

Ports as Nodes in Logistics Chains

State of the Port and Maritime Sector

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Presentation draws on material developed by
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State of the Port and Maritime Sector

- Global business
 - Temporarily hit by the financial crisis
- It matters how the ports are run
 - Ports to large extent are results of trade flows and corresponding demands of shipping industry
 - Ports that meet demand of the industry can flourish
- ISPS and Supply Chain Security

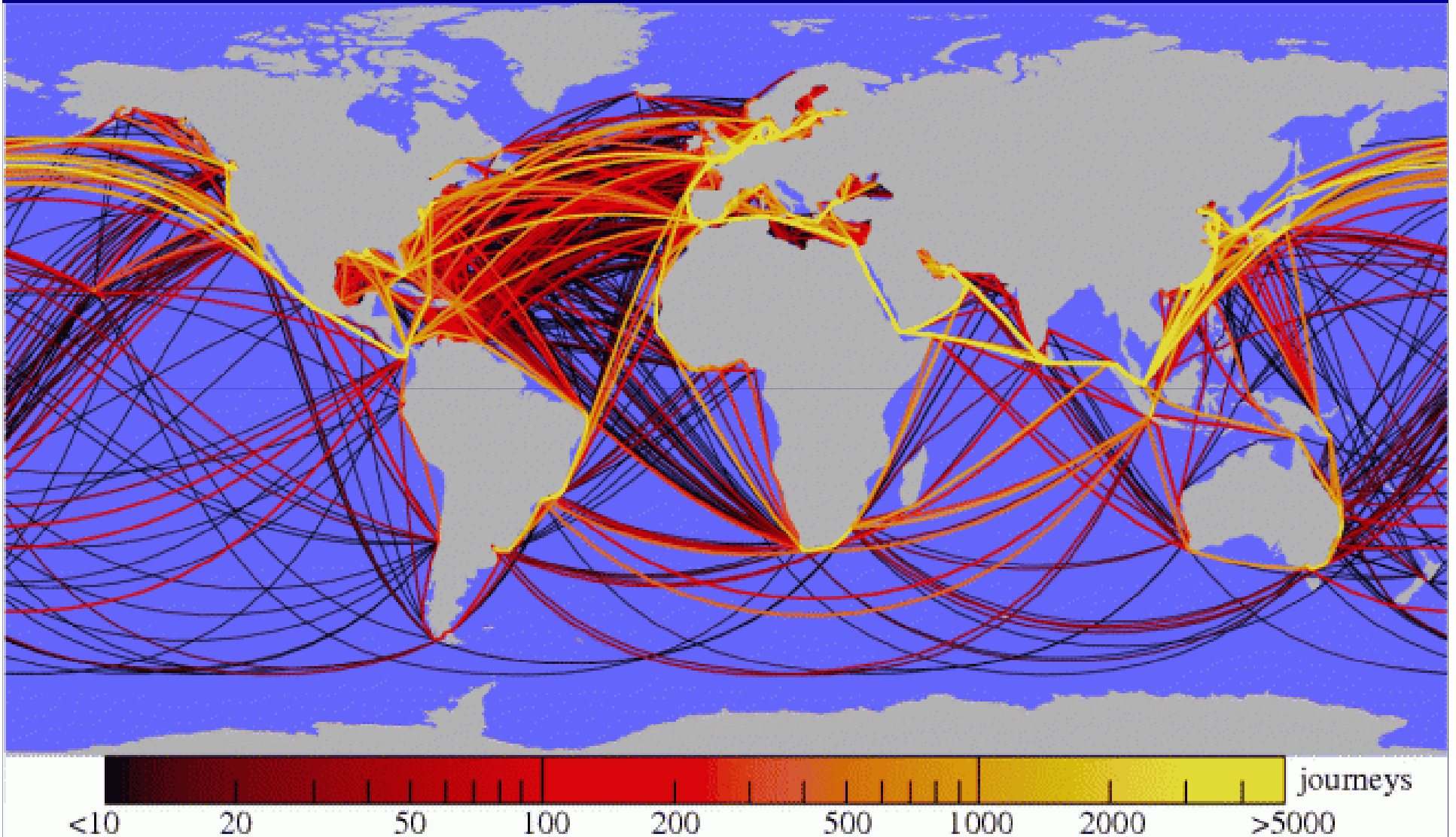
The World's Major Shipping Routes

(Source unknown)

- A team has reconstructed a year's worth of travel itineraries from 16,693 cargo ships using data from LLOYD's Register Fairplay and the Automatic Identification system which tracks vessels using VHF and GPS

