



Examiners Report

MAY 2019

LOGISTICS AND MULTI-MODAL TRANSPORT

Overall Comments

The overall pass rate in this exam was disappointing. The reasons for this reflect insufficient preparation on topics which are fundamental to the subject, and clearly set out in the syllabus, coupled with an apparent failure to read questions properly, resulting in incomplete answers, and in some cases, lengthy text which was not relevant to the question asked.

Question 1

Answer ALL parts of the question.

The majority of new containerships due for delivery in the next few years will have capacities over 18,000 TEU. Explain the advantages and disadvantages in the operation of these large ships from the point of view of:

- a) the container line,
- b) the port/terminal operator and
- c) the customer of the container line.

The answer should start with a short overview to demonstrate that the student understands the developments which have led to the introduction of 18,000+ teu vessels, and the role which they play. This should be followed with specific descriptions and explanations of the advantages and disadvantages which these ships bring to the stakeholders mentioned in the question. The following points should be covered:

Advantages for Container Line

- Economies of scale from larger vessels with a clear explanation of how the savings are generated, including:
 - Reduced vessel ownership/charter costs per TEU
 - Reduced bunker costs per TEU
- Opportunities to maximise volumes carried from customers

Disadvantages for Container Line

- Limited number of trades on which they can operate
- The need to operate in alliances to be able to fill capacity/avoid overtonnaging
- Limited number of ports/terminals that can handle them
- Risk of port/landside congestion due to peak arrival volumes

Advantages for Port/Terminal Operator

- If a port/terminal operator invests to handle large ships, they can gain competitive advantage as other terminals may not be able to handle these vessels – so generating extra volumes/revenue
- Secure an ongoing relationship with the major global lines and alliances

Disadvantages for Port/Terminal Operator

- Large capital investment needed to handle bigger ships (elaborate on different areas where investment is needed)
- Peak arrivals impose extra costs on e.g. yard/gate capacity
- Fewer services and fewer lines/alliances mean risk to business if services are lost to competitor ports/terminals

Advantages for customer of container line

- Lower costs passed on in reduced freight rates (explain competitive dynamics which cause this to happen)
- For large shippers, may be easier to secure large allocations on a single ship

Disadvantages for customers of container line

- Fewer service choices as a result of larger ships
- May be more hub and spoke and less direct services (though this is not always the case)
- Risk of congestion due to peak container arrivals at the terminal delaying the flow of goods to the importer

Question 2

Explain in detail FOUR of the following terms/abbreviations, and their significance in multimodal transport.

- 3PL.**
- INCOTERMS 2010.**
- ISPS.**
- Hub and Spoke.**
- Himalaya clause.**
- ICD.**

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 relevance to 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) 3PL (Third party logistics)

- What the term stands for
- Origin of the term and how it is distinguished from other types of logistics operators (e.g. operating lines, forwarding agents etc.)
- Brief description of functions/services performed by 3PLs
- The benefits to users of their services in the context of supply chain management

(b) INCOTERMS 2010

- Standard terms for use in contracts of sale, produced by ICC
- 2010 is latest version (replaced INCOTERMS 2000 on 1.1.2011)
- 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
- Mention the 11 terms (detailed description of all 11 not expected – mention the four groups, and give examples)
- Used extensively in contracts of sale for multimodal shipments – illustrate different types of commercial situations in which different terms may be used

(c) ISPS

- International Ship and Port Facility Security Code
- Amendment to SOLAS – came into force in 2004
- Developed as a response to terrorist attacks in 2001
- Describe the scope of the code, covering ports and ships
- Roles of the different parties – ships, shipping companies, ports and governments
- Different security levels
- Role of Recognised Security Organisations (RSOs)
- Security of ships and terminals – importance for multimodal shipments, particularly to avoid delays

(d) 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
- 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 to have access to frequent services to a wide range of destinations at lowest cost
- Give examples of hub ports/hub and spoke operations

(e) Himalaya Clause

- Clause in B/L – explain its purpose to give protection to servants of the carrier (including employees and agents)
- Explain origin/name of the clause (SS Himalaya – Adler vs Dickson - 1954)
- Its importance under different cargo liability conventions
- Used in multimodal bills of lading – protection for agents and subcontractors as well as ship's crew

(f) ICD

- Inland Clearance (or Container) Depot
- Explain the role of ICD in through transport movements – including transferring customs clearance/release away from port; transfer point between modes for inland movements; reduces port congestion; storage for empty containers (reduces imbalance costs)
- Describe facilities provided at ICD
- Explain the advantages for multimodal business/movements

Question 3

In answering this question, it is important that the student covers not only the advantages of disadvantages of outsourcing, but also the advantages and disadvantages of retaining the management of logistics in house.

