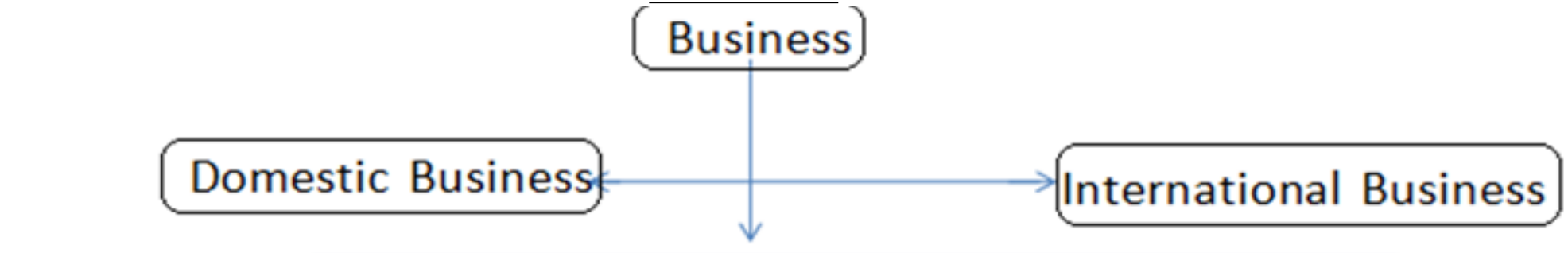
Business means: A company transacts business activities through the production of a good, or offering of a service or retailing of already manufactured products.

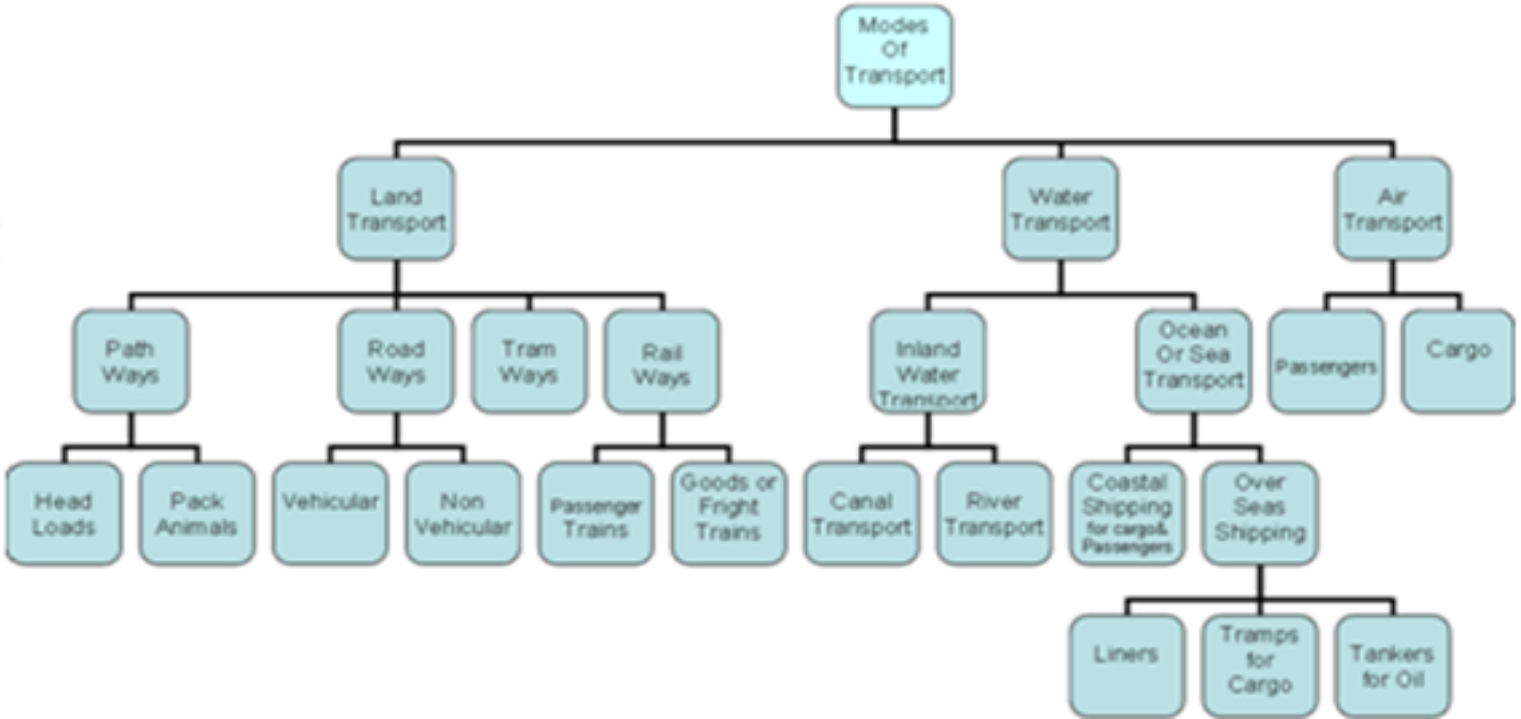
In contrast, **trade** refers only to the buying and selling activities, which form a part of **business** activities. So trading activities involve of buying, selling, or exchanging goods or services between people, firms, or countries.

BUSINESS STRUCTURE



Modes of Payment

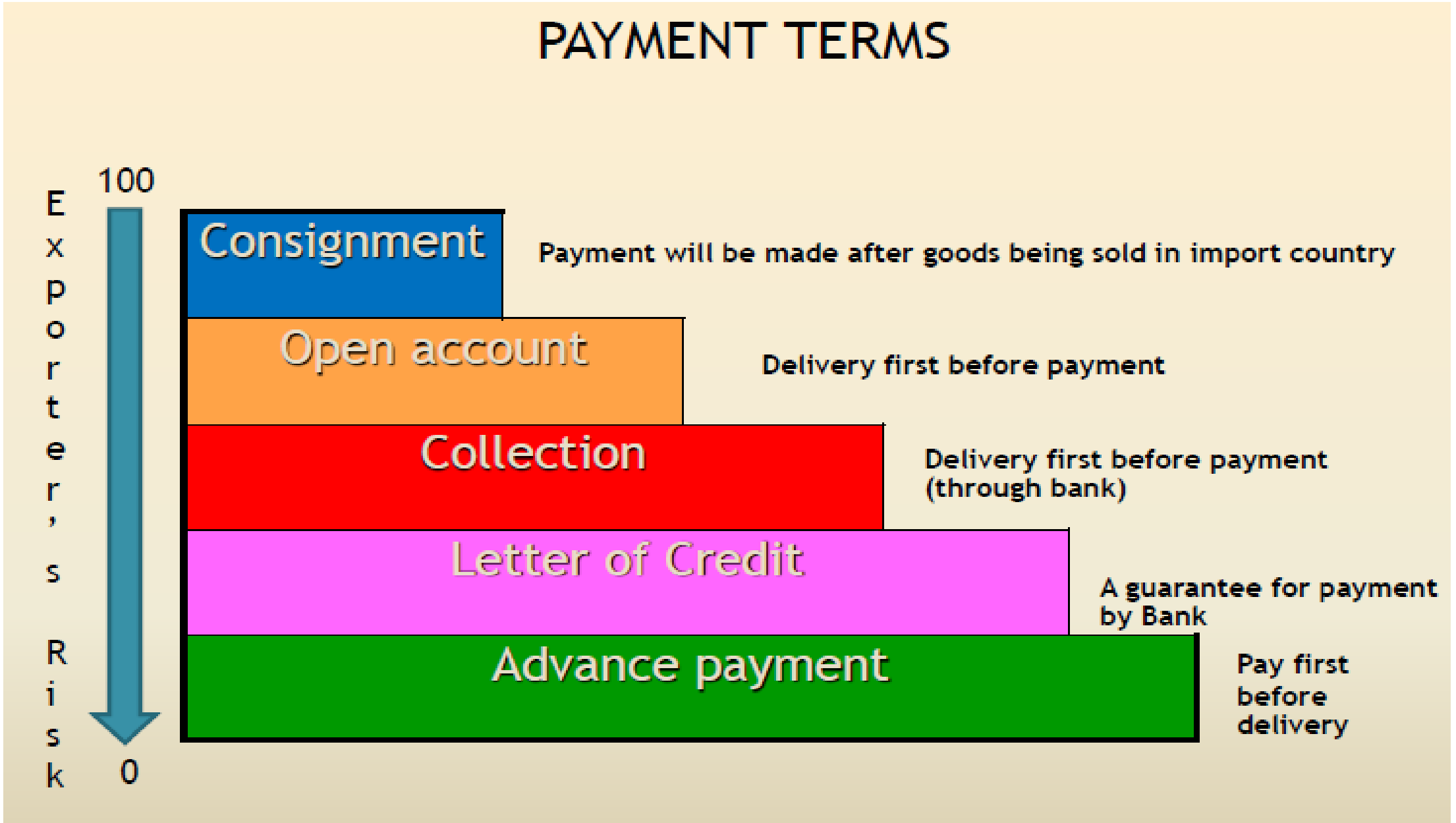
Modes of transport



INCO Terms, mode of transport & trade contract responsibility

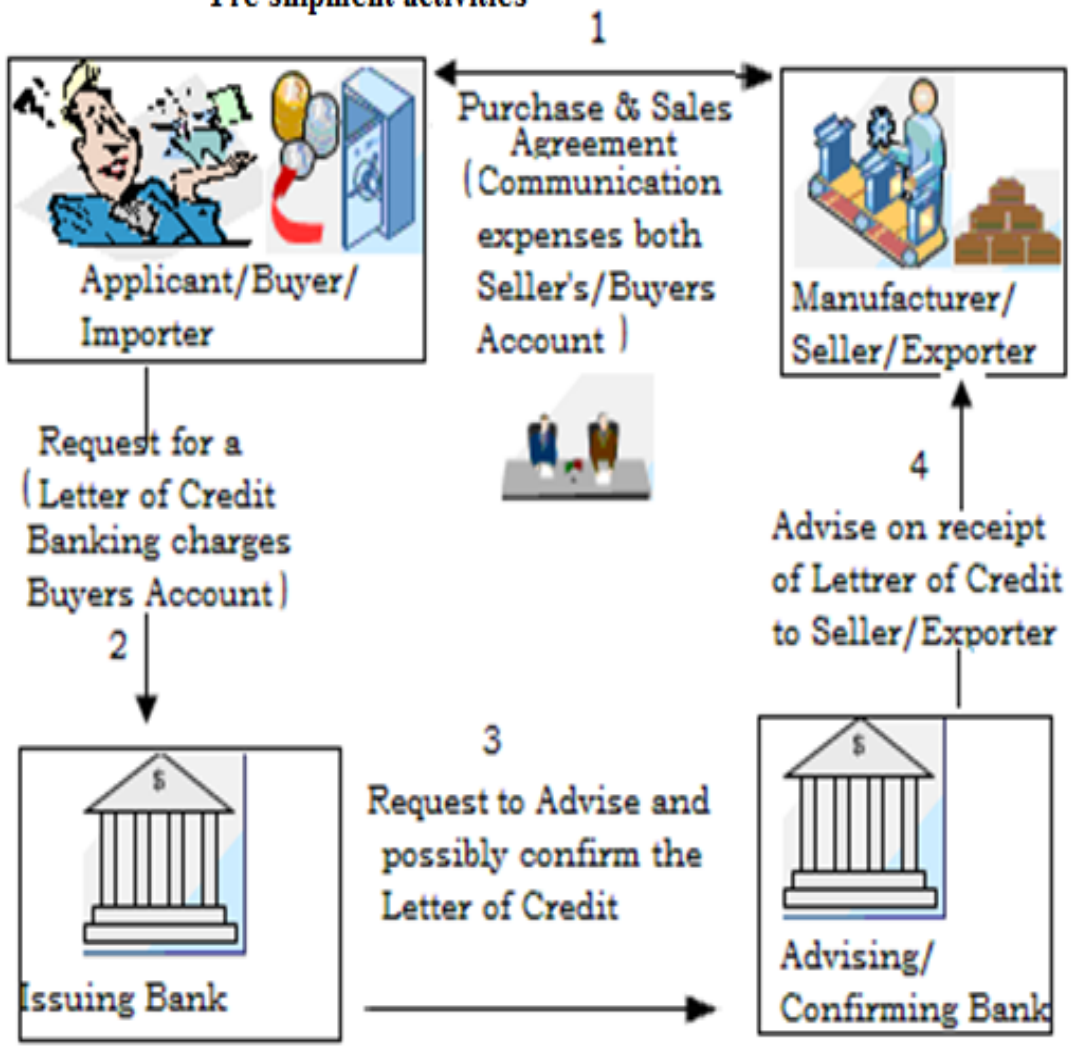
Group	Term	Expansion	Trade contract responsibility											Mode of Transportation			
			1	2	3	4	5	6	7	8	9	10	11	Land	Sea	Air	Multimodal
E	EXW	Ex Works	B	B	B	B	B	B	B	B	B	B	B				
F	FCA	Free Carrier	S	S	S	S	B	B	B	B	B	B	B	@		@	@
	FAS	Free Along Side	S	S	S	B	B	B	B	B	B	B	B		@		
	FOB	Free On Board	S	S	S	S	B	B	B	B	B	B	B		@		
C	CFR	Cost and FReight	S	S	S	S	S	B	S	B	B	B	B		@		
	CIF	Cost Insurance and Freight	S	S	S	S	S	S	S	B	B	B	B		@		
	CPT	Carriage Paid To	S	S	S	S	S	B	S	B	B	B	B	@		@	@
	CIP	Carriage and Insurance Paid To	S	S	S	S	S	S	S	B	B	B	B	@		@	@
D	DAF	Delivered at Frontier	S	S	S	S	S	B	S	B	B	B	B	@			@
	DES	Delivered Ex Ship	S	S	S	S	S	B	B	B	B	B	B		@		
	DEQ	Delivered Ex Quay	S	S	S	S	S	B	S	S	S	B	B		@		
	DDU	Delivered Duty Unpaid	S	S	S	S	S	S	S	B	B	S	S	@	@	@	@
	DDP	Delivered Duty Paid	S	S	S	S	S	S	S	S	S	S	S	@	@	@	@
	B = Buyer's responsibility																
	S = Seller's responsibility																
	1	Inland freight in Seller's country; Delivery to the carrier or frontier															
	2	Customs clearance in Seller's country															
	3	Payment of customs charges and taxes in Seller's country															
	4	Loading to the main carrier or means of conveyance															
	5	Main carriage/freight															
	7	Cargo (marine) insurance															
	8	Unloading from the main carrier or means of conveyance															
	9	Customs clearance in Buyer's country															
	10	Payment of customs duties and taxes in Buyer's country															
	11	Inland freight in Buyer's country															
	12	Other costs and risks in Buyer's country															

Mode of payment in international business



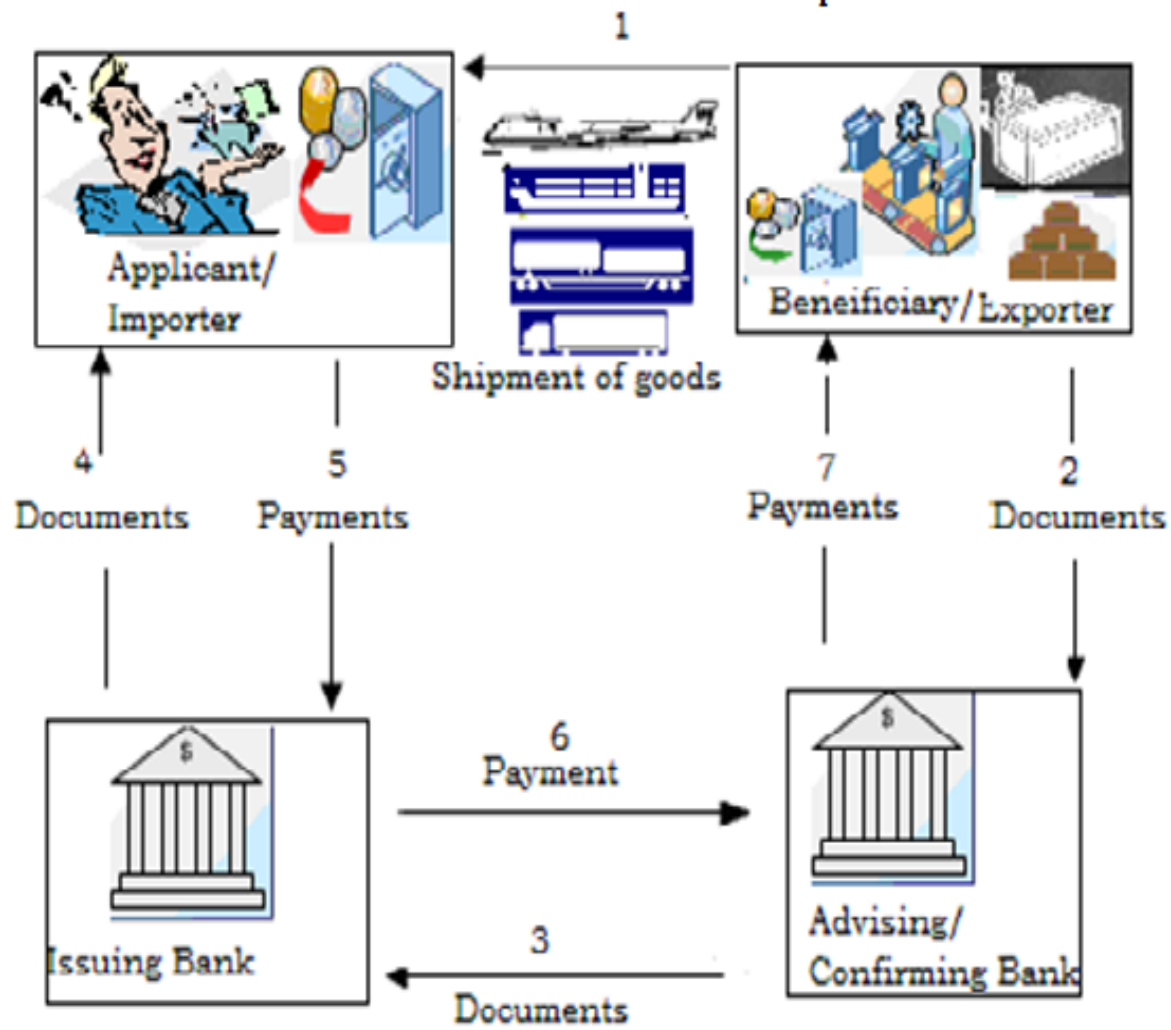
Letter of Credit operating mechanism

Pre shipment activities

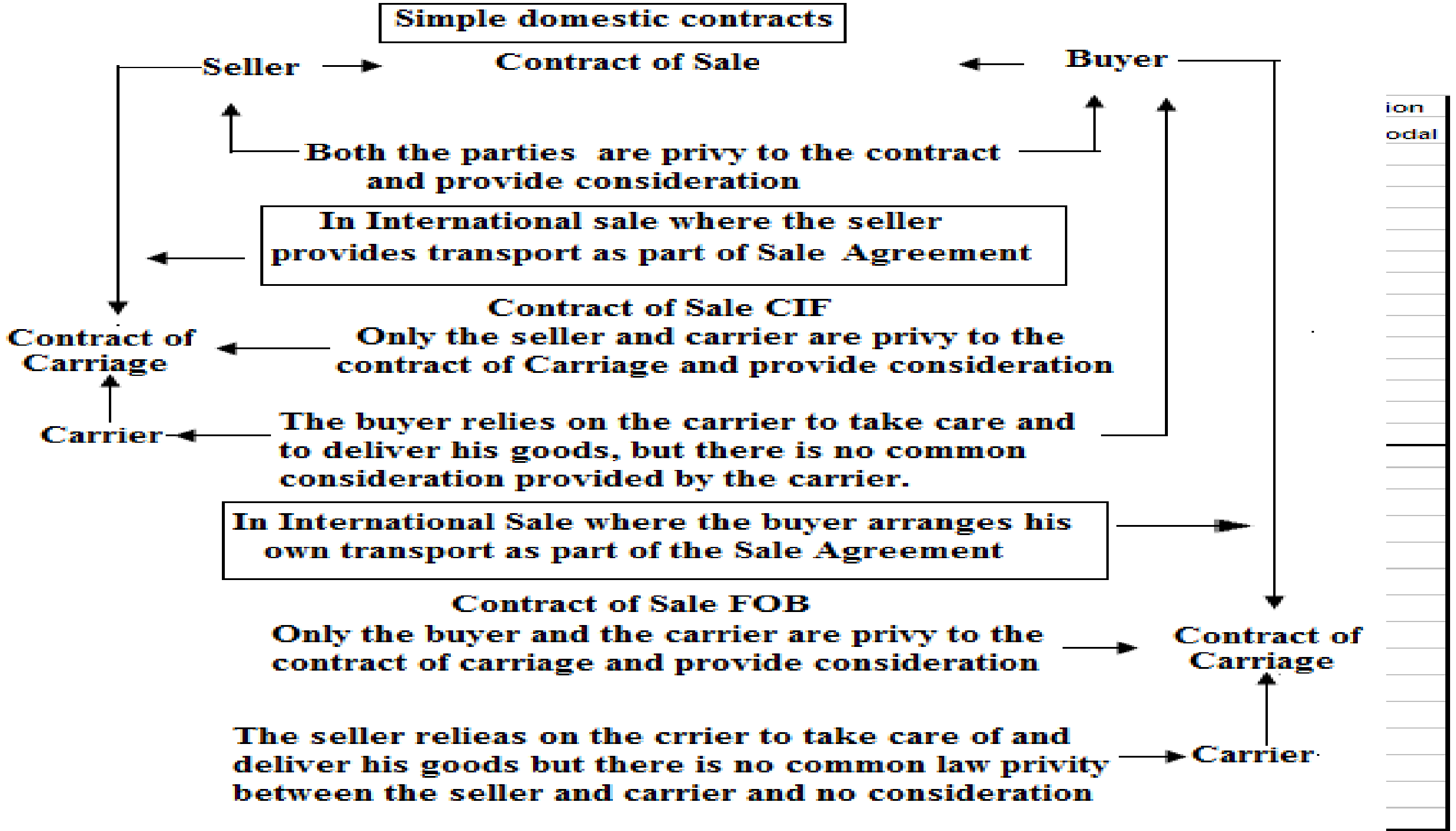


1) Signing of Sale Contract between Buyer & Seller 2) Importer or Buyer opening Letter of Credit 3) Issuing Bank informs Advising Bank 4) Adivising Bank informs Exporters/Shipper receipt of Letter of Credit

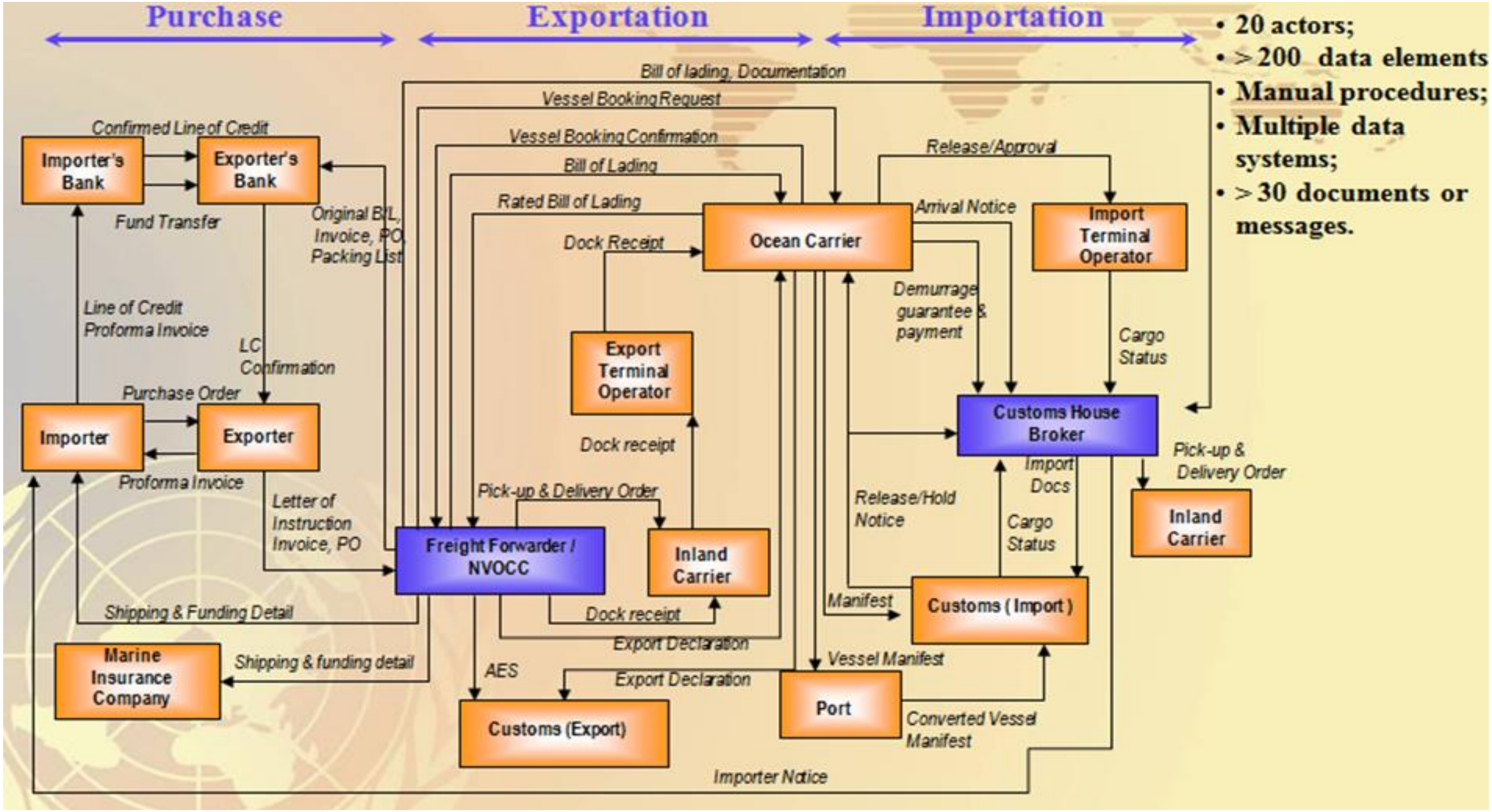
Post shipment activites



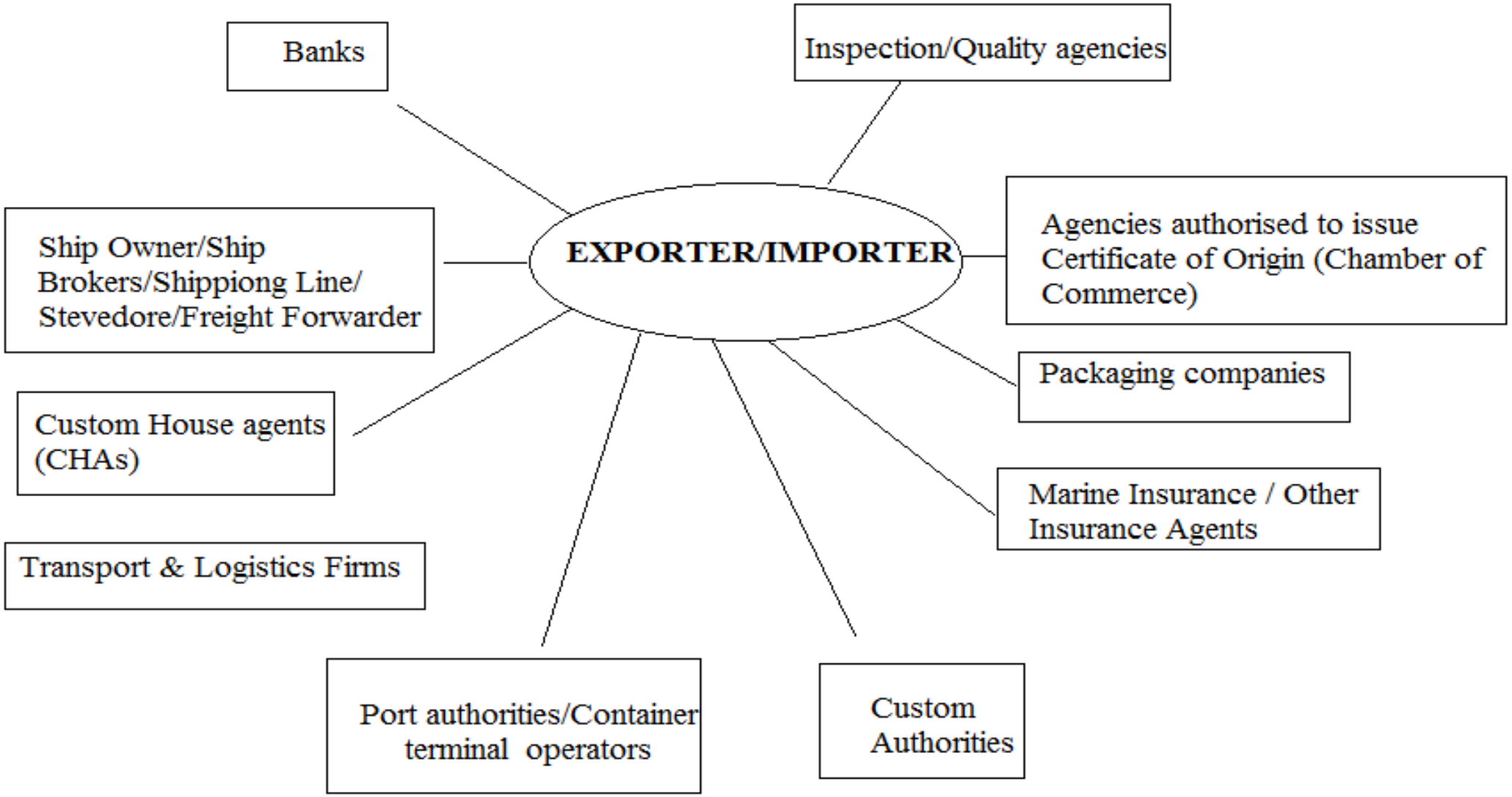
1) On receipt of L/C advise from his advising Bank, exporter make arrangement of shipment and advise shipping instructions to importer 2) Submit shipment documents to his bankers 3) Advising bank forward shipment documents to issuing bank 4) Issuing bank informs importer to remit L/C amount 5) Importer make payment of L/C and receives Document 6) Issuing Bank remits sale proceedings to Advising Bank 7) Advising bank credit Exporters account