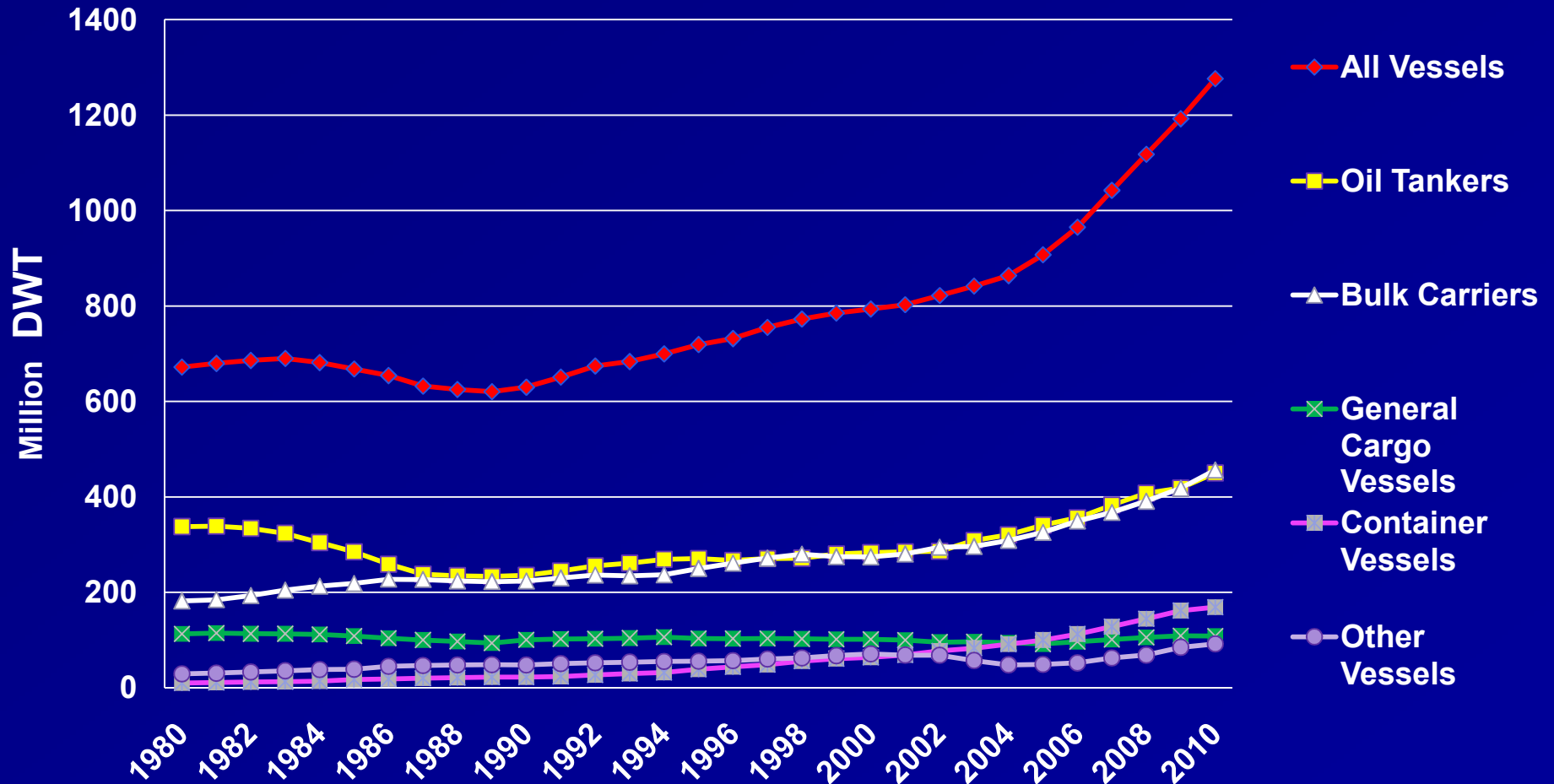


World Major Shipping Routes



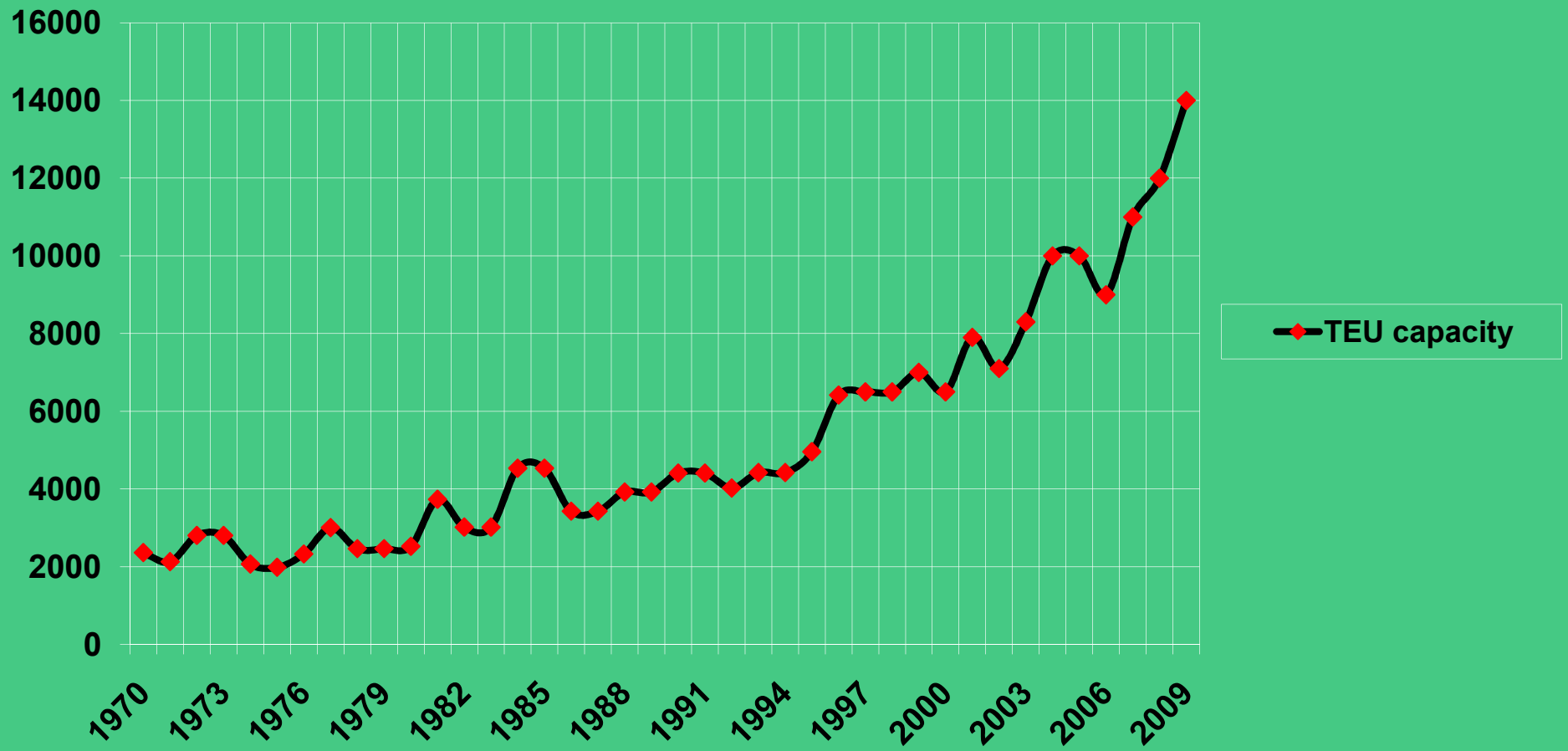
World Merchant Fleet Development (in million DWT)

(Source: UNCTAD)



