



Regulated Qualifications Unit and Assessment Specification

Unit title	Assess, Plan and Monitor Project Methods and Progress in Construction
Regulator unit code	J/616/7117
SQA unit code	H7SN 80
SSC Ref	COSCCOO13

History of changes

Publication date: August 2014

Version: 02 (July 2017)

Version number	Date	Description	Authorised by
02	July 2017	Unit Specification updated to reflect current Ofqual terminology	Qualifications Officer

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Regulated Qualifications Unit specification

Title	Assess, Plan and Monitor Project Methods and Progress in Construction	
Level	4	
Credit value	15	
Learning Outcomes	Assessment Criteria	
The learner will:	The learner can:	
1 Be able to assess and identify work methods.	1.1	Assess the available project data accurately and summarise it to enable decisions on construction, installation and work methods to be made.
	1.2	Obtain more information from alternative sources in cases where the available project data is insufficient.
	1.3	Identify with site personnel any special considerations, record them and pass them onto people who may be affected.
	1.4	Assess the selected work methods against relevant technical and project criteria and identify the one which best meets the criteria.
	1.5	Analyse the method which has been selected for its activity content and quantify it accurately.
	1.6	Prepare a method statement which is accurate, clear, concise and acceptable to all the people involved.
2 Understand how to assess and identify work methods.	2.1	Explain how to summarise project data.
	2.2	Examine how to assess the available project data.
	2.3	Propose how to recommend the selected work methods.
	2.4	Explain how to prepare a method statement.
	2.5	Explain how to obtain more information from alternative sources in cases where the available project data is insufficient.

Learning Outcomes The learner will:	Assessment Criteria The learner can:
	<p>2.6 Examine how to assess the selected methods against relevant technical and project criteria and identify the method which best meets the criteria.</p> <p>2.7 Examine how to analyse and quantify the method which has been selected for its activity content.</p>
<p>3 Be able to develop project programming and resourcing.</p>	<p>3.1 Identify major activities, calculating the resources needed from the information available and prepare a draft work programme.</p> <p>3.2 Develop schedules to procure resources.</p> <p>3.3 Obtain clarification and advice where the resources needed are not available.</p> <p>3.4 Calculate how long each activity will take, identify activities which influence each other and sequence them logically and realistically so that they make the best use of the resources available.</p> <p>3.5 Analyse the sequential programming of activities against technical and project requirements and the necessary resources.</p> <p>3.6 Produce detailed programmes and schedules of planned activities which are consistent with the complexity of the project.</p> <p>3.7 Identify alterations to the works programme which will meet changed circumstances or offer cost and time benefits, calculate the savings accurately and justify them to decision makers.</p> <p>3.8 Implement a system for monitoring the works programme and use the results to improve future production and planning.</p>

Learning Outcomes	Assessment Criteria
The learner will:	The learner can:
<p>4 Understand how to develop project programming and resourcing.</p>	<p>4.1 Describe what to identify as major activities.</p> <p>4.2 Explain how to calculate the resources needed from the information available.</p> <p>4.3 Explain how to prepare a draft work programme.</p> <p>4.4 Explain how to obtain clarification and advice where the resources needed are not available.</p> <p>4.5 Explain how to calculate how long each activity will take and sequence activities.</p> <p>4.6 Describe what to identify as activities which influence each other.</p> <p>4.7 Examine how to analyse the sequential programming of activities against technical and project requirements.</p> <p>4.8 Explain how to produce detailed programmes and schedules of planned activities.</p> <p>4.9 Describe what to identify as the alterations to the work programme which will meet changed circumstances or offer cost and time benefits.</p> <p>4.10 Explain how to calculate the savings resulting from alterations to the work programme.</p> <p>4.11 Evaluate how to justify to decision makers the savings resulting from alterations to the work programme.</p> <p>4.12 Explain how to implement a system for monitoring the works programme.</p> <p>4.13 Explain how to use the results of monitoring to improve future production and planning.</p>

