services with local transport services. With the growing use of IT in cargo booking, tracking, clearance and delivery by major shipping lines, as well as in customs clearance, all ports are required to become efficient interfaces for shipping services in a world closely connected through logistics chains.

The availability of common-user and robust e-commerce-based administrative and commercial services in the ports would allow them to connect to the IT networks of administrations, shipping lines and other transport operators. Of course, scalable systems with certain core functions are needed in order to cater to the different needs of a wide range of ports and terminals serving developing countries' trade. UNCTAD programmes, such as the Advanced Cargo Information System (ACIS) and the Automated System for Customs Data (ASYCUDA), provide major elements of such port community systems (UNCTAD, 2001).

With more liberal trade arrangements between countries, world trade is expected to continue its rapid growth, making the world's economies more and more interdependent. It is commonly recognized that ports play a critical role in their countries' trade growth. Therefore, a number of ports have taken steps to improve the quality of their customs services, and to provide basic transport and communications infrastructure in order to reap the benefits of e-commerce.

Information technology, especially Internet-based systems, can be used effectively to streamline and enhance supply chain processes, enhance cooperation between

carriers and their customers by enabling instant communications, and eliminate many burdensome procedures and regulations. Most developed countries have already implemented a variety of strategies and policies to develop their information infrastructures. In many countries port information systems have been transformed into integrated logistics information systems through interconnected efforts with other logistics-related information systems. INTIS at the Port of Rotterdam, ADEMAR+ at the Port of Le Havre, DAKOSY at the Port of Hamburg, SEAGH at the Port of Antwerp, and FCP80 at the Port of Felixstowe, are good examples of IT that facilitates electronic submissions and clearance of shipping information.

However, the most advanced IT of its kind may be the PORTNET at the Port of Singapore. The PORTNET, which was developed in 1984 and then refined and improved upon over many years, is the world's first and still-only nationwide e-commerce network that has the participation of the entire shipping and port community in Singapore. The PORTNET system facilitates end-to-end information workflow and creates value for port users in many areas, including the on-line booking of resources, e-fulfillment of port services, facilitation of billing services, customs clearance and linkage to government agencies.

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## 2.7 SUMMARY

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Some of the important concepts discussed in this unit are:

- Contract chartering in maritime delivery is the enlisting of a ship and the team members for a voyage between the port where the voyage begins and the destination port.
- Chartering is an activity within the shipping industry. There are cases where a charterer owning a cargo may employ a shipbroker, giving him a certain price called freight rate, to find a ship to transport the cargo.
- 'Charter party' is a contract by which the ship owner lets the ship to another person. Charter parties' content is highly standardized and are grouped into three main types: Voyage, time and demise/bare boat charter.
- Under voyage agreements, the charterer pays for the utilization of the ship's cargo space for one, or in some cases more than one, voyage.
- The time charter is different from the voyage charters. This is because here the owner keeps the crew, vessel and equipment at the disposal of the charterer.
- 'Bareboat charter' means hiring of a ship for a stipulated period on terms which give the charterer possession and control of the ship, including the right to appoint the master and crew.
- Freight rate is the price at which a certain cargo is delivered from one point to another.
- The key factors which determine freight rates are as follows: Mode of transport, Weight of the consignment, Size of the parcel/consignment, Distance of delivery port, Pickup and delivery points, and Nature of goods being shipped.
- The destination or the end point is an important aspect for determination of oceanic freight rates. In other words, the longer the distance, the greater will be the ocean shipping rate and vice-versa.

## NOTES

### Check Your Progress

15. What empowered vessels to be loaded and unloaded in a lesser amount of time?
16. Name some of the recently adopted developments in the technological field.
17. Why are ports of crucial importance to many countries?
18. How can information technology, especially Internet-based systems, be used in the shipping industry?

## NOTES

- Reducing waiting times in seaports for ships and their cargo has a direct bearing on trade costs.
- Technological advances have led to a continuous reduction in vessel operating costs over the decades. Improved fuel efficiency, economies of scale, and automation in port operations all help to reduce environmental and financial costs.
- Price-setting in transport and logistics markets significantly depends on the level of effective competition.
- The volume and type of cargo has a direct bearing on the carrier's costs.
- Competition law is also known as 'antitrust law' (e.g. the United States), or 'anti-monopoly' law (e.g. China and the Russian Federation).
- Liner conferences, also called 'shipping conferences' or 'ocean shipping conferences', have had the most significant influence on competition in the liner shipping market compared to other organizational forms of operation.
- In terms of membership, liner conferences can be classified as being either open or closed.
- The basic feature of multimodal transport is that at least two modes of transport are used.
- The definition jointly given by the United Nations Economic Commission for Europe (ECE), the European Conference of Ministers of Transport (ECMT) and the European Commission (EC) is 'Multimodal transport: carriage of goods by two or more modes of transport.'
- Multimodal transport has proven to be very advantageous as in it lies the most effective arrangement of multiple means of transportation.
- The Multimodal Transportation of Goods Act, 1993 (MMTG) provides for the regulation of Multimodal Transportation of Goods from any place in India to any place outside India involving two or more modes of Transport on the basis of a single Multimodal Transport Contract.
- Looking to the urgent need of Industry and keeping in view the provisions of the Multimodal Transportation of Goods Act, 1993 which is substantially based on the rules framed by the ICC and also taking into account the provisions of the UN Convention of 1980 on Multimodal Transportation of Goods, the Director General of Shipping, with the approval of the Government, has issued an Order on 17 March 1994 prescribing a model for the Multimodal Transport Document (MTD).
- The economic growth post the Second World War led to improved levels of world trade. As new global markets developed, the United States took the opportunity to take advantage of the new prospects.
- Some of the recently adopted developments in the technological field are: introduction of advanced data capturing system, increased use of e-commerce, and the launch of an advanced supply chain management system.
- Nowadays, time-based competition is intensifying. Any delays to the ship and its cargo are costly to everyone in the supply chain. The creative use of information

technology (IT) will create a benefit comparable to that of containerization or the construction of the Suez and Panama canals.

- Information technology, especially Internet-based systems, can be used effectively to streamline and enhance supply chain processes, enhance cooperation between carriers and their customers by enabling instant communications, and eliminate many burdensome procedures and regulations.

## NOTES

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### 2.8 ANSWERS TO 'CHECK YOUR PROGRESS'

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1. Contract chartering in maritime delivery is the enlisting of a ship and the team members for a voyage between the port where the voyage begins and the destination port.
2. Charter parties' content is highly standardized and are grouped into three main types: Voyage, time and demise/bareboat charter.
3. The time charter is different from the voyage charter. This is because here the owner keeps the crew, vessel and equipment at the disposal of the charterer.
4. 'Bareboat charter' means hiring of a ship for a stipulated period on terms which give the charterer possession and control of the ship, including the right to appoint the master and crew.
5. Freight rate is the price at which a certain cargo is delivered from one point to another.
6. Back freight is a payment that is owed to a maritime shipping company when the transportation of goods extends beyond the contracted destination port due to circumstances beyond the shipper's control.
7. The destination or the end point is an important aspect for determination of oceanic freight rates. In other words, the longer the distance, the greater will be the ocean shipping rate and vice-versa.
8. Competition in the transport markets depends on the size of the market and effective market regulation.
9. Liner shipping has for a long time been governed by cooperative arrangements, originally in the form of conferences, and later, with the emergence of containerization, also in the form of consortia, vessel sharing agreements, strategic/global alliances, capacity stabilization agreements and discussion/talking agreements.
10. In terms of membership, liner conferences can be classified as being either open or closed.
11. The basic feature of multimodal transport is that at least two modes of transport are used.
12. The Multimodal Transportation of Goods Act, 1993 (MMTG) provides for the regulation of Multimodal Transportation of Goods from any place in India to any place outside India involving two or more modes of Transport on the basis of a single Multimodal Transport Contract.

## NOTES

13. Increased containerization has resulted in Multimodal Transport of Goods under a single transport document covering all modes of transport from the exporter's premises to the consignee's premises such Multimodal Transportation under a single document has a number of advantages like reduction in overall transport cost reduction in delays, smoother and quicker movement of and improvement in quality of services.
14. Multimodal Transport Document (MTD) has been prepared for carrying out the provisions of the Act keeping in view the primary objective of the legislation that the carriers are there to serve trade and not the other way around.
15. The institution of palletization—the method of storing and transporting goods stacked on a pallet, and shipped as a unit load— and roll-on/roll-off cargoes empowered vessels to be loaded and unloaded in a lesser amount of time.
16. Some of the recently adopted developments in the technological field are: introduction of advanced data capturing system, increased use of e-commerce, and the launch of an advanced supply chain management system.
17. Ports are of crucial importance to many countries as they constitute a critical node in the transport chain linking international transport services with local transport services.
18. Information technology, especially Internet-based systems, can be used effectively to streamline and enhance supply chain processes, enhance cooperation between carriers and their customers by enabling instant communications, and eliminate many burdensome procedures and regulations.

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## 2.9 QUESTIONS AND EXERCISES

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### Short-Answer Questions

1. Define chartering.
2. How is freight collected according to the voyage charter?
3. How does the National Economic and Development Authority define freight rate?
4. What are the key factors that determine freight rates?
5. What is the relationship between distance and maritime transport costs?
6. State the purpose of competition laws.
7. What are the advantages of multimodal transport?
8. Write a short on Multimodal Transport Document and its implementation in India.
9. What are the current trends in ocean transportation?
10. How has information technology (IT) impacted the shipping industry?

### Long-Answer Questions

1. What is a charter party? Describe the various types of charters.
2. Describe the types and structure of freight rates.

3. Analyse the basic principles determining freight rate and the determinants of freight rate.
4. ‘Liner conferences, also called “shipping conferences” or “ocean shipping conferences”, have had the most significant influence on competition in the liner shipping market compared to other organizational forms of operation.” Discuss.
5. What are liner conferences? How can they be classified?
6. Critically evaluate the significance of multimodal transport system.
7. What is the multimodal transport document?
8. Discuss the technological developments in ocean transportation.

## **NOTES**



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## UNIT 3 ARRANGEMENT FOR SHIPMENT OF CARGO

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### NOTES

#### Structure

- 3.0 Introduction
- 3.1 Unit Objectives
- 3.2 Role of Intermediaries
  - 3.2.1 Need of Clearing, Forwarding and Shipping Agents
  - 3.2.2 Role of Stevedores and Surveyors
  - 3.2.3 Modes of Transport
- 3.3 Port and its Types
  - 3.3.1 Types of Ports
  - 3.3.2 Major Ports of the World
  - 3.3.3 Major Ports in India
- 3.4 Structural and Cargo Handling Facilities
  - 3.4.1 General Cargo Equipment
  - 3.4.2 Bulk Cargo Equipment
- 3.5 Warehousing and Storing in Ports
  - 3.5.1 Storage and Handling Capacities
  - 3.5.2 House and Terminal/Warehouse Stuffing
  - 3.5.3 Demurrage
  - 3.5.4 Loading and Unloading in Warehouses
  - 3.5.5 Transchart of Ministry of Shipping
- 3.6 Summary
- 3.7 Answers to 'Check Your Progress'
- 3.8 Questions and Exercises

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### 3.0 INTRODUCTION

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An increasing volume of research focuses on how ports and port cities are inserted in transport and logistics chains (Wang *et al.*, 2007). However, little empirical evidence exists assessing the relation between transport integration and port performance. Notably, the role of intermediaries in establishing efficient connectivity within transport chains in which ports are embedded is not well-known. Indeed, intermediaries are often placed within the broad category of distribution, logistics, and supply, while their motives and roles differ substantially in nature and scope. For example, traditional freight forwarders dominantly concentrate their networks within national boundaries, what can be seen as a weakness in a context of just-in-time manufacturing and customized delivery across the continent, notably regarding the provision of more integrated services (Bird, 1988). This unit describes the role of intermediaries in the shipment of cargo. It also discusses ports, its types and the major ports of the world and India. Moreover, it also assess cargo handling facilities and warehousing.

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### 3.1 UNIT OBJECTIVES

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After going through this unit, you will be able to:

- Discuss the role of intermediaries in the shipment of cargo
- Describe the role of stevedores and surveyors in the shipment of cargo

## NOTES



**Clearing and Forwarding (C&F):** The Clearing and Forwarding (C&F) Agent is a specialized person who guides the exporters in the selection of the airline/shipping line.

- Evaluate the term port, its types and name the major ports of the world and India
- Analyse the categorization of cargo handling equipment
- Describe the significance of warehousing and storage in ports
- Discuss the role of the Transchart of the Ministry of Shipping

## 3.2 ROLE OF INTERMEDIARIES

This section describes the role of various intermediaries—clearing and forwarding agents, stevedores and surveyors—in the shipment of cargo.

### 3.2.1 Need of Clearing, Forwarding and Shipping Agents

The decision regarding selection of the airline or the shipping line is a complex decision and requires the help of professionals in this field to make the proper choice. The **Clearing and Forwarding (C&F) Agent** is a specialized person who guides the exporters in the selection of the airline/shipping line. The C&F agents are known by different names such as Customs House Agents or Freight Forwarders or Shipping Agents. The basic function of a C&F agent is to provide various services to an exporter to ensure the smooth and timely shipment of goods. In practice, only the largest companies try to handle all the shipping and dispatch of their goods overseas themselves. With large quantities of goods to export, they can afford to employ their own export staff.

Small exporters find it easier to use the services of shipping and forwarding agents, or freight forwarder as they are sometimes called. They are experts on the availability of the different modes of transport for different markets, on the cost, and on the suitability of each mode. Their job involves booking space, arranging documentation and in many cases, collecting the goods from the factory and transporting them to the docks, airport, railway station and road collection point.

Shipping and forwarding agents deal with customs entries and other formalities. They arrange payment of freight charges and insurance. If necessary they handle collection of necessary documents. They may also help by consolidating or grouping a number of consignments to make transportation more economic.

For smooth and timely shipment of cargo, the exporter should appoint a suitable clearing and forwarding agent. Nevertheless, he should prepare the shipping documents himself as there are many intricacies and technicalities which he alone would know properly. He should not depend too much on the C&F Agent, who should be entrusted only with getting the documents processed and for their shipment.

The services provided by the C&F agents can be classified into essential and optional services. These services are as follows:

#### Essential services

Following are some of the services provided by C&F agents:

- Providing warehousing facility to the exporters for warehousing the goods before their transportation to the docks/port

- Transportation of goods to the docks and arrangements of warehousing at the port
- Arrangement of containers required for shipment of the goods
- Booking of shipping space or air freighting
- Advising the exporter as regards to the relative cost of sending the goods by different airlines/shipping lines as well as selection of the route of the flight /sea route
- Making arrangements for shipment of goods to be on board the ship/plane
- Arranging for marine cargo insurance of the shipment
- Preparation and processing of shipping documents required for custom clearance
- Arranging for various endorsements/issue of certificates from various agencies
- Providing assistance in the packing of the shipment
- Making arrangements for local transportation of goods to the port/docks
- Forwarding the documents to the exporter for their negotiation with the bank

### **Optional services**

Following services are provided by leading C&F agents at the specific request of the exporter:

- Providing warehousing facilities abroad at least in some of the major international markets in case the importer refuses to take delivery of the goods for any reason
- Providing assistance to bring the goods back to India if the situation so demands
- Providing assistance to locate the goods in case the shipment is misplaced or the cargo is stranded at some port
- Making arrangements for assessment of damage to the goods to file claim with the insurance company

Some specialized services provided by C&F agents include:

- Air Freight Forwarding
- Sea Freight Forwarding
- Port Handling Services
- Chartering Services
- Custom House Broking
- Project Movement
- Packing and Moving Services
- Air, Road and Rail Transportation (Domestic)
- Through Bill of Lading
- Air Freight: Export/Import
- Documentation/Customs Clearance
- Consultation Services
- Insurance Services
- Standard Cargo Insurance

### **NOTES**

## NOTES

Thus, the C&F agent offers various services to the exporter. While planning for distribution logistics, the exporter should in the first instance, appoint a C&F agent to provide him with the required services. There are no standardized rates of charges taken by these agents. The exporter should negotiate with these agents the amount of fees payable to them in relation to the desired services. The selection of a good and reliable agent should be made keeping in view the agency commission, the services offered and his experience in the product/country for transportation.

Export cargo can be dispatched to the overseas buyer by sea, air, post, land, river, etc. Shipment by sea is however, the most popular and generally resorted to as it is comparatively cheaper besides the ship's capacity is unlimited and can carry any quantity of cargo. Nevertheless, the other modes of conveyance, particularly air, are increasingly utilized as they are quicker and safer though expensive. But export by land or river is limited to neighbouring countries like Nepal, Bangladesh, Pakistan, Bhutan or even Afghanistan.

### **Role of Clearing and Forwarding Agent: Choice of Transportation**

As stated earlier, when an exporter wishes to send his goods to another country he may have a choice of transportation. Goods can be shipped by surface (road, rail, or sea) or by air. By far the most popular method is sea, with air freight as an occasional option.

### **Ocean freight**

Ocean freight is the most widely used form of transportation in international trade. It still has the attraction of being a cheap mode of transport for delivering large quantities of goods over long distances.

The procedure for arranging a shipment of goods can be complex. Before goods can be shipped by sea the exporter or his shipping agent or forwarding agent must:

- Find out freight rates
- Select a shipping line and a particular vessel
- Book shipping space
- Register cargo on a shipping note and send shipping note to shipping company
- Register details on custom entries forms and send shipping notes to shipping company
- Register details on custom entries forms and send to customs
- Arrange adequate packing, including shipping marks
- Receive calling forward notice from shipping company
- Send goods to port with consignment note
- Receive bill of lading from shipping company
- Pay freight bill
- Enclose bill of lading and send copies to shipping line and customer, or to the Bank acting as intermediary

### **Types of Shipping**

The freight rates that have to be paid to send goods by ocean freight depend to some extent on which type of shipping is used. The four basic types of shipping are:

## **1. Conference Line Vessels**

These are ships operated by a line, which is a member of a shipping conference. Conferences are groups of shipping line. They establish common freight rates, regular scheduled departures and common shipping conditions. They provide international liner services for the carriage of cargo on a specified route or routes.

The freight rates charged by the Conference lines are fixed taking into consideration the following factors:

- Nature and volume of cargo
- Relationship of weight to measurement
- Competition from other carriers/conferences
- Possibility of damage, pilferage, lighterage
- Operational Cost
- Port Charges and dues
- Possibility of securing return cargo

## **2. Non-Conference Vessels**

These are ships operated by shipping companies giving scheduled services but quoting freight rates independently.

## **3. Tramp Ships**

These are ships operated by shipping companies giving scheduled services but quoting freight rates independently.

## **4. Charter Ships**

These ships do not follow regular routes but travel as and where cargoes are available.

Of these types of shipping, the most commonly used ones are Conference Line Vessels, which make regular journeys and offer special discounts to exporters who use them regularly. The exporter or his Freight Forwarder may make such special arrangements with conference lines.

The shipping company will charge either by weight (W) or measure (M), whichever is greater.

In the case of particularly valuable cargo, the shipping company may charge an ad valorem freight rate. This is an extra charge because the goods are so valuable, such as might be the case with a consignment of furs.

A minimum charge may apply to freight charges if the goods are too small for a shipping company to handle them strictly by volume or weight.

Freight rates may also be increased by a special surcharge in special situations, such as local unrest or disaster or the need for a longer journey than necessary, as for example, when the Suez Canal was closed. Another possible form of surcharge is after a major devaluation of currency. Or there may be a 'congestion surcharge' which may be as high as 75 per cent.

It is important that these possible extras are taken into account when freight rates are estimated.

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### Reservation of Shipping Space

**Booking memos/notes:** Reservation can be done either through a formal letter or even by conveying necessary information on phone. A formal letter known as booking memo/note should contain the following information:

- Name and address of shipper (exporter)
- Details of cargo, i.e., the product, weight/volume, number of cases, etc.
- Port of loading and destination
- Date of loading

### Shipping Order

On reservation of shipping space, the concerned company issues a document known as Shipping Order. While its original copy is sent to the exporter, its duplicate is meant for the commanding officer of the ship for receiving on board the ship and cargo specified therein. It contains the details regarding the cargo, name of the broker if any, and shipper, expected date of loading and freight rate.

### Transport to Port

On getting the shipping space reserved, the exporter should take steps to transport the goods from factory/warehouse to the port of loading either by road transport or rail. Normally, rail transportation may be resorted to on account of the priority given in cargo movement.

### 3.2.2 Role of Stevedores and Surveyors

Stevedore and Shore Handling Agent is an authorized agent for loading and unloading and storage of cargo in any form on board the vessels in Port, arranging and receiving the cargo to/from the hook point, intermodal transport from wharf to stack yard and vice-versa and also receiving and delivering of cargo from/to wagons/trucks.

The stevedoring activities cover the activities on board involving workmen, extending to hooking for export (loading) cargo and unhooking of import (unloading) cargo or whatever practice prevalent in the port. The shore handling includes arranging and receiving the cargo to/from the hook point, intermodal transport from wharf to stack yard and vice-versa and also receiving and delivering of cargo from/to wagons/trucks.

Every stevedores and shore handling agents shall ensure the safe and efficient handling as per the Stevedoring and Shore Handling Licensing Policy during the currency of license issued to them by the Port, keeping in view the following basic criteria:

- (i) Stevedore and Shore Handling agents shall comply with applicable safety norms in relation to such operations and with the applicable statutes regarding labour.
- (ii) Stevedore and Shore Handling agent shall indemnify the Board against all third party claims arising out of such operations.
- (iii) Whenever casual workers are deployed, the Stevedore and Shore Handling agents should ensure that such workers are covered by the insurance policy.

- (iv) If any gear, plant or any other property of the Board is damaged in the course of stevedoring and shore handling operation the Stevedore and Shore Handling agent shall compensate the Board for such loss or damage.
- (v) Stevedore and Shore Handling agent shall deploy necessary equipment as indicated by the Port in the license.
- (vi) Stevedore and Shore Handling agent shall achieve the performance standards fixed by the Port.
- (vii) The Stevedore and Shore Handling agencies shall publish their tariff along with break up in their web sites and in the website of the Port.

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### Surveyors

Surveyors (Nautical Surveyors, Engineers and Ship Surveyors, and Ship Surveyors) are appointed under Section 9 of the Merchant Shipping Act, 1958 and are entrusted with the duty ensuring that the requirements of the Act and the rules and regulations made thereunder relating to safety survey are duly complied with.

Marine surveyors examine marine vessels to assess the condition of their structure, machinery and equipment. They ensure that vessels are constructed, equipped and maintained according to safety standards and are seaworthy. They check design plans, and make sure the construction of marine vessels complies with marine industry standards.

Marine surveyors will also periodically perform inspections to make sure that acceptable standards are maintained throughout the ship's life. They may inspect passenger and cargo ships, cruise liners, high-speed ferries, small boats and crude oil carriers.

### 3.2.3 Modes of Transport

The exporter can send the shipment of goods using any one of the following modes of transport as specified in the export contract.

- Air transport
- Sea transport
- Multimodal transport
- Road transport

#### 1. Air Transport

Air transport of goods involves sending shipment of goods on an international airline. The exporter need not directly approach the airline for booking of the cargo. This job is done in a cost-effective manner by the C&F agents who generally negotiate with the airlines lower freight rates as they provide bulk cargo to them. Some of the C&F agents act as consolidators for the airlines. In practice, the airlines are known to offer huge amounts of discount to the C&F agents for booking of cargo. Such discounts may not be available to an individual exporter as the total cargo offered may not have the substantial load. While selecting the airline, the exporter should be guided by the considerations of cost and timely delivery of the goods. It should, however, be ensured that the cargo shall be carried in the manner as specified in the export order. The export order may provide the direct shipment or trans-shipment. Direct shipment means

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that the same airline should carry the cargo from port of loading to the port of discharge. Trans-shipment of goods permits change of plane on the way to the destination of the cargo. In this case, the loading and unloading takes place at least twice. The exporter may find trans-shipment attractive as the cost of transportation is generally lower as compared to direct shipment. Against this cost advantage of trans-shipment over direct shipment, the exporter runs the risk of delay in transportation of goods and possible damage to the goods during loading/unloading at the intermediate ports. The decision should not be based mainly on the terms as given in the export contract. Trans-shipment should not be preferred unless it is permitted by the buyer. The reason being that, in case there is a delay in shipment or damage to the goods, the importer may not accept the goods, or even if he accepts, may raise a claim against the exporter for compensation for the damaged goods. This would spoil the reputation of the exporter which would adversely affect the growth of his business.

Various international conventions have laid down the basic rules for the air freighting of goods. The first international convention was concluded in 1929 at Warsaw, known as 1929 Warsaw Convention. The convention relating to international air carriage was amended by the 1955 Hague Protocol and further supplemented by the 1961 Guadalajara Convention and the Montreal Additional Protocol of 1975.

### **Airway Bill**

The airline issues the transport document known as AIRWAY Bill (AWB) when it accepts the cargo for transportation. Airway bill gives proof of the conclusion of the contract of carriage of goods by air.

The Airway Bill usually contains the following information:

- General description of the nature of goods
- Particular marks that are necessary for identifying the goods
- Number of packages, and the quantity and weight of the goods
- Place of discharge
- Transit airports (where applicable)
- A statement that the Warsaw rules (the provision in the 1929 Warsaw Convention), as amended will apply to limit the carrier's liability for loss of or damage to the goods

The Airway Bill is not a document of title to the goods and consequently is not negotiable. Thus, the consignee does not require the Airway Bill to obtain the delivery of the goods from the airlines. However, in the US under Uniform Commercial Code, the Airway Bill is a document of title to the goods.

### **Advantages of air transport**

The transportation of goods by air offers many advantages to the exporter. Some of these are:

- Movement of goods is very fast.
- Warehousing costs are reduced to the minimum.
- It is suitable for the transportation of perishable goods.
- Risk associated with deterioration and obsolescence of goods is reduced.

- Insurance premium in the case of air transport is lower as compared to sea transport in view of the reduced level of risks.
- Losses due to rough handling, breakage and pilferage are also reduced to the minimum.

However, there is one disadvantage too, that is, the freight cost is very high as compared to transport of goods by sea. But this disadvantage should be assessed in comparison to the many advantages offered by air transport.

## 2. Sea Transport

Sea transport involves carriage of goods by ship to the port of discharge. The contract of carriage of goods by sea refers to the contract between the shipper and the shipping line (referred to as the carrier) for transportation of goods against payment of remuneration (i.e., freight) to the carrier. The shipper may be the seller (exporter) of goods or a freight forwarder or any other person sending goods on behalf of the exporter. One who sends the shipment is called the consignor /shipper and the person to whom goods are shipped is called the consignee. The consignee may be buyer or a clearing agent or any other person acting as a customer in his country and in such a case may request the exporter to consign the goods to the customer directly.

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### 3.3 PORT AND ITS TYPES

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Ports are the nodes of the world's maritime transport system. Every voyage of a ship must begin and end at a port. Their size and distribution will therefore both reflect and contribute to the pattern of maritime transport. Since the maritime transport system is part of a much larger global transport system, including road, rail, river and canal transport and the interchanges between all the modes, the factors that determine the location and growth (and decline) of ports are manifold, and go well beyond an assessment of the marine environment. These non-marine factors (such as land and river transport connections, location of population and industry and size of domestic markets) will determine, to a large extent, the development of ports and, therefore, the way in which they affect the marine environment. Nodes, however, can become bottlenecks, restricting the free flow of trade. Before the economic crisis of 2008, there were fears that port capacity could limit the development of world trade (UNCTAD, 2008). That problem has receded with the widespread economic slowdown, but could easily re-appear. This would lead to increased pressure for new port developments.

Just as containerization has transformed general cargo shipping from the mid-20th century onwards, so it has also transformed the nature of the ports that container ships use. In the past, ports relied on large numbers of relatively unskilled dockworkers to do the physical work of loading and unloading general cargo, often on a basis of casual labour, with no security of regular work. Containerization and parallel improvements in the handling of bulk cargoes have transformed this situation. Ports now require smaller numbers of much more skilled workers, and even more investment in handling equipment.

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### Check Your Progress

1. Who is the Clearing and Forwarding (C&F) Agent?
2. List any two services provided by C&F agents.
3. What do marine surveyors examine?
4. List any two advantages offered by the transportation of goods by air to the exporter.

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### Scale and magnitude of port activity

Ports can be classified in several different ways. Some ports are dedicated to a single function (such as the handling of oil). Others are general, handling a variety of trades. Some are private, used for the traffic of one trader (or a small number of traders). Others are general, open to shipping in general. Some are designed for bulk traffic, both dry and liquid. Others are for general cargo, which today usually implies containers. And some ports are a mix of these various categories.

Dry bulk traffic covers the five major bulk trades (iron ore, coal, grain, bauxite/alumina and phosphate rock), together amounting to 2,786 million tonnes in 2013, and the minor bulk trades (soymeal, oilseed/meal, rice, fertilizers, metals, minerals, steel and forest products), together amounting to 2,300 million tonnes in 2013. The main tanker bulk traffic (crude oil, petroleum products, and liquefied natural gas) amounted to 2,904 million tonnes. There is also a much smaller market in bulk tanker carriage of chemicals (UNCTAD, 2013).

The location of ports for handling bulk traffic is usually determined by the location of their sources of supply and demand. A new oil field may well demand the creation of a completely new port, as happened with the creation of Sullom Voe in the Shetland Islands in the United Kingdom in the 1970s at the beginning of the exploitation of North Sea oil and gas (Zetland, 1974). A large iron and steel works may be linked to the creation of new port facilities to receive imports of iron ore, as is happening at Zhanjiang in China (Baosteel, 2008). As a result of geographical or historical factors, some ports for bulk traffic can have awkward conjunctions in their location. For example, in Australia, the coal mines in Queensland need more port outlets, but the likely locations for ports are near the Great Barrier Reef, which gives rise to difficult decisions (Saturday Paper, 2014). In the United Kingdom, the Milford Haven oil terminal grew up gradually over many years in the safe natural harbour of Milford Haven. It is currently the United Kingdom's largest oil port, with a throughput of hydrocarbons in bulk of 40 million tonnes a year. However, the United Kingdom's first marine nature reserve, Skomer Island, is near the mouth of the harbour (Donaldson, 1994; DfT, 2014).

The containerization of general cargo, the consequent reduction of trans-shipment costs and the use of ever larger ships has changed the nature of the demand for general cargo ports over the past half century. Instead of relatively small ships moving directly from the origin to the destination of the cargo, thus minimising the then expensive trans-shipment costs, there is now a hierarchy of ports, with cargoes passing through entrepôts where they are trans-shipped. Rotterdam, in the Netherlands, is a good example of such an entrepôt, with many other North Sea ports receiving the trans-shipped goods (Haralambides, 2002). The proportion of worldwide total container movements that involve trans-shipment is gradually increasing (25 per cent in 2000: 28 per cent in 2012 [Notteboom *et al.*, 2014]). The nature of this hierarchy shows that there is a major equatorial shipping route linking major ports, with supporting north-south and transoceanic routes. The 'transshipment markets' identified are the zones within which ports are competing with each other for the long-haul business, which will be trans-shipped for delivery to its final destination by ship, road or rail (Rodrigue, 2010). Containerized general cargo amounted to 1.6 billion tonnes in 2012—an estimated 52 per cent of global seaborne trade in terms of value (UNCTAD,

2013). The imbalances in containerized exports and imports, the liberalization of trade regulation and transit facilitation are resulting in a growth of containerization of trades previously handled as bulk. Since more containerized imports arrive in some ports than there are exports from those ports to fill the containers, the shipping costs for the return or onward journey using the surplus containers are low. This acts as a form of subsidy on the use of such containers, and thus attracts business from the bulk trades. For example, between 2008, when grain trading was deregulated in Australia, and 2013, the country's containerized wheat export shipments increased tenfold (UNCTAD, 2013).

### 3.3.1 Types of Ports

Ports are heterogeneous, differing considerably, depending on their location, in the types of vessel and cargo that they can handle and the services they offer. However, some broad categories can be used to distinguish between them.

#### Sea ports versus inland ports

Ports exist in several different locations: deep-sea ports, shallow-sea ports, and ports on inland waterways, lakes and rivers. In terms of volumes, the majority of waterborne freight traffic travels through seaports, although some inland ports can be quite large—the Port of Montreal (is the largest inland port in the world) handled 25m tonnes in 2010.

The advantage of inland ports over coastal ports is that they are usually closer to the final destination of their cargo. However, their main disadvantage is that waterborne accessibility is usually more limited, particularly for larger vessels.

#### Transshipment hubs and hinterland ports

Some ports (e.g., the Port of Jebel Ali, UAE) exist purely as hubs for the purpose of transshipment, while others (e.g., the Port of Nagoya, Japan) primarily serve their hinterland. In transshipment ports, cargo is typically moved from ship to quay to ship; conversely, hinterland ports focus on moving freight from ship to hinterland. The location of ports has a clear role to play in determining the composition of transshipment versus hinterland traffic. For instance, transshipment ports are common in the Middle East due to its location on shipping corridors between Asia, Europe and Africa.

A related distinction exists between types of vessel. Feeder vessels transport freight from the transshipment ports to their ultimate destination, with movements between two transshipment ports being conducted by larger vessels. These larger vessels often only call at major ports at either end of their voyage. This form of distribution network can be more efficient than continually loading and unloading the larger vessels at a number of different ports.

The use of feeder vessels is relatively common, for example, 80 per cent of Bangladesh's US\$40 billion foreign trade is done through Singapore Port, with feeder vessels transporting Bangladeshi cargo to the port, where it is placed onto large vessels to be taken to its final destinations.

The distinction of feeder vessels and transshipment hubs from larger vessels and hinterland ports, is important, because for long distance international trade the costs of

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short distance feeder services are likely to comprise a relatively small proportion of total transport costs.

### **Freight ports versus passenger ports**

Many ports serve a range of customers. However, ports that have substantial amounts of passenger traffic are typically restricted to regions where there is a short-distance sea crossing, such as between Singapore and Batam, Indonesia. This report does cover passenger traffic, but its main focus is the freight sector.

### **Container traffic versus bulk freight traffic**

Freight traffic comes in a number of forms, including oil traffic, liquefied natural gas (LNG), dry bulk and container traffic. Typically, each type of cargo will require specialised loading and unloading equipment at a port, be that in the form of cranes, pumps or other equipment. Given the complexities of handling different types of cargo, not all ports have the facilities to handle every type of cargo. For example, currently only three ports in France (Fos-sur-Mer, Fos Cavaou and Montoir-de-Bretagne) had the equipment to handle LNG.

### **3.3.2 Major Ports of the World**

The world's busiest container port is Shanghai in China, with 33.62 million TEU movements in 2013. Table 3.1 sets out the numbers of container movements for each of the further five container ports with the heaviest traffic in each of the five main transshipment markets. Outside these areas, there are of course other very large and busy ports, for example (with millions of TEU movements in 2013): Los Angeles, California, USA (7.87), Long Beach, California, USA (6.73) and New York/New Jersey, USA (5.47). In total, the world's 50 busiest container ports in 2013 were spread as follows:

- (a) Twenty-four in the west Pacific (ten in China; three in Japan; two each in Indonesia and Malaysia; and one each in Hong Kong, China, the Philippines, the Republic of Korea, Singapore, Taiwan Province of China, Thailand and Viet Nam)
- (b) Four in the eastern Pacific (two in the United States of America and one each in Canada and Panama)
- (c) Seven in the Indian Ocean (two in the United Arab Emirates and one each in India, Oman, Saudi Arabia, Sri Lanka and South Africa)
- (d) Eleven in the eastern Atlantic and adjacent seas (two each in Germany and Spain and one each in Belgium, Egypt, Italy, Malta, the Netherlands, Turkey and the United Kingdom)
- (e) Four in the western Atlantic (two in the United States and one each in Brazil and Panama) (WSC, 2014)

**Table 3.1 World's Busiest Container Ports in the Five Major Transshipment Markets – 2013**

Arrangement for  
Shipment of Cargo

PORT	COUNTRY	TEU MOVEMENTS 2013 (MILLIONS)
<b>World's busiest container port</b>		
Shanghai	China	33.62
<b>North-East Asia</b>		
Busan	Republic of Korea	17.69
Qingdao	China	15.52
Tianjin	China	13.01
Dalian	China	10.86
Keihin ports (Kawasaki, Tokyo, Yokohama)	Japan	8.37
<b>Central East Asia</b>		
Hong Kong	China	22.35
Ningbo-Zhoushan	China	17.33
Guangzhou	China	15.31
Kaohsiung	Taiwan Province of China	9.94
Xiamen (formerly known as Amoy)	China	8.01
<b>South-East Asia</b>		
Singapore	Singapore	32.60
Port Kelang	Malaysia	10.35
Tanjung Pelepas	Malaysia	7.63
Tanjung Priok	Indonesia	6.59
Laem Chang	Thailand	6.04
<b>Middle East and Indian Sub-Continent</b>		
Jebel Ali, Dubai	United Arab Emirates	13.64

**NOTES**

*Draft: Not to be Quoted or Cited for Publication*

PORT	COUNTRY	TEU MOVEMENTS 2013 (MILLIONS)
Jeddah	Saudi Arabia	4.56
Colombo	Sri Lanka	4.31
Jawaharlal Nehru Port (near Mumbai)	India	4.12
Sharjah	United Arab Emirates	4.12
<b>Mediterranean</b>		
Algeciras Bay	Spain	4.50
Valencia	Spain	4.33
Ambarli (near Istanbul)	Turkey	3.38
Port Said	Egypt	3.12
Marsaxlokk	Malta	2.75
<b>North-West Europe</b>		
Rotterdam	The Netherlands	11.62
Hamburg	Germany	9.30
Antwerp	Belgium	8.59
Bremen and Bremerhaven	Germany	5.84
Felixstowe	United Kingdom	3.74
<b>South-East USA and Central America</b>		
Colon	Panama	3.36
Balboa	Panama	3.19
Georgia Ports (Savannah, Brunswick)	USA	3.03
Hampton Roads (Newport News, Norfolk, Virginia Beach)*	USA	2.22
Houston*	USA	1.47

\* Not among the world's 50 busiest container ports.