Simple domestic contracts
Seller
Contract of Sale
Buyer
Both the parties are privy to the contract and provide consideration
In International sale where the seller provides transport as part of Sale Agreement
Contract of Sale CIF
Only the seller and carrier are privy to the contract of Carriage and provide consideration
Contract of Carriage
Carrier
The buyer relies on the carrier to take care and to deliver his goods, but there is no common consideration provided by the carrier.
In International Sale where the buyer arranges his own transport as part of the Sale Agreement
Contract of Sale FOB
Only the buyer and the carrier are privy to the contract of carriage and provide consideration
Contract of Carriage
The seller relieas on the crrier to take care of and deliver his goods but there is no common law privity between the seller and carrier and no consideration
Carrier

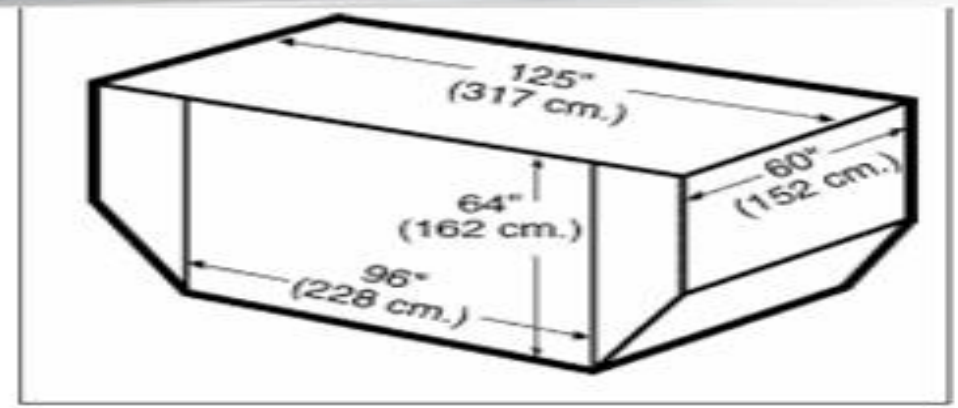
DATA EXCHANGE IN INTERNATIONAL TRADE



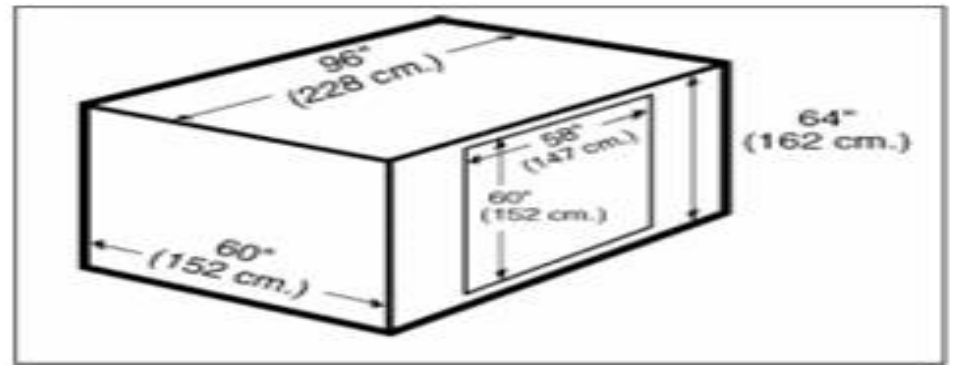
Actors involved in Import & Export Trade



LD-8
(Equivalent to IATA Type 6A)
Internal Capacity
243 cu ft/6.9 cu m
Maximum Gross Weight:
5,400 lb/2,450 kg
External Dimensions:
(L x W x H)
96" x 60" x 64"
228 cm x 152 cm x 162 cm



LD-4
(Equivalent to IATA Type 7A)
Internal Capacity
194 cu ft/5 cu m
Maximum Gross Weight:
5,400 lb/2,450 kg
External Dimensions:
(L x W x H)
96" x 60" x 64"
228 cm x 152 cm x 162 cm



Aircraft chartering

Aircraft are chartered for a number of reasons:

- **Cargo** may be unexpectedly delayed, or stranded in a particular location.
- Scheduled flights may be fully booked

Chartering of an aircraft is an expensive exercise and it is an option which requires careful consideration. The following are major concerns:

- **Finding** an aircraft with adequate capacity and flight range
- **Obtaining** traffic and landing rights to ensure passage to the desired destination.
- Charterer having to pay for both legs of the journey, because of the lack of cargo for the return journey.

In such cases it is recommended that you avail of the services of an experienced air cargo agent or airfreight forwarder to ensure you are using the right equipment, at the lowest available price, for the job.

Port is the place where (such as airport or seaport) used for loading and unloading of Cargo and a place to manage all the imports, exports of goods between one country to another.

Harbours are just vast spacing places, where ships, cargo container loaders and vessels are anchored for safety purposes from bad climate or weather conditions.

1. Free Ports, ports where international trade can be conducted with less strict Customs regulations, so saving time on paperwork and bottom line costs. Very useful if looking to transship cargo through a regional hub port. For that reason many regional hubs tend to have Free Port Zones.
2. Closed Ports, ports where foreign trade vessels are barred and only national coastal traffic is handled.

Port model	Description
Public service port	A public port authority owning and operating all equipment (port authority **and** port operations)
Tool port	A public port authority owns all equipment which is operated by labor employed by private firms (port authority + ownership of equipment required for port operations)
Landlord port	Separation between public port authority (not involved in port operations) and private operators (generally concessionaires)
Private service port	Private port authority owning and operating all equipment (private port authority **and** port operations) (in some case – not always - port infrastructures are financed / built / owned by the private sector)

Overview of Port

Docks are places where ships, vessels are designed and repaired.

Dry Dock means under no water stream conditions, desinging and repairing of ships is done.
In this particularly, engine repairs of Ship are done in most cases. Where as in a **Wet Dock**, upper parts of ship (which is as in if a Ship is on Sea, the half that we can see upon water) are repaired or remodelled there.

Jetty may be called temporary asylum for Small Ships, that or those which cannot enter Harbours. It is just for extra spacing parking for such smaller ships.

Quay is the space at the Harbour or Shore, where all the ships can moor nearby.

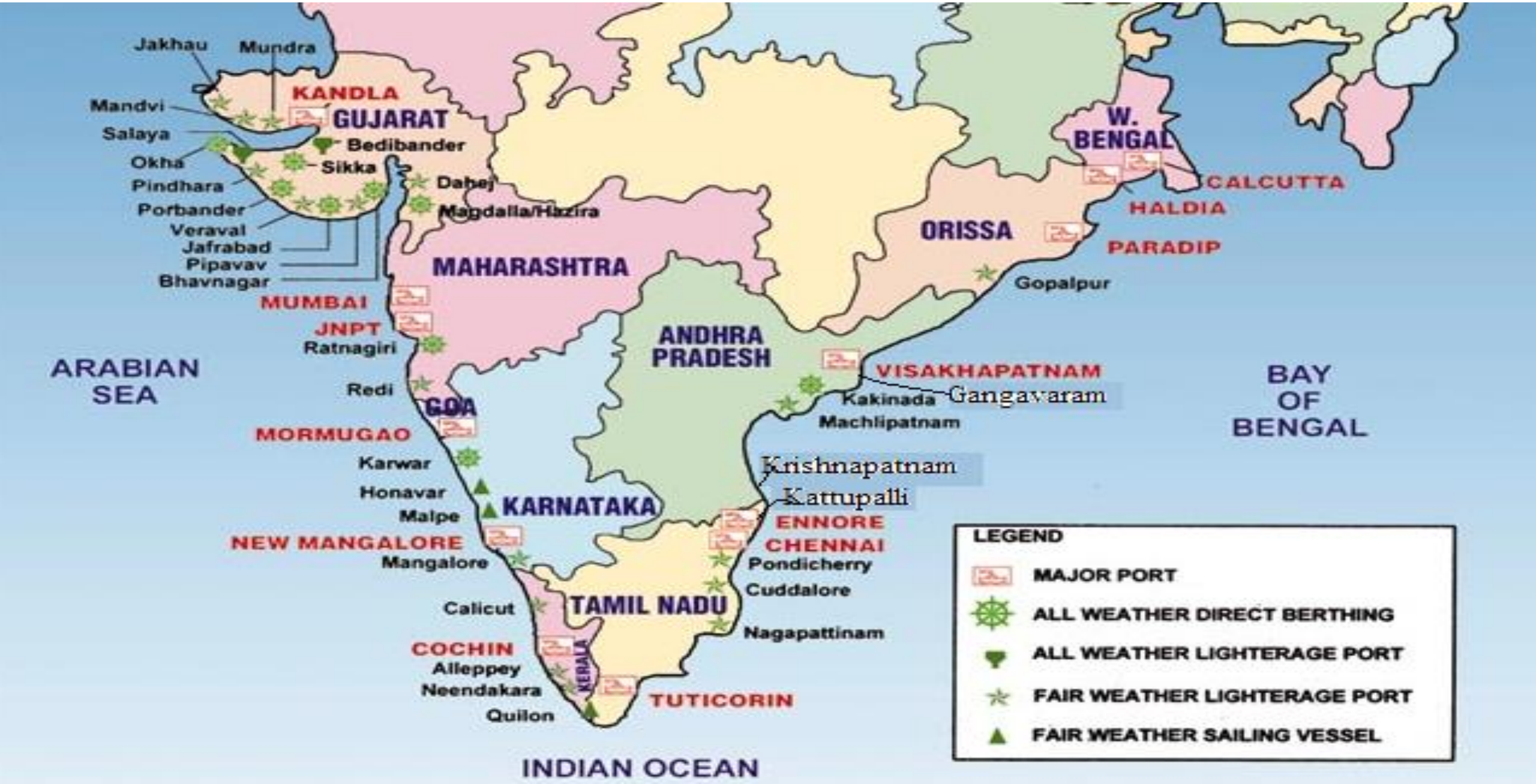
Wharf is less substitutive than a quay, and may be on the bank of a river or a of a Big Lake.

	BUILT ON PILES	BUILT ON FILLING
PARALLEL TO SHORE	WHARF	QUAY
EXTENDING OUT FROM SHORE	PIER	JETTY

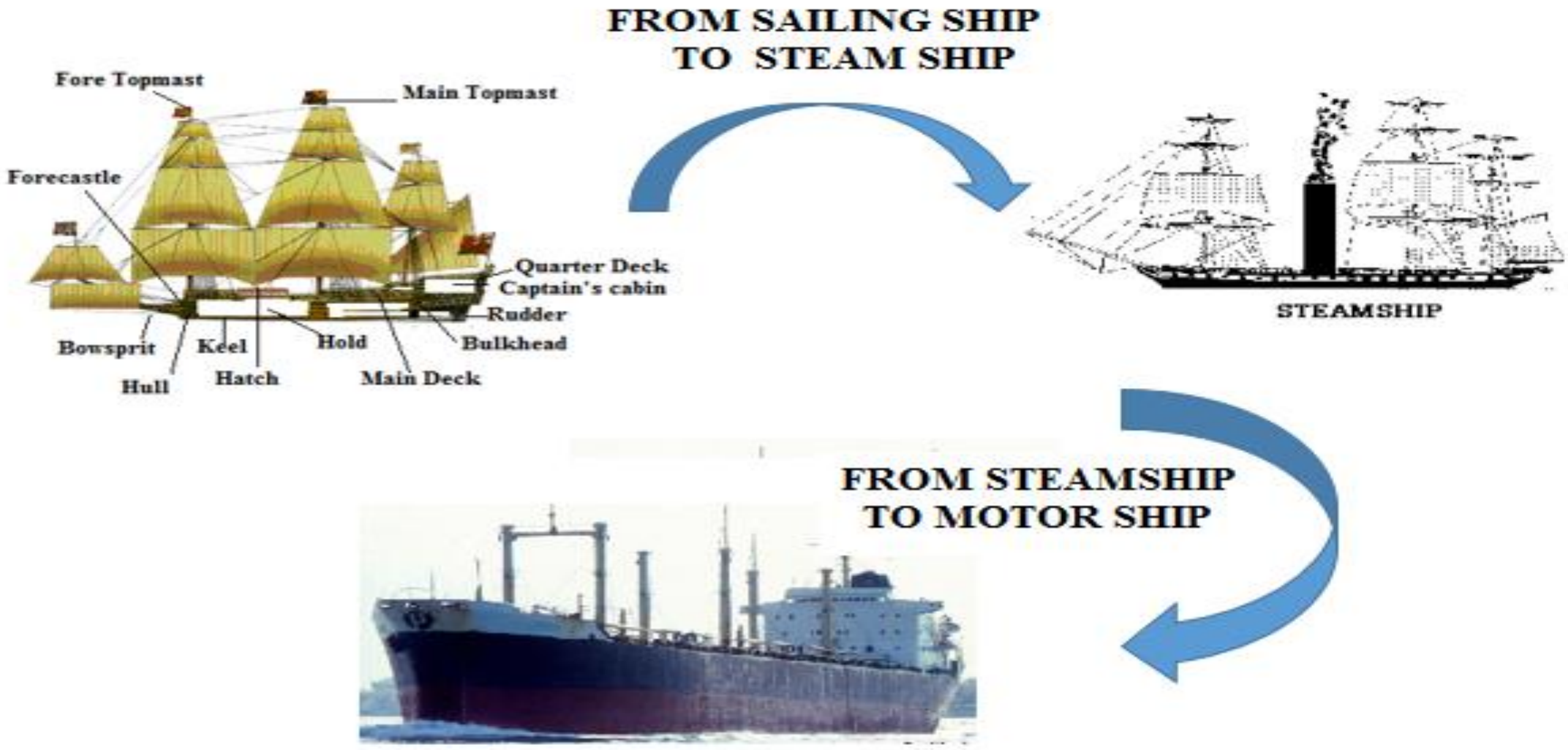
Port tariff

Service group	Component/ type of service	Charging system			
		Basis	Units	Payer	Recipient
Navigation	Port dues	Size of ship	GRT	Shipping line	Port
	Pilotage	Size of ship Time	GRT Hours	Shipping line	Port/Pilotage Association
	Tug services	Tug time involved Size of ship	Number GRT	Shipping line	Port/ Tug owner
	Mooring/unmooring	Size of ship	GRT	Shipping line	Port
	Ancillary services	Various	Various	Shipping line	Port
Berth	Berth hire	Time of ship alongside Size of ship	Hours GRT	Shipping line	Port
	Wharfage	Volume/weight/size of cargo	Tonnes/ TEU/㎥	Consignee/ Consignor	Port
	Ancillary services	Amount consumed	Various	Shipping line	Port
	Stevedorage	Volume/weight/size of cargo	Tonnes/ TEU/㎥	Shipping line	Provider of service

Indian major Ports and minor (private) ports



SAILING & STEAM SHIPS ARE ABBREVIATED AS ‘S.S.’ . SHIP IS AN ELONGAGED METAL BOX HENCE IT IS CALLED AS ‘VESSEL’. MOTOR VESSEL ABBREVIATION IS M.V.AND M.T. IS FOR TANKER SHIP

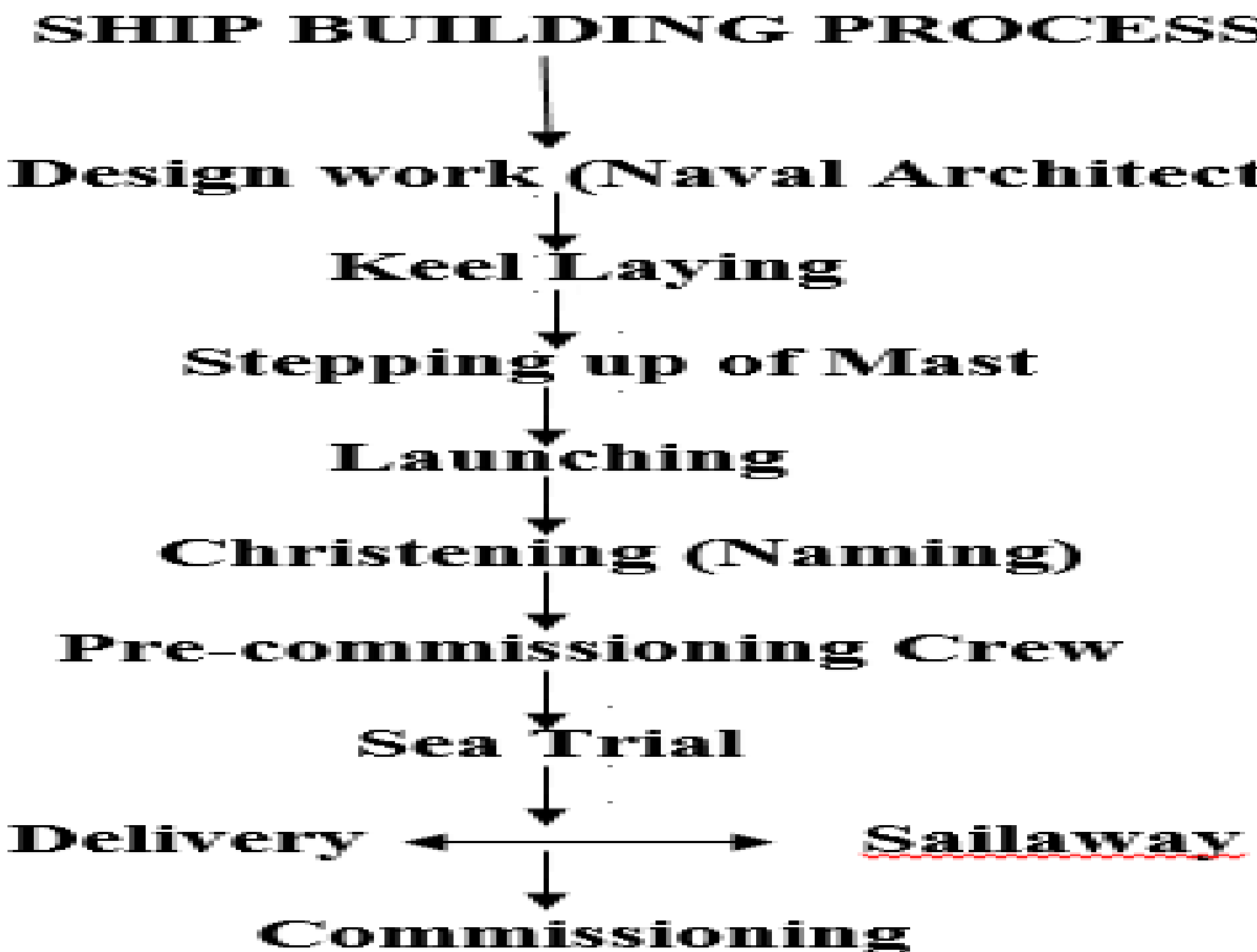


Ships are built

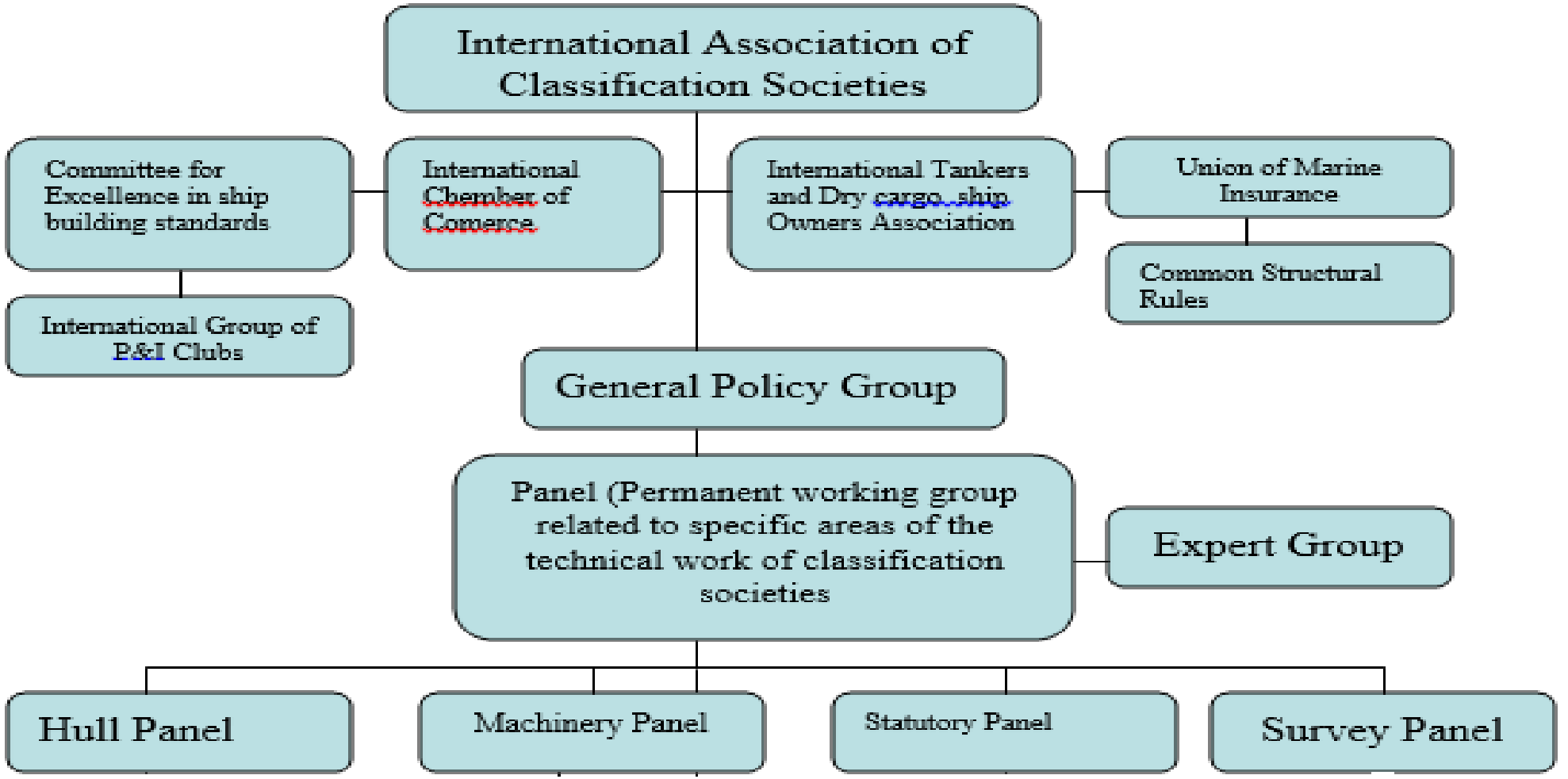
- to satisfy a large number of different needs of the owners of the world’s merchant and naval fleets

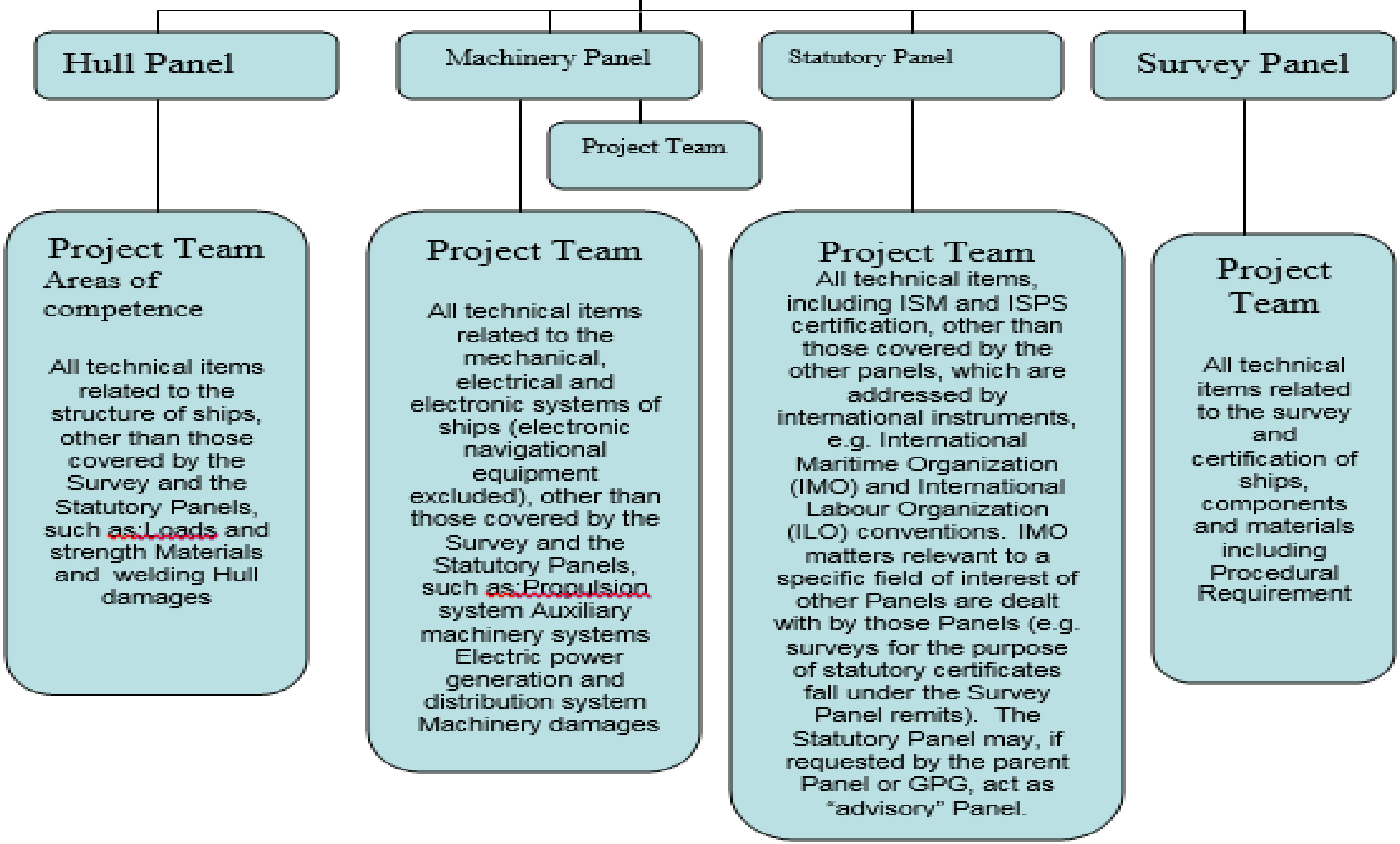
- and those different needs result in some very different hull shapes and sizes, speed requirements, and propulsion types.

