The Role of AEO to Enhance Global Supply Chains’ Security

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• Why are Ports Important?
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Today’s Reality Is Deep & Complex
Global Supply Chains

Supply Chain RESILIENCE
• Multi-sources
• Multi-nodes
• Multi-routes

Introduction

• The challenges facing shipping and the world's ports today are not only related to the quantity but also the quality and security of services:

  • The continuous progress of globalization of shipping in supply chains is resulting in increasing pressures on ports cost and improve operational efficiency.

  • Global supply chains are facing different risks that made stakeholders more aware of the vulnerability of their supply chains, and encouraged them to seek ways to reduce these risks.

Supply Chain Management: Linked Value Chains
Global Transportation Logistics Network
Global Supply Chain stakeholders

THE IMPORTER
At the centre of various assaults.
Why are Ports Important?

- Ports are a **critical part** of global supply chains and also a major focus for global security.
- Over 80% of cross border trade moves via water
- Competitive position due to supply chain links
- Support raw material acquisition, manufacturing and distribution of finished products
- Create **synergies**
- Converge interests between port community players to guarantee:
  - Price (cost advantage)
  - Quality
  - Reliability
  - Customization
  - Responsiveness
Integration and Competitiveness

• Port Integration is designed to:
  • Identify, exchange and transfer best practice examples in the transport sector with the aim of an overall integration of related policies.
  • It focuses on transport chains as a whole by combining best practice examples dedicated to maritime transport with those tackling issues of hinterland transport.
Integration and Competitiveness

• Port competitiveness is:
  • Increasing relevance, given the importance of ports both as source of value creation for the firms involved in the process of services production and, more in general, for the impact of port activities on the economic development of the “territory” in which the port is located.

• Port competitiveness measured on:
  - Terminal, shipping company, cluster, hinterland, etc.;
  - Model of analysis (Strategic Business Area, Porter’s Diamond model, Supply Chain Management, etc.) and
  - Market shares, throughput growth rates, local employment, local incomes, etc.
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Key Challenges of Global SC Network

• Lengthening of the Supply Chain
• Difficulty & Cost Inefficiencies in Transportation Execution
• Lost Sales/Mismatch in Supply & Demand
• Import/Export Compliance Procedures
• Disconnect between International and Domestic Transportation
• Lack of Strong Technology support
• Lack of Experience and Skill Sets
What are the Leaders doing?

- **Laggards** are taking the full impact of rate increases and capacity/performance shortfalls

- **Leaders** are taking action to avoid these problems by:
  - Trying to Improve overall service and financial performance
  - Investing in the right place
  - Focusing on Value
  - Thinking End to End
  - Leverage Technology (Network Design, Logistics, Visibility, Analytical Solutions, etc.)
  - Tapping local Talent
  - Manage Risk

Revenue
Costs
Working Capital
Fixed Capital
Shareholder Value
Profitability
Invested Capital

Leader’s Holistic Approach

Laggard’s Silo View

- Greater customer satisfaction (i.e., higher market share, greater gross margins)
- More competitive delivery availability
- Lower cost of goods sold - low freight rates at each business unit
- Lower raw materials and finished goods inventory without sacrificing customer satisfaction or raising logistics costs
- Shorter “order-to-$$” cycles
- Fewer physical assets (i.e., trucks, trailers, and much higher asset utilization

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When one fails, we all fail.

Security requires committed involvement from everyone.
Supply Chain Security

Supply Chains are inherently complex, dynamic, and fluid, characterized by uncertainty.
Supply Chain Security Problem?

• Terrorism/Piracy/ Bioterrorism
• Obsolescence
• Pilferage
• Information Breach
• Proprietary Data
• Cyberspace Security
• RFID Data Security
• Lengthening of Supply Chains – coupled with Globalization
• Lack of Training
Supply Chain Security Initiatives

• Container Security Initiative (CSI),
• Customs-Trade Partnership Against Terrorism (C-TPAT)
• Authorized Economic Operator (AEO) program;
• International Ship and Port Facility Security (ISPS),
• Advanced Manifest Rule (AMR) and
• Free and Secure Trade initiative (FAST).
Authorized Economic Operator (AEO)

• The European Union’s AEO is comparable to the US C-TPAT program.

• Authorized Economic Operator (AEO) which is defined as:

  “A party - manufacturers, importers, exporters, clearance companies: carriers, intermediaries, air and sea ports, border facility operators: integrated operators, warehouses, distributors and freight forwarders-involved in the international movement of goods in whatever function that has been approved by or on behalf of a national customs administration as complying with WCO or equivalent supply chain security standards”.

Authorized Economic Operator (AEO)

1) Early detection
2) Certification & credentialing
3) Scanning technology
4) Container integrity
5) ISPS International Ship & Port Security Code, vessel tracking at sea AIS/LRIT

Automatic Identification System (AIS) / The long-range identification and tracking (LRIT)

Authorized Economic Operator (AEO)

Compliance
Transparency
Auto-control
Cooperation
Trust
Simplification
Facilitation

AEO

Customs

AEO

Authorised Economic Operator

Indian Customs

AEO

Japan

AEO

Hong Kong

Korea

Conclusions

• Global supply chain firms are increasingly interested in protecting their supply chains to protect their customers and brand names.

• Ports must develop a broad range of competencies to achieve supply chain integration.

• Global supply chain security has seen performance improvements in detection and resiliency.

• Better performance is linked to extended supply chain security efforts throughout the supply chain.
Conclusions

- Optimal Design of Global Supply Chain
- Global Logistics Visibility
- Dynamic Logistics Routes
- Logistics Process Automation
- Collaboration with Supply Chain Partners
- Compliance to Changing Regulations
- Making the Financial-Supply Chain Connection
Thank You