Trade and Development Commission
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17-21 June 2013
Geneva

Key Trends in International Transport and Implications for Development

By
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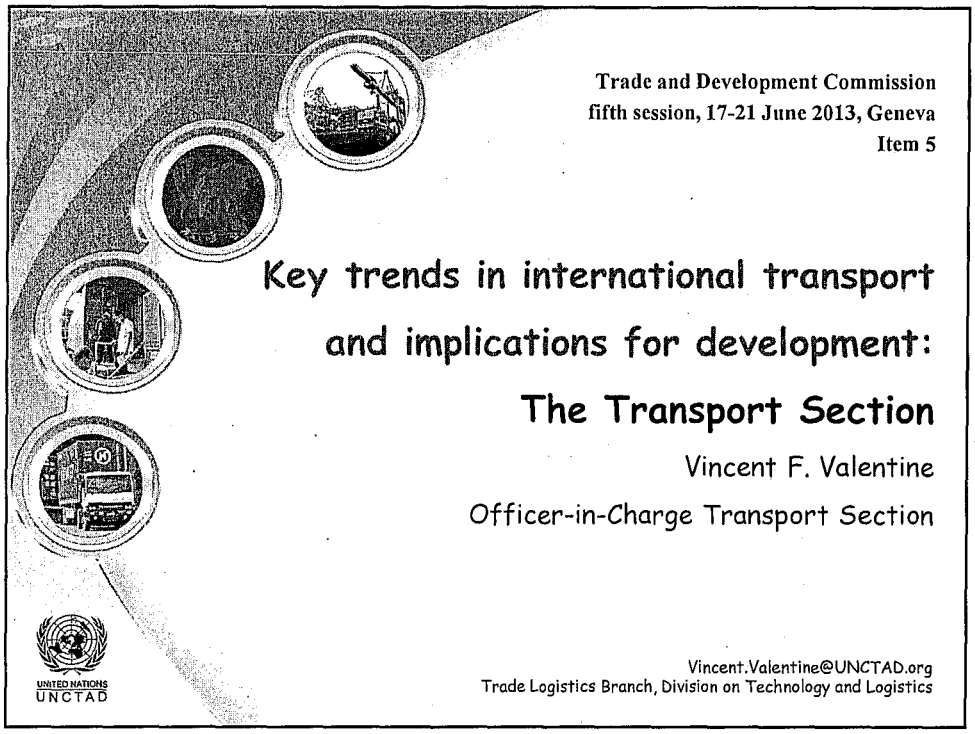

Trade and Development Commission
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Item 5

Key trends in international transport and implications for development: The Transport Section

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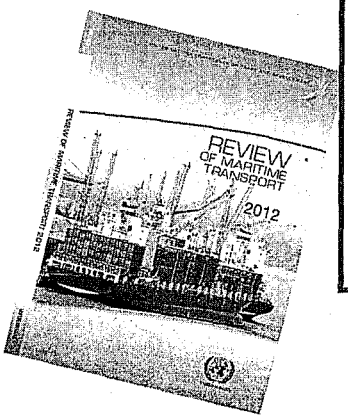
Transport Section Activities

(within the Review of Maritime Transport)



- Chapter 3 FREIGHT RATES AND MARITIME TRANSPORT COSTS
  - Freight rates
  - Freight markets and transport costs
  - Policy options to reduce maritime transport costs
- Chapter 4. PORT DEVELOPMENTS
  - Port throughput
  - Recent port developments
  - Port development outlook
- Chapter 6. SUSTAINABLE FREIGHT TRANSPORT DEVELOPMENT AND FINANCE
  - Transport sector energy use and emissions
  - Recent developments in sustainable freight transport
  - Enabling sustainable Freight Transport finance-related considerations