- average age of ships are 20 to 25 years


SHIP BUILDING PROCESS
Design work (Naval Architect)
Keel Laying
Stepping up of Mast
Launching
Christening (Naming)
Pre-commissioning Crew
Sea Trial
Delivery
Sailaway
Commissioning

More than 90% of the world's cargo carrying tonnage is covered by the classification design, construction and through-life compliance Rules and standards set by the ten Member Societies and one Associate of IACS. (International Association of Classification Societies. The flow chart is given below:




Hull Panel
Machinery Panel
Statutory Panel
Survey Panel
Project Team
Project Team
Areas of competence
All technical items related to the structure of ships, other than those covered by the Survey and the Statutory Panels, such as:Loads and strength Materials and welding Hull damages
Project Team
All technical items related to the mechanical, electrical and electronic systems of ships (electronic navigational equipment excluded), other than those covered by the Survey and the Statutory Panels, such as:Propulsion system Auxiliary machinery systems Electric power generation and distribution system Machinery damages
Project Team
All technical items, including ISM and ISPS certification, other than those covered by the other panels, which are addressed by international instruments, e.g. International Maritime Organization (IMO) and International Labour Organization (ILO) conventions. IMO matters relevant to a specific field of interest of other Panels are dealt with by those Panels (e.g. surveys for the purpose of statutory certificates fall under the Survey Panel remits). The Statutory Panel may, if requested by the parent Panel or GPG, act as "advisory" Panel.
Project Team
All technical items related to the survey and certification of ships, components and materials including Procedural Requirement

Inter-governmental Organisations

International Maritime Organization (IMO)
International Labour Organization (ILO)
United Nations Conference on Trade and Development (UNCTAD)
World Meteorological Organization (WMO)
World Customs Organization (WCO)
International Hydrographic Organization (IHO)
International Maritime Mobile Satellite Organization (INMARSAT)
Paris MOU on Port State Control
Tokyo MOU on Port State Control
Indian MOU
Mediterranean MOU
Black Sea MOU
Latin American MOU

SHIP BUILDING PROCESS

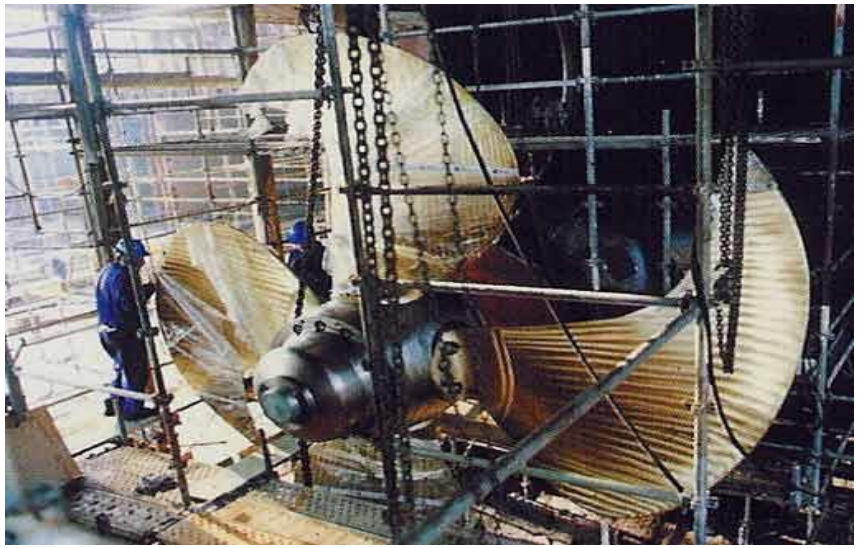
Keel laying

Bow assembling

Hull work is finished

Fitting of engine

Fixing of Propeller



Fixing superstructure

Engine and Auxillary machineries fitting

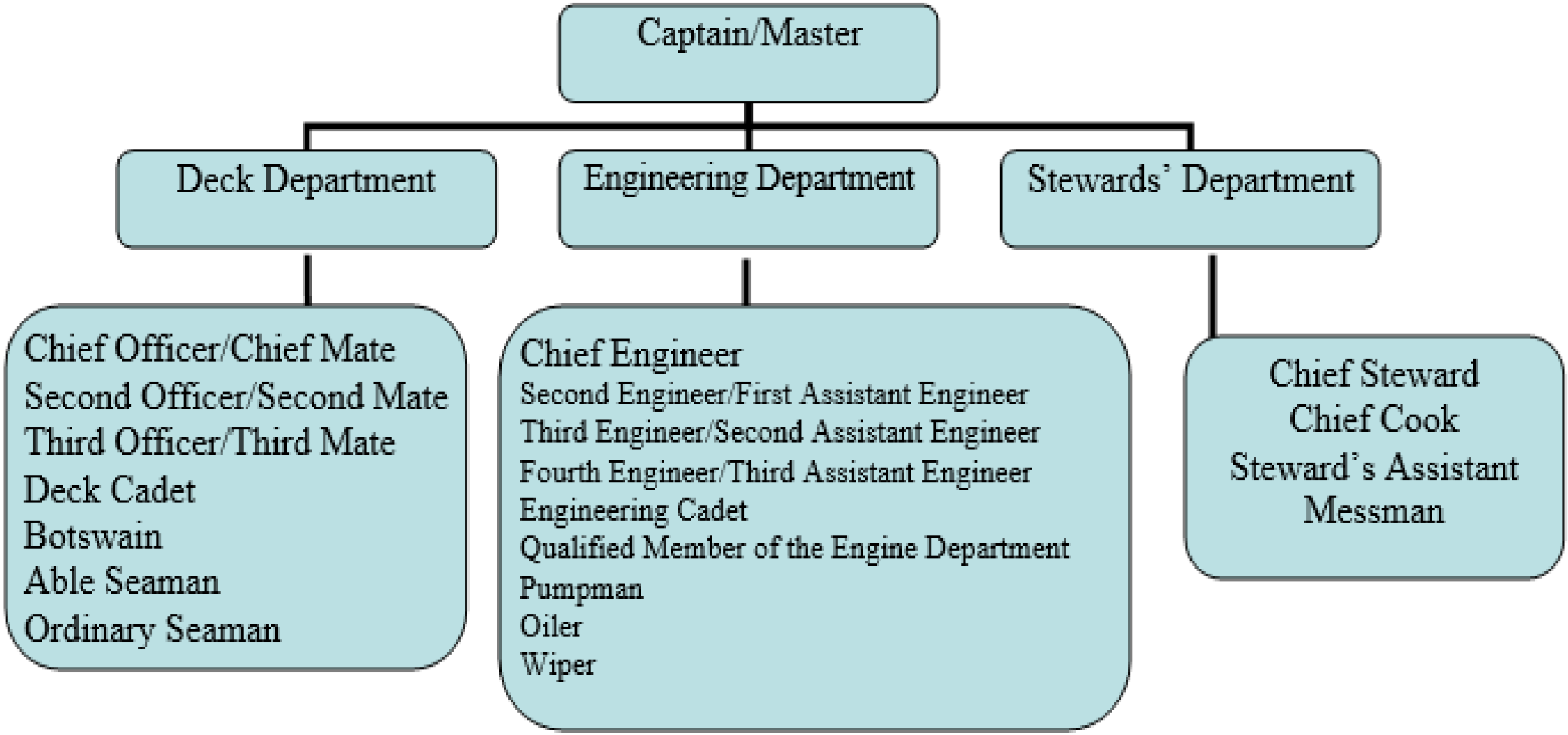
Navigational equipments fitting

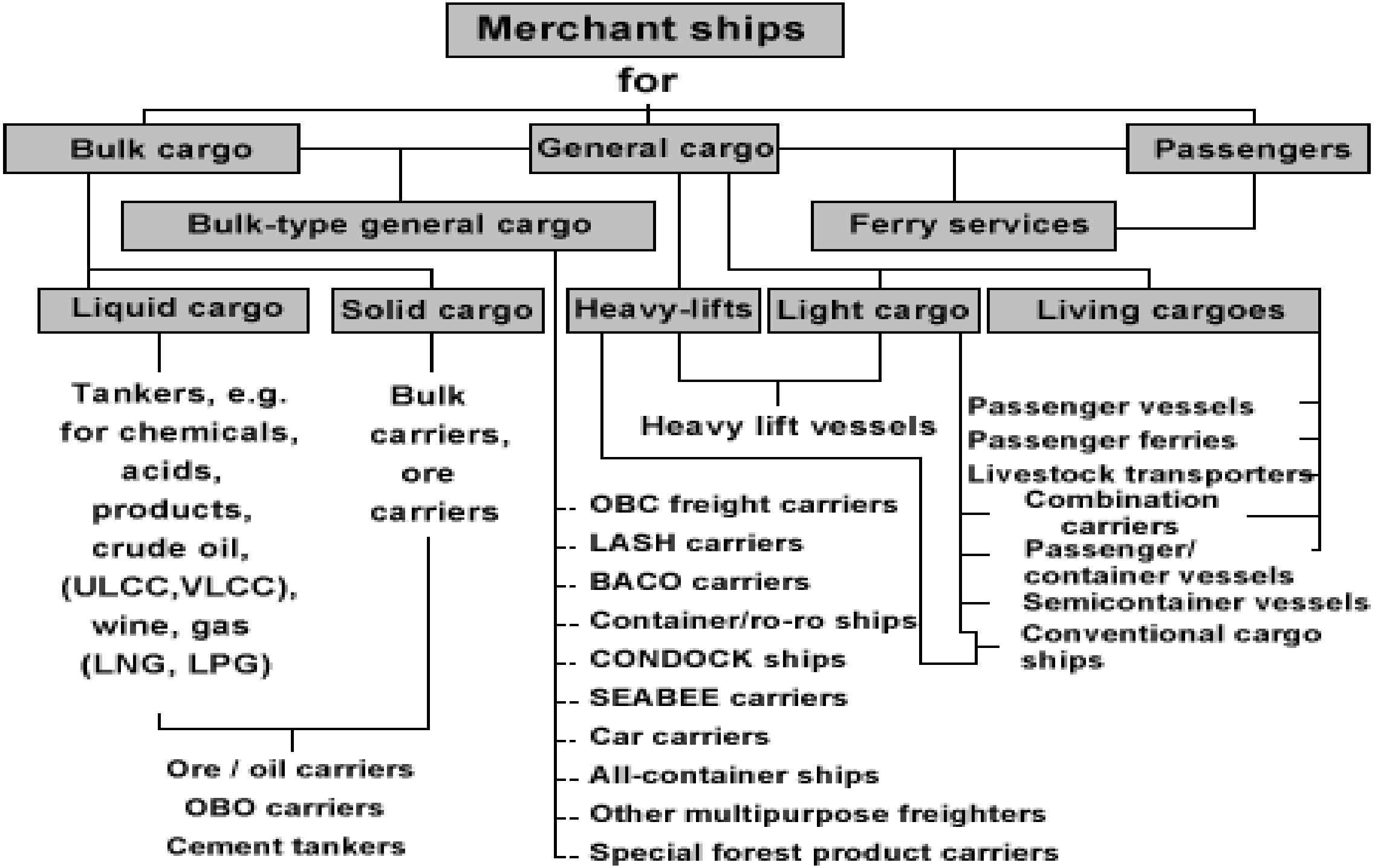
Accommodation for crew

CREW ACCOMMODATION

FOLLOWED BY NAMING CEREMONY AND LAUNCHING

CREW COMPLEMENT BY SHIP CLASS : The required crew size will be dictated by a document called the Minimum Safe Manning Certificate. This document dictates the minimum number of personnel necessary to safely navigate and operate the vessel




Merchant ships
for
Bulk cargo
General cargo
Passengers
Bulk-type general cargo
Ferry services
Liquid cargo
Solid cargo
Heavy-lifts
Light cargo
Living cargoes
Tankers, e.g. for chemicals, acids, products, crude oil, (ULCC,VLCC), wine, gas (LNG, LPG)
Bulk carriers, ore carriers
Heavy lift vessels
Passenger vessels
Passenger ferries
Livestock transporters
Combination carriers
Passenger/ container vessels
Semicontainer vessels
Conventional cargo ships
OBC freight carriers
LASH carriers
BACO carriers
Container/ro-ro ships
CONDOCK ships
SEABEE carriers
Car carriers
All-container ships
Other multipurpose freighters
Special forest product carriers
Ore / oil carriers
OBO carriers
Cement tankers

Types of dry bulk cargo ships

HANDYSIZE TYPE SHIP.
APPROXIMATELY FROM
10000DWT TO 30000DWT

HANDYMAX SIZE TYPE SHIP.
FROM 30001 TO 50000DWT

PANAMAX TYPE SIZE SHIP
FROM 50001DWT TO 80000DWT

CAPESIZE TYPE SHIP. FROM
80000DWT AND LARGER

Types of tanker ships

HANDYSIZE TYPE TANKER FROM 19001DWT TO 25000DWT

PANAMAX SIZE TYPE TANKER FROM 50001DWT TO 80000DWT

SUEZMAX SIZE TYPE SHIP FROM 120,000DWT TO 200,000DWT

AFRAMAX TYPE TANKER FROM 80000 TO 120,000 DWT

VLCC - VERY LARGE CRUDE CARRIER SIZE TYPE SHIP 200,000DWT TO 350,000DWT

ULCC - ULTRA LARGE CRUDE CARRIER SIZE TYPE SHIP 350,000DWT AND ABOVE

Types of gas carriers

Tank capacity	78,000 m³
Gross tonnage	46,500 tons
Length	230.0 m
Breadth	36.6 m
Depth	20.8 m
Speed	16.7 kts
Main engine	Mitsubishi UE diesel engine

Tank capacity	135,000 m³
Gross tonnage	112,200 tons
Length	297.5 m
Breadth	45.75 m
Depth	25.5 m
Speed	19.5 kts
Main engine	Mitsubishi steam turbine

Types of ships

PCTC : Pure Car and Truck Carrier

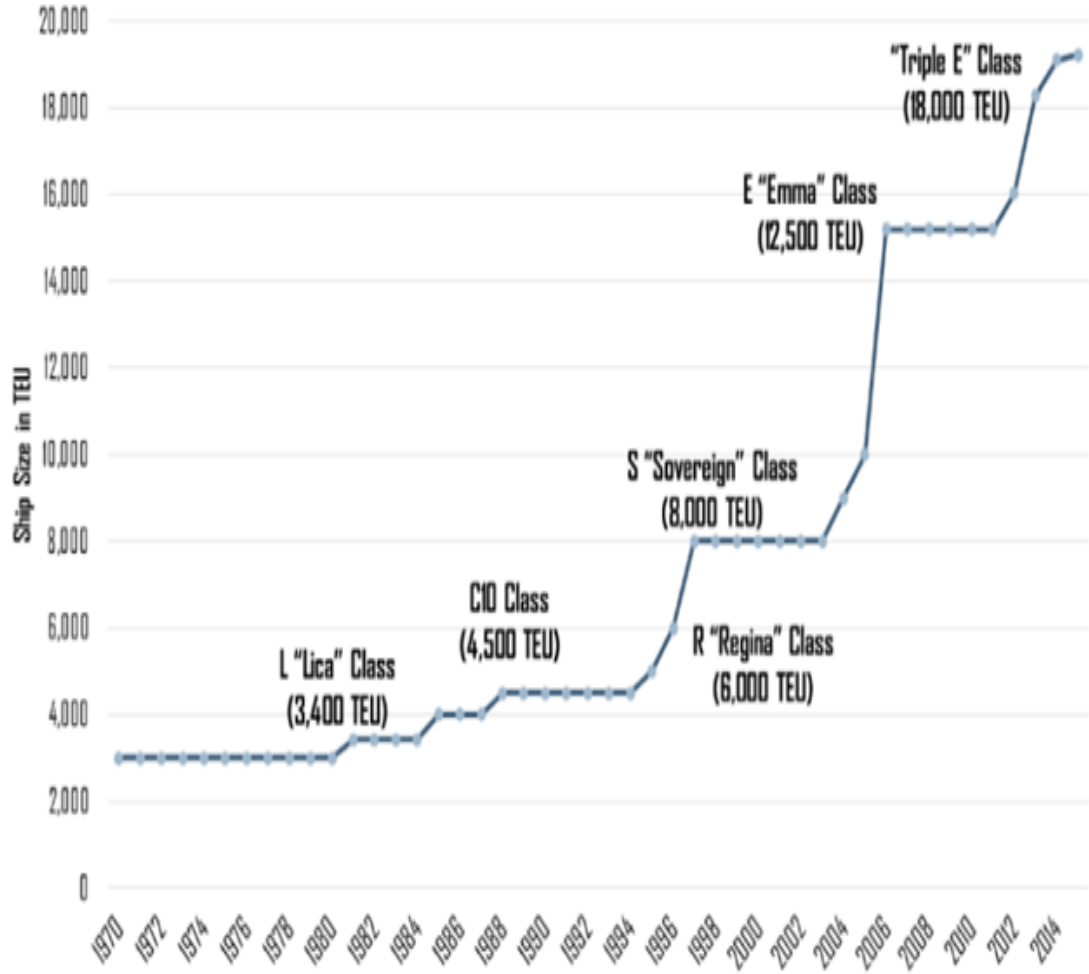
Container Ship

General Cargo Ship

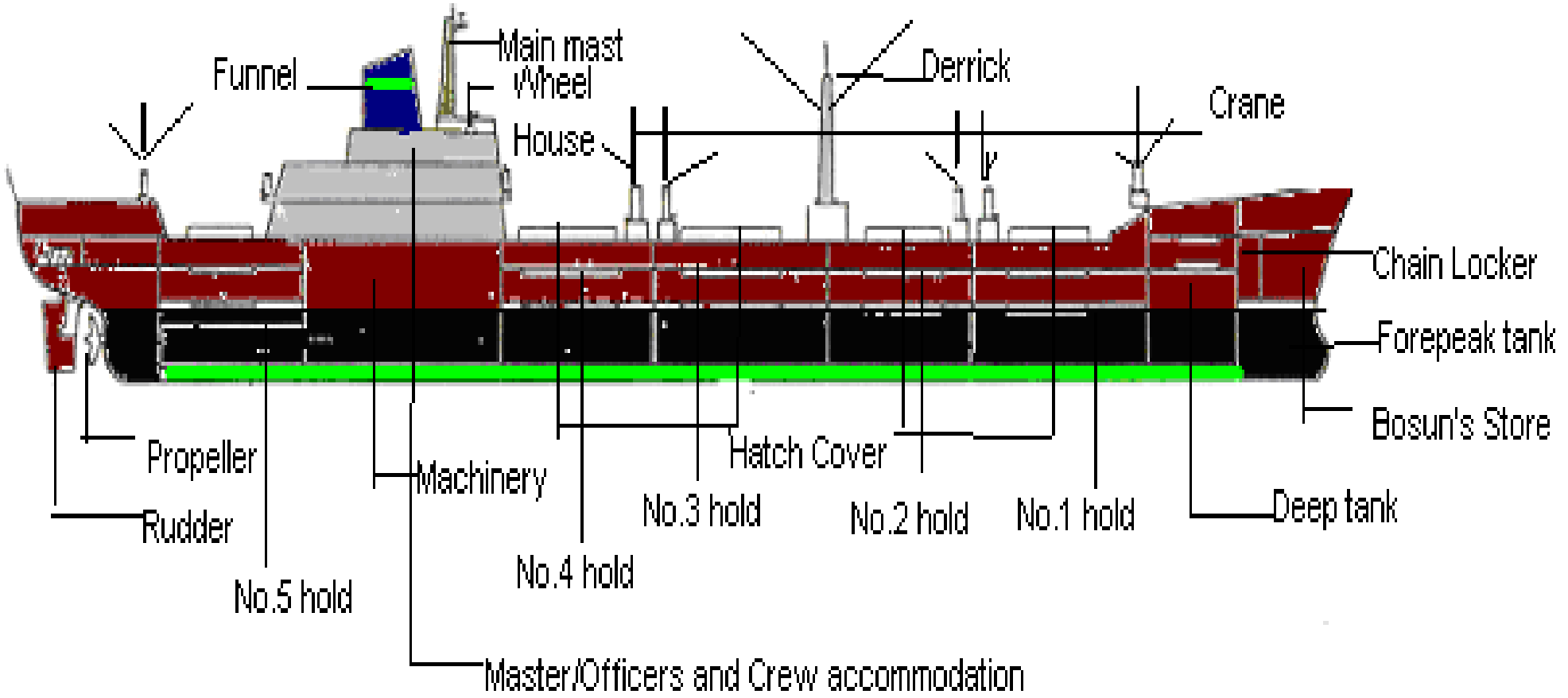
Cattle Carrier

Container ships size

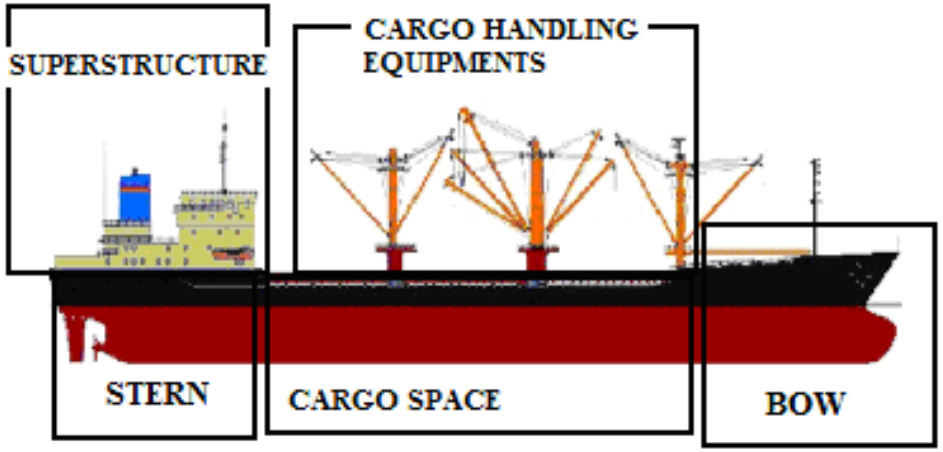
	Length	Draft	TEU
First Generation (1956-1970)			
Converted Cargo Vessel	135 m	< 9 m	500
Converted Tanker	200 m		800
Second Generation (1970-1980)			
Cellular Containership	215 m	10 m	1,000 – 2,500
Third Generation (1980-1988)			
Panamax Class	250 m 290 m	11-12 m	3,000 4,000
Fourth Generation (1988-2000)			
Post Panamax	275 – 305 m	11-13 m	4,000 – 5,000
Fifth Generation (2000-?)			
Post Panamax Plus	335 m	13-14 m	5,000 – 8,000

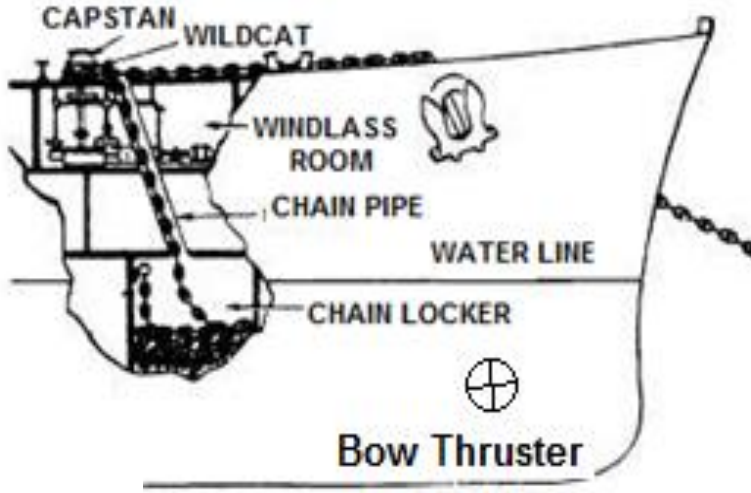


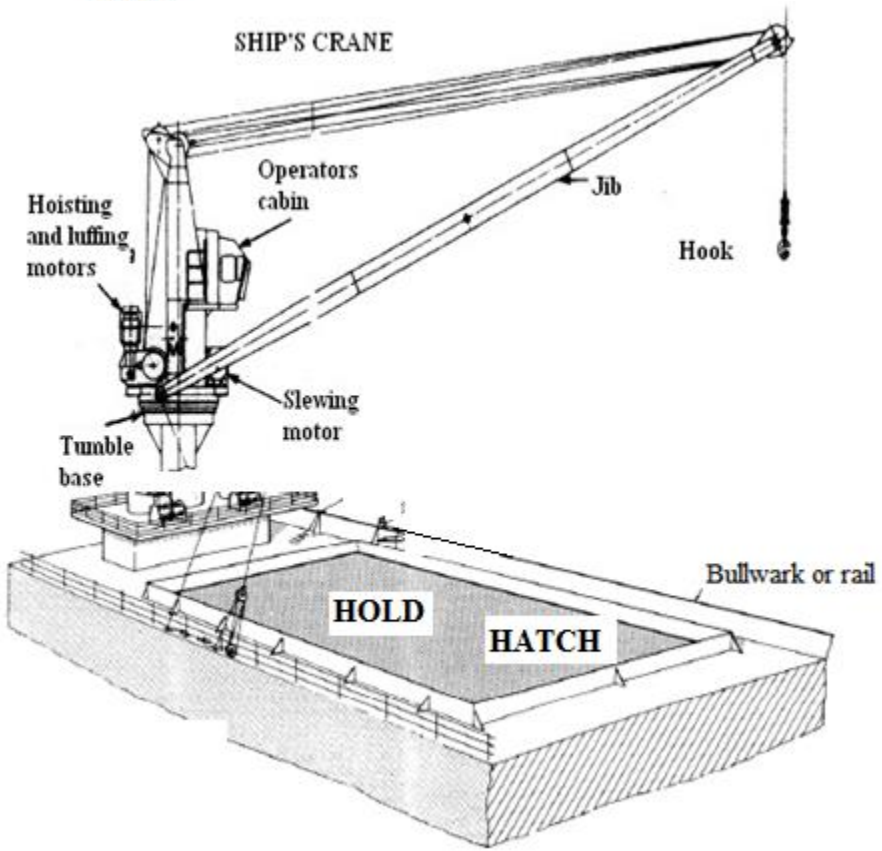
Longitudinal section of a General Cargo Ship

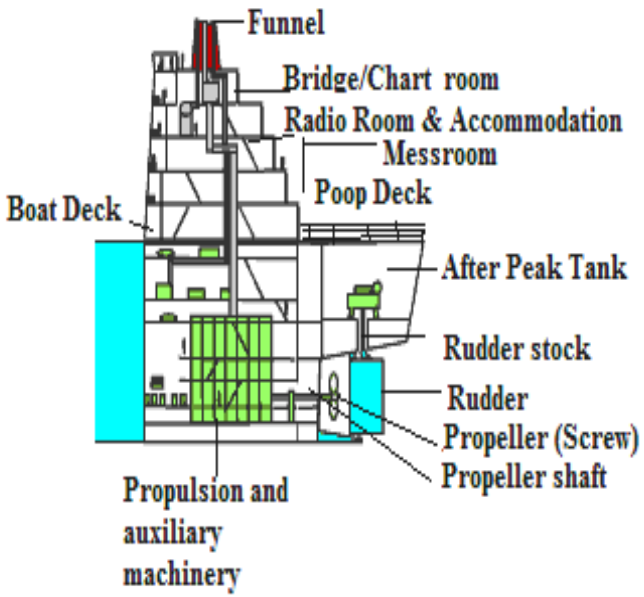


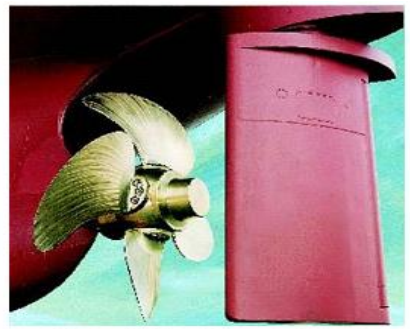
HULL











Controllable pitch propeller

Ship’s parts

Bridge: The bridge of a ship is an area at front of the ship where the navigational equipment are housed. The ship is controlled from the bridge by the captain or navigational officer

Propeller and Rudder: A propeller is a type of fan that transmits power by converting rotational motion into thrust and the Rudder is used for steering the ship

Cargo Control Room: Cargo Control room where PIC can monitor cargo operation.

