

Level 5 Advanced Diploma in Procurement and Supply

# AD2 - Managing risks in supply chains

# **EXAM EXEMPLAR QUESTIONS**

CASE STUDY, QUESTIONS AND INDICATIVE ANSWER CONTENT



# **CASE STUDY - GOLIATH QUARRY PRODUCTS (GQP)**

#### Introduction

Goliath Quarry Products (GQP) was formed in the late 1960's in the UK to supply quarry equipment that required strong, robust machinery capable of crushing and screening 6000 tonnes of quarry rocks per day.

As the market developed GQP became a leading global supplier. GQP's production facilities expanded from one factory site tofour4 factory sites in the UK. The main focus for GQP became new product development and ensuring that it maintained the quality and reliability synonymous with its brand.

In the last decade new low-cost competitors have entered the market and are starting to reduce GQP's market share. GQP needs to concentrate on costs if it is going to sustain its market share leadership. GQP directors insist that it must maintain its brand image but achieve the same quality product at a lower cost. This may involve the use of low-cost country sourcing. Areas of concern for low-cost country sourcing are as follows:

- Poor quality product
- The passing of title
- Initial prices increasing once a commitment to supply has been made
- Orders not shipping on time and 'premium' transport arrangements having to be made
- Low-cost country suppliers subcontracting work and GQP not being aware that they have done this. This may result in poor quality.

#### The supply base

Simon Jones is one of GQP's Supply Chain Managers and is responsible for the procurement of the fabrications for his site. The fabrications supplier base for GQP is mainly local. Simon realises that if he is to reduce costs he needs to expand his supply base, introduce competition and consider procurement from lower cost countries. Simon needs to review the range of fabrications and find product lines that would be suitable for low-cost country sourcing. Simon decides that the best way to do this is with the next planned new product introduction in 6 months' time. Simon drafts a sourcing plan outlined in **Table 1**.

Table 1

Task	Description	Estimate duration (weeks)	Predecessor
Α	Identify a product line suitable of sourcing globally	2	
В	Gather drawings, material and finish specification	1	А
С	Determine the volumes over a medium/long-term period	2	А
D	Analyse the supplier market locally and internationally	3	А
Е	Review international sourcing options and select	3	D
F	Send tender enquiry	2	B, C & F
G	Visit potential suppliers	2	F
Н	Receive tenders	4	F
I	Select potential suppliers	1	G & H
J	Prototype build	6	1
K	Airfreight prototype for approval	1	J
L	Gain Quality approval	1	K
M	If approved then Final Negotiation and contract award	2	L

# **Sourcing from low cost countries**

GQP has a set time-frame of 6 months for the launch of its new product and needs to ensure no risk of failing to meet this deadline.

The local fabrication suppliers to GQP are very financially dependent on GQP with GQP being 80% of most of the local fabricators business. Simon believes that there may be collusion between the local suppliers when pricing. It is time for change and Simon believes that low-cost country sourcing may remove some of the complacency GQP feels they are experiencing with the local suppliers. Simon must ensure that any change to low-cost country sourcing must be seamless.

#### **QUESTIONS AND MARKING SCHEME**

# Q1 Learning outcome: 1.0

For each of the Activities A to E suggest how the risks associated with international sourcing and the selection of global suppliers in the future may be reduced.

(25 marks)

#### Marking scheme

A Framework answer might feature the following Pre-contractual activities:

International sourcing and selection of a critical global category supplier to support an organisation is a complex task that must be planned and approached with great care. Candidates answers should ideally capture/expand on the bullet points under each of the following tasks:

#### Task A

Identify/segment a product line suitable of sourcing globally. Bundling product lines into natural category groupings.

- Segmentation analysis
- Criticality analysis
- Strategy team & stakeholder selection
- Business case development.

(4 marks)

#### Task B

Gather all drawings, material and finish specifications.

- Compliance requirements
- Technical options selection/ Expedite process.

(4 marks)

#### Task C

Determine the business volumes over a medium/long term period.

- Demand management questions/review
- Learning curve analysis.

(4 marks)

# Task D

Analyse the supplier market landscape locally and internationally

Supply market analysis/ Supplier analysis.

(4 marks)

#### Task E

Review international sourcing options and select

- Leverage & portfolio analysis/ Strategic source planning and then selection
- Review market testing options/ Select supplier for market test
- Sourcing strategy business cases.

(4 marks)

Up to 20 marks are available for the above.

Stronger answers will capture the complexities of sourcing and the need to allocate time and effort up front, to determine the optimum international sourcing strategy and applying it only where the product line category is suited to a global contractual arrangement.

Task E – Review international sourcing options and select – is vital in terms of understanding the contractor landscape, leverage points etc.

