



Unit 5: Management of Commercial Risk

Delivery guidance

This unit will give your learners a valuable insight into the various factors considered by a company to finalise their tender sums. Such factors often require careful evaluation of conflicting factors that impact on the potential success of the tender bid.

Approaching the unit

You should focus on developing an understanding of tendering strategies so that your learners are aware of why a company decides to submit tenders. Learners would get to know various ways in which a project could be procured. An appreciation of supply chain arrangements also helps learners to understand the risks associated with construction projects.

You should give learners real world examples of construction projects or through project scenarios developed by yourself including company profiles. Design activities so that learners are able to review the information from various sources including site visits.

You then draw upon all the learning activities to determine a final tender sum which considers a variety of factors, includes all the required adjustments and is agreed at board level.

Throughout the delivery, you should relate the content of this unit to a number of units on this qualification which will help to motivate learners. This unit gives opportunities to make use of a variety of delivery approaches which encourage independent learning including research activities, role play and interaction with the guest speakers.

You will find the use of carefully considered mock project briefs a valuable learning resource throughout the delivery of this unit. You may also wish to adapt suitable case studies for your learners. Using such resources helps to develop a holistic understanding of the subject among learners and gives you the opportunity to involve local construction or architectural firms in providing example projects and mentoring support to learners through some of the exercises.

Learning aim A

Introduce learners to the tendering process, highlighting the key terminology used. You could introduce the topic using a short video clip which will provide a basis for a class discussion. You could use a project scenario to develop an understanding of a typical tender decision programme. It is important that such scenarios are based around real world projects and include all the details that would be expected by the industry.

Once you have introduced basic principles, you can engage your learners during delivery through knowledge quiz activities, individual, paired and group activities and class discussions.

Invite a guest speaker from the industry who has the responsibility of making tendering decisions. The speaker could highlight the procurement routes currently being used by the industry and their relationship to risk management. Learners are often both interested and enthused to hear about the current practices, so early exposure would be greatly motivating.



Learning aims B and C

For learning aim B, demonstrate the use of commercial intelligence by providing examples. Engage learners through hands-on mini-research activities to review information that could contribute towards market intelligence.

Arrange a site visit for learners so that they could appreciate how site-specific factors impact upon the tendering processes and the final sums. Give learners a checklist to use on the site and support them in triangulation of information.

For learning aim C, you will need to refer to industry standard processes and procedures in the delivery of making final decisions. You will need to guide learners through role play how such procedures work.

You may wish to adopt a holistic, project-based approach in combining the delivery of **learning aims B and C** (this could be by using the same example project/case study as used during delivery of learning aim A). By doing so, learners will develop a complete, end-to-end experience-based understanding of the information sources used to assess commercial risk as well as how various factors are evaluated to reach the final tender sums. You could either develop a mock project or adapt an actual case study/example.



Assessment model

Learning aim	Key content areas	Recommended assessment approach
A Understand the risks associated with construction projects	A1 Tender strategies A2 Contractual arrangements A3 Supply chain A4 Commercial risk analysis	This will be an externally set and internally assessed Pearson assignment. You will be provided with a tender scenario and estimated project cost in order to consider an appropriate tender submission taking into account all external and internal factors that impact on the final tender decision.
B Review information used when making commercial tender decisions	B1 Commercial intelligence B2 Company aspirations and needs B3 Site visit report B4 Business analysis B5 Market structure	
C Undertake commercial decisions to support the procurement process	C1 Application of risk analysis to make commercial decisions C2 Analysis of the estimated project cost C3 Use of commercial intelligence C4 Tender adjudication and settlement	

Assessment guidance

This will be an externally set and internally assessed Pearson assignment. You will be provided with a tender scenario and estimated project cost in order to consider an appropriate tender submission, taking into account all external and internal factors that impact on the final tender decision.

Assessment controls

Time: the assignment should be completed in the stated time for the assignment.

Invigilation: learners should be invigilated and on centre premises when completing the assignment.

Resources: resources and learner work should be kept securely in the centre between assessment periods.

Research: learners may need to research their local environment to collect data to support their response. If this is the case, they are permitted to take notes and bring them back to the centre. Research time will be accounted for in the time requirement for the assignment.



Getting started

Unit 5: Management of Commercial Risk

Introduction

You may wish to introduce learners to this unit using online video clips showing the tendering processes for a typical construction project highlighting various stages and their significance. Give an overview that illustrates the various factors, often conflicting, which are considered while making commercial decisions. The focus is on developing an understanding of risk and how this could be managed. Inviting a guest speaker at the start will also help to motivate your learners. Engage your learners during delivery through knowledge quiz, individual/paired/group activities, site visit and class discussions. Both learning aims B and C will focus on activities around practical application of tasks in response to real-world or mock project briefs and a company profile. You will need to give regular tutorial support to learners both in their group work, and individually as required.

