



MAY 2018 - ICS Examiners Report

LOGISTICS AND MULTIMODAL TRANSPORT

Q1. Having a container at the right place at the right time for a customer's booking is a key objective for a container line in managing its fleet of containers.

Discuss the data and the management systems which a line needs to meet this objective, while at the same time minimising the costs of providing containers.

Having a container at the right place at the right time, while minimising costs, is one of the key management requirements for any line or carrier operating a fleet of containers.

There is no single activity which will achieve this, but rather a series of tasks each of which requires support from the company's management systems, together with good quality data. Students were therefore expected to cover a range of activities and data requirements in order to achieve a pass.

The following are the main systems and data requirements to be included in an answer:

Asset tracking – location and status of individual containers by serial number

Data to be captured – all movements of containers from place to place; change of status (e.g. pack/unpack); condition (requiring repair, under repair etc.)

Stock Planning

(a) To project container levels by type by location, and identify surpluses/deficits of containers

(b) To identify actions required to adjust stock levels at lowest cost (e.g. leasing in/out activity, imbalances etc., issue instructions and monitor implementation)

Data to be captured: opening stock of containers by type/location; expected increases/decreases in stock at the location; forecasts of container demand by container type/trade/voyage; cost matrix for different actions available to correct surpluses/deficits

M and R system - management of the costs of maintaining containers

Data required – box specification, age, repair history, value; cost of proposed repair, 2nd hand value, CSC compliance

Leasing System – management of financial arrangements for leasing in/out containers

Data required – financial details of leases, dates/locations on/off hire, invoices/payments

Q2. Answer BOTH parts of the question:

a) Explain the role of an NVOCC as a provider of logistics and multi-modal transport services, and describe - with examples - the services they provide.

b) What are the advantages and disadvantages to the exporter and importer of using an NVOCC, rather than contracting directly with ocean carriers?

This question is specific on the different information to include in the answer, and students needed to cover all of what was expected.

Firstly, the answer should cover the role of an NVOCC, which can be summarised under the following headings (with a short paragraph to elaborate on each bullet point):

- Define and explain the term 'Non Vessel operating (common) carrier'
- An NVOCC purchases space on vessels from liner service operators
- Provides door to door multi modal service as a principal (contrast with forwarding agent)
- Offers both FCL and LCL ('Groupage') services
- Provides additional added value services – some NVOCCs will manage complete supply chains

The question asked for a detailed description of the various services which may be provided by an NVOCC with examples. This part of the answer should cover:

- Door to Door Transport (including using a cocktail of carriers)
- Groupage/LCL
- Shipment Tracking
- Documentation/Customs Clearance/Lodging Documents
- Other value added services – warehousing/distribution, calling forward/consolidation, cross docking, packaging/labelling

This list is not exhaustive.

Part (b) of the question asked for both the advantages and disadvantages of using an NVOCC, from the perspective of both an exporter and importer. These should include:

Advantages to Exporters/Importers

- Negotiating 'muscle' of NVOCCs to get lower freight rates
- NVOCCs have access to a number of carriers on the same route
- NVOCCs will have guaranteed space from carriers (may be important in peak seasons)
- NVOCCs invest in and offer a wider range of services than carriers e.g. warehousing, cross-docking, consolidation etc.
- Large NVOCCs have global services; smaller NVOCCs may specialise in particular areas or commodities

Disadvantages to Exporters/Importers

- Dealing with a 'middle man' is not always efficient – can be better from service perspective to deal with the carrier direct
- Large shippers can get better rates than NVOCCs + tailor made contract
- NVOCCs will be taking their own profit margin, so may be higher cost than dealing with carrier direct
- When there are space shortages, which of the NVOCC's customers will get priority?
- If NVOCC is bankrupt, there is a risk that your cargo will be held by line as security for freight

Students needed to make sure they covered all parts of the question, and did not focus on only one NVOCC activity. For example, setting out the advantages without mentioning the disadvantages, or only discussing Groupage as an NVOCC activity would not be enough detail for a pass.