The following are the main points which should be covered in answering this question:

Advantages of retaining In House

- Direct employment and control of staff involved
- Direct communications between logistics staff and all other functions in the company
- Ensures common targets and objectives across the whole business
- A single IT platform can cover logistics as well as production, sales etc.
- Direct negotiations with carriers etc. on rates/services – can get best deal particularly for large exporters/importers
- Individual services can be sub-contracted if required

Disadvantages of retaining In House

- Managing logistics is a distraction from core business
- May not have sufficient scale to get best freight rates
- May not have sufficient scale to attract best logistics staff
- Additional HR tasks to recruit, train and manage specialist staff for logistics functions
- Need to devote resources (including capital) to IT systems, warehousing facilities etc.

Advantages of Outsourcing

- Easy availability of specialist expertise and systems, including sophisticated pipeline tracking, inventory management, documentary processing etc.
- Major logistics providers have worldwide capability – instant support in new markets
- Logistics providers have strong purchasing power
- No requirement to allocated scarce capital resources for investment in warehouses, transport facilities etc.

Disadvantages of Outsourcing

- Arms length relationship with management of the logistics provider
- Can be difficult to remove/change third party providers
- Longer communication chain
- Provider may subcontract, so further loss of control
- Risk of loss of secure information/business secrets
- A profit element goes to the third party – goals of the provider may be different from your own

Question 4

‘The weakest parts in a multi modal transport system are the transfer points between modes.’

Discuss this statement and, using examples to support your answer, explain whether you agree or disagree.

Where an exam question asks students to ‘discuss’ a statement, the expectation is that the student will ‘*consider and examine by looking at all sides of the situation or issue*’ (quote from Institute’s exams compact guide).

The requirement is therefore for an essay which explains and illustrates the role of transfer points, puts the case for and against the statement in the question, and draws a conclusion.

Marks were given for the quality of the presentation of the argument, and of the conclusion. The likely conclusion is that the statement is true, but a well presented argument reaching the opposite conclusion would also secure good marks.

The content of the answer should include:

- (a) An introduction, setting out the role of transfer points in multi modal transport
- (b) Points to support the statement (for example):
 - Risk and consequence of congestion at transfer points; bunching of arrivals/departures at port and ICDs etc.
 - Delays – problems of missed connections
 - Insufficient handling equipment at the transfer point and/or equipment breakdown
 - Labour shortages, or insufficient skills
 - Risk of misrouting/loss of consignments
 - Delays caused by documentary problems (though these may not be directly related to the modal transfer)
- (c) Points to put the argument against the statement:
 - Transport is also susceptible to delay (road congestion, bad weather, technical breakdown, late changes to schedules)
 - Transfer points can add value e.g. hub/spoke, relay services increase opportunities for the shipper; inland transfer points provide opportunity for rail/road multimodal routing, and for handling customs formalities away from the port
 - Shippers can use transfer points as an opportunity in their supply chain, for example to temporarily store cargo, to set up distribution hubs, amend the final destination for the cargo etc.
- (d) A conclusion balancing the arguments for and against the statement

Some students approached the discussion of the statement in a different way, but as long as the answers considered the statement from different perspectives, marks were awarded for the arguments which were put forward particularly where supported by relevant examples.

Question 5

Answer ALL parts of the question.

Explain the functions of a bill of lading with particular reference to the roles which they fulfill for:

- a) A shipper.**
- b) A multi-modal transport operator.**
- c) A bank which confirms a letter of credit.**

Answers should provide a full description of the three main roles of a bill of lading:

- Receipt for shipment
- Evidence of contract
- Document of Title/Negotiable document

The specific roles which the bill of lading fulfils for the three named parties should also be highlighted, for example:

Shipper

- Evidence of quantity/condition of goods accepted by carrier (e.g. in case of a claim) as well as the contractual terms
- Ability to sell goods to third party by negotiating the document
- Can ensure title not passed to buyer until the goods have been paid for
- Able to conduct transaction with buyer via documentary credit

Transport Operator

- Provides detail of contractual terms, including limitation of liability and other protections for the carrier
- Avoids dispute over quantity/condition of goods
- Ensures goods released to correct party through surrender of B/L at destination

Confirming Bank

- Ensures that seller complies with the provisions of the letter of credit, including
 - Bill of lading description of goods
 - Condition of goods (clean bill of lading)
 - Dated shipped on board complies with letter of credit
- Provides some security in case funds not transferred by advising bank

Question 6

Answer BOTH parts of the question.