Funnel : Funnel is a casing used for the exhaust pipes from the engine and is located near to the bridge

Ship’s parts ....continuation

Cargo Hold:A **ship's hold** or cargo **hold** is a space for carrying cargo. Cargo in holds may be either packaged in crates, bales, etc., or unpackaged (bulk cargo). Access to holds is by a large hatch at the top

Mast: The mast is used to carry antennas, whistle, navigational lights, flags etc.,

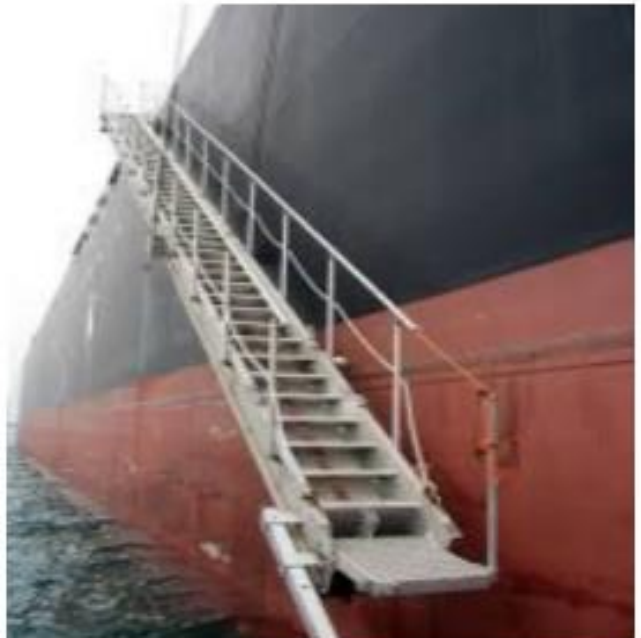
Crane: Crane is a machinery for hoisting and lowering the heavy objects

Anchor : The anchor is used to secure the ship in a stationary position at sea

Ship's part ….continuation

Mooring : Mooring is to secure a ship in position at a quay or berth or jetty for safe cargo operation and to make access to people from shore to ship

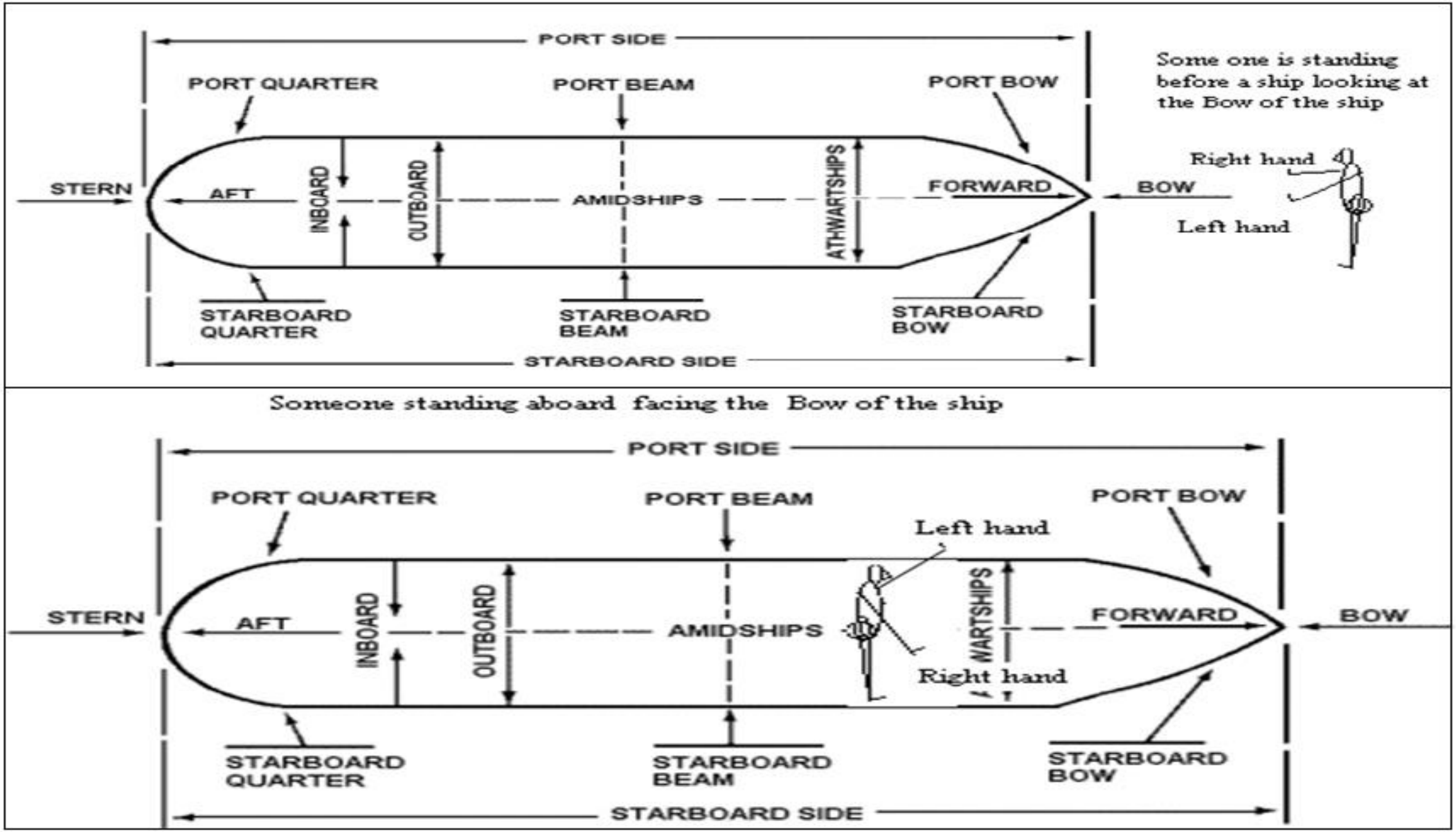
Life Boats: A *lifeboat* is a small, rigid or inflatable boat carried for emergency evacuation in the event of a disaster aboard a *ship*



Accommodation ladders and gangways fitted on *ships* are *used* to support the means of embarkation and disembarkation. For many people the gangway or accommodation ladder is the first point of contact with a ship.

Cabin: A cabin is a compartment on board a ship for the private use of the ship's crew, offiers, captain and or passengers

Ship's port and starboard side



WEIGHT TONNAGE TERMS

- DISPLACEMENT (W) - The weight of water of the displaced volume of the ship, which equals the weight of the ship and cargo. In other words: it is the weight of the volume of water displaced by the hull.

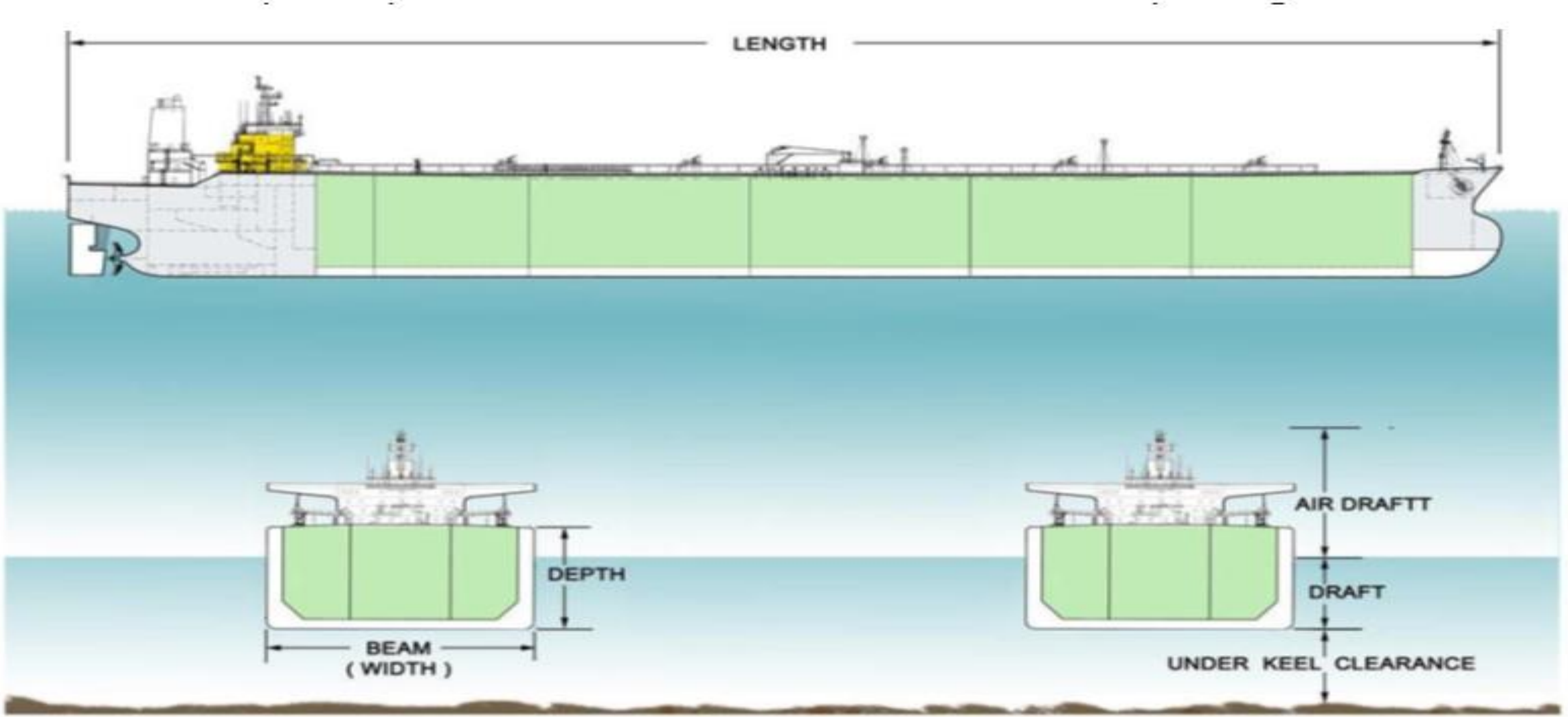
- DEADWEIGHT - total weight of cargo, stores, fuel and water needed to submerge a ship from her light draught to her maximum permitted draught; it is given by the difference between the load displacement and light displacement (also known as lightweight). *DWT* for short

- GROSS TONNAGE - Gross Tonnage is a measure of volume inside a vessel. This includes all areas from keel to funnel and bow to stern. Gross tonnage is the complete physical volume of space a cargo ship's hold has The means to calculate gross tonnage is laid out in the International Convention on Tonnage Measurement of Ships. Gross Tonnage is used to determine the number of crew, safety rules, registration fees, and port dues. It is the standard most often used to define a vessel.

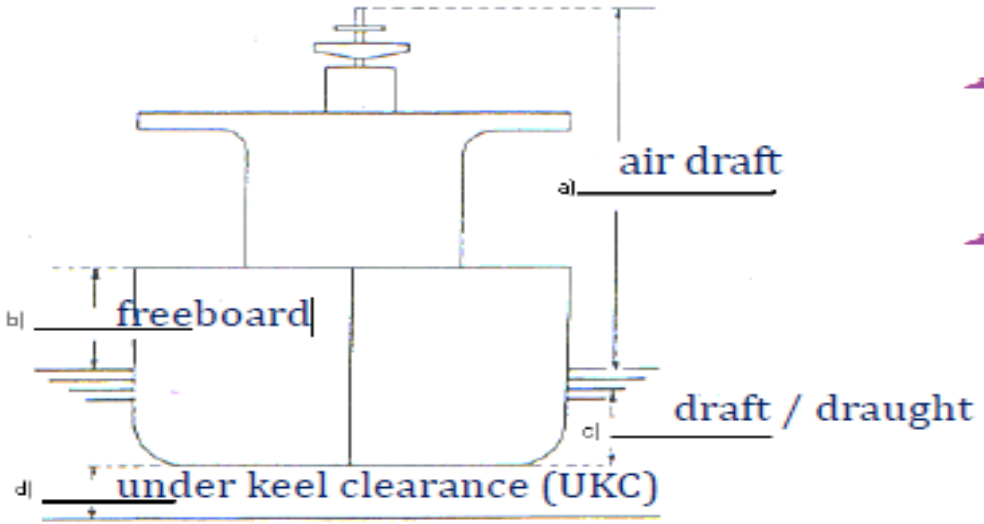
- NET TONNAGE - The tonnage most frequently used for the calculation of tonnage taxes and the assessment of charges for wharfage and other port dues. Net tonnage is obtained by deducting from the gross tonnage, crew and navigating spaces and an allowance for the space occupied by the propelling machinery.
- Net tonnage is a method of calculation for how much cargo space a ship has. It is not a measure of weight or mass, or the displacement weight of a ship, but instead **a volume measurement**. Each ton in a net tonnage figure is equivalent to 100 cubic feet (2.83 cubic meters) of space.

- CARGO DEADWEIGHT - Capacity is determined by deducting from total deadweight the weight of fuel, water, stores, dunnage, crew passengers, and other items necessary for use on a voyage.

A ship's **Length Overall [LOA]** is measured in feet and inches from the extreme forward end of the bow to the extreme aft end of the stern. The **beam** of a **ship** is its width at the widest point as measured at the **ship's** nominal waterline. The **beam**is a bearing projected at right-angles from the fore and aft line, outwards from the widest part of **ship**. **Air draft** (or **air draught**) is the distance from the surface of the water to the highest point on a **vessel**. This is similar to the "deep **draft**" of a **vessel** which is measured from the surface of the water to the deepest part of the hull below the surface, but **air draft** is expressed as a height, not a depth.

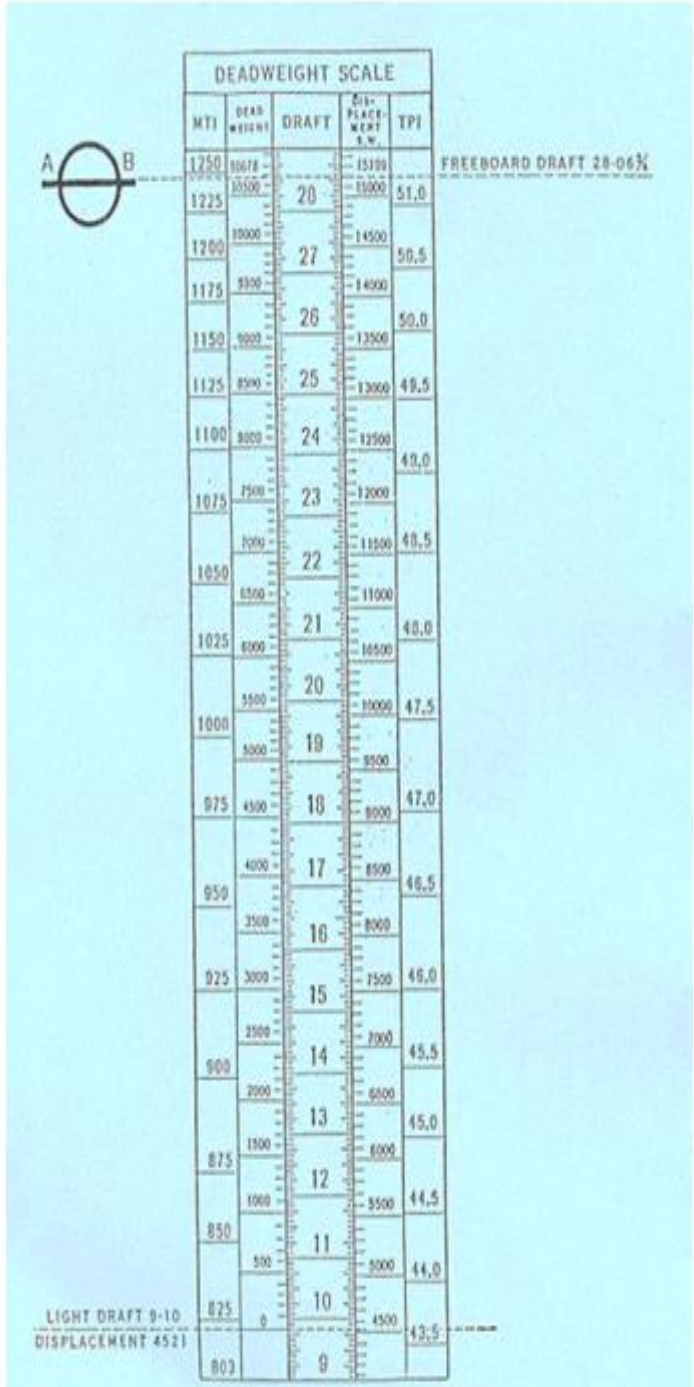


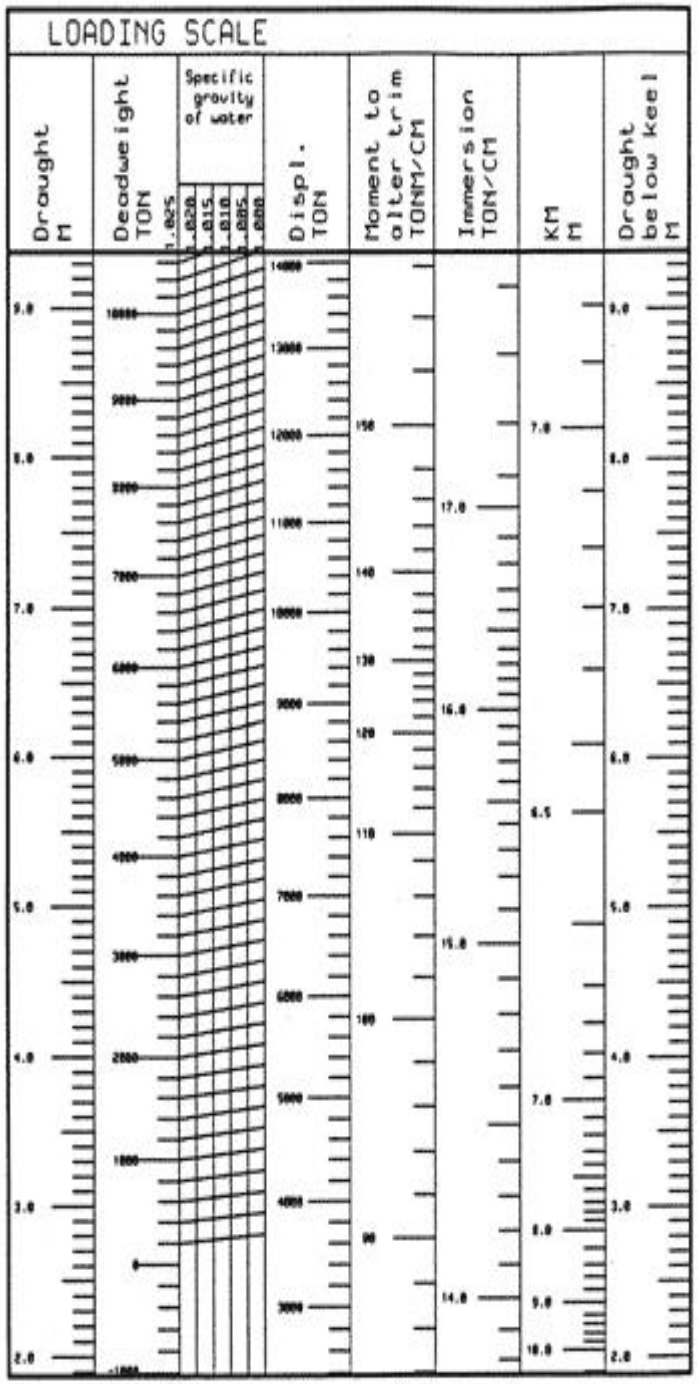
Draft



Draft mark at the bow

- The draft aft (stern) is measured in the perpendicular of the stern.
- The draft forward (bow (ship)) is measured in the perpendicular of the bow.
- The mean draft is obtained by calculating from the averaging of the stern and bow drafts, with correction for water level variation and value of the position of F with respect to the average perpendicular.
- The draft of a ship can be affected by multiple factors, not considering the rise and fall of the ship by displacement:
  - *Draft variation by list.*
  - *Draft variation by water level change.*
  - *Allowance of fresh water draft variation by passage from fresh to sea water or vice versa.*
  - *Heat variation in navigating shallow waters.*





The dead weight scale is made up of several columns :

Column A (dead weight ton-saltwater) gives the lift capacity of the vessel.

Column B (draft [feet or meters] to bottom of keel) shows the mean draft in feet and meters.

Column C (displacement tons, saltwater) gives the displacement tonnage of the ship plus any material placed in the vessel.

Column D (tons per inch or centimeter immersion) denotes the number of tons required to change the mean draft of the vessel 1 inch or centimeter at various drafts

Bale Capacity:

This is the cubic capacity of a space when the breadth is taken from the inside of the cargo battens, the depth from the wooden ceiling to the underside of the deck beams and the length from the inside of the bulkhead stiffeners or sparring where fitted.

Grain Capacity:

This is the cubic capacity of a space when the lengths, breadths and the depths are taken right to the ships side plating. An allowance is usually made for the volume occupied by frames and beams.

Stowage Factor:

This is the volume occupied by unit weight of cargo. Usually expressed as cubic metres/ tonne. It does not take into account space, which may be lost due to broken stowage. However it obtained by multiplying the greatest length by the greatest breadth with the greatest height.

Broken Stowage:

The space between packages which remains unutilized. This is generally expressed as a percentage and the amount that is to be allowed varies with differ rent cargo and the shape of the hold. It is greatest when large cases have to be loaded in a n end hold, where the after end narrows down considerably.

BS is generally not given in any of the booking lists, but is a ship/ hold experience factor or a sister ship experience factor for that particular cargo. The most commonly accepted figure is about 10%, thus with a BS of 10% the available cargo space that may be loaded would be 90%.

Terms used for calculating freight

Activity	Responsibility of Cargo Operation	
	Load Port	Discharge Port
Full Liner Term (FLT)	Owner	Owner
Liner In Free Out (LIFO)	Owner	Charterer
Free In and Liner Out (FILO)	Charterer	Owner
Free In Out Stow Trim (FIOST)	Owner	Owner
Berth term/Berth term (BT/BT)	Owner	Owner
Hook/Hook (HT/HT)	Owner	Owner

Apart from above terms, following terms are also used
WOWO means Walk on Walk off - for cattle
FOFO means Float on Float off - for boats, ships, yachts, off shore oil drilling rigs etc.,
RORO means Roll on Roll off
Sto-Ro means Stowable Roll on Roll off

Terms used for of calculating freight rates :

FIOS (Free In, Out, Stowed) :

It is most important to remember that the "Free" reference is viewed from the Ship Owners point of view - not the Shipper's. Freight rates quoted on a FIOS basis specifically exclude all aspects relating to cargo handling operations.

The ship is only responsible for expenses arising as a result of the ship calling into the port, i.e. port dues, pilotage, berth hire and light dues etc. Another very important consideration when booking cargo on FIOS terms is that the ship does not bear any responsibility for the speed of loading or discharging. Usually the rate agreed includes a fixed "free" period of time for loading/discharging operations, after which time a daily demurrage is incurred. Obviously this is of paramount importance where port congestion or stevedoring performance is uncertain. There are many overseas ports which fall into this category and particularly where vessel demurrage rates can vary significantly, depending on the size and type of ship nominated to undertake the particular project.

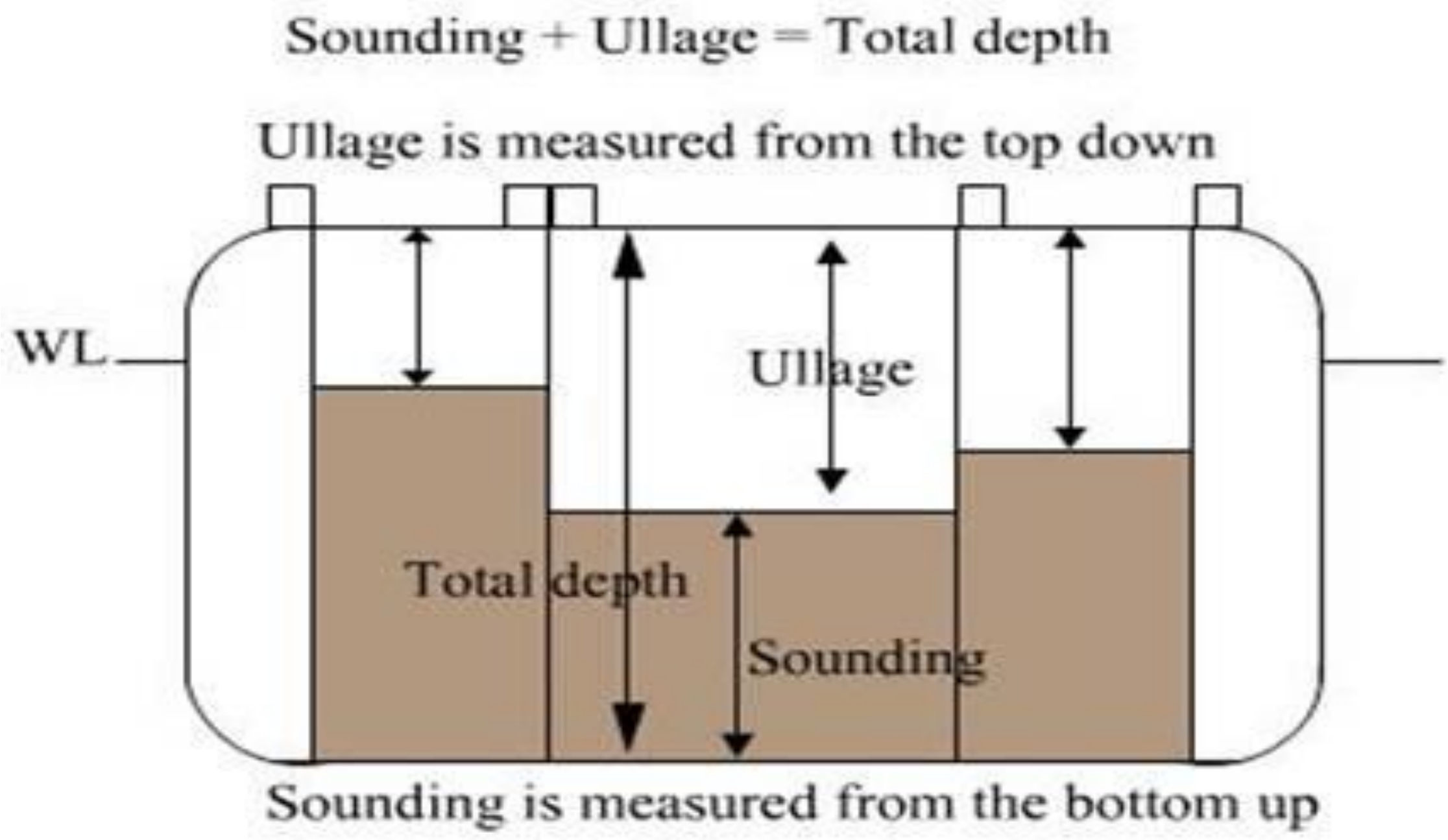
Full Liner Terms:

This is somewhat a vaguer term given different port practices. However, it generally implies that the freight amount provided includes both shore based and on-board stevedoring, lashing/unlashing, dunnage materials, securing/unsecuring and all costs of presenting to/receiving the cargo from the ship's side; with the shippers/receivers just bearing the cost of discharging from/reloading to the transport, along with the usual port charges/levies/taxes etc.

