

COSCCOMO07 - SQA Unit Code FM70 04

Identify, assess and evaluate project requirements in construction contracting operations management



Overview

This unit is about the procurement and use of resources. You will need to identify and agree goals and priorities with the project stakeholders. You will need to clarify, summarise and present the project requirements and stakeholders' preferences.

You will need to challenge any preferences which are not realistic and decide valid options. You will need to investigate and evaluate the best balance between the potential asset value and sustainability and project design, function, performance and return on investment. You will also need to decide whether and how to implement the potential sustainable development approach so as to achieve key requirements

You will need to identify where resources will be needed and how to obtain them. You will then need to analyse the factors which will influence the procurement and use of resources. You will also need to check that resources have been estimated and that opportunities and constraints have been evaluated and presented to decision makers. You will also need to produce a report on the procurement and use of resources.

COSCCOMO07 - SQA Unit Code FM70 04

Identify, assess and evaluate project requirements in construction contracting operations management

Performance criteria

You must be able to:

Identify, assess and agree project requirements and stakeholder preferences

- P1 identify and **agree** with **project stakeholders** what their **goals and priorities** are both now and for the future
- P2 summarise, **present** and **clarify the project stakeholders' requirements**, the options available and the **constraints and risks** which might apply to the project
- P3 challenge project requirements and **stakeholders'** preferences which do not appear to be realistic, decide valid options and **agree** them in writing
- P4 **investigate economic factors and resources, environmental and ecological factors**, and **social views** that affect the future **asset value and sustainability** of potential development
- P5 evaluate the best balance between the potential **asset value and sustainability** and project design, function, performance and return on investment
- P6 decide whether and how to implement the potential sustainable development approach in order to achieve key requirements

Identify, assess and evaluate resource procurement factors

You must be able to:

- P7 **identify** the areas of the development where **resources** will be needed and plan an investigation to quantify the **resources** and to decide where to obtain them
- P8 agree realistic costs, programmes and clear statements of purpose for investigation with the stakeholders
- P9 analyse the **factors which will influence the procurement and use of resources**
- P10 **identify** potential opportunities and constraints and assess the impact these might have on the practicability and efficiency of the development process
- P11 check that the **resources** that will be needed have been estimated, summarise potential opportunities and constraints and evaluate how these will affect both the financing and the programming of the project
- P12 **present** the calculations and evaluation to decision makers, note their advice and amend the evaluation to reflect the feedback received
- P13 produce a report on the procurement and use of **resources** which will enable a procurement strategy to be implemented

COSCCOMO07 - SQA Unit Code FM70 04

Identify, assess and evaluate project requirements in construction contracting operations management

Knowledge and understanding

You need to know and understand:

Identify, assess and agree project requirements and stakeholder preferences

- K1 what to identify as the **project stakeholders' goals and priorities** both now and in the future (understanding)
- K2 how and why to **agree** with the **project stakeholders'** what their **goals and priorities** are both now and in the future (evaluation)
- K3 how to summarise, **present** and **clarify the** project stakeholders' requirements, the options available and the **constraints and risks** which might apply to the project (application)
- K4 how and why to challenge project requirements and **stakeholders'** preferences (analysis)
- K5 how and why to decide which options are valid and **agree** them in writing (evaluation)
- K6 how and why to **investigate economic factors and resources, environmental and ecological factors, and social views** that affect the future **asset value and sustainability** of potential development (analysis)
- K7 how and why to evaluate the best balance between the potential **asset value and sustainability** and project design, function, performance and return on investment (evaluation)
- K8 how and why to decide whether to implement the potential sustainable development approach in order to achieve key requirements (evaluation)
- K9 how to implement the potential sustainable development approach in order to achieve key requirements (application)

Identify, assess and evaluate resource procurement factors

You need to know and understand:

- K10 what to **identify** as the areas of the development where **resources** will be needed (understanding)
- K11 how and why to plan an investigation to quantify the **resources** (synthesis)
- K12 how and why to decide where to obtain the **resources** (evaluation)
- K13 how and why to agree realistic costs, programmes and clear statements of purpose for investigation with the stakeholders (evaluation)
- K14 how and why to analyse the **factors which will influence the procurement and use of resources** (analysis)
- K15 how and why to assess the impact which potential opportunities and constraints might have on the practicability and efficiency of the

COSCCOMO07 - SQA Unit Code FM70 04

Identify, assess and evaluate project requirements in construction contracting operations management

development process (analysis)

- K16 how to check the **resources** that will be needed have been estimated (application)
- K17 how to summarise potential opportunities and constraints (application)
- K18 how and why to evaluate how **resource** needs, potential opportunities and constraints will affect both the financing and the programming of the project (evaluation)
- K19 how to **present** the calculations and evaluation to decision makers, note their advice and amend the evaluation to reflect the feedback received (application)
- K20 how to produce a report on the procurement and use of **resources** (application)

COSCCOMO07 - SQA Unit Code FM70 04

Identify, assess and evaluate project requirements in construction contracting operations management

Scope/range

Identify, assess and agree project requirements and stakeholder preferences

- 1 Agree:
 - 1.1 direct with a client
 - 1.2 by negotiation and agreement with partnering team
 - 1.3 facilitation
- 2 Project stakeholders:
 - 2.1 the client
 - 2.2 CDM co-ordinator
 - 2.3 design consultants
 - 2.4 potential contractors
 - 2.5 potential subcontractors and suppliers
 - 2.6 potential investors
 - 2.7 funding agencies
 - 2.8 independent client advisers
 - 2.9 user groups
 - 2.10 community groups
 - 2.11 facilities/asset managers
- 3 Goals and priorities:
 - 3.1 quantity
 - 3.2 quality
 - 3.3 cost (whole life costs)
 - 3.4 time
 - 3.5 development
 - 3.6 improvement
 - 3.7 use
 - 3.8 maintenance
 - 3.9 low carbon design
 - 3.10 environmental impact and sustainability
 - 3.11 security

