

The Role of AEO to Enhance Global Supply Chains' Security



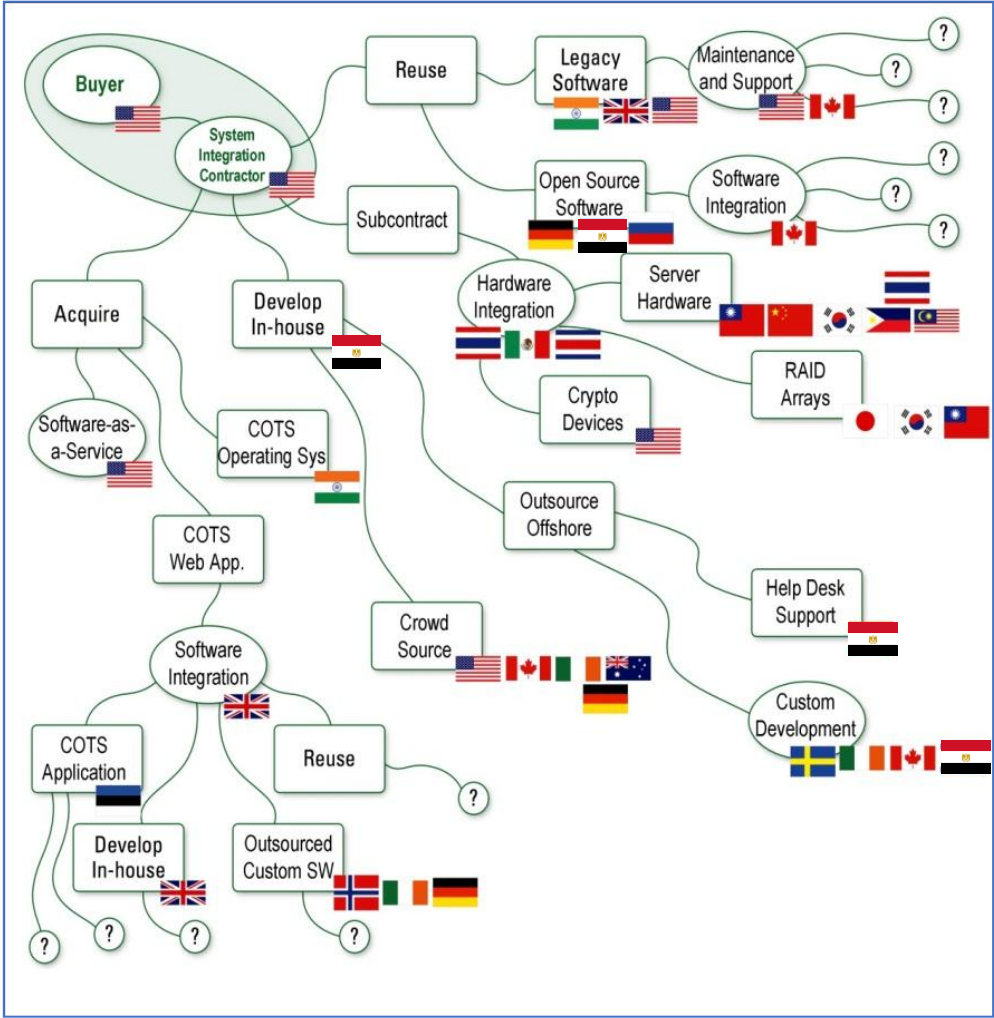
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Contents