Source: WSC, 2014

**NOTES**

**3.3.3 Major Ports in India**

India has 12 Major ports that handle large volume of traffic. These are Chennai Port, Cochin Port, Jawaharlal Nehru Port, Kamarajar Port, Kandla Port, Kolkata and Haldia Port, Mormugao Port, Mumbai Port, New Mangalore Port, Paradip Port, V. O. Chidambaranar Port and Vishakhapatnam Port. The total traffic handled during 2012-13 and 2013-14 in 12 major ports in India are given in Table 3.1.

*Table 3.2 Total Traffic Handled during 2012-13 and 2013-14 in Indian Ports*

Total Traffic at Major Ports	2012-13	2013-14
KANDLA PORT	93619	87005
MUMBAI PORT	58038	59184
JAWAHAR LAL NEHRU PORT	64488	62333
MORMUGAO PORT	17738	11739
NEW MANGALORE PORT	37036	39365
COCHIN PORTS PORTWISE	19845	20886
V.O CHIDAMBARANAR PORT	28260	28642
CHENNAI PORT	53404	51105
KAMARAJAR PORT	17885	27337
PARADIP PORT	56552	68003
VISHAKHAPATNAM PORT	59038	58504
KOLKATA and HALDIA PORTS	39928	41386

The total traffic handled by each port is calculated by sum of coastal loaded, coastal unloaded, overseas loaded, and overseas unloaded.

Chennai port is the second largest and third oldest port in India. It is considered as a big hub for cargo traffic, car, big containers in east coast of India. Chennai port is known for its coastal breakwater, artificial, large seaport type of harbour. Cochin port is situated in the state of Kerala in India and considered to be one of the largest port between Indian Ocean and Arabian Sea. This port is equipped with maritime facilities. Jawaharlal Nehru port is the largest container port in India and is also known as Nhava Sheva. It is situated in Maharashtra (Mumbai). It accounts for more than half of the total container volumes handled at India’s 12 public ports and around 40 per cent of the nation’s overall containerized ocean trade.

Kamarajar Port located in Chennai (Tamil Nadu) was earlier known as Ennore Port. It is the twelfth major port in India, and is the first port which is owned by a public company. Kandla Port in Gujarat is one of the major ports on the west coast region. It is considered to be the largest port of India by volume of cargo handled. Kolkata Port was constructed by the British East India Company. It is the oldest operating port in India. The port has two distinct dock systems—Kolkata Docks at Kolkata and a deep water dock at Haldia Dock Complex, Haldia. The Mormugao Port in Goa, bestowed the status of a Major Port in 1963, has contributed to the growth of maritime trade in India. It is the leading iron ore exporting port of India.

Mumbai Port, earlier known as Bombay Port, is situated in west Mumbai (Maharashtra). It is currently owned by the Government of India. This port is used for bulk cargo. New Mangalore Port is situated in Mangalore (Karnataka), it is currently owned by the Ministry of Shipping, Government of India, and is operated by New

Mangalore Port Trust (NMPT). This port mainly deals in the trade of logistical services, shipping and storage. The Port is well-equipped to handle bulk, hazardous cargoes, crude and Petroleum, Oil and Lubricants (POL) products, liquid chemicals, heavy lifts, machinery, containers. Paradip port is located in Jagatsinghpur, Odisha. This port is operated by Paradip Port Trust (PPT) which is an autonomous body and is wholly owned by the Government of India. V. O. Chidambaranar Port, also known as Tuticorin Port, is located in Tamil Nadu. It is the second largest port in Tamil Nadu and has the fourth largest container terminal in India. It deals mainly in fertiliser, timber logs, iron ore, industrial coal, and copper concentrate. Visakhapatnam Port is one of the major ports of Andhra Pradesh and considered to be the second largest port by volume of cargo handled. It is operated by Visakhapatnam Port Trust, owned by the Government of India.

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### 3.4 STRUCTURAL AND CARGO HANDLING FACILITIES

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The term inland waterway port or an inland waterway terminal conveys the idea of an end point. Indeed, traditionally, ports were perceived as end points of the transport system whereby water transport of cargoes was either originated or terminated. However, from a broader point of view, the one encompassing the so-called 'chain of transport', ports or terminals are neither starting nor ending points; they are simply the intermediate points where cargoes are transferred between the links in the transport chain. The emphasis on the transfer function in this introductory section is made since:

- Ports main function is to move the cargo and to avoid accumulating and damaging it
- In order to efficiently fulfill their transfer function, ports or terminals have to possess convenient access (rail and road) to the connecting modes of transport

We know in inland ports, the cargo handling and transfer is done at terminals, which consist of:

- Terminal facilities
- Terminal equipment
- Labour and staffs

Port operation, in a broad sense, includes a wide array of activities which take place at the site of the inland waterway terminals. The most basic activities include cargo handling activities, whereas other activities include storage and distribution, equipment maintenance, cargo processing, and other industrial activities.

Consequently, port operation is defined as a cargo handling (or moving) activity, performed by a designed company (gang or team), consisting of labour and machines.

A common division of cargoes handled by inland ports is based on their operational form. Consequently, the two generic cargo groups, are general and bulk cargoes. Inline with this operational cargo classification, cargo handling equipment can also be divided into:

- (a) General cargo equipment
- (b) Bulk cargo equipment

## NOTES

### Check Your Progress

5. What determines the development of ports and the way in which they affect the marine environment?
6. What determines the location of ports for handling bulk traffic?
7. Name the world's busiest container port.
8. Name the largest container port in India.

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**General cargoes:** General cargoes are defined as cargoes which are handled in batches or in discrete units.

General cargoes (bags, bundles of steel, paper reels, etc.) are defined as cargoes which are handled in batches or in discrete units. Their handling method is lifting and moving the cargo units, or loads, in a cyclical, repetitive fashion. Bulk cargoes (grain, coal, etc.) are composed of a multitude of small and homogenous units. They are handled in a continuous fashion and their main handling methods are based on conveyance.

Moving cargoes in the inland port setting is not different from moving cargoes in any industrial setting which is a part of the broader discipline of material handling, which, in turn, is a hybrid of Mechanical and Industrial Engineering. According to 'Material Handling', cargoes can be moved in three principal ways:

- (a) **Trucking:** By rolling the cargoes on wheels
- (b) **Lifting:** By picking up and moving the cargoes in the air
- (c) **Conveying:** By carrying the cargoes on a continuously moving chain, belt, chute, or pipe

Each cargo handling machine (or system) includes a combination of the above-mentioned principal methods. For example, a forklift combines limited lifting with trucking while a crawler crane combines limited trucking with lifting. The following sections will briefly review the most popular machines used in inland ports, mainly the general cargo equipment and container equipment as well as bulk cargo equipment.

### 3.4.1 General Cargo Equipment

General cargo equipment are the most basic handling machines at the inland waterway terminals. In the simplest terminal configuration, the equipment loads or unloads a vessel directly to or from the truck, railcar or another vessel. In the more-common, indirect operation, the cargo is first transferred between the vessel and the dock, held or stored at the terminal for a short period, and later trucked or railed to the final shipper's place. These general cargo equipment are tyre cranes, portal cranes, fixed cranes, forklifts, trailers, platform wagons, etc.

#### Tyre cranes

The tyre crane is a real multi-purpose handling machine, and can be found almost in any inland ports. Within the marine terminal the crane is not limited to vessel handling but can be used for handling trucks and railcars as well. In the common tyre crane configuration, the carriage system is on rubber tyres. In China's inland ports, the boom of most tyre cranes is fixed from 10 to 15 meters high (only boom length). Another tyre crane is truck crane, whose boom is usually telescopic (by hydraulic), so the crane can drive freely on public roads without need to dismantle the boom as is the case of fixed boom tyre crane. All tyre cranes are equipped with outriggers including wooden supports, and truck crane can be equipped with a separate crane driving cab. The capacity of a tyre crane is usually somewhat limited, allowing it to lift about 5 tonnes to 25 tonnes in the most popular case.

The tyre crane can move to any place easily and fast, and that is its merit; but the operations is slow and lift capacity is lower than that of the portal crane (in the same working radius), and that is its demerit.

## Cranes

In China's ports including seaports and inland ports, portal cranes are extensively used on docks, including small inland ports whose throughput is less than 3 million tonnes.

The configuration of portal crane in inland ports is based on pedestal support structure and an elevated turntable. In some design the support structure is based on a 4-leg gantry (bridge or portal) design with four sets of steel wheels at each corner, which enable the crane to move on tracks along the dock. The driver cab in most of these cranes is also elevated to enable an unobstructed view of the entire vessel hold. The pedestal configuration allows the crane to stand closer to the vessel, and use shorter boom and smaller swinging radius.

As a result, the cargo path is shorter and cargo control and staging is more accurate. Another improvement in boom design, called level-luffing, is based on an articulated boom, which allows through counter movement of the two boom segments for levelled traverse travelling, because the level movement is more energy-efficient, and also allows the use of less hoisting cable and the accuracy is better when working in small ranges.

Portal cranes usually have a higher productivity and a better reach than tyre cranes; if the capacity is the same, the price of one set is lower than that of the tyre crane. In China market, the lifting load is 10 tonnes and the reach is 30 meters, and the price of one set is about 380 thousand US dollars.

All of these portal cranes are powered by electricity, so the cost of operation is lower, and that is important for developing countries.

## Fixed cranes

The fixed crane cannot move, as its name indicates it can do any activity except travel. So we can say it is a crane without legs, because it has no traveling gear, this crane is cheaper and lighter than the traveling crane. Its elevated structure is usually the same as the portal crane's, but only smaller and lighter

Because of the price consideration, in China, small inland ports like to use the fixed crane. It can be located on the pontoon or on the dock, powered by electricity. If the port throughput is less than 3 million tonnes, the fixed crane will be chosen first, because the investment is comparatively low.

## Forklifts

These are very extensive cargo handling machines, suitable for any ports. The forklift combines trucking and lifting of cargo units, and the lifting is usually realized by way of a fork moving along a vertical mast through a hydraulic cylinder and a chain-driven fork attachment. The mast can be extended by using up to three telescopic sections (triplex). The capacity of a forklift is measured by the maximum weight it can lift at a stated distance from the face of the forks (60 cm in common applications). The smallest forklifts, where the cargo is hand pushed and lifted, have a rated capacity of about 0.5 tonne, but usually inland ports use forklifts of a capacity of 3-5 tonnes, at larger inland terminal maybe 10 tonnes. The largest can be found at container terminals, and the rated capacity is about 40 tonnes.

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## NOTES



**Bulk Handling Equipment:**  
Bulk handling equipment are essentially general cargo equipment adaptable for bulk handling, such as grab cranes.

At terminals forklifts are mainly used for cargo loading or unloading from trucks or railcars, or storage in the yard or warehouse. Forklifts are not used to transport the cargo, beyond 50 meters.

### Trailers and platform wagons

Cranes and forklifts are mainly to handle cargo vertically; in cargo transportation on land trailers and platform wagons will be used. A trailer is like a truck, but without packing box, and each trailer will trail 3-5 platform wagons, a group to transport cargoes. The cargo is put on to the platform wagons, each wagon can take 5 tonnes, or 10 tonnes, and the largest can take 40 tonnes, travelling from vessel to yard/warehouse or from yard/warehouse to vessel. In China's inland ports, for the inside terminal transportation this system is used for general cargoes, but this system cannot run on public roads.

### 3.4.2 Bulk Cargo Equipment

Bulk cargo handling methods and related equipment can be divided into two categories:

- (a) Batch handling equipment
- (b) Continuous handling equipment

**Bulk handling equipment** are essentially general cargo equipment adaptable for bulk handling, such as grab cranes. Continuous handling equipment are based on specialized bulk handling machines and are geared to the more voluminous terminals, handling up to several million tonnes a year.

Continuous handling equipment is usually a low cost system on a per-ton handled basis. Other advantages of continuous bulk handling equipment are that the machines pose lower infrastructure requirements due to lower loads, and enable better environmental control due to easier containment options.

#### Grab cranes

Almost all these cranes can be fitted for handling bulk cargoes. The conversion to bulk cargo handling is quite simple: replacing the hook by a clam-shell or grab attachment and installing additional power (mechanical or electrical).

The grab can be attached to any crane system but most commonly it is used with crawler and portal or gantry cranes. Usually, crawler cranes fitted with grabs are very versatile machines, they can both load and unload vessels, and can also load and unload trucks and trains. However, portal and gantry cranes are usually limited to vessel operation.

The productivity of a grab crane in handling bulk cargo is determined by the capacity (tonnage) of the shell, the path it has to cover and the speed of hoisting, swinging and opening/closing the grabs.

The size of the grab itself is a function of the density of the material it carries; smaller grabs are used with denser and heavier materials. Common inland ports, for example, many ports on China's Changjiang have been equipped with portal or gantry cranes fitted with grabs to unload the vessels. At present, it is the main method to unload the bulk cargo from vessels in China inland ports.

The use of the grab crane, though it is classified as a batch and not a continuous system, can be found in many continuous large-volume terminals. The crane is mostly of a gantry configuration, though sometimes the whirley boom is used as well (it is usually less expensive). A typical terminal layout includes one or two cranes, each feeding a hopper which, in turn, feeds a side belt conveyer leading to the storage pile or silo.

### **Screw unloader**

The first screw unloader in the world was operated in 1975 in Holland. After that the development of screw unloader has been very rapid. Recently, in the world many countries have used the screw unloader at common or industrial terminals, only specially for unloading vessels.

Depending on the material and the tonnage of vessel, the diameter of screw varies from 260 mm to 790 mm, and the capacity from 100 tons/per hour to 2000 tons/per hour. At port terminals, the screw unloader discharges the cargoes from the vessel and its operation has the following characteristics. It can unload coal, grain, cement, fertilizer and allowance powder, granular, and lump no more than 300 ROM. High efficiency of operation, due to the screw unloader fitted a feed gear that the filled up ratio can be reached 70-90 per cent. Its pollution is less than any type ship unloader, because the screw rotates inside the vertical pipe, and the material is inhaled into the screw pipe, so there is no dust pollution.

The configuration of screw unloader is simple so it is light in weight and low in price. The defect is that it needs more power and the damage caused by friction of the screw is rapid.

In China, the Yanyeng Electrical Power Station terminal, located at the Dongting Lake is equipped with the screw unloader.

### **Chain bucket unloader**

The main section in the chain bucket ship unloader is the suspensory chain buckets, inside which is the belt conveyer. In operation, the chain bucket moves in the direction shown, the lower chain bucket excavates the material and carries it up around the top wheel and then dump the material onto the belt conveyer which carries the cargo to the land.

### **Belt conveyer**

The belt conveyer is probably the most common piece of equipment in material handling. The main advantage of the conveyer is that it usually offers the lowest cost alternative for horizontal movement of cargo. This is an important property in inland areas. For example, at many China's coal inland terminals, the storage yard is located behind the levee, far away from the berth.

When combined with the stockpile conveyer, the overall length of conveyer at such a terminal can reach several km. The length of conveyer at the coal terminal in Nanjing port is more than 4 km. The main disadvantage of conveyer stems from the fact that it provides only a point-to-point connection and requires fixed support structures, unlike dump trucks and loader, which can move anywhere.

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The belt conveyer consists of a belt and idlers, or rollers, which support the belt. The idlers and the belt are usually arranged either 'flat' or 'troughed', depending on the properties of the material to be conveyed. Flat belts fit materials which have a steep repose angle (e.g., damp sand) while troughed belts fit lumpy materials (e.g., coal, ore). In addition to the belt and idlers, each conveyer has a support structure, a feeder and discharge device (for loading and unloading), and a tension-maintaining arrangement.

### **Vessel loaders**

In the typical layout of inland waterway bulk terminals the vessel is lower than the storage yard. Therefore, the loading of vessels is done almost exclusively by gravity, usually by using chutes or inclines. As already mentioned, at the low-volume, simplest bulk terminals, the trucks can dump their cargo directly into the vessel hold. At the continuous, high volume terminals, the loader is fed by a conveyer either from storage (bins or piles), or directly from truck/traincar dumper.

The capacity of gravity-based loader is dictated not by the loader itself (which has almost unlimited capacity), but by the fore mentioned feeding belts.

### **Boom stacker and reclaimer**

At continuous bulk terminals, the loading onto the storage piles is done by stackers and the discharge by reclaimers. Stackers are simply an inclined conveyer on a crane boom, and the crane structure is supported by a rail-mounted gantry. Usually the stacker travels along the rail track covering a large stocking area. A large stacker can stack piles of 10-15 meters high and 35-50 meters wider, about 1,00,000 tonnes of coal on each side. Because the stacker has such a large capacity, most inland terminals, only need one stacker.

The reclaimer is a large bucket wheel, mounted on the end of the boom carried (like the stacker) on a track-mounted gantry. The wheel digs into the stockpile and throws the cargo onto a conveyer. Usually, both the stacker and the reclaimer use the same trackage, gantry basis, and main conveyer (in reverse direction). The common usage is a very cost effective arrangement, at the expense of limited flexibility of usage, one machine can either stack or reclaim. This is a combined boom stacker and reclaimer.

A stacker or reclaimer or combined stacker and reclaimer must be connected with a main conveyer. The cargo will be conveyed from the stockpile or traincar by the main conveyer, and then to stockpile or the vessel. The main conveyer is connected with the boom conveyer which is mounted on the gantry. However, a stacker or a reclaimer only does a single operation, either stocking or reclaiming.

### **Stacker and reclaimer**

The gantry stacker and reclaimer and boom stacker and reclaimer are handling and transfer machines in the inland ports, their characteristics and operations are the same, but the configuration is different. We can say that the gantry type is more efficient and economical than the boom type.

First, the weight of the machine is lighter than the boom type. It is one fifth to one fourth lighter (at the same capacity), because no balance weights needed.

Second, the configuration is rational. There is no need for the balance weight to increase its stability, the conveyer beam can go up or down to charge or discharge the cargo and two bucket wheels are mounted on it.

Third, the reclaiming area is large, the stockpile can be discharged by one machine.

The gantry stacker and reclaimer is composed of the main gantry and conveyer beam, two legs mounted at the two ends of the top beam, under which is the bogies on the track, and two gears of the bucket wheel mounted on the conveyer beam, it is powered by electricity. The two bucket wheels can move along the conveyer beam to discharge the bulk cargo from the stockpile.

The coal terminal of Nanjing port was equipped with a gantry stacker and reclaimer ten years ago. Its span is 50 meters, its capacity is 2500 tonnes/per hour, the belt of conveyer is 1.4 meter wide and the speed is 3.15 meter/per second.

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### 3.5 WAREHOUSING AND STORING IN PORTS

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Warehousing or storage refers to ‘holding and preservation of goods until they are despatched to the consumers’. A large variety of commodities such as food grains, food products, pulses, spices, food stuffs, oilseeds, oils, sugar/jaggery, fibres, seeds, feed/fodder, perishable commodities (such as fruits and vegetables), dairy products and miscellaneous items (such as pharmaceutical products) create demand for suitable storage facilities post-harvest or post-production or manufacturing. The primary objective for storage is to make commodities available for final (or intermediate) consumption to meet consumers (or food processing industry) demand independent of time and space barriers, since the production of several commodities is seasonal in nature (mostly agricultural produce). Besides availability concerns, it is crucial to ensure that commodities are stored in suitable atmospheric conditions, to be sold for final (or intermediate) consumption as and when demand arises while maintaining their quality in the intervening period. However, with the advent of globalization and strengthening of global supply chains and even the spread of organised retail chains and rapid growth of e-commerce, the role of warehouses has transformed far beyond just being the facilities relevant for holding inventories.

Storage requirements could be temporary in nature or can be for short, medium or long term influenced to a great extent by the nature of product and its market conditions. On account of increasing demand for storage services spanning across wide range of commodities, the storage methods have evolved over time. Broadly speaking, these can be classified as: (a) traditional storage methods and (b) modern storage methods. Traditional methods include natural storage, artificial storage, ventilated storage and storage with ice refrigeration. Modern methods include storage with mechanical refrigeration, controlled atmosphere storage and modified atmosphere packaging (Rao, 2015).

In principle, warehouses can be classified into different types on the basis of criteria such as its stage in the supply chain, geographic area, product type, function performed, type of ownership, company usage (dedicated or shared-user), area, height and equipment, subject to the availability of detailed information regarding these

#### NOTES



**Warehousing:** Warehousing or storage refers to ‘holding and preservation of goods until they are despatched to the consumers’.

#### Check Your Progress

9. What are the most basic activities included in port operation?
10. What is the handling method of general cargoes?
11. State any one advantage of portal cranes over tyre cranes.
12. How can bulk cargo handling methods and related equipment be divided?

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characteristics (Rushton, Croucher and Baker, 2014). In the Indian context, warehouses are generally classified on the basis of ownership type as: (a) private, (b) public, (c) government, (d) bonded and (e) co-operative warehouses. Private warehouses are owned and managed by the manufacturers or traders for their own commodities. Public warehouses are the ones which are set up after obtaining the license from the government and provide storage services to public in general (such as manufacturers, wholesalers, exporters, importers etc.). In contrast to public warehouses, government warehouses are owned, managed and controlled by government at the central, state or local level and even by public corporations. Such warehouses deliver storage services to the government and private enterprises. Bonded warehouses are generally situated near the ports and are managed by the government or government agencies such as custom authorities. Cooperative societies own, manage and control the co-operative warehouses.

### 3.5.1 Storage and Handling Capacities

The supporting rationale of warehousing is an improvement in the time and place capability of the overall logistical system both in terms of economic benefits and service. For example, placing a warehouse in a logistical system to service a specific market segment may increase cost. These costs must be exceeded by the benefits of increases in market share, revenue and gross margin to make the decision acceptable.

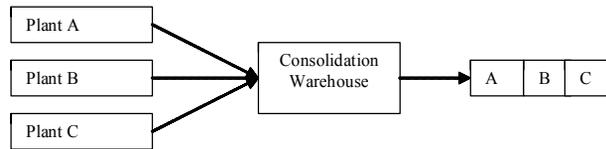
From a conceptual perspective, no warehouse should be included in a logistical system unless it is fully justified on a cost-benefit basis. Some major benefits that can accrue from warehousing are discussed as follows:

**Economic Benefits:** Economic benefits of warehousing can be quantified by the return on investment reflected in the direct cost-to-cost trade-off. For example, if adding a warehouse to a logistical system reduces overall transportation cost by an amount exceeding the fixed and variable costs of the warehouse, the warehouse is economically justified. This means that total costs have been reduced. Cost reductions are attainable through four basic economic benefits:

- Consolidation
- Break bulk and cross-dock
- Processing/postponement
- Stockpiling

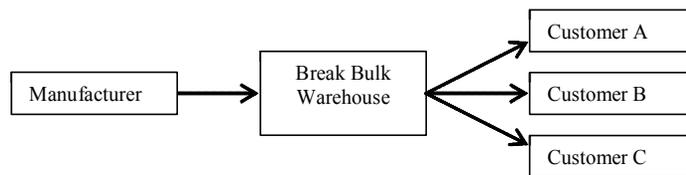
**Consolidation:** Shipment consolidation is when a warehouse receives and consolidates materials from a number of manufacturing plants destined to a specific customer on a single transportation shipment. The benefits are the realization of the lowest possible transportation rate. In order to provide effective consolidation, each manufacturing plant must use the warehouse as a forward stock location or as a sorting and assembly facility.

The primary benefit of consolidation is that it combines the logistical flow of several small shipments to a specific market area. Through the use of such a programme the manufacturer can optimize the total distribution cost (see Figure 3.1).



*Fig. 3.1 A Consolidation Warehouse*

**Break bulk and cross-dock:** In break bulk and cross-dock warehouse operations no storage is involved. A break bulk operation receives combined customer orders from manufacturers, sorts or splits individual orders and delivers them to individual customers. Long distance transportation movement is consolidated lowering transport costs (see Figure 3.2).



*Fig. 3.2 Break Bulk Operation*

A cross-dock facility is similar except that it involves multiple manufacturers. In this case, truckloads of product arrive from multiple manufacturers. The products are received, sorted by the customer, moved ‘across the dock’ to be loaded into the truck destined for the appropriate customer. The truck is filled with mixed products from multiple manufacturers. Retail chains make extensive use of cross-dock operations to replenish fast-moving store inventories. Cross-docking provides cost savings as full trucks move from the manufacturer’s end to the warehouse and from the warehouse to retailers. There is also reduced handling cost at the cross-dock facility since products are not stored.

**Processing/postponement:** Stores can also be used to postpone or delay production. For example, a warehouse with packaging or labelling capability allows postponement of final production until actual demand is known. Once a specific customer order is received, the warehouse can complete final processing and finalize the packaging.

Processing and postponement provide two economic benefits. First, risk is minimized because final packaging is not completed until an order has been received. Second, the required level of total inventory is reduced by using the basic product for a variety of labelling and packaging configurations.

**Stockpiling:** In the case of seasonal products such as agricultural commodities that are harvested at specific times but consumed throughout the year, or products such as sarees that are manufactured throughout the year but sold mainly during festival seasons, warehouse stockpiling is required. Stockpiling provides an inventory buffer, which allows production efficiencies within the constraints imposed by material sources and consumer behaviour while at the same time supporting marketing requirements.

**Service Benefits:** Warehousing enhances the time and place capability of the overall logistical system. However, the cost–benefit basis of service is often difficult to quantify. At a conceptual level, a service-justified warehouse is justified if the net effect contributes to an increase in profitability. But at an operational level, the problem is how to measure the direct revenue impact.

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There are five basic benefits achieved through warehousing from a service point of view:

- Spot stock
- Assortment
- Mixing
- Product support
- Market presence

**Spot stock:** Utilizing warehouse facilities for stock spotting takes place when a selected amount of a firm's product line is placed or 'spot stocked' in a warehouse to fill customer orders during a critical marketing period in a variety of markets, allows manufacturers with limited or highly seasonal product lines substantially reduce delivery times to strategic markets. For example, stock spotting is commonly used in physical distribution for agricultural products to farmers during the growing season. At the end of the season, the remaining inventory is withdrawn to a central warehouse.

**Distribution assortment:** A distribution warehouse is used to stock product combinations in anticipation of customer orders (see Figure 3.3). It may represent multiple products from the manufacturer or special assortments of products as specified by customers. For example, a manufacturer supplying JIT components would stock products so that it could be offered to the customer as and when required. Distribution warehouses improve service by having inventory at hand to supply the principal and also allow larger shipment quantities, which in turn reduce transportation cost.

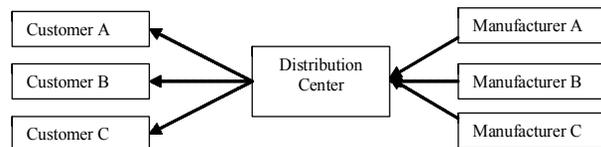


Fig. 3.3 Distribution Assortment Warehouse

**Mixing:** Warehouse mixing is similar to the consolidation process. In mixing, full truckloads of products are shipped from manufacturing plants to warehouses. Upon arrival at the mixing warehouse, the shipments are unloaded and the desired combination of each product for each customer or market is selected. In-transit mixing brings economies when plants are geographically separated reducing overall transportation charges and warehouse requirements. From the service point of view, warehouses that provide in-transit mixing have the net effect of reducing overall product storage and customer service as the inventory is sorted to precise customer specifications.

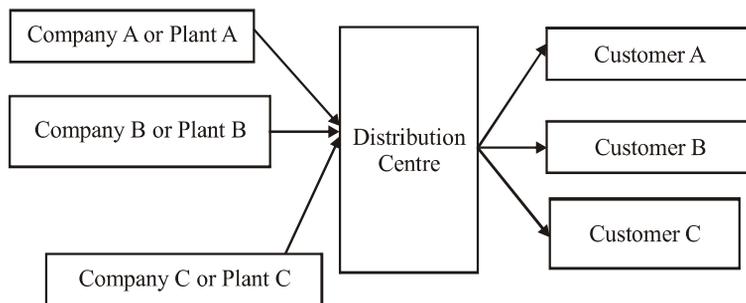
**Production support:** Production support warehousing meets actual requirements of raw material, part, sub-assemblies and assemblies required for production in an efficient manner. It provides for safety stocks on items purchased from outside vendors protecting against long lead times or significant variations in usage. The different types of warehousing could be raw materials stores, processed or semi-finished materials store, finished goods store, yard store, and so on. The economics is reflected in the ability of providing the most economical total-cost solution by supplying or 'feeding' processed materials, components and sub-assemblies into the assembly plant in an efficient and timely manner.

**Market presence:** The major advantage of local warehouses is that they can be more responsive to customer needs and offer quicker delivery than more distant warehouse. As a result, a local warehouse increases the speed of delivery. In many cases, especially for FMCG products, this can result in increased market share and potentially increases profitability.

### Cross-docking

Cross-docking is a logistics technique that eliminates the storage and order picking functions of a warehouse while still allowing it to serve its receiving and shipping functions. It also facilitates reduced handling cost at the cross-dock facility since products are not stored. Cross-docking, when properly executed, enables firms to eliminate inventory costs and reduce transportation costs, often at the same time.

In a cross-dock, materials are unloaded from an incoming truck or rail car and loaded into outbound trucks or railway wagons, with little or no storage in between. The idea is to transfer incoming shipments directly to outgoing trailers without storing them in between. Shipments typically spend less than 24 hours at the facility, sometimes less than an hour. Figure 3.4 is a simplistic illustration of how cross-docking works.



**Fig. 3.4** Cross-docking Warehouse Operations

Cross-docking may be done to change the type of conveyance, or to sort material intended for different destinations, or to combine material from different origins. Simply stated, cross-docking means receiving goods at one door and shipping out through the other door almost immediately without putting them in storage

In a sense, cross-docking shifts the focus from ‘supply chain’ to ‘demand chain’. For example, stock coming into a cross-docking centre is already pre-allocated against a replenishment order generated by a retailer in the supply chain. It works like this: goods arriving from the vendor already have a customer assigned, so workers move the shipment from the inbound truck to an outbound truck bound for the appropriate destination. Truckloads of the product arrive from multiple manufacturers. The products are received, sorted by the customer and moved ‘across the dock’ to be loaded into the truck destined for the appropriate customer.

The operations of cross-docking are in contrast to traditional warehousing, where goods are received from vendors and stored in devices such as pallet racks or shelving. When a customer (e.g., the consumer or perhaps a retail outlet) requests an item, workers pick it from the shelves and send it to the destination.

### NOTES



**Cross-docking:** Cross-docking is a logistics technique that eliminates the storage and order picking functions of a warehouse while still allowing it to serve its receiving and shipping functions.

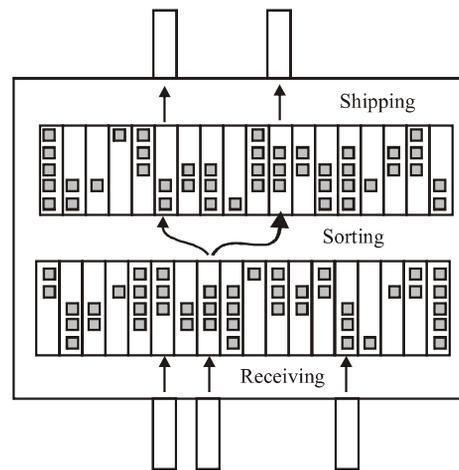
## NOTES

What is the economics of cross-docking? Warehousing has four major functions—receiving, storage, order picking and shipping. Storage and order picking are typically the most costly of the functions. Storage is a high cost item because of inventory holding costs; and order picking because it is labour intensive.

**Cross-docking Applications:** Some of the typical applications of cross-docking are as follows:

- ‘Hub and spoke’ arrangements, where materials are brought to one central location and then sorted for delivery to a variety of destinations.
- Consolidation arrangements, where a variety of smaller shipments are combined into one larger shipment for economy of transport.
- Deconsolidation arrangements, where large shipments (e.g., railcar lots) are broken down into smaller lots for ease of delivery.

Cross-docking may also involve offloading pre-assembled products for integration with other core orders before onward delivery to retail outlets. The process takes place without stock going into storage. Product categories considered suitable for cross-docking include slower-moving lines, fast-moving bulk products, chilled and frozen food, and product lines where sales are skewed geographically.



**Fig. 3.5** A Typical Two-stage Cross-dock

The most common cross-docking system is a two-stage system. Figure 3.5 illustrates a retail cross-dock in a post-distribution operation. It has the advantage of allowing workers in shipping to pick from among several pallets in a shipping queue (which results in more tightly packed loads), while still allowing value-added processing by workers in receiving.

### 3.5.2 House and Terminal/Warehouse Stuffing

**Stuffing** refers to the physical loading of cargo into carrier’s container. Once after moving cargo to Container freight station or load port, the cargo will be unloaded in warehouse. The loading and stuffing of a container to safely secure the cargo preventing movement and/or collisions inside the container is a specialized procedure that is normally carried out by professionals to reduce the risk of cargo damage. Whether the buyer or the seller carries the cost and risk of stuffing the container must be decided before bidding is conducted and the correct Incoterm used in the bidding document.



**Stuffing:** Stuffing refers to the physical loading of cargo into carrier’s container.

### 3.5.3 Demurrage

Demurrage is a charge for detaining a freight car, ship or other vehicle beyond the free time stipulated for loading or unloading. Demurrage may also be levied by a shipper on a consignee for containers held beyond an agreed date, or for failure to take delivery of stored goods within a specified time.

The scale of rates according to the Mumbai Port Trust are as follows:

#### Section 3.1 (B): Demurrage

On expiration of free days, save as hereinafter provided, demurrage will be charged for the period of storage on all goods (except mails, post parcels, diplomatic postal bags and personal baggage irrespective of weight per parcel, bag etc.) remaining uncleared, at the following rates:

Class of goods (1)	How charged (2)	R A T E (Rs)		
		For first to 20 <sup>th</sup> day (3)	For 21st to 40th day (4)	From 41st days onwards (5)
In respect of all goods classified in the wharfage schedule in Section-3.1(A) above.	Per tonne per day or part thereof	37.50	56.25	75.00

#### General notes to Section 3.1 (B)

- All import goods will be allowed storage in the docks free of demurrage for three days from the date following the day of complete discharge of vessel's cargo. All export goods will be allowed storage in the docks free of demurrage for seven days commencing from the date of admission of cargo into the port.
- For the purpose of calculation of free days Sundays, Customs notified holidays and port non-working days will be excluded.
- Free period of 10 days will be allowed for salvaged goods and the free period will be counted from the date on which goods are actually salvaged.
- In order to promote export aggregation certain specified area will be identified from time to time for specified cargo. A maximum of 30 free days will be allowed in such cases.
- Demurrage charge on both cargo and container shall not accrue for the period when the port is not in a position to deliver cargo/container when requested by the users.
- Demurrage on goods detained by the customs*
  - Periods during which the goods are detained by the Commissioner of Customs for the purpose of special examination involving analytical or technical test other than the ordinary process of appraisal and certified by the Commissioner of Customs to be not attributable to any fault or negligence on the part of the importers
  - Where goods are detained by the Commissioner of customs on account of Import Control formalities and certified by the Commissioner of Customs

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**Demurrage:** Demurrage is a charge for detaining a freight car, ship or other vehicle beyond the free time stipulated for loading or unloading.

