

## ECIPC3

Identify, analyse and evaluate risks, opportunities and uncertainties, and evaluate options for their control in the area of Project Control, Estimating, Planning & Cost Engineering



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### Overview

This standard defines the competence required to participate, with others, in the risk, opportunity and uncertainty identification and evaluation process and assess the commercial impact of technical and business risks, opportunities and uncertainties, and their potential influence on the outcomes or performance of the project. The context is the commercial impact on a project or business of the potential risks, opportunities and uncertainties to project schedule, cost, performance or specification and the options for their management or control. This competence is required principally (but not exclusively) prior to a commercial or financial commitment being made.

It is not expected that Project Control, Estimating, Planning & Cost Engineering practitioners will have the expertise, experience, and competencies of risk and opportunity management specialists in all cases. However, it would be expected that Project Control, Estimating, Planning & Cost Engineering practitioners would work with colleagues and peers to implement a culture of risk and opportunity and uncertainty awareness and management, and the associated practices.

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### Performance criteria

*You must be able to:*

- P1 Identify all areas of perceived risk, opportunity and uncertainty and review them with management and discipline specialists
- P2 Identify relevant risks, opportunities and uncertainties; rank and record them
- P3 Access appropriate sources of information and seek advice when necessary
- P4 Analyse and evaluate the risks, opportunities and uncertainties to establish potential consequences
- P5 Evaluate options for controlling perceived risks, opportunities and uncertainties
- P6 Develop mitigating/promoting actions that address the risks/opportunities effectively
- P7 Identify and allocate contingencies and allowances and provisions for mitigation and promotion costs

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### Knowledge and understanding

*You need to know and understand:*

- K1 Differentiation between risk, opportunity and uncertainty
- K2 Qualitative and quantitative risk, opportunity and uncertainty analysis and management techniques
- K3 Communication and presentation of risk, opportunity and uncertainty analysis data and results
- K4 Implications of relevant legislation
- K5 Means of identifying the potential consequences of risks, opportunities and uncertainties
- K6 Techniques for collecting and evaluating information and its consistency
- K7 Probability analysis and risk, opportunity and uncertainty modelling (e.g. Monte Carlo Simulation)
- K8 Contingency and allowance management
- K9 Information sources internal and external
- K10 Organisational systems and procedures
- K11 The project or business technology and environment in which risk, opportunity and uncertainty analysis techniques will be managed
- K12 Implications of National, European and local regulations and codes of practice
- K13 Procedures for updating risk, opportunity and uncertainty and any associated mitigating or promoting action records

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### Additional Information

#### Scope/range related to performance criteria

1. **Areas of perceived risk, opportunity or uncertainty**
  - 1.1. Unforeseen or unplanned circumstances
  - 1.2. Schedules or resources
  - 1.3. People, property or environmental factors
  - 1.4. Technological (maturity or novelty)
  - 1.5. Commercial and contractual
  - 1.6. Product or service failures/successes
  - 1.7. Costs and time
  - 1.8. Weather and other environmental conditions
  - 1.9. Legal constraints or litigation
  - 1.10. Health and safety
  - 1.11. Influences from sources outside the project participants
  
2. **Sources of information and advice**
  - 2.1. Statutes, regulations, codes of practice and related guidance
  - 2.2. Previous experience from within and without the organisation
  - 2.3. Technical guidance and research reports
  - 2.4. Business and commercial specialists
  - 2.5. Colleagues, customers and stakeholders
  - 2.6. External Specialists
  
3. **Consequences (on)**
  - 3.1. Costs
  - 3.2. Income
  - 3.3. Cash requirements
  - 3.4. Schedules
  - 3.5. Contingencies
  - 3.6. Commercial and contractual liabilities

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**Relevant occupations** Managers and Senior Officials; Engineering and manufacturing technologies; Engineering; Production Managers

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**Suite** Project Control, Estimating, Planning & Cost Engineering

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**Key words** impact, influence, outcomes, risk awareness, analyse, contingencies

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