
Plant Maintenance Make-or-Buy and Service Provider Performance Training Course

5 – 9 September 2027
Cairo





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Ref: 23_11244 **Date:** 5 – 9 September 2027 **Location:** Cairo **Fees:** 3100 GBP

Programme Summary

Plant maintenance make-or-buy and service provider performance is a five-day training course for maintenance, asset and contracts leaders at strategic level, culminating in a maintenance sourcing and contractor governance plan for their own facility. Many plants outsource maintenance by habit, then face rising costs, weak accountability and lost in-house capability. The approach links the outsourcing decision to asset risk, contract model choice, measurable service levels and active performance governance. Mars Training Centre UK delivers this programme in plant maintenance make-or-buy and service provider performance.

The Business Case

Contractors now carry much of the maintenance work in refineries and power stations, yet many contracts reward hours worked rather than equipment performance. Poorly scoped agreements generate variations, disputes and safety gaps. Leaders who decide deliberately what to keep in-house and govern providers through clear indicators regain control of cost, reliability and risk.

- Maintenance Cost Per Unit of Output: Aligns contractor payment with delivered availability rather than labour hours.
- Plant Availability: Links service levels and incentives to equipment uptime and backlog reduction.
- Contractual and Safety Risk: Reduces variations, claims and permit interface failures through clearer scope and accountability.

Principles and Evidence Base

- ISO 55000 Asset Management: Requires outsourced maintenance to remain under organisational control, applied to the sourcing decision in Session 1.
- EN 13269 Guideline on Preparation of Maintenance Contracts: Structures the scope, responsibilities and contract clauses drafted in Session 2.
- EN 15341 Maintenance Key Performance Indicators: Supplies the indicator set used to design service levels and scorecards in Sessions 3 and 4.
- ISO 44001 Collaborative Business Relationship Management: Guides alliance and long-term partnering arrangements in Session 4.



Intended Participants

- Executives accountable for maintenance budgets and the in-house and contracted labour balance.
- Senior leaders who approve maintenance contract strategies and award decisions.
- Heads of contracts and procurement who manage long-term service agreements for plant assets.
- Asset management leaders who set reliability targets that contractors must deliver.

The programme serves maintenance, asset management, procurement and contracts functions across oil and gas, refining, power generation and petrochemical operations.

Learning Outcomes

1. Participants will be able to evaluate which maintenance activities to retain or outsource using capability, cost and risk criteria.
2. Participants will be able to select a suitable contract model, from lump-sum and unit-rate to performance-based and alliance arrangements.
3. Participants will be able to construct a scope of work with service levels and indicators that reward equipment outcomes.
4. Participants will be able to design a tender evaluation approach weighing capability, safety record and commercial value.
5. Participants will be able to diagnose contractor underperformance and apply corrective and incentive mechanisms.
6. Participants will be able to justify a sourcing and transition plan to an executive committee.

Programme Structure

Day 1: Plant Maintenance Make-or-Buy Decisions

Which maintenance work should a plant keep, and which should it buy in?

- Core Versus Non-Core Maintenance Capability Mapping
- Whole-Life Cost Comparison of In-House and Contracted Work
- Asset Criticality and Risk in the Sourcing Decision
- Retaining Control of Outsourced Work Under ISO 55000
- Insourcing Triggers and Capability Loss Indicators

Day 2: Contract Models and Scope Definition

Which commercial model fits each type of maintenance work, and how is scope fixed?

- Lump-Sum, Unit-Rate and Cost-Reimbursable Contracts Compared
- Performance-Based and Availability Contracts
- Scope of Work Drafting With EN 13269
- Risk Allocation, Variations and Change Control Clauses
- Turnaround and Shutdown Contract Packaging



Day 3: Service Levels, Indicators and Contractor Selection

How are expectations measured, and how is the right provider chosen?

- Service Level Agreement Design for Maintenance Services
- Selecting Contract Indicators From EN 15341
- Contractor Prequalification and Safety Performance Review
- Weighted Technical and Commercial Tender Evaluation
- Contract Award Negotiation and Mobilisation Planning

Day 4: Governing Service Provider Performance

How is a maintenance contractor managed once the contract is live?

- Balanced Contractor Scorecards and Performance Reviews
- Incentive, Penalty and Gain-Share Mechanisms
- Permit-to-Work and Safety Interface Management
- Alliance Governance Using ISO 44001
- Dispute Avoidance and Escalation Routes

Day 5: Applying Service Provider Performance Governance

How are sourcing, contracting and governance combined into one plan for a facility?

- Applying the Make-or-Buy Matrix to a Participant Facility
- Recommending a Contract Model for a Gas Processing Plant Case
- Contract Transition, Handover and Exit Planning
- Testing a Contractor Scorecard Against Live Performance Data
- Sourcing and Contractor Governance Plan Presentation

Methodology

The programme relies on case analysis of maintenance outsourcing decisions from oil and gas, power generation and petrochemical plants, with structured exercises in which participants score sourcing options, draft scope clauses and build contractor scorecards. Session 5 brings the work together in a plan presented to peers.

- Suggested activity: Running a make-or-buy assessment for rotating equipment maintenance at a refinery.
- Suggested activity: Converting a unit-rate contract into a performance-based agreement for a power station.
- Suggested activity: Evaluating three maintenance tenders for a petrochemical turnaround.



Capstone Output

Each participant completes a maintenance sourcing and contractor governance plan for their own facility. It records make-or-buy decisions, contract models, draft service levels and indicators, tender evaluation criteria and transition and exit arrangements, ready for review by plant leadership.

Frequently Asked Questions

Is plant maintenance make-or-buy training suitable for procurement leaders without a maintenance background?

Yes. It is designed for strategic leaders from maintenance, procurement and contracts functions. It assumes experience of managing contracts or budgets.

Which standards does maintenance outsourcing and service provider performance training rest on?

It rests on ISO 55000 for control of outsourced activities, EN 13269 for maintenance contract preparation, EN 15341 for maintenance indicators and ISO 44001 for collaborative relationships.

How is the plan from plant maintenance make-or-buy training used at work?

You can submit it to plant leadership as the basis for the next maintenance contracting cycle, and use its scorecard when reviewing current providers.