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to be not attributable to any fault or negligence on the part of the Importer, for such period of detention under (a) and (b), the demurrage charges shall be recovered as under:

First 30 days of detention: 20 per cent of the applicable demurrage

31st day to 60 days of detention: 50 per cent of the applicable demurrage

61st day onwards of detention: 100 per cent of the applicable demurrage

7. Demurrage charges will be assessed on the gross weight of the goods. Gross weight if not in exact multiples of 100 kg will be rounded off to the next higher multiple of 100 kg for levy of charges.
8. No wharfage will be charged on shut out cargo.

### 3.5.4 Loading and Unloading in Warehouses

Moving goods around inside your warehouse and storing them in a rational way is a major challenge—but the process of actually getting the goods inside in the first place is also filled with potential problems. High costs, queuing and inefficiency can all arise when you are not unloading optimally. That is why making the process as smooth and quick as possible can have a positive ‘knock-on’ effect on the rest of your operation.

But what method should you use? Many warehouse managers use versatile counterbalances to unload the pallets from ground level from the sides of the truck. Others make use of pallet trucks, which can enter the lorry via a loading bay and take out pallets from the rear.

Both ways of working have their advantages and disadvantages, and even the most cost-effective option in terms of the cost per pallet may not work for you—especially if you do not make use of loading bays.

### 3.5.5 Transchart of Ministry of Shipping

As indicated in the report on the Ministry of Road Transport and Highways the Ministry of Surface Transport was bifurcated into two ministries, viz., the Ministry of Shipping and the Ministry of Road Transport and Highways in November, 2000. The Ministry of Shipping is responsible for major ports, shipping, ship building and ship repair, national waterways and inland water transport and light houses. The subjects allocated to the ministry are listed at Annex 1 and the organisation chart is at Annex 2. A statement showing the sanctioned staff strength of the Ministry is at Annex 3. The Ministry of Shipping has the following subordinate offices, autonomous bodies, societies and associations and public sector undertakings:

#### Subordinate Offices

1. Directorate General of Shipping
2. Andaman Lakshadweep Harbour Works
3. Directorate General of Lighthouses and Lightships
4. Minor Ports Survey Organization

### Autonomous Bodies

1. Port Trusts at Calcutta, Paradip, Visakhapatnam, Chennai, Ennore, Tuticorin, Kochi, New Mangalore, Mormugao, Mumbai, Jawaharlal Nehru (Nhava Sheva) and Kandla
2. Dock Labour Boards at Calcutta, Kandla, Chennai, Mormugao and Visakhapatnam
3. Inland Waterways Authority of India
4. Seamen's Provident Fund Organisation
5. Tariff Authority for Major Ports

### Societies/Associations

1. National Institute of Port Management (NIPM)
2. National Ship Design and Research Centre
3. Seafarers Welfare Fund Society

### Public Sector Undertakings

1. Shipping Corporation of India
2. Hindustan Shipyard Limited
3. Cochin Shipyard Limited
4. Central Inland Water Transport Corporation Limited
5. Dredging Corporation of India
6. Hooghly Dock and Ports Engineers Limited
7. Ennore Port Company

The Ministry is also responsible for administering the following Acts:

1. The Indian Ports Act, 1908 (15 of 1908)
2. The Inland Vessels Act, 1917 (1 of 1917)
3. The Dock Workers (Regulation of Employment) Act, 1948 (9 of 1948)
4. The Merchant Shipping Act, 1969 (44 of 1958)
5. The Major Ports Trust Act, 1963 (38 of 1963)
6. The Seamen's Provident Fund Act, 1966 (4 of 1966)
7. The Inland Waterways Authority of India Act, 1985 (82 of 1985)

The Ministry of Shipping has a Chartering Wing (Transchart), which is responsible for making shipping arrangements for the transportation of cargo owned/controlled by the government or by government owned entities like PSUs as per the policy of buying FOB/FAS and selling CAF/CIF. Transchart has an enviable record of making shipping arrangements at internationally competitive freight rates, thus saving valuable foreign exchange for the country and in the process also providing cargo support to Indian vessels. The policy of buying FOB and selling CAF/CIF is in the national interest and Transchart should continue. There is, however, considerable scope for the computerisation of the operations of Transchart and this could result in a reduction in the staff strength. This exercise should be carried out in six months.

### NOTES

#### Check Your Progress

13. Define warehousing.
14. State the major advantage of local warehouses.
15. 'Warehousing has four major functions.' Name them.
16. What is demurrage?

## NOTES

### 3.6 SUMMARY

Some of the important concepts discussed in this unit are:

- The decision regarding selection of the airline or the shipping line is a complex decision and requires the help of professionals in this field to make the proper choice. The Clearing and Forwarding (C&F) Agent is a specialized person who guides the exporters in the selection of the airline/shipping line.
- Shipping and forwarding agents deal with customs entries and other formalities. They arrange payment of freight charges and insurance.
- For smooth and timely shipment of cargo, the exporter should appoint a suitable clearing and forwarding agent.
- Export cargo can be dispatched to the overseas buyer by sea, air, post, land, river, etc. Shipment by sea is however, the most popular and generally resorted to as it is comparatively cheaper besides the ship's capacity is unlimited and can carry any quantity of cargo.
- Goods can be shipped by surface (road, rail, or sea) or by air. By far the most popular method is sea, with air freight as an occasional option.
- The freight rates that have to be paid to send goods by ocean freight depend to some extent on which type of shipping is used. The four basic types of shipping are: Conference line vessels, non-conference vessels, tramp ships and charter ships.
- Stevedore and Shore Handling Agent is an authorized agent for loading and unloading and storage of cargo in any form on board the vessels in Port, arranging and receiving the cargo to/from the hook point, intermodal transport from wharf to stack yard and vice-versa and also receiving and delivering of cargo from/to wagons/trucks.
- Marine surveyors examine marine vessels to assess the condition of their structure, machinery and equipment. They ensure that vessels are constructed, equipped and maintained according to safety standards and are seaworthy.
- The exporter can send the shipment of goods using any one of the following modes of transport as specified in the export contract.
  - o Air transport
  - o Sea transport
  - o Multimodal transport
  - o Road transport
- Ports are the nodes of the world's maritime transport system. Every voyage of a ship must begin and end at a port. Their size and distribution will therefore both reflect and contribute to the pattern of maritime transport.
- Ports are heterogeneous, differing considerably, depending on their location, in the types of vessel and cargo that they can handle and the services they offer. The various types are sea ports, inland ports, transshipment hubs, hinterland ports, freight ports, passenger ports, container traffic and bulk freight traffic.

- The world's busiest container port is Shanghai in China, with 33.62 million TEU movements in 2013.
- There are of course other very large and busy ports, for example (with millions of TEU movements in 2013): Los Angeles, California, USA (7.87), Long Beach, California, USA (6.73) and New York/New Jersey, USA (5.47).
- India has 12 Major ports that handle large volume of traffic. These are Chennai Port, Cochin Port, Jawaharlal Nehru Port, Kamarajar Port, Kandla Port, Kolkata and Haldia Port, Mormugao Port, Mumbai Port, New Mangalore Port, Paradip Port, V. O. Chidambaranar Port and Vishakhapatnam Port.
- Chennai port is the second largest and third oldest port in India. It is considered as a big hub for cargo traffic, car, big containers in east coast of India.
- The term inland waterway port or an inland waterway terminal conveys the idea of an end point. Indeed, traditionally, ports were perceived as end points of the transport system whereby water transport of cargoes was either originated or terminated.
- The two generic cargo groups, are general and bulk cargoes. In line with this operational cargo classification, cargo handling equipment can also be divided into:
  - o General cargo equipment
  - o Bulk cargo equipment
- General cargo equipment are the most basic handling machines at the inland waterway terminals. General cargo equipment are tyre cranes, portal cranes, fixed cranes, forklifts, trailers, platform wagons, etc.
- Bulk cargo handling methods and related equipment can be divided into two categories:
  - o Batch handling equipment
  - o Continuous handling equipment
- Bulk handling equipment are essentially general cargo equipment adaptable for bulk handling, such as grab cranes.
- The belt conveyer is probably the most common piece of equipment in material handling. The main advantage of the conveyer is that it usually offers the lowest cost alternative for horizontal movement of cargo.
- The gantry stacker and reclaimer and boom stacker and reclaimer are handling and transfer machines in the inland ports, their characteristics and operations are the same, but the configuration is different.
- Warehousing or storage refers to 'holding and preservation of goods until they are despatched to the consumers'.
- In the Indian context, warehouses are generally classified on the basis of ownership type as: (a) private, (b) public, (c) government, (d) bonded and (e) co-operative warehouses.
- Economic benefits of warehousing can be quantified by the return on investment reflected in the direct cost-to-cost trade-off.

## NOTES

## NOTES

- Cost reductions are attainable through four basic economic benefits:
  - o Consolidation
  - o Break bulk and cross-dock
  - o Processing/postponement
  - o Stockpiling
- There are five basic benefits achieved through warehousing from a service point of view:
  - o Spot stock
  - o Assortment
  - o Mixing
  - o Product support
  - o Market presence
- Cross-docking is a logistics technique that eliminates the storage and order picking functions of a warehouse while still allowing it to serve its receiving and shipping functions.
- Stuffing refers to the physical loading of cargo into carrier's container. Once after moving cargo to Container freight station or load port, the cargo will be unloaded in warehouse.
- Demurrage is a charge for detaining a freight car, ship or other vehicle beyond the free time stipulated for loading or unloading.
- The Ministry of Shipping has a Chartering Wing (Transchart), which is responsible for making shipping arrangements for the transportation of cargo owned/controlled by the government or by government owned entities like PSUs as per the policy of buying FOB/FAS and selling CAF/CIF.

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### 3.7 ANSWERS TO 'CHECK YOUR PROGRESS'

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1. The Clearing and Forwarding (C&F) Agent is a specialized person who guides the exporters in the selection of the airline/shipping line.
2. Following are some of the services provided by C&F agents:
  - Providing warehousing facility to the exporters for warehousing the goods before their transportation to the docks/port
  - Transportation of goods to the docks and arrangements of warehousing at the port
3. Marine surveyors examine marine vessels to assess the condition of their structure, machinery and equipment.
4. The transportation of goods by air offers many advantages to the exporter. Some of these are:
  - Movement of goods is very fast.
  - Warehousing costs are reduced to the minimum.
5. The non-marine factors—such as land and river transport connections, location of population and industry and size of domestic markets—will determine, to a

- large extent, the development of ports and, therefore, the way in which they affect the marine environment.
6. The location of ports for handling bulk traffic is usually determined by the location of their sources of supply and demand.
  7. The world's busiest container port is Shanghai in China, with 33.62 million TEU movements in 2013.
  8. Jawaharlal Nehru port is the largest container port in India.
  9. The most basic activities in port operation include cargo handling activities, whereas other activities include storage and distribution, equipment maintenance, cargo processing, and other industrial activities.
  10. The handling method of general cargoes is lifting and moving the cargo units, or loads, in a cyclical, repetitive fashion.
  11. Portal cranes usually have a higher productivity and a better reach than tyre cranes; if the capacity is the same, the price of one set is lower than that of the tyre crane.
  12. Bulk cargo handling methods and related equipment can be divided into two categories:
    - (a) Batch handling equipment
    - (b) Continuous handling equipment
  13. Warehousing or storage refers to 'holding and preservation of goods until they are despatched to the consumers'.
  14. The major advantage of local warehouses is that they can be more responsive to customer needs and offer quicker delivery than more distant warehouse.
  15. Warehousing has four major functions—receiving, storage, order picking and shipping.
  16. Demurrage is a charge for detaining a freight car, ship or other vehicle beyond the free time stipulated for loading or unloading.

## NOTES

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### 3.8 QUESTIONS AND EXERCISES

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#### Short-Answer Questions

1. Why are clearing and forwarding agents required?
2. Who is a Stevedore and Shore Handling Agent?
3. What is the Airway Bill?
4. Write a short note on the scale and magnitude of port activity.
5. Name the major ports that handle large volume of traffic in India.
6. What are general cargo equipment? Name its types.
7. What are the economic benefits of warehousing?
8. Write a short note on warehouse stuffing.
9. What are the methods used by warehouse managers for the smooth operation of loading and unloading of goods in the warehouses?

**NOTES**

**Long-Answer Questions**

1. Discuss the role of clearing and forwarding agents in the choice of transportation for exports.
2. Describe the role of stevedores and surveyors in the shipment of cargo.
3. Critically examine the term port and assess its types.
4. What are the major ports of the world and India? Describe.
5. Analyse the categorization of cargo handling equipment.
6. Describe the significance of warehousing and storage in ports.
7. What is cross-docking? What are its applications?
8. Discuss the role of the Transchart of the Ministry of Shipping.

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## UNIT 4 MARITIME INSURANCE

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### Structure

- 4.0 Introduction
- 4.1 Unit Objectives
- 4.2 Marine and Cargo Insurance
  - 4.2.1 Cargo Insurance
  - 4.2.2 Marine Insurance Contract
  - 4.2.3 Types of Coverage
  - 4.2.4 Institute Cargo Clauses
  - 4.2.5 Types of Policies: Specific and Open Policy
  - 4.2.6 Documentation for Filing Claim
- 4.3 Insurance Claim Procedure
  - 4.3.1 Procedure for Marine Insurance Claims
  - 4.3.2 Duties of the Insured (Preservation of Recovery Rights)
  - 4.3.3 Statutory Time Limits for Lodging Notice of Claims and Filing Suits
  - 4.3.4 Documents Required for Processing Cargo Claim
- 4.4 Summary
- 4.5 Answers to 'Check Your Progress'
- 4.6 Questions and Exercises

### NOTES

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### 4.0 INTRODUCTION

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The need to insure property against the economic consequences of its loss or damage is a fundamental feature of modern society. The more valuable the property and the more serious consequences of its loss or damage to the owner, the more imperative it is to insure it adequately. Particularly in the case of property representing substantial investments in commodities, manufactured goods and industrial plants, and involving outside financing, the owner of the goods as well as his creditors insist on ample insurance cover. Credit is becoming more difficult to obtain without such cover. Thus, merchants insure their goods in stock, farmers their crops, and industries their products, plants and machinery. The scope of the insurance cover sought in each case depends, of course, on the type of perils to which the goods concerned are exposed and on the degree of security their owners wish to attain.

Goods in transit are generally exposed to considerable additional perils, against which adequate insurance cover becomes even more essential. This explains the early development of marine insurance, which has been practiced by merchants since the early days of overseas trade. It continues to play a very important role in world trade. In practically every import or export transaction, besides the main partners—the seller and the buyer of the goods and the indispensable carrier—insurers have an essential role to play both economically, through providing insurance cover and settling claims (with or without recourse against third parties possibly liable for loss of or damage to cargo), and financially, where the marine insurance policy is an ancillary document indispensable to the negotiability of the goods while in transit. This unit discusses maritime insurance and its various aspects.

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## 4.1 UNIT OBJECTIVES

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After going through this unit, you will be able to:

- Describe the need for cargo insurance
- Explain the procedure of insuring
- Analyse the major types of cargo insurance policies
- Assess the insurance claim procedure
- Discuss the marine insurance claim procedure
- List the major documents required for processing cargo claim

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## 4.2 MARINE AND CARGO INSURANCE

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**Marine insurance** is a commonly used practice in international trade. It has to be carried out to safeguard onshore and offshore exposed property that includes container terminals, ports, oil platforms, pipelines, hull, marine casualty, and marine liability. Marine insurance is also a part of commercial insurance. You may be aware of the various risks that are involved in international trade. Marine insurance policy is adopted to reduce these risks. Marine insurance is useful to cover the losses of both small scale business as well as large organizations. But following losses are not covered in this policy:

- Due to wilful misconduct
- Ordinary leakage
- Improper packing
- Delay
- War
- Strike
- Riot and civil commotion

### Types of Marine Insurance

Five types of marine insurances are available in most countries. These are:

- Marine import transit insurance
- Marine export transit insurance
- Marine inland transit insurance
- Marine insurance claim procedure
- Marine hull

### Marine Insurance Amount/Premium

The marine insurance premium calculation can be done by considering the following factors:

- Nature of cargo

- Scope of cover, packing
- Mode of conveyance
- Distance and past claims experience

Some insurance companies offering marine insurance in India include:

1. ICICI Lombard – Marine Import Transit Insurance Policy
2. United India Insurance Co. – Marine Cargo
3. The New India Assurance Co.

#### 4.2.1 Cargo Insurance

Cargo insurance is a branch of marine insurance, though cargo insurance is a narrow concept when compared to marine insurance. Cargo insurance covers the loss or damage of ships, cargo, terminals, and any transport or property by which cargo is transferred, acquired, or held between the points of origin and final destination.

A marine or cargo insurance policy has an international character and therefore a policy taken in one country is acceptable in the other country. This is because of the adoption of universally acceptable uniform rules governing insurance in different countries.

There are various losses in international trade. The exporter may suffer a loss if the cargo is damaged due to an accident or any other circumstances during transportation of goods from port of loading to the port of discharge. Cargo insurance covers various losses or damages resulting in transit by rail, sea, road, air or posts. Since this risk involves international trade, therefore, there is need of cargo insurance. Cargo insurance policy can be directly taken by owners or the exporters may take it through bankers of goods in transit/shipment.

Following are the items that can be insured in cargo insurance:

- Trading of goods that generally cover export and import shipments
- All kinds of goods which are in transit either by rail, sea, road, air or post
- All kinds of goods which are carried by coastal vessels plying between the various ports within the country
- Cargo transported by small vessels or country craft over inland waters
- All kinds of goods which are moved from place to place by river transport

Cargo insurance policy is also meant to cover damage to property due to:

- Fire or explosion, stranding, sinking, etc.
- Overturning, derailment (of land conveyance)
- Collision
- Discharge of cargo at port of distress
- Jettisoning
- General average sacrifice, salvage charges
- Earthquake, lightning
- Washing overboard
- Sea, lake, river water
- Total loss of package lost overboard or dropped in loading or unloading

## NOTES

## NOTES

Cargo or marine insurance in India is subjected to the following legislations:

- The Insurance Act, 1938; and Insurance Rules, 1939
- Marine Insurance Act, 1963

In India, cargo insurance cover is provided only by the nationalized insurance companies, i.e., General Insurance Corporation of India or its four subsidiaries in India. These companies operate within the standard rules and regulations including those that are provided in the 'All India Marine Cargo Tariff' in India.

### 4.2.2 Marine Insurance Contract

Article 3 of the Indian Marine Insurance Act, 1963 defines marine insurance contract as follows:

'It is an agreement whereby the insurer undertakes to indemnify the assured in the manner and to the extent thereby agreed, against marine losses, that is to say, the losses incidental to marine adventure.'

Before different aspects of marine insurance contract are explained, it should be clearly understood that the word 'marine' used in the definition does not have any specific connotation. Despite the usage of this word, cargo insurance principles as stated in the definition are equally applicable to all modes of transport used in the carriage of goods.

#### Parties to the Contract

There are two parties to the agreement—the insurer and the insured. The insurer is the insurance company, also known as underwriters, which assume the liability when the loss takes place. On the other hand, the insured is the one who either procures an insurance policy or becomes a beneficiary through it.

#### Need for Insurance

All experienced exporters are aware of the risks to their cargo while it is in transit. These include fire, storm, collision, pilferage, leakage and explosions. Goods travelling from the country, in whatever mode of transport, must be insured against loss or damage at each stage of their journey, so that neither the exporter nor the customer suffers any loss.

In the language of insurance the shipment of goods is called an 'adventure' or 'venture'—terms used long ago when the shipment of goods was far more hazardous than it is today. Goods should be insured if a person has a financial stake (an 'insurable interest') in the arrival of the goods at their destination. Under the law, a person may purchase marine insurance in a venture only if he has insurable interest in it.

Either the exporter or his customer will be liable for the goods at any one point in the journey. The liability laid down in terms of delivery normally conforms to when the title of ownership to the goods passes from the exporter to the customer. This is known as the passing of risk.

For example, in an FOB (Free on Board) contract, the transfer of ownership is at the point where the goods pass over the ship's rail. In theory, the exporter insures the goods up to that point and the customer takes responsibility from then on. In practice, the customer normally buys insurance to cover the whole journey in FOB

(Free on Board), FAS (Free Alongside Ship) and C and F (Cost and Freight) contracts, from the exporter's warehouse to the final destination.

Under a CIF (Cost, Insurance and Freight) contract, the exporter takes out ocean insurance even through his ownership and responsibility for loss or damage and when the goods have been placed on the vessel. He takes out cover against the risks customarily covered in his particular trade. He is not required to do more unless both parties have agreed to it. These rules are of course subject to local usage. Whatever allocation of responsibility is agreed upon, it must be absolutely clear and must cover any emergency.

Even when an exporter's responsibility ends when he leaves the consignment at the dock (FAS), it may be wise in many cases for him to take insurance for the entire voyage, because his financial stake in the 'venture' continues until he is actually paid for the goods. If the goods are damaged in transit the customer may be unwilling or even unable to pay for them.

To avoid any such risk, the exporter should make it a general policy that his conditions of sale make him responsible for providing marine insurance—even in FOB contracts. If this is not possible due to local customs, an exporter can purchase special contingency insurance which will make up any shortage in claims paid by the customer's insurance. It should be noted that *marine insurance is a misleading term and can be extended to cover transportation over land or on inland waterways.*

### **How to Insure?**

Insurance can be arranged by an insurance broker or an insurance company. An insurance policy is issued when the goods are insured, but it is also commonplace to use a 'certificate of insurance', which is used as evidence of the agreement between the insurer and the person taking shipping documents. A policy is also used as collateral security when an exporter gets an advance against his bank credit.

Individual policies for a single shipment are seldom used by companies regularly engaged in foreign trade. Exporters normally insure under long term policies, known as 'Open Cover'. These contracts may run for a fixed time or indefinitely until cancellation. As evidence of insurance of each shipment, the insured or his insurance broker can issue a certificate of insurance, which gives all the information contained in an insurance policy. The open cover gives the exporter automatic, continuous coverage. It also saves him the trouble of having to arrange for protection every time he makes a shipment, and he always knows his exact insurance costs. This makes it easier for him to quote a landed sales price.

On a CIF contract the exporter sends the certificate of insurance to the customer, for him to claim at the port of destination if the goods have been damaged on the ship.

It is a common practice to insure for 10 per cent above the CIF value of the goods, in order to allow for problems involved in replacing the goods, waiting for the money, etc. The goods may be insured for even higher amounts, for example, to cover loss of import duty paid on products which have subsequently disappeared.

## **NOTES**

**NOTES****4.2.3 Types of Coverage**

In buying insurance, the object is to buy as much protection as is necessary or prudent, at as low a cost as possible. To do this, one has to know what risks can be covered, and to decide how much coverage is needed.

An insurance policy defines its coverage in terms of the nature of the loss or damage, the extent of the loss or damage, and the conditions under which it occurred.

For example, sea water damage is a major risk and is covered to some extent by all marine policies. But one policy may pay for sea water damage only if the loss is total or if the vessel has been stranded, sunk, burnt, or has been in a collision. Another policy may be more inclusive, and pay for partial sea water damage caused not only by such calamities, but even by heavy weather (storm, etc.).

Generally, the specific risks or perils covered by a policy are not consolidated in a single paragraph; they are listed in several clauses set into various places in the policy. In the case of raw materials, policies sometimes do not fully define the coverage, and claims are settled according to prevailing customs in the trade.

**Kinds of Perils**

The events which lead to loss or damage to the cargo are perils against which insurance cover can be obtained. These perils may be categorized into four groups:

- Marine perils (Act of God: natural calamity)
- Extraneous perils (Faults in loading, breakage, leakage, etc.)
- War perils (War, civil war, revolution, rebellion, etc.)
- Strike perils (Strike, lockouts, etc.)

**Kinds of Losses**

Losses are of two types. These are:

- Total loss
- Partial loss (also known as Average)

Total loss, in turn, can be of two types. These are:

- Actual total loss
- Constructive total loss

Partial loss or Average is also of two types. These are:

- General average
- Particular average

To a great extent, the protection that a marine insurance policy gives is defined by its 'average' terms.

The word 'average' has a special meaning in insurance. It means partial loss. 'Partial loss' in turn can mean the total loss or part of the cargo. Particular average is a partial loss suffered by part of the cargo. Generally, average is a loss that affects all cargo interests on the ship, and the ship itself. General average has been defined as 'a partial and deliberate sacrifice of the ship, freight, or goods, undertaken for the common

safety of the adventure in time of peril and/or extraordinary expenditure with the like object.’

The idea of general average liability is to spread the losses suffered by only some individuals involved in a voyage, so that all interested parties assume their fair share. If for example, a ship topples in a storm and some of the cargo is thrown overboard to save it, the resulting loss is considered ‘in general average’. The value of the lost goods is contributed to proportionately by the parties interested in the voyage—all of the cargo owners and the ship-owners. Each of them is required to pay a share of the damage; even though his own cargo may not have been lost or damaged at all.

Accidents often result in both general average and particular average losses. Take the example of a fire in a cargo hold. The ship’s crew puts out the fire with water. Some of the cargo in the hold is damaged by the fire itself. This is a particular average loss. If the owners of the fire-damaged cargo are insured against this kind of peril, they will be paid for the loss by their insurance company. But cargo in the hold has also been damaged by water used to put out the fire. This is general average loss. Whether or not the owners of the damaged cargo are insured for this kind of damage, they will be largely reimbursed for the loss by contributions from all the other cargo owners, even if their own group was not damaged, and also from the ship-owners.

#### **4.2.4 Institute Cargo Clauses**

The extent of possible insurance coverage that may be purchased varies; there is a wide variety of standard types of coverage. Three important ones are Free of Particular Average, With Particular Average, and All Risks. The cargo clauses in almost universal use are the Institute Cargo Clauses: FPA, WPA and All risks.

##### **(i) FPA (free of particular average)**

This is the minimum coverage in general use. It covers losses due to a ship or aircraft being totally lost. Partial loss is not covered, except to a limited extent and in particular circumstances. Which partial losses are covered and under what conditions vary according to national practice. The normal basis of valuation for ocean/air consignment will be CIF + incidentals up to a percentage which is agreed upon at the inception of the policy (normally this is 10 per cent).

##### **(ii) WPA (with particular average)**

WPA (with particular average) insures against the goods being damaged in transit, but does not cover because the ship is in danger. Partial loss is normally covered with a percentage franchise. That is, losses above a stated percentage of the value of the insured cargo are paid for, in practical terms.

The additional coverage one gets with WPA terms compared to FPA is protection against damage from sea water caused by ‘heavy weather’.

##### **(iii) All Risks**

All risks insure against most risks except risk of force majeure (war), unless the exporter has specifically asked for this to be included.

Additional specific risks may be covered by additions to the FPA and WAP Clauses. These include not only maritime perils, but such risks as damage from hooks,

## **NOTES**

**NOTES**

oil, rain, bilge or fresh water, theft, shortage or non-delivery, sweat, contact with other cargo, leakage or breakage.

A variety of clauses are used to cover certain goods against special risks, such as the Institute Provisional Value Clause for grain covers, the Institute Replacement Clause for machinery, the Skimming Clause for coffee and cocoa, the Labels Clause for canned goods, etc.

A variety of clauses are used to cover certain goods against special risks, such as the Institute Provisional Value Clause for grain covers, the Institute Replacement Clause for machinery the Skimming Clause for coffee and cocoa, the Labels Clause for canned goods, etc.

‘All Risks’ coverage is the broadest kind of standard coverage. But it does not, as its name suggests, really cover ‘all risks’. The ‘All Risks’ clause excludes coverage against damage caused by war, strikes, riots, etc. (These perils can be covered by a separate clause.) It covers only physical loss or damage from external causes.

#### **4.2.5 Types of Policies: Specific and Open Policy**

The contract of cargo insurance in international trade transactions takes three forms. It comes into being when either a Specific Voyage (or Time) Policy or an Open Cover, or an Open Policy is procured.

##### **Specific Voyage Policy**

The specific policy covers the risk that may arise during a journey from one specific port to another. But the benefit of specific voyage policy can be claimed for a single voyage or transit. The commencement of this policy starts before the voyage does. The insurance coverage will be over on completion of the voyage.

There should be complete details of the risks which are covered in this policy. For example, conveyance or vessel name or bill of lading or way bill and date, sum insured, terms and conditions of cover, voyage, cargo description, etc.

A voyage policy covers the risks that may rise during a journey from one specific place to another.

The terms and conditions of the insurance are set out in the appropriate ILU (Institute of London Underwriters) and other clauses. These clauses cover mainly the perils covered under the policy as well as conditions related to the insurable value and claims according to the Indian Stamp Act. Each policy must be stamped. The stamp duty is recoverable from the insured. For creating transferability, the policy is required to be assigned by blank endorsement by writing ‘for and on behalf of’ following by the name of the insured’, for example, exporting firm and the signature of the director or partner.

The insurance policy comprises the ‘MAR’ Policy form, which contains no insurance conditions and the Institute Clauses (A, B or C and War and Strike Clauses), which contain insurance conditions. It must be noted that Duration Clauses, which provide warehouse cover, are part of the Institute Cargo Clauses. Hence, unless specifically deleted, the warehouse-to-warehouse cover is deemed to be effective. In this way a Voyage Policy also becomes a Time Policy.

It covers shipments going from a given port to different ports and is specifically designed to satisfy the needs of those exporters who have substantial turnover and frequent transactions. In case of an open policy, the exporter does not have to negotiate insurance contract every time a shipment is sent.

This policy is issued for an agreed amount against which an exporter can send various consignments. He should declare the consignment to the insurance company and pay the required amount of insurance premium in relation to the amount insured. This policy is generally issued for a period of one year but the amount is more important as the insurance company undertakes to indemnify the insured up to the limit of the value of the policy.

### Open Cover

Open Cover is an insurance arrangement designed specifically to meet the needs of those firms which have substantial import/export turnover and frequent transactions. Such firms are spared the inconvenience of negotiating insurance contracts every time the transaction is to be made. Main features of an Open Cover arrangement are as follows:

- (i) Unlike an insurance policy, Open Cover is not an enforceable contract. Instead it is an agreement under which the insurance company would honour and accept declarations of shipment of cargo and issue stamped specific certificates of insurance against each declaration.
- (ii) Under an Open Cover arrangement, agreement between the insured and the insurer is reached about the subject matter (e.g., goods) insured, packing conditions, voyages, risks covered, rates and other conditions of the cover. The insured can obtain insurance cover within these agreed conditions.
- (iii) No premium is charged when an Open Cover is issued, but the insurance companies require the insured to furnish either a bank guarantee or cash deposit towards payment of premium against each declaration, as the declarations are made.
- (iv) The validity period of an Open Cover is twelve months.
- (v) It is customary to make an Open Cover agreement subject to two limitation clauses, Per Bottom and Per Place Clauses. The effect of these clauses is to limit the liability of the insurance company to an agreed amount. Thus, if the loss in an accident is more than this amount, the loss will be partly recoverable up to this agreed amount. For example, in an Open cover, if the limitation clause is ₹ 10 lakh and the loss is ₹ 20 lakh, the insurance company will pay only ₹ 10 lakh.

These two limitations are imposed to reduce the risk of the insurance company. In the case of the Per Bottom Clause, cargo of the value exceeding the agreed amount should not be carried in one carrier. Similarly, under a Per Place Clause (also known as Location Clause), cargo exceeding the agreed amount should not be accumulated at one place. It must be understood that according to Indian insurance practice, the effect of the Per Place Clause is not confined only to per-shipment accumulation of risk; it applies also to similar accumulations at the destination.

### NOTES



**Open Cover:** Open Cover is an insurance arrangement designed specifically to meet the needs of those firms which have substantial import/export turnover and frequent transactions.

## NOTES

- (vi) An Open Cover may be cancelled by either party by giving 30 days' notice in writing. This stipulation does not cover War and Strikes risks for ocean voyage. For ocean voyages other than from/to the US the notice period for cancellation of War and Strike risks is seven days and for shipments from/to US it is 48 hours.
- (vii) When the loss takes place, claim will be awarded with reference to insurable value calculated on the basis of CIF plus 10 per cent.
- (viii) The duty of the insured is to declare each and every shipment as soon as known. Unintentional failure to export shipment will be condoned by the insurance company. However, if the insured does not wilfully report shipments, the insurance company may hold the Open Cover null and void for all subsequent shipments.

### Open Policy

Also known as Floating Policy, it has much in common with the Open Cover. This policy benefits clients with a substantial turnover and a large number of dispatches. Thus, it covers a series of consignments with all stipulations of the Open Cover, except that:

- (i) Open Policy is an enforceable contract of insurance and is hence duly stamped.
- (ii) Open Policy is for an agreed amount, against which a series of consignments may be dispatched and declared as a result of which the sum insured will gradually diminish by the amount of each declaration until it is finally exhausted.
- (iii) Even through the Open Policy cases on expiry of one year from the date of its issue, the sum insured is of paramount importance. Therefore, the sum insured may exhaust prior to the expiry of the policy.
- (iv) Open Policy is subject to cancellation by either party after giving 15 days' notice of cancellation in writing.

### What is not insured?

To have a clear idea of what 'all risk' really means, one must understand the meaning of 'risk' and 'external' as these terms are used in insurance. A 'risk' is something that may happen, but not something that must happen. It is in other words, a possibility that may arise as a fortuity, an accident, and not inevitability.

This means that marine insurance does not cover the kind of damage that can be expected to occur under normal conditions because of the nature of the goods themselves, i.e., their 'inherent vice'. For example, if butter turns rancid during a voyage that is not interrupted by an accident, this damage would be considered a result of its inherent vice, and would not be covered by the policy. Another case of inherent vice would be inadequately packed fragile glassware. Breakage would be due to its inherent vice. In other words, due to internal rather than external causes, even if the packages were handled roughly.

Inherent vice is specifically excluded from coverage in the All Risk Clause, and it is an implied exclusion in all insurance policies, whether or not it is specifically mentioned.

Delay is another exclusion that is usually specifically stated, and it is implied in all policies in any case. This means that if goods are delayed in transit and there is a loss because the delay causes them to spoil or lose market value, this loss is not covered in the case of especially sensitive products, such as meat or butter. It is possible to have the policy changed to pay for physical damage caused by delay, but even then the delay usually must be the result of fortuitous named perils.

### **Other Exclusions**

Clearly, it is important for you to understand what marine insurance does not cover as to understand what it does. All insurance is written within a frame of basic conditions, or implied warranties, which do not appear in the policy, but which have been backed over the years by court decisions. If these conditions are violated, the insurance may be invalidated and the underwriters would have the option of rejecting claims.

Perhaps, the most important principle of insurance is Utmost Good Faith. This means that the insured is obligated to disclose to the insurer all facts relevant to the risk when applying for the insurance. If, for example, an exporter misrepresents the kind of packing used and breakage occurred, the insurance company may well refuse to pay for the damage.

All insurance policies also carry implied conditions that the assured must follow the generally established trade usages for the particular product, and that he will not contribute to the loss through wilful fault or negligence. Another implied warranty is that the venture must be legal.

Insurance contracts may explicitly limit the coverage for particular goods or circumstances. Thus, the following losses could be excluded in a contract: leakage or hook losses on goods packed in bags; spontaneous combustion fires in cotton; solidification of palm and coconut oil, unless heated storage is provided.

### **Choosing the Right Coverage**

Most exporters will probably want to have the widest form of coverage they can get such as an 'All Risks' coverage. But because of the nature of their goods, underwriters may agree to provide only a more limited form of cover.

Moreover, even though an exporter can get 'All Risks' coverage, he may decide that it is uneconomical. An experienced exporter knows the losses he can expect, and may find it cheaper to write them off as trade losses rather than to pay the relatively high 'All Risks' premium.

Products should be insured in the appropriate category. A good rule of thumb is that an exporter should insure for the coverage accepted in his particular trade. The following exercise should help understand which type of insurance to use for particular products.

### **Annual Policy**

Annual policy covers goods in transit by road or rail or sea from specified depots or processing units owned or hired by the insured. The goods covered must belong to or be held in trust by the insured. These policies cannot be issued to transport operators, clearing, forwarding and commission agents or freight forwarders or in joint names.

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They cannot be assigned or transferred. For such policies the sum insured should not be less than ₹ 5,000.

#### 4.2.6 Documentation for Filing Claim

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The following documents are required by insurers to finalize the claim promptly:

- Original insurance policy or certificate of insurance
- Original invoice and packing list together with shipping specification or weight notes
- Copy of bill of lading or other contract of carriage
- Survey report/ shorthand/non-delivery/landed but missing certificate
- Copies of correspondence exchanged with the carriers or bailee's
- Claim bill

Exporter must take care of the following points while procuring insurance document:

- Amount insured is 110 per cent of the CIF value of the goods—10 per cent pertains to the anticipated profit
- Insurance document is not dated later than the date of shipment
- Amount insured must be stated in the currency invoice to take care of the exchange fluctuations
- Insurance document is issued by an insurance company or its agent or underwriters
- The document issued by broker is not a good document

#### Claims Threshold Frauds

Many underwriters follow a policy whereby claims beneath a specified threshold, say US \$10,000, will be examined briefly before a decision is taken to either reject or accept the claim. In practice, this means that the benefit of any doubt is given to the assured. The rationale behind this is that it is not worth the claims handlers' time to investigate these claims in depth. Knowledge of this practice is not restricted to underwriters and their Claims Departments. It is well-known to fraudsters.