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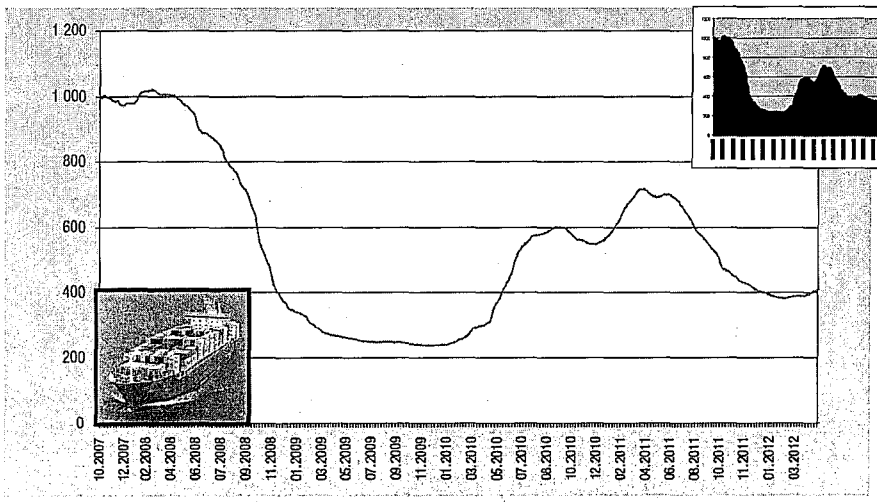
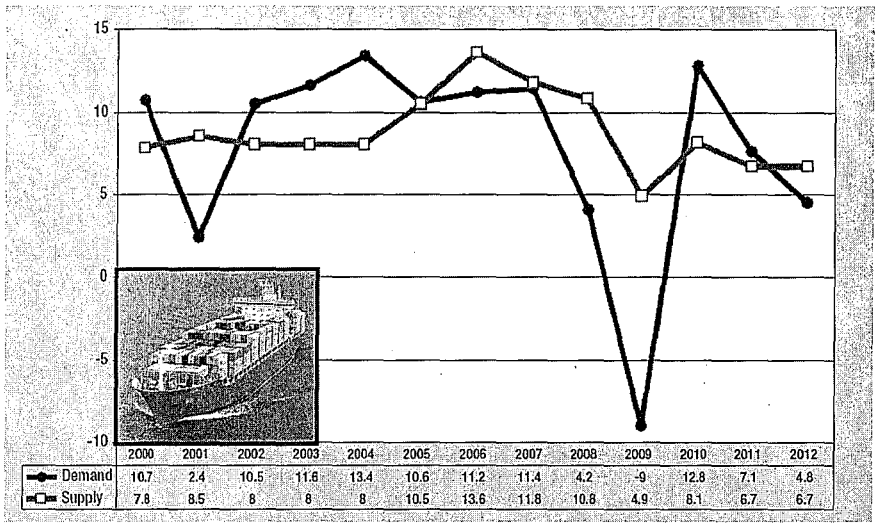
The NewConTex 2007-2012
(Index base October 2007 1,000 points)



Source: Compiled by the UNCTAD secretariat, using the New ConTex index produced by the Hamburg Shipbrokers' Association. See http://www.vhss.de.

Note: New ConTex is a container ship time charter assessment index calculated as an equivalent weight of percentage change from six ConTex assessments, including the following ship sizes: 1,100, 1,700, 2,500, 2,700, 3,500 and 4,250 TEUs.

Growth of demand and supply in container shipping, 2000-2012 (annual growth rates)

