Training Course of Railway Personnel
BIMSTEC and Mekong-Ganga Cooperation Countries
Railway Staff College, Vadodara, 20-25 March 2005

UNESCAP
Activities in the field of transport

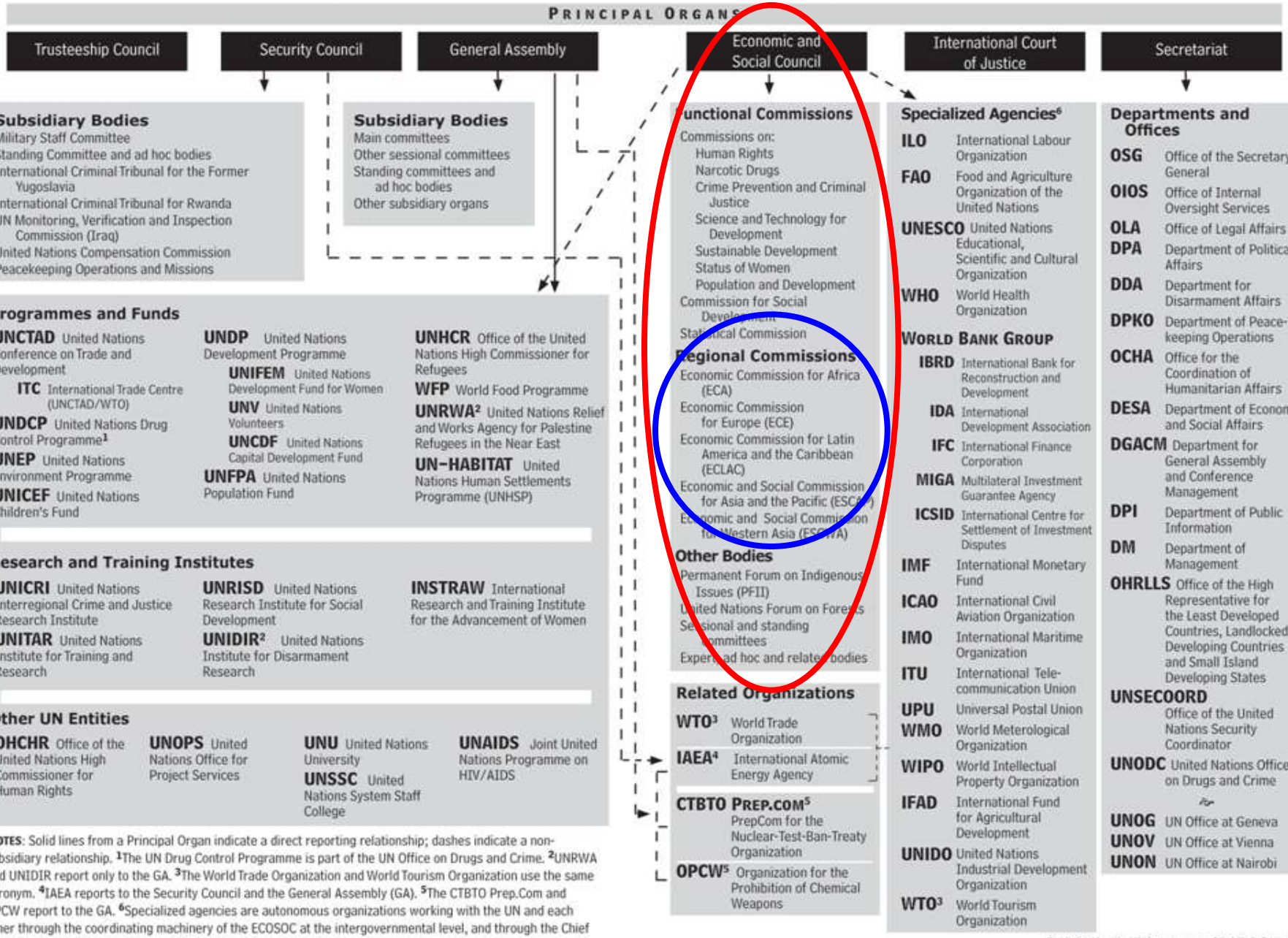
John Moon
Transport and Tourism Division
UNESCAP

Contents

- **What is ESCAP TTD?**
- **What does it do?**
- **What is its approach and visions?**

What is ESCAP TTD?

The United Nations system



NOTES: Solid lines from a Principal Organ indicate a direct reporting relationship; dashes indicate a non-subsidiary relationship. [1]The UN Drug Control Programme is part of the UN Office on Drugs and Crime. [2]UNRWA and UNIDIR report only to the GA. [3]The World Trade Organization and World Tourism Organization use the same acronym. [4]IAEA reports to the Security Council and the General Assembly (GA). [5]The CTBTO Prep.Com and OPCW report to the GA. [6]Specialized agencies are autonomous organizations working with the UN and each other through the coordinating machinery of the ECOSOC at the intergovernmental level, and through the Chief Executives Board for coordination (CEB) at the inter-secretariat level.

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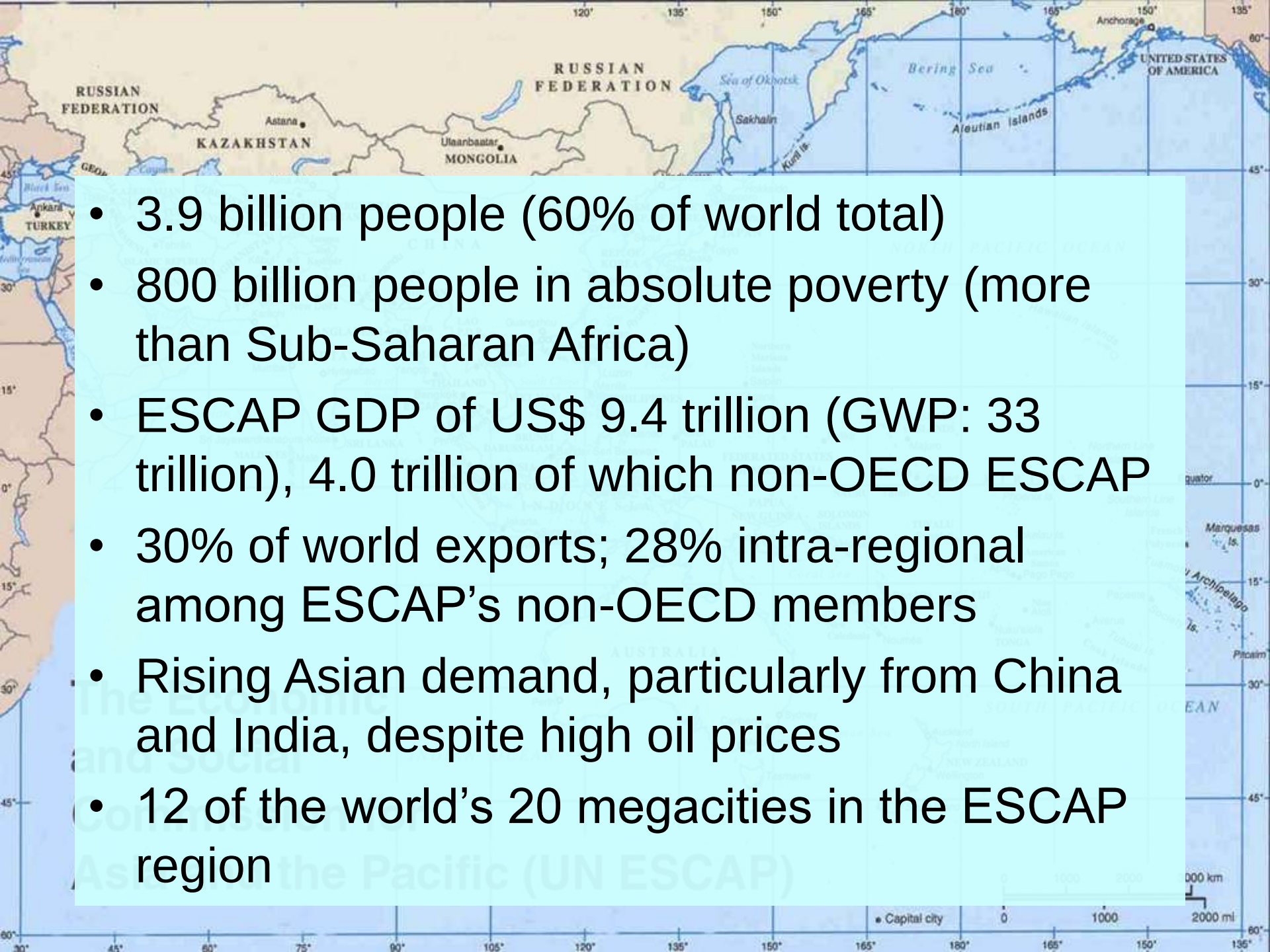
DPI/2342—March 2004



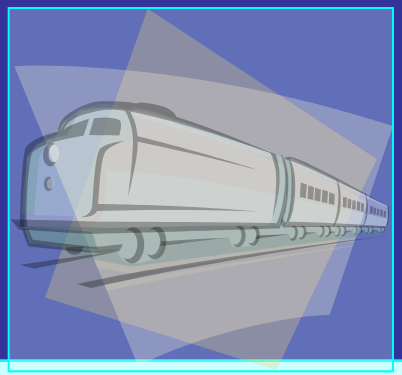
- 3.9 billion people (60% of world total)
- 800 billion people in absolute poverty (more than Sub-Saharan Africa)
- ESCAP GDP of US$ 9.4 trillion (GWP: 33 trillion), 4.0 trillion of which non-OECD ESCAP
- 30% of world exports; 28% intra-regional among ESCAP's non-OECD members
- Rising Asian demand, particularly from China and India, despite high oil prices
- 12 of the world's 20 megacities in the ESCAP region

What does ESCAP TTD do?