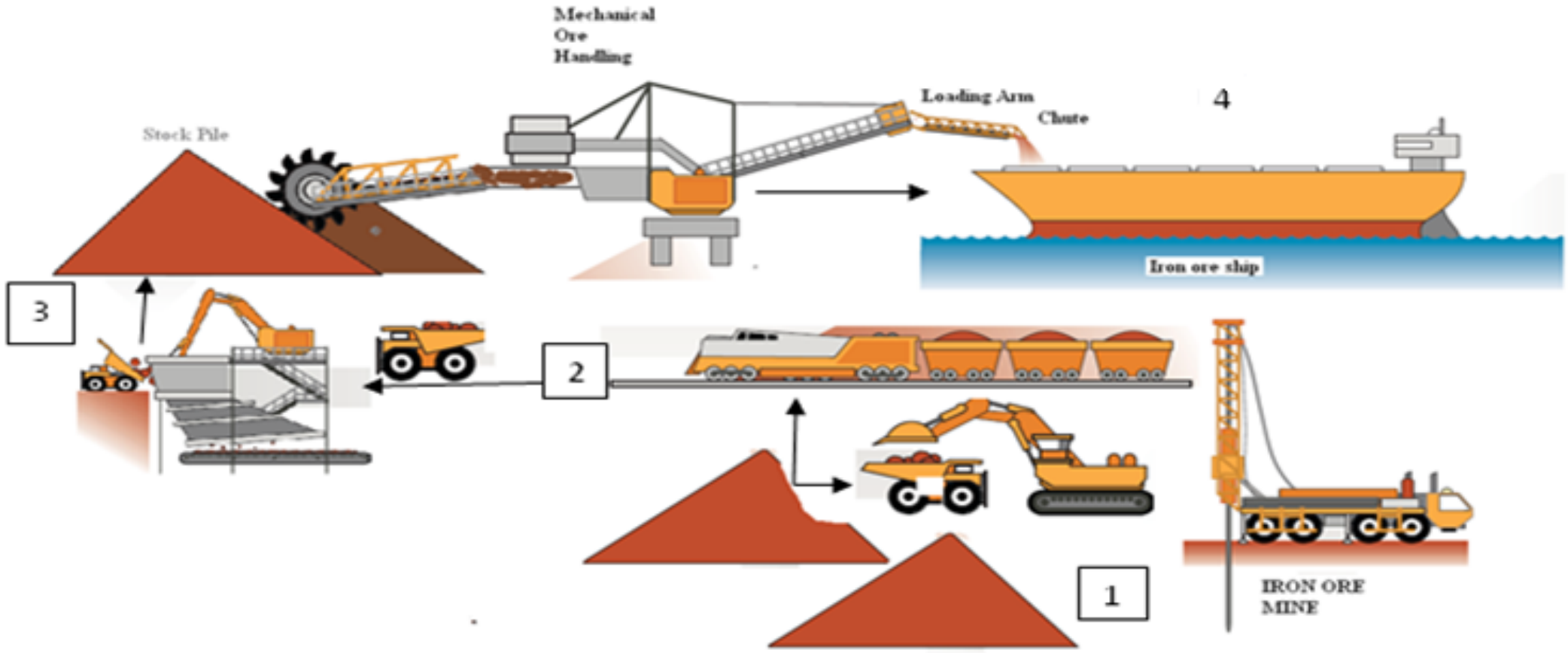
Frequently the terms are varied at different ends of the voyage i.e. FILO (Free In/Liner Out), LIFO (Liner In Free Out) or FIFO (Free In/Free Out) etc. To be absolutely sure of all liabilities, it is always advisable to request that terms clearly and concisely indicate what is/isn't included in your particular contract - in layman's terms.


Manifolds
Loading arms
SHOKING

Liquid Cargo measurement



Mechanical Ore Handling



1) Iron ore extracted from mine 2) Iorn ore loading and transported from mine site to Port (Transportation from mine site to railway siding transportation,loading at railwagon involved) 3) At port iron ore offloaded to Stock Pile which will be mechanically transported by reclaimer to conveyor belt and through loading arm chute, loaded onto ship

Cranes work in tandem

Newsprint paper rolls being loaded into hold

Steel pipes being loaed into hold

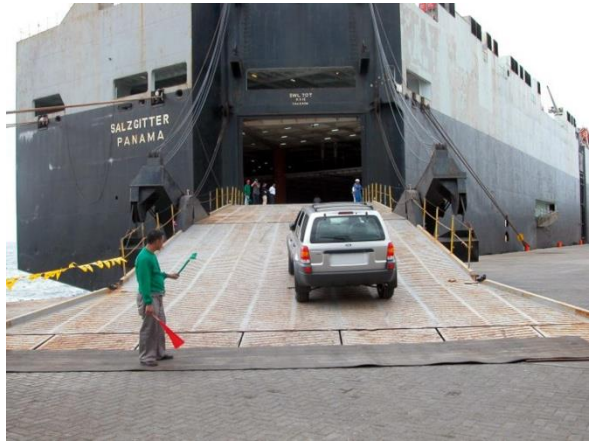
Granite Rough Blocks stowed into hold

Steel Coils stowed into hold

Steel Tubes lowered into hold

Cars are stowed and secured on board a Pure Car Carrier (PCC)

Cars are rolled out from a Pure Car Carrier (PCC)

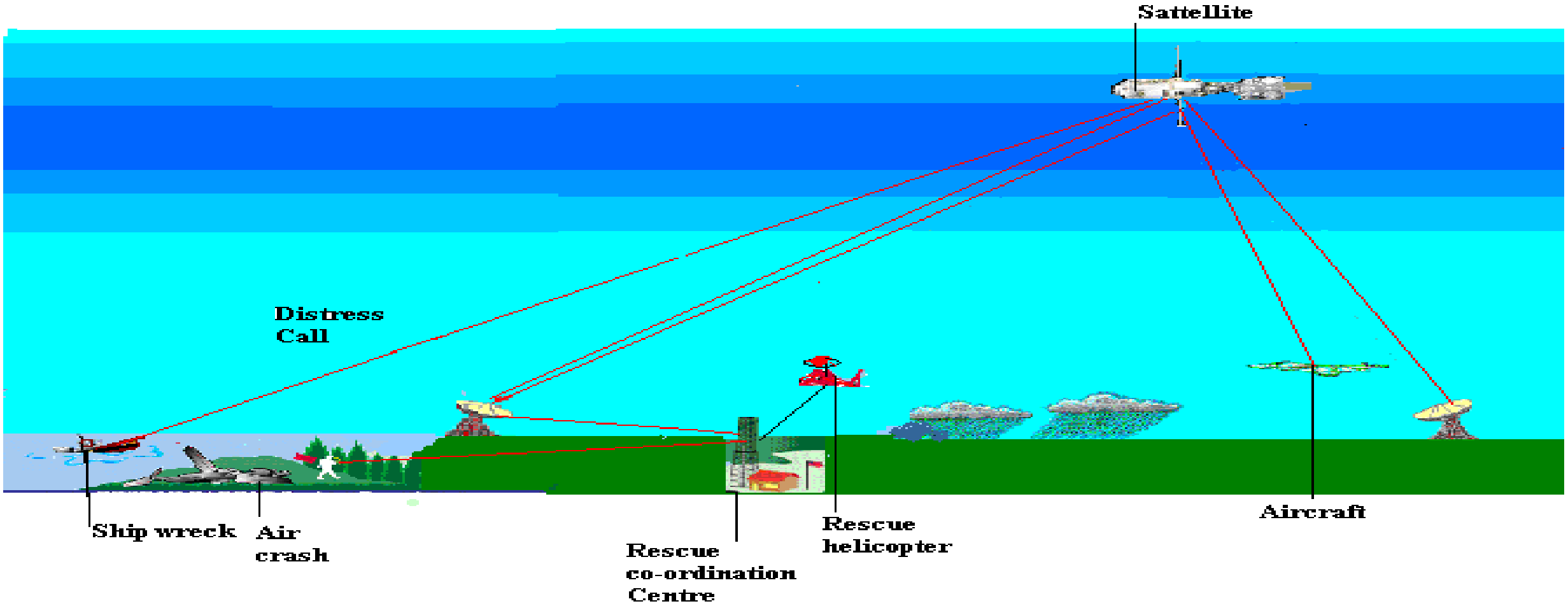


LIVESTOCK CARRIER WALK ON/WALK OFF (Wo/Wo)

GLOBAL COMMUNICATION NETWORKS

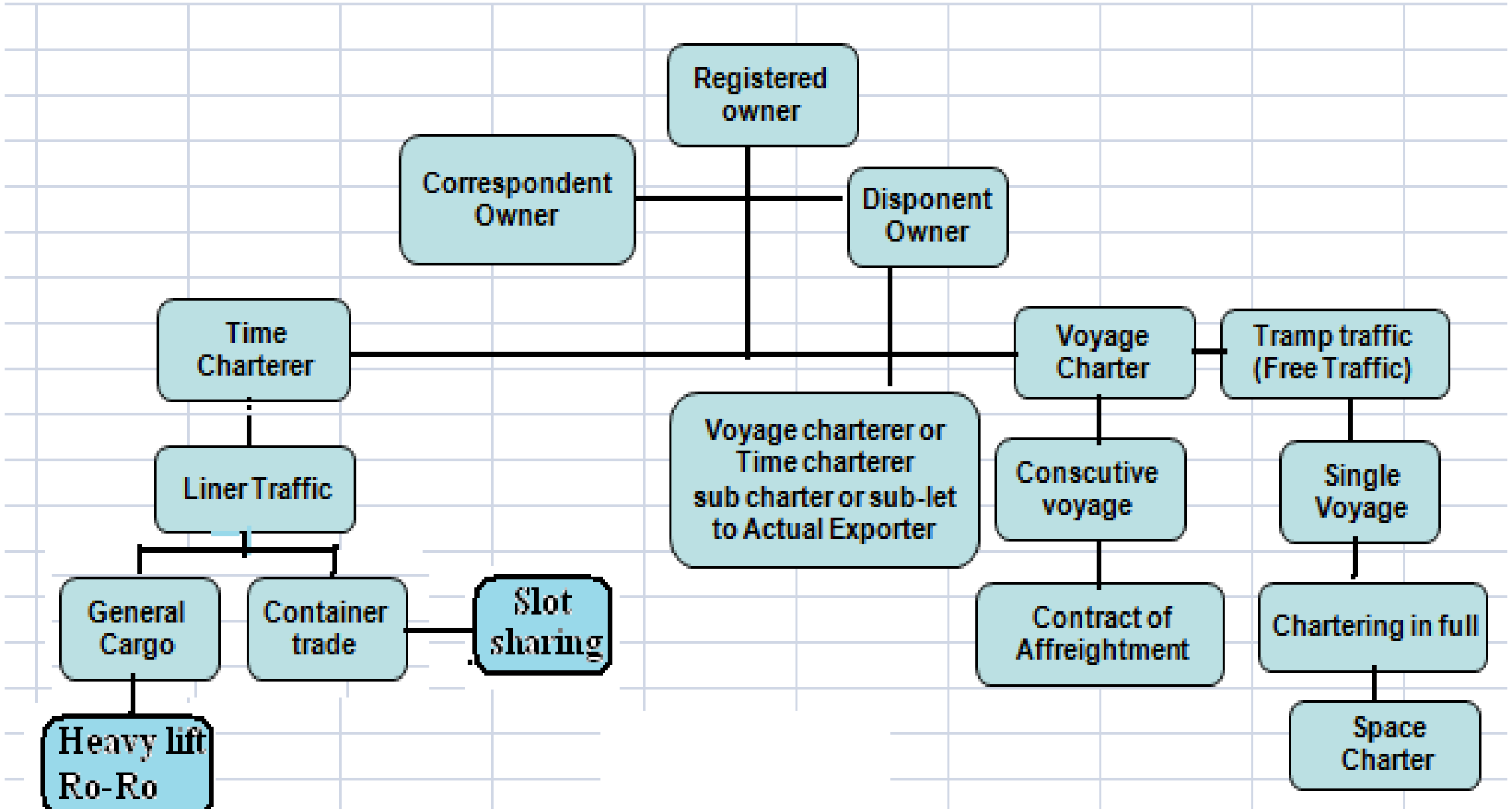
In 1979 the UN International Maritime Organization sponsored the establishment of the International Maritime Satellite Organization (INMARSAT)
Inmarsat C is one of the most flexible mobile satellite message communication systems in the World, it has the ability to handle commercial, operational and personal messages just as easily as distress and safety communications.
Inmarsat C is recommended for the any of the following applications:
E-mail and messaging
Fax and telex
SMS text
Remote monitoring
Tracking
Chart and weather updates
Maritime safety information

DISTRESS AND SAFETY SATELLITE COMMUNICATION

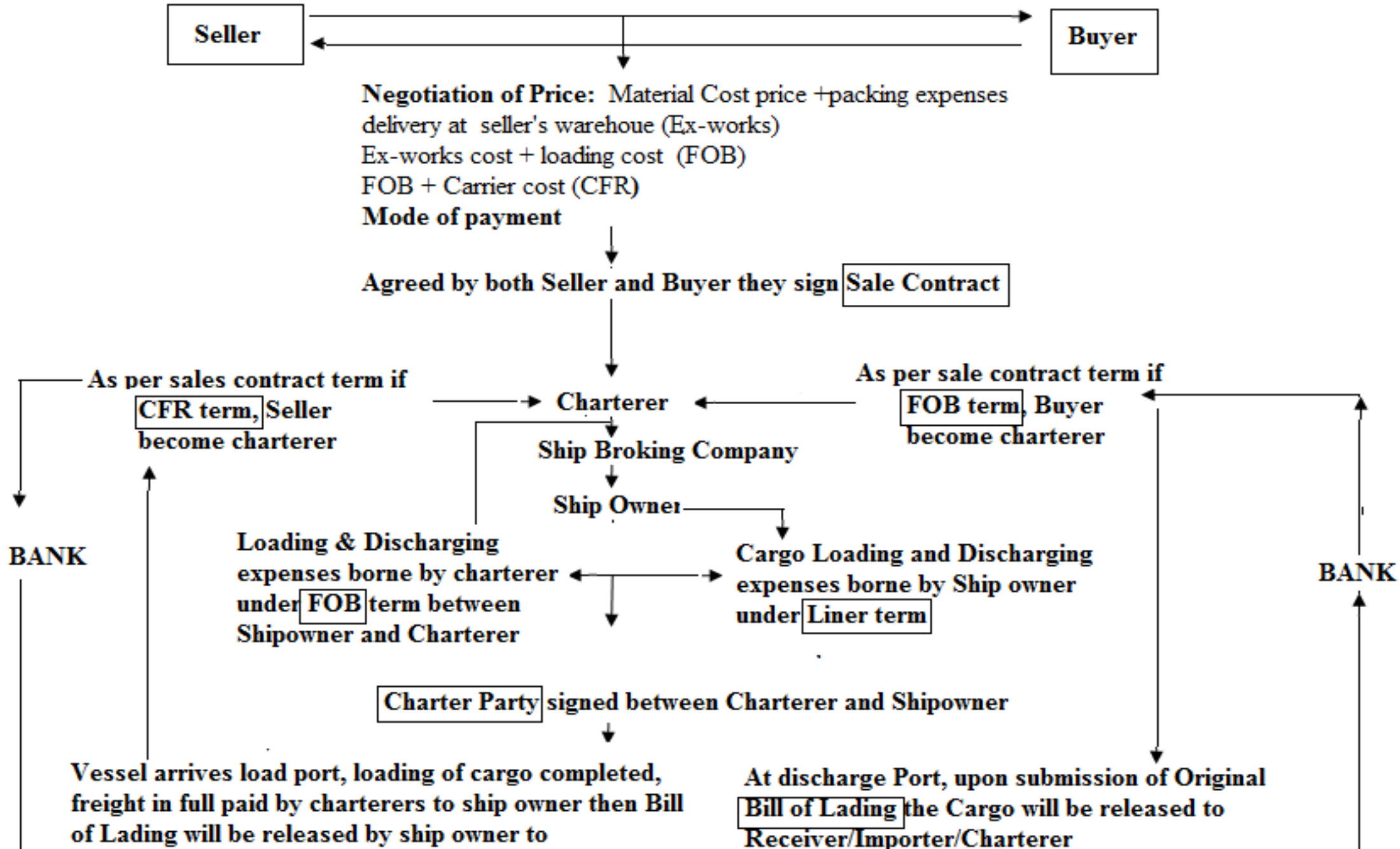


Ocean Region Code

Ocean Region	All Ocean Region	Pacific	Indian	Atlantic-West	Atlantic-East
Telephone, Facsimile	870	872	873	874	871


Registered owner
Correspondent Owner
Disponent Owner
Time Charterer
Voyage Charter
Tramp traffic (Free Traffic)
Liner Traffic
Voyage charterer or Time charterer sub charter or sub-let to Actual Exporter
Conscutive voyage
Single Voyage
General Cargo
Container trade
Slot sharing
Contract of Affreightment
Chartering in full
Heavy lift Ro-Ro
Space Charter

CHARTERING FLOW CHART



CHARTERING NEGOATIATIONS

CHATERER ⟷ **SHIP OWNER**

BROKING COMPANY

Main terms

Cargo name & Quantity
Load & Discharge port
Load port loading quantity per day
Discharge Port discharge quantity per day
Freight indication if any
Cargo readines date

Sub terms

Ship particulars such as name of ship, IMO number,call Sign, Classification Society, P&I Club, Valid certificates, Ship's Gross /Net/Dead weight, number of hatches/holds,crane & capacity, cargo Bale/Grain capacity, year of built. Draft, Beam, Air draft, mainly freight indication

LayCan, Lay Time, Detention & demurrage of ship and despatch
Freight payment term and term for releasing of Bill of Lading

FREIGHT CALCUATION FOR VOYAGE CHARTER

Register ship owner — **Ship building Cost or Purchae of second hand ship cost Bank, Share holders, Holdings or individual propeietor**

Bareboat charter — **Who agrees to pay daily charter hire till the life of the ship hence it is called demise charter. Probably the Demise charter can acquire ship during the life of ship**

Time Charter — **Who agrees to pay daily chare hire for a specific period of time such as six months, one year, five year and so on....**

As per Sale Agreement
Buyer CFR term Seller FOB term will become CHARTERER

Voyage Charter → **Who agrees to pay for a particular voyage per metric ton of cargo for a particular days agreed by Voyage charterer and if the days exeeded, he has to pay ship owner demurrage and if the ship is despatched quickly the ship owner pays despatch money to the Charterer**

VOYAGE CHARTERER

Loading and discharging expenses at load and discharge port Local Taxes, Custom charges , Port charges to accumulate total cargo at Dock .

SHIP OWNER

Daily charter hire payable to owners + bunker charges i.e. Fuel oil expenses at sea voyage + Diesel Oil expenses at Port stay + Lubricant oil expenses for both sea and at port. Any other ship & crew related expenses

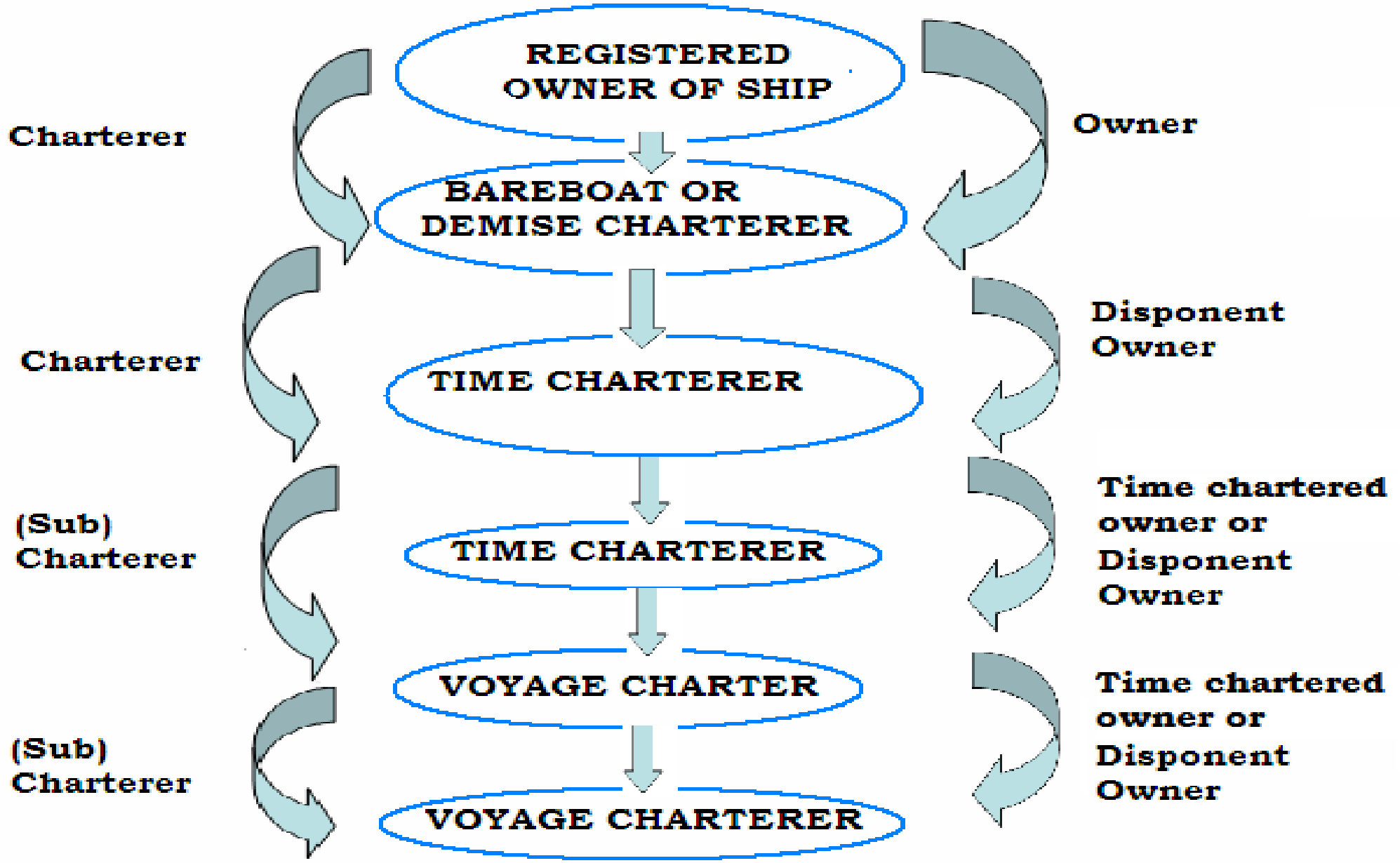
WILL ARRIVE TOTAL COST DEVIDED BY QUANTITY OF CARGO PER METRIC TON, ADD HIS PROFIT DEPENDING UPON BALTIC DRY INDEX /DEMAND & SUPPLY

OWNERSHIP

x %	xx % Ownership
/B	Bare-boat Charter
-MGMT	Commercial Management
-OP	Commercial Operations
REWING	Crewing
GMT	Ship under management
O	Managing Owner
P	Operator
WNER	Ship's owner
OOL	Ship employed in pool
OW	Part Owner
/C	Time Charter
C/BB	Time Charter/Bare-boat
-MGMT	Technical Management

RISK

Activity	Bareboat Charterer	Time Charterer	Voyage Charterer	Liner Shipping
Capital costs	Owner	Owner	Owner	Owner
Port charges	Charter	Charter	Owner	Owner
Time Risk in Port	Charter	Charter	Charter & owner	Owner
Loading and Unloading	Charter	Charter	Carter & Owner	Owner
Bunkers	Charter	Charter	Owner	Owner
Time risk at Sea	Charter	Charter	Owner	Owner
Canvassing/seeking Cargo	Charter	Charter	Owner	Owner
Manning & Crewing	Charter	Owner	Owner	Owner
Maintenance and Repair	charter/Owner	Owner	Owner	Owner
Hull ,War & P&I Insurance	charter/Owner	Owner	Owner	Owner


REGISTERED OWNER OF SHIP
Owner
Charterer
BAREBOAT OR DEMISE CHARTERER
Disponent Owner
Charterer
TIME CHARTERER
Time chartered owner or Disponent Owner
(Sub) Charterer
TIME CHARTERER
VOYAGE CHARTER
Time chartered owner or Disponent Owner
(Sub) Charterer
VOYAGE CHARTERER

Steamer agents

Ship owners and charterers cannot be present at every port their ship docks at, or watch over every deal secured for employment; there simply isn’t enough time if they want to build their business. But, as you would expect, they also do not want to wash their hands of the day-to-day operations of these multi-million dollar assets. The middle ground comes in the form of a Ship’s Agent, a person or firm who transacts all business on behalf and under the direction of a ship owner or charterer

What is it like working as an Agent?

The list of ‘jobs’ that need to be done when a ship calls at a port is exhaustive – arranging for loading and unloading of cargo, purchasing stores, arranging crew changes, organising inspections, booking repairs… and so on.

Add to that the need to have local contacts in every port that the ship calls to successfully, and cost effectively, perform those duties, and the importance of a local agent becomes clear.

Acting for, or on behalf of, another, Agents provide an onsite operations person with knowledge of the ins and outs of conducting business in a particular port, in locations where the ship owner or operator may not have an office or personnel.

