Examiner's Report

November 2021

Logistics and Multimodal Transport

Question 1

You are the manager of a logistics company, providing a multimodal transport service for an importer of consumer goods which are moving from Hong Kong to New York.

Describe the modes of transport and different routes which are available from Hong Kong to New York, using examples, and provide advice to the importer on the advantages and disadvantages of each route.

Use the world map provided to support your answer.

The main routes and modes from Hong Kong to New York which should be covered in the answer are

- Air transport (which could include Sea/Air)
- Sea/Rail via WCNA ports
- All water services via Panama and Suez canals

For each route, the student was expected to describe the route, the advantages/disadvantages to the customer, and to provide examples e.g. specific ports and carriers. The routes and ports should be clearly shown on the map.

The advantages and disadvantages should compare the following features between the different routes:

- Transit times
- Cost
- Reliability – risks of delay, with specific causes
- Capacity
- Suitability for particular types of cargo/commercial requirements
- Availability of premium services

Question 2

Explain in detail any FOUR of the following terms and their significance in multimodal transport.

- **i. INCOTERMS 2020**
- **ii. NVOCC**
- **iii. Hub and Spoke**
- **iv. UCP 600**
- **v. FMC**
- **vi. CMR**

For each term or abbreviation, the student should cover the following:

- The meaning of the term/abbreviation
- Its context/origin
- A detailed description of what it represents
- Its significance in multimodal transport and the supply chain

The following are specific points to which the student should refer for each of the six parts of the question:

(a) INCOTERMS 2020

- Standard terms for use in contracts of sale, produced by ICC
- 2020 is latest version (replaced INCOTERMS 2010 on 1.1.2021, but older version(s) can still be used)
- Identify buyer's and seller's responsibilities for organisation and cost of transport (and insurance) and when risk passes from seller to buyer
- Need to incorporate explicitly in the contract – and to state which version
- Mention the 11 terms (detailed description of all 11 was not expected but mention the four groups, and give examples)
- Highlight key differences from INCOTERMS 2010
- Used extensively in contracts of sale for multimodal shipments

(b) NVOCC

- Non Vessel Operating Container (or Common) Carrier
- Describe role played in supply chain/through transport
- Acts as principal not agent (explain relationship with ocean carrier – also contrast with forwarding agents)
- Brief description of main services provided; this should include LCL/Groupage, FCLs, Calling forward/Consolidation, Documentation, Value Added Services, Supply Chain

Management

- Benefits which NVOCCs bring to their customers
- Examples of NVOCCs

(c) Hub and Spoke

- Describe the concept of using large vessels to transport to hub ports to optimise scale, with smaller feeders to individual destinations
- Contrast with direct port to port services, and circumstances where hub and spoke are favoured
- Importance of the hub locations and the facilities provided there
- As well as container shipping networks, mention should be made of air freight hubs, domestic road and parcel networks, supply chain distribution hubs
- Importance to multimodal transport of having access to frequent services to a wide range of destinations at lowest cost
- Give examples of hub ports/hub and spoke operations

(d) UCP 600

- Stands for Uniform Customs and Practice for Document Credits
- Set of rules issued by ICC for Documentary Credits
- UCP600 is latest version (applicable 1.1.2007)
- Needs to be stipulated in contracts
- Contains 39 articles
- List some key provisions of UCP600 (types of documents covered, credit must be irrevocable etc.)
- Used extensively for multimodal shipments on letters of credit – important that operators understand how these rules impact on bills of lading (clean/dirty etc)

(e) FMC

- Federal Maritime Commission
- USA Regulatory Body set up in 1961 to oversee overseas shipping
- Enforcement of provisions of the various US Shipping Acts (mention the main Acts)
- Objective is fair and efficient shipping for benefit of US exporters/importers and consumers; protection from unfair competition
- Scrutinises agreements between shipping lines, which need to be filed with and approved by FMC (mainly conference, VSA and Alliance agreements)
- Monitors shipping tariffs, and confidential service contracts which have to be filed with the FMC
- Recent investigations during the pandemic
- Key regulator for multimodal operators with services to/from USA

(f) CMR

- State name in full (Convention on the Contract for the International Carriage of Goods by Road), how it was developed and by who, and when it entered into force
- What journeys are covered – relevance to multimodal transport
- Requirement for consignment note – key details
- Main liabilities and exclusions

Question 3

Answer BOTH parts of the question.

A manufacturer of cars assembled from imported parts uses a supply chain based on 'just in time' principles.

a) Explain what is meant by a 'Just in Time' supply chain, and the advantages and disadvantages for the manufacturer in adopting this approach.

b) What different factors (other than price) should the manufacturer look for when choosing a multimodal transport operator to provide the transport services as part of this supply chain?