Q3. Answer BOTH parts of the question:

Congestion can be a major problem both to the providers and the users of multi-modal transport services

a) At what stages of a through transport movement is congestion commonly found, and what causes the congestion? Give detailed examples.

b) Explain the consequences of congestion both for the providers and the users of a service, and the steps they can take to limit the impact on their business

Congestion is a wide ranging problem in all transport and distribution systems, and it was important that a student considered as widely as possible where the problems occur, the causes and the potential solutions.

Part (a)

The main points of congestion are at **modal interfaces** – ports (where congestion can occur at various pinch points for both ships and cargo); also ICDs and railheads. Congestion also occurs on road/rail systems, at canals waiting for transits, etc.

The causes of congestion are wide ranging, and include:

- Shortage of equipment (e.g. cranes at terminals)
- Shortage of land (e.g. yard space, shortage of berths)
- Lack of capacity (roads, rail systems, canal transits)
- Problems of peaks in e.g. ship/container arrivals at certain times/days
- Shortage of labour
- Bad weather

Part (b)

The consequences of congestion are wide ranging, and it is important to discuss these from both the perspective of the user and the provider of the transport service.

Consequences can be grouped under the following headings:

- Operational consequences, for example delays to ships, cargo etc. There are also knock on effects – if a ship is delayed on a port call, there may be delays at later ports, or on the next round voyage, or port calls get omitted in order to regain the schedule
- Increased costs to both providers and users, either as a direct consequence (e.g. congestion surcharges, hiring in more equipment), or an indirect consequence (e.g. airfreighting goods to avoid a stock out)
- Ongoing impact on the business, where reputation suffers, due to reduced reliability etc., so that financial losses go beyond the congestion event itself

There are numerous steps which can be considered to reduce/remove congestion, with different measures being possible on both shorter and longer term timescales.

In the short term, actions may be limited, e.g. securing extra resources – hiring in extra labour or equipment if available; better operational planning can also help reduce congestion e.g. vehicle booking systems at container terminals can reduce vehicle queues with little extra resource needed, or longer gate opening hours.

On a longer term timescale, investment in more infrastructures may be required, or focusing on particular business sectors/activities which are more productive (e.g. store empty containers away from the container terminal, rather than use up valuable yard space).

From the user's perspective, it may be wise to review the supply chain, and look for alternative routes/modes, as well as having 'back up options' available.

Student should avoid focusing on just one aspect of congestion. Examples are vital in order to secure a good mark on this question.

Q4. Mergers and acquisitions between logistics companies and between ocean carriers has been a common feature of how the multi-modal transport industry has developed over the last few years.

Explain why these companies might decide to consolidate and the benefits and challenges for them when they do so, using examples of recent deals that have taken place.

The pursuit of scale through mergers and acquisitions has been a constant theme in the through transport and logistics business over the last few years, and this question gave students an excellent opportunity both to explain the rationale for these deals, and show their knowledge of current industry developments

The first key question is – why do companies consolidate through mergers and acquisitions?

Pursuit of scale benefits to reduce unit costs is the most obvious reason, and students needed to explain these benefits, which include:

- Being able to invest in and use larger ships
- Developing more efficient networks
- Greater buying power
- Spreading overheads (e.g. IT systems) across a greater volume of business
- Being able to invest in fixed cost systems e.g. warehousing/distribution systems, rather than buying in from third parties

However there are other positive reasons beyond cost reduction which can drive consolidation, for example:

- Improved market position – increased market share can put an operator in a stronger position
- Global coverage – can make the operator more attractive to customers
- Easier access to finance

Consolidation can also be driven by problems with the business, giving the operator and its shareholders little alternative. These problems can include:

- Poor profitability, or ongoing losses
- Balance sheet problems
- Too small to be economic
- Loss of customer confidence
- Shareholders want to exit

As well as potential benefits from consolidation, there will be a number of challenges, and many such deals fail to achieve the expected benefits. This can be due to a number of factors, including

- Cultural problems between the organisations
- Loss of market share/customer dissatisfaction
- Calculations on cost savings were too optimistic, and failed to take account of the 'real life' environment

To achieve a mark, it was important that students covered a number of different benefits and challenges, and provided examples from recent consolidations in the industry.