Learning aim A: Understand the risks associated with construction projects

Learning aim A1

In your initial presentation to learners, you could introduce tender strategies using a variety of scenario-based tasks. Online resources as well as adequate details within the tasks can help in illustrating the differences between various strategies. This can help prompt class discussion for you to clarify points and gauge learner understanding.

- Use similar scenarios to decide about suitable tender strategies considering a variety of factors, such as budget, site and location. Focus on the constraints that the supply chain could have on the tender preparation. Give learners this information and ask them to analyse these scenarios before presenting to their peers.

Learning aim A2

Through a tutor presentation, introduce how a construction project could be procured. Engage learners through research activities, class discussions and Q&A to develop understanding of how a procurement route impacts upon project risks. Learners apply this understanding to determine a suitable form of contract that would minimise the risk to the project. Learners are then to present their findings to their peers.

If possible, invite a guest speaker to expand upon contractual arrangements which you would have already covered through class exercises and presentations. The guest speaker could be from a quantity surveying, or related, background. The guest speaker presents an ideal opportunity to highlight how a specific procurement route impacts upon risk and profits.

Learning aim A3

In a tutor presentation, you could explain how the supply chain works in the construction industry. You could follow this by leading a class discussion on the various players in the supply chain.

Through suitably structured activities, reinforce understanding about the role of suppliers and subcontractors in tendering, the risks associated with it as well as potential costs. Leading a class discussion based on a project brief where learners can suggest ways to minimise and manage any risks in the supply chain related to suppliers and subcontractors, will help learners



understand the challenges associated with supply chain management. Extend this discussion to nominated suppliers and nominated subcontractors to introduce provisional sums. Introduce terminology that is embedded within the class discussions and exercises to contextualise technical terms.

Learning aim A4

Use a tutor presentation to give an overview of the factors to be considered while analysing commercial risk. Make use of case studies and pre-session reading which would give the context of what could be called a commercial risk and why it is important.

Facilitate a group activity where learners are given a set of project documents. The learners will carry out research relating to factors that impact upon the project risks such as buildability, contract conditions and economic factors. Each group is to present to their peers. Give support and add any detail as necessary.

Learning aim B: Review information used when making commercial tender decisions

Learning aim B1

Using a tutor presentation, introduce the need to be commercially aware of the competitors before deciding to bid for a project. Engage learners through Q&A about risk management. Based upon a detailed project brief, learners should determine how this would help to make a bidding decision. Learners to share their findings with their peers. Give support and add where necessary.

- Lead a small group activity where learners determine suitable methods to gather market intelligence. Learners to share their findings with their peers. Give support and add where necessary.

Learning aim B2

Using a tutor presentation, introduce how internal attitudes and long-term planning within a company have an impact upon tender decisions. Learners should work on a detailed company profile including performance data and business plans. Learners can then participate in a class discussion to justify their findings. Give support and add where necessary.

Invite a guest speaker from the industry. This could be a Quantity Surveyor, Project Manager, Contract Manager or any senior manager responsible for making tender decisions. The guest speaker should be able to share examples and instances where internal attitudes and long-term planning within a company have an impact upon tender decisions.

- Before the session, receive relevant documents from the guest speaker and distribute these amongst the learners. Ask learners to study these and prepare questions for the guest speaker.

Learning aim B3

You will deliver this topic so that learners develop an understanding of site-specific factors which could impact upon tender sums especially preliminaries and other relevant items.

You could either arrange short visits locally or arrange a visit for longer where learners are able to gather the detailed data.

- Using the data gathered on site, lead a class discussion on how this information could impact upon pricing of preliminary items, repairs and alterations, and the assessment of commercial risk.



Learning aim B4

Through a tutor presentation, introduce learners to the range of different methods available to investigate the feasibility of projects.

Follow this with a group activity, during which you could ask learners to work in small groups to carry out research on one method/approach such as PESTLE, SWOT, 5 Cs and Porter's five forces, cost benefit analysis and residual method of valuation. Learners to present their findings to the other groups.

Facilitate the discussion among groups; summarise and add where necessary.

Learning aim B5

Using a tutor presentation, give an overview of the factors that influence supply of labour and materials and the demand for construction work and have an impact upon tender prices and cost of work. Introduce the concept of perfect competition, imperfect competition and monopoly.

- Follow this by facilitating a group activity about market structures where learners present to their peers. Give support and add any detail as necessary.

Learning aim C: Undertake commercial decisions to support the procurement process

Learning aim C1

In a tutor presentation, introduce the nature of commercial decisions which an organisation has to make. Lead a class discussion about how various risk analysis factors influence such decisions. Please refer to unit content where various factors are listed such as market conditions and political stability. Use scenarios or case studies to give context to this discussion.