An assured in the Philippines came out with an elaborate scheme involving a number of associated companies who insured cargo of textiles imported into the Philippines. The cargo was short-shipped into containers. Upon arrival at Manila, the containers were opened in the presence of surveyors and sometimes customs officials who duly noted that the cargo was short of the quantity allegedly shipped. A claim was made upon the underwriters by each of the assured companies. The value of each claim was less than the 'claims threshold' of the underwriting company and was promptly paid.

It is only after many months, in some cases years, that the underwriters were able to identify all these claims as being made by the same group of companies. Soon after, the underwriters refused to insure the assured or his associated companies. The result was that the assured transferred his business to another underwriter. As underwriters rarely exchange information on claims, the assured was able to pick one underwriter after another for many years before news got around the market that his

business was best left untouched. However, by this time he had succeeded in turning his insurance premiums into a highly profitable ‘investment’.

By its very nature, frauds in international trade can give rise to difficulties over which country and police force have jurisdiction over the crime. The police force, which has jurisdiction over the crime, may not have the criminals within its boundaries.

Businessmen do not always appreciate the quality of evidence which is required to bring about a successful criminal prosecution. These limitations can sometimes severely restrict the resources (and enthusiasm) with which a police investigation is pursued.

On the other hand, the common complaint of the industry is that despite spending many man-hours providing law enforcement agencies with information and documentation no meaningful feedback is received. This lack of dialogue sometimes results in even willing persons in industry forming a view that the effort of providing this information is a ‘waste of time’. The best way forward in dealing with maritime fraud is an active partnership between law enforcement agencies and the industry, each recognizing the limitations of the other. This sounds great in theory. It is rather more difficult to put into practice.

By the time a criminal conviction is obtained, years may have gone by after the crime. In the short term, the industry has to look to itself to control maritime crime.

Frauds are best avoided. Once a fraud has occurred the options are very few and they are all usually very expensive. Information on the track record of one’s trading partners is an important factor in the prevention of frauds. If one were able to always deal with first class companies who are financially strong and operationally competent the chances of fraud would be minimized. In the real world of business, this is not always possible. A ship-owner with his vessel in the Far East with no available cargo has to decide between long, expensive ballast passage to a better location or chartering his vessel to a hitherto unknown company who controls a cargo in the vicinity.

Hands-on knowledge of the trade is also a major factor which helps in the prevention of fraud. A company dealing in ‘steel products’, for example, embarking on a one-off, apparently lucrative sugar transaction, places itself as a perfect target for fraudsters in the sugar business. Buyers who are inexperienced in the oil business, attracted by the apparent profits of a fraudulent Nigerian crude oil sale, are exactly the kind of customers the Nigerian oil fraudster is seeking. It is surprising how normally prudent businessmen cast caution aside when confronted with a fabulous deal.

### 4.3 INSURANCE CLAIM PROCEDURE

Marine insurance is the general category of insurance covering the risks of physical damage to property (goods) in transit. It covers goods purchased (shipped) from domestic and foreign sources, and sales (shipments) to domestic and foreign customers. Inland marine insurance not only protects the domestic shipper/recipient of goods against losses beyond its control/responsibility (acts of God, natural calamity, etc.) but also transfers subrogation time and expense to its insurance carrier.

International maritime law, largely by tested precedent through Lloyd’s of London, determines the extent to which responsibility for product (and loss or damage) is

## NOTES

### Check Your Progress

1. What is the difference between marine insurance and cargo insurance?
2. What are the types of marine insurances available?
3. How is the premium calculated in marine insurance?
4. What are the categories of perils?
5. What are the documents required for finalizing a claim?



**Marine Insurance:** Marine insurance is the general category of insurance covering the risks of physical damage to property (goods) in transit

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vested with the shipper/recipient or the ocean carrier. For this reason, a differing interpretation of negligence and responsibility as well as foreign shipments are covered by a separate Ocean Marine (Cargo) Policy.

As a shipper/purchaser of goods destined for/shipped from foreign countries, one's direct responsibility for damage to goods in transit—'product risk'—is determined by the method of invoicing employed.

### 4.3.1 Procedure for Marine Insurance Claims

The procedure for marine insurance claims takes the following steps:

- In case of loss/damage in transit, a monetary claim should be lodged with the carrier within the time limit to protect recovery rights.
- Appointment of surveyor or claim representative in agreement with the insurer to determine the nature, cause and extent of loss/damage.
- The surveyor informs the insurer of the approximate value of loss incurred.
- The claim procedure takes from one to three weeks.

#### Documents Required for Marine Insurance Claim

The documents required for marine insurance claim are as follows:

- Original invoice and packing list if forming part of invoice
- Document of declaration of consignment
- Damage certificate from the carrier

The farmer must furnish area sown confirmation certificate, if required.

#### Claims Procedure

The cardinal point about claim adjustments is that the insured has clearly defined responsibilities when there is a loss. If he does not fulfill these responsibilities, the insurer can refuse to pay.

In the event of loss or damage, it is important to claim quickly, usually within one month. All relevant documents must be held by the person claiming, and insurance company procedures must be followed. The insurance company itself will advise.

Generally, the exporter endorses the insurance policy or certificate on a shipment over to the buyer, at the same time he endorses the bill of lading before the ocean voyage starts. Then the customer becomes the insured party, and if loss or damage occurs from then on, it is his responsibility to file the claim. However, the exporter does have a real financial interest in the shipment until he has been paid. Payment may not be forthcoming until the voyage is completed, so the exporter may cover the shipment with his own contingency insurance, and then claim if there is a loss.

#### Procedure and Documentation When a Loss Arises

The procedure and documentation when a loss arises are as follows:

- Give immediate notice of loss to the insurance company and/or their agents mentioned in the policy, giving the details of loss.
- Ensure that all rights against carriers, bailers or other third parties are properly preserved and exercised.

- If the package shows any outward sign of loss or damage, the insured and/or their agents must call for a detailed survey by ship surveyors on such packages and also lodge a proper monetary claim on the shipping company for loss or damages found.
- If the ship survey is time barred then the insured and/or their agents must call for an insurance survey on such packages before affecting delivery. If the packages are found in apparently sound condition but on unpacking any loss or damage is found, the insured and/or their agents must immediately inform the insurance company and obtain an insurance survey. Insured should keep the goods as well as the contents with its packing materials intact for inspection by the surveyors for proper assessment of loss or damage.
- In case of packages which are found to be missing, the insured must lodge a proper monetary claim for the full value of the missing packages, with the shipping company and also with the bailers, and obtain a proper acknowledgement from them.
- In terms of Carriage of Goods by Sea Act, 1925, the time limit for filing suits against shipping companies is one year from the date of discharge.

**Documents to be accompanied:** The claims on the insurers should be submitted duly supported by the following documents:

- (i) Original insurance policy or certificate of insurance duly endorsed by the insured
- (ii) Full set Bill of Lading in respect of total loss claims, otherwise non-negotiable copy of the Bill of Lading, Airway Bill, Railway Receipt, as applicable
- (iii) Copy of invoice with packing/weight list
- (iv) Insurance Survey report or other documentary evidence to substantiate cause and extent of loss
- (v) Joint Ship Survey/Discrepancy Certificate issued by the carriers
- (vi) Port Authority Landing remarks certificate
- (vii) Casual Report when a vessel is missing or lost
- (viii) Ship Master's Protest or an authenticated copy of extract from ship's Log Book, in case the vessel encountered heavy weather or other casualty during the voyage
- (ix) In case of short landing claims, a Short Landing Certificate issued by the carrier or Port authority
- (x) A landed but Missing Certificate from the Port authority in case the package had landed but is missing
- (xi) In the event of General Average claim for refund of GA Deposit, the GA Deposit Receipt and Bank Counter Guarantees
- (xii) Triplicate copy of Bill of Entry (in case of India)
- (xiii) Copies of letters lodging claims on the carriers, Port Authority, etc.
- (xiv) Letter of Subrogation duly stamped and signed; and
- (xv) Any other document as may be asked for by the insurers.

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**Documents needed under rail/road policies:** The following documents, as applicable, are required to be submitted to insurers in support of claims under Rail/Road policies:

1. Original Policy or Certificate of insurance duly endorsed
2. Original railway receipt (Non-delivery cases)
3. A copy of the railway receipt (damage claim)
4. Original Consignment Note (Non-delivery cases – Road Transit Claim)
5. A copy of the Consignment Note (damage claim – Road Transit)
6. Invoice (original or copy)/ packing list/weight specification
7. ‘Non Delivery’ or ‘Partial Delivery’ certificate from the Railways/Road Transport Operators
8. Open delivery/assessment delivery certificates (Rail/Road)
9. Certified copy of the remarks in the railway delivery book (Damage Claims)
10. Certified copy of the remarks in the delivery challan (Road Transit Claims)
11. Independent Surveyor’s Report, if any.
12. Copy of:
  - (a) Notice of claim lodge on the carriers (Rail/Road)
  - (b) Relative postal registration receipts and A.D. cards
  - (c) Subsequent correspondence with the carriers
13. Letter of Subrogation
14. Special Power of Attorney (Rail Transit Claims)
15. Letter of Authority (Rail Transit Claims)

The insured will file a claim with the insurance company after meeting the aforementioned requirements. The insurance company is generally contacted immediately on discovery of loss to the cargo, which will assist the insured in carrying out the responsibilities.

It is quite natural that there is disagreement between the insured and the insurers regarding insurance claims. In such a case, the insured can take legal recourse against the insurers and file a legal suit. However, under the Indian Limitation Act, no suit can be filed against the insurer in respect of a claim under an insurance policy after a lapse of three year from:

- (a) The date of occurrence causing the loss; or
- (b) The date when the claim is repudiated either partly or wholly

It is clear that if liability is not denied for three years, the claim of the insured would become time-barred under the law. If the claimants want to keep their claim right open, they will have to file-suit against the insurer before the expiry of the period of three years. The claim would also remain open, if the insurers belatedly repudiate the claim.

### **4.3.2 Duties of the Insured (Preservation of Recovery Rights)**

In the case of a claim, it has to be ensured by the claimants that the right of recovery against the carrier is properly preserved. In the absence of the same, recovery action

against the carrier becomes prejudiced. This will adversely affect the right of the insured to claim under the policy. This has been incorporated as a specific provision in the Institute Cargo Clauses (A), (B) and (C) under the heading 'Duty of Insured'.

Insured should insist on a carrier's survey; if they observe any damage to the goods while taking delivery. They should demand an open delivery certificate indicating the condition of the goods before delivery is taken. No clean receipt should be issued to the carrier, when the goods are in an apparently damaged condition. The carrier may refuse to give a Damage Certificate/Open Delivery Certificate. Then the insured or his representatives should send a letter stating that he is arranging for a survey to be conducted. If the carrier does not join with the surveyor, insured/claimant should serve a notice on him that the findings of such a survey will be binding on him (carrier). When damage is noticed in the case of an inland transit, the insured must give only a qualified receipt or he can write about the damage upon the delivery challan. Underwriters must also inform the insured of the period within which they have to issue notice of claim against the carrier.

### Claims against Marine Policies

Claims against marine insurance policy when payable to exporters in India will be paid only in rupees by GIC and its subsidiaries, irrespective of the currency of the relative policy. When a claimant is not a resident of India, claims may be settled in foreign currency provided the GIC and its subsidiaries are satisfied that ownership of the goods lost, damaged, etc. vest in such a claimant.

GIC will settle claims in rupees in favour of Indian exporters even in cases where the title of goods has passed on to a foreign buyer, if a request to the effect has been made by the non-resident claimant. In such cases a certificate indicating full particulars of the transaction including number of relative GR/PP form and amount paid in settlement of claim will be issued to the exporter to enable him to obtain the necessary approval of RBI for making replacement shipments.

### Marine Insurance Contract

Marine insurance contract is an arrangement by which the insurance company (insurer) agrees to indemnify the owner (insured) of a ship or cargo against risks which are incidental to marine adventure. Such contracts are based on the following principles:

- (i) Principle of utmost good faith, i.e., the insured must disclose to the insurer all the material facts or circumstances which are known to him or which ought to be known to him in the ordinary course of business.
- (ii) Principle of insurable interest, i.e., no person can enter into a valid contract of insurance, unless he had insurable interest in the object.

Or the life insured. Insurable interest is understood as an interest in the preservation of a thing or continuance of a life, as recognized by law. Thus, one can have an insurable interest only when one would stand to benefit financially by the continuance of the life or object insured, otherwise financial loss would result. Thus, a person can take a policy on his ship, an owner of the goods can take policy on cargo and a person entitled to receive freight can take policy on freight. All such persons have insurable interest in the subject wagering agreements, which are not valid contracts.

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**Marine Insurance Contract:** Marine insurance contract is an arrangement by which the insurance company (insurer) agrees to indemnify the owner (insured) of a ship or cargo against risks which are incidental to marine adventure.

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- (iii) Principle of indemnity, i.e., the contracts of insurance only indemnify (make good) a loss resulting from risk covered under the policy. However, the cargo owners are usually allowed a reasonable anticipated profit. In other words, we can say that the marine insurance policy provides a commercial indemnity rather than indemnity in a strict legal sense.

### 4.3.3 Statutory Time Limits for Lodging Notice of Claims and Filing Suits

The following table gives the time limit for lodging claims and filing suits as per the provisions of the Indian Carriage of Goods by Sea Act, 1925 and provisions of the Major Port Trust Act.

**Table 4.1** Time Limits for Lodging Notice of Claims and Filing Suits

<b>Indian Carriage of Goods by Sea Act, 1925 and Provisions of the Major Port Trust Act.</b>		
	<i>Time Limit for Lodging Claim</i>	<i>Time Limit for Filing Suit</i>
Steamer	Within the period of 3 days from the date of discharge of cargo from overseas vessel.	Within one year from the date of discharge from overseas vessel.
Port Trust Authorities	For "short landing" and "landed but missing." Within 5/7 days from the General Landing date (Bombay Port within 7 days of landing). (Calcutta and Madras Ports within 5 days of landing).	Within 6 months from the date of discharge, 6 months from the date of accrual of the cause (Bombay and Madras Ports) 3 months from the date of accrual of the cause (Calcutta port).
In all cases, one month's notice of intention to file suit must be given. Notice against the Port Authorities Customs/ Carriers must be Registered Post (A.D.) with copies sent to the insurers, to enable them to decide on questions of eventual recovery.		
<b>In the Case of other Modes of Carriage</b>		
Rail Carriers	6 months from date of booking (as per Sec. 78B of the Indian Railway Act).	3 years from date of delivery or date when consignment ought to have been delivered.
Motor Lorry Carrier	6 months from the time the loss or damage came to knowledge (Sec. 10 of the Carriers Act).	-do-
Air International	14 days from the date of delivery of cargo	2 years from date of arrival at destination or the date on which aircraft ought to have been arrived (as per Indian Carriage by Air Act).
Domestic	7 days from the date of delivery of cargo	-do-
Non-delivery International	21 days from the date of booking of cargo	-do-
Domestic	14 days from the date of booking of cargo	-do-
Postal Authorities	Immediately	3 years from the date of postal receipts

## Do's and Don'ts for Safeguarding Cargo from Damage or Loss

The primary objective of the marine cargo insurance policy is to provide financial protection against unforeseen damage to cargo. Exporters should keep in mind that insurance will cover only specific types of losses.

Situations like loss of business reputation and losses consequential to cargo damage/loss cannot be compensated. It is therefore essential that all organizations do the utmost to minimize cargo losses through risk management. This was the message given to the participants of a workshop on Marine Cargo Insurance held on 23 June 1977, at Calcutta, organized by the Federation of Indian Export Organization (FIEO) with technical support from the National Insurance Company Ltd.

A prudent approach towards risk management starts from loss control, where good packaging and care through the transit is considered and ensured to minimize the chances of loss itself. Merchandise exported or imported is subject to many hazards, both physical and environmental which can cause loss or damage. Cargo losses are mainly attributed to poor handling, storage, fire, explosion, sinking, collision, theft, pilferage, non-delivery and weather damage. It is estimated that about 70 per cent of cargo loss is preventable. The following measures can be considered and implemented when planning control of cargo loss.

### (i) Packaging

Statistics show that nearly 40 per cent of damages occur during handling, storage and transit, and can be prevented by improving the packaging.

### (ii) Loss Control in Ports

Packaging can play a significant role in reducing pilferage. Choosing an appropriate clearing and forwarding agent and carrier will ensure that adequate supervision is available during the handling. Proper warehousing and prompt clearing of goods from the port can ensure that the cargo is within control.

Generally, the policy cover is only for the voyage, and is effective from warehouse to warehouse. The policy is liable for termination sixty days after discharge.

The types of loss which are covered include the following:

- **Actual total loss:** This occurs when the goods are totally destroyed, or when the goods are so damaged, that they cease to be of the kind insured.
- **Constructive total loss:** This is a commercial total loss and arises when cargo is damaged and the cost of repairing the damage and forwarding the goods to their destination exceeds their value on arrival at the destination.
- **General average:** During voyage, a situation sometime arises where the entire venture may appear to be in danger. In such circumstances, the captain of the vessel will declare General Average and take certain extraordinary steps in order to save the entire volume. It may result in an extraordinary sacrifice or expenditure, voluntarily and reasonably made at the time of common peril. As per international practice, all interests have to contribute to make good the losses incurred in the General Average Act. In case the cargo is sacrificed, the owners of the cargo can make their claim directly to their insurers for their liability to contribute for General Average losses.

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- **Particular average/Partial loss:** This occurs where part of the cargo is totally lost, e.g., non-delivery, theft, loss during loading/unloading and goods arriving in damaged condition.

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### 4.3.4 Documents Required for Processing Cargo Claim

The documents required for processing cargo claim are as follows:

1. Policy certificate of insurance in original
2. Invoice
3. Packing slip
4. Carriers receipt
5. Certificate of loss/damage from Carriers/Port Trust
6. Survey report
7. Claim form with Bill
8. Copy of claim on carriers with their reply, if any

The above are requirements in general and they may vary from case to case.

#### Do's and Don'ts

- Arrange earlier clearance of goods from carriers
- Clear the goods only after carefully examining the packages
- Claim on carriers for missing packages, if any
- Do not give clear receipt to carrier of goods if they are in a doubtful condition
- Clear the imported goods externally damaged, only after joint survey by steamer agents/air carriers/customs authorities and insurers is done within the statutory time
- Clear inland consignments externally damaged only after taking open delivery certificate from rail/road transporters
- Recondition and repack the damaged goods, making them fit for further transit
- Preserve the packing materials intact for inspection by surveyor
- Give prompt notice of loss/damage to the insurers with estimate of loss/damage, and to the carriers involved
- Assist insurance surveyors to the maximum possible extent
- Send notice of claims only under Registered Post with A.D
- Preserve the salvage safe till disposal of claim
- Extend time limit for filing suit pending finalization of the claim
- Seek refund of duty where due
- Extend period of insurance, if necessary

With the Multimodal Transportation of Goods Act, 1993, it is essential for every exporter to acquaint himself with the provisions of the enactment to ensure compliance with the statutory pre-requisites for fastening liability on the multimodal transport operator. This aspect is especially important for those exporters who mobilize export cargo by different modes of transportation from the hinterland.

#### Check Your Progress

6. What are the documents required for marine insurance claim?
7. What is the Marine insurance contract?
8. What are the common reasons for cargo losses?
9. List the types of losses covered.
10. What are the documents required for processing cargo claims?

## 4.4 SUMMARY

Some of the important concepts discussed in this unit are:

- The need to insure property against the economic consequences of its loss or damage is a fundamental feature of modern society. The more valuable the property and the more serious consequences of its loss or damage to the owner, the more imperative it is to insure it adequately.
- Credit is becoming more difficult to obtain without such cover. Thus, merchants insure their goods in stock, farmers their crops, and industries their products, plants and machinery.
- Goods in transit are generally exposed to considerable additional perils, against which adequate insurance cover becomes even more essential. This explains the early development of marine insurance, which has been practiced by merchants since the early days of overseas trade.
- Marine insurance is a commonly used practice in international trade. It has to be carried out to safeguard onshore and offshore exposed property that includes container terminals, ports, oil platforms, pipelines, hull, marine casualty, and marine liability.
- Five types of marine insurances are available in most countries. These are: Marine import transit insurance, Marine export transit insurance, Marine inland transit insurance, Marine insurance claim procedure, and Marine hull.
- Cargo insurance is a branch of marine insurance, though cargo insurance is a narrow concept when compared to marine insurance. Cargo insurance covers the loss or damage of ships, cargo, terminals, and any transport or property by which cargo is transferred, acquired, or held between the points of origin and final destination.
- In India, cargo insurance cover is provided only by the nationalized insurance companies, i.e., General Insurance Corporation of India or its four subsidiaries in India.
- Article 3 of the Indian Marine Insurance Act, 1963 defines marine insurance contract as follows: ‘It is an agreement whereby the insurer undertakes to indemnify the assured in the manner and to the extent thereby agreed, against marine losses, that is to say, the losses incidental to marine adventure.’
- Insurance can be arranged by an insurance broker or an insurance company. An insurance policy is issued when the goods are insured, but it is also commonplace to use a ‘certificate of insurance’, which is used as evidence of the agreement between the insurer and the person taking shipping documents.
- In buying insurance, the object is to buy as much protection as is necessary or prudent, at as low a cost as possible. To do this, one has to know what risks can be covered, and to decide how much coverage is needed.
- The events which lead to loss or damage to the cargo are perils against which insurance cover can be obtained. These perils may be categorized into four groups: Marine perils (Act of God: natural calamity), Extraneous perils (Faults

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in loading, breakage, leakage, etc.), War perils (War, civil war, revolution, rebellion, etc.), and Strike perils (Strike, lockouts, etc.).

- The extent of possible insurance coverage that may be purchased varies; there is a wide variety of standard types of coverage. Three important ones are Free of Particular Average, With Particular Average, and All Risks. The cargo clauses in almost universal use are the Institute Cargo Clauses: FPA, WPA and All risks.
- The contract of cargo insurance in international trade transactions takes three forms. It comes into being when either a Specific Voyage (or Time) Policy or an Open Cover, or an Open Policy is procured.
- The specific policy covers the risk that may arise during a journey from one specific port to another. But the benefit of specific voyage policy can be claimed for a single voyage or transit.
- Open Cover is an insurance arrangement designed specifically to meet the needs of those firms which have substantial import/export turnover and frequent transactions.
- Also known as Floating Policy, the Open Policy has much in common with the Open Cover. This policy benefits clients with a substantial turnover and a large number of dispatches.
- Annual policy covers goods in transit by road or rail or sea from specified depots or processing units owned or hired by the insured.
- The documents required for marine insurance claim are as follows:
  - o Original invoice and packing list if forming part of invoice
  - o Document of declaration of consignment
  - o Damage certificate from the carrier
- The cardinal point about claim adjustments is that the insured has clearly defined responsibilities when there is a loss. If he does not fulfill these responsibilities, the insurer can refuse to pay.
- It is quite natural that there is disagreement between the insured and the insurers regarding insurance claims. In such a case, the insured can take legal recourse against the insurers and file a legal suit.
- Claims against marine insurance policy when payable to exporters in India will be paid only in rupees by GIC and its subsidiaries, irrespective of the currency of the relative policy.
- The primary objective of the marine cargo insurance policy is to provide financial protection against unforeseen damage to cargo. Exporters should keep in mind that insurance will cover only specific types of losses.
- Statistics show that nearly 40 per cent of damages occur during handling, storage and transit, and can be prevented by improving the packaging.
- Packaging can play a significant role in reducing pilferage. Choosing an appropriate clearing and forwarding agent and carrier will ensure that adequate supervision is available during the handling.

## 4.5 ANSWERS TO 'CHECK YOUR PROGRESS'

1. Marine insurance is a commonly used practice in international trade. It has to be done to safeguard onshore and offshore exposed property that includes container terminals, ports, oil platforms, pipelines, hull, marine casualty, and marine liability. Cargo insurance is a branch of marine insurance that covers the loss or damage of ships, cargo, terminals, and any transport or property by which cargo is transferred, acquired, or held between the points of origin and final destination.
2. The five types of marine insurances available in most countries are:
  - Marine import transit insurance
  - Marine export transit insurance
  - Marine inland transit insurance
  - Marine insurance claim procedure
  - Marine hull
3. The marine insurance premium calculation can be done by considering the following factors:
  - Nature of cargo
  - Scope of cover, packing
  - Mode of conveyance
  - Distance and past claims experience
4. Perils against which insurance cover can be obtained are categorized as follows:
  - Marine Perils (Act of God – natural calamity)
  - Extraneous Perils (Faults in loading, breakage, leakage, etc.)
  - War Perils (War, civil war, revolution, rebellion, etc.)
  - Strike Perils (Strike, lockouts, etc.)
5. The following documents are required by insurers to finalize the claim promptly:
  - Original insurance policy or certificate of insurance
  - Original invoice and packing list together with shipping specification or weight notes
  - Copy of bill of lading or other contract of carriage
  - Survey report/shorthand/non-delivery/landed but missing certificate
  - Copies of correspondence exchanged with the carriers or bailee's
  - Claim Bill
6. The documents required for marine insurance claim are:
  - Original Invoice and packing list – if forming part of Invoice
  - Document of declaration of consignment
  - Damage Certificate from the carrier
7. Marine insurance contract is an arrangement by which the insurance company (insurer) agrees to indemnify the owner (insured) of a ship or cargo against risks which are incidental to marine adventure.
8. Cargo losses are mainly attributed to poor handling, storage, fire, explosion, sinking, collision, theft, pilferage, non-delivery and weather damage.

## NOTES

**NOTES**

9. The types of losses which are covered include:
  - (i) Actual total loss
  - (ii) Constructive total loss
  - (iii) General average
  - (iv) Particular average
10. The documents required for processing cargo claim are:
  - (i) Policy certificate of insurance in original
  - (ii) Invoice
  - (iii) Packing slip
  - (iv) Carriers receipt
  - (v) Certificate of loss/damage from Carriers/Port Trust
  - (vi) Survey report
  - (vii) Claim form with Bill
  - (viii) Copy of claim on carriers with their reply, if any

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## **4.6 QUESTIONS AND EXERCISES**

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### **Short-Answer Questions**

1. Define the role of cargo insurance in international trade.
2. What are the various kinds of coverage that are available in cargo insurance?
3. What are the features of the specific voyage policy?
4. What is the open policy in cargo insurance?
5. What do you understand by the term ‘Open Cover’?
6. Write a short note on the marine claim procedure.
7. Mention the major issues involved in the claim procedure.
8. What are the documents required for the claim procedure?
9. What documents are required to be submitted to insurers in support of claims under rail/road policies?

### **Long-Answer Questions**

1. Discuss the major policies that are generally used in cargo insurance.
2. Discuss the procedure of obtaining cargo insurance.
3. What are the various types of insurance that are available to an exporter? Explain.
4. Discuss the need for cargo insurance in international trade.
5. Write a detailed note on the duties of the insured.
6. Discuss the statutory time limits for lodging a notice of claim and filing suits.
7. What are the major documents required for processing the cargo claim?
8. How can the cargo be safeguarded against any damage or loss? Discuss.

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# UNIT 5 CHOICE OF A SHIPPING SERVICE

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## NOTES

### Structure

- 5.0 Introduction
- 5.1 Unit Objectives
- 5.2 Factors Influencing Choice of a Shipping Service
- 5.3 Reliable Worldwide Network and One-Stop for Total Logistics Solutions
  - 5.3.1 One-Stop for Total Logistics Solutions
- 5.4 Commitment to High Quality Services
  - 5.4.1 Transparency and Tracking
  - 5.4.2 Positive Approach
- 5.5 Highly Trained, Motivated and Result-Oriented Staff, Team Work
  - 5.5.1 Prerequisites of a Motivated and Effective Team
  - 5.5.2 Provide Alternatives and Options to the Client
- 5.6 Summary
- 5.7 Answers to 'Check Your Progress'
- 5.8 Questions and Exercises

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## 5.0 INTRODUCTION

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Transport is the essential link between supplier and receiver, and the aim is to receive the goods in good condition, when and where they are needed. For this, it is very important to choose the shipping service with great care and consideration. This necessitates close collaboration between procurement staff, the supplier and the transporter. The journey involved, whether over land, sea and/or air, may introduce certain costs and risks that can be mitigated by appropriate methods of dispatch, insurance coverage, suitable packaging instructions, and by considering the roles and responsibilities of the parties involved in the chain of transport events up until final delivery to the client. This unit deals with the choice of a shipping service. It describes the various factors associated with the choice of a good shipping company.

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## 5.1 UNIT OBJECTIVES

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After going through this unit, you will be able to:

- Describe the various factors influencing the choice of a shipping service
- Assess the importance of a reliable worldwide network in the shipping industry
- Explain the meaning of one-stop for total logistics solutions
- Analyse the significance of high quality services, transparency and tracking, and the positive approach in the shipping industry
- Evaluate the importance of highly trained, motivated and result-oriented staff, and team work in the shipping industry

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## 5.2 FACTORS INFLUENCING CHOICE OF A SHIPPING SERVICE

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### NOTES

With a plethora of options available in the open market, one has to make a smart choice of the shipping company with great care and consideration. There are numerous aspects to consider while choosing the most suitable shipping service to transport goods from one particular point to another. The effective use and choice and methods of transportation apparatus diminishes the cost of shipping and logistics. However, export planning is not always as simple as it seems. Here are some points to ponder over while choosing a company to deliver your products.

### 1. Destination of the shipment

It is a mandatory requirement that the shipping company chosen should be able to convey the shipment to all desired locations. Many stores providing only to their local markets use local companies for delivery of goods. For local shipment, a good deal can be carried out after negotiations with them, and also shipments can be processed faster in comparison to bigger companies. On the other hand, in case of international shipments, there may be a need to employ bigger companies.

### 2. Types of product to be shipped

It may not be possible for every shipper to ship the goods. The products being shipped might be too big or might require special handling which the shipping company may not be able to provide. For example, a sweet manufacturing company was looking for the best shipping options to deliver their boxes of sweet at MyMunchiesBox, their first option was to get in touch with the well-known shipping giants. The reason being that those giant shipping companies shipped worldwide (and were used to handling large quantities). It turned out however that the sweet boxes were too small for them to be able to offer them a good deal. Likewise, companies that sell delicate lab equipment, for example, inflammable items, may need to find a carrier that can ensure safe and proper delivery of these kind of goods.

### 3. Average size of the shipment

The average order size of the shipment also matters while choosing the right shipping company meeting our requirements. A shipping company may offer a great price on shipping a small flat pack but if the average order consists of medium boxes, then that deal is worthless.

### 4. Shipment processing speed

One should also check the time needed by the company to process and deliver each shipment to the customers. The time needed by the shipping company to process and deliver each shipment needs to be ascertained, especially in case of perishable items on board.

### 5. Tracking the consignment

Today, tracking the consignment is the need of the customers. They want to be in the exact know-how of when their product leaves the shipping bay, the route it follows

and when it is expected for delivery. These days all shipping companies provide an online tracking facility for the ease of their customers. It should therefore be taken into consideration that the shipping company provides for easy tracking on their website.

## **6. Provision of insurance choices**

Another factor that influences the selection of a shipping company is the availability of insurance options. Shipping clients must definitely have an option to insure their package, especially if the delivery place is known for delivery problems. However, not all shipping providers offer such options.

## **7. Live rates integration**

A shipping company providing real time carrier rates to its customers is preferred over other shipping companies. For that to happen, the shipping company needs to make sure that it offers a simple way to integrate the rates with the e-commerce system.

## **8. Multiple shipping options**

This is the most complex option where in a company lets its customers choose the shipping provider they prefer from a comprehensive list of shippers available with them. Many customers prefer this option as it makes them in charge of deciding how their goods are shipped. However, in some cases, a choice made by a novice customer may prove to be detrimental.

## **9. Free shipping offer**

It is but natural that many customers desire and look for free shipping offers along with their consignments. To get another or a smaller product shipped in addition to the main consignment, at no cost, is by far a very enticing factor which helps in the selection of the shipping company.

## **10. Flat rate shipping**

Sometimes a shipping company might not be able to offer free shipping. Instead, the company might charge a flat rate on deliveries, regardless of the product ordered by customers. A flat rate can be offered on every package sent, or ranges for various weights or complete orders. There is no doubt that to introduce this option the average cost of shipping the package needs to be estimated. With this right information, the cost of the ship can be intimated to the customers.

## **11. Actual time carrier rates**

A shipping company may also offer the exact rate that it charges its customers. This means that the price will be dependent on many factors like package weight, shipping location and many others.

## **12. Cost of transport**

When choosing the best shipping company for export, budget should be the most important factor in decision-making. Costs can differ depending on the type and amount of goods that have to be transported. Cost of transport will have an effect on the cost of goods.

## **NOTES**

## NOTES

No doubt that transport through sea is the cheapest mode of transportation suitable for heavy or bulky goods over long distances where time is not a significant element. Importers and exporters should take into consideration the inclusive cost of transportation keeping in mind the 'hidden costs' such as insurance premiums and finance charges.

### 13. Reliability and regularity of service

Different freight shipment services differ in consistency and regularity. The selection of the service provider will be influenced by the urgency, speed and methodology by which a client would prefer the delivery of goods. Sea transport is usually affected by foul weather such as heavy rains, snow, fog sea storms, and hurricanes, which may cause delays.

### 14. Safety

Safety and security of goods in transit is a very important factor in the selection of the shipment service provider. Water transport generally exposes consignments to the hazards of sea; hence, if viewed from this point of view, sea transport is the most risky form of transport. Also, to protect the goods in transit, a particular kind of packaging is suggested, which may prove to be detrimental or beneficial to costs. Goods in freight may also need additional facilities like refrigeration or special security measures that need to be kept in mind.

### 15. Characteristics of goods

The size and weight of goods to be conveyed also play a vital role in determining the mode of transport. Land and air transport generally cater to light and small shipments, whereas rail and sea transport cater to heavy shipments. Deciding the mode of transport is also dependent on how dangerous, fragile or of high value the products are.

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## 5.3 RELIABLE WORLDWIDE NETWORK AND ONE-STOP FOR TOTAL LOGISTICS SOLUTIONS

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One of the main problems faced by organizations engaged in global commercial activities is the dispatch of international freight. For products or goods that are sold across the border, the organization's reputation depends very much on the ability of the shipment company to deliver the products to its customers at the other end in a suitable manner. The products of a company may be ready for shipment but if the shipping company does not provide its clients with adequate support or if the freight dispatching company does not cooperate by providing reliable freight forwarding service, then the company dispatching the freight will lose its brand reputation despite having a highly marketable product in the segment.

Therefore, all companies transporting cargo must choose their commercial international shipping company with great care. There are varied factors that affect the timely delivery of shipments. First, the overseas container shipping company or the international freight dispatching company should have been in the international freight forwarding business for some time and they must have adequate experience so that they have knowledge of the procedures involved in the first place. For inexperienced

### Check Your Progress

1. What is the essential link between supplier and receiver?
2. What diminishes the cost of shipping and logistics?
3. What should be the most important factor in decision-making while choosing the best shipping company for export?

service providers, international shipping and the procedures to be followed can prove to be a bit devastating. Using such service providers may cause unnecessary delays and confusions in shipping the products to the customers.

Second, the shipping company should have a reliable worldwide network in order to transport the goods to the preferred location in an integrated manner. One of the major reasons for shipping delays is poor delivery network. If a company with vast experience or a company that has been in the international shipping business for a considerable number of years is chosen, they will have a reliable network which will ensure that the products are delivered on time. This point of selecting a company is very crucial. Selecting such a reliable shipping company reduces the likelihood of running into frequent problems. Even if there are any glitches in the shipping process, a reliable shipping company will know how to deal with it without letting the client know about it.

Since the reputation of a brand is directly linked to the delivery timeline and the company's reliability is measured in terms of the shipping company's ability to deliver products effectively, this factor cannot be taken lightly. In the competitive global market, no one can afford to lose their existing customers or new prospective customers due to their carelessness in choosing their international shipping service provider. The credentials of the international shipping company must be verified and it should be ensured that the international shipping company enjoys a good reputation in the industry.

While choosing the shipping service provider, one should not base one's decision only on the cost factor. It is extremely pertinent to find the most competitively priced service provider to keep the shipping expenses under control, it is also very important to channelize priorities. Preference should be given to those companies that enjoy a good reputation in the shipping industry and companies that have a reliable shipping network across the globe to ensure the timely delivery of goods. Reliability as a quality is something that we search for in individuals, organizations, items, and administrations.