Part (a)

It was important that the student could show a full understanding of how a supply chain operating under 'just in time' principles should be managed. This required more than a single sentence definition. Points to be covered should include:

- Logistics principles – right goods, at right place, right time and right cost
- The need to manage inventory throughout supply chain – a continuous pipeline
- Objective of minimising static inventory (in some cases, reducing it to zero)
- How Just in Time is applied in practice

In describing the advantages and disadvantages of a 'just in time' approach, it was important that these be related to the manufacture of cars, using imported parts, as set out in the question. Points which should be covered include:

Advantages

- Minimises 'wasted' inventory holding costs, including capital/financing cost of stock, and costs of providing/operating warehousing space
- Avoids risk of damage to and loss of warehoused stock
- Avoids risk of obsolescence; in the context of car assembly it avoids holding stocks of parts for many different models, where customer preferences may change rapidly

Disadvantages

- Risk of running out of stock – financial and reputational consequences
- Consequences of unforeseen demand change – explain the importance of forecasting
- Consequences of delays in supply chain and at point of manufacture – and the need to have alternative plans, including alternative suppliers, alternative modes/routes (resilience in the supply chain)

Part (b)
In this part of the question, the student was expected to discuss the importance of service factors in the supply chain which will be particularly relevant to businesses relying on a 'just in time' supply chain, and why these are important

The following are the main service factors which should be covered:

- Speed
- Frequency
- Reliability
- Transparency of data on cargo movement (including appropriate routine and exception reports to the customer)

However there are a large number of additional factors which may determine how a customer may assess the quality of the service of a multi-modal service operator, including:

- Global coverage (of markets important to the manufacturer)
- To what extent the operator owns/controls the key parts of the supply chain
- Expert assistance/advice with cargo transport and related issues
- Timeliness/Quality of documentation
- Range/quality of E Commerce products (ease of access to information/time saving)
- Guaranteed space availability per sailing
- Environmental credentials (e.g. demonstrating approach to minimising pollution, carbon emissions etc.)

Question 4

Having a container available at the right place at the right time while minimising the associated costs is a key objective for a container line which manages its own fleet of containers.

Explain the different container management functions which need to be undertaken to meet this objective, and the IT systems needed to support them.

The main business functions associated with managing a fleet of containers are:

- Ensuring the operator has a fleet of containers (of different sizes and types) to meet its business needs
- Determining and procuring the optimum mix of owned and leased containers
- Tracking the location and status of all its containers to ensure proper records of the company's assets, and to provide a 'real time' database of its fleet for forward planning purposes; this should also provide information on containers delayed by customers so that detention/demurrage charges can be calculated
- Managing the leased containers in its fleet in accordance with the terms of the lease agreements, including the correct payment of daily hire rates, and that pick up and drop off of containers comply with the terms of the agreement
- Managing the maintenance and repair of containers in accordance with regulatory requirements (CSC Convention and national laws) and company standards, including scrapping/selling containers as required
- Planning the level of container stocks at every location in order to meet customer requirements, including the use of forecasting and planning techniques
- Implementation of plans to deal with surpluses/deficits of containers, through leasing in/out, cabotage, imbalance movements, container type substitution, commercial incentives etc.

Students might group these functions differently; however what is important was a description of the functions, and how they contributed to the key objectives of container management, together with an explanation of IT systems needed to support them.

Question 5

Ports and their container/ro-ro terminals can be owned and operated by the public sector or by private/commercial businesses.

Discuss the advantages and disadvantages of public and private ownership and operation, supporting your answer with examples of ownership structures in particular ports.

In answering this question, students needed to:

- Show a clear understanding of what is meant by ownership in public and private sectors
- Describe both the advantages and disadvantages of each type of ownership
- Ensure that examples were included for ports/terminals to illustrate the points being made

The following aspects of public/private ownership should be addressed in the answer:

Advantages of Ownership in the Public Sector

- Public sector can take a long term view of investment in strategic national assets, which includes ports
- Objectives will be aligned to national interests (e.g. facilitating the country's trading activity, which promotes growth/prosperity), and the well being of the people, rather than pursuing profits
- Governments may have more ready access to capital for development of infrastructure (though this is not always the case)
- Public sector can set prices as a 'fair' level, and ensure equal access for all users
- Profits generated can be reinvested

Disadvantages of Ownership in the Public Sector

- Competition for scarce financial resources with other government investment – transport sector is often a low priority
- Decisions can be politically influenced, and not in the best interest of trade/transport
- With no 'profit' objective or viable competition, public sector organisations can be highly inefficient, and poorly managed
- In some countries, public sector organisations are associated with corruption

Advantages of Ownership in the Private Sector

- Ready access to sources of capital (particularly with large multinationals)
- High quality management and best practice (both nationally and where relevant internationally)
- Competition in the private sector drives efficiency, and therefore better

service/prices for customers
- Business customers can usually negotiate a tailored package to meet their requirements

Disadvantages of Ownership in the Private Sector

- Private sector often has short term objectives rather than long term vision
- Private sector ownership of ports/terminals where there is no competition creates a monopoly operator, which can increase prices unreasonably, and hide inefficiencies (in these circumstances, there may be a need for a government authority which regulates prices)
- Financial benefits go disproportionately to the shareholders, rather than national interests, or to customers

Question 6

There are currently three international cargo liability conventions for maritime transport in force, and a fourth convention (the Rotterdam Rules) not yet in force.