Give a detailed project brief to learners who will be working in small groups. They are to carry out a risk analysis and determine any tender adjustments required considering a range of factors.

Each group is to present to their peers. Give support and add as necessary.

The project brief must include, beside other documents, drawings and related technical and costing details to support learners when completing activities. Please focus on the final outcome of a final adjusted sum.

Learning aim C2

In your tutor presentation, introduce the concept of 'unit rates' and how they are built up, including preliminaries, labour, plant and materials. Lead a class discussion on what might be required to cost an item using examples (e.g. laying concrete in foundations). Follow this with a group activity where learners will carry out research, find an example of a unit rate and share their findings with the class.

After introducing the concept of overheads, prime cost (PC), provisional sums (PS), contingencies and alternative tenders, lead a class discussion on what contributes to each of the concepts introduced.

Give an overview of the estimation and billing process in accordance with recognised methods used by the local and national industry focusing on 'key cost centres'.



Follow this with an individual activity. After you have demonstrated how all of the calculations could be summarised under various sections (or cost centres), learners will carry forward the costs to the summary page of the bill. Give support as necessary.

Learning aim C3

Facilitate a group activity where learners will work on the project brief which should include details on commercial intelligence and competitors, so that learners can determine how competitive tendering helps to inform a bidding decision.

Learners are to share their findings with their peers.

Draw upon the key points of the session and answer any questions learners may have.

Learning aim C4

This topic could be covered through role play. The purpose of this is to simulate the processes followed by the industry for tender adjudication and settlement. Assign roles to the learners over two possible 'meetings'.

The first of these meetings will consider overheads and profit margins, economic conditions and workload.

The second meeting will consider various discounts and director's adjustments.

Discuss a summary of the activity highlighting which of the factors resulted in adjustment, and why. The meeting should conclude with a firm bid.

Invite a guest speaker who could be a Quantity Surveyor, Project Manager, Contract Manager or any senior manager responsible for making tender decisions. The guest speaker should be able to share examples and instances where commercial decisions were taken based upon a variety of factors. The guest speaker will also explain the processes to reach a final sum.

Before the session, you would have received relevant documents from the guest speaker and distributed among learners. Ask learners to study these and prepare questions for the guest speaker.



Details of links to other BTEC units and qualifications, and to other relevant units/qualifications

This unit links to:

- Unit 1: Construction Technology
- Unit 2: Construction Design
- Unit 11: Management of a Construction Project
- Unit 15: Measurement Techniques
- Unit 20: Quantity Surveying
- Unit 22: Economics and Finance in Construction.

Resources

In addition to the resources listed below, publishers are likely to produce Pearson-endorsed textbooks that support this unit of the BTEC Nationals in Construction and the Built Environment. Check the Pearson website at <http://qualifications.pearson.com/endorsed-resources> for more information as titles achieve endorsement.

Textbooks

Ashworth, A. Hogg, K. and Higgs, C. (2013) *Willis's Practice and Procedure for the Quantity Surveyor* (13th revised edition), Wiley-Blackwell, ISBN 9780470672198.

This book provides good coverage of the work of the quantity surveyor in private practice, in public service and in contracting organisations.

Brook, M. (2016) *Estimating and Tendering for Construction Work* (5th edition), Routledge, ISBN 9781138838062.

This book covers a number of topics in this unit and has been popular among the learners for some time.

Lee, S., Trench, W. and Willis, A. (2014) *Willis's Elements of Quantity Surveying* (12th edition), Wiley-Blackwell, ISBN 9781118499207.

A popular book for quantity surveying and covers a range of topics relevant to the unit.

Cooke, B. and Williams, P. (2009) *Construction Planning, Programming and Control* (3rd edition), Wiley-Blackwell, ISBN 9781405183802.

This book covers the principles and practice of construction planning, programming and control during the preparation and construction stages of a project. The control of time, money and resources are considered in a risk management context.

Journals

Construction Manager

This journal is published by the Chartered Institute of Building and contains updates on construction projects, methods and materials.

RICS journals

RICS publishes a number of journals which are of relevance to the unit content and quantity surveying profession.



Videos

'Bills of Quantities' – this provides an insight into format and use of bill of quantities.

Websites

The website of Royal Institution of Chartered Surveyors (RICS) is the relevant professional body. The website contains a wealth of information about standards, regulations and useful events.

Visit the website Designing Buildings Wiki, which is supported by a number of organisations such as CIOB, ICE and BRE. The website provides information relevant to this unit.

Pearson is not responsible for the content of any external internet sites. It is essential for tutors to preview each website before using it in class so as to ensure that the URL is still accurate, relevant and appropriate. We suggest that tutors bookmark useful websites and consider enabling learners to access them through the school/college intranet.