



Certified in Logistics, Transportation and Distribution

Tracking, Expediting, Tracing, and
Consolidating and Related Metrics



CLTD On-Demand Training for Self-Study Professionals

Are you preparing for the CLTD certification through self-study? As an experienced supply chain professional, you already have strong practical knowledge—but some topics may still need expert clarification. Fhysics Business Consultants bridges that gap with on-demand, topic-oriented CLTD training sessions designed specifically for self-learners.

Whether you need guidance on a single concept or an entire module, our focused training helps you master complex areas quickly and confidently. Get personalized support, strengthen your exam readiness, and elevate your supply chain expertise—on your schedule.

Mobile: +91-900-304-9000 (WhatsApp)

Email: Certifications@Fhysics.net



Tracing, Expediting, Tracing, and Consolidating and Related Metrics

1. End-to-End Shipment Visibility

End-to-end visibility refers to the ability to track a shipment from origin to final delivery through every node of the supply chain. It requires integration of carrier tracking systems, TMS platforms, GPS/telematics, and EDI/API data feeds. High visibility supports real-time decision-making, delays prevention, inventory optimization, and customer service. Visibility also helps detect exceptions early and reduce expediting costs. CLTD candidates must understand the technologies, data flows, and processes enabling continuous tracking across multimodal networks.

2. Shipment Tracking Technologies

Shipment tracking relies on a mix of technologies—barcodes, RFID, GPS, IoT sensors, telematics, mobile apps, and geofencing. These tools provide location, condition, temperature, shock, and security status. Understanding how each technology works, its cost, accuracy, and application is essential for selecting the right solution. Tracking data improves ETA accuracy, enhances traceability, and helps carriers and shippers respond to service disruptions. CLTD exams emphasize technology selection and integration with logistics systems.

3. Expediting Processes and Strategies

Expediting involves accelerating shipments to prevent stockouts, production delays, or customer dissatisfaction. It includes reprioritizing loads, switching modes (e.g., air instead of truck), rerouting freight, or coordinating special

handling. Understanding when to expedite, how to justify the cost, and how to minimize the need for expediting through better planning is essential. The concept also covers supplier management and monitoring lead-time variations that trigger expediting actions.

4. Tracing Lost or Delayed Shipments

Tracing is the investigative process used when shipments are lost, delayed, damaged, or missing status updates. It requires coordination with carriers, analysis of event scans, facility logs, and reviewing routing patterns. Understanding common causes of shipment disappearance—misroutes, cross-docking errors, customs holds, or labeling issues—is important. Effective tracing reduces financial losses, speeds claim filing, and prevents service failures. It is a key competency for controlling transportation risk.

5. Freight Consolidation Principles

Freight consolidation involves combining multiple small shipments into larger loads to reduce cost, improve truckload utilization, and simplify handling. Understanding consolidation methods—multi-stop truckload, pool distribution, cross-docking, milk runs, and hub-and-spoke networks—is essential. Consolidation also impacts transit time, routing, and carrier selection. CLTD candidates should understand how to evaluate consolidation opportunities using shipment size, frequency, geography, and service requirements.

6. Deconsolidation and Distribution Strategies

Deconsolidation refers to breaking down consolidated freight at destination facilities to send goods to multiple

customers or final points. This strategy improves last-mile efficiency and reduces shipping costs. Understanding deconsolidation processes—sorting, staging, container stripping, and LTL distribution—is essential. It is also critical for managing international shipments, especially those entering through ports and airports. Deconsolidation enables faster delivery and supports omni-channel fulfillment.

7. Exception Management and Alerts

Exception management monitors deviations from expected shipping milestones, such as late departures, route deviations, failed scans, customs delays, or weather disruptions. Systems generate alerts that enable proactive problem-solving. Mastery of exception categories, root causes, and corrective actions is vital. Exception management improves service reliability, reduces expediting needs, and enhances customer satisfaction by providing timely updates.

8. Estimated Time of Arrival (ETA) Accuracy

ETA accuracy is a key performance indicator reflecting how precisely carriers predict arrival times. Accurate ETAs support warehouse planning, labor scheduling, production continuity, and customer service. Understanding how real-time data, machine learning models, traffic patterns, carrier performance, and mode characteristics influence ETAs is crucial. Poor ETA accuracy leads to delays, inefficiencies, and unnecessary expediting.

9. On-Time Pickup and Delivery Performance

This metric evaluates whether shipments are collected and

delivered within agreed time windows. It reflects carrier reliability and supply chain discipline. Understanding how appointment systems, dock scheduling, transportation mode characteristics, and route planning affect on-time performance is critical. This concept supports carrier scorecards, contract negotiations, and continuous improvement processes.

10. Perfect Order Performance

The perfect order is shipped complete, on time, damage-free, correctly documented, and without exceptions.