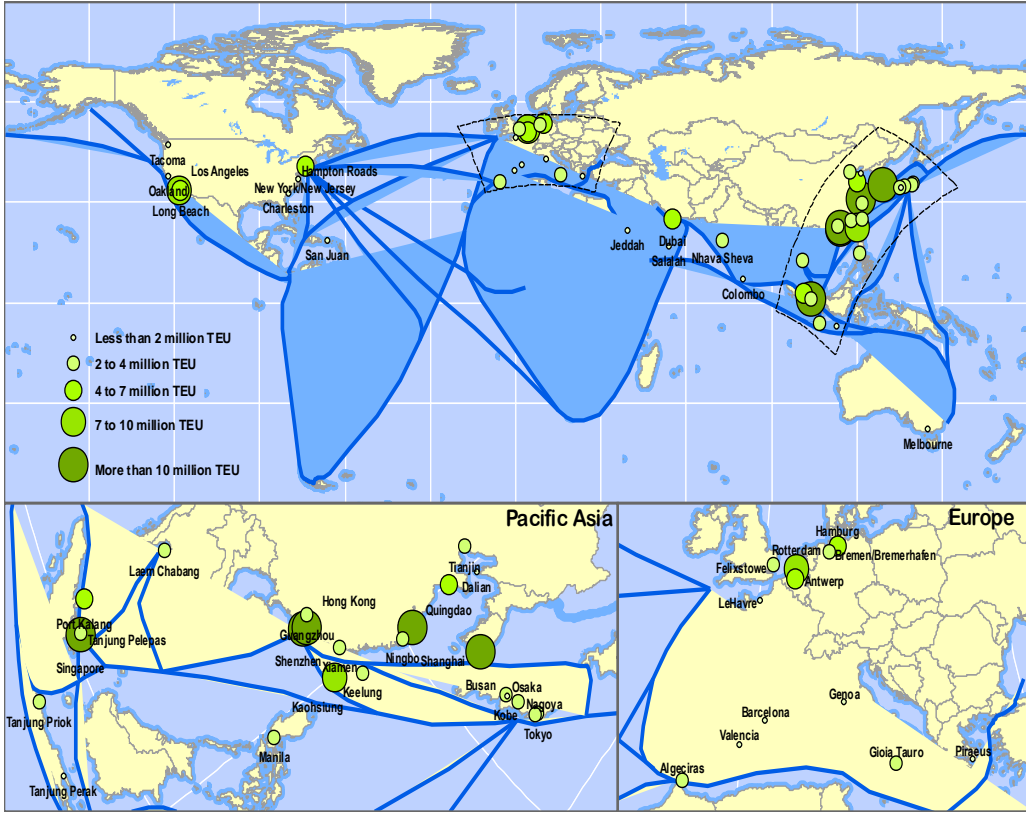
- Introduction
- What is Supply chain?
- Why are Ports Important?
- Integration and competitiveness
- Supply Chain Security
- AEO
- Conclusions