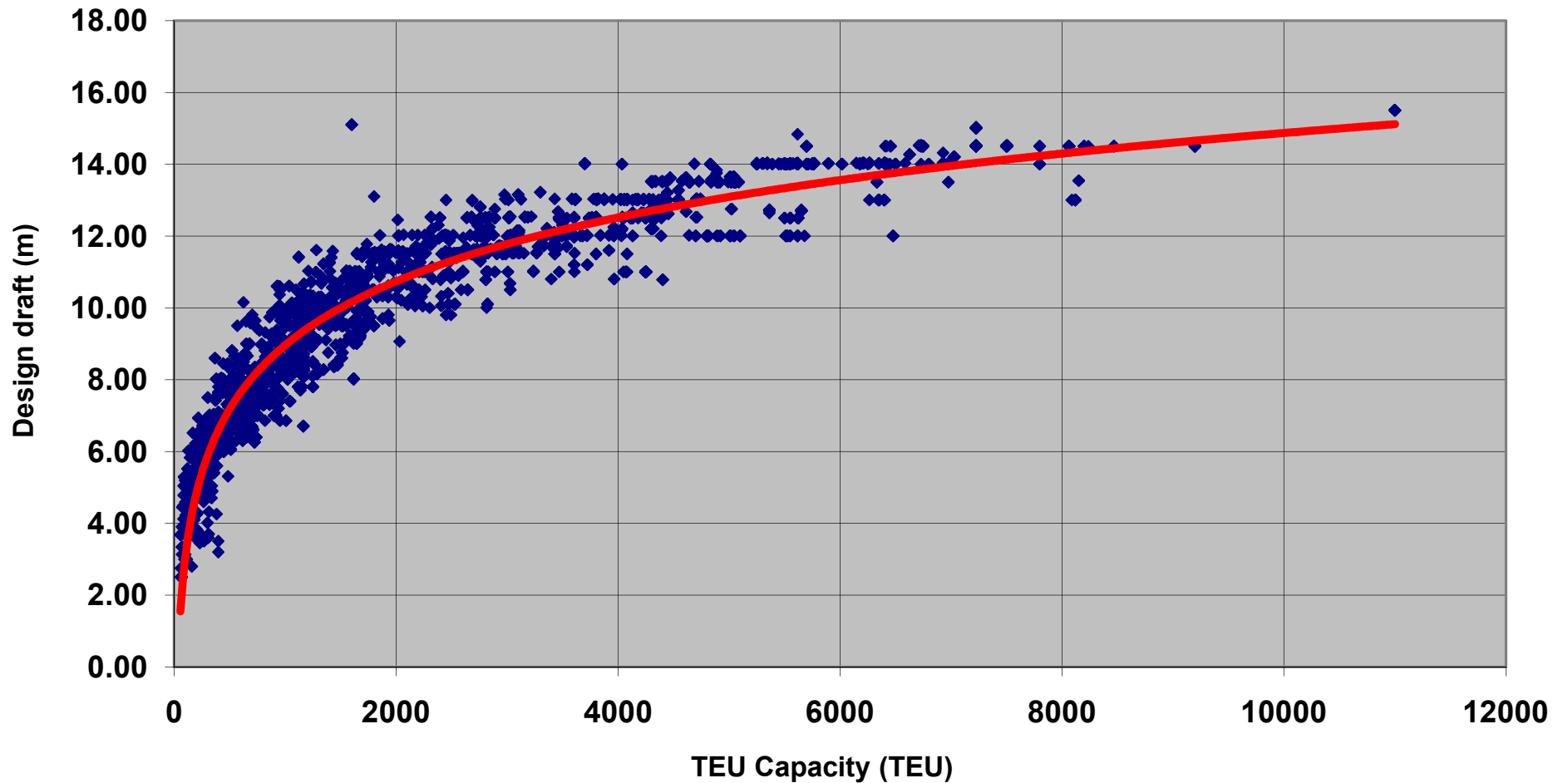
Container vessel capacity development

(Maximum Capacity built each Year (Clarkson 2004 and others))