Learning Outcomes	Assessment Criteria
The learner will:	The learner can:
<p>5 Be able to monitor project progress against agreed programmes.</p>	<p>5.1 Implement systems to monitor and record the progress of the contract against the agreed programmes, and collect information regularly and summarise it accurately.</p> <p>5.2 Identify and quantify any variations and deviations from planned progress which have occurred, or which may occur, and which could disrupt the programme.</p> <p>5.3 Investigate the circumstances of any variations thoroughly and report to line manager.</p> <p>5.4 Suggest options which are most likely to minimise increases in cost and time and help the contract progress, and pass these on to line manager.</p> <p>5.5 Revise programme to accommodate new circumstances.</p>
<p>6 Understand how to monitor project progress against agreed programmes.</p>	<p>6.1 Explain how to implement systems to monitor and record the progress of the contract against the agreed programmes, and collect and summarise information.</p> <p>6.2 Describe what to identify as any variations and deviations from planned progress which have occurred, or which may occur, and which could disrupt the programme.</p> <p>6.3 Examine how to quantify any variations and deviations from planned progress which could disrupt the programme.</p> <p>6.4 Examine how to investigate the circumstances of any variations.</p> <p>6.5 Explain how to report variations and circumstances to line manager.</p>

Learning Outcomes	Assessment Criteria
The learner will:	The learner can:
	<p data-bbox="799 324 1402 495">6.6 Propose how to suggest options which are most likely to minimise increases in cost and time and help the contract progress and pass them to line manager.</p> <p data-bbox="799 526 1370 591">6.7 Explain how to revise programme to accommodate new circumstances.</p>

Additional information about the unit
Unit purpose and aim(s)
<p>This unit is about preparing method statements, programmes and schedules and calculating resource requirements and monitoring progress and dealing with deviations from plans.</p> <p>You will need to assess data, obtaining more if necessary and analyse and assess work methods and produce a method statement. You will need to identify activities, calculate the resources and time requirements, analyse the activities and produce activity programmes and schedules.</p> <p>You will need to implement monitoring systems, identify deviations from plans and, following investigation, implement appropriate corrective action. You will need to regularly inform decision makers regarding progress and identify, and recommend possible improvements.</p>
Unit start date
01 August 2014
Details of the relationship between the unit and relevant national occupational standards (if appropriate)
The unit sets out the competence and knowledge specification for COSCCOO13 in Construction Contracting Operations.
Details of the relationship between the unit and other standards or curricula (if appropriate)
N/A
Assessment requirements specified by a sector or regulatory body (if appropriate)
<p>The following ranges apply: Learning Outcomes 1 and 2</p> <ul style="list-style-type: none"> ◆ Project data: <ul style="list-style-type: none"> — conditions of contract — bills of quantities — specifications — detailed drawings — health and safety plans — time-scales — contractual risks, obligations and scope of works ◆ Construction, installation and work methods: <ul style="list-style-type: none"> — sequencing of work and integration of work operations — organisation of resources (people, plant, materials, finance) — construction and installation techniques — temporary works — prefabrication and standardisation (volumetric pods, panelised hybrid) — health, safety and welfare — new materials and technologies

Additional information about the unit (cont)

Assessment requirements specified by a sector or regulatory body (if appropriate)

- ◆ Alternative sources:
 - the client
 - consultants
 - contractors
 - sub-contractors
 - suppliers
 - regulatory authorities
 - technical literature
 - trade literature
 - organisational expertise
- ◆ Identify work methods:
 - standard lists and procedures
 - investigative research
- ◆ Technical and project criteria:
 - materials & component performance and availability
 - structural forms
 - phased occupancy
 - fire protection
 - access
 - plant, equipment & people capability
 - traffic generation and management
 - environmental factors
 - transportation
 - waste and sustainability
 - seasonal weather conditions
 - buildability
 - value engineering
 - protection of archaeological and historically valuable resources
 - third party obligations
 - other related programmes
 - community benefits, including skills and training
- ◆ Analyse:
 - method study
 - work study
 - production analysis
 - benchmarking

Learning Outcomes 3 and 4

- ◆ Resources:
 - people
 - plant and equipment
 - materials and components
 - sub-contractors
 - information

Additional information about the unit (cont)