The next important quality is affordability. It is not enough that the shipping service provider is just reliable, but one should also be able to use their international freight forwarding services. If the shipping company charges an exorbitant fee for the shipping services, then many people will not be able to hire their services. The top service providers in the shipping industry are also reasonably priced companies. International Shipping in the United States offers the most reliable shipping services at reasonable prices.

The company selected should also be a customer-oriented company. All reputed companies of the international shipping industry are dedicated to provide its customers the highest level of satisfaction. The company's success is mainly because of this particular quality. Hiring such companies increases the probability of highly satisfactory services.

Another important quality of top shipping companies is that they should be licensed, insured and certified. This proves how credible the company is. In case of a company not licensed to run the business, not only will the service provider have to face problems, but there will also be no guarantee on the safe delivery of goods at their destination in case anything goes wrong. Therefore, one must work only with those companies that are licensed and companies that are insured for safety.

## NOTES

## NOTES



**One-Stop:** One stop source is a business or office where multiple services are offered.



**Single Window:** Single window is simply a system, sometimes described as a concept, process or environment that enables individuals, businesses and Government organizations to submit information to, or through, a single point of access, now normally electronic.

### Check Your Progress

4. What is the main problem faced by organizations engaged in global commercial activities?
5. When can a company dispatching freight lose its brand reputation?
6. What is a single window?

Finally, the shipping service provider chosen should have a good shipping network for global operations. All the top companies in the international shipping industry have a good shipping network which enables them to deliver the goods to any part of the world. This again will come only with experience. If a company has been in the shipping industry for a long time, they would have established good global networks. The client should therefore ensure to choose an experienced company with a reliable global shipping network so that the goods reach the desired destination on time.

### 5.3.1 One-Stop for Total Logistics Solutions

There are many different versions of single windows. For example, the concept of the single window is applied to many IT application areas, particularly e-Government and banking systems. Generically, a **single window** is simply a system, sometimes described as a concept, process or environment that enables individuals, businesses and Government organizations to submit information to, or through, a single point of access, now normally electronic. The single window evolved as a single physical office that was established to handle all formalities, compliance and payment processes. This was commonly known as a ‘one-stop shop’, or ‘guichet unique’. Initially, the trade or trade facilitation single window was applied to the trader’s lodgement of customs declarations and ministerial licences and permits. This has also been called the formalities function or customs and OGA compliance functions. This concept has now been extended to include the complete trade, transport and logistics community so that, ultimately, all border crossings and all forms of cargo shipment are included in the single window system for the electronic exchange of all key public sector and private sector trade documents (messages), licences, permits and payments all through a single (possibly central) access point, although there are several alternative technology designs.

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## 5.4 COMMITMENT TO HIGH QUALITY SERVICES

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Commitment to the provision of high quality services to its customers and stakeholders is another important prerequisite of a good shipping company. The staff employed by the shipping company must be capable of serving its customers effectively. They must be diligent and effective professionals. They should also follow utmost integrity in the delivery of their services. The following points are indicators of good service provided by the provider:

### 1. Service delivery

A good shipping company is that which is committed to good service delivery. The ultimate purpose of a shipping company must be to ensure safe and timely delivery of its client’s consignment to the place designated by the client. A customer who has paid for the services of the shipping company has all the right to be served in the best possible manner. A service is said to be well-delivered only when its clients are satisfied.

### 2. Contact with customers

Every point of contact with the customer should be considered a ‘Moment of Truth’ by the service provider company. In case of lack of commitment and targets, every contact will be a lost opportunity. It is best for every company to lay down a detailed

Customer Service Charter which is the employees' written commitment to understand the customer service. The aim of the shipping company must not only be to deliver value for money but also to satisfy their customers.

### 3. Mindset of staff

The staff must be trained to believe the following:

- Everyone is a service provider.
- Everyone is a service consumer.
- Service delivery is everybody's business.
- Deliver service to me, as you want me to deliver service to you.

### 4. Fundamental values

A shipping company must endeavour to uphold the following fundamental values in the delivery of services to all its customers and stakeholders.

- **Professionalism:** Company staffs must exhibit expertise, efficiency and competence while performing their duties.
- **Teamwork:** Utmost mutual cooperation for the greater benefit of the society should be the aim of each company employee while providing quality services to its stakeholders.
- **Integrity:** Sincerity with utmost sense of responsibility must be ensured in all dealings and operations of the company.
- **Leadership:** A good and responsible shipping organization must set a national agenda with respect to shipping, green drive, marine environment protection and management of the world's marine endowments.
- **Adaptability:** A responsible shipping company must strive to be creative, innovative and flexible towards the ever-emerging trends in shipping management and rules.
- **Excellence:** The company must endeavour to attain excellence in national and international maritime organization.
- **Quality communication:** The customers and stakeholders of a shipping company must be kept involved in and informed about its services and development that may have an impact on the management and progress of the industry. Other than this, all consignees must have direct and free access to information regarding their consignments at all times.

#### 5.4.1 Transparency and Tracking

Using mobile barcode scanning retailers can track shipping and receiving activities across the organization in real time. In this way, retailers and customers are able to record the arrival or dispatch of the shipment the moment it arrives from the source or the moment it is sent to its destination. In addition to this, they can constantly track cargo movement through every internal shipping and receiving touch point. The tracking facility should be available with the retailers as well as customers through which they can automatically place orders with the help of consumer applications that offer mobile data capture capabilities.

## NOTES

## NOTES



**Geotagging:** It is the process of adding geographical identification metadata to various media such as a geotagged photograph or video, websites and SMS messages.

With an easy-to-use suitable mobile application, logistics employees are able to review and track shipments across the organization. Workers can swiftly scan items to update the status of a shipment or delivery.

On the receiving port or destination, employees can validate the incoming shipments and instantaneously report any spoiled or missing items. With the help of the process of overall streamlining of shipping and receiving functions, less time needs to be spent in their management.

Retailers can go one step further and improve what the value mobile data capture brings to their shipping and receiving operations by attaching it to proof of delivery. Freight delivery can be managed using a smart phone or tablet to efficiently scan products for proof of delivery and endorsements signed by recipients of the delivered goods. This process cuts on time and the cost related with attaining delivery proof, and at the same time errors are also reduced to a great extent.

Instant report of deliveries improves customer service and inventory tracking. Apparatus and equipment like built-in navigation, **geotagging** and communication capabilities of mobile devices further spread the value of mobile proof of delivery.

All these improved facilities to track shipments and deliveries is vital for the success of the modern shipping enterprise. In the modern world, shipping consignments move seamlessly from the source port to their destination through sea routes, while the sending agencies are able to keep a track on the movement of the freight.

### 5.4.2 Positive Approach

It is extremely important to find a way to concentrate on the positive elements of a situation, even when it seems that there is no good. Even bad things have something to teach us. There is always something around that motivates a person to be positive, one just needs to search for it. There are ways of acquiring a positive approach if a person or an organization is not already bestowed with one. Following are few suggestions, adoption of which can lead to positivity in the organization:

- **Look for the positive side:** It is very easy to concentrate on the negative. However, it is important to look for positivity and focus on it.
- **Be aware of all thoughts that enter the mind:** A person must focus on how he/she thinks about different situations. On seeing a number of businesses closing down, one must not think that his/her business is also doomed, rather it should be seen as an opportunity to find new customers and perhaps even enhance the market share. Effort should be made to challenge all negative thoughts and turn them into positive thoughts.
- **Present a positive attitude before others:** Even if one is feeling low, he/she must make sure that he/she portrays a positive attitude towards everyone with whom he/she deals. This always helps a person feel positive and it also spreads positivity to others.
- **Concentrate on all that has gone well:** Concentrating on all things that have gone well and one's achievements increases a person's positivity and seeing things that have not gone well in order to learn a lesson is also a positive approach.
- **Watch who you associate with:** Always be around people with a positive attitude and make sure to avoid negativity.

- **Focus on improving the performance of your business:** Focus on getting your business in the best shape to weather the downturn and to maximize your short-term and long-term business performance.
- **Keep your business goals at the forefront of your mind:** It is important to always focus on the goals of one's business. An effort should be made to keep visiting them again and again and ensure that they do not lose their relevance.

A positive attitude helps in improving every business. It not only maximizes the performance of the business, but it also leaves a positive impact on everybody's life.

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## 5.5 HIGHLY TRAINED, MOTIVATED AND RESULT-ORIENTED STAFF, TEAM WORK

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Identifying the right people to help make the decision for one's business is the first step towards a successful business. This requires employability of the right stakeholders within the organization.

### 5.5.1 Prerequisites of a Motivated and Effective Team

Motivated and result-oriented staff members of a team need to ensure effective marketing, use technical means of communication and business development, and make sure of certain fulfillments. The marketing team is required to communicate the shipping requirements with its customers and they may end up using shipping promotions like free or flat rate shipping to attract more business and enhance the value of the shipping company. The team must ensure that the right shipping options are available to the customers when needed and that the given offers are clear. They must have the capability to ensure that the orders are collected, packed and shipped correctly and timely. Above all, the team must be confident as to whatever option is chosen by the customer, their team will be able to handle the requirements. The team needs to know how the approach to shipping will affect customers at every stage of the customer lifecycle.

Selection of a good team can be made by asking few of the following questions:

- What can be the duration of promotions while maintaining margins?
- What means of communication will be used to remain in touch with the existing and prospective customers?
- How can less common shipping options (LTL freight, in-store pickup, etc.) be communicated in an unambiguous manner?
- What options/offers will be given by the shipping company to appeal customers?
- What will be the foremost motivating factor for your customers: Speed? Cost? Additional options?
- What method will be adopted to present personalized shipping options to customers?
- Should the company offer shipping promotion on abandoned cart rates first, in order to increase the company's potential?

## NOTES

### Check Your Progress

7. What should be the ultimate purpose of a shipping company?
8. What helps the logistics employees to review and track shipments across the organization?
9. How does a positive attitude help improve a business?

## NOTES

- Is it possible to build out multiple onsite advertising units to promote the shipping offer? How long will it take? What kind of information will be required for that?
- How will you ensure that the labels are clearly marked and an operationalized process is in place?
- Are you in know-how of how different shipping procedures work from door to door?
- How will you handle the company response in case a customer has a bad experience?

### Excellent team work

In case if you have ever seen a big ship, you would have noticed that people from all around the world and from an extensive range of people are working there. The globe meets on board! In this case, understanding and having concern for each other is important in situations where you have to work in a group.

### 5.5.2 Provide Alternatives and Options to the Client

Shipping is fundamental to customer experience and can make or break business in several ways. Not only are shipping and packaging necessary distribution functions, but they are also an important element of marketing strategy. The business may represent the connection between the company and the customers, but the shipping process connects the products directly to the customers.

Packaging must be the first and foremost consideration. The type of packing required depends on the goods to be sent, the method of dispatch and conditions at the final destination. Remember that paying extra for good packing may result in savings to the organization in the long run. Safe transport, weight, size, expense, and image are all elements involved in the choice of packaging materials, and the many options available in the market today do not make these decisions easy.

One of the most important secrets to successful business is to conquer the challenge of shipping profitably. As your business enhances, shipping from nearby warehouses and trucking packages to shipping points near the customer are substitutes that may reduce costs. Fulfillment warehouses may provide the best solution. Extra expenses may be hidden by shipping costs that are far lower than anything a small business could purchase and sell. If you are carrying out your own shipping then consider arranging directly to pay for your inbound traffic. This tactic could greatly increase your volume with a shipper and result in lower negotiated rates for your outbound traffic. All alternatives must be considered carefully, experimented with different tactics, and we must be sure to re-evaluate them on a regular basis.

#### Check Your Progress

10. What is the first step towards a successful business?
11. What do motivated and result-oriented staff members of a team need to ensure in order to satisfy their clients?
12. On what does the type of packing of goods depend?

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## 5.6 SUMMARY

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Some of the important concepts discussed in this unit are:

- Transport is the essential link between supplier and receiver, and the aim is to receive the goods in good condition, when and where they are needed. For

this, it is very important to choose the shipping service with great care and consideration.

- With a plethora of options available in the open market, one has to make a smart choice of the shipping company with great care and consideration. There are numerous aspects to consider while choosing the most suitable shipping service to transport goods from one particular point to another.
- It is a mandatory requirement that the shipping company chosen should be able to convey the shipment to all desired locations.
- The average order size of the shipment also matters while choosing the right shipping company meeting our requirements. A shipping company may offer a great price on shipping a small flat pack but if the average order consists of medium boxes, then that deal is worthless.
- When choosing the best shipping company for export, budget should be the most important factor in decision-making. Costs can differ depending on the type and amount of goods that have to be transported. Cost of transport will have an effect on the cost of goods.
- One of the main problems faced by organizations engaged in global commercial activities is the dispatch of international freight. For products or goods that are sold across the border, the organization's reputation depends very much on the ability of the shipment company to deliver the products to its customers at the other end in a suitable manner.
- Since the reputation of a brand is directly linked to the delivery timeline and the company's reliability is measured in terms of the shipping company's ability to deliver products effectively, this factor cannot be taken lightly.
- Another important quality of top shipping companies is that they should be licensed, insured and certified.
- There are many different versions of single windows. The single window evolved as a single physical office that was established to handle all formalities, compliance and payment processes. This was commonly known as a 'one-stop shop', or 'guichet unique'.
- Commitment to the provision of high quality services to its customers and stakeholders is another important prerequisite of a good shipping company.
- A good shipping company is that which is committed to good service delivery. The ultimate purpose of a shipping company must be to ensure safe and timely delivery of its client's consignment to the place designated by the client.
- Using mobile barcode scanning retailers can track shipping and receiving activities across the organization in real time.
- With an easy-to-use suitable mobile application, logistics employees are able to review and track shipments across the organization. Workers can swiftly scan items to update the status of a shipment or delivery.
- Instant report of deliveries improves customer service and inventory tracking. Apparatus and equipment like built-in navigation, geo-tagging and communication capabilities of mobile devices further spread the value of mobile proof of delivery.

## NOTES

## NOTES

- It is extremely important to find a way to concentrate on the positive elements of a situation, even when it seems that there is no good.
- Motivated and result-oriented staff members of a team need to ensure effective marketing, use technical means of communication and business development, and make sure of certain fulfillments.
- The marketing team is required to communicate the shipping requirements with its customers and they may end up using shipping promotions like free or flat rate shipping to attract more business and enhance the value of the shipping company.
- Shipping is fundamental to customer experience and can make or break business in several ways. Not only are shipping and packaging necessary distribution functions, but they are also an important element of marketing strategy.
- Packaging must be the first and foremost consideration. The type of packing required depends on the goods to be sent, the method of dispatch and conditions at the final destination.
- One of the most important secrets to successful business is to conquer the challenge of shipping profitably.

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### 5.7 ANSWERS TO ‘CHECK YOUR PROGRESS’

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1. Transport is the essential link between supplier and receiver, and the aim is to receive the goods in good condition, when and where they are needed.
2. The effective use and choice and methods of transportation apparatus diminishes the cost of shipping and logistics.
3. When choosing the best shipping company for export, budget should be the most important factor in decision-making.
4. One of the main problems faced by organizations engaged in global commercial activities is the dispatch of international freight.
5. The products of a company may be ready for shipment but if the shipping company does not provide its clients with adequate support or if the freight dispatching company does not cooperate by providing reliable freight forwarding service, then the company dispatching the freight will lose its brand reputation despite having a highly marketable product in the segment.
6. A single window is simply a system, sometimes described as a concept, process or environment that enables individuals, businesses and Government organizations to submit information to, or through, a single point of access, now normally electronic.
7. The ultimate purpose of a shipping company must be to ensure safe and timely delivery of its client’s consignment to the place designated by the client.
8. With an easy-to-use suitable mobile application, logistics employees are able to review and track shipments across the organization.
9. A positive attitude helps in improving every business. It not only maximizes the performance of the business, but it also leaves a positive impact on everybody’s life.

10. Identifying the right people to help make the decision for one's business is the first step towards a successful business.
11. Motivated and result-oriented staff members of a team need to ensure effective marketing, use technical means of communication and business development, and make sure of certain fulfillments.
12. The type of packing required depends on the goods to be sent, the method of dispatch and conditions at the final destination.

## NOTES

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## 5.8 QUESTIONS AND EXERCISES

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### Short-Answer Questions

1. How does the type of product to be shipped influence the choice of a shipping service?
2. Why is tracking the consignment an important aspect for the shipping industry?
3. State the varied factors that affect the timely delivery of shipments.
4. Write a short note on one-stop for total logistics solutions.
5. Why is team work essential in the shipping industry?
6. What are the alternatives and options provided to the clients by the shipping company?

### Long-Answer Questions

1. Describe the various factors influencing the choice of a shipping service.
2. Assess the importance of a reliable worldwide network in the shipping industry.
3. Analyse the significance of high quality services, transparency and tracking in the shipping industry.
4. What is the positive approach in the shipping industry?
5. Evaluate the importance of highly trained, motivated and result-oriented staff in the shipping industry.



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# UNIT 6 EXPORT PROCEDURE AND DOCUMENTATION

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## NOTES

### Structure

- 6.0 Introduction
- 6.1 Unit Objectives
- 6.2 Offer, Receipt of Orders and the Shipment Procedure
  - 6.2.1 Stages of Processing an Order
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  - 6.3.1 Significance of Export Documentation
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## 6.0 INTRODUCTION

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Documents are the support to collect information and data. Document requirements in international trade serve different purposes. These may include for example documents required as part of governmental procedures, supply chain management and payment requirements. Managing the various documentary requirements becomes problematic as the information need to be submitted to different agencies in different countries and languages, on different forms, and with various supportive documents attached to them. National and international businesses, traders and transport operators have to cope with numerous documents and forms (sometimes up to 40 originals), often containing redundant and repetitive data and information (200 data elements on average).

Simplification of trade documents, therefore, aims at reducing document and data requirements and aligning them to international standards. Aligned trade documents are the first step towards paperless processing of documents and Customs automation.

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Any export shipment involves a number of documents required mainly by the Customs/Port Authorities. Mostly the format of these documents is common in most cases, but may differ in respect to documents used at different ports. Hence, a reference to the Clearing and Forwarding Agent and/or the Customs/Port Authorities is suggested. This unit describes export procedure and documentation, the shipment procedure, export credit procedure and documents, the multimodal transport document, and the customs clearance of export cargo.

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### 6.1 UNIT OBJECTIVES

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After going through this unit, you will be able to:

- Discuss the offer, receipt of orders and the shipment procedure
- Describe the various documents that any exporter must be familiar with in export documentation
- Evaluate the export credit instruments and procedures
- Discuss the types of letters of credit
- Analyse the significance of export credit insurance
- Explain the Standard Policy and the Small Exporters' Policy
- Assess the multimodal transport document
- Discuss the process of loading of goods for customs clearance
- Analyse the process of removal of goods under claim of rebate from factory or warehouse without examination by the central excise officers

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### 6.2 OFFER, RECEIPT OF ORDERS AND THE SHIPMENT PROCEDURE

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It is a requirement that first the export order should be acknowledged, and then it should be carefully examined in terms of items, specification, pre-shipment inspection, payment conditions, special packaging, labelling and marketing requirements, shipment and delivery date, marine insurance, documentation, etc. A formal confirmation should be sent to the buyer if all these conditions are satisfactory. Otherwise, before confirming the order, a clarification should be sought from the buyer. After confirmation of the export order immediate steps should be taken for procuring/manufacturing the export goods.

#### **Why is an Export Order Processed?**

An export order has to be processed to meet the requirements of materials required by the importers. The export order must be processed as expeditiously as possible so that the buyers can receive the materials on time as per their delivery schedules and also conforming to the specifications stipulated by them.

#### **Parties, Acts and Publications Involved**

An exporter should consult the most important Acts/publications in connection with the processing of an export order. The Imports and Exports Control Act, 1947, now

replaced by the Foreign Trade (Development and Regulation) Act, Custom Act, 1962, Carriage of Goods by Sea Act, 1924, the Foreign Exchange Regulations Act, 1973, schedule of charges of goods in respect of the port of shipment, Handbook of Export Promotion, and Export-Import Policy and Handbook of Procedures (1992-97) should be consulted.

The main parties involved in this processing are the exporter, the buyer, the negotiating bank, the shipping company, the insurance company, the Reserve Bank of India, the Chief Controller of Imports and Exports (Director General of Foreign Trade), the Controller of Customs, the port commissioners, and the clearing and forwarding agents.

### 6.2.1 Stages of Processing an Order

The various stages in the processing of a shipment order are given below.

**First stage:** The exporter should scrutinize the export order with reference to the terms and conditions of the contract. This is the most crucial stage.

All subsequent actions and reactions will depend on the terms and conditions of the export contract. It should be ensured that the contract has been entered into in accordance with the prevalent export promotion policies of the country and the foreign exchange regulations. The export order must specify the mode of payment in unmistakable terms.

The clearance of the excise authorities has to be obtained. This can be done in two ways. The first way is to make payment of the excise duty at the time of removing the export consignment from the factory and file a claim for rebate of duty after exportations of goods. The second way is to secure clearance under bond. This involves entering into a bond under such terms and conditions as the Collector of Customs may decide. When the export goods are removed from the factory, a debit entry for excise duty is made in the bond account of the exporter. This obligation is discharged after exportation of the goods. The exporter has to prepare two important documents: AR-4 Form and the Gate Pass Form. Form GP-I is used when the export goods are to be removed under claim for rebate of duty and Form GP-2 is to be predated when the goods are to be removed under bond. If the exporter wishes, the central excise officer can make physical verification at the factory and seal the packages. For this purpose, a prescribed supervision fee has to be paid. In this case, AR-4 Form has to be used.

The other authority, which is to be approached immediately at this stage, is the Export Inspection Agency for conducting quality control and reshipment inspection. An inspector is deputed by the Inspection Agency to inspect the export consignment. If the goods conform to the prescribed specifications, an inspection certificate is issued. The goods are dispatched to the port of shipment and the railway receipt is obtained.

**Second stage:** As soon as the export order has been confirmed, preparations for the dispatch of goods are started. A 'delivery note' (in duplicate) is sent to the factory manager. This note should contain the description of the goods as has been given in the export order, along with a copy of the instructions given by the importer. The date by which the goods must be manufactured, the date by which the necessary formalities must be completed, the requisite time margins to be given must be clearly intimated to the works manager.

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**Dispatch Advice:** It is defined as information by a consignor or seller to the consignee or buyer that the ordered goods are ready to be shipped, or have already been shipped.

**Third stage:** This stage involves the role of the Development Commissioner of Foreign Trade Zones (FTZs)/Export Processing Zones (EPZs), and the Federation of India Export Organizations. Once an exporter has been registered, the registration shall remain valid for five years. Registered exporters have to submit quarterly reports about the export made by them.

**Fourth stage:** After the goods have been dispatched to the port town, the works manager sends a 'dispatch advice' to the Export Department. Soon after, an application is sent to the insurance company for marine insurance cover. The insurance policy is obtained in duplicate. At this stage, formalities in relation to floor regulations, canalization, certificate origin, ECGC cover and consular invoice, wherever necessary, should be completed. Thereafter, the Export Department should send the following documents to its clearing and forwarding agents along with detailed instructions:

- Commercial invoice showing the details and value of goods specifying FOB or CIF prices, as the case may be, and the market/real value (usually two copies) original exporter order
- Rotation number allotted by the customs to the vessels
- Agent's name
- Colour
- Port
- Final destination
- Exporter's name and address
- Number of packages
- Marks and numbers
- Real value
- FOB
- Country of origin
- Code number of the goods
- Number and date of exchange from the control GR Form
- Export license number, wherever necessary

There are three types of shipping bills, namely:

- Shipping bill for free goods
- Dutiable shipping bill
- Drawback shipping bill

The shipping bill must be prepared according to the category of the export goods. The shipping bill with requisite number of copies (usually five copies) is submitted to the Export Department of Customs House along with documents from serial no. 1.

The shipping bill for 'free' goods is processed in the following manner:

- Deposited in box
- Dealt by receiving clerk

- Dealt by distributing clerk
- Checked and passed by appraiser
- Approved by principal appraiser

**Fifth stage:** The clearing and forwarding agent takes delivery of the consignment from the railways and arrange for its storage in the warehouse. Thereafter, he prepares the requisite copies of the shipping bill. The most important particulars, which are to be filled in the shipping bill are:

- Consignee's name and address
- Vessel's name
- Rotation number allotted by the customs to the vessels
- Agent's name
- Colour
- Port
- Final destination
- Exporters name and address
- Number of packages
- Marks and numbers
- Real value
- FOB value
- Country of origin
- Code number of the goods
- Number and date of exchange from the control GR Form
- Export license number, wherever necessary

The shipping bill for 'free' goods is processed in the following manner:

- Deposited in box
- Dealt by receiving clerk
- Dealt by distributing clerk
- Checked and passed by appraiser
- Approved by principal appraiser
- Signed by the Assistant Collector of Customs, where necessary
- Checked and signed by pass examiner and shipping bill number marked
- GR Form detached
- Returned to the clearing and forwarding agent by the distributing clerk

In case of processing of 'dutiable/drawback' shipping bill, apart from the first six steps mentioned above, the bill has to go through the following additional persons: (i) Pass examiner; (ii) Duty calculator; (iii) Accounts clerk dealing with deposit account or cash, and (iv) Cashier for duty receipt.

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In case any drawback is involved, the shipping bill would also require to be passed by the Drawback Appraiser, with an endorsement on the duplicate shipping bill or original, where necessary, for holding the drawback examination of the export goods in the docks.

**Sixth stage:** After the shipping bill has been passed by the customs, the clearing and forwarding agent presents the port trust copy of the shipping bill to the shed superintendent of the port trust and obtains the carting order for bringing the export cargo in the transit shed for physical examination. Thereafter, in the case of shed cargo, the dock challan is prepared. Where the shiploads override, the dock charges are indicated on the shipping bill itself, and therefore, no separate dock challan is prepared. The following details are given in the dock challan: (i) Consignee's name and address; (ii) Vessel's name; (iii) Port of destination; (iv) Exporters name; (v) Marks and number of packages (these must be given in the shipping bill);

(vi) Gross weight; (vii) Measurement in cubic metres or weight in metric tonnes; (viii) Port charges payable; and (ix) Other details as required.

The dock challan is processed in the following manner:

- Placed in the receiving box
- The port commissioner's shipping charges calculated and checked by the clerk
- Deposited with the cash clerk
- Dock challan released by distributing clerk to the clearing and forwarding agent

**Seventh stage:** The passed shipping bill, including the dock challan in case of overside cargo are carried by the authorized licensed courier accompanying the goods for making the cargo ready for shipment after finally being passed by port commissioners and the custom shed staff. For shed cargo in dock, the following steps are taken: (i) Gate warden checks the documents, registers and permits entry of cargo into the dock; (ii) The export shed writer accepts dock challan and cart ticket; (iii) The receiving clerk issues unloading slip for cargo from lorry after checking its condition; (iv) The supercargo arrangers unload cargo from lorry; (v) The writer registers the dock challan in manifest and sends it to the customs preventive officer for endorsement; (vi) The preventive officer examines and checks the contents, weight, etc. of the goods and if in order makes an endorsement 'Let Ship' on the duplicate copy of the shipping bill, and the dock challan is finally signed by the customs divisional officer; (vii) The port commissioner writes in the shed register the details and releases the dock challan; (viii) The supercargo takes over the control of the cargo shipment. In case of overside cargo, the cargo is shipped accompanied by a boat note and the shipping bill is then registered with the customs for which a pass is issued.

**Eighth stage:** The ship's export clerk calls for the cargo from the shed or boat and after loading prepares the mate's receipt. The ship's captain or his agent signs the mate's receipt. It is then delivered to the port commissioner's shed. The clearing and forwarding agent pays the port charges and takes delivery of the mate's receipt. In the case of overside shipment, the mate's receipt is directly given to the clearing and forwarding agent. It is then presented to the preventive officer for certifying the fact of



**Mate's receipt:** It is a document signed by an officer of a vessel evidencing receipt of a shipment onboard the vessel.

shipment on all copies of the shipping bill, original and duplicate of AR4A/AR4 Form, and all other documents that need post-shipment endorsement from the Preventive Officer. The mate's receipt is presented to the shipping company and the requisite number of copies or the bill of lading (usually two negotiable and about a dozen non-negotiable copies) are obtained by the clearing and forwarding agent.

**Ninth stage:** The clearing and forwarding agent forwards the following documents to the exporter:

- Full set of bill of lading, COB together with required number of non-negotiable copies
- Export promotion copy of the shipping bill
- AR-4A/ AR-4 Form (duplicate copy)
- One copy of the commercial invoice duly attested by the Customs Department
- Original export order
- Original letter of credit
- Railway concession form duly attested by the customs.

**Tenth stage:** As soon as the exporter receives the above documents from the clearing and forwarding agent he completes the remaining formalities. The negotiating bank transmits the duplicate copy of the GR Forms to the Exchange Control Department of the Reserve Bank of India.

The original copy of the bank certificate, along with attested copies of the commercial invoice, is returned to the exporter. The duplicate copy of the bank certificate is forwarded to the office of the Director General of Foreign Trade in the area. The exporter is paid the value of the export consignment against the above-mentioned documents.

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### 6.3 EXPORT DOCUMENTATION

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According to the Customs Act (Section 40), the person in charge of a Conveyance-vessel, vehicle, Aircraft, etc., cannot permit loading of export Cargo at the Customs Station unless and until the formal permission to export given by the proper Customs Officer, is presented. Before granting the permission, the Customs Officer, however ensures that the goods being exported are in accordance with the different regulations, particularly in terms of the following:

- (i) The goods are of the same type, sort and value as have been declared by the exporter
- (ii) The Duty or Cess leviable thereon has been properly determined and paid,
- (iii) Provisions of Export (Control) Order, Export (Quality Control and Inspection) Act and Foreign Exchange (Regulation) Act are complied with

The Customs Act (Section 50) further states that the exporter, in case of goods to be exported in a vessel or aircraft, has to present the **Shipment Bill** and other connected documents to the proper officer. Any export shipment therefore, involves the preparation of several document declarations and certificates, on the basis of which the Customs Authorities grant necessary permission. There are also several documents

### NOTES

#### Check Your Progress

1. Why is it necessary to process an export order?
2. Name the main parties involved in the processing of an order.
3. Name the types of shipping bills.
4. Who prepares the mate's receipt?

required for submission to the Port Authorities. In addition, a few more documents are required if the export product(s) fall(s) within the purview of the Export Assistance Schemes and Facilities.

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### **The Major Documents**

The major documents that any exporter must be familiar with include the following:

- Bill of Lading
- Export Licence
- Customs Entry Form
- Commercial Invoice
- Customs Invoice
- Legalised/Visaed Invoice
- Consular Invoice
- Bill of Exchange
- Certificate of Origin and GSP Certificate
- Certificate of Value
- Certificate of Health/Sanitary Certificate
- Certificate of Inspection, Analysis or Weight
- Packing List
- Certification of Inspection
- Black List Certificate
- Weight Note
- Manufacturer's/Supplier's Quality Inspection
- Certificate/Languages Certificate
- Manufacturer's Certificate
- Certificate of Chemical Analysis
- Certificate of Conditioning
- Certificate of Insurance
- Shut Out Advice
- Short Shipment Form
- Shipping Advice
- Antiquity Certificate
- Certificate of Measurement
- Certificate of Exports
- Shipping Bill/Bill of Export
- Transshipment Bill
- Transshipment Permit
- Shipping Order
- Car/Lorry Ticket

Not all the above documents are required by all countries, and not for all goods. The exporter must find out which ones are necessary in each case. He must know what these documents are needed for.

### **6.3.1 Significance of Export Documentation**

Some of the procedures that must be followed when an exporter has marketed his goods and received an order are now considered. These procedures often involves a good deal of documentation. This documentation is one of the major differences between trading in the home country and trading with a foreign country.

A number of documents must accompany every export shipment. They must be the correct documents and this is not a simple matter, because the requirements differ from country to country. If the documents are not the correct ones, or if they are not filled in correctly—down to the last detail—the importer cannot obtain the goods from his port when they arrive. He may even have to pay a fine and/or storage charges while the correct documentation is obtained. Additional charges may have to be made by the exporter. Obviously, a customer will think twice about future dealings with an exporter if he has experienced unnecessary delays.

Some exporters are worried by export documentation because they think it is very complicated. But it can be learnt, and Institutions such as the local Ministry of Commerce, Chamber of Commerce or Trade Associations will help the perplexed exporter. Furthermore, instead of handling documentation themselves, exporters often use Shipping and Forwarding Agents, who obtain and fill out documents, arrange transportation, etc.

But whether or not the exporter uses a Shipping and Forwarding Agent, he should know something about documentation because it plays such an extensive role in export procedures.

One major purpose of documentation is to provide a specific and complete description of the goods, so that they can be correctly assessed for Import Duty. This assumes that the customer has obtained an Import Licence if necessary.

But documentation also plays an important role in transport arrangements, in payment and credit procedures and in relation to cargo insurance and claims.

Once the goods are ready, an exporter has to prepare and execute various documents at different stages of sending the shipment of goods to the importer. These documents are important for two reasons:

- (a) As an evidence of shipment and title of goods
- (b) For obtaining payment

The various documents are therefore, of vital interest to the exporter and the Bank which is the usual media of payment. The documentary requirements are both regulatory and operational in nature and have to comply with the Rules and Regulations of the Indian Government as well as the importing country for different types of products. These requirements are different for different types of products. When exporting for the first time, exporters should always find out from their buyers the documents required for the product concerned.

Accuracy and completeness are a prime necessity in documents covering export shipments. Whether two or twenty copies of the Invoice are required by the buyer, the

## **NOTES**

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same should be supplied as, the buyer probably has some reasons for it. Minor discrepancies of any kind either in the date itself or in the typing in the documents, which look harmless sometimes assume a menacing form. Erasures and strike over in typing or changes or additions made in ink must never be indulged as these only arouse the suspicion that the documents have been tampered with. Any alteration or addition made by an Authority issuing the documents must be endorsed properly, with the signatures of the person issuing the documents only. If the documents are not the correct ones or if they are not filled in correctly to the last, the importer may not be able to get the goods when the ship carrying them arrives. This may seem obvious but it bears emphasis since both the requirements and penalties are greater beyond comparison in export than in domestic trade.

The main purpose of the documents accompanying a shipment is to provide a specific and complete description of the goods so that they can be assessed correctly for Duty purpose and meet the Import Licensing requirements or Import Quota Restrictions imposed on the goods for clearance purpose. If there are any discrepancies in the documents and/ or if the required documents are not produced, the shipment may not be allowed for import or may even be confiscated by the Customs of the importing country. There is a plethora of documents in export trade—different forms, applications and documents are required to be filled in for obtaining Export Licences, completing Pre-shipment Inspection, for Customs Clearance and shipping, for obtaining payment and export finance and for claiming export benefits like Duty Drawback, etc.

The experienced exporter, because of the complexity of documentation, will find it a good idea to have the various documents prepared for him by a Shipping and Forwarding Agent or should take advice from a fellow exporter. The Exporter should also develop a habit of thoroughly scrutinising the documents for any possible errors or discrepancies and if any errors or discrepancies are found, must rectify them immediately before despatching them to the Bank of buyer.

### **6.3.2 Standardised Pre-Shipment Export Documents: Commercial and Regulatory Documents**

The Government of India has made it mandatory for every exporter to use standardised pre-shipment export documents w.e.f. 1 September 1991. This is popularly known as Aligned Documentation System (ADS), based on UN Layout Key. The ADS Methodology involves the preparation of documents on a uniform and standard A4 size of paper. The documents are aligned to one another in such a way that, the common items of information are given the same relative slots in each of the documents included in the System. This makes it possible to prepare one Master document embodying the information common to all the documents included in the aligned series and to run off all the aligned documents from the same Master document with the help of suitable marking reproduction techniques. The Pre-shipment documents on a Standard Layout were first introduced by Sweden in 1956 followed by Denmark, Finland and Norway. It was later that most of the European countries, USA, Australia, etc., have adopted this ADS system.

**Advantages:** The ADS system offers the following advantages:

- Dispenses with the conventional documentation practices
- Brings in uniformity in documentation

- Ensures economy, speed, accuracy and convenience
- Facilitates expeditious checking and processing of documents at different stages
- Generates as many copies as required of Commercial and Regulatory Documents from their respective Master Copies through Photocopying Machines

### **Documentation Practices in India**

In India, on an average, about 25 documents are associated with the Pre-shipment stage to export transaction. These documents are classified into two categories namely, Commercial and Regulatory. The Commercial documents are those which, by Customs of Trade, are required for effecting physical transfer of goods and their 'title' from the exporter to the importer. Regulatory Pre-shipment documents are those which have been prescribed by different Government Departments/Bodies in compliance of the requirements of various Rules and Regulations under relevant laws like Exchange Control Regulations, Export Trade Control, Customs, etc.