(Up to an additional 5 marks will be available for a reasoned discussion around this area).

(25 marks)

CIPS study guide reference: Chapter 5 - section 1.3

#### Q2 Learning outcome: 2.0

- (a) Based on the information in **Table 1**:
  - (i) Identify the critical path for the project.

(5 marks)

(ii) Determine the planned duration for the sourcing project.

(5 marks)

(b) Calculate the maximum time saving that could be made on Task H in order to reduce the overall duration of the project (taking into account the fact that all other task durations will remain as in Table 1).

Show your calculations.

(8 marks)

- (c) If the maximum time saving on Task H is achieved (and Task D is reduced by 2 weeks as suggested by GQP Managing Director) calculate:
  - (i) The revised overall planned duration of the project.

(3 marks)

(ii) An approximate start date if the project is to be complete by 01 September.

(4 marks)

# Marking scheme

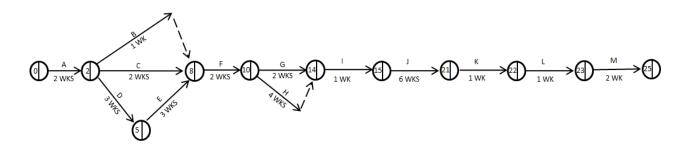
(a) (i) Based on a simple network diagram, the critical path runs through A, D, E, F, H, I, J, K, L & M.

Deduct 1 mark for any task wrongly included or missed.

(5 marks)

(a) (ii) The sum of the durations on the tasks on the critical path equals 25 weeks (2w + 3w + 3w + 2w + 4w + 1w + 6w + 1w + 2w). Award up to 3 marks if the wrong duration is calculated but based on a logical process using an incorrect critical path.

#### **Network Diagram**



(5 marks)

(b) If the duration of Task H is reduced to the extent that it will no longer be on the critical path, then the other candidate critical path will be: A-D-E-F-G-I-J-K-L-M (23 weeks). In other words 23 weeks is the lowest possible duration for the project if the duration of all other tasks are left unadjusted.

(4 marks for identifying alternative critical path)

The maximum effective saving on H is 2 weeks as if it is reduced to one week the project will still take 23 weeks. The maximum saving on Task H is 2 weeks.

(2 marks for this analysis and 2 marks for explanation)

(c) (i) If Task H is reduced by 2 weeks and Task D is reduced by 2 weeks, the overall duration of the project will be 21 weeks.

(3 marks)

(c) (ii) 21 weeks is approximately 5 months, so to complete the project by the 01 September, it should be started mid-late March (also accept 1st April or any other date where candidates have attempted to calculate exactly 21 weeks before 01 September).

(4 marks)

CIPS study guide reference: Chapter 9

#### Q3 Learning outcome: 3.0

Discuss the contract terms and clauses that GQP can use to manage the risks identified for low-cost country sourcing.

(25 marks)

#### Marking scheme

Contract terms are statements by the parties to the contract as to what they understand their rights and obligations to be under the contract. They define the content of the 'offer' (or counter-offer) which becomes binding once accepted by the other party. Contractual terms are the form of express terms (which are especially inserted into a contract by either or both of the parties) or in the form of implied terms (which are automatically assumed to be part of a contract, by virtue of relevant statute, custom or business). Many of the terms most important in the management of contractual risk are express terms.

(5 marks)

# (i) Poor quality product

Inspection and testing clauses may be used to stipulate:

- That the buyer is not legally bound to accept delivery of goods (which may imply the transfer of
  possession, title and risk) before inspection and/or testing of the goods to ascertain that they
  conform to specification and are fit for purpose.
- That the buyer is to be allowed a reasonable time to inspect and test incoming goods.

A rights of inspection clause, giving the outsourcer rights of access to inspect the supplier's premises, processes or performance to monitor compliance.

Penalties for specific non-performance (e.g. liquidated damages), and incentives for performance or improvements (e.g. bonus payments).

Under implied statutory terms in regard to 'satisfactory quality and fitness for purpose' the buyer is much stronger protected but still has the responsibility for inspecting and choosing wisely before entering into contracts.

(4 marks)

#### (ii) The passing of title

GQP may wish to stipulate that ownership passes when the goods have been delivered and formally accepted, following inspection, testing or other procedures.

GQP may secure ownership of the goods upon inspection and payment, but may ask the supplier to retain possession of some or all of the goods, in order to reduce its own stockholding.

If the parties do not indicate their intentions, Section 18 of the Sale of Goods Act 1979 lays down various rules for when property passes.

(4 marks)

# (iii) Initial prices increasing once a commitment to supply has been made.

GQP could implement a fixed price clause for the duration of the contract: essentially, allocating all cost-related risks to the low-cost country supplier.