Explain the purpose of these conventions.

Describe the main differences between the terms of the four conventions, and why the differences exist.

In the first part of the question, the student was expected to explain **why** there are international cargo liability conventions, the purpose of which is to ensure that there are minimum terms in a contract which define the rights and responsibilities of both the shipper and the carrier. While a historical description of the development of the conventions is relevant, a description without explaining their rationale was not sufficient.

The second part of the question specifically asked students to highlight the differences in the terms of the four conventions. The best way to do this is to select a specific heading (e.g. Monetary Limits of Liability), and then state how each of the four conventions deals with this heading, highlighting both the differences, and why are different.

This should then be repeated for a number of different headings, which should include:

- Monetary Limits of Liability
- Scope of application (to different contracts of carriage, and to types of cargo)
- Liability for delay
- Liability for errors in navigation
- Carriers' defences
- Protections for agents/servants of the carrier (e.g. Himalaya clause)
- Time limits for notification/claims
- Jurisdiction and others

Question 7

Answer BOTH parts of the question.

a) What is a documentary letter of credit, and what part does it play in the international trading and movement of goods using multi modal transport services.

b) Name THREE features of a bill of lading which are required to ensure its acceptance under a letter of credit, and explain why these features are important to the buyer of the goods.

This question expected a student to have a sound knowledge of documentary credits and bills of lading, and in particular their practical application.

Part (a)

The answer should include a description of what a documentary credit is, and how it works:

- It is one method for financing international sale contracts, and for transferring funds between the buyer and the seller
- Describe the process involving opening of letter of credit by buyer, role of advising and confirming banks, shipment of goods, lodging of documents, payment for goods
- Which documents are required, issues with lodging documents etc.
- Types of letters of credit
- Purpose of UCP600

The role which a documentary credit plays in international trade and the movement of goods needs to be described covering the following points:

- A documentary credit provides reassurance to both buyer and seller, and the student should explain how and why
- Each party is dealing with a bank in their own country
- The transaction is carried out against a transfer of documents, rather than the physical transfer of goods.

Part (b)

This should focus on the specific features of a bill of lading which ensure its acceptance under a letter of credit, rather than a general description of the roles of a bill of lading. As well as describing these features, the student needed to explain why they are important to the buyer. Examples are:

- Clean bill of lading
- Shipped on Board bill of lading and cargo shipped within date required by LOC
- Freight paid bill of lading
- Correct description of goods + correct loading port and destination
- Correct parties

Question 8

The profitability of container lines has increased dramatically in the last twelve months, reaching levels never previously experienced.

Explain the circumstances which have enabled the lines to make these exceptional profits.

Discuss how generating such high profits may affect the future of the industry and in particular its relationship with regulators and with its customers.

The answer needed to demonstrate an understanding of the current commercial environment and how this has resulted in high profits for the lines. There are various ways of looking at this, but the following points are relevant.

High profits come from the perfect storm of

- Sustained/increased cargo demand particularly in the Asia/Europe and Asia/North American trades
- Delays to ships caused by port congestion – due both to high volumes and lower productivity due to COVID related issues (including temporary closures of terminals in major ports); this effectively reduces service capacity
- Delays with inland transport due to shortage of resources in many countries
- All available ships on the charter market have been used; relatively low level of new building deliveries due to low orders placed around 2 years ago
- Lines have redistributed capacity between trades according to demand, creating space shortages in most trades

Lines can charge virtually what they like in a sellers' market, though the student should also acknowledge the areas where lines are incurring additional costs

In discussing the impact of high profits, it is suggested that the following points should be covered:

Impact on the industry

- Lines may use surplus cash to (over) order new buildings, leading to future capacity surpluses
- High profitability may encourage new entrants, increasing competition
- Less focus on mergers and acquisitions as less efficient operators will generate some profit, so no pressure to sell/consolidate businesses
- Lines may use cash to invest outside core business (3PLs. digital businesses, 'green' solutions) – these may have positive or negative outcomes

Relationship with regulators

High profits increase regulatory scrutiny – do lines have too much market power?

Examples:

- Greater scrutiny of alliances
- Specific investigations on detention and demurrage charges (FMC)
- Are lines' fulfilling common carrier obligations as required under US legislation?

Relationship with customers

- Lines' current actions may harm long term relationships
- Major customers may pursue other solutions including operating own ships (e.g. Amazon, Walmart etc.) – or investing in carriers?
- In short term, customers have little negotiating leverage, but will focus on securing space/guarantees of shipment to avoid harm to their own business with price as a secondary consideration
- When the market eventually corrects itself, customers will strike hard bargains with lines – 'partnership' between carriers and shippers is probably no longer going to be on the table