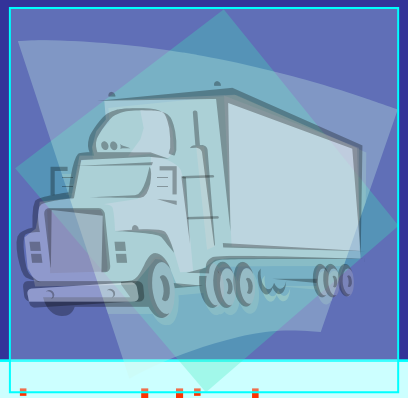
Transport and Tourism Division

- **Asian Land Transport Infrastructure Development Project (ALTID): Asian Highway, Trans-Asian Railway and Transport Facilitation (48/11)**
- **Euro-Asian Linkages**
- **Freight forwarding and multimodal transport**
- **Maritime Policy Planning Model (MPPM), Integrated Transport Policy model (ITPM)**
- **Public-Private Partnerships (PPP)**
- **Road Safety**
- **Urban Transport, Sustainable Urban Transport Project (SUTP), Bus Rapid Transit (BRT)**
- **Transport and poverty (MDGs)**
- **Tourism: Plan of Action for Sustainable Tourism (PASTA), tourism and poverty alleviation, tourism and Asian Highway (and TAR)**

Asian Land Transport Infrastructure Development Project (ALTID)



Trans-Asian Railway



Asian Highway

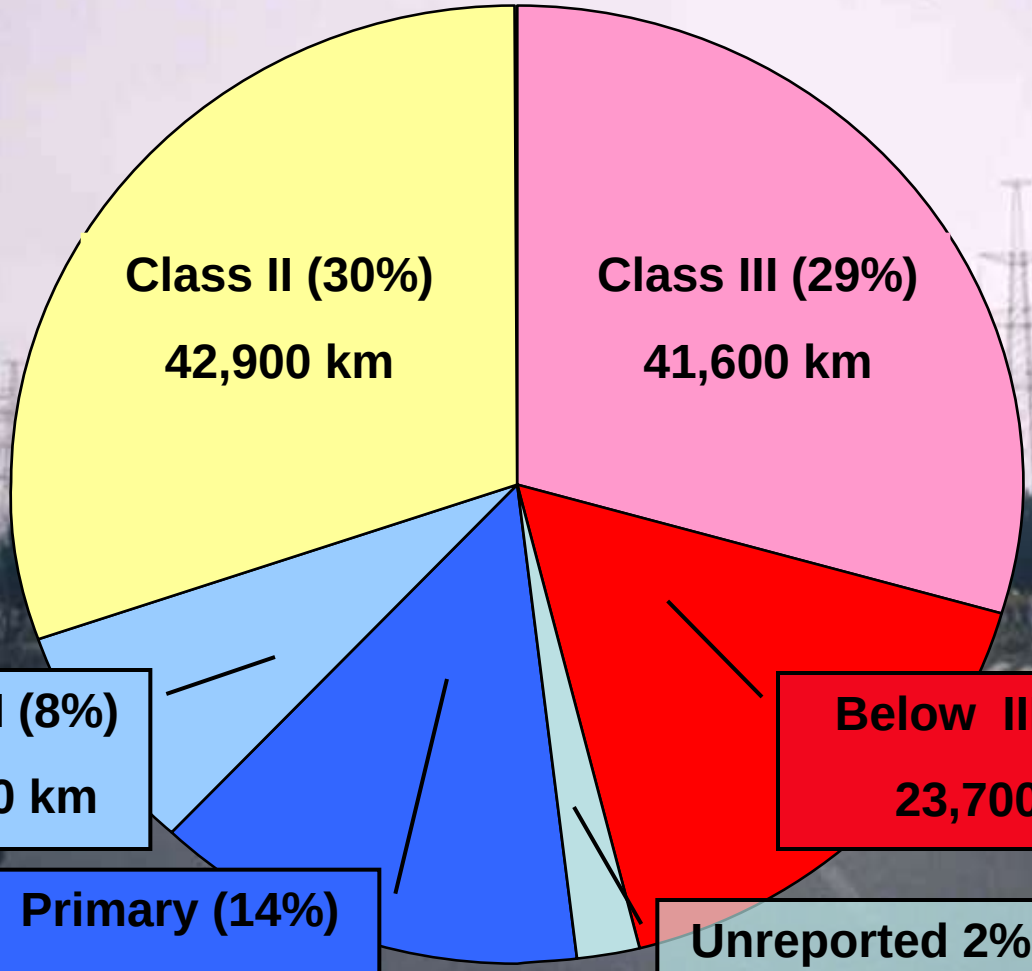
Land Transport Facilitation

Intergovernmental Agreement on the Asian Highway

- **Entered into force: 4 July 2005**
  - **28 member States have signed the Agreement**
  - **18 ratified, approved or accepted the agreement**
- **Contracting Parties**
  - **Adopt AH network**
  - **Negotiating procedures**
  - **Conform to AH design standards**
  - **Display AH signs**
- **Working Group on the Asian Highway**
- **Investment needs and priorities**
  - **Upgrading of 26,000 km requires US$ 18 billion**