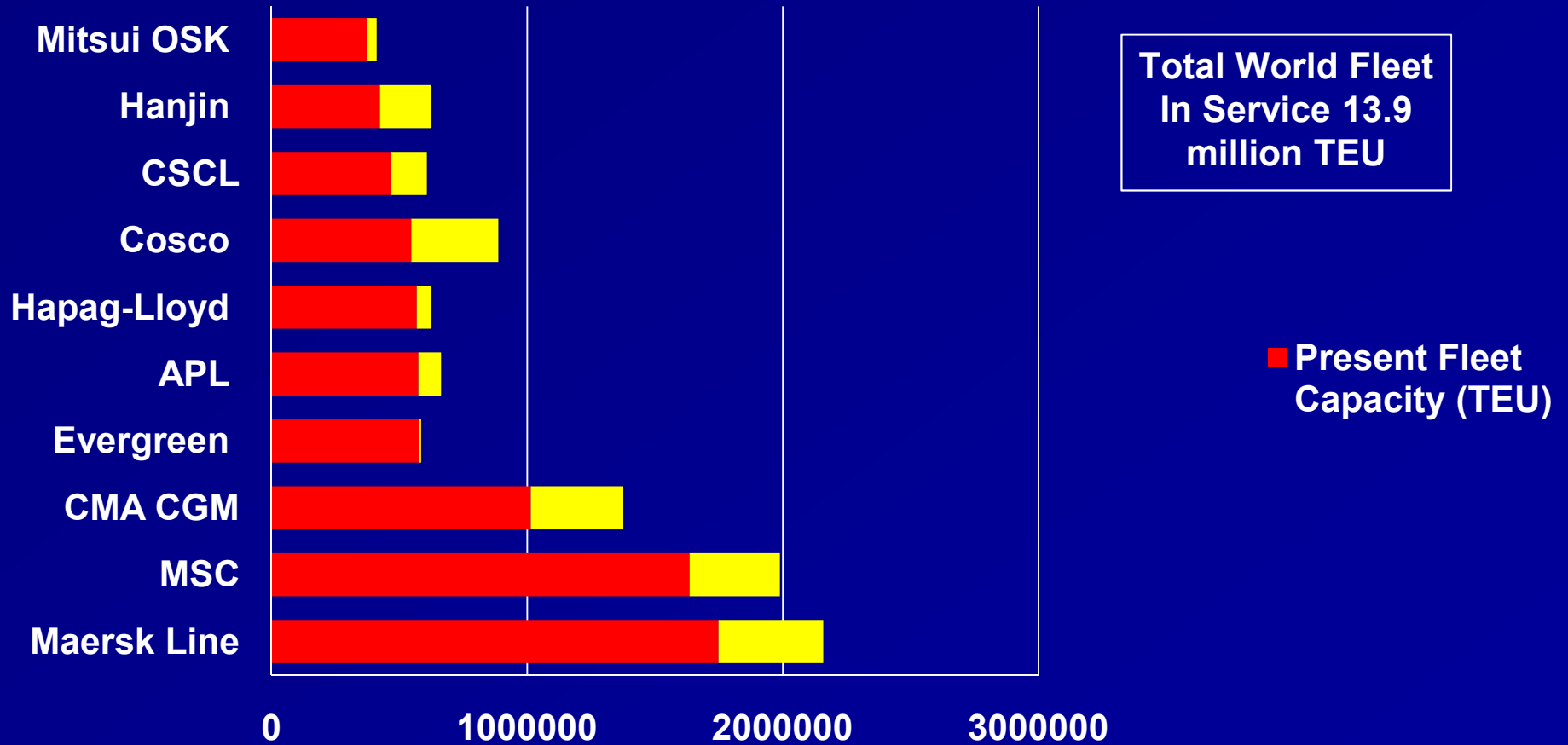
Container vessels dimensions

(Sources: Fairplay and various other data)



