JUPITER PRIME
Consulting • Training • Advisory
جوبيتر برايم للاستشارات والتدريب

COURSE BROCHURE

Advanced Supply Chain Network Design and Execution Control Training Course

31 October – 11 November 2027
Muscat

Advanced Supply Chain Network Design and Execution Control Training Course

Ref: 945_35803 **Date:** 31 October – 11 November 2027 **Location:** Muscat **Fees:** 9900 GBP

Supply Chain Network Design and Execution Control is a 2-week advanced training course for supply chain directors and network planners, in which each participant drafts a supply chain strategy execution roadmap. Shifting trade routes, nearshoring choices and customer service promises now force boards to revisit where plants, warehouses and suppliers sit, and how daily flows are steered. Jupiter Prime Training offers this course on Supply Chain Network Design and Execution Control.

Why Supply Chain Network Design and Execution Control Matter Now

Three forces drive the agenda: boards asking whether the current footprint of factories, distribution centres and suppliers still fits the markets served, customers who expect shorter lead times with fewer stock-outs, and recurring disruptions that expose single-source lanes. An organisation that redesigns its network and wires execution to live signals cuts landed cost and recovers faster; one that does not keeps paying for expedited freight and idle capacity. The course draws on ISO 22301 business continuity management for continuity planning and ISO 28000 security and resilience management for the supply chain, alongside established network modelling practice.

Who Gains Most from Supply Chain Network Design and Execution Control

- Directors who own the end-to-end footprint of plants, depots and cross-docks
- Network planners who model flows, capacities and service zones
- Heads of strategic sourcing who align supplier locations with network strategy
- Leaders of logistics control rooms who steer daily shipments and exceptions
- Continuity and resilience leads who plan for lane and node failures

A supply chain leadership group that sends its network design, sourcing and logistics control heads together gains most, because footprint, supplier and execution choices only pay off when they are taken as one.

Supply Chain Network Design and Execution Control Capabilities

The outcomes below run from footprint questions on the board agenda down to the exception alerts a control tower raises each shift.

- Build a baseline network model of nodes, lanes and cost-to-serve — the footprint decision
- Weigh centralised, regional and hub-and-spoke scenarios — the board investment case
- Align supplier locations and dual sourcing with network design — the sourcing strategy
- Design control tower alerts, roles and escalation rules — the logistics operations lead
- Test network resilience through node and lane failure scenarios — the continuity sponsor
-

Specify a balanced scorecard linking network choices to service and cost — the executive committee

Key Supply Chain Network Design and Execution Control Terms

- Network design — choosing the number, location, size and role of plants, warehouses and suppliers to meet service at lowest landed cost.
- Cost-to-serve — the full cost of fulfilling a customer or channel, including freight, handling, inventory and service overheads.
- Control tower — a central capability that gives end-to-end visibility of shipments and stock and coordinates response to exceptions.
- Greenfield analysis — a modelling method that finds ideal facility locations from demand points without assuming existing sites.
- Time to recover — how long a node or lane takes to return to full capacity after a disruption.
- Landed cost — the total cost of a product at its destination, including purchase price, freight, duties and handling.

Supply Chain Network Design and Execution Control Day by Day

Day 1: Network Strategy Context

- Footprint Pressures and Trade Route Shifts — When to Redesign the Network
- Service Promise Segmentation — Lead Time Targets by Channel
- Strategic Fit Assessment — Responsive Versus Efficient Network Choice
- Board-Level Network Questions — Capital and Risk Appetite Framing
- Current Footprint Diagnostic — Gaps Between Strategy and Physical Network

Day 2: Network Modelling Foundations

- Baseline Network Model Build — Nodes, Lanes, Volumes and Costs
- Greenfield Location Analysis — Ideal Sites From Demand Points
- Cost-to-Serve Modelling — Profit by Customer and Channel
- Capacity Constraints in Models — Plant and Warehouse Limits Represented
- Model Validation Against Actuals — Confidence Before Scenario Testing

Day 3: Footprint Scenarios

- Centralised Versus Regional Distribution — Inventory and Freight Trade-Off
- Hub-and-Spoke and Cross-Dock Designs — Consolidation of Inbound Flows
- Nearshoring and Second-Source Plant Options — Proximity Against Unit Cost
- Landed Cost Comparison — Duties, Freight and Handling Included
- Scenario Sensitivity Testing — Demand and Fuel Price Swings