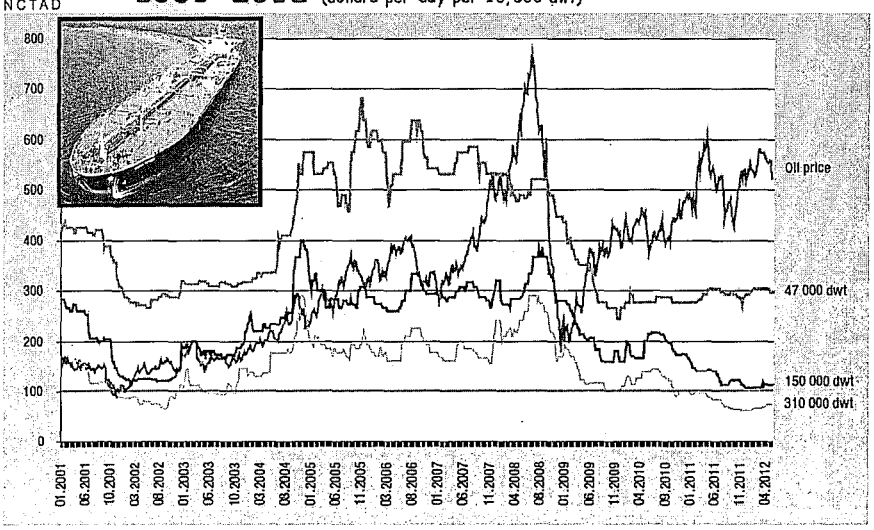


	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Demand	10.7	2.4	10.5	11.6	13.4	10.6	11.2	11.4	4.2	-9	12.8	7.1	4.8
Supply	7.8	8.5	8	8	8	10.5	13.6	11.8	10.8	4.9	8.1	6.7	6.7

Source: Compiled by UNCTAD secretariat on the basis of data from *Clarkson Container Intelligence Monthly*, various issues.

Note: Supply data refers to total container-carrying fleet capacity, including multi-purpose and other vessels with some container-carrying capacity. Demand growth based on million TEU lifts. The data for 2012 are forecast figures.

Daily tanker time charter rate in dollars per 10,000 dwt capacity for various vessel sizes 2001-2012 (dollars per day per 10,000 dwt)



Source: Compiled by UNCTAD secretariat based on information from *Clarkson Shipping Intelligence Network*. Oil price data from United States of America Energy Information Administration, available at http://205.254.135.7/dnav/pet/pet_pri_spt_s1_w.htm.

Note: The x-axis represents weekly figures. The y-axis represents daily time charter rate in dollars per 10,000 dwt capacity for a modern tanker. Oil price is indexed with index base 150 in May 2001. Ship sizes are expressed in deadweight capacity (in thousands of dwt).

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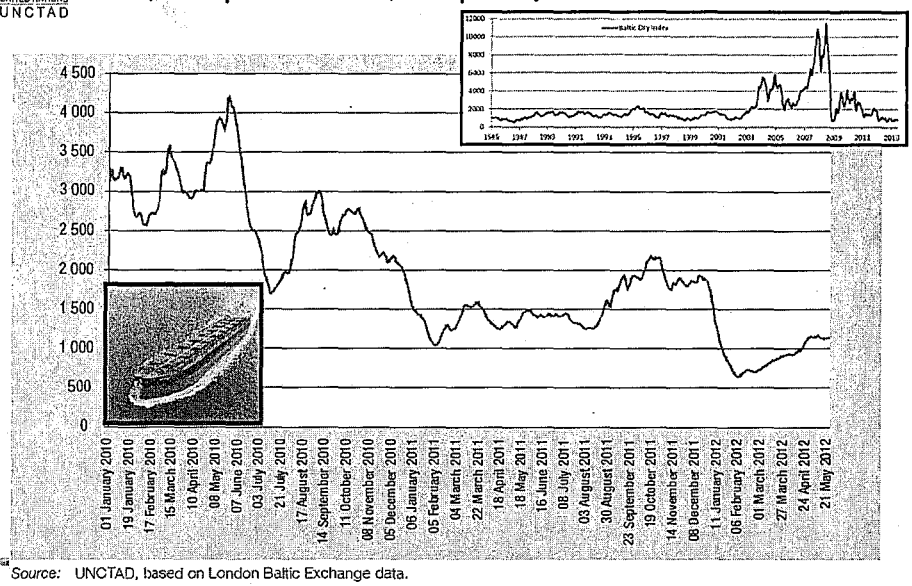
Baltic Exchange Dry Index 2010-12

(base year 1985 1,000 points)



Source: UNCTAD, based on London Baltic Exchange data.