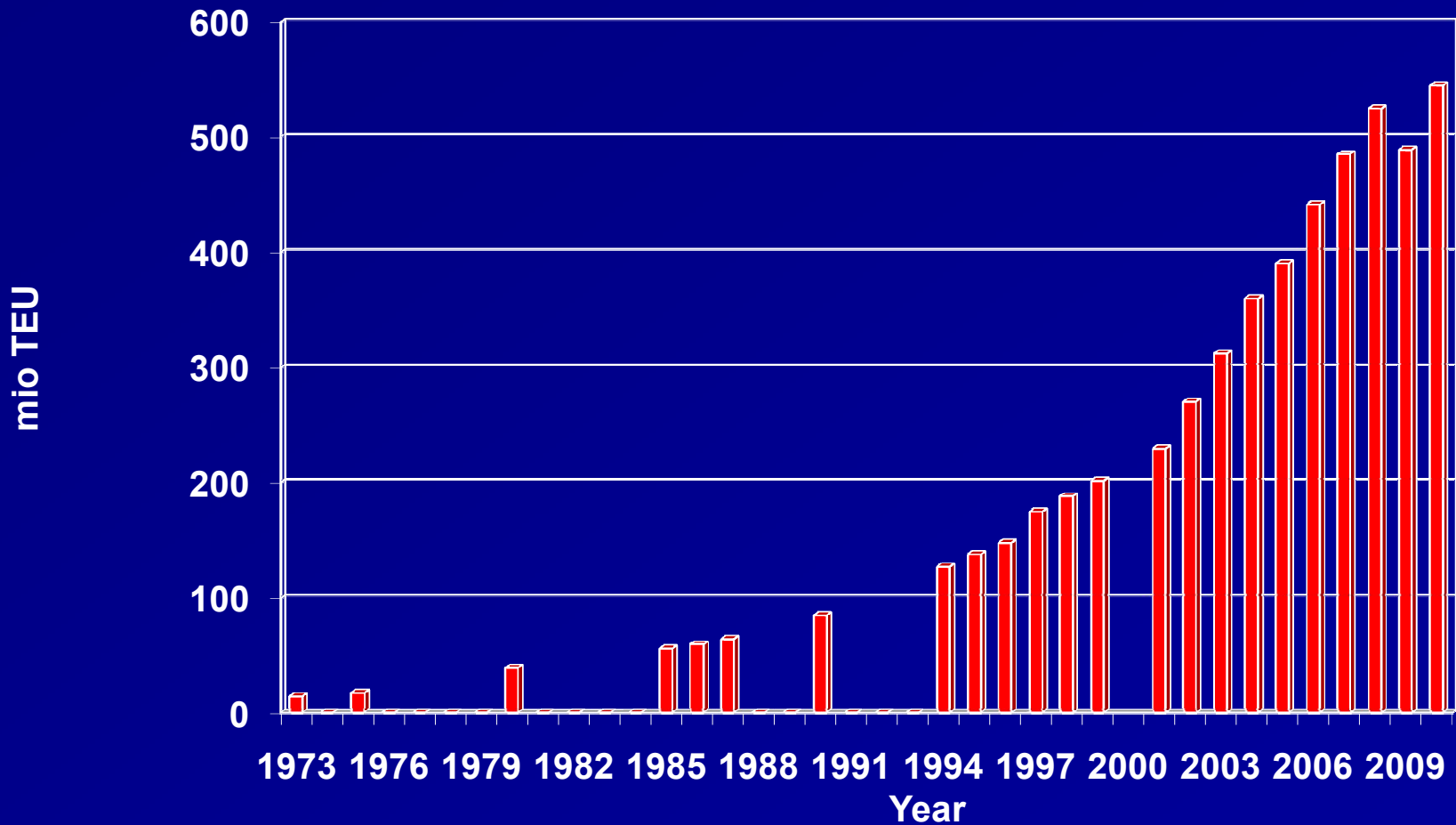
Top 10 Container Shipping Lines August 2010 – Fleet Capacity (TEU)

(Source: Containerisation International)



World port container traffic (mio TEU)