FLOW CHART OF AGENCY WORK

Buyer (Importer) charters ship for FOB term shipment

Seller (Exporter) charters ship for CFR term shipment

BROKING COMPANY

Owner

Charterer's Agents

Owners Agents

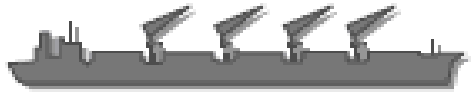
Government & Statutory Bodies involved :

Customs Authorities

Port Authorities

Immigration

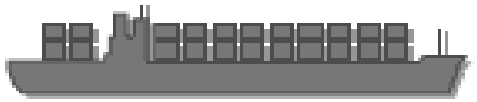
Port Health



Bulk ship

Breakbulk ship

Pure Car Carrier

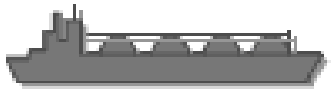


Container ship

Passenger ship

Tanker ship

LPG tanker ship



LNG tanker ship

Service providers involved:

Shipping Agents

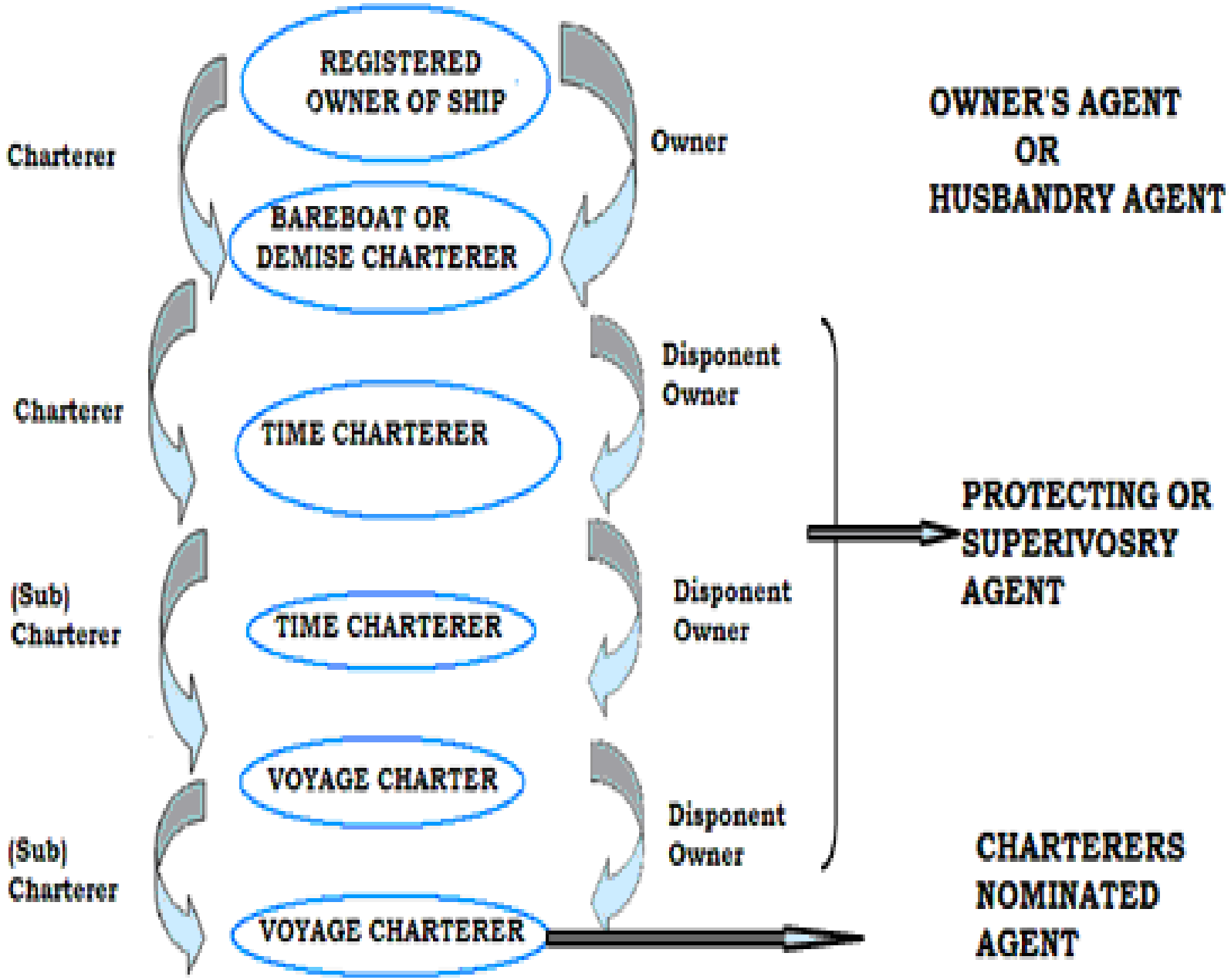
Stevedores

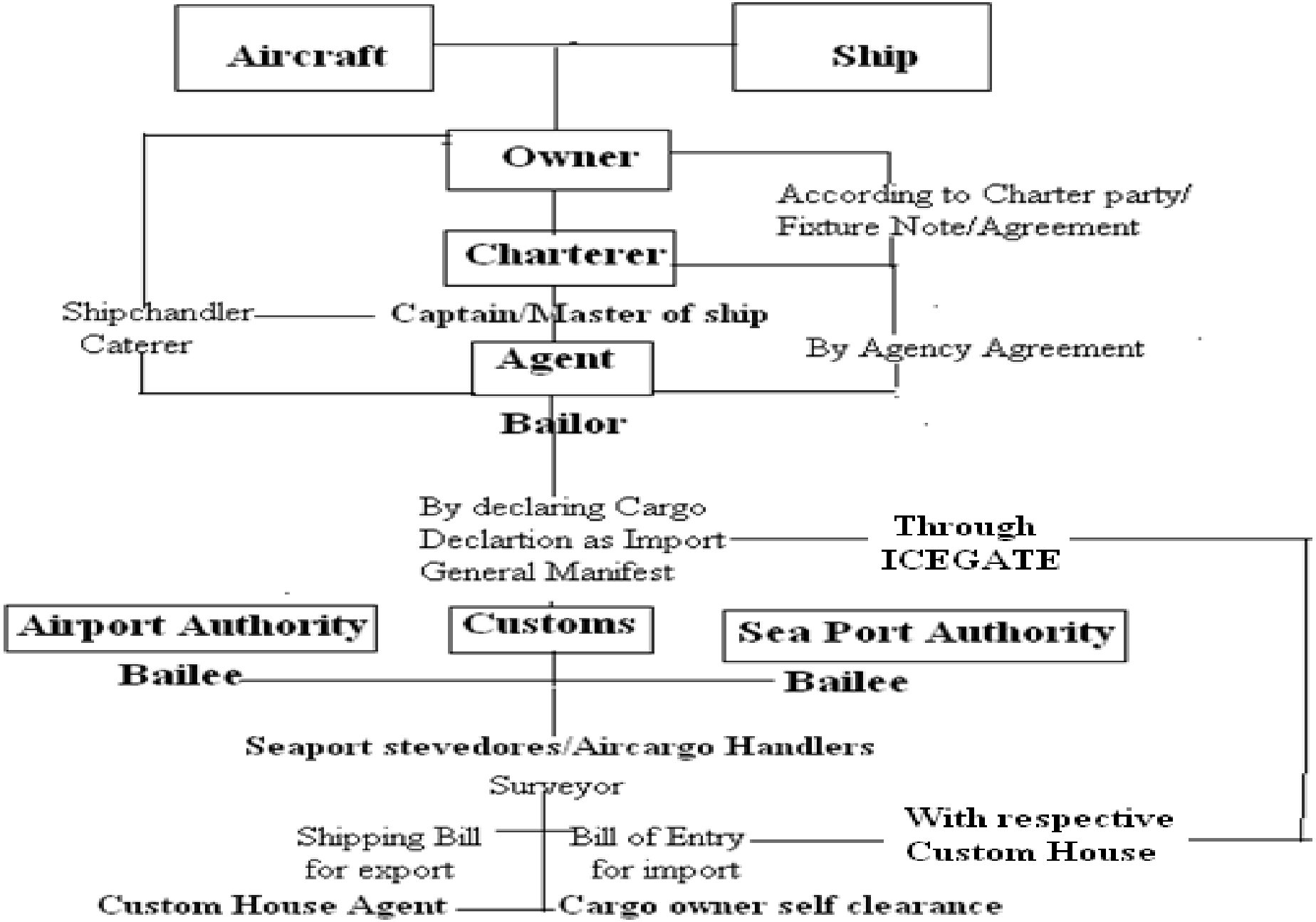
Custom House Agents

Clearing & Forwarding Agents

Transporters

Cargo Operation by Pipelines to storage tanks


REGISTERED OWNER OF SHIP
Charterer
Owner
BAREBOAT OR DEMISE CHARTERER
Charterer
Disponent Owner
TIME CHARTERER
(Sub) Charterer
Disponent Owner
TIME CHARTERER
VOYAGE CHARTER
(Sub) Charterer
Disponent Owner
VOYAGE CHARTERER
OWNER'S AGENT OR HUSBANDRY AGENT
PROTECTING OR SUPERIVOSRY AGENT
CHARTERERS NOMINATED AGENT


Aircraft
Ship
Owner
According to Charter party/
Fixture Note/Agreement
Charterer
Shipchandler
Caterer
Captain/Master of ship
By Agency Agreement
Agent
Bailor
By declaring Cargo
Declartion as Import
General Manifest
Through
ICEGATE
Airport Authority
Customs
Sea Port Authority
Bailee
Bailee
Seaport stevedores/Aircargo Handlers
Surveyor
Shipping Bill
for export
Bill of Entry
for import
With respective
Custom House
Custom House Agent
Cargo owner self clearance

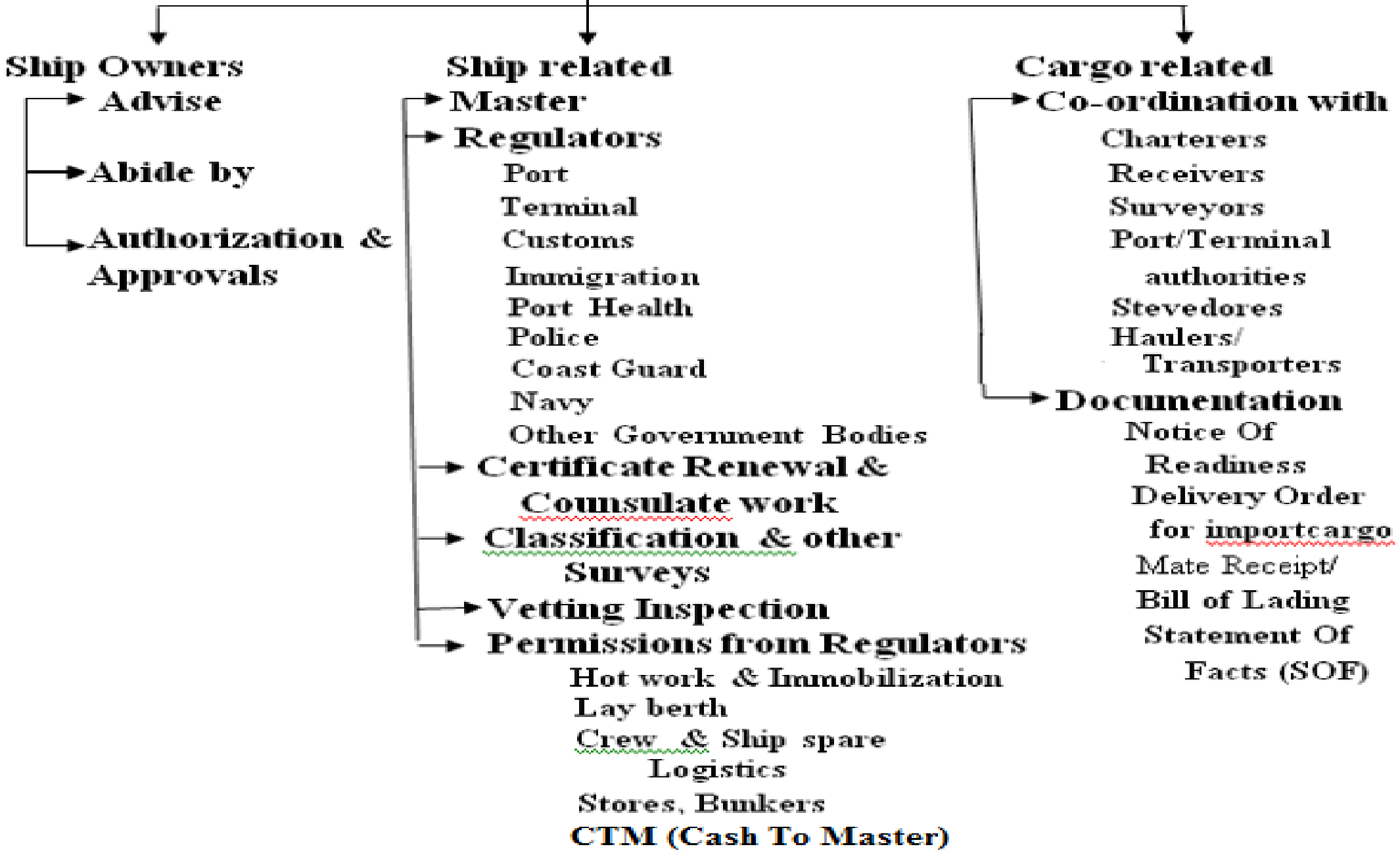
MAIN DIFFERENCE BETWEEN TRAMP AND LINER SHIPPING

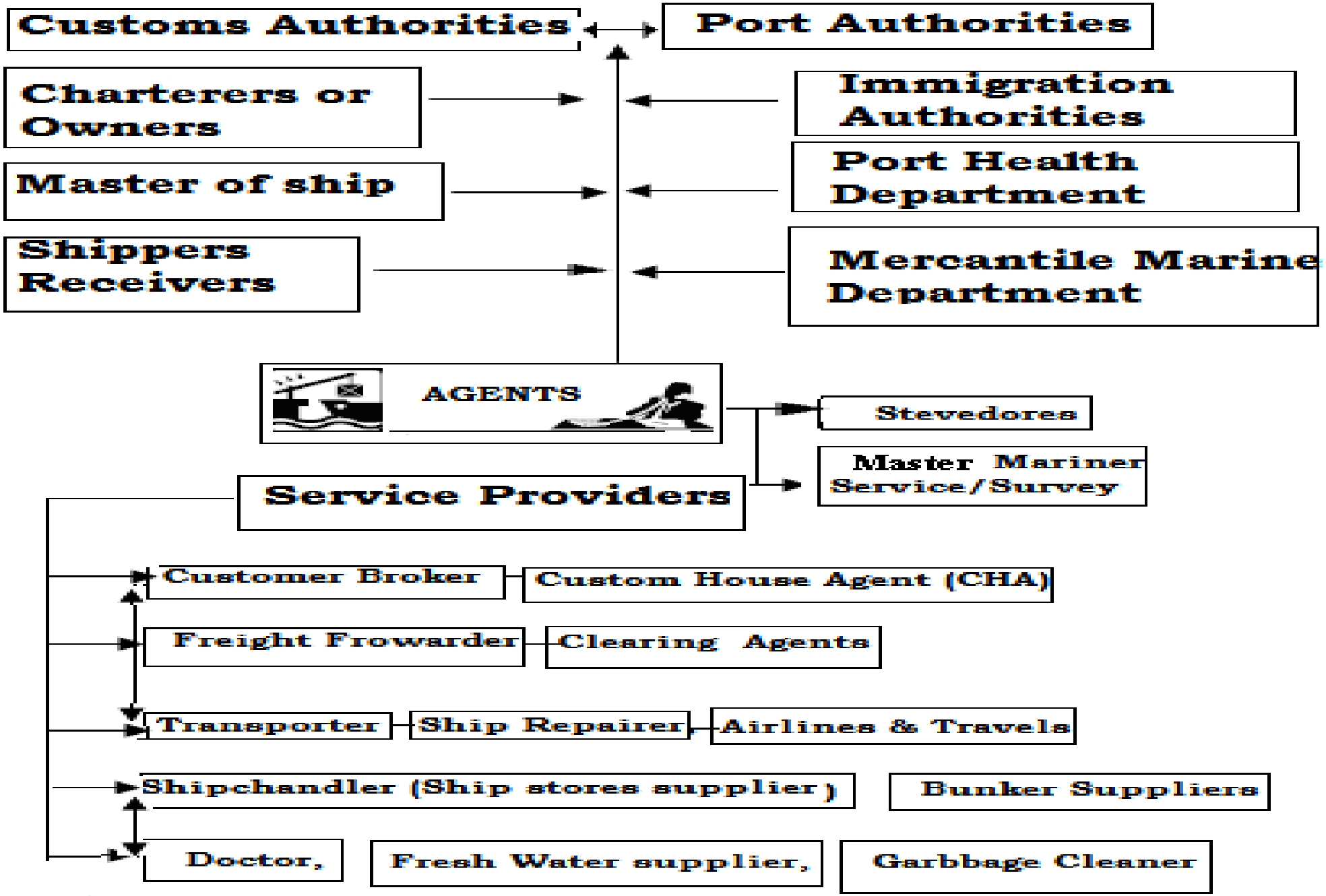
TRAMP SHIPPING	LINER SHIPPING
Operates indeterminate dates	Operate predetermined dates
Subject to inducement of cargo	Offers regual scheduled service
Lower fixed cost	Higher fixed cost
Placement of vessels depending upon the volume of cargo	Number of vessels to put in Liner service is determined by ports of call, frequency, distance and speed
Tramp vessel can wait till cargo is filled up.	Vessels arrives & sails port empty or load as per schedule
Overheads is less	Administrataive Overheads are high
Cargo booking done through Ship or cargo brokers	**Cargo Booking** will be taken care by Marketing & Sales personnel

Principal	Agents	Services
Registered Owner/ Bareboat charterer/ Time Chartererer	Owner's Agent	If charter party allows the ownes or Bareboat or Time charterer to appoint their own agents, at the load and discharge ports to handle port/customs entry & clearance port disbursements by paying port dues, pilotage,berth hire, light house dues and all other matters, those agents are called 'Owners Agents'
Registered Owner/ Bareboat charterer/ Time Charterer/	Husbandry agent	Shipowners appoint their own agents to attend non-cargo matters specifically those matters related to vessels repairs, supplies of stores, provision,bunker, survey and any other reasons for the vessel to call..
Owner or Time charterer	Protecting or Supervisory agent	In this case, the owners and charterers appoint individually their agent to protect their interest when under the charter party the vessel is consigned to another's agent. For example according to the Charter party owners appoint their agent, to protect charterers interest, charterers may appoint their agent . If the Charter Party permits Charterers to appoint agent, then Owners nominate their agents to protect their interest.
Voyage charterer	Charterer's nominated agent	As the charterers have the right to nominate their agents at load and discharge port to handle all their requirements, port disbursements by paying port dues, pilotage, berth hire, light house dues. Some time owners also may also ask them to look after their interests and vessel & Master's requirements as an additional responsibility. They are called as 'Charterered nominated agents'

Tramp Ship Agent

(Agency work flow chart)




Customs Authorities
Port Authorities
Charterers or Owners
Immigration Authorities
Master of ship
Port Health Department
Shippers Receivers
Mercantile Marine Department
AGENTS
Stevedores
Master Mariner Service/Survey
Service Providers
Customer Broker
Custom House Agent (CHA)
Freight Frowarder
Clearing Agents
Transporter
Ship Repairer
Airlines & Travels
Shipchandler (Ship stores supplier)
Bunker Suppliers
Doctor,
Fresh Water supplier,
Garbbage Cleaner

AGENTS DUTIES AND RESPONSIBILLITIES WITH PORT AUTHORITIES:

BEFORE ARRIVAL OF VESSEL:
VESSEL'S PARTICULARS, CARGO DETAILS, STEVEDORE'S DETAILS, PLANNING OF CARGO OPERATION,ARRANGMENTS OF DIRECT RECEIPT OF HEAVY LIFT CARGO FROM SHIP, FOR OBTAINING SUITABLE BERTH.

ONCE SUITABLE BERTH IS ALLOTTED BY PORT AUTHORITIES:
PAYMENT OF MARINE DUES SUCH AS PORT DUES, PILOTAGE, BERTH HIRE FOR CALCULATED STAY OF SHIP AT BERTH

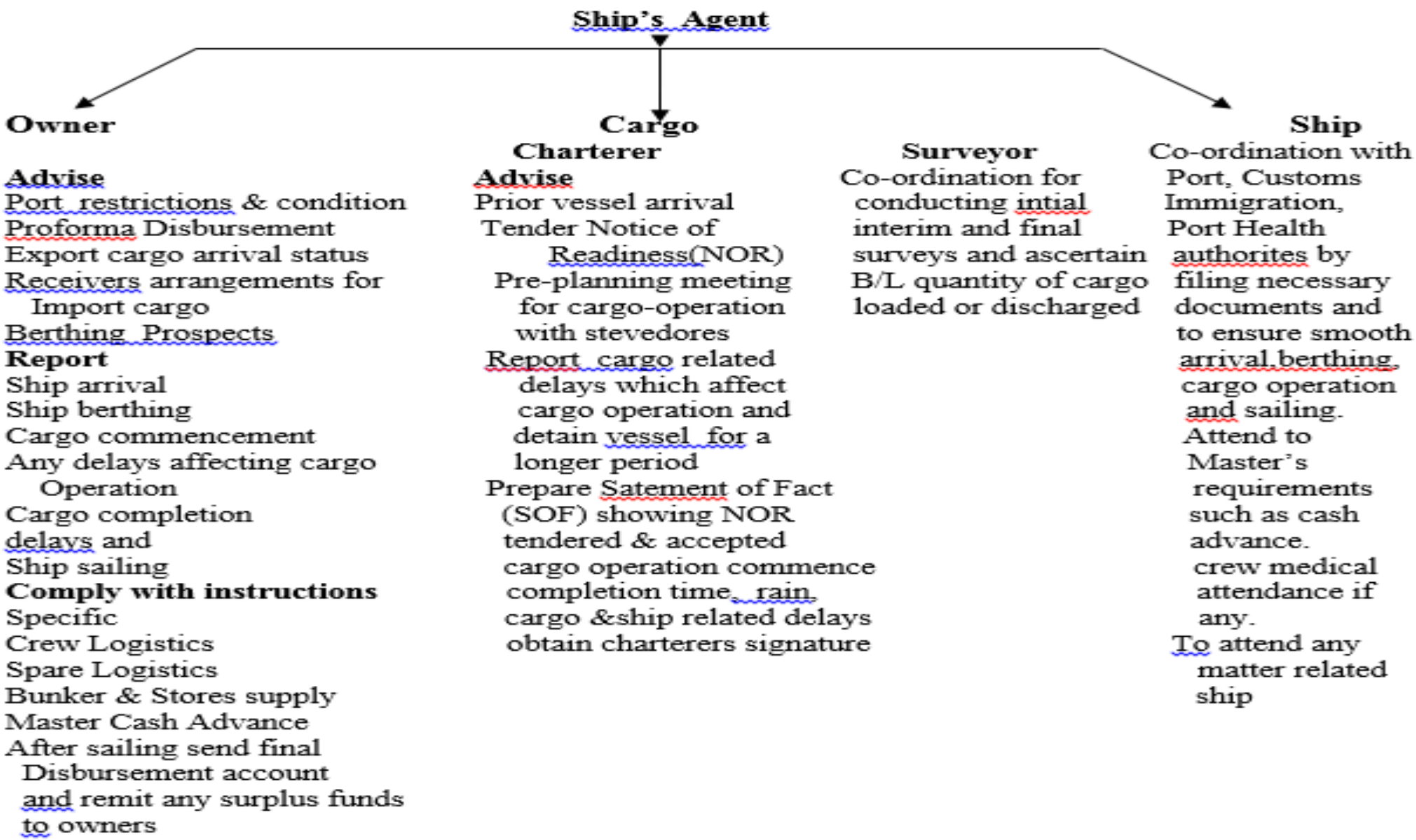
CO-ORDINATION WITH TRAFFIC DEPARTMENT FOR ARRANGEMENT OF RECEIVING CARGO,

CO-ORDINATION WITH SHIPPERS OR RECEIVERS.CUSTOM HOSUE AGENTS OR FREIGHT FORWARDERS, CLEARING AGENTS FOR SUBMISSION OF CUSTOMS & PORT DOCUMENTS

AFTER VESSEL'S BERTH (COMING ALONG SIDE);
ARRIVAL PARTICULARS, COPY OF SHIP'S REQUIRED CERTIFICATES TO CONFIRM THE TONNAGE

DURING CARGO OPERATION: THE AGENT OR THEIR REPRESENTATIVE TO BE PHYSICALLY AVAILABLE AT THE SHIPSIDE ALL THE TIME TO SUPERIVSE THE CARGO OPERATION.

FOR EXPORT CARGO THE AGENT SHOULD ENSURE IN CONFIRMITY WITH PORT TRUST TALLY THAT THE CARGO LOADED ON BOARD IN APPARANT GOOD CONDITON, MASTER AGREES TO SIGN CLEAN MATE RECEIPT OR AUTHORISE THE AGENT TO RELEASE THE BILL OF LADING AND FOR IMPORT CARGO ALL THE CARGO LANDED IN GOOD AND SOUND CONDITION.


Ship's Agent
Owner
Advise
Port restrictions & condition
Proforma Disbursement
Export cargo arrival status
Receivers arrangements for Import cargo
Berthing Prospects
Report
Ship arrival
Ship berthing
Cargo commencement
Any delays affecting cargo Operation
Cargo completion
delays and
Ship sailing
Comply with instructions
Specific
Crew Logistics
Spare Logistics
Bunker & Stores supply
Master Cash Advance
After sailing send final Disbursement account and remit any surplus funds to owners
Cargo
Charterer
Advise
Prior vessel arrival
Tender Notice of Readiness(NOR)
Pre-planning meeting for cargo-operation with stevedores
Report cargo related delays which affect cargo operation and detain vessel for a longer period
Prepare Satement of Fact (SOF) showing NOR tendered & accepted
cargo operation commence
completion time, rain,
cargo &ship related delays
obtain charterers signature
Surveyor
Co-ordination for conducting intial interim and final surveys and ascertain B/L quantity of cargo loaded or discharged
Ship
Co-ordination with Port, Customs Immigration, Port Health authorites by filing necessary documents and to ensure smooth arrival,berthing, cargo operation and sailing.
Attend to Master's requirements such as cash advance.
crew medical attendance if any.
To attend any matter related ship

PROCEDURE TO BE FOLLOWED AND DOCUMENTS TO BE SUBMITTED TO CUSTOMS DEPARTMENTS:

FILING OF SHIP'S ARRIVAL PARTICULARS

FILING OF IMPORT GENERAL MANIFEST

PAYMENT OF INDIAN LIGHT HOUSE DUES

PAYMENT OF CUSTOMS OVERTIME

INFORM SHIP'S PARTICULARS AND ARRIVAL DETAILS TO RUMMAGING DEPARTMENT, CENTRAL INTELLIGENCY UNIT, DOCK INTELLIGENT UNIT,IMPORT, EXPORT MANIFEST DEPARTMENT

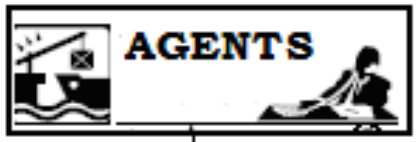
CUSTOMS BOARDING DOCUMENTS REQUIRED:
LAST PORT CLEARANCE
SHIP'S STORES LIST IN DUPLICATE
CREW LIST IN DUPLICATE
DECK CARGO MEMO CERTIFYING THE QUANTITY IN DUPLICATE
CERTIFYING NO OPIUM ON BOARD THE SHIP
LIST OF FAVOUR PARCEL IF ANY
SHIPP'S CURRENCY (INDIAN & FOREIGN) DECLARATION
LIST OF ARMS & AMMUNICATION ON BOARD (SHIP'S PROPERTY)
PRIVATE PROPERTY LIST OF CAPTAIN, OFFICERS AND CREW CONTAINING VALUABLE ARTICLES, CURRENCY (INDIAN & FOREIGN) AND PROPERTY WITH THEM ON SHIP INCLUDING DUTIABLE AND VALUABLES
INDIAN LIGHT HOUSE DUES
CUSTOMS OVER TIME PAID CHALLAN

DOCUMENTS TO BE SUBMITTED TO CUSTOMS OFFICE WITHIN 24 HOURS ARRIVAL OF SHIP:

SHIP'S STORE LIST AND SHIP'S, CAPTAIN'S,OFFICERS' & CREWS' PRIVATE PROPERTY LIST
BOARDING OFFICER'S CERTIFIED DECLARTION OF DECK CARGO, NO OPIUM,ARMS & AMMUNICATION, GOLD SILVER CARRIED AS CARGO, COPIES OF SHIP'S CERTIFIATES, LOAD LINE CERTIFICATES, LIGHT HOUSE DUES, SAFETY EQUIP MENT,RADIO & WIRELESS EQUIPMENTS CERTIFICATES.
FOR OIL TANKERS: LODING CERTIFICATE OBTAINED BY THE MSTER FROM LOD PORT, CARGO FLASH POINT CERTIFI CATE, QUANTITY OF CARGO ON BOARD ETC.

