
Capital Programme Assurance Course: Contractor Billing, Change Orders and Controls Review

17 – 21 May 2027
New York





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Programme Summary

Capital programme assurance over contractor billing, change orders and project controls is the subject of this five-day training course for audit and project leaders at advanced level, culminating in a risk-based capital project audit plan for their organisation. Owners often discover overbilling, unsupported variations and weak award decisions only at close-out, when recovery is hardest. The approach moves from audit planning and contract audit rights to payment testing, change order review, award integrity and close-out. Mars Training Centre UK delivers this programme in capital programme assurance.

The Business Case

Capital projects concentrate large payments, complex contracts and many parties into a few years, a common source of cost leakage. Assurance that starts at award and follows each payment protects budgets and gives audit committees evidence.

- Recovered and Avoided Contractor Costs: Rise as payments are tested against contract terms.
- Change Order Cycle and Value Growth: Fall as variations follow clear entitlement rules.
- Audit Findings Closed on Time: Increase as findings are reported early.

Principles and Evidence Base

- IIA Global Internal Audit Standards: Risk-based planning, evidence and reporting requirements shape Sessions 1 and 5.
- IIA Three Lines Model: Assurance roles of project teams, controls and internal audit are set in Session 1.
- COSO Internal Control - Integrated Framework: Its components structure the controls review in Sessions 2 and 3.
- FIDIC Conditions of Contract and Earned Value Management: Payment and variation mechanisms and progress measures guide Sessions 3 and 4.

Intended Participants

- Leaders who plan and direct internal audit coverage of capital programmes.
- Managers accountable for project controls, cost reporting and payment approval.
- Senior contracts and commercial staff who negotiate variations and final accounts.
- Owner representatives who report project performance to boards and audit committees.

The programme serves energy and utilities, real estate and infrastructure developers, government capital works and industrial owners.



Learning Outcomes

1. Participants will be able to construct a risk-based audit plan for a capital project across its life cycle.
2. Participants will be able to evaluate contract audit rights and records clauses for enforceability and coverage.
3. Participants will be able to test contractor payment applications, markups, allowances and reimbursable costs.
4. Participants will be able to diagnose weaknesses in change order pricing, entitlement and approval.
5. Participants will be able to assess procurement and award integrity against red flags of collusion or bias.
6. Participants will be able to justify audit findings and recommendations to project owners and audit committees.

Programme Structure

Day 1: Capital Programme Assurance Planning

Where are the largest risks in the capital portfolio, and who provides assurance over them?

- Capital Project Life Cycle and Risk Points
- Contract Types and Audit Risk: Lump Sum, Remeasurement, Cost-Plus and GMP
- Three Lines Model Roles on a Capital Programme
- Risk-Based Audit Universe and Project Selection
- Audit Rights, Records and Subcontractor Flow-Down Clauses

Day 2: Procurement, Award and Project Controls Review

Was the contract awarded fairly, and are controls in place before money flows?

- Tender Process Integrity and Bid Evaluation Records
- Collusion, Bid-Rigging and Conflict of Interest Red Flags
- Project Controls Baseline: Budget, Schedule and Cost Codes
- Delegation of Authority and Payment Approval Controls
- COSO Control Mapping for a Capital Project

Day 3: Contractor Billing and Cost Audit

Does each payment reflect work done and costs allowed by the contract?

- Payment Application and Progress Valuation Testing
- Labour Rates, Equipment Charges and General Conditions
- Fee, Markup, Allowances and Contingency Drawdown
- Duplicate Payment and Benford's Law Data Analytics
- Retention, Advance Payment and Bond Reconciliation



Day 4: Change Order and Variation Review

Are variations entitled, fairly priced and properly approved?

- Variation Mechanisms Under FIDIC Conditions of Contract
- Entitlement Review and Scope Creep Indicators
- Pricing Variations: Rates, Quotations and Cost Build-Up
- Earned Value Analysis to Test Progress Against Cost
- Change Control Board Governance and Approval Trail

Day 5: Applying Capital Programme Assurance and Close-Out

Is the audit plan ready to run and report through to final account?

- Close-Out Audit: Final Account, Claims Settlement and Asset Handover
- Lessons Learned Reviews Across Projects
- Reporting Day 3 and Day 4 Findings to the Audit Committee
- Linking Day 1 Risk Ranking to Day 2 Control Testing
- Capital Project Audit Plan Completion

Methodology

The programme relies on a field-style audit of a fictional capital project. Participants test a contract, payment applications, change orders and tender records, then present findings to a simulated audit committee, using cases from power, real estate and public works.

- Suggested activity: Testing a contractor payment application against rates and progress records.
- Suggested activity: Reviewing a set of change orders for entitlement and pricing.
- Suggested activity: Presenting audit findings to an audit committee panel.

Capstone Output

Each participant completes a risk-based capital project audit plan for their organisation. It ranks projects by risk, sets objectives per life-cycle stage, lists billing, change order and award tests, and defines data requests and reporting. It is used to schedule the next audit cycle.

Frequently Asked Questions

Is the capital programme assurance course suitable for auditors without an engineering background?

Yes. It is set at advanced level and assumes audit or contract experience, not engineering knowledge.



Which standards does the capital programme assurance and contractor audit training rest on?

It rests on the IIA Global Internal Audit Standards, the IIA Three Lines Model, the COSO Internal Control - Integrated Framework, FIDIC conditions of contract and earned value management.

How is the capital project audit plan from capital programme assurance training used at work?

You can use it to set audit coverage of projects, agree data requests with contractors and report results.

How does capital programme assurance training differ from a course on contract administration?

Contract administration runs the contract day to day. Capital programme assurance independently tests whether billing, change orders, awards and controls protected the owner.