A contract price adjustment clause, detailing how new prices or price changes will be determined and jointly agreed: essentially, sharing cost-related risks – but also mitigating some risk, by relating price

adjustments to actual cost rises, rather than agreeing an up-front price with an inflated 'contingency' element.

Dispute resolution clauses, detailing how disputes on prices will be resolved.

(4 marks)

(iv) Orders not shipping on time and 'premium' transport arrangements having to be made. 'Time is of the essence of the contract', so GQP can insist upon the delivery date specified in the contract. If there is a delay in performance, the injured party may treat it as a breach of condition and pay nothing (and also refuse to accept late performance if offered). Such time stipulations are generally treated as part of the essential description of the goods and are governed by implied terms in relation to sale of description (s13 of the Sale of Goods Act 1979).

(4 marks)

(v) Low-cost country suppliers subcontracting work and GQP not being aware that they have done this. This may result in poor quality.

GQP have a key interest in assuring the quality of the goods produced by suppliers therefore they will not want the supplier to hand over the contract to a third party – at least without the opportunity to pre-qualify and approve the subcontractor. The original supplier will remain liable for any failures on the part of the third party, but the risk may still be unacceptable to GQP.

A subcontracting and assignment clause may be used to prevent any assignment or subcontracting without prior written consent. A typical clause may be as follows: 'the supplier shall not assign or transfer the whole or any part of this contract, or subcontract the production or supply of any goods to be supplied under this contract, without the prior written consent of the buyer.'

(4 marks)

CIPS study guide reference: Chapter 11

#### Q4 Learning outcome: 4.0

(a) Identify key risks for GQP's future business to be included in a risk register for GQP to address potential risks.

(13 marks)

(b) Discuss how Simon can ensure a successful introduction of a low-cost country supplier to GQP through good supplier transition planning.

(12 marks)

# Marking scheme

(a) Candidates may wish to tackle this question by first identifying the weaknesses and threats facing GQP.

All weaknesses and threats will point the way in terms of likely areas of hazard/disruption/ risk for GQP to be managed. Each risk identifier should be attributed to an 'owner' whose responsibility it is to monitor the risk and update the register accordingly. Regular reporting on the contents of the risk register is important as part of monitoring, review and escalation. Up to 5 marks – will be available for candidates that follow a structure similar to the above; credit will be awarded for appropriate alternative structures.

(5 marks)

The risks to be included in a risk register should capture:

- Any supply risk that may cause the new product launch to be delayed
- GQPs product offering is currently too costly
- Local fabrication suppliers are dependent on GQP as their main source of income
- Possible collusion between the local fabricators when pricing
- Quality and reliability must be maintained and this may be more difficult to monitor with overseas supply
- Premium freight costs
- Possibility of low-cost country suppliers sub-contracting work
- Potential cashflow issues with GQP from sourcing overseas
- Number of competitors has increased
- Some of the timelines Simon has allowed in his sourcing plan may be too tight
- Any other potential risk.

Up to 8 marks will be available for specific risks.

(8 marks)

(b) As the introduction of a low-cost country supplier to GQP represents a significant change to its current Fabrication supplier base, it is important that the adoption of the new supplier is well planned.

Areas that Simon needs to ensure are well planned are as follows:

- Negotiation, preparation of product specifications, service level agreements and supply contracts so that there is clear understanding of the expectations of both parties and how the relationship between them will be managed. (Communication, quality and performance management, dispute resolution etc.)
- The contract should include a negotiated transition plan, detailing the risks and responsibilities

- of both parties, including the ironing out of unforeseen problems or issues. There should also be a provision for acceptance testing (perhaps a trial period).
- Readiness of stakeholders, systems and infrastructure for the implementation of a low cost country supplier. Plans, controls, systems and resources need to be in place to handle the logistics, inventory, quality and other operational implications of the contract. Staff needs to be aware of the new relationship and their responsibilities within it. Customers may need to be made aware of any implications for quality or delivery.
- A trial period or pilot programme allows buyers and supplier organisations to test their readiness, identify issues and iron out problems prior to acceptance or full implementation. Phased implementation may be another option. For GQP they may source locally in parallel with the low cost country supplier until such times that they are confident that the low-cost country can sustain their requirements.
- Contract management and review, to ensure that: co-operative working relationships are built with the new supplier; shortfalls on agreed specifications are followed up; and changes to contractual terms are systematically documented and managed; and continuous improvements are built into supplier performance over time.
- Incentives may be used, in the form of potential further business or performance related bonuses, to motivate the supplier to provide the service required within the tight time-frame required by GQP.

(12 marks)

CIPS study guide reference: Chapter 13