Today's Reality Is Deep & Complex Global Supply Chains



Supply Chain **RESILIENCE**

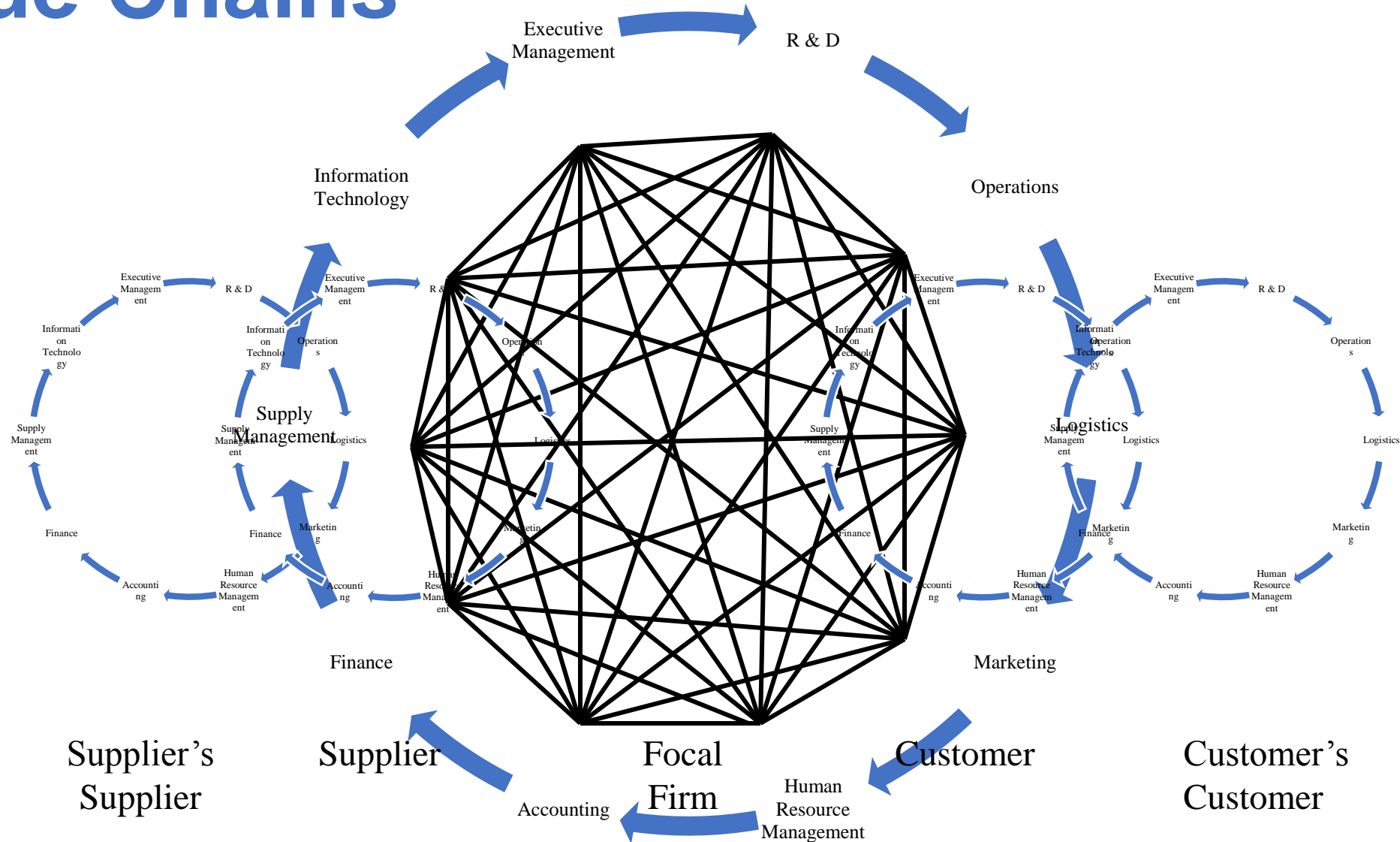
- Multi-sources
- Multi-nodes
- Multi-routes