Note: The index is made up of 20 key dry bulk routes measured on a time charter basis. The index covers Handysize, Supramax, Panamax and Capesize dry bulk carriers, carrying commodities such as coal, iron ore and grain.

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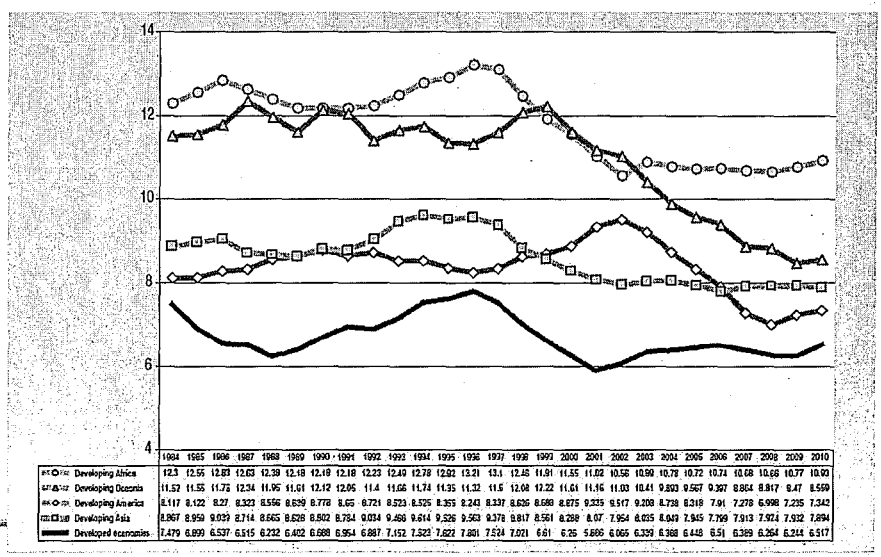
Freight costs as percentage of value of imports (five-year moving average)



Source: UNCTAD.

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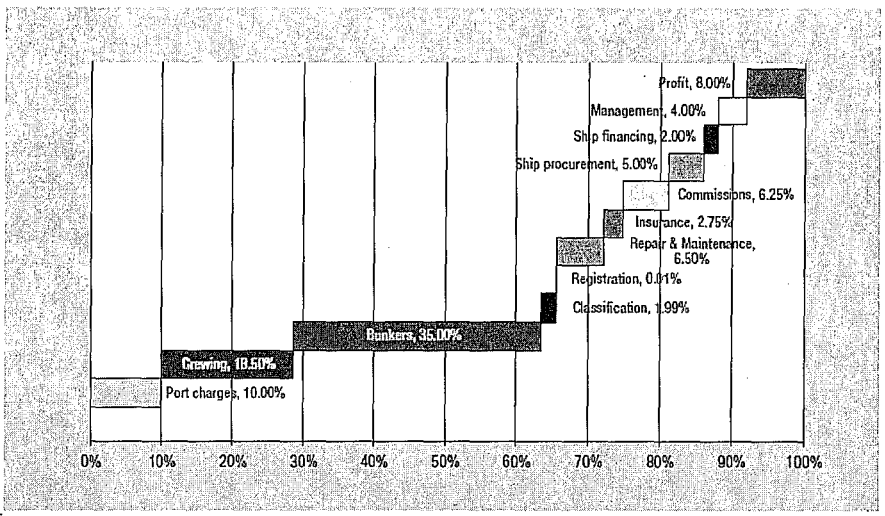
Freight rate cost components (for a tanker of 10,000 dwt with 20 years of economic life)



Source: Data received from a ship operator in February 2012.

Note: Figures refer to share of cost component as a percentage of total costs. Results are based on the assumption that the ship is staffed with a Turkish crew. Relative costs depend on many factors that may change over time.