Assessment requirements specified by a sector or regulatory body (if appropriate)

- ◆ Programmes and schedules:
 - bar charts
 - network analysis
 - critical path
 - time change
 - action lists
 - method statements
- ◆ Clarification and advice — from:
 - the client/client's representative
 - consultants
 - project team partners
 - practice research
 - technical publications
 - trade literature
 - management
- ◆ Analyse — using:
 - method study
 - work study
 - production analysis
- ◆ Technical and project requirements:
 - materials & component performance and availability
 - structural forms
 - phased occupancy
 - fire protection
 - access
 - plant, equipment & people capability
 - traffic generation and management
 - environmental factors
 - transportation
 - waste and sustainability
 - seasonal weather conditions
 - buildability
 - value engineering
 - protection of archaeological and historically valuable resources
 - third party obligations
 - other related programmes
 - community benefits, including skills and training
- ◆ Produce:
 - manually
 - electronically

Additional information about the unit (cont)

Assessment requirements specified by a sector or regulatory body (if appropriate)

Learning Outcomes 5 and 6

- ◆ Systems to monitor and record:
 - visual inspection
 - resource records
 - site inspection reports
 - contractors' reports
 - certified payments
 - written and graphical records of actual work against programmed work
 - site meetings
 - key performance indicators
 - organisational procedures
 - management reports
 - benchmarks
- ◆ Programmes:
 - bar charts
 - network analysis
 - critical path
 - time change
 - action lists
 - method statements
 - project expenditure forecasts
- ◆ Resources:
 - people
 - plant and equipment
 - materials and components
 - finance
 - time
 - specialist services
 - public utility services
 - information
- ◆ Quantify:
 - method study
 - work study
 - production analysis
 - cost implication
- ◆ Circumstances:
 - resource shortages
 - design problems and constraints
 - industrial disputes
 - lack of essential construction information
 - construction errors
 - inclement weather
 - physical constraints
 - legal
 - environmental
 - contract variations
 - force majeure

Additional information about the unit (cont)
Assessment requirements specified by a sector or regulatory body (if appropriate)
<ul style="list-style-type: none"> ◆ Revise: <ul style="list-style-type: none"> — revise programme — agree new completion dates — initiate contract claim <p>This unit must be assessed in a work environment, in accordance with:</p> <ul style="list-style-type: none"> ◆ the Additional Requirements for Qualifications using the title NVQ in QCF ◆ the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment. <p>Assessors for this unit must have verifiable, current industry experience and a sufficient depth of relevant occupational expertise and knowledge, and must use a combination of assessment methods as defined in the Consolidated Assessment Strategy.</p> <p>Workplace evidence of skills cannot be simulated</p>
Endorsement of the unit by a sector or other appropriate body (if required)
CITB
Location of the unit within the subject/sector classification system
4.1 Engineering, 5.2 Building and Construction
Name of the organisation submitting the unit
CITB
Guided Learning Hours
50

Regulated Qualifications Assessment specification

Assessment (evidence) requirements

The evidence requirements for this unit are shown in the main body of the unit under the section titled 'Assessment requirements or guidance specified by a sector or regulatory body'.

Guidance on methods/instruments of assessment

Occupational skills (OS) unit

This unit is designed to assess the skills of learners in the workplace. Observation of learner performance can only be carried out on-the-job and should always be the primary and preferred source of evidence of competent performance.

Collection of supplementary evidence of performance can be used to further substantiate, support and expand the evidence base for competent performance where this is necessary. This may arise in situations where evidence from direct observation of the learners on-the-job is deemed insufficient to fully meet the required standards. Supplementary evidence may include:

- ◆ witness testimony
- ◆ questioning
- ◆ professional discussion
- ◆ product and photographic evidence
- ◆ relevant active documentation, reports, presentations
- ◆ other valid evidence which relates directly to learner performance on-the-job

SQA's Guide to Assessment is designed to provide support for everyone who assesses for SQA qualifications. It looks at the principles of assessment, and brings together information on assessment in general as well as on best practice in assessment. The Guide to Assessment can be downloaded free from SQA's website www.sqa.org.uk.