Conformity to Asian Highway Standard

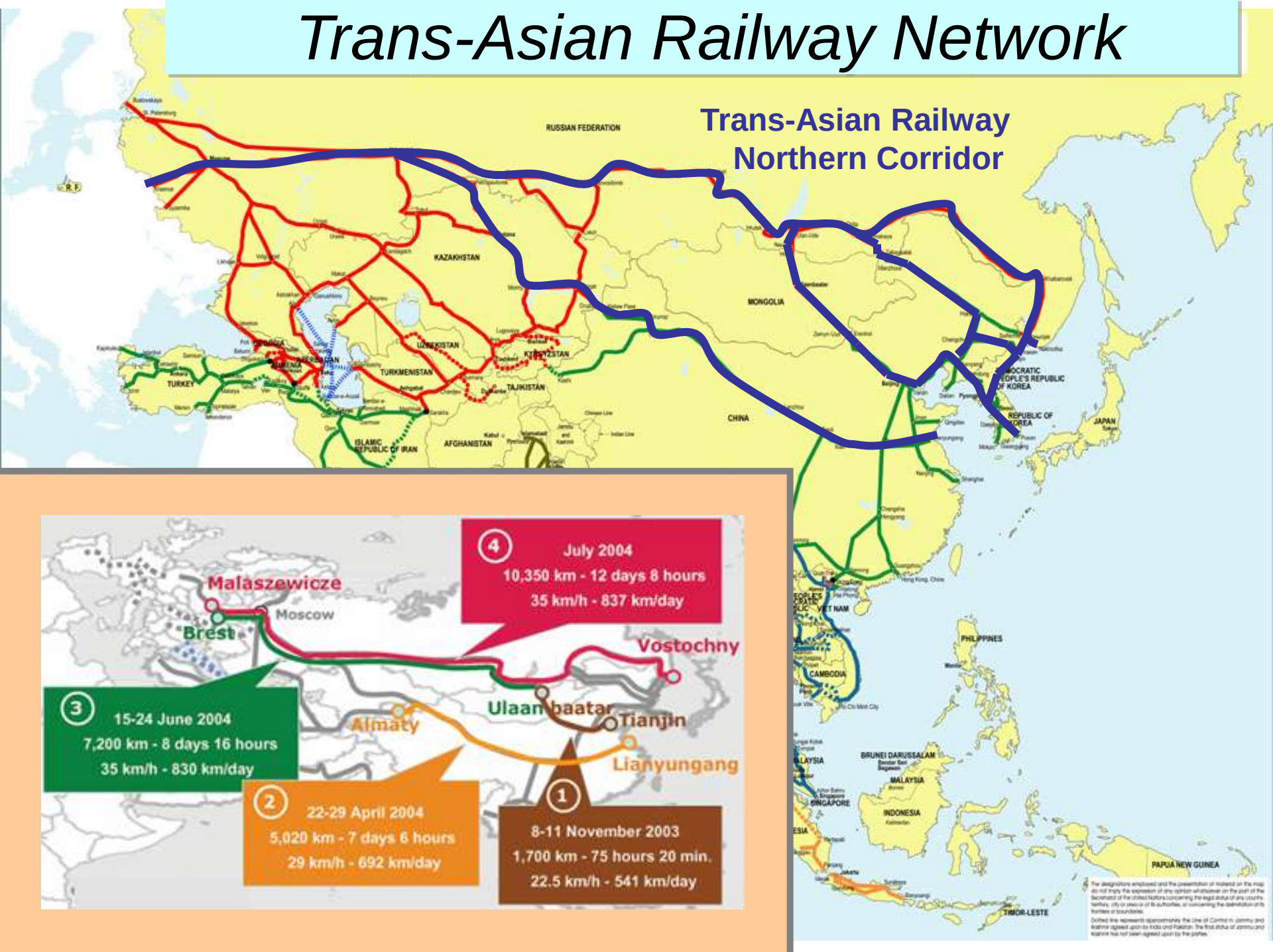
AH5 Azerbaijan



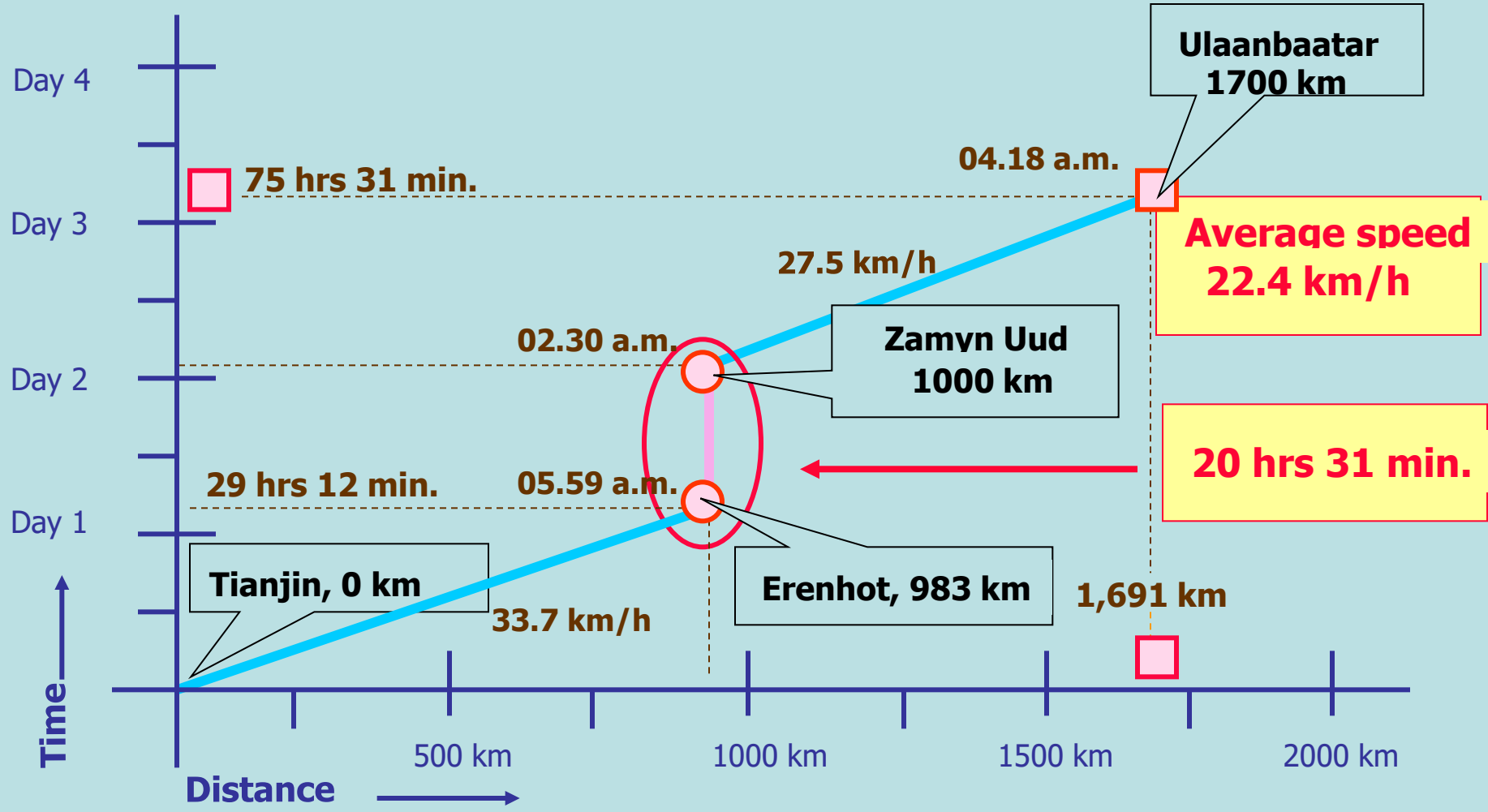
Trans-Asian Railway (TAR)

- **Development of a TAR Intergovernmental Agreement (draft adopted in November 2005)**
- **Demonstration Runs of Container Block Trains along the TAR Northern Corridor**

Trans-Asian Railway Network



Example for Tianjin Port - Ulaanbaatar

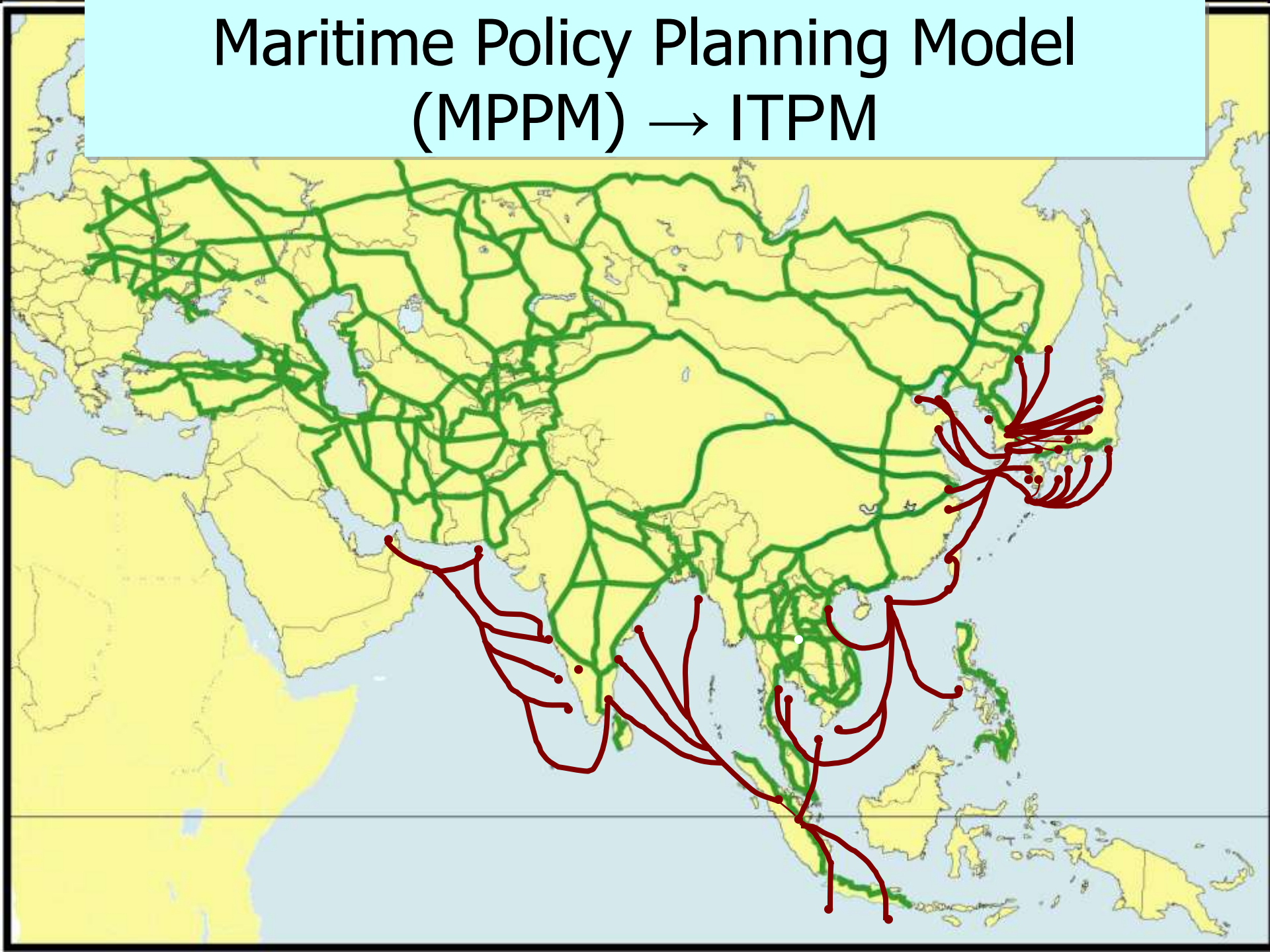


- Transshipment: 3 hrs. 20 min. *(3.5 min. per box)*
- Shunting + train formation: 3 hrs. 35 min.
- Customs: China, 3 hrs. 00 min. Mongolia, 4 hrs. 50 min.
- Doc. Processing: 5 hrs. 25 min.