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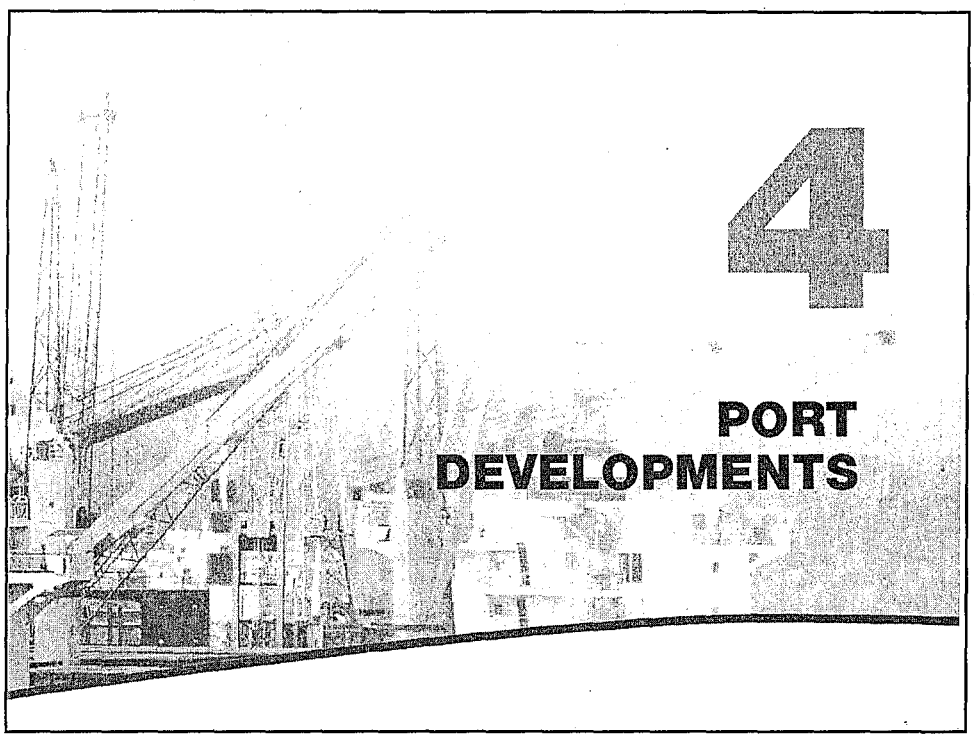
Three national policy related generic strategies to reduce maritime freight rates

Strategy	1. Developing coastal shipping	2. Developing port competitiveness	3. Developing port hinterland connections
Selected field of policy making	• Opening cabotage to global competition or restricting it to domestic operators • National ship registration policies • Institutional framework (e.g. maritime authority) • Investment policies and ownership model • Maritime infrastructure (e.g. feeder ports)	• Port administration related laws and regulations • Port management structures and ownership model • Institutional framework (e.g. port authority) • Port operations • Port infrastructure (e.g. links to other modes of transport)	• Intermodal interface connecting port with national and regional markets (options: Rail, road, waterway and air transport) • Regulatory and institutional framework for land transport modes • Regional transit and transport development agreements • Public private partnerships
Potential impact on freight rates	• The compliance with new ship registration requirements may reduce or increase operations costs • Opening cabotage can increase competitive pressure thus reducing freight rates • Improving coastal shipping infrastructure connects remote regions to international trade networks → modal shift to maritime transport and better economies of scale	• Reducing port related charges for maritime transport service providers through: a. efficiency gains in port operations and port administration b. reasonable profit margin of port operator in a more competitive business environment → Includes charges for all port functions: Landlord, regulator, operator, marketer and cargo-handler (e.g. cargo handling fees, channel fees)	• Improved port connectivity: a. increases cargo handling volumes in ports → lower unit handling costs b. attracts larger ships → lower unit transport costs c. attracts new transport service providers → lower margins due to increased competition