COSCCOMO07 - SQA Unit Code FM70 04

Identify, assess and evaluate project requirements in construction contracting operations management

- 3.12 health and safety
- 3.13 logistics
- 4 Present:
 - 4.1 orally
 - 4.2 in writing
 - 4.3 graphically
 - 4.4 electronically
- 5 Clarify the project stakeholders' requirements by:
 - 5.1 reference to standard documentation
 - 5.2 checklists
 - 5.3 client consultation
 - 5.4 questionnaires
 - 5.5 comparative field research
 - 5.6 market research
 - 5.7 identifying options and alternatives
 - 5.8 use of benchmarking tools
 - 5.9 digital exchange
- 6 Constraints and risks:
 - 6.1 cost
 - 6.2 time
 - 6.3 statutory regulations
 - 6.4 health and safety
 - 6.5 the environment
 - 6.6 client requirements
 - 6.7 system compatibility
 - 6.8 system interoperability
- 7 Investigate:
 - 7.1 use of benchmarking tools
 - 7.2 research

COSCCOMO07 - SQA Unit Code FM70 04

Identify, assess and evaluate project requirements in construction contracting operations management

- 7.3 consultancy advice
- 7.4 regulatory advice
- 7.5 insurance risk
- 8 Economic factors and resources:
 - 8.1 finance
 - 8.2 fiscal policy (including carbon tax/incentives)
 - 8.3 water demand/supply/use minimisation
 - 8.4 payback/return on investment
 - 8.5 carbon trading schemes/carbon reduction credits
 - 8.6 climate change levy agreements
 - 8.7 workforce (skills)
 - 8.8 raw materials
 - 8.9 manufactured systems and component/modular systems
 - 8.10 energy use/demand minimisation
 - 8.11 water demand/supply/use minimisation
 - 8.12 brownfield development
 - 8.13 land use
 - 8.14 resource efficient low carbon urban design
 - 8.15 market demands and social factors
- 9 Environmental and ecological factors:
 - 9.1 natural resources
 - 9.2 emissions (air, land, water)
 - 9.3 effluent
 - 9.4 waste and recycling
 - 9.5 access to environmentally sensitive areas
 - 9.6 effects of climate change
 - 9.7 carbon use minimisation
 - 9.8 water use
 - 9.9 biodiversity

COSCCOMO07 - SQA Unit Code FM70 04

Identify, assess and evaluate project requirements in construction contracting operations management

- 9.10 renewable energy technology
- 9.11 land use/contamination
- 9.12 protect archaeological and historically valuable resources
- 9.13 transport impact minimisation
- 10 Social views:
 - 10.1 client
 - 10.2 funders/investors
 - 10.3 workforce
 - 10.4 suppliers
 - 10.5 users
 - 10.6 community (including public/private space)
- 11 Asset value and sustainability:
 - 11.1 saleable revenue
 - 11.2 minimising running costs (environmental and economic)
 - 11.3 minimising maintenance
 - 11.4 location in relation to flooding/ground conditions
 - 11.5 energy use/demand minimisation
 - 11.6 decentralised district heating

Identify, assess and evaluate resource procurement factors

- 12 Identify by:
 - 12.1 standard lists and procedures
 - 12.2 investigative research
- 13 Resources:
 - 13.1 plant
 - 13.2 labour
 - 13.3 finance
 - 13.4 materials
 - 13.5 contractors
 - 13.6 subcontractors

COSCCOMO07 - SQA Unit Code FM70 04

Identify, assess and evaluate project requirements in construction contracting operations management

- 14 Factors which will influence the procurement of resources:
 - 14.1 forms of contract
 - 14.2 availability
 - 14.3 cost
 - 14.4 insurances
 - 14.5 time and period required
 - 14.6 transport
 - 14.7 delivery dates
 - 14.8 recoverable costs
 - 14.9 discounts
 - 14.10 service support
 - 14.11 environmental impact and sustainability
 - 14.12 political sensitivities
 - 14.13 legal and regulatory constraints on access and use
 - 14.14 permit
- 15 Factors which will influence the use of resources:
 - 15.1 workforce competences and availability
 - 15.2 use of materials
 - 15.3 sustainability
 - 15.4 equipment
 - 15.5 construction methods
 - 15.6 contracting methods
 - 15.7 quantity
 - 15.8 quality standards
 - 15.9 climate
 - 15.10 legal and regulatory constraints
 - 15.11 health, safety and welfare
 - 15.12 infrastructure
- 16 Present:

COSCCOMO07 - SQA Unit Code FM70 04

Identify, assess and evaluate project requirements in construction contracting operations management

- 16.1 orally
- 16.2 in writing
- 16.3 graphically
- 16.4 electronically

COSCCOMO07 - SQA Unit Code FM70 04

Identify, assess and evaluate project requirements in construction contracting operations management

Developed by ConstructionSkills

Version number 2

Date Approved November 2013

Indicative review date May 2020

Validity Current

Status Original

Originating organisation ConstructionSkills

Original URN COSCCOMO07

Relevant occupations Building and civil engineering technicians; managers in construction; estimators; valuers and assessors managers; quantity surveyors

Suite Construction Contracting Operations Management

Keywords Procurement; resources;