Q5. Answer BOTH parts of the question:

a) What is a documentary credit and what part does it play in the international trading and movement of goods using multi-modal services?

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

This question needed students to show 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:

- One method for financing international sale contracts, and for transferring funds between the buyer and the seller
- The process involving opening of letter of credit by buyer, role of advising and confirming banks
- The seller is required to lodge documents with bank, against which they will be paid
- 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 aspects:

- 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 a 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 shipped within date required
- Freight paid bill of lading
- Correct description of goods + correct loading port and destination

Q6. For each of the following INCOTERMS, explain in detail the responsibilities and risk to the buyer and seller in a contract of sale, including which costs are met by each party - where the cargo is moved by FCL door to door transport.

1. FCA
2. CIP
3. DDP

What are the advantages and disadvantages for an importer in using each of these terms?

This question required a student to demonstrate a detailed knowledge of three specific INCOTERMS, setting out how the responsibilities, the risks, and the costs are divided between the buyer and seller.

The answer also needed to cover how each of the three INCOTERMS might be used commercially from the importer's perspective, listing advantages and disadvantages. Points to be considered should include:

- Whether or not the importer's business model is based on controlling the supply chain

- Whether the importer is well placed to negotiate better freight rates
- The advantages of a fixed price with delivery to the importer's premises vs. less control
- What level of risk and responsibility the importer wishes to take

Q7. For a multi-modal transport service, with sea as the main leg, what are the important service factors to put forward to your customers as justification for paying a higher freight rate than that of competitors? Use examples, and explain why each service factor can provide a financial advantage for the customer.

The importance of service factors in through transport, and in the management of supply chains is a constant theme for logistics businesses. This question gave students an opportunity to demonstrate their knowledge both of the service factors which are important to users of multi-modal transport services, and how to assess their value.

The key service factors which should be covered by students are:

- Speed
- Frequency
- Reliability
- Transparency of data on cargo movement, for supply chain management

A description of what is meant by each service factor, and why it is important should be included. This should include the financial value which could be attached to each factor, in order to justify paying a premium on the freight rate for a better quality of service.

For example, a faster service would reduce the cost of stock in transit, and a more reliable service enables an importer to manage with lower safety stocks.

Practical examples for each service factor were essential to achieve a mark.

There are a number of other service factors which could be included, for example:

- Speed/accuracy of documentation
- Expert assistance/advice with cargo transport and related issues
- Range/quality of E Commerce products (ease of access to information/time saving)
- Guaranteed space availability per sailing

In each case it was important to show that high service standards could reduce the user's costs, or help to generate extra revenue for the user.

Q8. Discuss the advantages and disadvantages for a business that is importing and selling finished goods; in holding an inventory of these goods, and what factors should determine the level of inventory held, using a specific business/supply chain to support your answer.

This question falls into two parts, the first being the advantages and disadvantages of holding inventory. The following points should be included in the answer:

Advantages

- Ability to respond to unexpected increases in demand
- Ability to cope with delays in the supply chain (both in manufacture and transport)
- A secure base of stock from which to mount sales campaigns
- Slower shipment methods can be used

Disadvantages

- Financing cost of holding stock
- Cost of warehouse + staff/systems etc.
- Risk of damage/obsolescence

In the second part the student needed to discuss **how** to decide on the level of inventory to be held, and what factors will influence decisions. These factors should include:

- Lead time for supply
- Reliability of supply, taking into account the different parts of the supply chain
- Variability in demand
- Quality of forecasting
- Perishability
- Are there are alternative/emergency sources of supply available

It was vital to relate the answers to specific business/supply chain examples to show a proper understanding of how inventory management works in practice, and how the various factors will influence the decisions taken.