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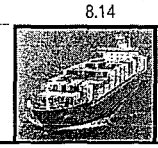
Container port throughput for 75 developing countries and economies in transition for years 2009, 2010 and 2011 (TEUs)

Country	2009	2010	Preliminary figures for 2011[a]	Percentage change 2010–2009	Percentage change 2011–2010
China	107 963 180	128 929 895	138 391 031	19.42	7.34
Singapore	26 592 800	29 178 500	30 722 470	9.72	5.29
China, Hong Kong SAR	21 040 096	23 699 242	24 404 000	12.64	2.97
Republic of Korea	15 699 161	18 537 801	20 809 210	18.08	12.25
Malaysia	15 859 938	18 244 650	19 808 658	15.04	8.57
United Arab Emirates	14 425 039	15 174 023	16 752 724	5.19	10.40
China, Taiwan Province of	11 352 097	12 501 107	13 463 919	10.12	7.70
India	8 011 810	9 752 908	9 951 310	21.73	2.03
Indonesia	7 243 557	8 371 058	8 884 888	15.57	6.14
Brazil	6 574 617	8 121 324	8 597 733	23.53	5.87
Thailand	5 897 935	6 648 532	7 170 500	12.73	7.85
Egypt	6 250 443	6 709 053	6 556 189	7.34	-2.28
Panama	4 597 112	5 906 056	6 534 265	28.47	10.64
Viet Nam	4 936 598	5 983 583	*6 282 762*	21.21	*5.00*
Turkey	4 521 713	5 547 447	5 998 820	22.68	8.14

Sources: UNCTAD secretariat, derived from information contained in Containerisation International Online (May 2012), from various Dynamar B.V. publications and from information obtained by the UNCTAD secretariat directly from terminal and port authorities.

[a] In this list, Singapore includes the port of Jurong.

[b] The term other reported refers to countries for which fewer than 100,000 TEUs per year were reported. Notes: Many figures, especially for 2011, are estimates (these figures are highlighted in italics). Port throughput figures tend not to be disclosed by ports until a considerable time after the end of the calendar year. Country totals may conceal the fact that minor ports may not be included; therefore, in some cases, the actual figures may be higher than those given.



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The relationship between vessel size and terminal type

	Terminal Type		
	Container terminal	Dry-bulk terminal	Tanker terminal
Maximum vessel carrying capacity	ULCSs (maximum 18,000–22,000 TEUs; 165,000 dwt)	VLOCs (maximum 400,000 dwt)	Ultra large crude carriers (ULCCs) (maximum 440,000–550,000 dwt)
Maximum vessel dimensions	Length: 400 metres Beam: 59 metres Draught: 14.5 metres	Length: 362 metres Beam: 65 metres Draught: 23 metres	Length: 458 metres Beam: 69 metres Draught: 24.6 metres
Alongside berth depth needed	15 metres	23.5 metres	25 metres
Berth length	1 000 metres. The whole vessel needs to be adjacent to the quay area to allow maximum unloading/loading and further berths needed at the same quay for feeder vessels.	Access to the vessel can be via a pier extended out into deeper water and cargo moved via conveyor.	Access to the vessel can be via a pier extended out into deeper water and cargo moved via pipeline.
Pilotage	Increased assistance likely	Increased assistance likely	Increased assistance likely
Terminal area	Two-way (import/export) cargo movement means increased storage space is needed to discharge and load cargo. Container yard depth should be at least 500 metres. Approximately 25–30 ha is needed for a terminal with an annual throughput of 1 million TEUs.	As cargo tends to move in one way (export to import) the increase storage space needed is minimal and tends to be open air, i.e. requiring only land surface. One million tons of iron ore occupy approximately 12–15 ha.	Although cargo tends to move in one direction, costly storage facilities and land surface are needed. One million barrels of storage occupy an area of 5 ha.
Quayside cargo-handling equipment	8–10 gantry cranes per berth with an outreach of 23 TEUs, $8 million–10 million each.	No significant difference	No significant difference

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Sources of International and Regional Funding

