

**IAS** The International Asset System

**"Integrating the Container Shipping Community"**

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**IAS** The International Asset System **The ocean transportation financial environment**

- Profit of 4-5% return in strong year - \$65/teu
- Revenue decreases, despite anti-trust immunity
- Opportunities for operational vendor savings are becoming exhausted, and are ever less valuable in \$/teu terms...
- ...however, carriers have still to address the inefficiencies of their data network

**Avg Ocean Carrier Revenue & Profit/teu 2000 - 2002**

Year	Revenue (USD)	Profit (Loss) (USD)
2000	\$1,250	\$65
2001	\$1,200	\$27
2002	\$1,150	(\$67)

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**IAS** The International Asset System **A fragmented communications infrastructure**

- Transportation entities all run their own networks, with little/no interoperability
- 10 -15 year-old information systems
- Significant information gaps
- No single industry info source
- Limited information integration
- High communication costs

For ocean carriers, this translates to information gaps with their trading partners, and a consequent lack of inland container visibility.

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**IAS** The International Asset System **Lack of Inland Container Visibility**

- Carriers have good visibility on units while they are at sea.
- Visibility is maintained while container is in terminal.
- Visibility deteriorates as container passes into hands of inland vendors.
- At consignee, box status is invisible: boxes can sit idle. Inefficient communication leads to inefficient utilization & detention billing disputes, costly.
- Lack of box visibility at consignee makes positioning of box for export more difficult and costly.

Lack of inland visibility leads to inefficiency in container utilization & raised costs.

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**IAS** The International Asset System **No Single Carrier Is Large Enough To Drive A Technology Solution**

The top 20 carriers control just 50% of the world market

100% = 5,790 TEU<sup>1</sup> (000)

Other: 46.2% | Top 20: 53.8%

**Top 20 container shipping companies capacity, 2001 (1,000 TEU<sup>1</sup>)**

Maersk-SeaLand	545
Evergreen	312
P&O Nedlloyd	269
MSC	226
Hanjin	218
APL	200
Cosco	189
NYK Line	157
MOL	146
Zim	145
CP Ships	133
CMA-COM	127
Hyundai	109
Yangming	101
OOCL	95
K Line	90
Hapag-Lloyd	88
UASC	69
China SCL	66
CSAV	62

<sup>1</sup> Twenty Foot Equivalent Unit  
Source: Containerization International

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**IAS** The International Asset System **Hub Infrastructure**

A common operating platform that powers effective applications, enabling ocean carriers to:

- Optimize equipment usage
- Reduce container operating and communication costs
- Streamline operations with trading partners
- Enhance customer service
- Introduce industry standards

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**IAS** The International Asset System **The Hub : a standards-based data repository**

- Scalable
  - Handles increasingly large transaction volumes
- Secure and robust
  - Ensures your data is safe
- Open architecture
  - Accommodates known and future data formats
- XML-based interface
  - Enables systems integration
- Internet based and Web-accessible
  - Low cost and easy access
- Integrated rules engine
  - Allows customers to define how they wish to use the system

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**IAS** The International Asset System **A Common Operating Platform : The IAS Hub**

The diagram shows the IAS Hub at the center, surrounded by a ring of nodes. Connected to the hub are:

- 10 out of Top 20 Ocean Carriers
- 300 Depots
- 546 IMC users
- 3 out of Top 5 Lessors
- 3 out of 7 Stack Train Operators
- IAS Depot Manager
- IAS InterBox
- IAS Event Manager

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**IAS** The International Asset System **Container Event Capture for IAS Hub**

Event capture can be performed by transportation entities using a variety of interfaces:

INTEGRATION	WEB APPLICATION	PDA/Device/ Satellite	TELEPHONE
			<ul style="list-style-type: none"> <li>Interactive Voice Response</li> <li>Touch tone</li> <li>Mobile or land line</li> </ul>

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**IAS** The International Asset System **What can it do now, and where can it lead ?**

- Now....
  - InterBox
    - Intermodal reservation system/Global container interchange platform
  - IAS Depot Manager
    - Captures depot events and distributes data among trading partners
  - IAS Event Manager
    - Provides visibility of containers and cargo
- Future....
  - Workflow Process
  - Security Data Management

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**IAS** The International Asset System **Process Flow Opportunities for a Data Hub**

**Vessel Arrival**

- Container #
- Size Type
- B/L #
- POL/POD
- Commodity
- IMCO/Hazmat
- Gross Weight
- Consignee
- Free Time

**Truck Dispatch**

- Size Type
- B/L #
- Commodity
- IMCO/Hazmat
- Gross Weight
- Consignee
- Rate
- Delivery Time

**Consignee Ops**

- Container #
- Size Type
- B/L #
- POL/POD
- Commodity
- IMCO/Hazmat
- Gross Weight
- Consignee
- Rate
- Delivery Time
- Free Time

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**IAS** The International Asset System **Security : the need for data management**

The diagram shows the Data Hub at the center, receiving data from various sources:

- US Customs (Seal Integrity: C-TPAT & CSI clearances)
- Yantian Terminal (Terminal Load Event/Seal Integrity)
- Ocean Carrier (Core B/L & Manifest Data)
- LAX Terminal (Terminal Arrival Seal Integrity)
- Local USA Dray (Location/Status/Seal Integrity)
- LAX Rail Ramp (Yard Arrival & Seal Integrity)
- Chinese Trucker (Location/Status/Seal Integrity)
- Chinese Shipper (Load Event, PO #, C/TPAT #, SKU #)
- Chinese Trucker (Location & Status)
- Yantian Depot (Container Number)
- Union Pacific RR (Rail CLM Data)
- Chicago Rail Ramp (Yard Arrival & Seal Integrity)
- Local USA Dray (Location/Status/Seal Integrity)
- US Consignee (Container Unload Event)

Data flows from the Data Hub to Customs/TSA/Agencies.

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