BEFORE DEPARTURE OF SHIPS TO BE SUBMITTED :

APPLICATION FOR PORT CLEARANCE, NO OBJECTION FROM INCOME TAX, CLEARANCE CERTIFICATES FROM PORT, IMMIGATION & COPY OF LIGHT HOUSE DUES CERTICATE, CHANGE OF COMMAND OF SHIP



IMMIGRATION DEPARTMENT

Advise vessel's arrival particuars along with copy of crew list.

Intimate Immigration Officer vessel's berthing time and request in the prescribed format along with crew list.

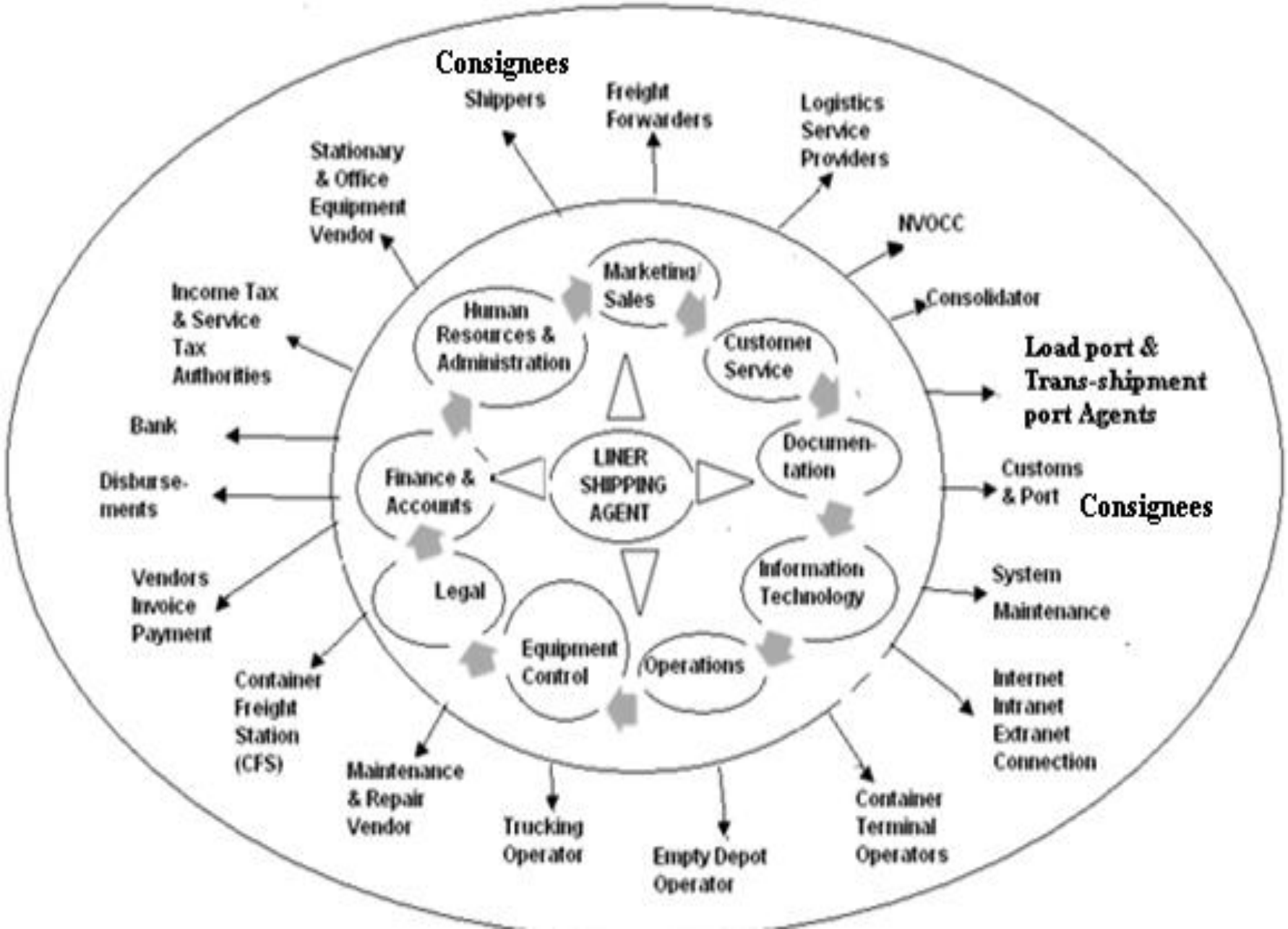
When the Immigration officer boards the vessel, make the Master of the vessel to present his, officers and crew's and if cruise/passenger ship to produce all passenger's passport for verification and to issue them temporary shore passes. (As per Immigration rules issuance of shore passes to Srilankan, Pakistani & Bangaladeshi crew is restricted

PORT HEALTH DEPARTMENT

Instruct Master of ship to apply for Radio Free Pratique by sending Pratique message by cable or fax /email through agent to grant free pratique

If ship is coming from Yellow fever area request Port Health Officer to board vessel to check and issue clearance to be brought from anchorage to suitable berth

Request Medical officer to board the vessel upon berthing or at outer anchorage to check crew for any contagious & infectious disease and inspect shi's galley (kitchen) for mortality of mice or insects


Consignees
Shippers
Freight Forwarders
Logistics Service Providers
NVOCC
Consolidator
Load port & Trans-shipment port Agents
Consignees
Customs & Port
System Maintenance
Internet Intranet Extranet Connection
Container Terminal Operators
Empty Depot Operator
Trucking Operator
Maintenance & Repair Vendor
Container Freight Station (CFS)
Vendors Invoice Payment
Disburse-ments
Bank
Income Tax & Service Tax Authorities
Stationary & Office Equipment Vendor
Marketing/ Sales
Customer Service
Documen-tation
Information Technology
Operations
Equipment Control
Legal
Finance & Accounts
Human Resources & Administration
LINER SHIPPING AGENT

ISO container types and size

20ft

High Cube

40ft

Open top

Garment on Hanger (GOH container)

Tank container

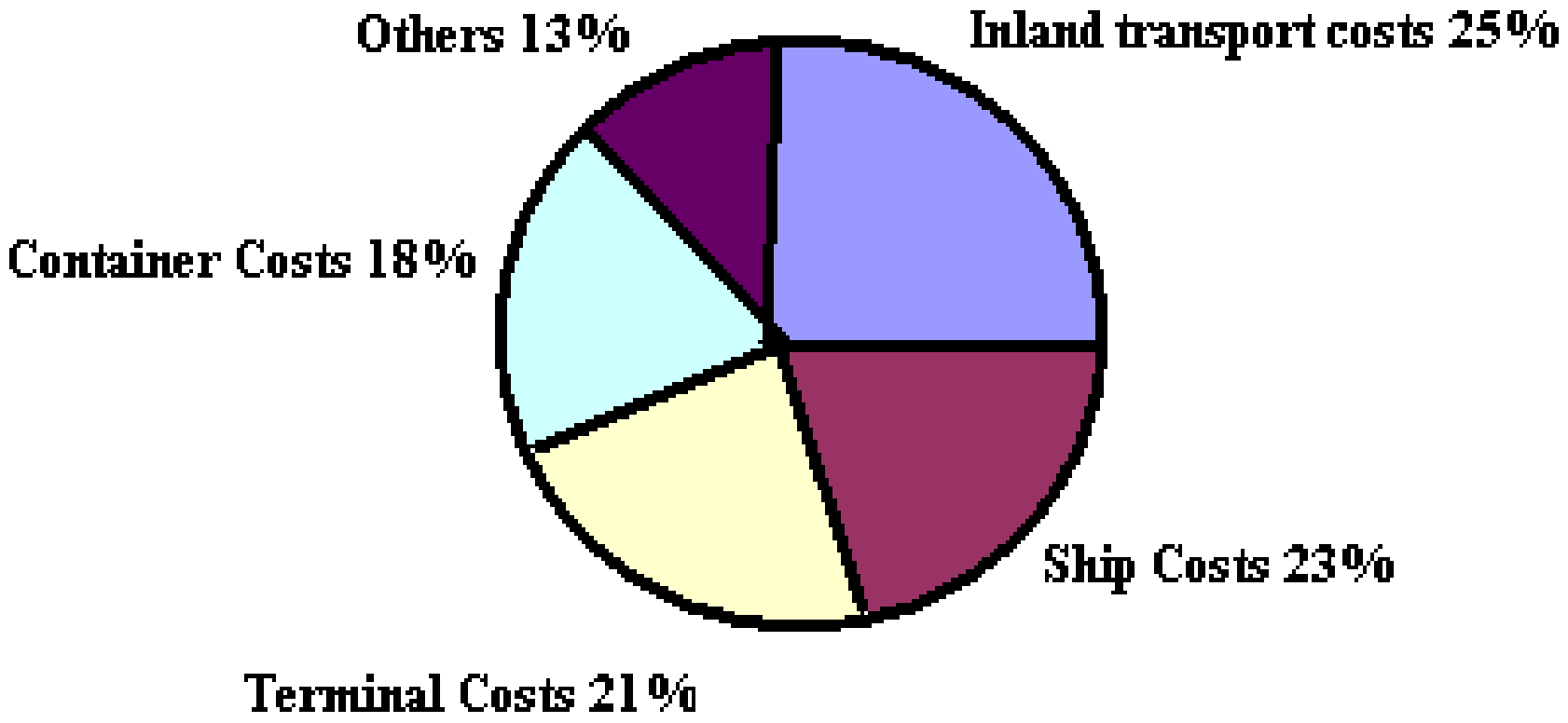
Reefer 20’ & 40’

Flat Racks

Container terminal


Rail mounted
Gantry Cranes
Container
ship
Wharf
Container
Parking
Yard

Freight Rate Mechanism



Freight components

- **INDICATIVE CALCULATION – OCEAN FREIGHT**
- 1. Basic Freight (FRT)
- 2. Transport Additional(Where applicable)
- 3. CAF on 1 and 2 (where applicable)
- 4 BAF**/FAF d(**)**
- 5. Any Other surcharges and Ancillar charges

Surcharges

Bunker Fuel — Compensates for wide fluctuations in marine bunker fuel and diesel oil at key (BAF/FAF) transpacific load ports.
Congestion — Addresses costs related to schedule delays, rerouting of cargo and other impacts from sudden or sustained port congestion.
Currency(CAF) — Covers increased local currency operating costs in Asian countries relative to U.S. dollar-denominated freight charges and revenues.

Feeder — Covers sudden increases in spot market rates for connecting vessel and inland barge feeder service in Asia.
War Risk — Addresses higher insurance premiums, shipment rerouting or rescheduling, and other increased costs serving countries at risk of war or armed conflict.

Container Service — Covers cleaning, fumigation, maintenance and repair and other services to container equipment after use.

Documentation Fee — Fee applied at origin and/or destination to offset rising staffing, training, equipment and information systems costs relating to increased volume and complexity of documentation.
Hazardous Rail Security — Covers security-related charges paid to U.S. railroads for intermodal shipments of hazardous cargo.

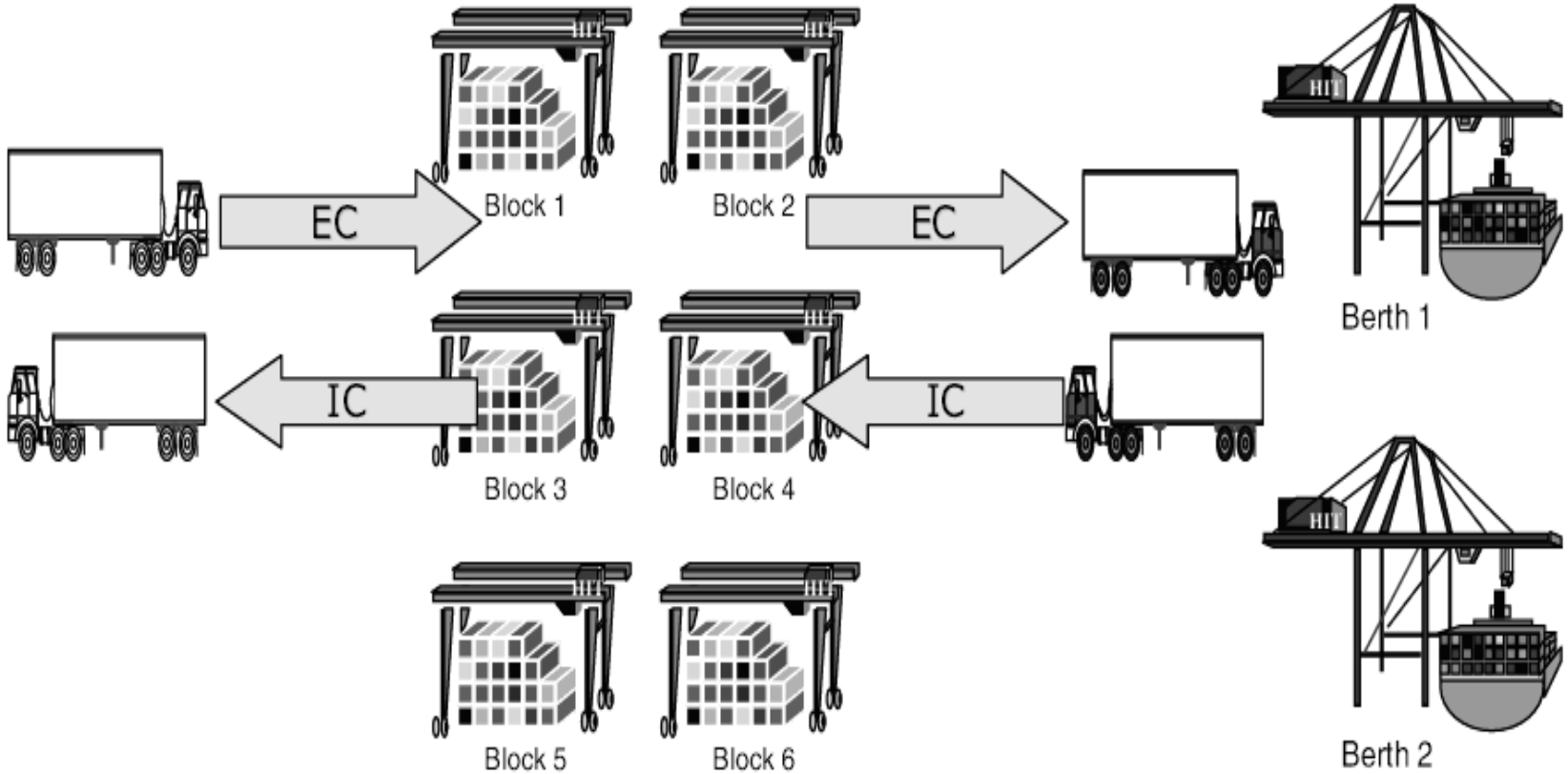
Terminal Handling — Reflects shoreside handling costs at origin port, from receipt of the container at the CY or CFS terminal through its loading onto the vessel. Charges vary by port, carrier and services performed; special charges may apply to refrigerated, hazardous or other cargo requiring additional handling.

Ancillary charges …contd..

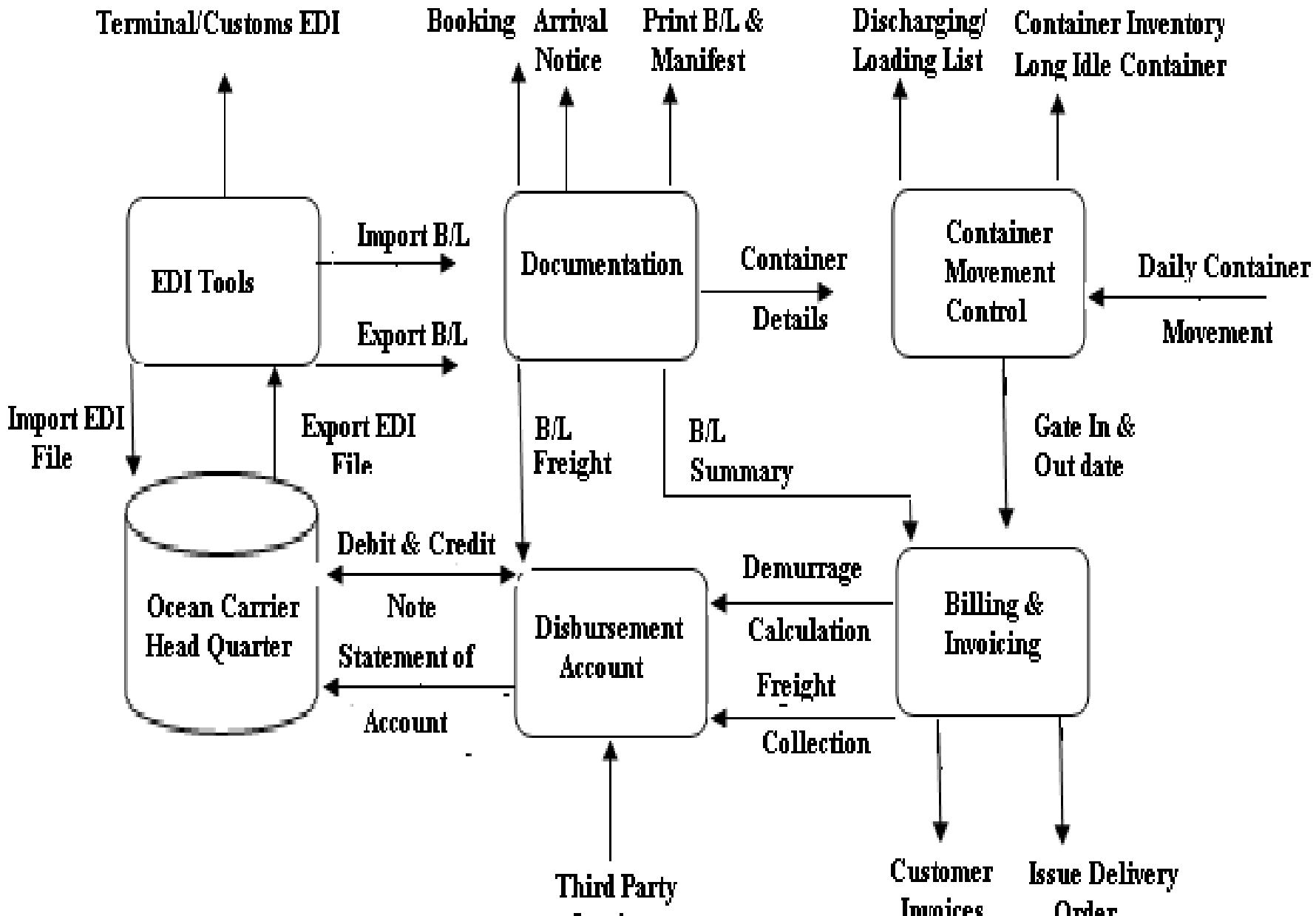
Detention — Period of time container and/or chassis is held by receiving party at its premises after delivery

Demurrage — Period of time loaded container remains at destination terminal awaiting pickup by shipper or consignee.

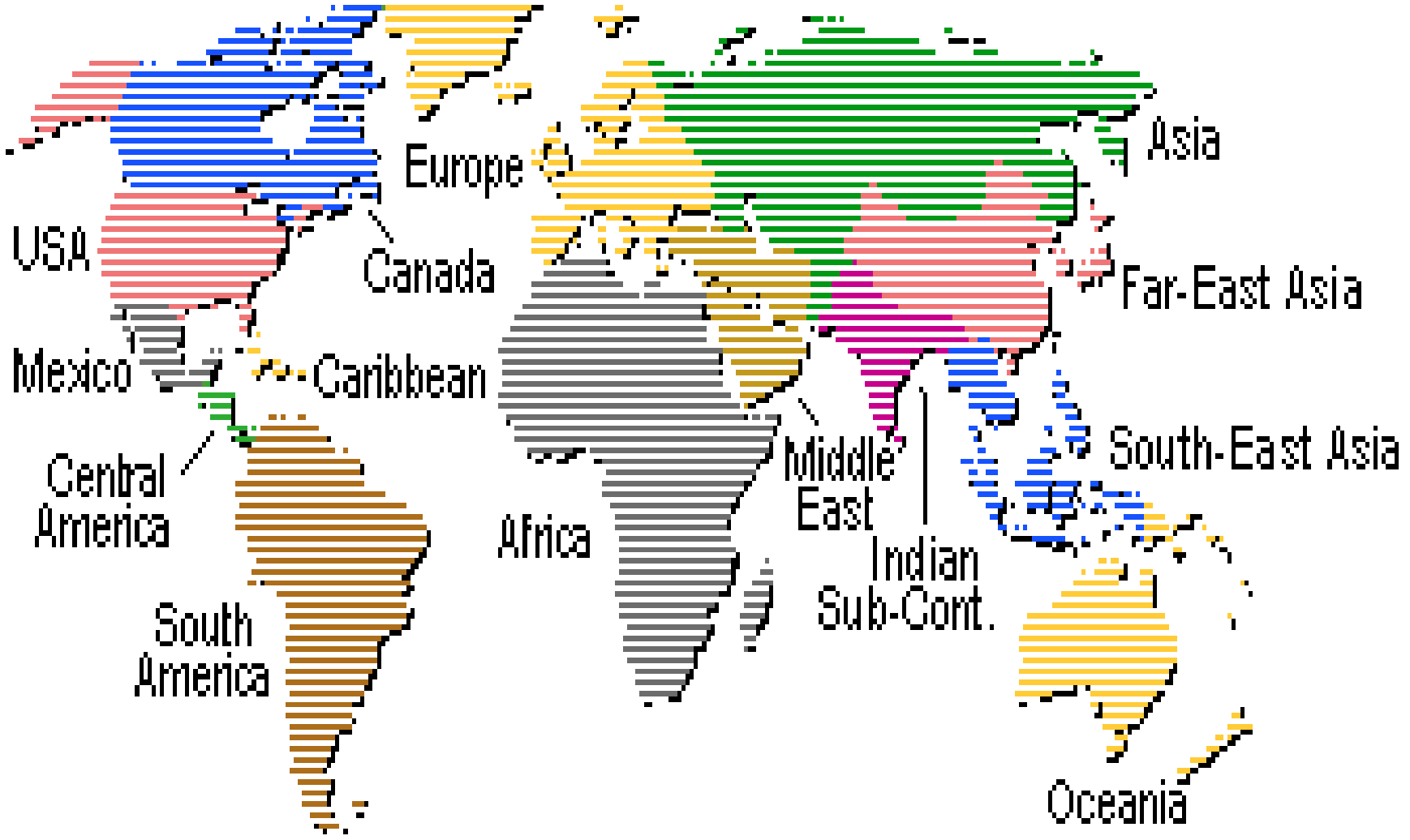
Drayage — Trucking of container and/or cargo on behalf of the customer within a port area, to and from an off-dock CY or CFS or locally for pickup or delivery

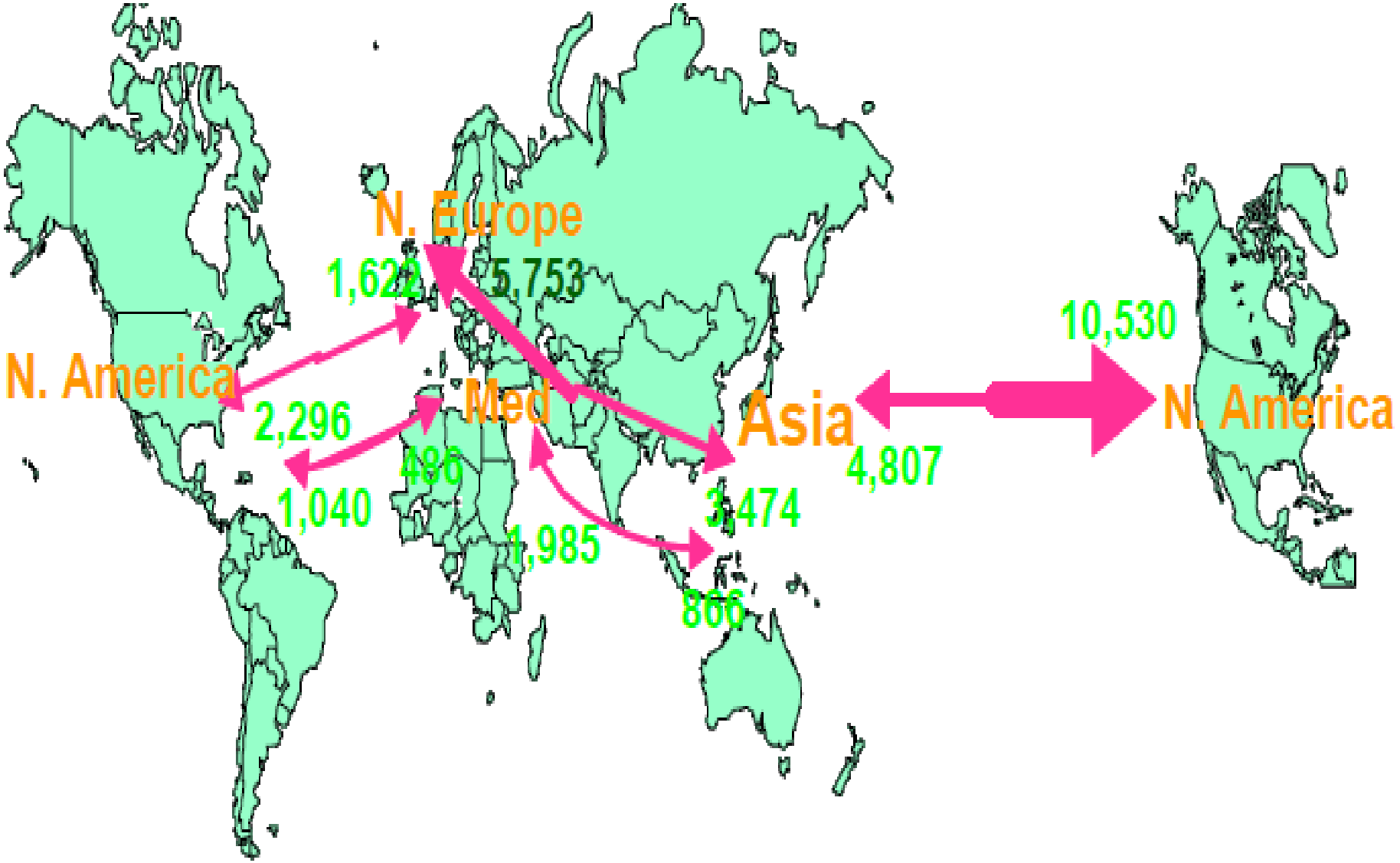


Gate Complex	Container Yard	Berth
Data: 400 Export Containers to go for storage : :	Data on Blocks B1: 40 Export Containers to Berth 1 10 Export Containers to Berth 4 20 Import Containers to Gate : :	Data on Berths Berth 1: 180 Import Containers to go for storage : :