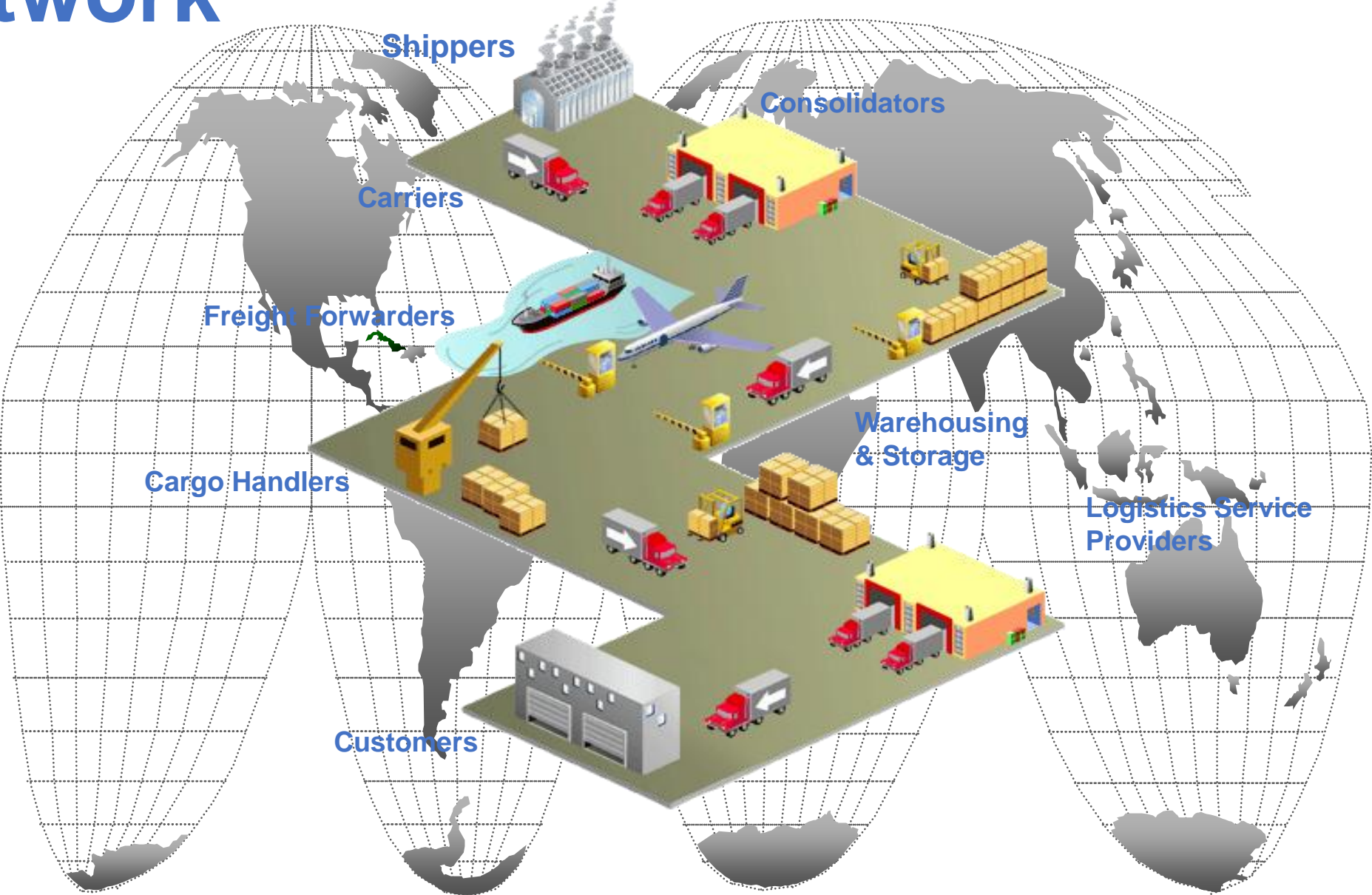
Introduction

- 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.