	*Total lending**	*Infrastructure lending*	*Transport Sector lending ****	*Transport Sector Share*
European Investment Bank	$57.6 billion (EUR 44.8 billion)		$13 billion (EUR 10.1 billion)	23%
Asian Development Bank	$21.6 billion		$5 billion	25%
International Bank for Reconstruction and development /International Development Assn.	$35.3 billion		$4.4 billion	13%
International Finance Corporation	$15.5 billion	$1.5 billion		
Inter American Development Bank	$11.4 billion		$1.7 Billion	15%
European Bank for Reconstruction and Development	$7.7 billion (EUR 6 billion)		$1.6 billion (EUR 1,3 billion)	21%
African Development Bank	$8.8 billion (UA 5.7 billion)	$2.4 billion ** (UA 1.57 billion)	$1.5 billion (UA 1 billion)	63%

Source: Compiled by UNCTAD secretariat from various annual accounts
* For 2012 ** For 2011 *** May include other sectors e.g. communication or environment

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Infrastructure Investment Funds

Fund	Firm	$m	Region
Global Infrastructure Partners II	Global Infrastructure Partners	8,250	Global
Global Infrastructure Partners	Global Infrastructure Partners	5,640	Global
Energy Capital Partners II	Energy Capital Partners	4,335	North America
EIG Energy Fund XV	EIG Global Energy Partners	4,121	Global
Alinda Infrastructure Fund II	Alinda Capital Partners	4,097	North America, Europe
Morgan Stanley Infrastructure Partners	Morgan Stanley Infrastructure	4,000	Global
Citi Infrastructure Partners	Citi Infrastructure Investors	3,400	OECD
ArcLight Energy Partners Fund V	ArcLight Capital Partners	3,310	North America, Europe
GS Infrastructure Partners II	GS Infrastructure Investment Group	3,100	North America, Europe
Brookfield Americas Infrastructure Fund	Brookfield Asset Management	2,655	North America, South America

Source: (Preqin, 2012) The 2012 Preqin Infrastructure Review

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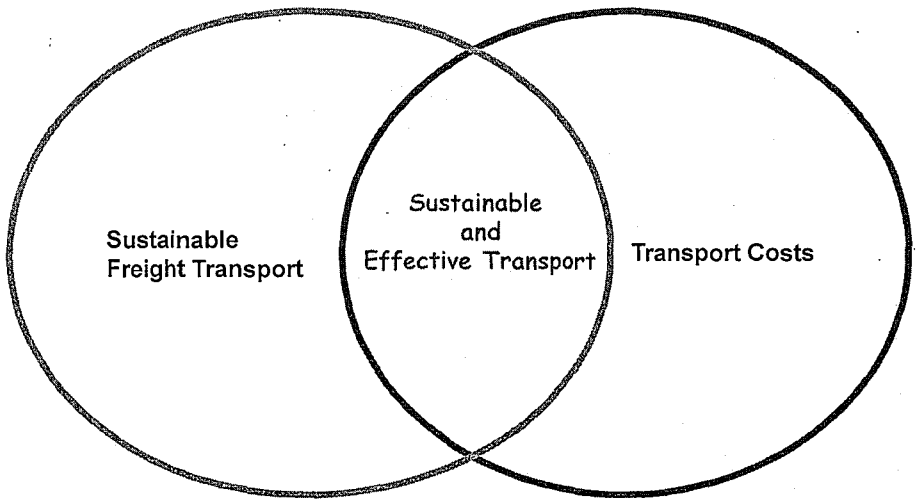
Transport Section - Main work



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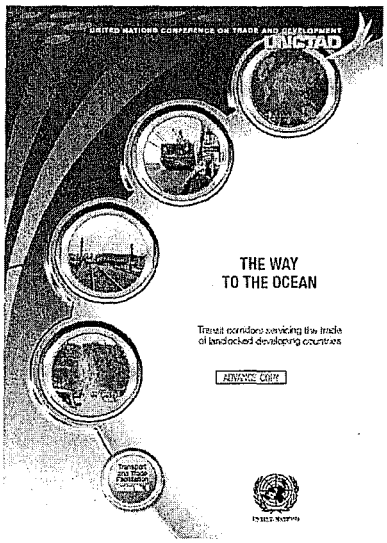
The Way to the Ocean