Measuring perfect order performance helps organizations evaluate the entire order fulfillment cycle. Understanding this metric helps identify weak links in tracking, expediting, documentation, and consolidation processes. CLTD emphasizes perfect order as a benchmark for logistics excellence and continuous improvement.

11. Dwell Time and Idle Time Metrics

Dwell time measures how long shipments sit at nodes such as warehouses, ports, or cross-docks. High dwell time indicates bottlenecks, inefficiencies, or lack of planning. Idle time refers to transportation assets waiting without performing value-added activities. Understanding these metrics enables root-cause analysis and network optimization. Reducing dwell time increases velocity and reduces cycle time variability.

12. Transit Time Variability

Transit time variability impacts reliability and inventory planning. Variability can be caused by weather, congestion, customs issues, carrier performance, and misrouting.

Understanding how to measure variability using standard deviation, coefficient of variation, or service level metrics helps logistics managers forecast lead times and safety stock needs. Reducing variability is more valuable than merely reducing average transit time.

13. Shipment Cycle Time Measurement

Shipment cycle time covers the total time from order release to final delivery. Understanding how to measure and analyze cycle time provides insight into transportation speed, carrier performance, and supply chain responsiveness. It includes pre-shipment processing, transit time, handling at nodes, and last-mile operations. Reducing cycle time improves customer satisfaction and speeds cash flow.

14. Freight Claims Management

Claims arise from lost, damaged, or delayed freight. Understanding documentation requirements, carrier liability limits, claim filing timelines, and root-cause analysis is essential. Claims management ensures financial recovery and drives improvements by identifying patterns such as handling issues or weak packaging. Effective claims processes complement tracing and exception management.

15. Order Consolidation Strategies in TMS

Transportation Management Systems support order consolidation through algorithms, routing strategies, and load optimization rules. Understanding how TMS consolidates orders by destination, weight, cube, mode, or service level improves efficiency and reduces cost. Mastery of TMS consolidation logic helps leverage digital tools to improve fill rates and lower total transportation spend.

16. Real-Time Data Integration (EDI & API)

EDI feeds structured data like shipment status (214), invoices (210), and BOL details (211). APIs allow real-time, flexible communication for location tracking, POD updates, and carrier connectivity. Understanding how real-time integrations support tracking, exception alerts, and customer visibility is essential. Integration improves speed, accuracy, and responsiveness in logistics operations.

17. Carrier Performance Scorecards

Scorecards measure metrics such as on-time delivery, tracking accuracy, claims ratio, cost per mile, and billing accuracy. Understanding how to build and interpret carrier scorecards is vital for contract compliance, performance improvement, and carrier selection. Scorecards ensure objective evaluation and support continuous improvement initiatives.

18. Consolidation Economics and Cost Trade-Offs

Consolidation affects transportation cost, inventory levels, handling time, and delivery speed. Understanding the trade-offs—such as lower cost but longer lead time—is key to making informed decisions. Freight density, shipment velocity, customer service requirements, and mode economics all influence consolidation strategies. CLTD candidates must understand how to balance these factors to optimize cost and service.

19. Root-Cause Analysis for Expediting

Expediting is a symptom of upstream issues such as poor planning, unreliable suppliers, inaccurate forecasts, or inadequate inventory policies. Root-cause analysis identifies

systemic problems and reduces reliance on costly expediting. Techniques include Pareto analysis, 5 Whys, and process flow mapping. Understanding how to link expediting events to operational weaknesses is essential for long-term improvement.

20. Customer Communication and Proactive Status Updates

Clear communication with customers during transit disruptions builds trust and reduces perceived service failures. Understanding how to provide proactive updates—via portals, EDI/API feeds, email alerts, or TMS dashboards—is crucial. Strong communication also reduces customer inquiries, improves experience, and strengthens relationships. Effective logistics communication includes escalation procedures and structured messaging.

Micro-Learning Programs in Supply Chain Management & Procurement



Enhance your professional edge with Fhyzics Business Consultants' Micro-Learning Programs in Supply Chain Management and Procurement. Designed as focused, two-hour Executive Development Programs, these sessions deliver practical insights and tools to solve real-world business challenges. Conducted in small batches for personalized learning, participants gain a deeper understanding of key supply chain and procurement strategies that drive efficiency and profitability. Each participant receives a certificate of completion, adding value to their professional profile and career growth. Whether you aim to advance in your current role or explore new opportunities, this program equips you with the knowledge and confidence to excel.