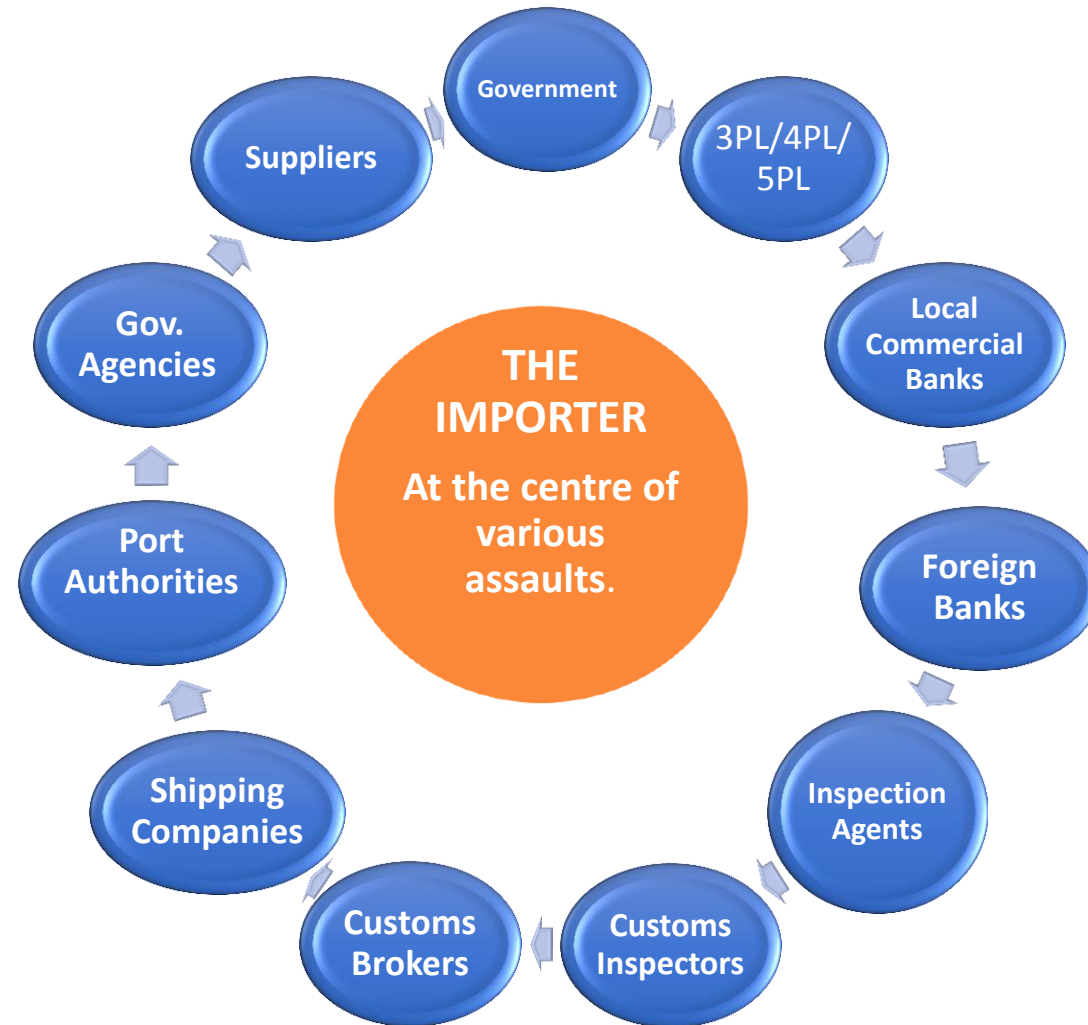
Supply Chain Management: Linked Value Chains