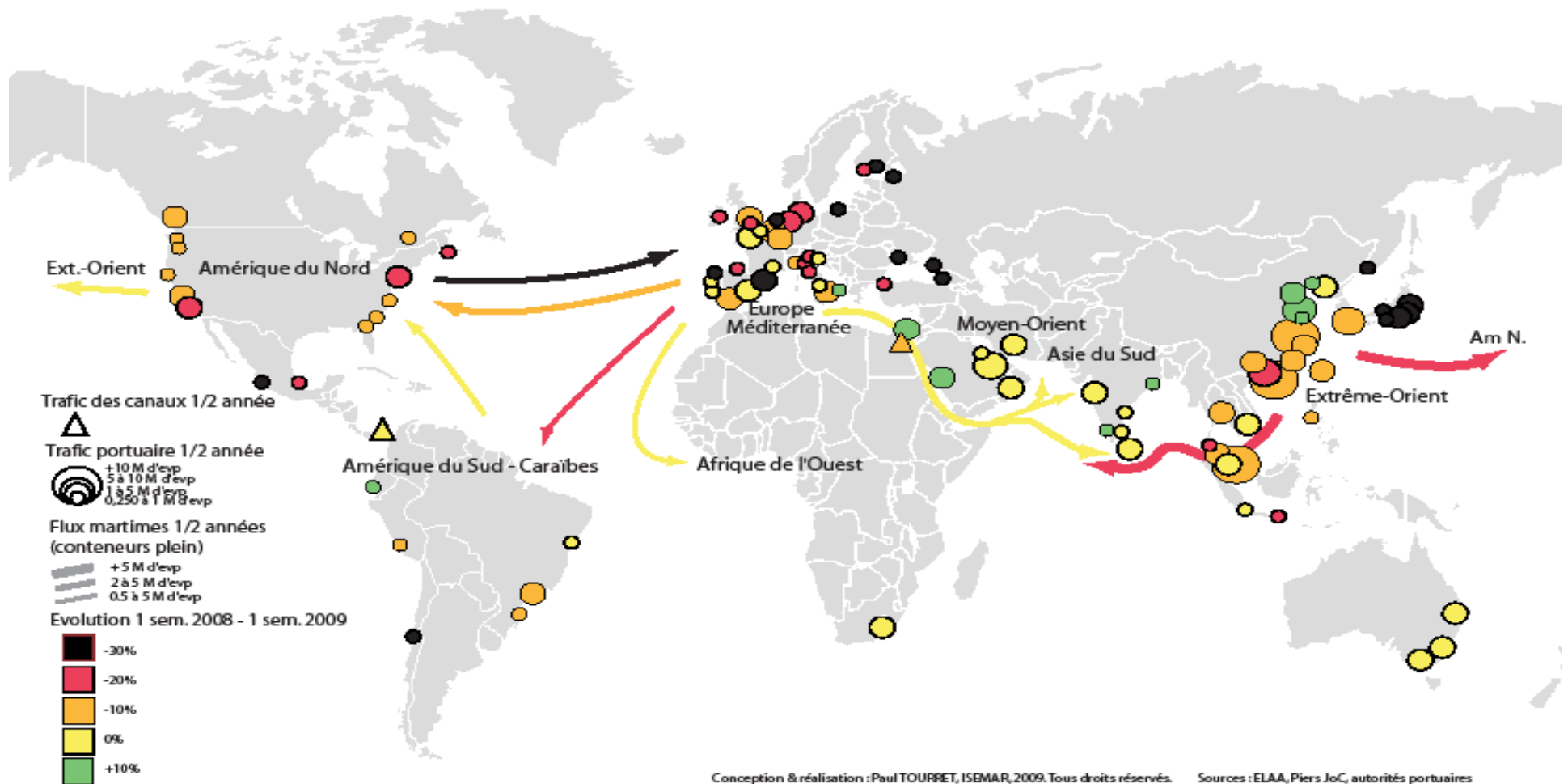
(Source: Containerisation International and other publications)



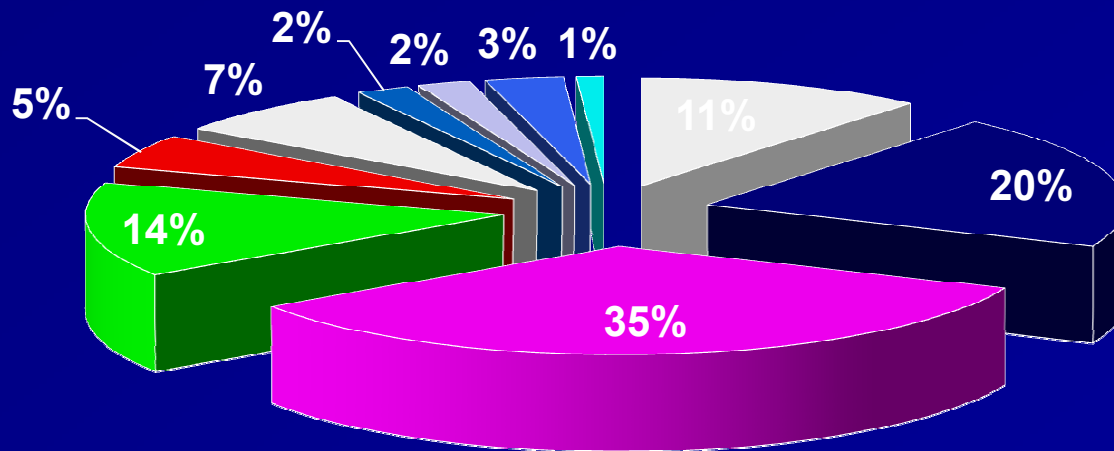
Container Throughput and Flows Comparison Q1 2008 and Q1 2009