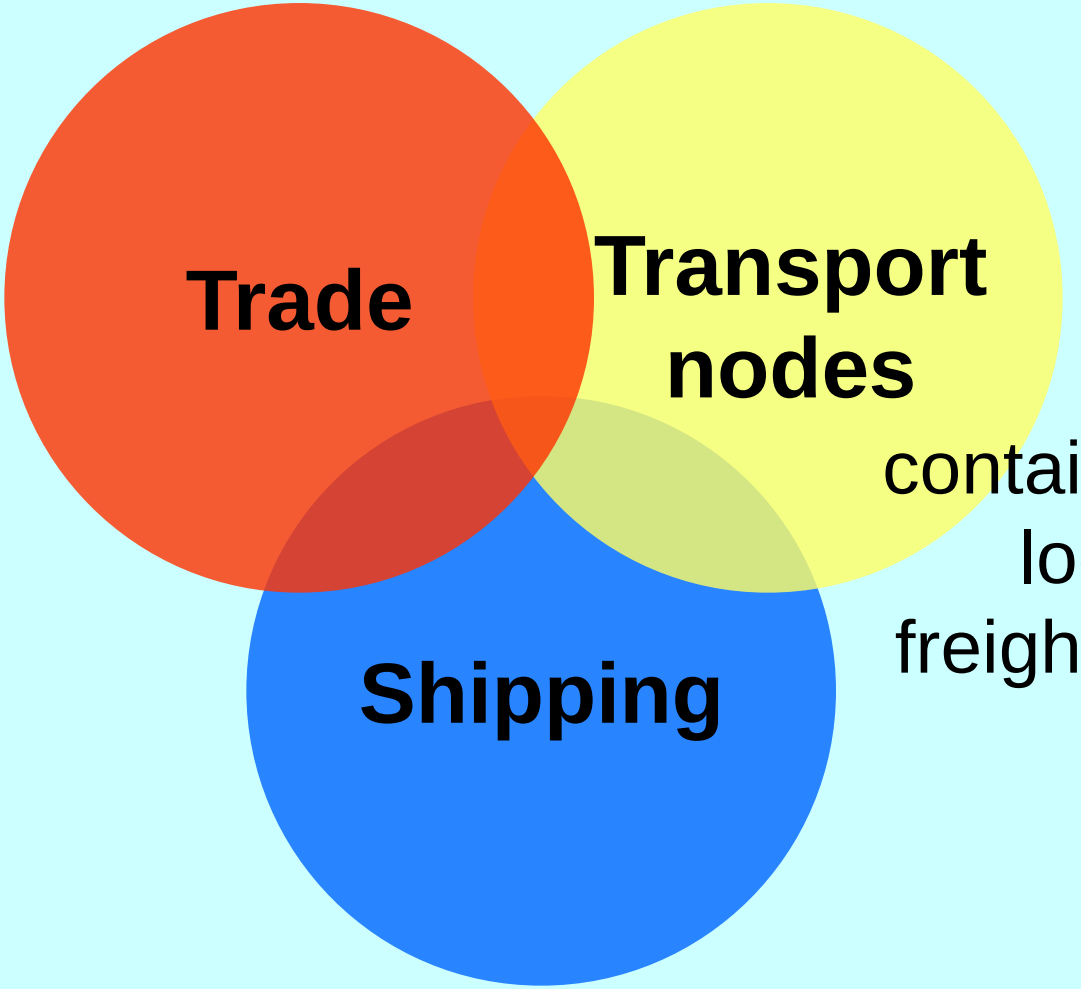
Transport Facilitation

- **ESCAP resolution 48/11 of April 1992**
  - Convention on Facilitation of International Maritime Traffic (FAL 1965) (1998 edition)
  - Convention on Road Traffic (Vienna, 8 November 1968)
  - Convention on Road Signs and Signals (Vienna, 8 November 1968)
  - Customs Convention on the International Transport of Goods under Cover of TIR Carnets (TIR Convention) (Geneva, 14 November 1975)
  - Customs Convention on the Temporary Importation of Commercial Road Vehicles (Geneva, 18 May 1956)
  - Customs Convention on Containers (Geneva, 2 December 1972)
  - International Convention on the Harmonisation of Frontier Controls of Goods (Geneva, 21 October 1982)
  - Convention on the Contract for the International Carriage of Goods by Road (CMR) (Geneva, 19 May 1956)
- **Work with subregional organizations, in particular:**
  - Shanghai Cooperation Organization (SCO)
  - Greater Mekong Subregion (GMS)
  - UN Special Programme for the Economies of Central Asia (SPECA)

Maritime Policy Planning Model (MPPM) → ITPM



Integrated Transport Policy Model (ITPM)



container terminals,
logistic centers,
freight villages, etc.

PPP Activities

I. Creation of conducive environment

A. Legal and regulatory environment
- Negotiating platform
- PPP governance
- PPP-readiness assessment
- Action plan in support of creating conducive environment

B. Public Policy in support of PPP
- Pro-poor PPPs
- Macroeconomic
- Sectoral
- Investment promotion
- Project risk sharing and government support

II. Institutional mechanism

A. PPP facilitation unit

- Promotion of PPP units
- Technical cooperation with PPP units

B. PPP support and alliance programme

- Networking of PPP units and agencies
- Facilitation of networking activities

C. Communication modalities

- Website
- On-line activities

III. Knowledge bank and capacity building

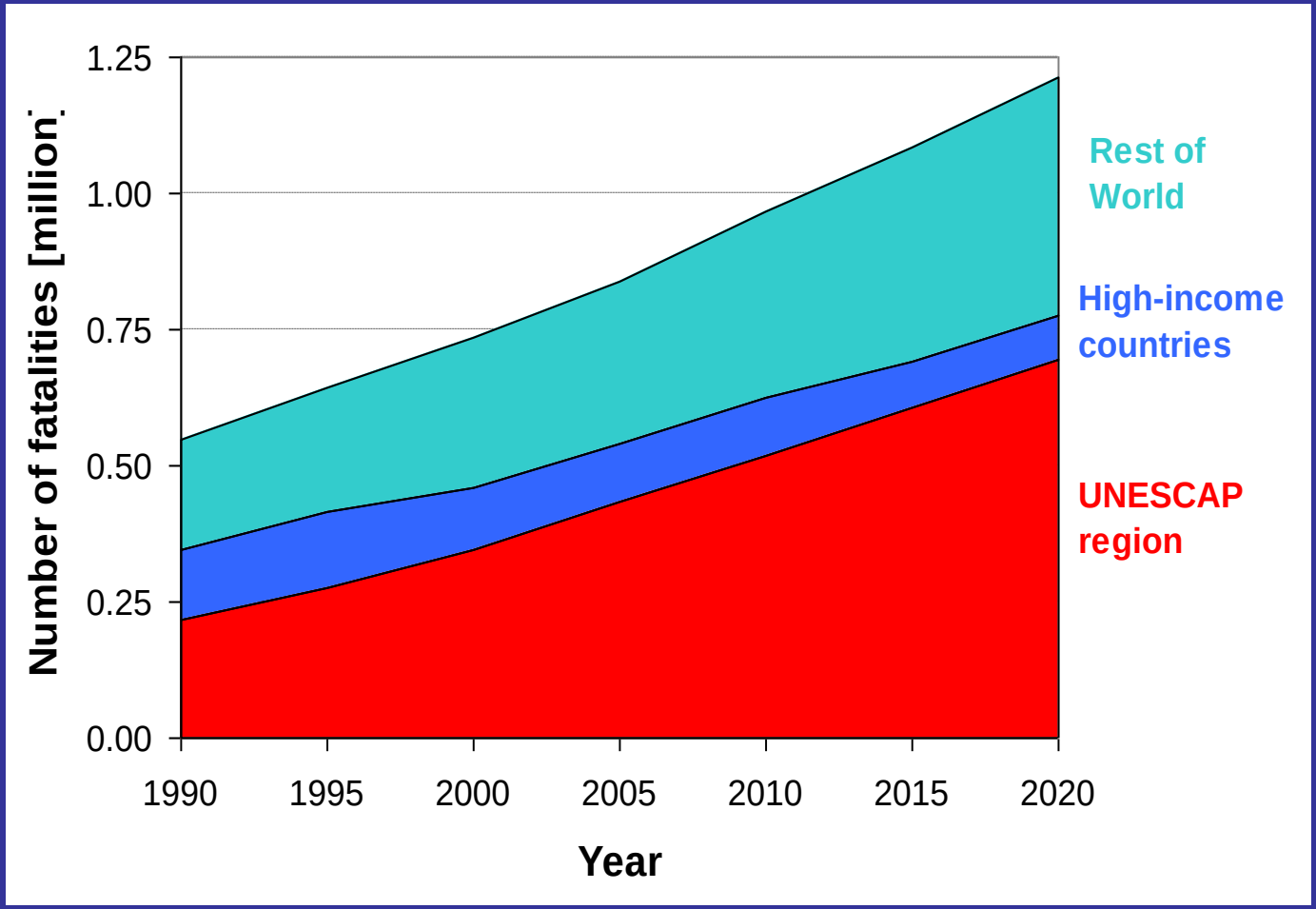
A. Knowledge centre

- Regulatory issues
- Project analysis and evaluation
- Legal and contractual matters
- Project financing and risk analysis
- Marketing and pricing
- Settlement of disputes
- Case studies

B. Capacity building

- Workshops
- Training programmes
- Collaboration with national training institutions

Road Safety



→ Ministerial Declaration on Road Safety in the ESCAP Region (Nov. 2006)

Sustainable Transport

- Rattanakosin project
- Advocacy on sustainable transport
  - Public Transport and BRT
    (6 workshops at Bangkok, Manila)
- Collaboration with GTZ through SUTP-Asia programme
  - Promotion of BRTs
- Establishment of ANTLER

gtz ASIA AND THE PACIFIC

CITYNET

Sustainable Urban Transport Project

SUTP Asia (eng)
SUTP LAC (esp)
SUTP LAC português

News
Daily news
SUTP Newsletter
Fuel prices-data

Resources
General resources
Transport Photo CD
Links

Events
Upcoming events
Past events

Site map

Welcome to the Sustainable Urban Transport Project- Asia and the Pacific - SUTP Asia - website

Policy-makers across Asia are facing formidable demands to meet the mobility needs of citizens in ways which are economically, socially and environmentally sustainable. SUTP aims to help cities meet this challenge and achieve their sustainable transport goals, through the dissemination of information about international experience and targeted work with particular cities.

Project related news

Revised Public Awareness Raising module

The GTZ SUTP has published a revised **40-page** module on **Public Awareness Raising in Sustainable Transport** (module 1e, 3.8 MB) by Carlos F. Pardo. It has expanded on some of the issues that were developed in the initial document, and has included information on diagnostic tools, levels of awareness of the population, types of information that can be given to the target groups and complementing other chapters. This module will be complemented in May 2006 by a Training Course on the same topic, and it will also be translated into Spanish by June 2006. It can be downloaded here.

Document on Traffic Safety impacts

Todd Litman and Steven Fitzroy from VTPI and Fitzroy and Associates have published a paper on the evaluation of mobility management traffic safety impacts. It can be downloaded here.

Transport and Poverty

- ANTLER activity – Workshop on Transport and MDGs
- Access, transport and poverty linkages (publication by AITD)

Tourism

- **Capacity building for sustainable tourism development and promotion of regional cooperation, including**
  - **Tourism and poverty alleviation**
  - **Tourism and AH and TAR**
- **Plan of Action for Sustainable Tourism development in Asia and the Pacific (PASTA) Phase II (2006-2012)**
- **Network of Asia-Pacific Education and Training institutes in Tourism (APETIT)**
  - **Since 1996**
  - **211 members in 42 countries**

ESCAP approach and vision

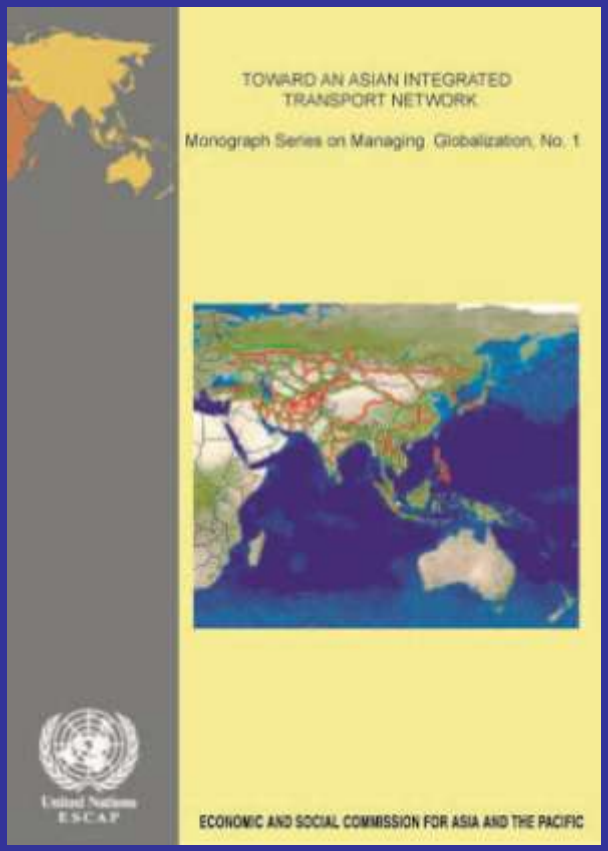
How does ESCAP work?