Global Transportation Logistics Network



Global Supply Chain stakeholders



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.*

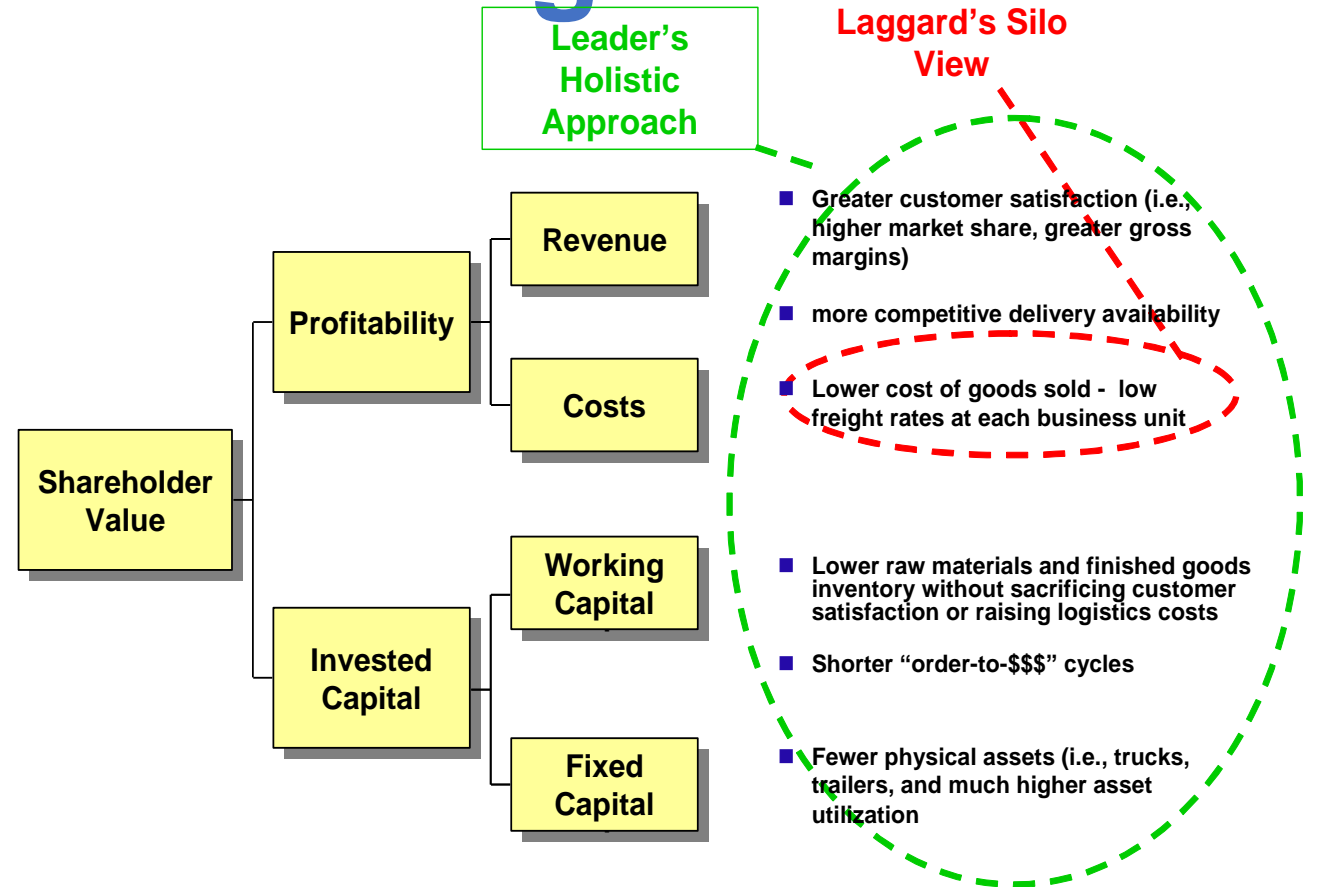
Rank	Port	Volume 2015 (Million TEU)	Volume 2014 (Million TEU)	Volume 2013 (Million TEU)	Volume 2012 (Million TEU)	Volume 2011 (Million TEU)	Website
1	Shanghai, China	36.54	35.29	33.62	32.53	31.74	www.portshanghai.com.cn
2	Singapore	30.92	33.87	32.6	31.65	29.94	www.singaporepsa.com
3	Shenzhen, China	24.20	24.03	23.28	22.94	22.57	www.szport.net
4	Ningbo-Zhoushan, China	20.63	19.45	17.33	16.83	14.72	www.mardep.gov.hk
5	Hong Kong, S.A.R., China	20.07	22.23	22.35	23.12	24.38	www.mardep.gov.hk
6	Busan, South Korea	19.45	18.65	17.69	17.04	16.18	www.busanpa.com
7	Qingdao, China	17.47	16.62	15.52	14.50	13.02	www.qdport.com
8	Guangzhou Harbor, China	17.22	16.16	15.31	14.74	14.42	www.gzport.com
9	Jebel Ali, Dubai, United Arab Emirates	15.60	15.25	13.64	13.30	13.00	www.dpworld.ae
10	Tianjin, China	14.11	14.05	13.01	12.30	11.59	www.ptacn.com
11	Rotterdam, Netherlands	12.23	12.30	11.62	11.87	11.88	www.portofrotterdam.com
12	Port Klang, Malaysia	11.89	10.95	10.35	10.00	9.60	www.pka.gov.my
13	Kaohsiung, Taiwan, China	10.26	10.59	9.94	9.78	9.64	www.khb.gov.tw
14	Antwerp, Belgium	9.65	8.98	8.59	8.64	8.66	www.portofantwerp.com
15	Dalian, China	9.45	10.13	10.86	8.92	6.40	www.dlport.cn
16	Xiamen, China	9.18	8.57	8.01	7.20	6.47	www.portxiamen.gov.cn

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



When one fails, we all fail.



**Security requires committed
involvement from everyone.**

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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).
- ISO/PAS 28000:2005 standard Specification for security management systems for the supply chain.

Authorized Economic Operator (AEO)