Micro-Learning Programs in Supply Chain Management



1. Fundamentals of Supply Chain Management
2. Supply Chain Planning and Optimization
3. Demand Forecasting Techniques
4. Inventory Control and Management
5. Distribution and Logistics Strategy
6. Warehouse Layout and Operations Efficiency
7. Supply Chain Risk Management
8. Supply Chain Performance Metrics (KPIs)
9. Lean Supply Chain Practices
10. Agile and Responsive Supply Chains
11. Sales and Operations Planning (S&OP)
12. Supply Chain Network Design
13. Supply Chain Digital Transformation
14. AI and Data Analytics in Supply Chain
15. Supply Chain Sustainability and Green Logistics
16. Reverse Logistics and Returns Management
17. Supply Chain Collaboration and Integration
18. Supplier Relationship Management in SCM
19. Global Supply Chain Strategy
20. Transportation Management Systems (TMS)
21. Inventory Optimization Models
22. Demand-Driven MRP (DDMRP) Concepts
23. Blockchain Applications in Supply Chain
24. Supply Chain Cost Reduction Techniques
25. SCOR Model and Process Improvement

Micro-Learning Programs in Supply Chain Management ...



26. Capacity Planning and Resource Allocation
27. Managing Supply Chain Disruptions
28. End-to-End Supply Chain Visibility
29. Cold Chain Logistics Management
30. Supply Chain Compliance and Ethics
31. Import–Export Procedures and Documentation
32. Managing Third-Party Logistics (3PL) Providers
33. Supply Chain Collaboration Technologies
34. Production Planning and Scheduling
35. Strategic Supply Chain Design Using Case Studies
36. Circular Economy in Supply Chain
37. Vendor-Managed Inventory (VMI)
38. Transportation Optimization Techniques
39. E-Commerce Supply Chain Models
40. Omni-Channel Fulfillment Strategies
41. Warehouse Automation and Robotics
42. SCOR DS Roadmap for Supply Chain Excellence
43. Customer-Centric Supply Chain Strategies
44. Supply Chain Finance and Working Capital Management
45. Supply Chain Data Visualization Using Power BI
46. Strategic Sourcing in Supply Chain Context
47. Supply Chain Benchmarking and Best Practices
48. Integrated Business Planning (IBP)
49. Supply Chain in Crisis Management and Recovery
50. Future Trends and Technologies in Supply Chain

Micro-Learning Programs in Procurement



1. Fundamentals of Procurement Management
2. Strategic Sourcing and Category Management
3. Supplier Selection and Evaluation
4. Contract Management Essentials
5. Cost and Price Analysis in Procurement
6. Negotiation Strategies for Procurement Professionals
7. E-Procurement and Digital Tools
8. Procurement Planning and Budgeting
9. Risk Management in Procurement
10. Supplier Relationship and Performance Management
11. Sustainable and Ethical Procurement
12. Total Cost of Ownership (TCO) Analysis
13. Make-or-Buy Decision Frameworks
14. Procurement Policies and Governance
15. Procurement in Public vs. Private Sectors
16. Procurement Audit and Compliance
17. Procurement Data Analytics and Reporting
18. Procurement Scorecards and KPIs
19. Strategic Supplier Partnerships
20. Category Strategy Development
21. Managing Global and Offshore Procurement
22. Negotiation Simulation Workshop
23. Contract Law for Procurement Managers
24. Cost Reduction Strategies in Procurement
25. Supplier Risk Assessment Models

Micro-Learning Programs in Procurement ...



26. Procurement Process Mapping and Improvement
27. Procurement Automation and AI Applications
28. Managing Procurement Teams Effectively
29. Procurement Ethics and Transparency
30. Procurement in the Digital Supply Chain
31. Vendor Consolidation Strategies
32. Spend Analysis and Optimization
33. Demand Forecasting for Procurement
34. E-Auction and Reverse Bidding Techniques
35. Inventory and Procurement Alignment
36. Procurement in Project-Based Organizations
37. Supplier Onboarding and Development
38. Procurement Market Intelligence
39. Measuring Supplier Innovation
40. Procurement in Times of Supply Disruption
41. Cross-Functional Collaboration in Procurement
42. Writing Effective RFPs, RFQs, and RFIs
43. Contract Negotiation Best Practices
44. Green Procurement and Circular Economy
45. Legal Aspects of Procurement Contracts
46. Performance-Based Contracting
47. Procurement Leadership and Strategic Influence
48. Cost Avoidance and Value Creation in Procurement
49. Managing Procurement with Power BI Dashboards
50. Future Skills and Trends in Procurement



Fhyzics Business Consultants Pvt. Ltd.

Professional Training Partner of ASCM, USA

www.Fhyzics.net

ASCM Referral Code
XEFGHYZ88

Certifications@Fhyzics.net
+91-900-304-9000

CLTD aspirants may buy the
CLTD Learning System and Examination
Credits directly through ASCM Portal.
When purchasing CLTD Examination
Credit, please enter Referral
Code **XEFGHYZ88** to receive CLTD
Recertification Guidance for life.