CARTOGRAPHIE ISEMAR / LA CRISE DE LA CONTENEURISATION EN 2009



Approximate regional share of world port container traffic (mio TEU)



Port Management Models and Private Sector Involvement in Port



Private sector involvement

- Region by region, there has been a shift from public/service port models to private sector participation both for capital and operational experience
- To date, developing economy countries entered into 299 projects totalling more than US\$ 33 billion of investment in 16 years
- In Africa some 70% of the (container) port operations are still run by the public sector
 - Past 5 years have seen a number of reforms taking place
- What are the developments in Latin America?



Port Management Models

Type	Infra-structure	Super-structure	Stevedoring labor	Other functions
Public Service Port	Public	Public	Public	Mainly public
Tool Port	Public	Public	Private	Mainly public
Landlord Port	Public	Private	Private	Mainly private
Private Service Port	Private	Private	Private	Mainly private



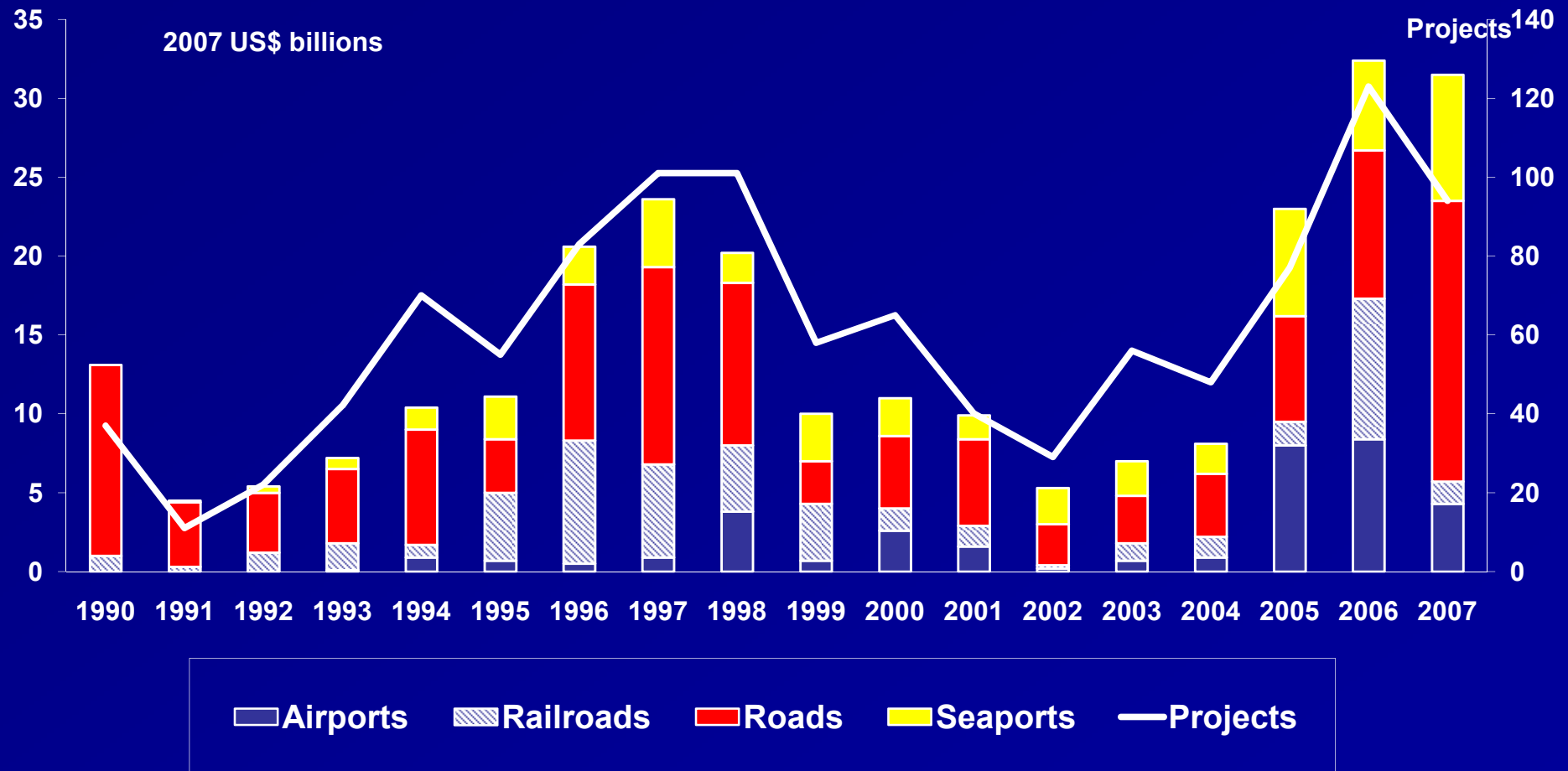
Private sector involvement (contd.)