On an average, there are 16 Commercial documents and 9 Regulatory documents. The following are the 16 Commercial documents generally involved at the pre-shipment stage:

#### ***Commercial documents***

1. Pro-forma Invoice
2. Commercial Invoice
3. Packing List
4. Shipping Instruction
5. Intimation of Inspection
6. Certificate of Inspection/Quality Control
7. Insurance Declaration
8. Certificate of Insurance
9. Shipping Order
10. Mate's Receipt
11. Bill of Lading/Combined Transport Document
12. Application for Certificate of Origin
13. Certificate of Origin
14. Bill of Exchange
15. Shipment Advice
16. Letter to the Bank for Collection/Negotiation of Documents

Out of the above 16 Commercial documents, 14 have been standardised and aligned to one another. Two documents, namely Shipping Order and Bill of Exchange could not be standardised for the reason that they have different data elements and very little commonality when compared with other commercial documents. The

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Regulatory documents associated with the pre-shipment stage of an Export transaction are given below:

**Regulatory documents**

**NOTES**

1. Gate Pass-I/Gate Pass-II (now deleted)
2. AR-4 Form
3. Shipping Bill/Bill of Export
4. Export Application/Dock Challan/Port Trust Copy of Shipping Bill
5. Receipt for Payment of Port charges
6. Vehicle Chit
7. Exchange Control Declaration (GR/PP) Forms
8. Freight Payment Certificate
9. Insurance Premium Payment Certificate

Out of the above 9 Regulatory documents, four have been standardised. In fact, these four documents have been reduced to only three. The receipt for payment of Port Charges has been incorporated in the Export Application/Dock Challan/Port Trust Copy of Shipping Bill, thus one document has been completely eliminated.

**6.3.3 Banking Procedure Export Documentation**

India took a leap forward in improving 'Ease of Doing Business' by reducing the mandatory documents required for import and export of goods to three documents each. The Directorate General of Foreign Trade (DGFT) issued a Notification to this effect on 12 March 2015.

The Department of Commerce had set up an Inter-Ministerial Committee under the Chairmanship of DGFT in July 2014 to study and recommend ways to reduce the number of mandatory documents required for export and import. The Committee held detailed discussions with all stakeholders and the concerned Departments/Ministries/Agencies and also visited Jawaharlal Nehru Port (JNPT) to study the ground situation and find ways to minimize the number of documents and reduce transaction costs and time for exports and imports. The Committee submitted its 'Trading Across Borders' report to Prime Minister's Office in December 2014.

Based on the recommendations of the report, the RBI has agreed to do away with the 'Foreign Exchange Control Form (SDF)' by incorporating the declaration in the 'Shipping Bill' (for exports) and dispensing with the 'Foreign Exchange Control Form (Form A-1)' (for imports). Customs have also agreed to merge the 'Commercial Invoice' with the 'Packing List' and have issued a Circular for accepting 'Commercial Invoice cum Packing List' that incorporates the required details of both the documents. The exporters and importers, however, have the option of filing separate 'Commercial Invoice' and 'Packing List' also, if they so desire. Shipping Ministry has also agreed to do away with the requirement of 'Terminal Handling Receipt' and make the process online.

As a consequence, after issue of the DGFT's Notification dated 12 March 2015, only three documents each would be mandatory documents for export and import.

MANDATORY DOCUMENTS FOR EXPORT & IMPORT		
S. No.	EXPORTS	IMPORTS
1	Bill of Lading/ Airway Bill	Bill of Lading/ Airway Bill
2	Commercial Invoice cum Packing List	Commercial Invoice cum Packing List
3	Shipping Bill/ Bill of Export	Bill of Entry

It may be recalled that India ranked 126 in ‘Trading Across Borders’ component of ‘Ease of Doing Business’, out of 189 countries ranked by the World Bank, in its 2015 Report. The ranking methodology adopted by the World Bank for ‘Trading Across Border’ takes into account the number of mandatory documents required for export and import and the time and cost of exporting/importing a container out of/into the country. World Bank’s 2015 Report listed 7 and 10 mandatory documents respectively for export and import from/to India.

MANDATORY DOCUMENTS LISTED BY WORLD BANK IN DOING BUSINESS REPORT 2015		
S. No.	EXPORTS	IMPORTS
1	Shipping Bill	Bill of Entry
2	Commercial Invoice	Commercial invoice
3	Packing List	Packing List
4	Bill of Lading	Bill of Lading
5	Foreign Exchange Control Form (SDF)	Foreign Exchange Control Form (Form A-1)
6	Terminal Handling Receipt	Terminal Handling Receipt
7	Technical Standard Certificate	Certified Engineer's Report
8		Cargo Release Order
9		Product manual
10		Inspection report

As such, after issue of DGFT’s Notification only three documents each would be mandatory for export and import as two documents (Packing List and Commercial Invoice) required by Customs have been merged into one document, whereas one document required by RBI (Foreign Exchange Control Forms—SDF for exports and A-1 for imports) and one document required by Ministry of Shipping (Terminal Handling Receipt) earlier, have now been dispensed with. ‘Cargo Release Order’ is not a mandatory document required by any regulatory agency, but is a commercial document issued by the Shipping line to the concerned importer. As regards, ‘Technical Standard Certificate’/ ‘Certified Engineer’s Report’, ‘Product manual’ and ‘Inspection report’, these documents are required in specific cases/products/tariff lines only and are not mandatory for all products.

The reduction in the number of mandatory documents would also lead to corresponding reduction in transaction cost and time. It is expected that this step would not only facilitate the ‘Ease of Doing Business’ in respect of ‘Trading Across Borders’ but also improve India’s ranking on this parameter.

## NOTES

### Check Your Progress

- When, according to the Customs Act (Section 40), can a person in charge of a Conveyance-vessel permit loading of export Cargo at the Customs Station?
- Why must erasures and strike over in typing or changes or additions made in ink never be indulged while preparing the documents?
- What is the Aligned Documentation System (ADS)?
- Why was the Inter-Ministerial Committee set up?

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## 6.4 EXPORT CREDIT INSTRUMENTS AND PROCEDURES

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### NOTES

Export credit has become an important tool of export promotion in countries like India. The developing countries require suitable financing mechanisms for adequate and timely credit. They also need credit at a cheaper rate in order to boost exports.

It is all the more necessary for a country like India where foreign trade constitutes a high percentage of its GNP—almost 15 per cent. In order to maintain and augment the high volume of export/import transactions, it is necessary to obtain financial assistance through the banks.

Export finance is required by all small, medium and large-scale manufacturers, exporters or merchant exporters, albeit in various degrees. The small or medium exporters, also known as second line borrowers, face more difficulties in arranging finances and obtaining credit, particularly when there is no L/C covering the export transaction.

The difficulties in obtaining finance for exports of new products to new or traditional markets or for new non-traditional export lines are comparatively more as the risk involved is more. The reason is not merely inadequate security, but assessment of risk arising from non-availability of data/information on overseas markets and customers. This is more so in developing countries where banks and other financial institutions do not have good infrastructure for collection of necessary information.

In international trade, export takes place on the basis of advance payment. Therefore, the exporter has to arrange his finance, for production as well as for supply, on credit to overseas buyers. Even his suppliers (whether supplying finished products to merchant exporters or inputs to manufacturer-exporters) hardly allow any credit on their supplies. Instead, they mostly work on an advance payment system as there is a huge domestic market pull in countries like India. Hence, there is always a need for export finance.

The provision of export credit by the commercial banks in India, both Indian and foreign, is regulated by the RBI, that is, the central bank. This was done by stipulating that a minimum proportion of their total lending be provided as export finance. From time to time, the RBI announces several schemes and guidelines for the efficient management of the credit delivery system.

### 6.4.1 Role of Export Credit

Export credit plays a crucial role in international trade. It is important and facilitates exporters in executing their export orders. Export credit is required both for short and long periods of time. In the export business, funds are required at the time of establishment of the business (long-term funds) and for carrying out the business (short-term funds). The exporters in India have the facility to obtain both long-term and short-term funds. Pre-shipment export finance is required as working capital. This working capital is used for timely production, packing and shipment of the orders.

There are several categories of risks which are associated with export credit. Among the most important are:

- **Business risk:** This refers to the business nature of the project. The risk can be attenuated through sound business and financial management.
- **Financial risk:** This refers to the level of debt in comparison to the equity base. It is controllable through the establishment of a sound financing plan.
- **Foreign exchange risk:** This can be greatly reduced or eliminated through hedging in the futures or the forward markets.
- **Country risk:** This can be greatly reduced or eliminated through insurance policies, usually obtainable from a government agency.
- **Credit risk:** This can be managed through the implementation of a sound credit policy.
- **Liquidity risk:** This can be contained through sound business management and a secure method of shipment.

Time risk interest rate increases with the length of the borrowing time as a result of the rise in the uncertainty level. This risk can be best managed through proper matching of the short-term needs with short-term borrowing and long-term needs with borrowing with maturities in line with those needs.

### Cost of Credit

It is not only the timely availability of adequate credit but also its low cost (rate of interest) which is important to promote exports. Low rate of interest on export credit is advocated as one of the effective incentives for export promotion as it strengthens the competitive ability of the exporters in international markets. It helps the exporter to reduce his cost of production, offer his products at low price or extend credit for large periods to his overseas buyers, thereby making him interested in the exporter's products and ultimately more overseas sales or foreign exchange earnings.

Although an export project may have been appraised and found viable, financing it may remain a major hurdle for entrepreneurs. Many may not be aware of the availability of a wide range of short-term and long-term debt instruments. They may also overlook some forms of equity participation (such as preferred shares), or be unfamiliar with leasing methods and how to determine which is less costly—leasing or borrowing. Some projects can be undertaken only as a combined effort of two or more parties forming a joint venture through equity participation. Entrepreneurs are often uninformed on their country's investment code, which may offer subsidies in the form of export paybacks, concessions such as soft loans, and export credit insurance and guarantees or grants.

Initially, the sponsor of an export project should review the capital structure of comparable projects as well as the means of financing used in similar industries. The methods of one industry may generate ideas applicable to other industries. This is also true of the financial structure of companies in other countries, which can often be emulated effectively.

Like any other project, an export project may require substantial investment in fixed assets and working capital. To meet this investment requirement, the project may have to use both internal and external funds. Deciding on the proportions of equity and financing is a policy issue that is affected by:

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- The availability of funds in the financial markets
- The cost of these funds
- The firm's ability to raise large amounts of external funds
- The firm's optimal capital structure

Since exporting is an activity that is generally supported by the government, the latter often give incentives to firms in the form of tax holiday and tax rebates in addition to special financing schemes provided by banks and other export financing institutions.

Before examining the different financing means, it is important for the investor to assess the influencing factors and different types of risks that a given project may face. Some of the factors and risks that will need to be assessed are:

- Inflation and exchange rates in the country where the project is to be located
- Prevailing rate of interest
- Political environment and country risks
- Level of competition
- Expected cash flow of the venture
- Periods during which different amounts will be needed
- The break-even point
- Collateral offered by the project
- Possibilities of cost overruns
- Expected life cycle of the product and the target markets
- Expected life cycle of the project
- Evolution of the technology used

This assessment will initially help to determine the economic factors to which the export project will be exposed as well as the strengths and the weakness of the project itself. It will also help in selecting a financing plan that is adapted to the business environment in which the project will operate.

For instance, should the cash flow of the project be uncertain owing to tough competition, debt financing should be kept at a small percentage. If the prevailing interest rate for borrowing is low, a higher debt-ratio could be envisaged. If the currency of the country in which the project is to be implemented is subject to rapid depreciation, it would be prudent to avoid borrowing in foreign currency. Lastly, if the technology to be used is rapidly changing, it would be judicious to assess the merits of leasing rather than buying.

### **Export Credit: Principal Issues**

The management of export credit involves a number of issues that must be addressed at the outset. Among the most important are:

- What sources of financing are available? In many countries, sources of funds are very limited.
- How long will the funds be required? Short-term needs, such as working capital requirements, should be financed by short-term debt and long-term needs by

long-term debt. This is a fundamental principle in finance; any departure from such a rule can lead to inefficient use of resources and at worst to bankruptcy. If fixed assets are financed by debt, the reimbursement of that debt should be completed well ahead of the expiration of the economic life of the assets.

- What are the trends in interest rates? If the interest rates are expected to rise, long-term finance may place restrictions on dividend payments, purchases of assets, management salaries, and working capital levels. Restrictive covenants on the bonds and loans are typical examples.
- What is the company's cash flow likely to be in the future? If a company expects to be short of cash in the near future, repayment of the loan principal should be scheduled well into the future in order to reduce the short-term financial risk to the project.

### Lending Basis

Loans have traditionally been extended on the basis of the value of the fixed assets to be mortgaged and/or the collateral. This has often resulted in the substantial losses to the lenders when the liquidation value of the asset when bankruptcy occurs turns out to be a fraction of its book value. What is important is not the value of the asset itself, but how much it can generate in cash flow, which in turn can cover interest payments and reimbursement of the loan. For example, a specialized machine that is built to produce one specific product will have a liquidation value much lower than its book value as shown in the financial statements. In fact, the liquidation value of the assets during bankruptcy varies from 5 per cent to 50 per cent of the book value. In practice, obtaining a court order for the seizure and liquidation of a company's asset is not the aim of lenders, who consider these actions totally unproductive, however necessary they may be.

While equity participation and collateral are essential for obtaining loan financing, today debt is primarily extended on the basis of factors other than the value of the assets. The level of debt that lenders are willing to finance in comparison to equity level is based on many elements. Prominent among these are:

- The level of expected project cash flow: The higher this level, the higher the amount of debt that can be obtained (such as in the case of a new technology, or in the new drug, which will generate a high level of return over a long period).
- The stability of cyclical nature of the expected project cash flow: The more the revenue is stable and secure, the higher the acceptable level of debt in proportion to the capital (for example, utility companies are generally highly-leveraged).
- The prevailing level of interest rates and expected tendencies in future and current influencing economic conditions.
- The risk category of the industry of the project (for example, a computer of genetic engineering project as against a cement manufacturing project).
- The debt-to-equity ratio level in competing companies.
- The value of the assets, collateral and guarantees offered.

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In contrast to debt holders, owners of equity have a claim on the earnings of the firm only after all creditors have been paid. When the firm is liquidated, owners are entitled only to the net assets remaining after the demands of all creditors are met. Thus, they assume all the risks in the event of failure but are rewarded with all the benefits of success. In fact, equity financing confers the title of ownership on investors and is the foundation for any new project or existing firm.

### 6.4.2 Export Credit Delivery System in India

India has a well-developed export credit delivery system. The major focus of export credit delivery system in India has been on short-term working capital credit requirements of the Indian exporters. These requirements are mainly fulfilled by the scheduled commercial banks. These banks not only provide export credit but their export credit is also linked with providing financial and other services. In the financial requirement there is a provision of export finance. But, other and related services include handling of export documents, counselling and advisory services, facilitating foreign exchange operations of exporters, etc. Banks provide these supports as per guidance of foreign exchange operations of the RBI regulations. Most of export credit requirements are fulfilled by nationalized banks. These are leaders in providing export finance. Nationalized banks include SBI and associates. Private Banks and foreign banks are also offering export credits to exporters. Although in India there is no provision of providing direct subsidies to exporters. Instead, India relies on a wide range of indirect measures, including duty and tax concessions, export finance, export insurance and guarantee, and export promotion and marketing assistance.

### 6.4.3 Scheduled Commercial Banks

Commercial banks render three basic functions relating to export credit. These are:

- (i) Transfer Function
- (ii) Credit Function
- (iii) Hedging Function

In addition, banks also issue guarantees for different purposes connected with export-import transactions.

#### 1. Transfer Function

It is the basic function of banks to facilitate payments without the medium of currency. This is because currency of other country is not acceptable usually in settlement of payment. International payment transactions are carried through credit instruments like bill of exchange, banker's draft through cable or mail transfer.

For effecting payments, Indian banks maintain deposit accounts with banks in other countries. Banks buy foreign exchange from exporters and others and sell to importers and others who require the same. The difference between the rate of exchange at which it is bought and sold is an important source of income for banks.

Still another transfer function is the buying and selling of foreign currency from the foreign exchange market. Banks also enter into forward exchange contracts for sale/purchase of a currency.

## 2. Credit Function

It involves credit facilities at different stages through which a transaction passes e.g. the stage at which it is initiated, during the transaction or after its completion. It also takes different forms like pre-shipment or packing credit, post-shipment credit through negotiation of bill of exchange drawn or not drawn under a letter of credit, discounting of time or usance bills and purchase of bills not drawn under letter of credit. Medium-term credit for export of goods on deferred payment terms is also a credit function.

## 3. Hedging Function

Transactions involving forward purchase and sale of foreign currency from exporters to importers for eliminating risk in exchange rate fluctuation is known as hedging function of banks. They also resort to foreign exchange market to cover forward transactions.

**Hedging vis-à-vis covering:** There is distinction between hedging and covering. Whereas covering is connected with a self-liquidating arrangement, hedging is not. The former provides protection against a cash flow or transaction exposure in regard to both receivables and payable which could otherwise lead to a realized gain or loss. A forward sale, therefore, protects the domestic currency value of a foreign currency receivable. It is a covering operation, because on the settlement date the foreign currency receivables will automatically liquidate the forward sale. As against this, hedging involves the protection of accounting value of foreign assets and liabilities denominated in foreign currency against unrealized foreign exchanges losses and gains. Such forward sale of currency is not self-liquidating and has to be liquidated by a subsequent purchase in the spot market.

## 4. Guarantees

In addition to the three basic functions, banks also issue guarantees which are required at the various stages of export financing for different purposes such as:

- (a) For a contractor at the time of submitting a quotation for tender in a foreign country
- (b) For a foreign contractor, when a contract has been awarded, to cover the exporters due performance of the contract
- (c) For the importer as coverage for an advance payment he has made to the exporter
- (d) For the importer in lieu of reduction money for satisfactory performance of the items supplied for a stipulated period
- (e) For government authorities like import, customs or other departments for issue of conditional (like export obligation) licences, duty free imports, etc.

Export credit to exporters has increased from less than 6 per cent in the mid-1980s to over 12 per cent by mid 1990s but there was declining trend in export credit by 10.5 per cent during the late 1990s as shown in Figure 6.1. The share of export credit to total exports was about 25.2 per cent during 1980-81 to 1999-2000. While it was about 24 per cent in the 1980s, it increased to about 26.4 per cent in the 1990s. There has been a general decline in this ratio from over 29 per cent during the late 1980s to less than 24 per cent during the late 1990s as shown in Figure 6.2.

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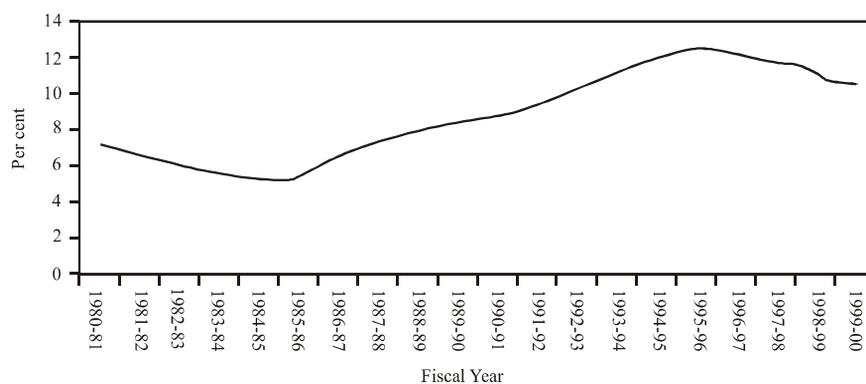


Figure 6.1 Share of Export Credit in Gross Bank Non-Food Credit (Three Years Moving Average)

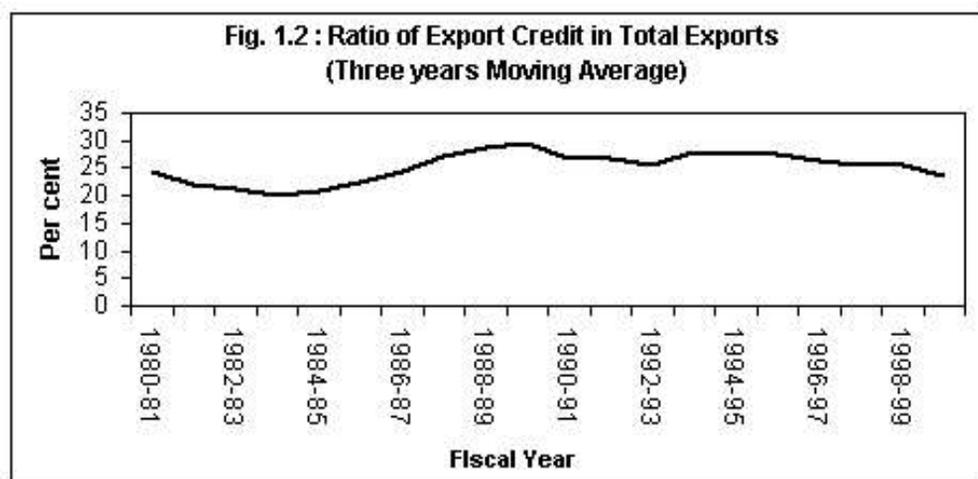


Figure 6.2 Ratio of Export Credit in Total Exports (Three Years Moving Average)



**Letter of credit:** A letter of credit is a document issued by the importer's bank in favour of the exporter giving him the authority to draw bills up to a particular amount covering a specified shipment of goods and assuring him of payment against the delivery of shipping documents.

#### 6.4.4 Letters of Credit and Types

A letter of credit is a document issued by the importer's bank in favour of the exporter giving him the authority to draw bills up to a particular amount (as per the contract price) covering a specified shipment of goods and assuring him of payment against the delivery of shipping documents.

Consider the example of the Indian exporter and the US importer. The US importer applies to her local bank; let's say the Bank of America, for the issuance of a letter of credit.

The Bank of America then undertakes a credit check of the importer. If the bank is satisfied with her creditworthiness, it will issue a letter of credit. However, the bank might require a cash deposit or some other form of collateral from her first. In addition the Bank of America will charge the importer a fee for this service.

Typically this amounts to between 0.5 per cent and 2 per cent of the value of the letter of credit, depending on the importer's creditworthiness and the size of the transaction. (As a rule the larger the transaction, the lower the percentage.)

Let us assume that the Bank of America is satisfied with the American importer's creditworthiness and agrees to issue a letter of credit. The letter states that the Bank of

America will pay the Indian exporter for the merchandise so long as it is shipped in accordance with certain specified instructions and conditions.

At this point the letter of credit becomes a specified instruction and condition. At this point the letter of credit becomes a financial contract between the Bank of America and the Indian exporter. The Bank of America then sends the letter of credit to the Indian exporter's bank; let's say the State Bank of India. The State Bank of India tells the exporter it has received a letter of credit and that he can ship the merchandise.

After the exporter has shipped the merchandise, he draws a draft against the Bank of America in accordance with the terms of the letter of credit, attaches the required documents, and presents the draft to his own bank, the State Bank of India, for payment.

The State Bank of India then forwards the letter of credit and associated documents to the Bank of America. If all the terms and conditions contained in the letter of credit have been complied with, the Bank of America will honour the draft and will send payment to the State Bank of India. When the State Bank of India receives the funds, it will pay the Indian exporter.

The operations of letters of credit have been regulated and are governed by Uniform Customs and Practice for documentary Credits of International Chamber of Commerce, adopted by more than 160 countries.

### Letter of Credit: Major Terms

The major terms are as follows:

- **Document:** It is a document issued by the importer's bank in favour of the exporter giving him the authority to draw bills up to a particular amount (as per the contract price) covering a specified shipment of goods and assuring him of payment against the delivery of shipping documents.
- **Parties to a letter of credit:** Applicants/Importer.
- **Applicant's/Importer's bank (issuing bank):** The bank who issues or opens the letter of credit on behalf of the importer/customer.
- **Exporter:** Exporter is the 'beneficiary' of the letter of credit who is entitled to receive the payment of his bills according to the terms of the letter.
- **Intermediary bank:** Intermediary bank is usually a branch or the correspondent of the opening bank in the exporting country through which the credit is advised to the exporter.
- **Paying bank:** The bank which negotiates the beneficiary bills under the credit and pay for it is known as Paying Bank.

### Operation of Letter of Credit

The letter of credit is also known as documentary credit or a commercial letter of credit. The eL/C is one of the most commonly used methods of payment in international trade. An L/C offers the seller the security of knowing that he will be paid while offering the buyer the assurance that payment will only be made when his bank is presented with documents that keep to the terms of the L/C.

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When both the buyer and seller agree on using the L/C as a mode of payment, the buyer first obtains the L/C from his bank. This is different from documentary collection, where the seller initiates the process with his bank.

As shown in Figure 6.3, the buyer applies for the L/C from his bank in step 4. Once approved, the L/C is forwarded to the advising bank (step 5). The advising bank, which acts on behalf of the seller, has to confirm whether the L/C is in order. Once this is confirmed, the seller releases the shipping documents (step 8). The issuing bank releases the payment once the buyer has confirmed the collection of the goods.

### Procedure for the Issue of Letter of Credit

The procedure for the issue of letter of credit as explained in Figure 6.3 is as follows:

- The exporter and the importer enter into an export contract which provides for payment by means of a Letter of Credit.
- The importer approaches his bank to open the Letter of Credit in favour of the exporter.
- The importer's bank sends the Letter of Credit to the exporter through one of its corresponding banks in the exporter's country, known as advising bank.
- Advising bank authenticates the letter of credit and sends it to the exporter.

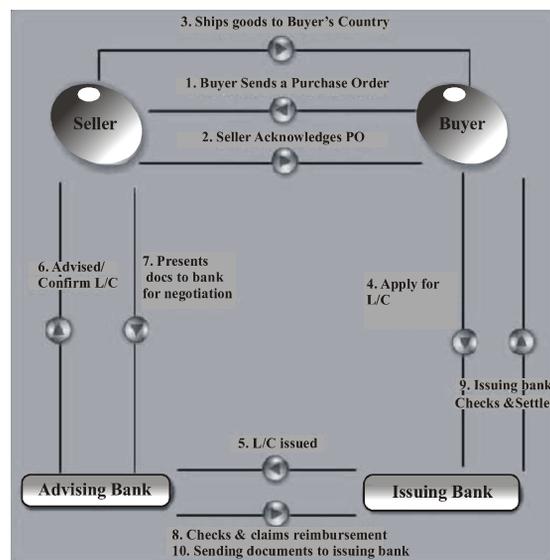


Figure 6.3 Procedure for the Issue of Letter of Credit

### Contents of Letter of Credit

A Letter of Credit generally contains the following information:

- Complete and correct name and address of the beneficiary, i.e., the exporter
- Complete and correct name and address of the applicant, i.e., the importer
- Type of Letter of Credit/Documentary Credit
- Amount of Letter of Credit
- How the credit shall be available, e.g., by payment, deferred payment, acceptance or negotiation

- The name of the drawer of the draft and the tenor of the draft
- Description of goods, quantity of the items and the unit price
- List of documents required to be submitted by the beneficiary
- Port of discharge and the place of final destination
- Terms of delivery, i.e., FOB, CIF, CFR, etc.
- Status of transshipment, i.e., whether allowed or not
- Status of partial shipment, i.e., whether allowed or not
- The last date of sending shipment
- Time period for the presentation of documents for negotiation by the beneficiary after the dispatch of the shipment
- The date and place of expiry of the Letter of Credit
- Transfer of the Letter of Credit allowed or not
- Mode of advice of the Letter of Credit, i.e., by mail or tele-transmission

### **Precautions to be taken by Seller and Buyer in Letter of Credit**

Both buyer and seller should scrutinize the Letter of Credit carefully before proceeding to execute the export order. They should examine the following points to ensure that:

#### ***Seller***

- There is a need to ascertain that a local bank has authenticated the letter of credit. If a letter of credit is received directly from a foreign bank, it should be forwarded to the seller bank to have its details verified and have it authorized. The Letter of Credit appears to be valid Letter of Credit. Seller can consult his banker for this purpose.
- There is also a need to examine the terms of the sales contract as given in the letter of credit. The type of Letter of Credit and its terms and conditions are as per the agreed terms and conditions of the export contract.
- There is also a need to make sure that the seller can present all the documents named. The documents required under the Letter of Credit can be obtained and presented for negotiation.
- All the terms and conditions are acceptable and can be complied with. It should be ensured that the Letter of Credit does not include any condition that is unacceptable or cannot be complied with.
- The description of the goods, quantity and unit prices are as per the export contract.
- There is no clause in the Letter of Credit that requires payment of costs or charges not agreed to with the importer.
- The last date for sending shipment and the time allowed for presentation of the documents are acceptable.
- The part of loading and the port of discharge are as per the export contract.
- The responsibility for the insurance of the goods has been clearly stated.

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### **Buyer**

- There is a need to verify the bank account and make sure that there is enough credit with the bank.
- There is also a need to be extra careful in completing the application. Importer should also be sure that the guarantee is issued according to the contract terms. The shipment will not take place until the seller is satisfied, so aim to have the guarantee issued in good time and avoid the time and cost of amendments.
- There is also a need to use the opportunity to negotiate extended credit terms, if possible.
- There is also the need to make sure that all the necessary documents should be cleared so that the goods pass to the importer smoothly.
- There is also the need on behalf of importer to insist on terms that are important to protect importer interest, such as latest shipment dates or other such terms.

### **Advantages of Letter of Credit**

Letter of credit is beneficial to both the exporter and the importer as it facilitates the conduct of export-import transaction. The various benefits of the letter of credit are as follows:

- The exporter is assured of payment as there is written promise by the importer's bank to make payment if the shipment is sent in strict compliance of the terms and conditions of the letter of credit.
- The exporter is able to obtain advance from the bank to finance the credit needs to send the shipment.
- The importer can negotiate a lower price for the goods and deferred payment terms by offering payment against the letter of credit as desired by the exporter.
- The letter of credit eliminates the commercial risk to payment since the payment is assured by the bank which has opened the irrevocable letter of credit. The payment to the exporter is not affected by the willingness and capability of the buyer to make the payment.
- The letter of credit mode of payment enables the importers to expand the sources of supply because the exporters are always willing to supply goods against the letter of credit.

### **Types of Letters of Credit**

The types of letters of credits are:

- Sight or Usance Letter of Credit
- Confirmed or Unconfirmed Letter of Credit
- Negotiable Letter of Credit
- Revolving Letter of Credit
- Red Clause Letter of Credit
- Green Clause Letter of Credit
- Transferable Letter of Credit

- Acceptance credits
- Back to Back Letter of Credit
- With Recourse or Without Recourse Letter of Credit
- Anticipatory Letter of Credit
- Standby Letter of Credit

They are discussed in detail in the following paragraphs.

### **(i) Sight or Usance Letter of Credit**

A letter of credit is known as Sight Letter of Credit or Letter of Credit at Sight if it involves payment to the exporter against sight draft. On the other hand, if the payment is made against usance draft, then the Letter of Credit is known as Usance Letter of Credit. In this case, the usance draft is accepted jointly by the issuing bank and the importer. Once the draft is jointly accepted by the bank and the importer, it becomes the first class commercial paper which can be discounted through any commercial bank before the due date. This enables an exporter to obtain funds in advance before waiting for the due date.

### **(ii) Confirmed/Unconfirmed Letter of Credit**

An irrevocable Letter of Credit is confirmed when the advising bank adds its confirmation to the Letter of Credit. This means that the advising bank assumes the primary liability for making payment to the beneficiary as if it were the issuing bank. This arrangement is beneficial for the exporter as it enables him to protect himself against the political risks involved in transfer of funds from the importer's country to the exporter's country. This kind of situation may arise when the importer's country is at war or is faced with civil/ethical disturbances leading to the ban on the transfer of funds out of the country.

It is important to understand that confirmation of Letter of Credit is possible only if there is a clause in the letter of credit which permits the advising bank or any other negotiating bank to add its confirmation. Thus, if an exporter wants confirmation of Letter of Confirmation then he must negotiate this with the importer so that he can get this clause included in the Letter of Credit. Confirmation of credit, in fact, operates as an insurance against the political risks to payment.

An irrevocable confirmed Letter of Credit is the most beneficial form of credit for the exporter as he has obtained assurance of payment from two banks namely, the issuing bank and the confirming bank. The exporter should take the decision regarding confirmation carefully as it involves cost in terms of payment of confirmation charges to the bank. It is most desirable to opt for confirmation in the case of those countries which are politically unstable or where the financial standing of the issuing bank is not very good.

Once the payment is made by the confirming bank (it is usually located in the exporter's country), then it claims the amount of Letter of Credit from the issuing bank. In case it fails to obtain the payment from the issuing bank for any reason, then it cannot claim the amount from the exporter, i.e., the beneficiary under the Letter of Credit. Confirmation of Letter of Credit is, thus, without recourse to the beneficiary.

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On the other hand, if the irrevocable Letter of Credit does not provide for its confirmation, then it would be known as an unconfirmed Letter of Credit.

- A revocable credit can be amended or cancelled by the issuing bank at any moment and without prior notice to the beneficiary. This type of credit does not constitute a legally binding undertaking between the bank or banks concerned and the beneficiary.
- An irrevocable credit constitutes a definite undertaking of the issuing bank for the payment of the bills drawn under the credit, provided the beneficiary presents the stipulated documents to the credit nominated bank or the issuing bank or the issuing bank and complies with all the conditions of the credit. This type of credit can neither be modified nor cancelled without the prior approval of the beneficiary concerned and it is, therefore, widely accepted.
- The Uniform Customs basically and explicitly recognize only the revocable or irrevocable letters of credit which can either be confirmed or unconfirmed.
- Both revocable and irrevocable credit is advised to a beneficiary by the advising bank without any engagements on its part. When an issuing bank authorizes or requests another bank to confirm its irrevocable credit and the latter has added its confirmation to pay against presentation of proper documents, such credit is called 'confirmed credit'.

### **(iii) Negotiable Letter of Credit**

A Letter of Credit is known as negotiable if the issuing bank authorizes the negotiating bank to honour the draft/s drawn under the terms of the credit. In such a case, the exporter gets the payment even before the documents are scrutinized by the issuing bank. The negotiating bank, i.e., the bank through which documents are prepared for negotiation for realization of the export proceeds, would examine the documents and if the same are found to be non-discrepant, then it would release the payment under the terms of credit to the exporter subject to an undertaking from the exporter that in case the issuing bank does not release the payment then he would refund the amount to the negotiating bank. Thus, the negotiating bank reserves to itself the right to take recourse to the beneficiary in the event of non-payment by the issuing bank under the credit. This facility of payment would be available to the exporter only if it is stated in the Letter of Credit that the payment is allowed by negotiation and the name of the bank(s) allowed to negotiate is also stated in the Letter of Credit. In case the name of the negotiating bank is stated in the Letter of Credit, then the negotiation is restricted to the nominated bank and the credit is then called Restricted Credit. In case the issuing bank agrees for negotiation by any bank then the credit is called Unrestricted.

### **(iv) Revolving Letter of Credit**

A Revolving Letter of Credit is one which provides for the renewal of the amount of the credit without any amendments to the letter of credit in relation to a given time period or a given amount. The revolving letter of credit may be revocable or irrevocable. For example, a letter of credit may revolve initially for an amount up to \$20,000 per month for a fixed period of say, three months. In this case, the amount of credit shall be renewed for \$20,000 every month for a period of three months irrespective of whether any credit was utilized or not by beneficiary during the month. Thus, while the face

value of the letter of credit is \$20,000, the undertaking of the issuing bank is for the total amount of \$60,000 in revolving periods each for \$20,000 for three months.

The revolving credits are opened in those cases where the importer regularly imports goods from a certain exporter. Instead of opening letter of credit for each import, the importer saves on the transaction costs by opening the revolving credit. The disadvantage of revolving credit from the point of view of the importer is that he enters into long term commitment with a particular supplier and thereby deprives him of the possible opportunity of making imports at competitive rates in future.

The revolving credit may be cumulative or non-cumulative. The credit is considered cumulative if the unutilized amount of one time period can be carried over to the next period. If the unutilized amount cannot be carried over, then the credit is called non-cumulative.

#### **(v) Red Clause and Green Clause Letters of Credit**

A Red Clause Letter of Credit is a kind which enables the confirming bank or the nominated bank to make advances to the beneficiary even before the presentation of the documents. Since this clause used to be written customarily in red ink it is called red clause letter of credit. This clause states the amount that can be advanced to the beneficiary and in certain cases it may cover even the full amount of the letter of credit. The confirming or the nominated bank recovers the amount of advance with interest out of the payment realized under the credit. In case the documents presented by the exporter are found to be discrepant then the bank which had given the advance will have the right to demand repayment of the advance amount with interest from the issuing bank. The issuing bank would have the right of recourse against the applicant i.e., the importer. This means that the liability will fall on the applicant. Whether such clause would be included in the letter of credit or not depends on the agreement between the exporter and the importer. On the other hand, the letter of credit is known as Green Clause letter of credit if it provides for the credit given to the exporter to cover the period of storage of goods at the sea port.