Day 4: Sourcing Alignment

- Supplier Location Mapping — Tier-One and Tier-Two Concentration
- Dual and Multi-Sourcing Design — Exposure Reduction on Critical Items
- Make-or-Buy at Network Level — Insourcing Versus Contract Manufacturing
- Supplier Capacity Reservation Agreements — Securing Volume for Peaks
- Sourcing and Network Joint Reviews — One Footprint Decision Forum

Day 5: Inventory Positioning

- Multi-Echelon Inventory Placement — Where Buffer Stock Sits
- Postponement and Late Customisation — Generic Stock Held Upstream
- Decoupling Point Selection — Make-to-Stock Versus Make-to-Order Boundary
- Safety Stock by Node — Service Level and Lead Time Variability
- Inventory Investment Case — Working Capital Against Service Gain

Day 6: Execution Control Towers

- Control Tower Operating Model — Scope, Roles and Shift Coverage
- End-to-End Visibility Feeds — Carrier, Warehouse and Supplier Signals
- Exception Alert Design — Thresholds That Trigger Action
- Escalation Playbooks — Who Decides Reroute, Expedite or Hold
- Control Tower Maturity Stages — From Visibility to Prescriptive Response

Day 7: Network Resilience

- ISO 22301 Continuity Principles — Recovery Priorities for Critical Nodes
- ISO 28000 Security and Resilience — Threats Along Transport Lanes
- Node and Lane Failure Stress Tests — Time to Recover Measured
- Single Points of Failure Register — Ports, Plants and Sole Suppliers
- Contingency Capacity Options — Standby Sites and Alternative Carriers

Day 8: Performance Management

- Balanced Supply Chain Scorecard — Service, Cost, Cash and Resilience
- Perfect Order and On-Time-In-Full Measures — Customer View of Execution
- Network Cost Tracking — Freight, Warehousing and Duty Trends
- Performance Review Cadence — Weekly, Monthly and Quarterly Forums
- Target Cascading to Sites — Linking Node Goals to Strategy

Day 9: Transformation Planning

- Network Change Sequencing — Site Openings, Closures and Transfers
- Transition Risk Plans — Service Protection During Migration
- Investment Appraisal for Network Moves — Payback and Net Present Value
- Stakeholder Engagement for Site Changes — Workforce and Customer Messaging
- Benefits Tracking Framework — Proving Network Savings After Go-Live

Day 10: Practising the Supply Chain Strategy Execution Roadmap

- Pharmaceutical Distribution Case — Applying Footprint Scenarios and Cold Lanes
- Building Materials Network Case — Sourcing Alignment and Cross-Dock Choices
- Control Tower Disruption Drill — Escalation Playbook Under Time Pressure
- Board Briefing Rehearsal — Presenting the Recommended Network
- Supply Chain Strategy Execution Roadmap — Phases, Owners and Measures Set

Applying Supply Chain Network Design and Execution Control After the Course

- Build a baseline network model for one product family and compare it with a regional distribution scenario
- Draft exception alert thresholds and an escalation playbook for the top three shipping lanes and test them with the logistics control room

Supply Chain Network Design and Execution Control Questions FAQ

What are Supply Chain Network Design and Execution Control, and why do they matter now?

They are the methods for deciding where plants, warehouses and suppliers sit and for steering daily flows through that network. They matter now because shifting trade routes, tighter service promises and frequent disruptions make an outdated footprint costly.

Which roles gain most from Supply Chain Network Design and Execution Control training?

Supply chain directors, network planners, strategic sourcing heads and logistics control room leaders gain most. You benefit if you shape footprint decisions, model flows and costs, or coordinate response when shipments and suppliers fail.

How does Supply Chain Network Design and Execution Control differ from a demand and supply planning course?

It addresses the physical structure and live steering of the network rather than monthly volume balancing. A planning course aligns forecasts and capacity; this one decides where capacity sits, how it is sourced and how execution is controlled.

What do you bring back from Supply Chain Network Design and Execution Control training?

You bring back a strategy execution roadmap, a scenario comparison method, a control tower escalation playbook and a resilience stress test. Together they give your leadership group a clear case for network change and a way to track it.

Supply Chain Network Design and Execution Control: The Way Forward

The supply chain strategy execution roadmap sets out the recommended network, the sourcing moves that support it, the control tower setup and the measures that track progress. Its first use is securing board approval for the opening phase. Directors, planners and logistics leads share it, and it is worth revisiting after the first major disruption, when real recovery times test the design.