ECIPC56

Identify and promote cost or time savings through Project Control, Estimating, Planning & Cost Engineering activities during the concept and definition phase

Overview

This standard defines the competence required to participate, with others, in the establishment and execution of target costs or schedules for business deliverables through the application of cost or time minimisation or optimisation during the concept and definition phases of the life cycle.

It is expected that practitioners would work with colleagues and peers to implement a culture of target costing, value engineering or associated practices

Performance criteria

You must be able to:

You must be able to:

P1 Establish and allocate target costs and determine the anticipated quantities required for a range of business deliverables

P2 Research and interpret technical/engineering drawings, Computer-AidedDesign Models, technical papers and/or written specifications

P3 Understand and interpret the design requirements or design intent of the business / project deliverables

P4 Identify the key functional elements of the design requirements

P5 Determine the key cost drivers associated with achieving the functional parameters

P6 Create and maintain cost models and/or Cost Response Curves

P7 Review concept and definition options, cost-performance trade-offs, and identify cost avoidance or cost reduction objectives

P8 Demonstrate an ability to influence the thinking of key stakeholders

Knowledge and understanding

You need to know and understand:

You must be able to:

K1 Principles of Target Costing or Scheduling

K2 Principles of Value Analysis and Value Engineering

K3 Principles of Process Improvement (e.g. Lean Manufacturing, Learning Curve) K4 Root Cause Analysis techniques

K5 Engineering Design Principles and Practice

K6 Appreciation of Test, Commissioning and Validation requirements

K7 Appreciation of associated Technologies, Processes and Facilities (e.g. Manufacturing, Construction or Information Technologies)

K8 Lateral Thinking and Brainstorming techniques

K9 Cost Modelling techniques

Scope/range related to performance criteria

1. Key Stakeholder Interfaces (may include)

1.1. Multiple Engineering/Functional disciplines
1.2. Commercial and Finance
1.3. Purchasing
1.4. Customers
1.5. Suppliers
1.6. Partners
1.7. Health Safety & Environment
1.8. IT Specialists

2. Cost / Schedule Type (4 from 7)

2.1. Acquisition Design and Development Cost/Schedule
2.2. Acquisition Manufacture Cost/Schedule
2.3. Operational / Maintenance and Support Cost/Schedule
2.4. Disposal Cost/Schedule
2.5. Life Cycle, Through-Life or Whole Life Cost/Schedule
2.6. Cost/Schedule of Construction / Installation
2.7. Commissioning Cost/Schedule

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