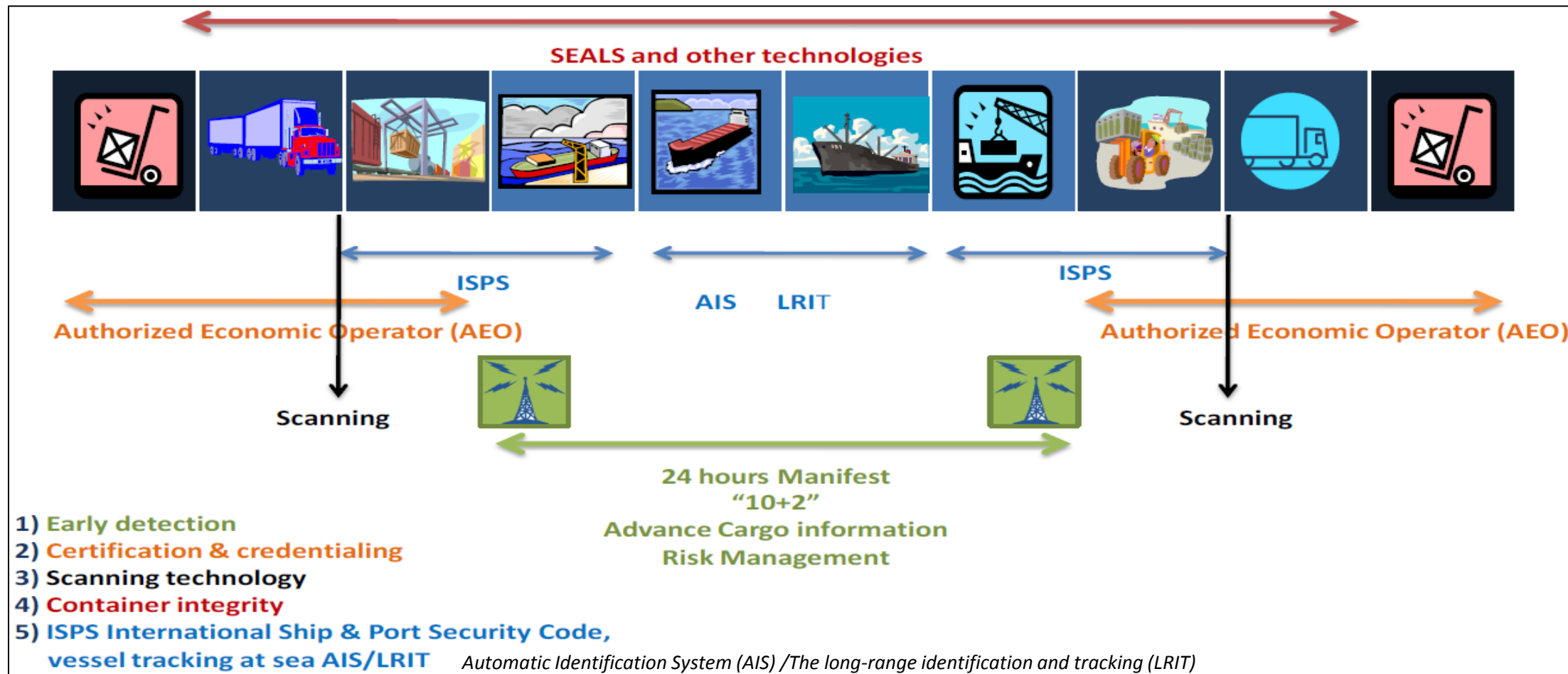
- The European Union's AEO is comparable to the US C-TPAT program.
- Authorized Economic Operator (AEO) which is defined as:

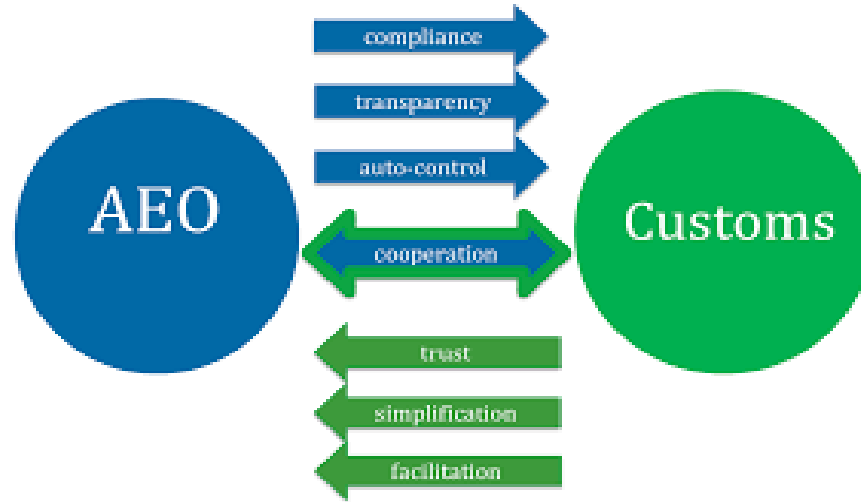
“A party - manufacturers, importers, exporters, clearance companies, carriers, intermediaries, air and sea ports, border facility operators, integrated operators, warehouses, distributors and freight forwarders-

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)





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