#### **(vi) Transferable Letter of Credit**

Transferable Letter of Credit is a credit which authorizes the advising bank to transfer part or full amount of the credit to any other party at the request of the beneficiary. In this case, the importer runs the risk of accepting the shipment of goods from a party other than with whom the order was placed and the party supplying the goods may not have had any business dealings in the past with the importer. However, once the credit is transferred, the transferee gets the right to make presentation of the draft/s and the documents and claim payment for the goods supplied. This kind of credit is very useful in those cases where the importer is making imports through an agent in the exporting country. Such agents, known as buying agents in the exporting country, maintain the list of reliable exporters for the supply of goods to their principals in the foreign country. The transferable credits help the buying agents to transfer part of the credit amount to different exporters who have been given the orders of supply of goods to the importer.

#### **(vii) Back-to-Back Credit**

When the exporter uses his export letter of credit as a cover for opening a credit in favour of the local suppliers, the letter of credit is called Back-to-Back credit.

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#### **Transferable letter of credit:**

Transferable Letter of Credit is a credit which authorizes the advising bank to transfer part or full amount of the credit to any other party at the request of the beneficiary.

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Back-to-Back letter of credit is a credit which is issued at the strength of another letter of credit. For example, an exporter who has received a letter of credit for export of goods may have to import goods from another country for the execution of the order. The foreign supplier may ask for payment against the letter of credit. The exporter can request for the issue of import letter of credit on the strength of the export letter of credit. The second letter of credit involves two separate letters of credits as follows:

- One opened in favour of the primary beneficiary or the original exporter.
- The credit opened in favour of the second beneficiary who would supply goods to the first beneficiary. Thus, the first beneficiary becomes the applicant for opening of the second letter of credit. It is important to ensure that the second letter of credit specifies all the documents required by the first credit and the time limits set for presentation of the documents in such a manner that it will enable the primary beneficiary, i.e., original exporter to present the documents within the time limits set by the primary letter of credit.

### **(viii) Acceptance Credits**

An acceptance credit stipulates that the beneficiary must draw a bill of exchange for a particular tenor, e.g., 60, 90, 120 days sight and the drafts will be accepted by one of the following parties, i.e., (i) the applicants, (ii) the advising bank or (iii) the negotiating bank

*Transferable credits:* Under transferable letter of credit, the beneficiary is entitled to request the paying, accepting, negotiating bank to pay, accept and negotiate bills rendered by one or more parties. For partial transfer to one second beneficiary or more than one second beneficiaries it is essential that credit must permit partial shipment.

### **(ix) With Recourse or Without Recourse Letter of Credit**

A letter of credit is with recourse when under the terms of credit, the negotiating bank or the nominated bank can approach the beneficiary for the refund of the payment made under the letter of credit. It is without recourse when the negotiating or the nominated bank cannot approach the beneficiary to refund the payment under the letter of credit. A confirmed letter of credit is without recourse to the beneficiary and the unconfirmed or the negotiable credits are always with recourse to the beneficiary.

### **(x) Standby Letter of Credit**

Standby Letter of Credit is an assurance to the beneficiary that the applicant shall perform his part of the obligation undertaken by him under the contract between the applicant and the beneficiary. It is, in fact, a kind of performance guarantee to support the beneficiary in the event of default by the applicant. The subject matter of this kind of letter of credit could be:

- Repayment of the money borrowed by the applicant from the beneficiary, or
- Payment on account of any indebtedness undertaken by the applicant, or
- Payment on account of any default by the applicant in the performance of any obligation undertaken by the applicant.

A standby letter of credit is a crossbreed. On the one hand, it is a form of documentary credit and on the other it has the functions of an independent guarantee subject to its own terms. Standby letters of credit have traditionally been issued with a reference to UCP. However, specific practices in standby letters of credit, such as extend or pay demands, have not been provided in UCP. That is why specific rules for standby letters of credit have been drafted, which have led to the adoption of the International Standby Practices (ISP) under the aegis of ICC in 1998 (Publication No. 590). To be applicable, ISP has to be incorporated by reference in the standby. Where the same standby refers to ISP and to other rules, ISP shall supersede them.

#### **(xi) Anticipatory Letter of Credit**

The anticipatory credits provide for advance payment, or at least part payment to the beneficiary against his undertaking to effect the shipment and submit the bill and/or documents in terms of credit within the validity.

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### **6.5 EXPORT CREDIT INSURANCE AND EXPORT CREDIT AND GUARANTEE CORPORATION**

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Payments for exports are open to risks even at the best of times. The risks have assumed large proportions today due to the far-reaching political and economic changes that are sweeping the world. An outbreak of war or civil war may block or delay payment for the goods supplied. A coup or an insurrection may also bring about the same result. Economic difficulties or balance of payment problems may lead a country to impose restrictions on either import of certain goods, or on transfer of payments for goods imported. In addition, one has to contend with the usual commercial risks of the foreign buyer going bankrupt, or losing his capacity to pay. Conducting export business in such conditions of uncertainty is fraught with danger.

The loss of a large payment may spell disaster for any exporter, whatever his prudence and competence. On the other hand, too cautious an attitude in evaluating risks and selecting buyers may result in loss of hard-to-get business opportunities. Export credit insurance is designed to protect exporters from the consequences of payment default on account of both adverse political and commercial developments, and to enable them to expand their business without fear of loss.

Export credit insurance also seeks to create a favourable climate in which exporters can hope to get timely and liberal credit facilities from banks at home. For this purpose, export credit insurance provides guarantees to banks to protect them from the risk of loss inherent in granting various types of finance facilities to exporters.

In order to provide export credit insurance support to Indian exporters, the Government of India set up the Export Risks Insurance Corporation (ERIC) in July 1957 which was transformed into the Export Credit and Guarantee Corporation (ECGC) in 1964. To bring it into sharper focus, the Corporation's name was once again changed to the present Export Credit Guarantee Corporation of India in 1983. ECGC is a company wholly owned by the Government of India. It functions under the administrative control of the Ministry of Commerce, and is managed by a Board of Directors representing Government, Banking, Insurance, Trade and Industry, etc.

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##### **Check Your Progress**

9. Why has export credit become an important tool of export promotion in countries like India?
10. What is the role of export credit?
11. What has been the major focus of export credit delivery system in India?
12. What is a letter of credit?
13. Why is an irrevocable confirmed Letter of Credit the most beneficial form of credit for the exporter?

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The cover provided by ECGC is of four types:

- Standard policy issued to exporters to protect them against payment risks involved in exports on short term credit and Small Exporter's policy issued for the same purpose to exporters with small exports;
- Specific policies designed to protect Indian firms against payment risks involved in: (a) exports on deferred terms of payment (b) services rendered to foreign parties and (c) construction works and turnkey projects undertaken abroad,
- Financial guarantees issued to banks in India to protect them from risks of loss involved in their extending financial support to exporters at the pre-shipment as well as post-shipment stages; and
- Special schemes, viz., Transfer Guarantee meant to protect banks which add confirmation to a Letter of Credit opened by foreign banks, insurance cover for Buyer's Credit, Line of Credit, Overseas investment Insurance and Exchange Fluctuation Risk insurance.

### 6.5.1 Standard Policy and Small Exporters' Policy

Shipments (comprehensive risks) Policy, which is commonly known as the Standard Policy, is ideally suited to cover risks in respect of goods exported on short-term credit, i.e., credit not exceeding 180 days. This policy covers both commercial and political risks from the date of shipment. It is issued to exporters whose anticipated export turnover for the next 12 months is more than ₹25 lakhs. The appropriate policy for exporters with an anticipated turnover of less than ₹25 lakhs is the Small Exporters' Policy.

#### Risks covered under the policy

Under the Shipments (Comprehensive Risks) Policy, the Corporation covers, from the date of shipment, the following risks:

#### *Commercial risks*

- Insolvency of the buyer
- Failure of the buyer to make the payment due within a specified period, normally 4 months from the due date
- Buyer's failure to accept the goods, subject to certain conditions

#### *Political risks*

- Imposition of restrictions by the Government of the buyer's country, or any Government action which may block or delay the transfer of payment made by the buyer
- War, civil war, revolution or civil disturbances in the buyer's country, new import restrictions or cancellation of a valid import licence
- Interruption or diversion of voyage outside India resulting in payment of additional freight or insurance charges which cannot be recovered from the buyer

Any other cause of loss occurring outside India, not normally insured in general by insurers, and beyond the control of both the exporter and the buyer.

## Risks not covered

The policy does not cover losses due to the following risks:

- Commercial disputes including quality disputes raised by the buyers, unless the exporter obtains a decree from a competent court of law in the buyer's country in his favour
- Causes inherent in the nature of the goods
- Buyer's failure to obtain necessary import or exchange authorisation from authorities in his country
- Insolvency or default of any agent of the exporter or of the collecting bank
- Loss or damage to goods which can be covered by general insurers
- Exchange rate fluctuation
- Failure of the exporter to fulfil the terms of the export contract or negligence on his part

## Shipments covered

The Shipments (Comprehensive Risks) Policy is meant to cover all the shipments that may be made by an exporter on credit terms during a period of 24 months ahead. In other words, an exporter is required to get the insurance provided by the Policy for each and every shipment that may be made by him in the next 24 months on DP, DA or Open Delivery terms to all buyers other than his own associates. The policy cannot be issued for selected shipments, selected buyers or selected markets.

## Exclusion

An exporter may of course, exclude shipments made against advance payment, or those which are supported by irrevocable Letters of Credit, which carry the confirmation of banks in India, since he faces no risk in respect of such transactions. Where an exporter is dealing with several distinct items, ECGC may agree to exclude all shipments of certain agreed items, provided that what is offered for insurance consists of all items of allied nature and offers the Corporation a reasonable portion of the exporter's total business with a fair spread of risks.

## Shipments against letters of credit

Unless they are confirmed by banks in India, payments under irrevocable Letters of Credit are subject to political risks. Exporters, therefore, will be well advised to get them also covered under the Policy. Such shipments, which are excluded from the scope of the Policy can be covered under it if an exporter so desires. Lower premium rates are applied to them because they do not involve commercial risk and only the political risks have to be covered.

For shipments made against irrevocable Letters of Credit, an exporter has option to obtain either political risks cover only or cover for comprehensive risks, i.e., for all political risks and the risk of insolvency or default of the bank opening the irrevocable Letter of Credit. In either case, cover will be provided by the Corporation only if the exporter agrees to get all the shipments made against irrevocable Letters of Credit covered under the Policy. Cover will not be available for selected transactions.

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### **Shipments to associates**

Shipments to associates, i.e., foreign buyers in whose business the exporter has a financial interest, are normally excluded from the policy. They can however, be covered against political risks under the Policy if an exporter so desires. Where the associate is a public limited company in which the exporter's shareholding does not exceed 40 per cent, cover can be provided against insolvency risks in addition to all the political risks.

### **Shipments made by air**

Where shipments are made by air, the buyers are often able to obtain delivery of the goods from the airlines before making payment of the bills or accepting them for payment, as the case may be. If the buyer fails to make the payment subsequently as per the contract, the risk of loss will not be covered under the Policy if premium has been paid on the shipment for DP or DA terms of payment. An exporter can however, get cover for such contingencies also if he obtains Credit Limit on such buyers on Open Delivery terms, and also pays premium at rates applicable to Open Delivery terms.

### **Shipments made on credit exceeding 180 days**

The Policy is meant to provide cover for shipments involving a credit period not exceeding 180 days. In exceptional cases however, cover may be granted for shipments with longer credit period, provided that such longer credits are justifiable for the export items concerned.

### **Shipments to associates**

Shipments which are made to an overseas agent under an agreement that he will receive the goods as agent of the exporter and remit the proceeds on their being sold by him are excluded from the scope of the Policy. However, if an exporter wants it, the Corporation can get them included under the Policy. Cover will be provided only against political risks, since the agent acts for the exporter. If, however, goods are sold to ultimate buyers on credit terms, comprehensive risks cover can be provided for sales to such ultimate buyers if the exporter wants such cover.

### **ECGC: How the risks are covered**

#### ***Maximum liability***

As the Policy is intended to cover all the shipments that may be made by an exporter in a period of 24 months ahead, the Corporation will fix its maximum liability under each Policy. The maximum liability is the limit upto which ECGC would accept liability for shipments made in each of the policy-years, for both commercial and political risks. It will be advisable for exporters to estimate the maximum outstanding payments due from overseas buyers at any one time during the policy period, and to obtain the policy with maximum liability for such a value. The maximum liability fixed under the Policy can be enhanced subsequently, if necessary.

### ***Credit limits on buyers***

Commercial risks covered are subjected to a Credit Limit approved by the Corporation on each buyer to whom shipments are made on credit terms. The exporter has therefore, to apply for a suitable Credit Limit on each buyer. On the basis of its own judgement of the credit worthiness of the buyer, as ascertained from credit reports obtained from banks and specialised agencies abroad, the Corporation will approve a Credit Limit which is the limit upto which it will pay claim on account of losses arising from commercial risks. The Credit Limit is a revolving limit and once approved it will hold good for all shipments to the buyers as long as there is no gap of more than 12 months between two shipments. Credit limit is a limit on the Corporation's exposure on the buyer for commercial risks, and not a limit on the value of shipment that may be made to him. Premium has therefore, to be paid on the full value of each shipment even where the value of the shipment of the total value of the bills outstanding for payment is in excess of the Credit Limit.

As the Credit Limit is indicative of the safe limit of credit that can be extended to the buyer, it will be advisable for exporters to see that the total value of the bills outstanding with the buyer at any one time is not out of proportion to the Credit Limit. In cases where the Credit Limit that the Corporation is prepared to grant is far lower than the value of outstanding's, exporters should discuss the problem with the Corporation.

Credit limits need not be obtained if a shipment is made on DP or CAD terms, and if the value of the shipment does not exceed ₹5 lakhs. Political as well as commercial risks will stand automatically covered for such shipments, the only qualification being that the claims will not be paid on more than two buyers during the Policy period under this provision.

### **Restricted cover countries**

For a large majority of countries, the Corporation places no limit for covering political risks. However, in the case of certain countries where the political risks are very high, which are around 57 at present, cover for political as well as commercial risk is granted on a restricted basis. Policy holders intending to export to such countries are required to obtain specific approval of the Corporation for each shipment or contract in advance, preferably before concluding the contract.

Where Specific Approval is granted, it may be subjected to certain special conditions and in some cases, subjected to payment of a Specific Approval Fee in the range of 0.5 per cent to 2 per cent of the contract value. Specific Approval Fee is payable in addition to the premium on the shipments. A portion of the Specific Approval Fee is refundable in the event of shipments not taking place, or if the payments are received before the expiry of the waiting period for claims.

### **Time for payment of claim**

A claim will arise when any of the risks insured under the Policy materialises. If an overseas buyer becomes insolvent, the exporter becomes eligible for a claim one month after his loss is admitted to rank against the insolvent's estate, or after four months from the due date, whichever is earlier. In case of protracted default, the claim

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is payable after four months from the due date. Claims in respect of additional handling, transport or insurance charges incurred by the exporter because of interruption or diversion of voyage outside India are payable after proof of loss is furnished. In all other cases, claim is payable after four months from the date of the event causing loss.

However, in case of exports to countries where long transfer delays are experienced, ECGC may extend the waiting period and claim for such shipments are payable after the expiry of such an extended period.

Where the buyer does not accept goods or pay for them because of disputes over fulfilment of the terms of contract by the exporter, counter claims or set-off, ECGC will consider claims after the dispute between the parties is resolved and the amount payable is established, by obtaining a decree in a court of law in the country of the buyer. This condition is waived in cases where the Corporation is satisfied that the exporter is not at fault and that no useful purpose would be served by proceeding against the buyer.

### Small Exporters' Policy

The Small Exporters' Policy is basically the Standard Policy, incorporating certain improvements in terms of cover, in order to encourage small exporters to obtain and operate the policy. It is issued to exporters whose anticipated export turnover for the next 12 months does not exceed ₹25 lakhs.

The Small Exporters' Policy differs from the Standard Policy in the following respect:

- **Period of policy:** Small Exporter's Policy is issued for a period of 12 months, as against 24 months in the case of Standard Policy.
- **Minimum premium:** The Minimum premium payable for a Small Exporters' Policy is an amount equal to 0.30 per cent of the anticipated turnover on D/P and D/A terms of payment plus where the exporter seeks cover also for L/C shipments, 0.10 per cent of the anticipated turnover on L/C terms or ₹1000, whichever is higher.
- **Declaration of shipments:** Shipments need to be declared only twice: in the seventh month for shipments made in the first six months of the policy period, and in the 13th month for shipments made in the last six months of the Policy period.
- **Declaration of overdue payments:** Small Exporters are required to submit monthly declarations of all payments remaining overdue by more than 60 days from the due date, as against 30 days in the case of exporters holding the Standard Policy.
- **Percentage of cover:** For shipments covered under the Small Exporters' Policy, the Corporation will pay claims to the extent of 95 per cent where the loss is due to commercial risks, and 100 per cent if the loss is caused by any of the political risks. Under the Standard Policy, the extent of cover is 90 per cent for both commercial and political risks.
- **Waiting period for claims:** The normal waiting period of 4 months under the Standard Policy has been halved in the case of claims arising under the Small Exporters Policy.

### **Change in terms of payment or extension in credit card**

In order to enable small exporters to deal with their buyers in a flexible manner, the following facilities are allowed:

- (a) A small exporter may, without the prior approval of the Corporation, convert a D/P bill into a D/A bill, provided that he has already obtained suitable Credit Limit on the buyer on D/A terms.
- (b) Where the value of the bill is not more than ₹3 lakhs, conversion of D/P bills into D/A bills is permitted even if Credit Limit on the buyer has been obtained on D/P terms only. But not more than one claim can be considered during the policy period, on account of losses arising following such conversions.
- (c) A small exporter may, without the prior approval of the Corporation, extend the due date of payment of a D/A bill provided that a Credit Limit on the buyer on D/A terms is in force at the time of such extension.

### **Resale of unaccepted goods**

If upon non-acceptance of goods by a buyer, the exporter sells the goods to an alternative buyer without obtaining prior approval of the Corporation as required under the Policy, the Corporation may consider payment of claims upto an amount considered reasonable by it, provided that the Corporation is satisfied that the exporter did his best under the circumstances to minimise the loss.

### **Claims due to loss or damage to goods**

The Corporation may also consider payment of claims upto an amount considered by it as reasonable where loss is due to loss of or damage to the goods due to certain risks which are not normally included in general/marine insurance policies. The exporters should in such cases, have exercised normal care in obtaining the general/marine insurance policies.

In all other respects, the Small Exporter's Policy is the same as the Standard Policy.

### **6.5.2 Guarantees to Banks**

Timely and adequate credit facilities, at the pre-shipment as well as post-shipment stage, are essential for exporters to realize their full export potential. Exporters may not, however, be able to obtain such facilities from their bankers for several reasons, e.g., the exporter may be relatively new to export business, the extent of facilities needed by him may be out of proportion to the equity of the firm or the value of collaterals offered by the exporter may be inadequate. ECGC has designed a scheme of Guarantees to Banks with a view to enhancing the credit worthiness of the exporters so that they would be able to secure better and larger facilities from their bankers. The Guarantees seek to achieve this objective by assuring the banks that, in the event of an exporter failing to discharge his liabilities to the bank, and thereby making the bank incur a loss, ECGC would make good a major portion of the bank's loss. The bank is required to be a co-insurer to the extent of the remaining loss. Any amount recovered from the exporter subsequent to payment of claims will be shared between the Corporation and the bank in the same ratio in which the loss was borne by them at the

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### Multimedia Transport

**Document:** It is a bill of lading covering two or more modes of transport.

### Check Your Progress

14. What is the export credit insurance designed to protect?
15. When did the Government of India set up the Export Risks Insurance Corporation (ERIC)?
16. State any one difference between Small Exporter's Policy and Standard Policy.
17. What are the types of guarantees that the ECGC has evolved to meet the varying needs of exporters?

time of settlement of claim. Recovery expenses will be the first charge on the amounts recovered.

To meet the varying needs of exporters, the Corporation has evolved the following types of Guarantees:

- (i) Packing Credit Guarantee
- (ii) Export Production Finance Guarantee
- (iii) Post-shipment Export Credit Guarantee
- (iv) Export Finance Guarantee
- (v) Export Performance Guarantee
- (vi) Export Finance (overseas lending) Guarantee

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## 6.6 MULTIMODAL TRANSPORT DOCUMENT

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The multimodal transport system has already been discussed in Unit 2. This section will describe the multimodal transport document.

When the goods are taken in charge by the multimodal transport operator, he shall issue a multimodal transport document which, at the option of the consignor, shall be in either negotiable or non-negotiable form.

The multimodal transport document shall be signed by the multimodal transport operator or by a person having authority from him. The signature on the multimodal transport document may be in handwriting, printed in facsimile, perforated, stamped, in symbols, or made by any other mechanical or electronic means, if not inconsistent with the law of the country where the multimodal transport document is issued.

If the consignor so agrees, a non-negotiable multimodal transport document may be issued by making use of any mechanical or other means preserving a record of the particulars stated in Article 8 to be contained in the multimodal transport document. In such a case, the multimodal transport operator, after having taken the goods in charge, shall deliver to the consignor a readable document containing all the particulars so recorded, and such document shall for the purposes of the provisions of this Convention be deemed to be a multimodal transport document.

### Negotiable Multimodal Transport Document (Article 6)

Where a multimodal transport document is issued in negotiable form:

- (a) It shall be made out to order or to bearer;
- (b) If made out to order it shall be transferable by endorsement;
- (c) If made out to bearer it shall be transferable without endorsement;
- (d) If issued in a set of more than one original it shall indicate the number of originals in the set;
- (e) If any copies are issued each copy shall be marked 'non-negotiable copy'.

Delivery of the goods may be demanded from the multimodal transport operator or a person acting on his behalf only against surrender of the negotiable multimodal transport document duly endorsed where necessary.

The multimodal transport operator shall be discharged from his obligation to deliver the goods if, where a negotiable multimodal transport document has been issued in a set of more than one original, he or a person acting on his behalf has in good faith delivered the goods against surrender of one of such originals.

### **Non-Negotiable Multimodal Transport Document (Article 7)**

Where a multimodal transport document is issued in non-negotiable form it shall indicate a named consignee.

The multimodal transport operator shall be discharged from his obligation to deliver the goods if he makes delivery thereof to the consignee named in such non-negotiable multimodal transport document or to such other person as he may be duly instructed, as a rule, in writing.

### **Contents of the Multimodal Transport Document (Article 8)**

The multimodal transport document shall contain the following particulars:

- (a) The general nature of the goods, the leading marks necessary for identification of the goods, an express statement, if applicable, as to the dangerous character of the goods, the number of packages or pieces, and the gross weight of the goods or their quantity otherwise expressed, all such particulars as furnished by the consignor;
- (b) The apparent condition of the goods;
- (c) The name and principal place of business of the multimodal transport operator;
- (d) The name of the consignor;
- (e) The consignee, if named by the consignor;
- (f) The place and date of taking in charge of the goods by the multimodal transport operator;
- (g) The place of delivery of the goods;
- (h) The date or the period of delivery of the goods at the place of delivery, if expressly agreed upon between the parties;
- (i) A statement indicating whether the multimodal transport document is negotiable or non-negotiable;
- (j) The place and date of issue of the multimodal transport document;
- (k) The signature of the multimodal transport operator or of a person having authority from him;
- (l) The freight for each mode of transport, if expressly agreed between the parties, or the freight, including its currency, to the extent payable by the consignee or other indication that freight is payable by him;
- (m) The intended journey route, modes of transport and places of transshipment, if known at the time of issuance of the multimodal transport document;
- (n) The statement referred to in paragraph 3 of article 28;
- (o) Any other particulars which the parties may agree to insert in the multimodal transport document, if not inconsistent with the law of the country where the multimodal transport document is issued.

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The absence from the multimodal document of one or more of the particulars referred to in paragraph 1 of this Article shall not affect the legal character of the document as a multimodal transport document provided that it nevertheless meets the requirements set out in paragraph 4 of Article 1.

### **Reservations in the Multimodal Transport Document (Article 9)**

If the multimodal transport document contains particulars concerning the general nature, leading marks, number of packages or pieces, weight or quantity of the goods which the multimodal transport operator or a person acting on his behalf knows, or has reasonable grounds to suspect, do not accurately represent the goods actually taken in charge, or if he has no reasonable means of checking such particulars, the multimodal transport operator or a person acting on his behalf shall insert in the multimodal transport document a reservation specifying these inaccuracies, grounds of suspicion or the absence of reasonable means of checking.

If the multimodal transport operator or a person acting on his behalf fails to note on the multimodal transport document the apparent condition of the goods, he is deemed to have noted on the multimodal transport document that the goods were in apparent good condition.

### **Evidentiary Effect of the Multimodal Transport Document (Article 10)**

Except for particulars in respect of which and to the extent to which a reservation permitted under Article 9 has been entered:

- (a) The multimodal transport document shall be prima facie evidence of the taking in charge by the multimodal transport operator of the goods as described therein; and
- (b) Proof to the contrary by the multimodal transport operator shall not be admissible if the multimodal transport document is issued in negotiable form and has been transferred to a third party, including a consignee, who has acted in good faith in reliance on the description of the goods therein.

### **Liability for Intentional Misstatements or Omissions (Article 11)**

When the multimodal transport operator, with intent to defraud, gives in the multimodal transport document false information concerning the goods or omits any information required to be included under paragraph 1 (a) or (b) of Article 8 or under Article 9, he shall be liable, without the benefit of the limitation of liability provided for in this Convention, for any loss, damage or expenses incurred by a third party, including a consignee, who acted in reliance on the description of the goods in the multimodal transport document issued.

### **Guarantee by the Consignor (Article 12)**

The consignor shall be deemed to have guaranteed to the multimodal transport operator the accuracy, at the time the goods were taken in charge by the multimodal transport operator, of particulars relating to the general nature of the goods, their marks, number, weight and quantity and, if applicable, to the dangerous character of the goods, as furnished by him for insertion in the multimodal transport document.

The consignor shall indemnify the multimodal transport operator against loss resulting from inaccuracies in or inadequacies of the particulars referred to in paragraph 1 of this article. The consignor shall remain liable even if the multimodal transport document has been transferred by him. The right of the multimodal transport operator to such indemnity shall in no way limit his liability under the multimodal transport contract to any person other than the consignor.

### **Other Documents (Article 13)**

The issue of the multimodal transport document does not preclude the issue, if necessary, of other documents relating to transport or other services involved in international multimodal transport, in accordance with applicable international conventions or national law. However, the issue of such other documents shall not affect the legal character of the multimodal transport document.

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## **6.7 CUSTOMS CLEARANCE OF CARGO**

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Every exporter is required to seek customs clearance of the export goods before sending them to the importer.

### **6.7.1 Customs Clearance of Export Shipment**

The exporter can send the shipment through any one of the following modes of transportation of the goods:

- (i) Shipment by air
- (ii) Shipment by sea
- (iii) Shipment by post
- (iv) Shipment by road (land routes)

The procedure for customs clearance is essentially the same whether the shipment is sent by air or sea or post or land route. However, there are minor variations too.

### **Computerized Processing of Export Documents**

The customs authorities have introduced the system of computerized processing of export documents in order to ensure speedy and efficient customs clearance of export shipments. The system is known as the Indian Customs EDI System-Exports (ICES-E). This system was introduced at the Air Cargo Unit of the Delhi Customs with effect from 3 June 1996. Since then this system is being introduced at various Custom Stations (air, sea, land and inland container depots) throughout the country. The nature of shipments—duty free shipments or shipments under claim of duty drawback or shipments under advance licensing (DEEC shipments) or shipments under DEPB scheme or shipments by 100 per cent EOU/ EPZ units, etc.—covered by the ICES-E is different at different customs stations. The documentation for customs clearance is different depending upon whether the shipment is covered under the computerized processing system or not. Accordingly, the documents required for customs clearance should be prepared by the exporter or the Clearing and Forwarding Agent (also known as Custom House Agent).

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### **Check Your Progress**

18. Who signs the multimodal transport document?
19. What happens if the multimodal transport operator fails to note on the multimodal transport document the apparent condition of the goods?

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### **Appointment of Clearing and Forwarding Agent/Custom House Agent**

The exporter should first of all appoint a Clearing and Forwarding Agent/ Custom House Agent (CHA) to handle the procedure involved in the customs clearance of the export shipment. He is expected to take the following steps for this purpose:

1. Booking of shipping space with the conference liner or booking the shipment with the airline. The liner issues shipping order and the airlines issues the carting order when the shipment is booked for transportation.
2. Providing assistance for hiring of the container if the shipment is proposed to be sent through container.

### **Allotment of EDP Number**

Every exporter is required to obtain the EDP (Electronic Data Processing) number as the same is required to be written on the Shipping Bill generated by the computer system. The shipping bill is not cleared without this number. The exporter should apply to the Assistant Commissioner of Customs, Export Department, and Customs House for the allotment of this number on firm's letterhead enclosing the Photostat copy of the Importer-Exporter Code Number allotted by the DGFT.

### **Registration of Importer-Exporter Code Number, RBI Code Number, etc.**

The CHS should apply to the customs authorities on behalf of the exporter for registration of the details as regards Importer-Exporter Code number, RBI Ten digit code number, Authorized Dealer Code number of the Bank through which the exporter would negotiate the shipping documents for negotiation/collection, and Current account with the designated bank for the purpose of crediting the amount of duty drawback to the exporter in respect of export shipment. These registrations form the core of the computerized processing of the export documents.

### **Opening Current Account**

The exporters are required to open an account with the designated branch of the designated bank at the customs station where the export shipment is to be sent. For instance, at Delhi Customs, the designated bank for this purpose is the Punjab National Bank.

### **Shipment Bill: Annexures A & B**

Under manual processing of export documents, the exporter is required to file the appropriate type of the shipping bill to seek the order for customs clearance of the export shipment. (This order is called the 'LET EXPORT'). Under computerized processing of the export documents, the exporter/ CHA is not required to file the shipping bill rather the shipping bill is generated through the computer system. The exporter or CHA files the required information with the DATA ENTRY Centre of the Customs Station so that the shipping bill is prepared through the computer. The information is filed in the forms as given below:

*Annexure – A:* This is used for the export of duty free goods and is used in place of Shipping Bill for export of duty free goods. It is also applicable in the case of those shipments where no foreign exchange is involved, i.e., free trade samples, warranty replacements, gift parcel, re-export goods, etc.

*Annexure – B:* This is used for the export of goods under claim for duty drawback.

Once the data regarding the shipment are fed into the computer then, a check list of the information fed into the computer is given to the exporter/CHA for verification of the information. The exporter/CHA signs the check list and thereby confirms the entries in the check list. The system then generates the Shipping Bill and assigns the requisite shipping bill number. The shipping bill so generated is then used as the basic document for the issue of the LET EXPORT order.

### **Exchange Control Declaration Form**

Every exporter is required to declare the exchange value of the export shipment and also give an undertaking that the export proceeds shall be realized within a period of six months or due date whichever is earlier. Under the manual system of processing of the export documents, this declaration used to be made in the prescribed form called GR form in case of shipments by air or sea or land. This form is called PP in case of export by post and SOFTEX in case of export of software. Since computerization has been introduced at the sea /air /container depot customs stations, the exporters are required to file the SDF declaration in duplicate in place of the GR form, with effect from 1 February 1999 vide New Delhi Customs Public Notice No.49/98 dated 21 September 1998 and No.3/99 dated 28 January 1999.

The exporters/CHA shall continue to file the GR form in those cases where the export documents are processed manually.

### **Endorsement/Certifications on the invoice**

The exporter/CHA is required to obtain the endorsements on the shipping bill in respect of quota for the export of readymade garments from the Apparel Export Promotion Council and for textiles from the Cotton Textile Export Promotion Council. Besides, the exporter obtains certification from the Wild Life Inspection Agency under the Convention on International Trade in Endangered Species, Agricultural and Processed Foods Products Export Development Agency (APEDA) etc. on the shipping bill is generated by the computerized system only after the LET EXPORT order has been issued. The exporters are required to obtain such endorsements/certifications on the Invoice.

## **6.7.2 Procedure and Documentation Requirements for Customs Clearance**

The exporter/CHA is required to submit various documents to customs authorities to seek clearance of the shipment and to obtain LET EXPORT order. The documents required depend upon the mode of shipment.

### **Documents in the Case of Shipment by Air/Sea**

The following documents are required for customs clearance of the shipment of goods by Air/Sea:

1. Shipping Bill (appropriate type) in quadruplicate or the Annexure A or B (in the case of computerized processing of export documents)
2. Commercial Invoice

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3. Exchange Control Declaration Form GR or SDF as applicable (original and duplicate)
4. Copy of Letter of Credit/Copy of the Export Order/Export Contract duly attested by bank
5. Packing list
6. Certificate of Origin or GSP Certificate of Origin
7. Shipper's Declaration form for export of goods under:
  - a. Claim of duty drawback, or
  - b. Anticipation of issue of an advance license/DEEC, or
  - c. DEEC Scheme, or
  - d. Without certification from Export Inspection Agency
8. ARE.1 duly approved by the Central Excise Officer or Invoice showing clearance of excisable goods

### **Additional Documents (if required):**

1. Export License
2. Pre-shipment Inspection Certificate
3. Marine Insurance certificate in triplicate
4. Antiquity Certificate in case of export of Antiques issued by Archaeological Survey of India
5. Special Customs/Consular Legalized Invoice
6. Freight Declaration
7. Declaration of quality, value and specification
8. Any particular declaration/statement/certificate/documents required by the Customs in respect of such particular shipment

In the case of shipment by sea, the exporter is required to submit, in addition to the documents described above, the following documents required by the Port Trust Authorities:

- a. Port Trust copy of the shipping bill
- b. Cart chit/ vehicle ticket/export cargo ticket

The Port Trust copy of the shipping bill is referred to as Dock Challan at the Calcutta Port Trust; Export Application at Chennai; Cochin and Port Trust copy at Mumbai Port Trust.

### **Documentation in Case of Shipment by Post**

1. Customs Declaration Form instead of Shipping Bill
2. DEEC Book in case shipment is under Advance License, if required Exchange Control Declaration Form (PP Form)
3. Form D in case the shipment is for export of goods under claim for Duty Drawback
4. ARE.1 or the Invoice showing clearance of excisable goods
5. Commercial Invoice

6. Packing List
7. Certificate of Origin/GSP Certificate of Origin
8. Copy of export order/letter of credit
9. Insurance Policy or the Certificate of Insurance
10. Export License, if required
11. Pre-shipment inspection Certificate

Any other document that may be required by the Customs/Post Office

### **Documentation in Case of Shipment by Land**

The shipment of goods by lorry or rail or boat can be sent to neighbouring countries, for example, Pakistan, Bangladesh, Myanmar and Nepal. The following documents are required to be presented to the Land Customs Station wing of the Customs Department having jurisdiction over the place through which the consignment moves into the foreign country:

1. Bill of Export (of the appropriate type)
2. Exchange Control Declaration form (GR)
3. Drawback Bill
4. Commercial Invoice
5. Packing List
6. Certificate of Origin/ GSP Certificate of Origin
7. Copy of the Export Order/Letter of Credit
8. Pre-shipment inspection certificate
9. ARE.1 or invoice showing clearance of excisable goods
10. Export License, if any
11. Any other documents that may be required by the customs

### **Customs Clearance Procedure**

The process of customs clearance of the export shipments involves the following four phases irrespective of the mode of shipment:

- Checking of the shipping documents
- Physical examination of export cargo
- Loading of the goods
- Post loading certification

### **(I) Shipment by Air**

In case of shipment by air, the steps involved are as follows:

#### **Checking of Shipping Documents**

1. The CHA/Exporter makes the actual booking of cargo with the airlines in advance and the Carting Order is obtained. The Airway Bill too is taken in advance of the arrival of the flight.