Terminal/Customs EDI
Booking
Arrival Notice
Print B/L & Manifest
Discharging/ Loading List
Container Inventory
Long Idle Container
EDI Tools
Import B/L
Export B/L
Documentation
Container Details
Container Movement Control
Daily Container Movement
Import EDI File
Export EDI File
B/L Freight
B/L Summary
Gate In & Out date
Debit & Credit Note
Statement of Account
Ocean Carrier Head Quarter
Disbursement Account
Demurrage Calculation
Freight Collection
Billing & Invoicing
Third Party
Customer Invoices
Issue Delivery Order

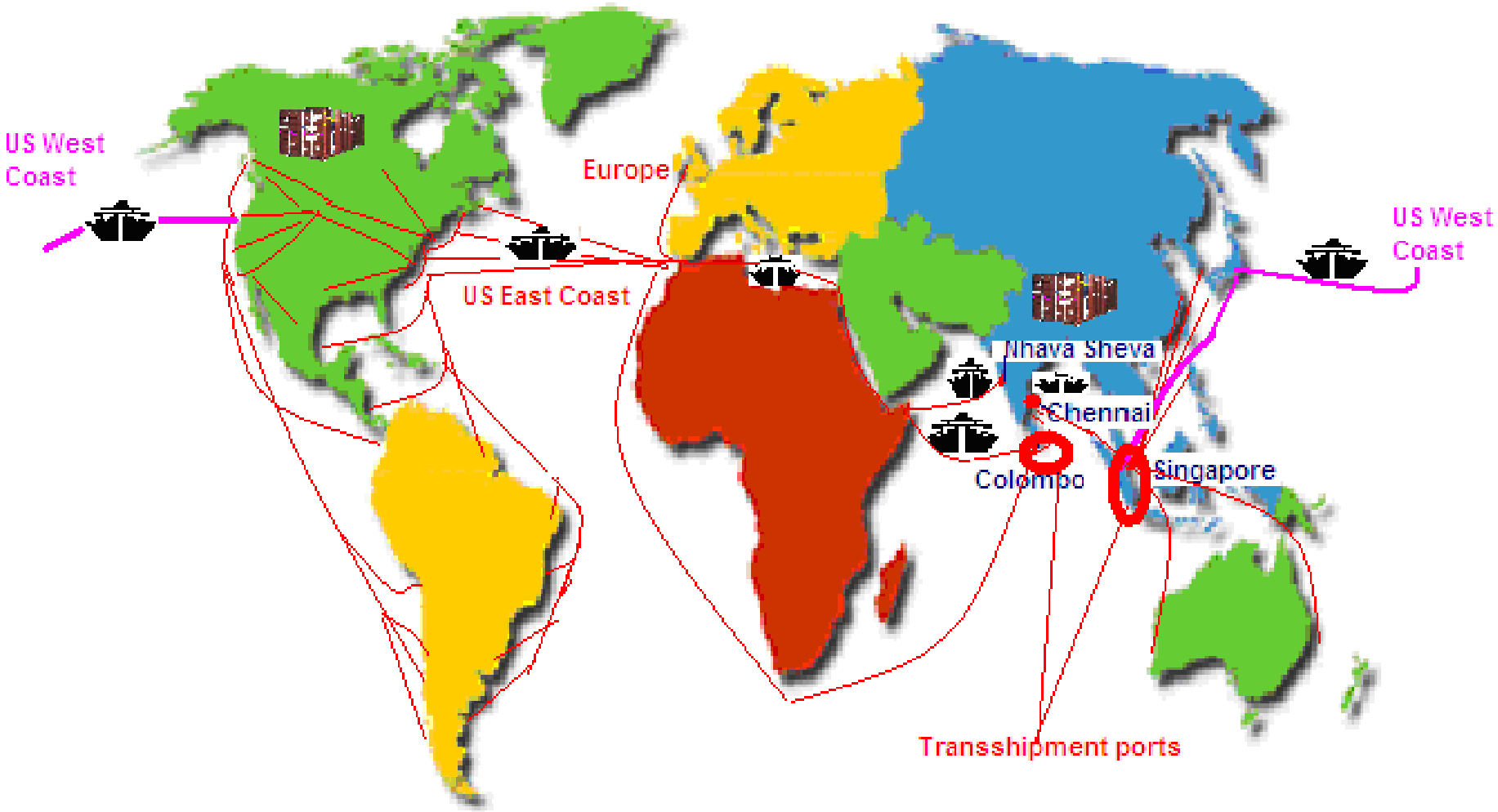
Shipping Sectors



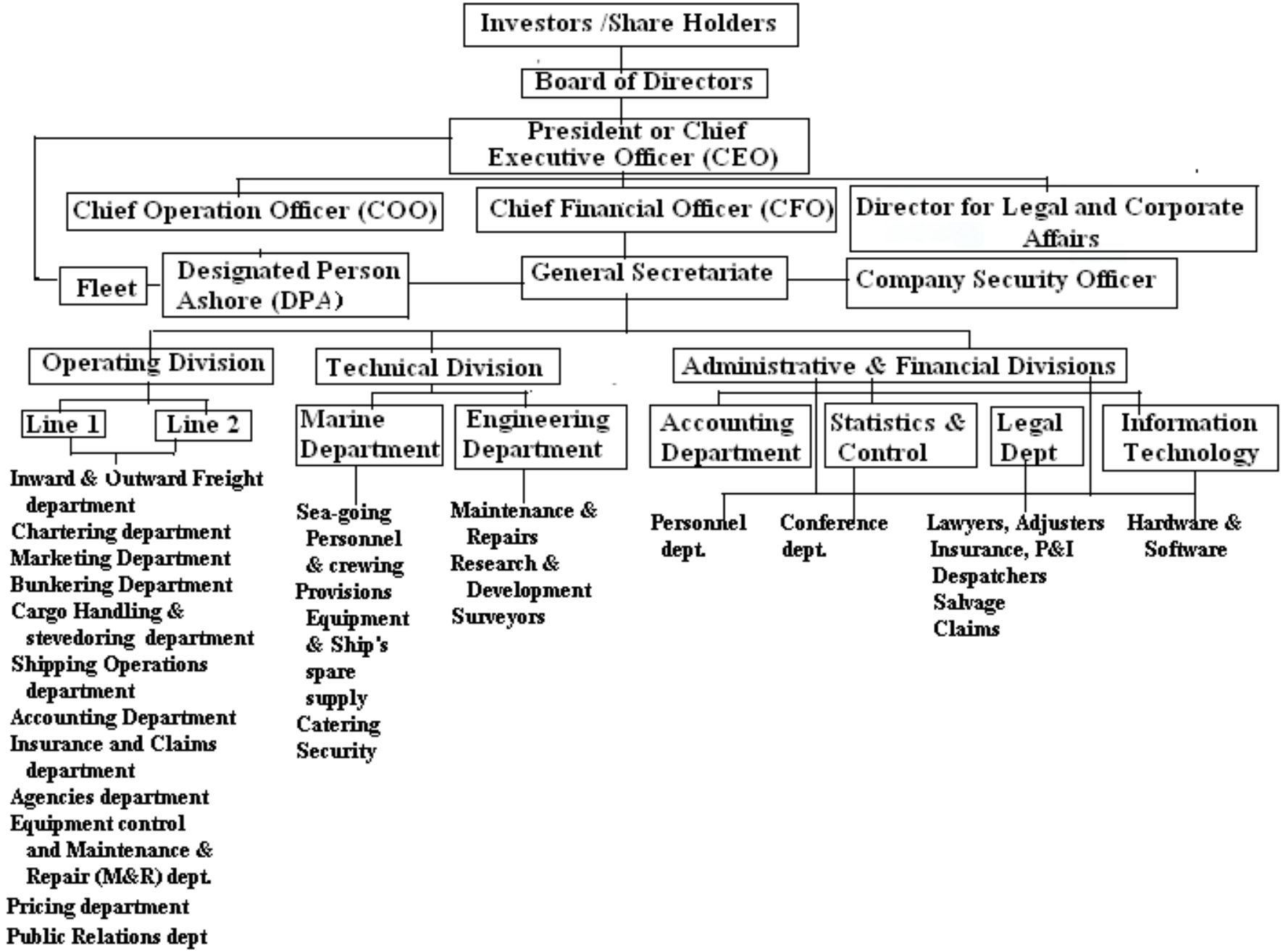


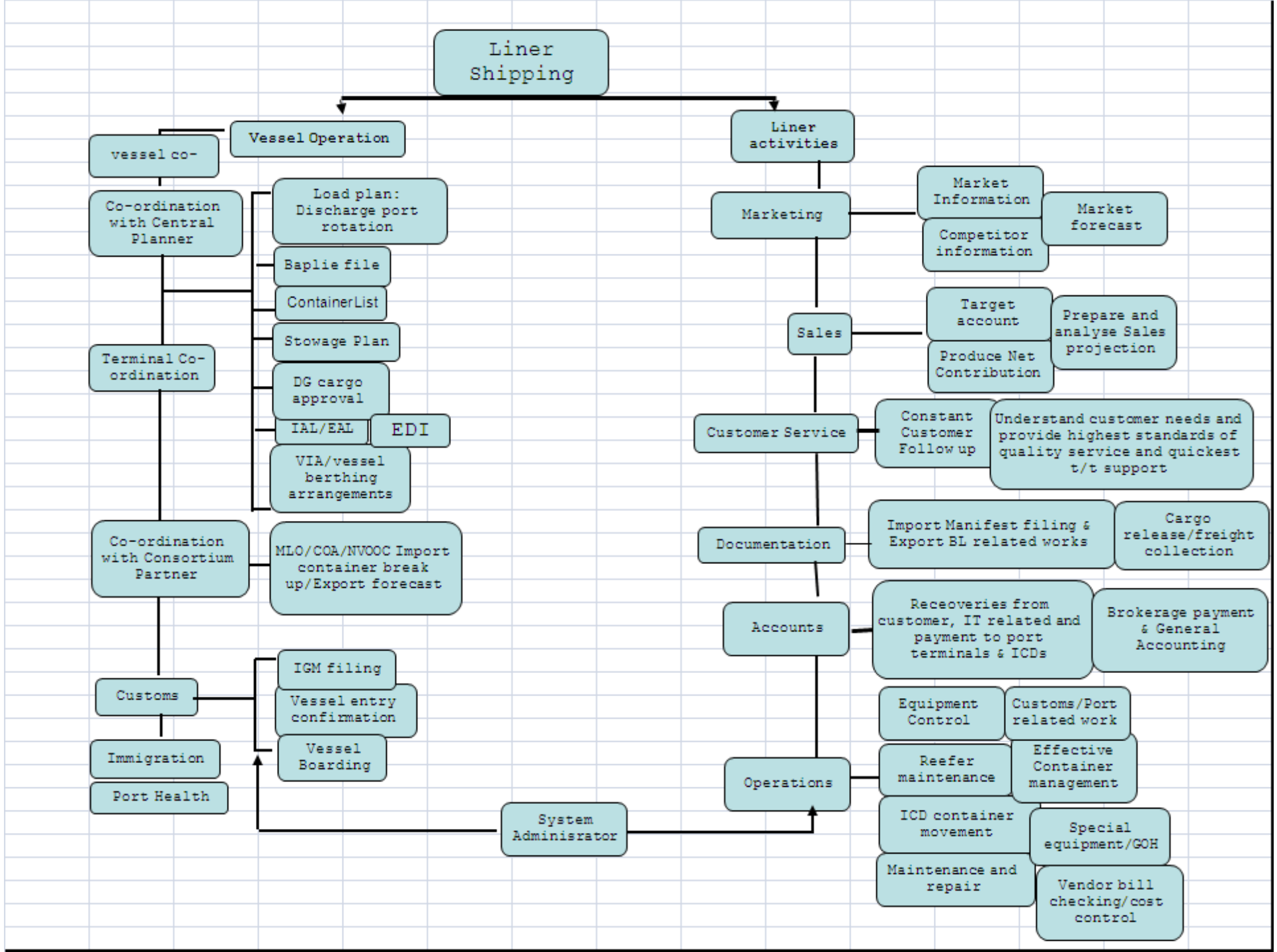
(Example only) Container trade flow volumes of east/west axis in 2004 (unit: 1000 teu)

CONTAINER TRAVELLING FROM A PLACE TO PLACE THROUGH MOTHER VESSEL AND FEEDER VESSEL



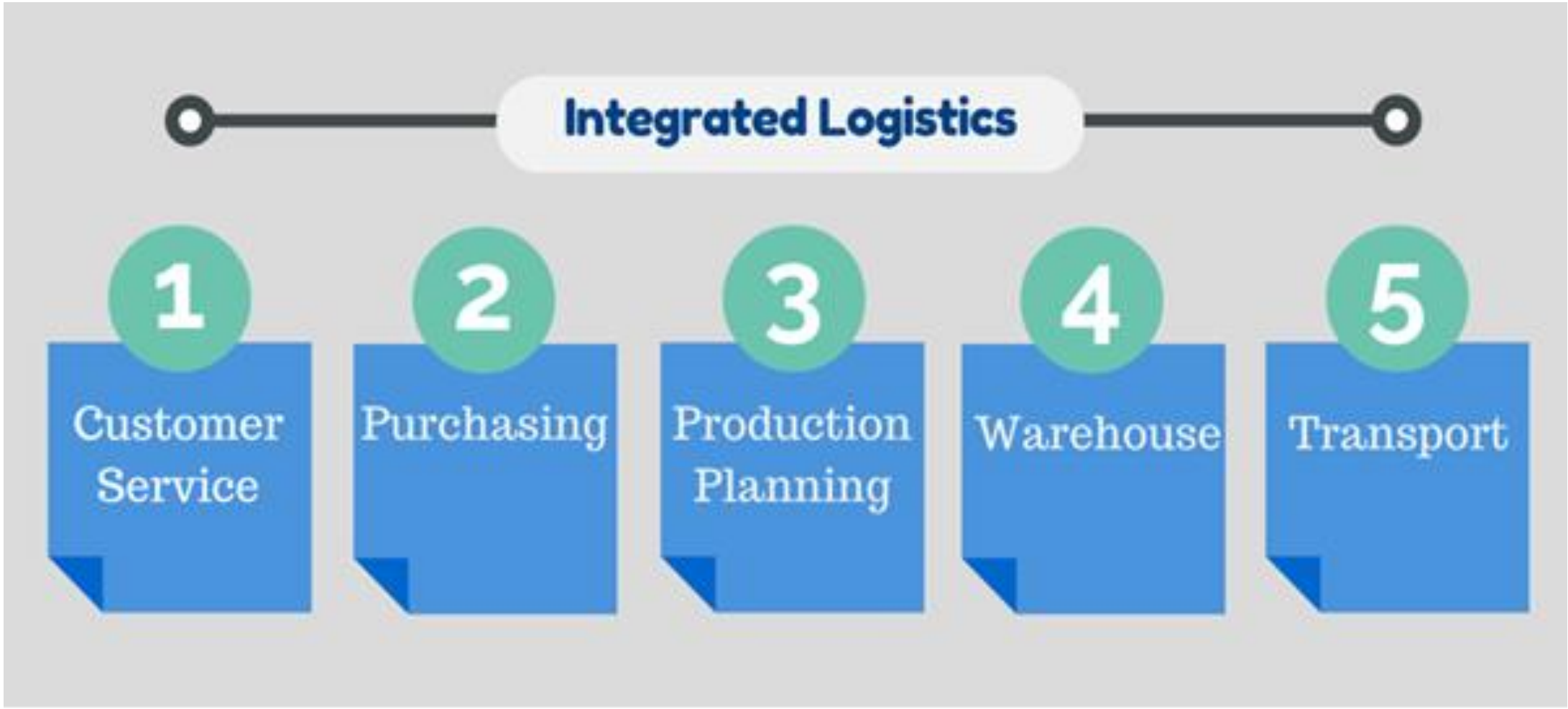
Here is the containerized shipment cycle. Many of you may already be familiar with this and should take the time to review it.


Investors /Share Holders
Board of Directors
President or Chief Executive Officer (CEO)
Chief Operation Officer (COO)
Chief Financial Officer (CFO)
Director for Legal and Corporate Affairs
Fleet
Designated Person Ashore (DPA)
General Secretariate
Company Security Officer
Operating Division
Technical Division
Administrative & Financial Divisions
Line 1
Line 2
Marine Department
Engineering Department
Accounting Department
Statistics & Control
Legal Dept
Information Technology
Inward & Outward Freight department
Chartering department
Marketing Department
Bunkering Department
Cargo Handling & stevedoring department
Shipping Operations department
Accounting Department
Insurance and Claims department
Agencies department
Equipment control and Maintenance & Repair (M&R) dept.
Pricing department
Public Relations dept
Sea-going Personnel & crewing
Provisions
Equipment & Ship's spare supply
Catering
Security
Maintenance & Repairs
Research & Development
Surveyors
Personnel dept.
Conference dept.
Lawyers, Adjusters
Insurance, P&I
Despatchers
Salvage
Claims
Hardware & Software

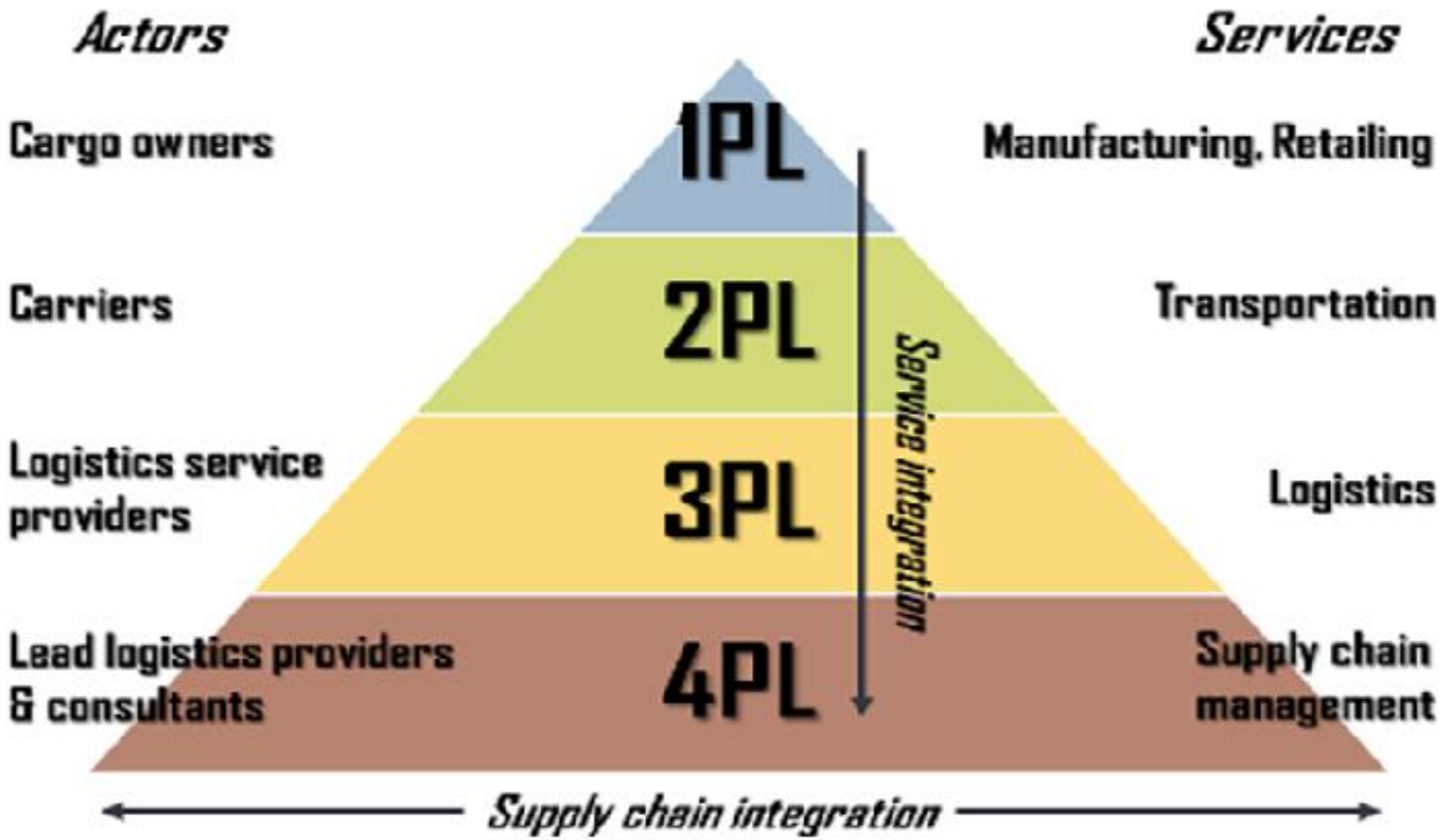

Liner Shipping
Vessel Operation
vessel co-
Co-ordination with Central Planner
Load plan: Discharge port rotation
Baplie file
ContainerList
Stowage Plan
DG cargo approval
IAL/EAL
EDI
VIA/vessel berthing arrangements
Terminal Co-ordination
Co-ordination with Consortium Partner
MLO/COA/NVOOC Import container break up/Export forecast
Customs
IGM filing
Vessel entry confirmation
Vessel Boarding
Immigration
Port Health
System Administrator
Liner activities
Marketing
Market Information
Market forecast
Competitor information
Sales
Target account
Prepare and analyse Sales projection
Produce Net Contribution
Customer Service
Constant Customer Follow up
Understand customer needs and provide highest standards of quality service and quickest t/t support
Documentation
Import Manifest filing & Export BL related works
Cargo release/freight collection
Accounts
Receoveries from customer, IT related and payment to port terminals & ICDs
Brokerage payment & General Accounting
Operations
Equipment Control
Customs/Port related work
Reefer maintenance
Effective Container management
ICD container movement
Special equipment/GOH
Maintenance and repair
Vendor bill checking/cost control

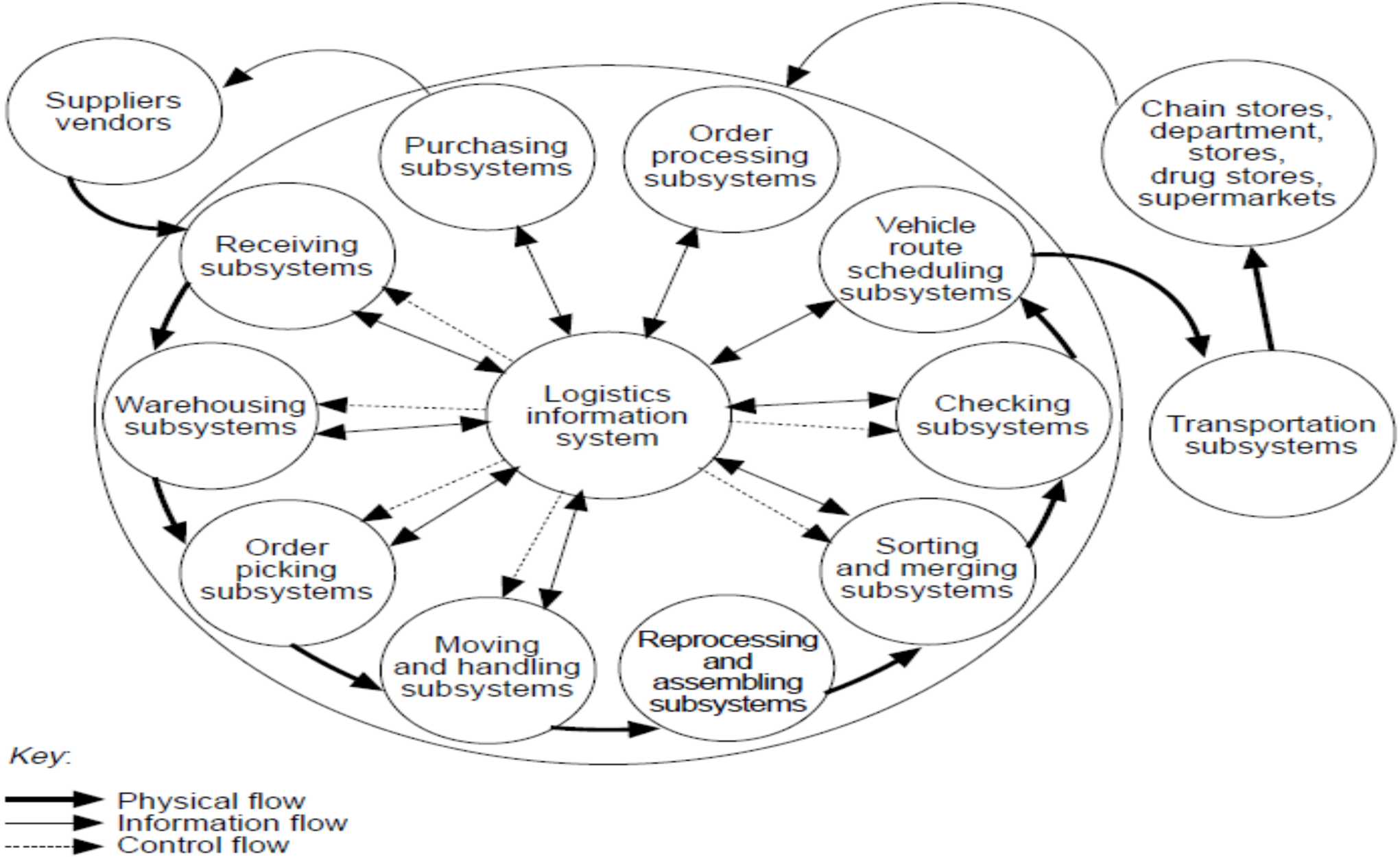
Integrated logistics

The logistics in the supply chain must anticipate the customers' needs – this is integrated logistics.



Layers of Logistics Explained




Suppliers vendors
Purchasing subsystems
Order processing subsystems
Chain stores, department, stores, drug stores, supermarkets
Receiving subsystems
Vehicle route scheduling subsystems
Warehousing subsystems
Logistics information system
Checking subsystems
Transportation subsystems
Order picking subsystems
Sorting and merging subsystems
Moving and handling subsystems
Reprocessing and assembling subsystems
Key:
Physical flow
Information flow
Control flow

Humanitarian & Medical courier

- **Specifically, the activities of “planning, implementing and controlling the efficient, cost-effective flow of and storage of goods and materials as well as related information, from point of origin to point of consumption for purpose of alleviating the suffering of vulnerable people” are known as “humanitarian logistics” .**

- **Briefly, “for humanitarians, logistics is the processes and systems involved in mobilizing people, resources, skills and knowledge to help vulnerable people affected by disaster”**

- **Medical Courier Services is saving lives. Discover why the Medical community relies on Quick's Medical Courier Services for their critical blood, tissue, organ and medical device transport**

A supply chain consists of three types of entities:

- customers,
- a producer, and the
- producer's suppliers.

The extended supply chain includes customers' customers and suppliers' suppliers.

Supply chain management oversees and optimizes the processes of :

- acquiring inputs from suppliers (purchasing),
- converting those inputs into a finished product (production), and
- delivering those products or outputs - to customers (fulfillment).

What is Cold Chain Logistics?

Major Sectors : Food and Beverages, Bio-Pharmaceutical

The Cold chain logistics infrastructure