Economic and Social Commission for Asia and the Pacific (ESCAP) and its subsidiary bodies:

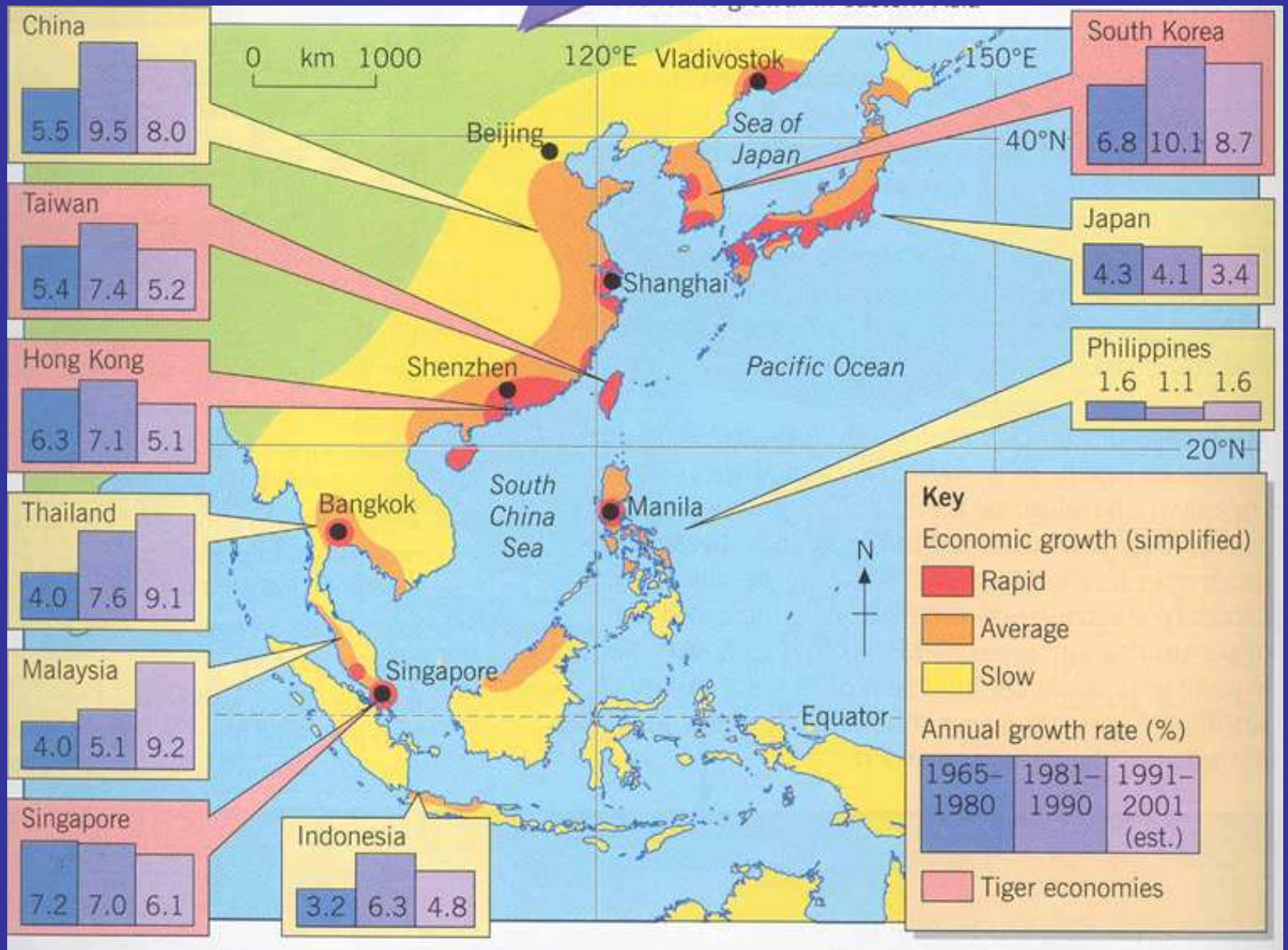
- **Commission**
- **Committee on Managing Globalization**
- **Ministerial Conference on Infrastructure and Transport**
  - **Theme Study**
  - **MC on Infrastructure, New Delhi (1996)**
    → NDAP/RAPI (1997-2001)
  - **MC on Infrastructure, Seoul (2001)**
    → RAPII (2002-2006)
  - **MC on Transport, Busan (2006)**

Seoul Vision

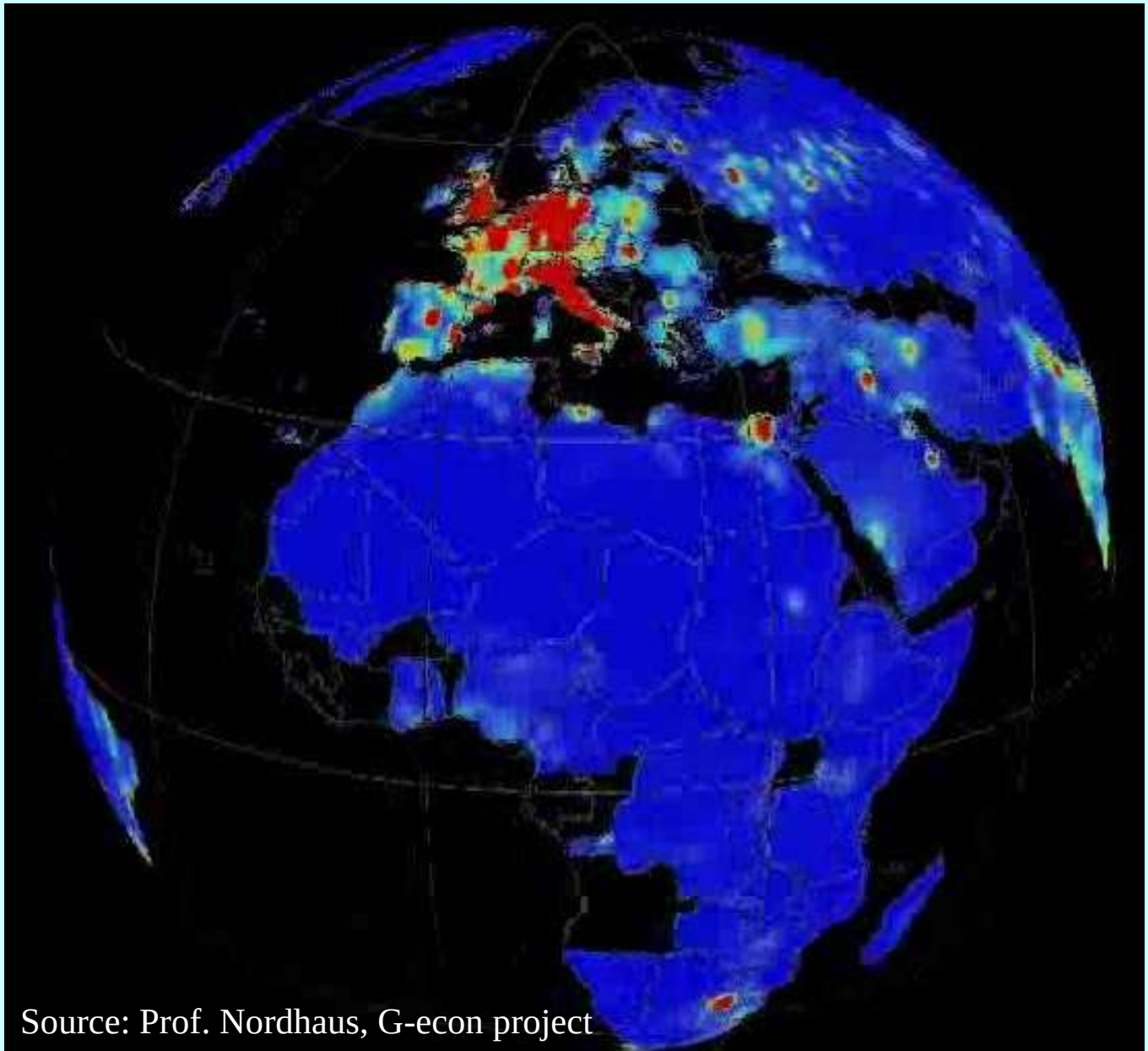
Integrated, intermodal international transport