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2. The CHA/Exporter presents both the original and duplicate of the SDF to the Superintendent, Central Registration Unit (CRU) who signs the SDF forms and allots the running 10 digit RBI code number on the SDF form and returns them to the CHA/Exporter.
3. After the allotment of the RBI code number, the CHA/Exporter submits the Annexure A or B as the case may be, to the Service Centre at the Customs station.
4. The Service Centre hands over the check list to the CHA/Exporter for confirmation of the entries. The CHA/Exporter signs it and returns it to the Service Centre for generation of the shipping bill for noting and further processing.
5. The Service Centre generates the shipping bill and shipping bill number I is automatically allotted for follow up.
6. The CHA/Exporter submits all the export documents as detailed above to the export department of the customs for checking. The customs officer examines the documents to ascertain whether the value and quantity of the goods is as per the export order/letter of credit, and whether the formalities as regard exchange control, licensing, and pre-shipment inspection if allocable have been completed. On being satisfied about the documents, the customs officer examining the documents determines the extent of physical examination of the goods and the official is assigned to conduct the examination of the goods.
7. In the case of export of dutiable goods, the CHA/Exporter is asked to pay for the export cess. After the payment of the export cess, the receipt (copy of the TR6 challan) is submitted to the account department of the Customs.

### **Physical Examination of Export Cargo and Loading of Goods**

Once the order for physical examination is given, the physical examination is conducted by the designated Inspector in quick succession. Therefore, it is advisable that the goods should be brought along at the time when the documents are being presented. The steps involved in this stage are as follows:

1. Cargo is brought to the export shed on the day mentioned in the carting order.
2. The CHA/Exporter submits Annexure C to the examining officer when the goods are brought for physical examination. The examining officer verifies the number and marks on the packages and makes a note on this form.
3. The CHA/Exporter arranges for the unloading of the cargo and its weight check.
4. The CHA/Exporter pay the terminal storage and processing charges as per the applicable tariff rates to the International Airport Authority of India.
5. The CHA/Exporter arranges for the stacking of the cargo in the export cargo shed at the place earmarked for the airlines through which the shipment is to be sent.
6. If the goods are found to be in order then the inspector /superintendent shall record the report of physical examination of the cargo on the shipping bill through the computer system.
7. The Superintendent of Customs shall issue the LET EXPORT order if the report of physical examination and the documents are in order. In case, there is any

discrepancy, the matter is referred to the Assistant Commissioner of Customs (Exports) for decision.

8. The CHA/Exporter now gets the shipping bill printed and he is given the Exporter's copy and the export promotion copy of the shipping bill duly signed by the competent authority.

### **Loading of Goods**

1. After the LET EXPORT order is issued, the export cargo is moved to the bonded area for its storage and palletisation by the International Airport Authority of India (IAAI). The latter acknowledges the receipt of the cargo on the carting order and the copy of the Airway Bill. Normally, some cooling period for reasons of security is observed say, for 24 to 48 hours before the cargo is loaded on board the aircraft.
2. The airlines prepare the Export General Manifest (EGM) before the arrival of the flight for its handing over to the customs.
3. On the day of flight the cargo is moved to the loading area as per details given in the EGM and loading of cargo is under the supervision of the customs officer in charge of loading operations.
4. After the cargo is loaded, the airlines file the EGM with customs in a day or two.

### **Post Loading Certification**

After loading of the cargo, the captain of the Airlines flight signs the duplicate and triplicate copies of the shipping bill against the goods received by him.

After the process of customs clearance is over, the CHA/Exporter is returned all the documents he had submitted except the original copy of the SDF form as the same is sent to the RBI directly by the customs.

### **(II) Shipment by Ship (Sea)**

The basic procedure in the case of shipment by ship through sea route is the same as outlined above. The facilities for the storage of the cargo for palletisation and their movement to the docks are provided by the Port Trust Authority of the concerned sea port. The CHA/Exporter should ensure booking of the shipping space with the shipping line in advance. Generally, booking of the cargo begins four to six weeks in advance of the arrival of the ship. Once the shipping order has been obtained then the CHA/Exporter should submit the Port Trust Copy of the shipping bill or the Dock challan for determination of the port and dock charges.

### **Checking the Documents**

The CHA/Exporter presents the documents to the customs authorities in the manner explained above under the head shipment of goods by air.

The customs authorities assign a number and date on the shipping Bill/GR form (or SDF form, as applicable) and also assign rotation number to the ship/vessel. Details of shipment are noted in the register.

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The documents tendered are checked to ascertain whether the same are in order and whether they are consistent. The details of goods, FOB value, duty drawback rate (wherever applicable) and input-output norms (wherever applicable) given on the shipping bill are checked by the Inspector and by the Superintendent of Customs.

- After processing of the documents, shipping bill (in case of manual processing only) and GR form/ SDF forms (original copies) are detached from the set of documents.
- After examination of the documents and appraisalment of the value, the customs officer, called Customs Appraiser/Examiner makes an endorsement on the duplicate copy of the shipping bill giving directions to the Dock Appraiser to conduct the physical examination of the goods.
- At this stage all the documents except GR/SDF Form original, original shipping bill and a copy of the commercial invoice, are returned to the CHA/Exporter to be presented to the Dock Appraiser.
- The CHA/Exporter now submit the Port Trust documents to the Shed Superintendent, of the port and obtain the carting order for bringing the export cargo to the transit shed for physical examination of the goods by the Dock Appraiser. Before bringing in the cargo, the CHA/Exporter should ensure that the port and dock charges and the export cess, if applicable have been paid.

### Physical Examination of the Export Goods

1. At this stage, export cargo is brought in accordance with carting order issued by the shed superintendent and the CHA/Exporter submits the following documents to the Dock Appraiser for conducting physical examination of the export cargo:
  - Duplicate, triplicate and export promotion copy of the shipping bill
  - Commercial Invoice
  - Packing List
  - ARE.1 (Original and duplicate)
  - Inspection certificate (Original)
  - GR/SDF (duplicate)
2. After conducting the physical examination, the Dock Appraiser records his report on the shipping bill and if he is satisfied, then he issues the LET EXPORT order on the duplicate copy of the shipping bill and hands it over to the CHA/exporter.
3. The CHA/Exporter now presents all the documents along with the LET EXPORT order to the Preventive officer of the customs for the issue of LET SHIP order.

### Loading of the Cargo

Loading of the cargo on board the vessel is done under the supervision of the Preventive Officer of the customs. He makes an endorsement 'LET SHIP' on the duplicate copy of the shipping bill. Therefore, this copy is handed over to the agent of the shipping company. This endorsement is an authorization from the customs to the shipping company to accept the cargo for loading on the vessel.

After the LET SHIP order, the cargo is moved to the dock for loading onto the vessel. The Mate of the ship issues a receipt called the Mate's Receipt to the Shed Superintendent after the loading of the cargo.

The CHA/Exporter makes payment of the port and dock charges and collects the Mate's receipt.

### **Post-loading Certification**

The following certifications are done after loading of the cargo:

1. The CHA/Exporter present the Mate's Receipt to the Preventive Officer who records the certificate of shipment on all the copies of the shipping bill, original and duplicate copies of ARE.1 form. The fact of part or full shipment is also recorded on the shipment bills.
2. The Preventive Officer returns the Export Promotion Copy, a copy of the Drawback Shipping Bill and duplicate ARE.1 to the CHA/Exporter.
3. The CHA/Exporter presents the Mate's Receipt to the shipping line and requests it to issue the Bill of Lading (Negotiable and non-negotiable copies).
4. The agent of the shipping lines files the Export General Manifest with the export department of the customs.

### **(III) Shipment through Inland Container Depot**

The procedure for the customs clearance of the export shipment sent through container from the Inland Container Depot (ICD) is the same as in the case of customs clearance by air. The facilities for the storage of the export cargo are provided by the Central Warehousing Corporation (CWC) at the ICDs.

Some of the points of differences are explained below:

The carting order for bringing in the cargo at the ICD is issued by the CWC. The CHA/Exporter presents the carting order, the check list issued by the Service Centre of the Computer Unit, and annexure-C. It should be ensured that the shipping bill number and date is mentioned on the annexure-C as given by the Service Centre.

Exporters have the facility to have the container loaded in the factory itself. For this purpose the permission of the Assistant Commissioner of Customs (ICD) is required. Besides, the exporter should approach the Central Excise Officer for sealing of the container in the factory.

Once the Superintendent of Customs is satisfied after the examination of the documents and goods, he will issue the LET EXPORT order on the shipping bill through the computer system.

After the issue of the LET EXPORT order, five copies of the shipping bill are generated by the computer system and the same are handed over to the exporter/CHA. These five copies of the shipping bill are as follows:

1. Customs Copy
2. Exporter's Copy
3. Export Promotion Copy
4. TR-1 (Transference) Copy
5. TR-2 Copy

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The CHA/Exporter should produce all the five copies of the Shipping Bill and the duplicate copy of the GR1 or the SDF Form to the Superintendent of the Export shed for his signatures after the LET EXPORT order. The Superintendent shall return after signatures, the duplicate of the GR/SDF Form and all the copies of the Shipping bill except customs copy to the CHA/Exporter. The CHA/Exporter shall hand over the TR-1 and TR-II copies of the shipping bill to the CWC for its onward transmission to the gateway port with export containers.

The shipping line's agent issues the Received for Shipment bill of lading to the CHA/Exporter at the CID. The received for Shipment Bill of Lading' is converted into the 'Shipped on the Board' bill of lading when the container is loaded on the ship at the sea port.

The exporter should take steps to arrange for central excise and customs clearance of the export shipment so that the goods can be exported to the foreign buyer. The central excise clearance procedures are different for the export of goods manufactured by the exempted units or the units liable for registration under the Central Excise Rules. The exporter has the facility to obtain clearance either under the Claim of Rebate of Duty or under Excise Bond.

### 6.7.3 Removal of Goods under Claim of Rebate

We will now discuss the removal of goods under claim of rebate from the factory or warehouse without examination by the Central Excise Officers.

Exporters are allowed to remove the goods for export on their own without getting the goods examined by the Central Excise Officers. The AR4 in such cases would be prepared in sixuplicate, giving all particulars and declarations. The exporters shall deliver triplicate, quadruplicate, quintuplicate and sixuplicate copies of AR4, to the Superintendent of Central Excise having jurisdiction over the factory or the warehouse, within 24-hours of the removal of the consignment and would retain the original and duplicate copies for presenting along with the consignment to the Customs Officer at the point of export.

The jurisdictional Superintendent of Central Excise shall examine the information contained in AR4 and verify the facts of payment of Duty and other Certificates/Declarations made by the exporter. After he is satisfied that the information contained in the AR4 is true, he will sign at appropriate places in the four copies of AR4 submitted to him and put his stamp with his name and designation below his signature. He would then dispose the triplicate, quadruplicate and sixuplicate copies of AR4 as under:

- (i) **Triplicate:** To the rebate sanctioning authority viz. Maritime Collector of Central Excise or the Assistant Collector of Central Excise declared by the exporter on the AR4. This copy on the request of the exporter may be sealed and handed over to the exporter/his authorized agent for presenting to the rebate sanctioning authority.
- (ii) **Quadruplicate:** To the Chief Accounts Officer in the Collectorate Headquarters.
- (iii) **Quintuplicate:** Office copy to be retained by the Central Excise Officer.
- (iv) **Sixuplicate:** To be given to the exporter.

The Customs Officer should not withhold such export shipments for want of triplicate copy of the AR 4 from the Range Superintendent.

- (a) Exporters should not clear such goods unless they execute necessary Bond in terms of Rule 13 or 14 as the case may be and they should also indicate the Bond number and authority before which the Bond is executed in the relevant column provided in Form AR4.
- (b) Rule 13 and Rule 14 provide for execution of a Bond with surety or Bond without Surety/Security. Exporters of the following categories can execute the Bond without Surety/Security:
- Super Star Trading House
  - Star Trading House
  - Export House
  - Registered Exporters (registered with relevant Export Promotion Council)
  - Manufacturers registered with Central Excise Department

A unit, whose value of clearance for home consumption is less than ₹30 lakh in the preceding financial year or during the current financial year will not be required to take Central Excise Registration.

The above relaxation is subject to the condition that:

- (i) Exporters have not come to the adverse notice of the Department in the last three years.
- (ii) All the formalities required under Central Excise Acts and Rules related to exports are regularly complied with the exporters.
- (iii) A copy of the Registration-cum-Membership Certificate (RCMC), duly attested by the exporter is submitted.

This facility can be withdrawn without prior notice to any exporter if it comes to the adverse notice of the Department.

#### **6.7.4 Procedure for Exports under Central Excise Seal**

When the exporter wants the sealing of the goods by the Central Excise Officers so that the export goods may not be examined by the Customs Officers at the Port/Airport of shipment, he should present an AR4 Application in sixuplicate to the Superintendent of Central Excise having jurisdiction over the factory/warehouse. However, where exporter is unable to give 24 hours' advance notice to the Superintendent of Central Excise, his request for shorter notice is normally accepted. All such relaxations are then reported to the Assistant Collector of Central Excise for post facto approval.

The Superintendent of Central Excise may depute an Inspector of Central Excise or may himself go for sealing and examination of the export consignment. Where the AR4 indicates that the export is in discharge of an export obligation under a Quantity-based Advance Licence issued under the Duty Exemption Scheme, the consignment is invariably examined and sealed by the Superintendent of Central Excise himself.

The Central Excise Officer examining the consignment would draw samples wherever necessary in triplicate. He would hand over two sets of samples, duly sealed, to the exporters or his authorized agent for delivering to the customs officers at the point of the export. He would retain the third set for his records.

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The export consignment is examined vis-à-vis the description of goods, their value and other particulars/declarations of the AR4. The Central Excise Officer shall verify the facts of payment of Duty and other Certificates/Declarations made by the exporter. After he is satisfied that the information contained in the AR4 is true he would allow the clearance of export consignment and also sign all the six copies of AR4 at appropriate places. The copies of AR4 would be disposed of as under:

- (i) **Original/Duplicate:** To the exporter for presenting to customs officer at the point of Export along with the export consignment.
- (ii) **Triplicate:** To the rebate sanctioning authority, i.e., Maritime Collector of Central Excise or the jurisdictional Assistant Collector of Central Excise, as declared by the exporter on the AR4. The Central Excise Officer may hand over this copy under a sealed cover on the exporter's request.
- (iii) **Quadruplicate:** To the Chief Accounts Officer at his Collectorate Headquarters.
- (iv) **Quintuplicate:** To be retained for records.

**Markings:** The package in which the goods are to be exported would be legibly marked in ink or in oil colour or in such other durable manner with progressive number commencing with No. 1 for each calendar year and with the exporter's name.

### AR4 form – different colours

The different copies of AR4 forms are of different colours indicated below:

- |                    |   |        |
|--------------------|---|--------|
| (i) Original       | — | White  |
| (ii) Duplicate     | — | Buff   |
| (iii) Triplicate   | — | Pink   |
| (iv) Quadruplicate | — | Green  |
| (v) Quintuplicate  | — | Blue   |
| (vi) Sixtuplicate  | — | Yellow |

Exporters should take adequate care in filling up the AR4 pro forma. The Rebate Sanctioning Authority, along with its complete postal address should be clearly mentioned at the appropriate place in the AR4. The application portions should be carefully retained and inapplicable portions struck off. Exporters are now required to give the following Certificates/Declarations:

- ‘We hereby certify that the above mentioned goods have been manufactured
- (a) Availing facility/without availing facility of MODVAT credit under Rule 57A of the Central Excise Rules 1944.
  - (b) Availing facility/without availing facility under 12 (1) (b) of Central Excise Rules 1944.
  - (c) Availing facility/without availing facility under Rule 13(1) (b) of Central Excise Rules 1944.

We hereby declare that the export is in discharge of the export obligation under a Quantity based Advance Licence/ Under Claim of Duty Drawback under Customs and Central Excise Duties Drawback Rule, 1971.’

### 6.7.5 Processing of AR4 by Customs Office at the Port of Export

The original, duplicate and sixtuplicate copies of the AR4 shall be presented by the exporter/his authorized agent to the customs officer at the point of export along with the goods, Shipping Bill/Bill of Export and samples sealed by the Central Excise Officer. The export consignment shall be checked by the customs officer. The Export consignment shall be checked by the customs officer to see whether the seals are intact, whether the marks and the number tally are proper and if found in order he may allow exports after ensuring that the number of the AR4 has been indicated in the Shipping Bill or the Bill of Export, as the case may be. After the goods have been shipped, the proper Officer of Customs would make necessary endorsements in the original, Duplicate and Sixtuplicate copies of the AR4 at appropriate places and put his stamp with his name and designation below his signature. The copies of AR4 shall be disposed off by him in the following manner:

**Original and sixtuplicate** are to be handed over to the exporter. Original shall be used for filing the rebate claim. Sixtuplicate copy shall be used for Drawback/ DEEC endorsement.

**Duplicate** to be sent to the Rebate Sanctioning authority declared on AR4. This copy on a request by the exporter may be sealed and handed over to the exporter/his authorized agent for presenting to the rebate sanctioning authority.

#### Claiming Rebate

Where the export is from any of the Port, Airport or Post Office falling within the jurisdiction of Maritime Collector of Central Excise, the option is available to file claim of rebate before Maritime Collector of Central Excise or the Jurisdictional Assistant Collector of Central Excise. For this purpose, exporters are required to clearly indicate their option on AR4 along with the complete postal address of the Authority from whom the rebate shall be claimed.

#### Filing and Sanction of Rebate Claim

Filing and sanction of rebate claim takes place in the following manners:

- (i) **With maritime collector of central excise:** Where the exporter of goods is from any of the ports, airports or post office falling within the jurisdiction of Maritime Collector of Central Excise of Bombay, Calcutta, Madras, Paradip, Visakhapatnam, Cochin, Kandle, the exporter can opt to claim rebate. The rebate can be claimed from exportation within time limit prescribed under sec 11B of the Central Excise Officer and the duplicate copy of the AR4 received from the Central Excise Officer and the duplicate AR4 received from the customs officer. The Maritime collector after due scrutiny and verification of the said AR4s, will sanction the rebate claim in whole or in part.
- (ii) **With assistant collector, central excise having jurisdiction of the factory:** Where the exporter wishes to claim rebate of excise duty from the Assistant Collector having jurisdiction over the factory or warehouse from where the goods were removed for export, he will file the claim of rebate within six months from the date of export. This should be done in prescribed form along with the original copy of AR4, duly endorsed by the customs officer certifying export of

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**Excise tax:** It is any duty on manufactured goods which is levied at the moment of manufacture, rather than at sale.

the consignment (and the duplicate copy handed over to him by the customs officer in a sealed cover). The Assistant Collector of Central Excise would verify and compare the original copy of AR4 with the duplicate copy of AR4 received from the customs officer and with the triplicate copy of AR4, received from Superintendent, Central Excise Range and after satisfying himself that the claim is in order will sanction the rebate either in whole or in part.

### Documents to be filed for claiming rebate

Following documents should be filed for claiming rebate:

- Application in prescribed form
- Original copy of AR4
- Duplicate copy of AR4 in sealed cover received from customs officer (optional)
- Duly attested copy of Bill of Lading
- Duly attested copy of Shipping Bill (Export Promotion copy)
- Disclaimer Certificate (in case where claimant is other than the exporter)

### Time Limit for Disposal

The rebate sanctioning authority should point out deficiency (all at the same time), if any, in the claim within fifteen days of filing the same and ask the exporter to rectify the same within fifteen days. The claim of rebate of duty on export of goods should be disposed off within a period of two months.

### Excise Clearance for Export

Excisable goods can be exported either by making payment of Excise Duty and claiming its refund after export or by executing a Bond. There is still another system 'manufacture-in-bond' where Excise/Customs Duty is not to be paid even on raw materials, components, used in export products. Excise Duty paid on raw materials, components, etc. used in export products is also refunded to the exporters of such goods (and not to their manufacturers/producers) in the form of 'Draw Back'.

Export goods subject to Central Excise Duty can be exported either under claim for rebate of excise duty or under bond. While under the former system, the excise duty is to be paid first and its refund claimed after effecting exports, in the latter case, the goods are allowed to be exported outside the country without payment of duty.

### Simplified procedure for SSI Units

**No AR4 procedure:** The CBEC has vide its Circular No.212/46/95- Cx. dt 20/5/96, introduced a simplified procedure for SSI units having value of clearances for home consumption within exemption limit during the relevant financial year, and who are availing full exemption. Hence, the units which though eligible for full exemption, are not availing themselves of the exemption, are not covered by the simplified export procedure.

**No registration declaration:** The SSI units availing full excise exemption and exporting their products need not register themselves with the Central Excise Department. Instead, they shall file a declaration and obtain a declarant's code number.

**Regular AR4/5 procedure:** In the case of manufacturers who need clearance for the consumption and for export, who do not furnish proof of export within six months, and whose value of clearance exceeds the exemption limit, should take central excise registration and follow the regular AR-4/AR-5 procedure.

### **Export in Bond of Finished Excisable Goods to All Destinations other than Nepal**

The units manufacturing dutiable (excisable) goods and desiring to export the same without payment of excise duty can do so after execution of the requisite bond with the competent Central Excise Authority. The bond is to be filed and requires AR4 procedure to be followed even in case of SSI units whose clearance in the domestic market exceeds ₹30 lakh a year. The exemption from following the required AR4 procedure has been explained earlier under item 1.

The procedure to export in bond is a little different for (i) export by Sea or Air or Post and (ii) by surface, i.e., land route. However, before clearing goods from the factory, the exporter may get the goods examined by the Central Excise Authorities or can remove without such examination. They are also required to prepare certain documents which are explained below:

**Documents:** Form AR4/5 is an application for removal of excisable goods in Bond or under claim of rebate on export from India by any mode, i.e., sea, air, post, land (surface), etc.

**Invoice:** Assesse's invoice is to be used as transport document for clearance of goods from the factory.

For in-bond exports of excisable goods to Nepal for which payment is received in freely convertible currency, there is a special form of invoice. It is also different from Nepal Invoice.

**Bonds:** For export of excisable goods without payment of duty, there are six types of Bonds from which exporters have to choose the appropriate one. These forms are B.I. (Surety), B. 1 (General Surety) and B.1 (General Security), B.16 (General Security).

Bond B.1 is used to execute for one particular consignment and B.1 (General) to cover a series of exports from factory. The manufacturer exporters who have executed B.16 bond are not required to execute a separate bond to cover Duty on the goods exported without payment of Duty.

**Bank certificate:** This is a special type of certificate to be used in the case of excisable goods for which payment is received under freely convertible currency for export to Nepal.

**Application for refund of rebate on duty:** There is an Application for claim of rebate on duty for excisable goods exported by Sea/Air, Post of Land (surface).

### **Export by Sea/Air or Port**

**Packing/markings of case:** Packing export case or package or bale should be marked in ink or oil colours with Central Excise mark, date and numbers.

**Documents:** Prepare the necessary documents, i.e., AR4/5 and invoice and fill in by giving necessary information/ declaration.

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**Filing of proof and discharge of bond:** After having exported the goods, the exporter should file the following documents as proof of export with the Central Excise Authority having jurisdiction over the factory/godown:

1. Original Copy of AR4 Form.
2. Duplicate Copy of AR4 Form in sealed cover received from the customs officer (optional)
3. Attested copy of Bill of Lading
4. Attested copy of Shipping Bill (Export Promotion Copy)

### Partial export

If the scrutiny of AR4 Form reveals that only part of consignment removed in Bond for export has actually been exported out of India, the Excise Authority concerned shall call upon the Bonder to pay within 10 days the Duty leviable on the quantity short shipped, in terms of the Bond.

### Export of Finished Excise Paid Goods under Claim for Refund of Duty

Refund (rebate) of duty is granted under Rule 12 of the Central Excise Rules and Notifications Nos. 41 to 44/94-CE (NT) all dated 22 September 1994, 46/94-CE (NT) dated 22 August 1994 and 50/94 CE (NT) dated 22 September 1994, paid on:

- (a) All excisable goods except mineral oil products exported as stores for consumption on board an aircraft on foreign run and goods exported as ship stores for consumption on board a vessel bound for any foreign Port.
- (b) Materials used in the manufacture of goods.

The rebate of Duty on goods exported to Nepal is made to the Nepal Government and hence, explained separately.

**Claim authority:** The claim for refund of any Duty of Central Excise is to be made to Assistant Commissioner of Central Excise having jurisdiction over the factory of manufacture.

**Time limit:** The claim is to be filed before the expiry of six months from the date on which the ship or aircraft in which such goods are loaded, leaves India or the date on which such goods pass the frontier in case export is made by land or the date of dispatch of goods by the Post Office in case of postal exports.

**Application form:** The application for refund is filed in prescribed form in duplicate. This form is to be used for refund against all goods.

**Document:** The following documents should be enclosed with the application form:

- (i) AR4 form (original) duly endorsed by the Customs
- (ii) Duplicate copy of AR4 in sealed cover, if obtained from Customs
- (iii) Bill of Lading (non-negotiable copy) airway bill or air consignment note/ Postal receipt, duly attested
- (iv) Attested copy of Shipping Bill/Bill of Export
- (v) Duplicate copy of invoice under which Central Excise duty was paid on goods cleared for export

- (vi) Disclaimer Certificate, where claimer is other than the exporter
- (vii) Detailed worksheet indicating the amount of rebate claimed

### 6.7.6 Sales Tax Exemption on Exports

There is no tax on sales made for export purposes. It implies that the exporter need not pay Sales Tax either on the goods purchased from manufacturers or traders, i.e., other merchants.

The only condition imposed is that the exporter must be a registered dealer with the Sales Tax Department. If he is not a registered dealer, he cannot utilize the facility provided for export of goods without payment of Sales Tax under Form H.

The condition of the exporter being a registered dealer therefore implies that, if the exporter is engaged in selling products in the country which is not otherwise subjected to Sales Tax, and hence has not got himself registered with the Sales Tax Department, he cannot utilize the Form 'H' facilities, i.e., exporting goods without payment of Sales Tax.

#### Registration Procedure

Therefore, the exporter should get himself registered with the Sales Tax Department for utilizing the facility. Apply to the Sales Tax Officer under whose jurisdiction the Head/ Registered Office is located. Therefore, a Sales Tax Inspector may visit the Office to check.

- (i) Account books showing sales/purchase transactions
- (ii) House rent/Tax receipt
- (iii) Partnership deed, or other relevant documents
- (iv) Ration card, etc.

#### Security

The STO usually asks the exporter to file a security bond from another firm(s) registered under the Sales Tax law.

#### Form

Having got registered, the under mentioned procedure should be followed:

- (i) Apply to the concerned STO for obtaining Form 'H' with:
  - a. Copy of the L/C, or
  - b. Copy of the confirmed export order,
  - c. Copy of the export invoice, where the goods have already been purchased.
- (ii) Put prescribed Court fee Stamp for each form according to the number of forms sanctioned
- (iii) The STO will put the name stamp of the company in Form 'H'.

Hence, the exporter should approach the STO for obtaining Form 'H' along with the Company's name stamp to be put in the body of the form.

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### Filling in Form 'H'

After exporting the goods, Form 'H' (in triplicate) obtained from the STO is filled in the manner described above, and given to the party from which the goods for export have been purchased. It may be reiterated that the goods can be purchased from the manufacturer as well as from merchants.

Form 'H' is to be filled in triplicate. While one copy is retained by the exporter himself, the remaining two copies will be given to the seller of the goods, i.e., the manufacturer or trader from whom the goods have been purchased by the exporter. The seller will then send one copy of Form 'H' given to him by exporter to the STO concerned, along with his Return of Sales Tax. Its third copy will be retained by him.

No document is required to be attached with Form 'H' while submitting it to the STO, along with the Sale Tax Return.

### No further endorsement

Form 'H' cannot be endorsed to any other party than the one to whom it is issued in the first instance.

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## 6.8 SUMMARY

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Some of the important concepts discussed in this unit are:

- Documents are the support to collect information and data. Document requirements in international trade serve different purposes.
- Any export shipment involves a number of documents required mainly by the Customs/Port Authorities. Mostly the format of these documents is common in most cases, but may differ in respect to Documents used at different ports.
- It is a requirement that first the export order should be acknowledged, and then it should be carefully examined in terms of items, specification, pre-shipment inspection, payment conditions, special packaging, labelling and marketing requirements, shipment and delivery date, marine insurance, documentation, etc.
- An exporter should consult the most important Acts/publications in connection with the processing of an export order.
- There are various stages in the processing of a shipment order that has been discussed in this unit.
- A number of documents must accompany every export shipment. They must be the correct documents and this is not a simple matter, because the requirements differ from country to country.
- One major purpose of documentation is to provide a specific and complete description of the goods, so that they can be correctly assessed for Import Duty.
- Accuracy and completeness are a prime necessity in documents covering export shipments.

### Check Your Progress

20. What are the modes of transportation through which an exporter can send the shipment?
21. What are the phases in the process of customs clearance of export shipments?
22. Which are the categories of exporters who can execute the bond without surety/security?

- The Government of India has made it mandatory for every exporter to use standardised pre-shipment export documents w.e.f. 1 September 1991.
- In India, on an average, about 25 documents are associated with the Pre-shipment stage to export transaction. These documents are classified into two categories namely, Commercial and Regulatory.
- Export credit has become an important tool of export promotion in countries like India. The developing countries require suitable financing mechanisms for adequate and timely credit. They also need credit at a cheaper rate in order to boost exports.
- Export credit plays a crucial role in international trade. It is important and facilitates exporters in executing their export orders. Export credit is required both for short and long periods of time. In the export business, funds are required at the time of establishment of the business (long-term funds) and for carrying out the business (short-term funds).
- India has a well-developed export credit delivery system. The major focus of export credit delivery system in India has been on short-term working capital credit requirements of the Indian exporters.
- Commercial banks render three basic functions relating to export credit. These are: (i) Transfer Function, (ii) Credit Function, and (iii) Hedging Function.
- A letter of credit is a document issued by the importer's bank in favour of the exporter giving him the authority to draw bills up to a particular amount (as per the contract price) covering a specified shipment of goods and assuring him of payment against the delivery of shipping documents.
- The types of letters of credits are: Sight or Usance Letter of Credit, Confirmed or Unconfirmed Letter of Credit, Negotiable Letter of Credit, Revolving Letter of Credit, Red Clause Letter of Credit, Green Clause Letter of Credit, Transferable Letter of Credit, Acceptance credits, Back to Back Letter of Credit, With Recourse or Without Recourse Letter of Credit, Anticipatory Letter of Credit, and Standby Letter of Credit.
- Export credit insurance is designed to protect exporters from the consequences of payment default on account of both adverse political and commercial developments, and to enable them to expand their business without fear of loss.
- Shipments (comprehensive risks) Policy, which is commonly known as the Standard Policy, is ideally suited to cover risks in respect of goods exported on short-term credit, i.e., credit not exceeding 180 days. This policy covers both commercial and political risks from the date of shipment. It is issued to exporters whose anticipated export turnover for the next 12 months is more than ₹25 lakhs. The appropriate policy for exporters with an anticipated turnover of less than ₹25 lakhs is the Small Exporters' Policy.
- When the goods are taken in charge by the multimodal transport operator, he shall issue a multimodal transport document which, at the option of the consignor, shall be in either negotiable or non-negotiable form.
- The multimodal transport document shall be signed by the multimodal transport operator or by a person having authority from him.

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- Where a multimodal transport document is issued in non-negotiable form it shall indicate a named consignee.
- The exporter can send the shipment through any one of the following modes of transportation of the goods: (i) Shipment by air, (ii) Shipment by sea, (iii) Shipment by post, (iv) Shipment by road (land routes).
- Exporters are allowed to remove the goods for export on their own without getting the goods examined by the Central Excise Officers.
- When the exporter wants the sealing of the goods by the Central Excise Officers so that the export goods may not be examined by the Customs Officers at the Port/Airport of shipment, he should present an AR4 Application in sixuplicate to the Superintendent of Central Excise having jurisdiction over the factory/warehouse.
- There is no tax on sales made for export purposes. It implies that the exporter need not pay Sales Tax either on the goods purchased from manufacturers or traders, i.e., other merchants.

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### 6.9 ANSWERS TO ‘CHECK YOUR PROGRESS’

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1. An export order has to be processed to meet the requirements of materials required by the importers.
2. The main parties involved in the processing of an order are the exporter, the buyer, the negotiating bank, the shipping company, the insurance company, the Reserve Bank of India, the Chief Controller of Imports and Exports (Director General of Foreign Trade), the Controller of Customs, the port commissioners, and the clearing and forwarding agents.
3. There are three types of shipping bills, namely:
  - Shipping bill for free goods
  - Dutiable shipping bill
  - Drawback shipping bill
4. The ship's export clerk calls for the cargo from the shed or boat and after loading prepares the mate's receipt.
5. According to the Customs Act (Section 40), the person in charge of a Conveyance-vessel, vehicle, Aircraft, etc., cannot permit loading of export Cargo at the Customs Station unless and until the formal permission to export given by the proper Customs Officer, is presented.
6. Erasures and strike over in typing or changes or additions made in ink must never be indulged as these only arouse the suspicion that the documents have been tampered with.
7. The Government of India has made it mandatory for every exporter to use standardised pre-shipment export documents w.e.f. 1 September 1991. This is popularly known as Aligned Documentation System (ADS), based on UN Layout Key.

8. The Department of Commerce had set up an Inter-Ministerial Committee under the Chairmanship of DGFT in July 2014 to study and recommend ways to reduce the number of mandatory documents required for export and import.
9. Export credit has become an important tool of export promotion in countries like India. The developing countries require suitable financing mechanisms for adequate and timely credit. They also need credit at a cheaper rate in order to boost exports.
10. Export credit plays a crucial role in international trade. It is important and facilitates exporters in executing their export orders. Export credit is required both for short and long periods of time.
11. The major focus of export credit delivery system in India has been on short-term working capital credit requirements of the Indian exporters.
12. A letter of credit is a document issued by the importer's bank in favour of the exporter giving him the authority to draw bills up to a particular amount (as per the contract price) covering a specified shipment of goods and assuring him of payment against the delivery of shipping documents.
13. An irrevocable confirmed Letter of Credit is the most beneficial form of credit for the exporter as he has obtained assurance of payment from two banks namely, the issuing bank and the confirming bank.
14. Export credit insurance is designed to protect exporters from the consequences of payment default on account of both adverse political and commercial developments, and to enable them to expand their business without fear of loss.
15. The Government of India set up the Export Risks Insurance Corporation (ERIC) in July 1957.
16. Small Exporter's Policy is issued for a period of 12 months, as against 24 months in the case of Standard Policy.
17. To meet the varying needs of exporters, the ECGC has evolved the following types of Guarantees: (i) Packing Credit Guarantee, (ii) Export Production Finance Guarantee, (iii) Post-shipment Export Credit Guarantee, (iv) Export Finance Guarantee, (v) Export Performance Guarantee, and (vi) Export Finance (overseas lending) Guarantee.
18. The multimodal transport document shall be signed by the multimodal transport operator or by a person having authority from him.
19. If the multimodal transport operator or a person acting on his behalf fails to note on the multimodal transport document the apparent condition of the goods, he is deemed to have noted on the multimodal transport document that the goods were in apparent good condition.
20. The exporter can send the shipment through any one of the following modes of transportation of the goods: (i) Shipment by air, (ii) Shipment by sea, (iii) Shipment by post, (iv) Shipment by road (land routes).
21. The process of customs clearance of the export shipments involves the following four phases irrespective of the mode of shipment:
  - Checking of the shipping documents

## NOTES

## NOTES

- Physical examination of export cargo
- Loading of the goods
- Post loading certification

22. Exporters of the following categories can execute the bond without surety/ security.
- Super Star Trading House
  - Star Trading House
  - Export House
  - Registered Exporters (registered with relevant Export Promotion Council)
  - Manufacturers registered with Central Excise Department

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## 6.10 QUESTIONS AND EXERCISES

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### Short-Answer Questions

1. What is the first stage in the processing of an order?
2. List the documents that are forwarded by the clearing and forwarding agent to the exporter.
3. State the significance of export documentation.
4. List the advantages of the Aligned Documentation System (ADS).
5. Write a short note on the banking procedure export documentation.
6. What are the categories of risks which are associated with export credit?
7. What are the principal issues in the management of export credit?
8. List the advantages of letter of credit.
9. Why was the Export Risks Insurance Corporation (ERIC) set up?
10. What is the Small Exporter's Policy?
11. What are the contents of the multimodal transport document?
12. Write a short note on customs clearance of export shipment.
13. What are the major documents required for custom clearance?
14. What do you mean by physical examination of cargo?

### Long-Answer Questions

1. What are the different purposes that documents serve in international trade?
2. Discuss the offer, receipt of orders and the shipment procedure.
3. Describe the various documents that any exporter must be familiar with in export documentation.
4. How are documentation practices in India categorized?
5. Critically evaluate the export credit instruments and procedures.
6. 'Commercial banks render three basic functions relating to export credit.' What are they?

7. Evaluate the types of letters of credit.
8. Analyse the significance of export credit insurance.
9. What is the Standard Policy and how is it different from the Small Exporters' Policy?
10. What is the multimodal transport document? Describe.
11. Discuss the process of loading of goods for customs clearance.
12. Discuss the process of removal of goods under claim of rebate from factory or warehouse without examination by the central excise officers.

**NOTES**