- a) Explain the reasons why there are currently three cargo liability conventions in force. How do you decide which convention applies to a particular shipment?**
- b) In 2008, the United Nations adopted a fourth convention, the Rotterdam Rules. Explain why this was thought to be necessary, and why these Rules are not yet in use.**

Part (a)

The answer should cover:

- Background to the evolution of Hague, Hague Visby, Hamburg Rules
- Brief historical development of each convention
- Main factors which on each occasion led a new convention to be developed, including : problems with liability limits, impact of containerisation, concern that Hague/Hague Visby favoured shipowners

Which convention applies? – This should cover:

- Application according to the type of document
- Application according to the type of cargo (e.g. live animals, on deck cargo)
- Rules relating to where cargo is loaded, where cargo is discharged, and where b/l is issued, including the potential for two different conventions to apply to the same shipment ('jurisdiction shopping')

Part (b)

The answer should provide a brief description of the reasons for the development of the Rotterdam Rules including

- The need for a more 'balanced' convention
- Recognition of the need for a convention to cover door to door transport
- Specific rules for electronic documents
- The risk of regional conventions being developed by e.g. USA, EU

Reasons why the convention is not yet in force should cover:

- The difference between adoption and ratification of a convention
- The specific requirements for Rotterdam Rules to enter into force, and the present level of ratifications
- Who is in favour of the convention and who is against – the politics and lobbying which apparently prevents countries which had actively supported the development of the convention from ratifying it

Question 7

Delays due to government regulations at the point of entry to a country can have a significant impact on the efficiency of a supply chain.

Explain reasons why particular regulations may cause delays, and steps which cargo owners can take to minimise these delays, giving specific examples.

Students should first identify different regulations which may cause delays and explain the reasons for the delays. The second part of the answer requires students to propose what steps cargo owners can take to minimise those delays.

There are a variety of regulations which may cause delays, which can be grouped as follows:

- Customs regulations and clearance
- Health and veterinary regulations and associated checks
- Security related regulations
- Physical checks on e.g. hazardous cargo labelling, weight restrictions

There are a number of specific regulations which can fall under each of the above headings, and examples of these should be given, and the problems which may be encountered which can cause delays.

There are a wide range of steps which cargo owners can take to avoid or minimise the delays, including

- Full compliance with regulations is the most obvious action to take; however to ensure this happens, it is necessary to ensure that regulations are fully understood, and that staff are appropriately trained
- Paperwork should be presented well in advance (e.g. so that clearance is obtained before the cargo arrives)
- Enrol in any special programs which given preferences to a company which participates (e.g. authorised economic operator in EU, C-TPAT in USA)
- Keep up to date with information on e.g. opening hours of authorities, local congestion etc.
- If port delays are a regular problem, consider using an alternative port of entry where there are fewer delays

Question 8

Describe the range of services which you would expect a logistics company to offer, and explain, with examples, how the provisions of these services enable global supply chains to operate effectively.

Before describing the range of services offered, it is helpful for the student to provide a brief definition of logistics, as this shows an understanding of the objective of the services which a logistics company offers.

The range of services should include the following, each of which should be briefly described in the answer, with examples:

- Providing/managing door to door transport (including different modes as required)
- Documentation/Customs clearance etc.
- Shipment Tracking – IT systems to plan and manage the inventory from supplier through to point of use/sale
- Calling forward and/or consolidating cargo at/near point of supply
- Providing and operating warehouse facility(ies) for client;
- Labelling and Packaging
- Local distribution/Last mile delivery
- Management of returns (return to warehouse or supplier, including repackaging or recycling)

An analysis of the way in which the provision of these services enables a global supply chain to function effectively can be approached in a number of ways. It is suggested that the following features of logistics services should be included in the answer:

- Regular, reliable and frequent services enable products to be sourced from almost anywhere globally
- Containerisation, and proper packaging and handling ensure goods are protected from damage/pilfering and arrive in good condition for sale/use at destination
- IT systems provide vital visibility on the supply chain, e.g. stock management, in transit and at warehouse – information in real time; exception reports so that corrective action can be initiated quickly in case of delays
- Providing confidence to the customer that goods will arrive as scheduled, and managing any delays, and consequences of delays
- Supply chain management can reduce overall costs, so making it cost effective to source goods from cheaper suppliers, even if they are further away
- Logistics can combine different modes of transport to give an optimum balance between speed and cost, and manage supplies from different sources, providing resilience in the supply chain
- Managing communications with all parties in the supply chain