Globalisation and Economic Growth in Asia

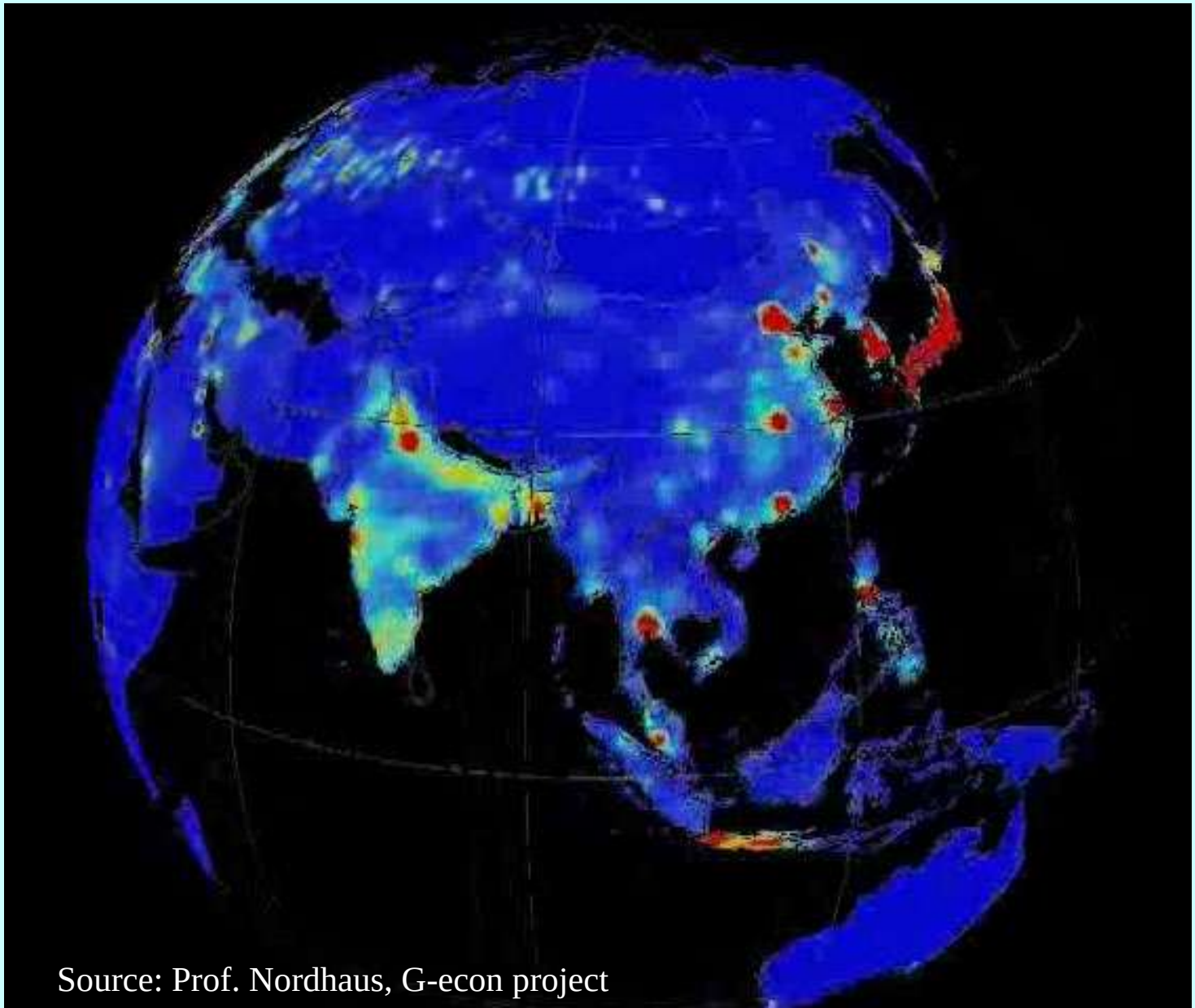


GDP density map of Europe



Source: Prof. Nordhaus, G-econ project

GDP density map of Asia



Source: Prof. Nordhaus, G-econ project

Globalisation and International Production Networks

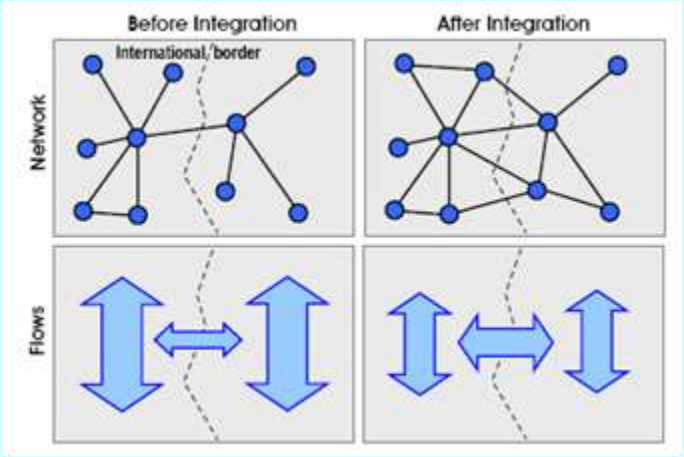
"The noticeable reduction in transportation and communication cost has facilitated the division of the productive process, allowing participation by a larger number of geographical locations according to the advantages that each one contributes to the value added chain.

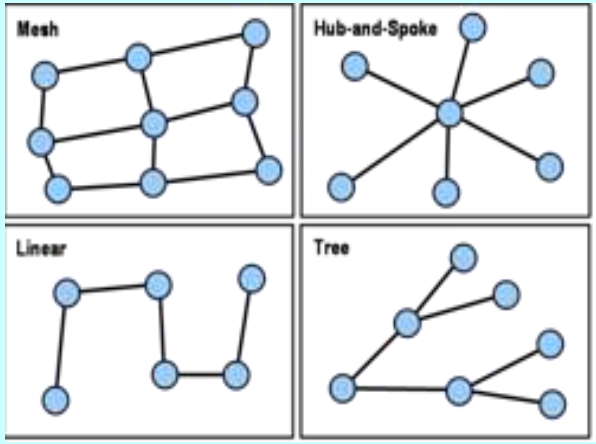
This fact has broadened the opportunities so the individual economies can participate more actively in the international production networks administered by large multinational companies."

Source: SELA Permanent Secretariat Risks and Opportunities of Globalization, in Capitulos del SELA (Latin American Economic System), Globalization, trade and integration, 1996, p.60.

General Network Issues

- Networks consist of links and nodes
  - Critical links, closure/failure of links, network externalities
- Linking sub-networks together
  - Interconnectivity
  - Interoperability
- Linking more than two systems
  - Transit issues
  - Hubs-and-spokes
- Quality and capacity

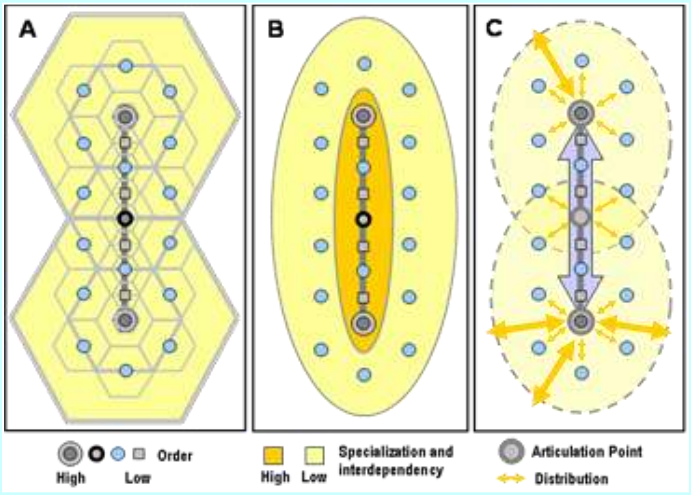


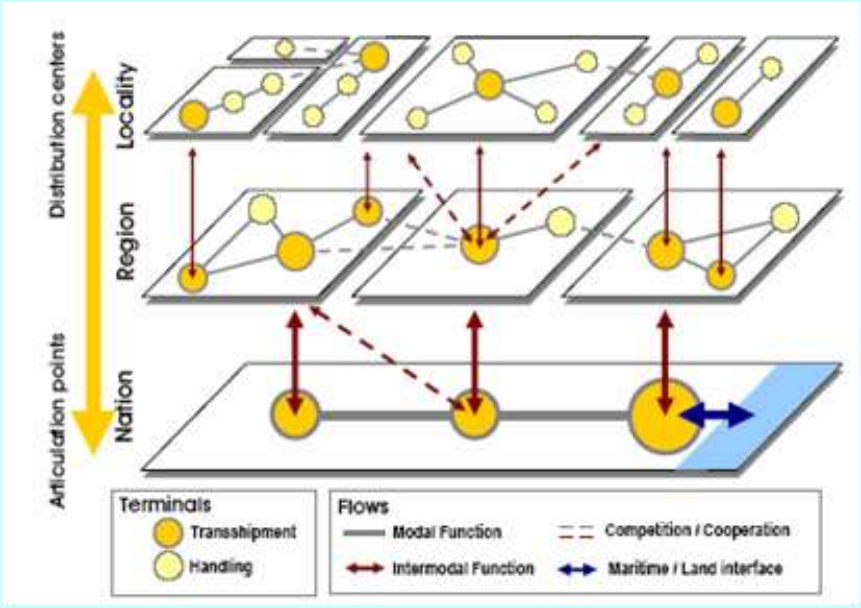


Source: Jean-Paul Rodrigue, Dept. of Economics & Geography, Hofstra University, USA. http://people.hofstra.edu/geotrans

General Network Issues (2)

- Paths and corridors
- Non-physical networks
  - Social economic
  - Political/regulatory
  - Information
  - Knowledge
  - Environmental
- Linkages between networks in the “same” sector





General Network Issues (3)