Transit corridors servicing the trade of landlocked developing countries

- Building Institutional Capacity
- Building trust
- Developing transport nodes



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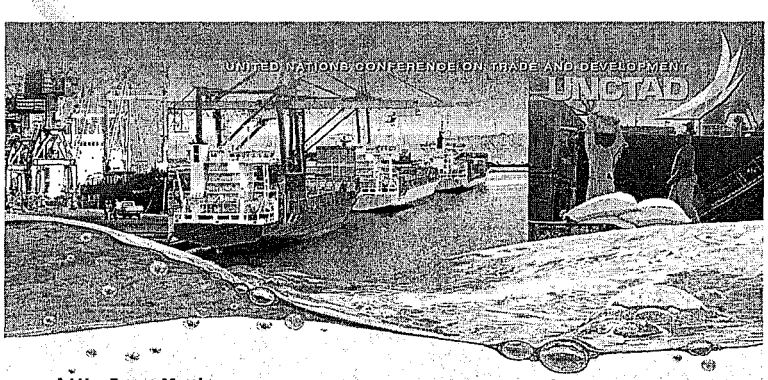

Ad-Hoc Expert Meeting on

ASSESSING PORT PERFORMANCE

Geneva, 12 December 2012

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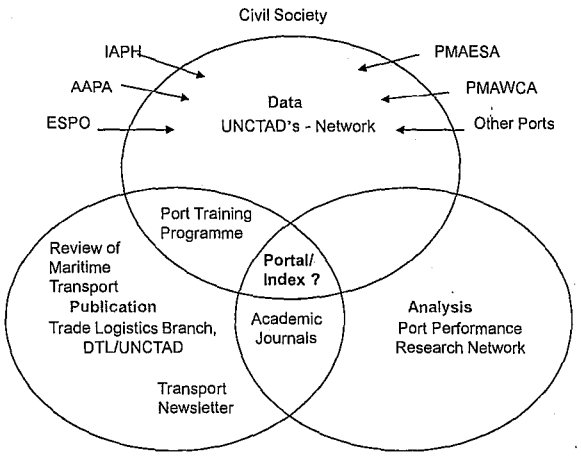
Collaboration



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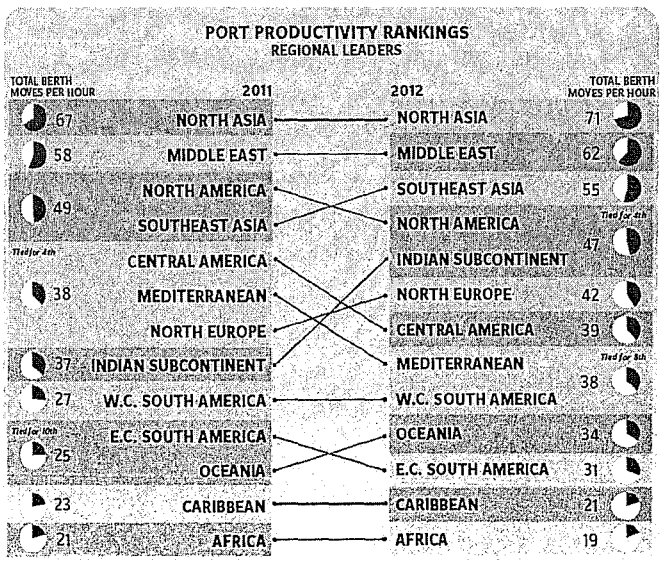
Journal of Commerce - Port Productivity Index



Source: JOC Port Productivity Database; Ocean Shipping Consult


Thank You
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