- The WB Port Reform Toolkit (Second Edition 2006) provides extensive details since *not one solution fits all*
- The Landlord Port Management Model is the World Bank's "preferred" option
 - Private sector involvement will grow but Governments will continue to be the landlord, regulator and provider of basic infrastructure
 - Sometimes need for accompanying institutional, legal and labor reform



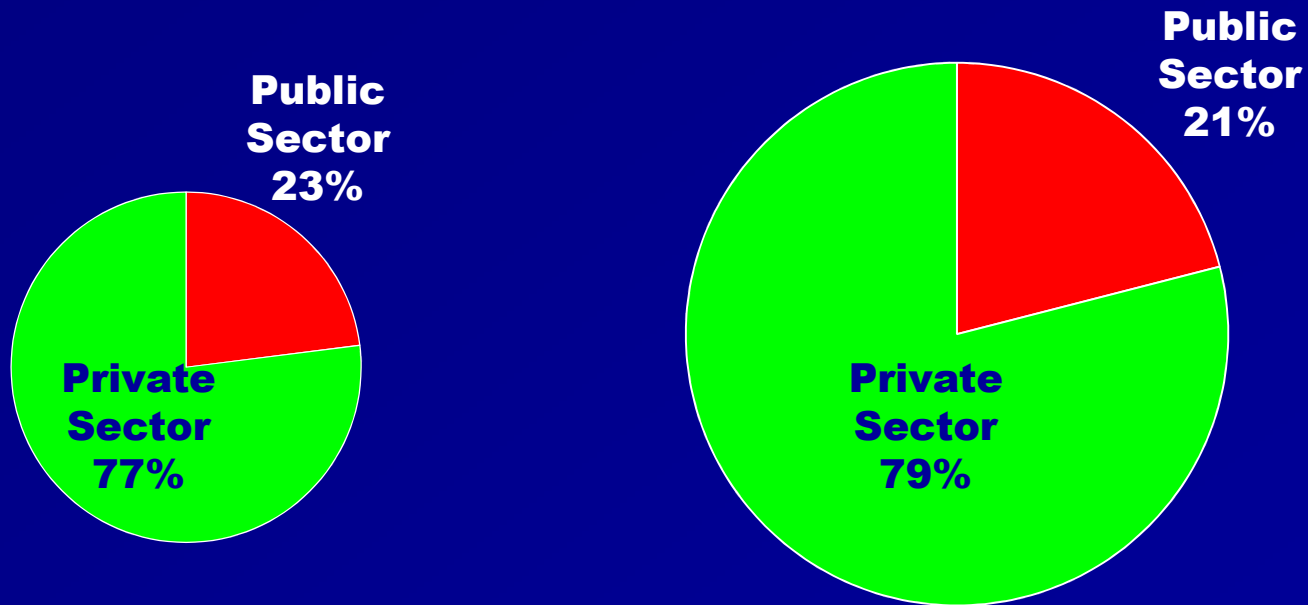
Private participation in transport projects in developing countries 1990-2007

(Source: World Bank and PPIAF, PPI Project database)



Container terminal operations

Source: Annual review of global container terminal operators – 2005 (Drewry)



2004 Global Capacity
455 mil TEU

2010 Global Capacity
610 mil TEU



Port and Supply Chain Security



Port and Supply Chain Security

ISPS

- International Ship and Port (Facility) Security Code of the IMO was introduced in July 2004
- Implementation of ISPS resulted in relatively small increase of port/terminal handling costs (conclusion of recently published WB study)
- 2007: IMO Statement that there still is much confusion about the actual ISPS requirements



Port and Supply Chain Security (contd.)

Supply Chain Security (SCS)

- Supply Chain Security (SCS) is the concept which encompasses the programs, systems, procedures, technologies and solutions applied to address threats to the supply chain and the consequent threats to the economic, social and physical well-being of citizens and organized society
- In the context of globalization, a supply chain also refers to the network of supply chains that form today's global commerce



Port and Supply Chain Security (contd.)

Supply Chain Security (SCS)

- Threats to the supply chain can come from
 - Outside the supply chain, threatening to disrupt the chain
 - Inside the supply chain, when it is used to perform and cover illegal activities, like contraband, terrorism, or piracy
- SCS concentrates on security issues in the entire chain from producer to consumer
- The World Bank published the Supply Chain Security Guide in July 2009



Tunnel and mobile radiation scanners



Case Study Automated Container Inspection Lane

(Source: Port of Rotterdam)



Thank you for your attention