- Linkages between networks in “different sectors

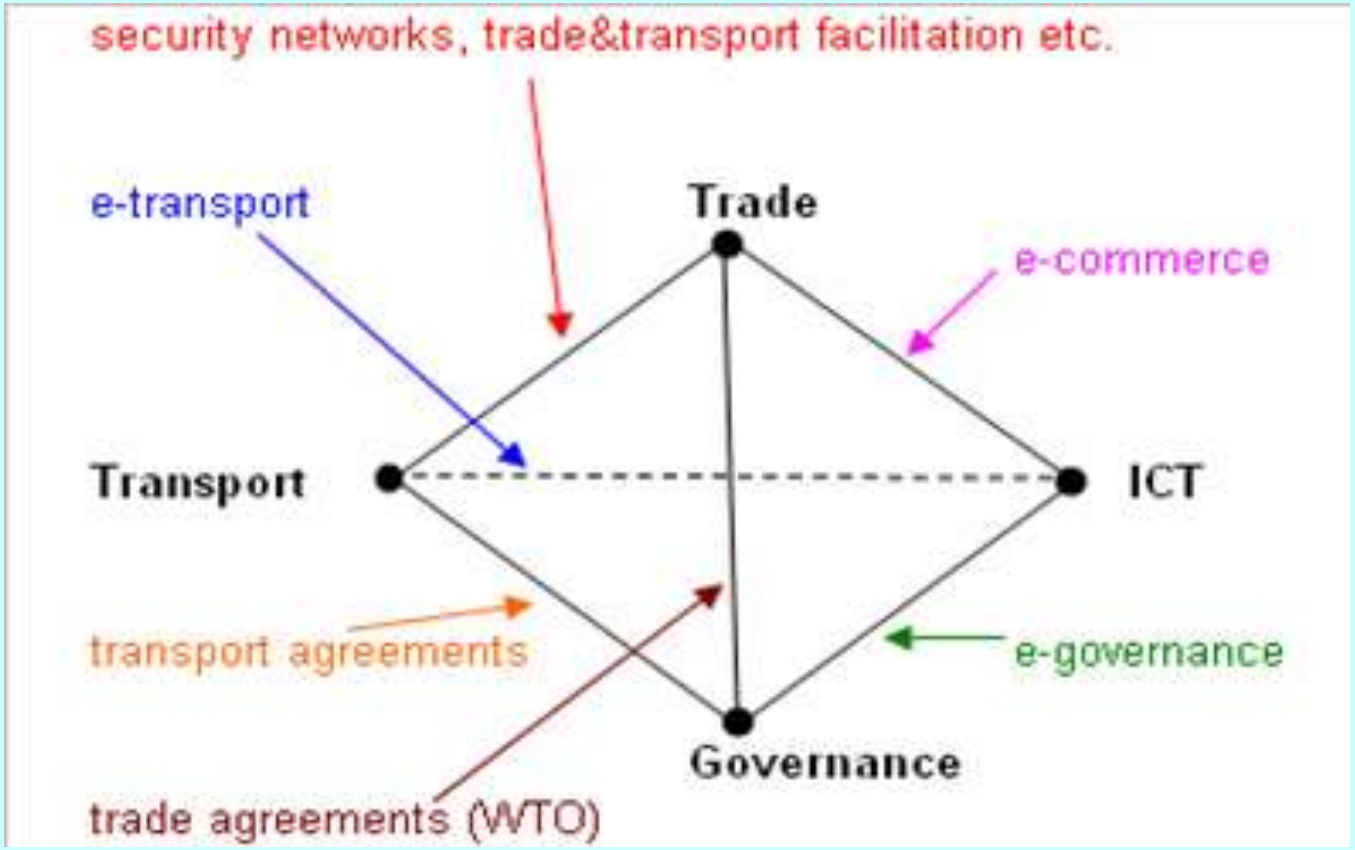


Figure 8-1: Trans-shipment ports included in model

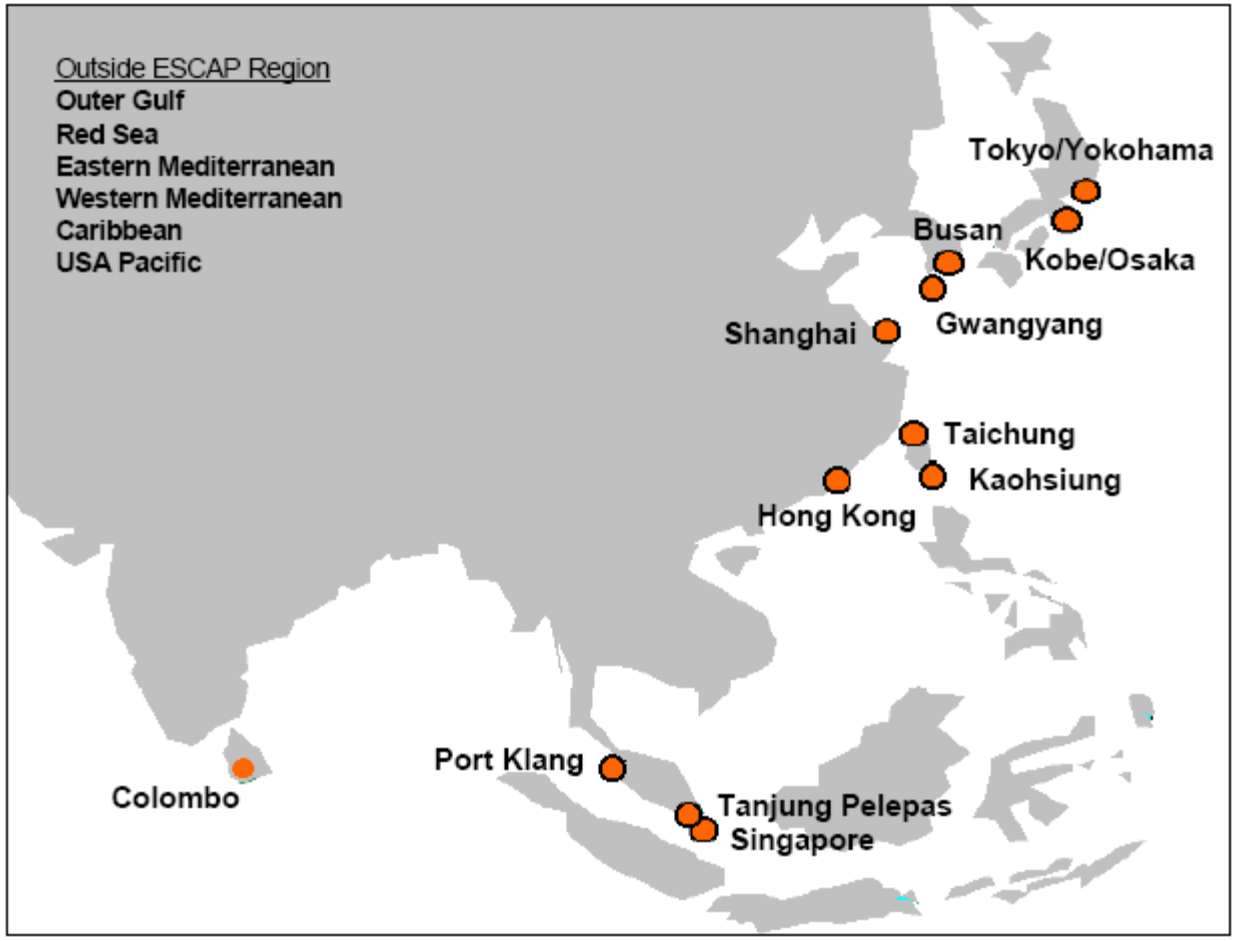
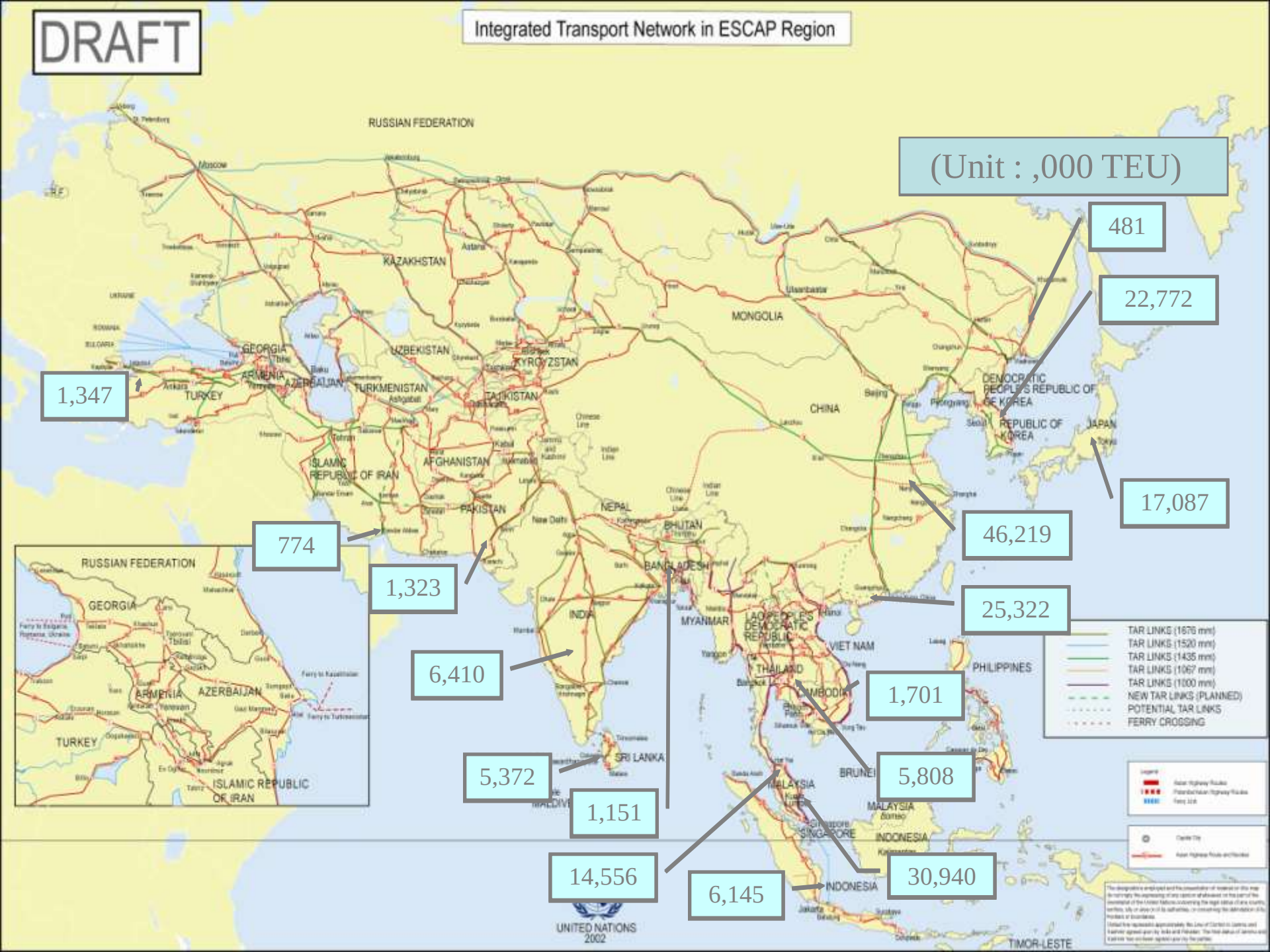


Table 1 PORT TRAFFIC LEAGUE 2003

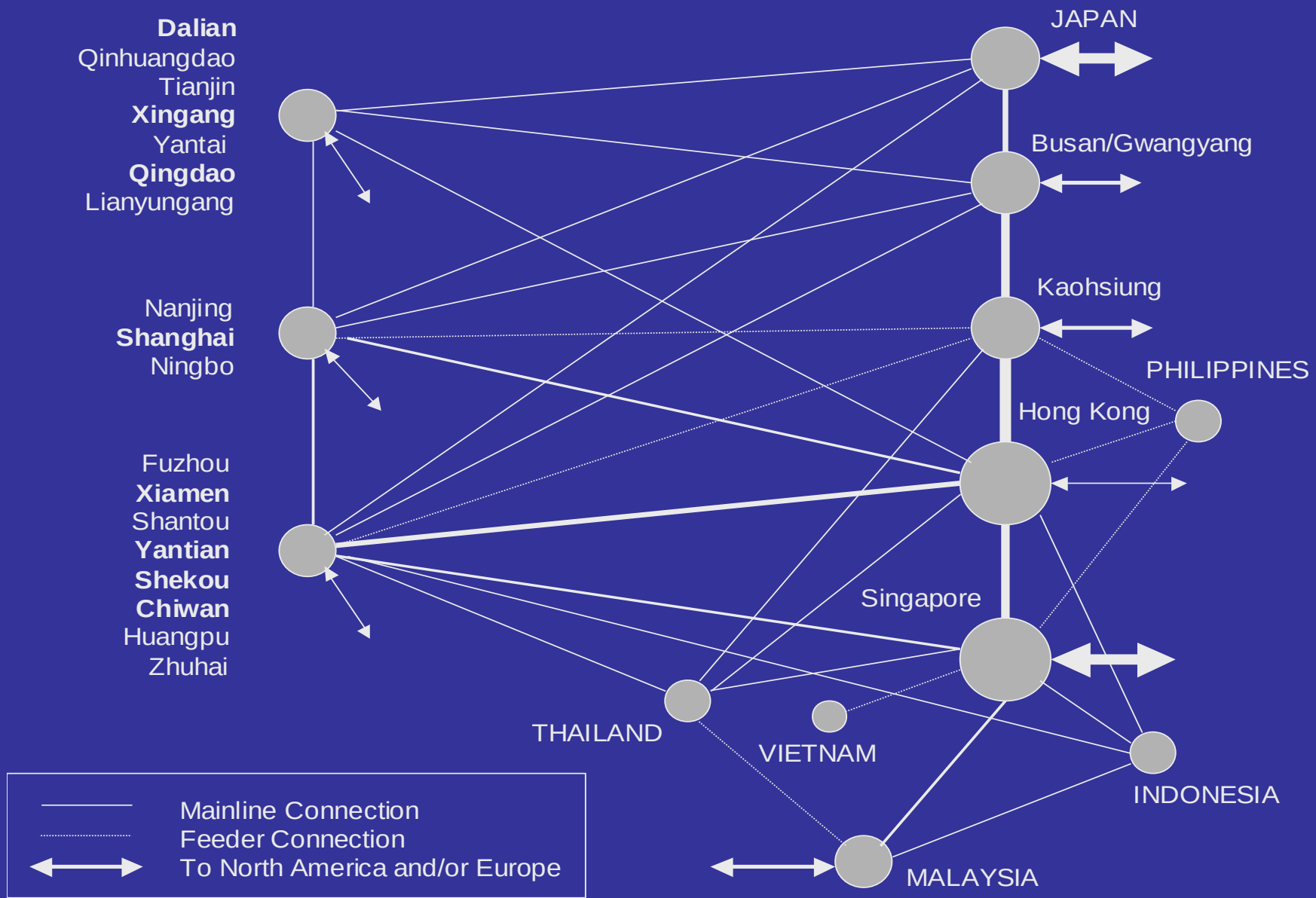
Rank 03	Port Name	2003 TEU	2002 TEU	Rank 02	Country
1	Hong Kong	20,449,000	19,144,000	1	China
2	Singapore	18,100,000	16,800,000	2	Singapore
3	Shanghai	11,280,000	8,610,000	4	China
4	Shenzhen	10,614,900	7,613,754	6	China
5	Busan	10,407,809	9,453,356	3	Korea
6	Kaohsiung	8,840,000	8,493,000	5	Taiwan
7	Los Angeles	7,178,940	6,105,863	8	USA
8	Rotterdam	7,106,779	6,506,310	7	Netherlands
9	Hamburg	6,138,000	5,373,999	9	Germany
10	Antwerp	5,445,436	4,777,152	10	Belgium
11	Dubai	5,151,958	4,194,264	13	UAE
12	Port Klang	4,840,000	4,533,212	11	Malaysia
13	Long Beach	4,658,124	4,526,365	12	USA
14	Qingdao	4,239,000	3,410,000	15	China
15	New York/New Jersey	4,067,812	3,749,014	14	USA
16	Tanjung Pelepas	3,487,320	2,660,000	21	Malaysia
17	Tokyo	3,313,647	2,712,348	19	Japan
18	Bremen/Bremerhaven	3,189,853	3,031,587	16	Germany
19	Laem Chabang	3,181,050	2,656,651	22	Thailand
20	Gioia Tauro	3,148,662	2,954,571	17	Italy
21	Tianjin	3,015,000	2,410,000	24	China
22	Ningbo	2,772,000	1,860,000	32	China
23	Guangzhou	2,761,700	2,180,000	27	China
24	Tanjung Priok	2,757,513	2,680,000*	20	Indonesia
25	Manila	2,552,187	2,462,169	23	Philippines
26	Algeciras	2,515,908	2,229,141	26	Spain
27	Yokohama	2,504,628	2,364,516	25	Japan
28	Felixstowe	2,500,000*	2,750,000*	18	UK
29	Xiamen	2,331,000	1,750,000	35	China
30	Jawaharlal Nehru	2,268,989	1,929,531	29	India
31	Nagoya	2,073,995	1,927,244	30	Japan
32	Kobe	2,045,714	1,992,949	28	Japan
33	Keelung	2,000,707	1,918,597	31	Taiwan
34	Salalah	2,000,000	1,211,634	58	Oman

DRAFT

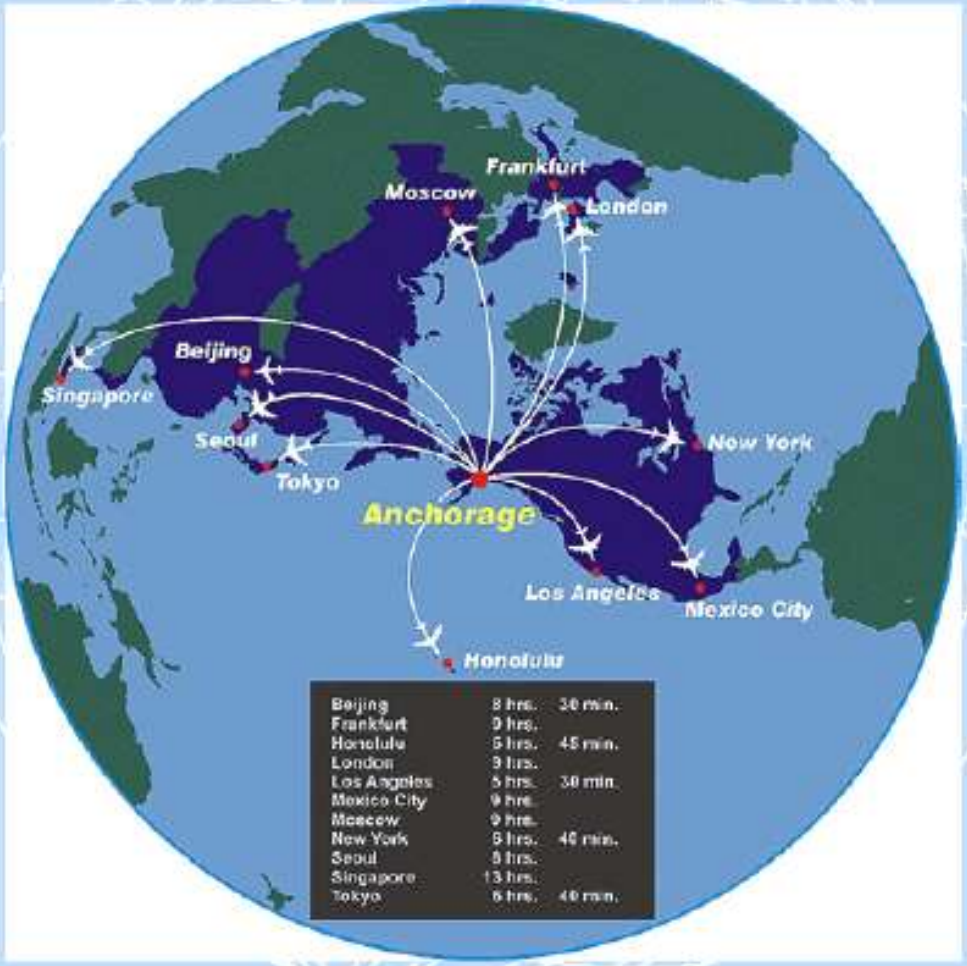
Integrated Transport Network in ESCAP Region

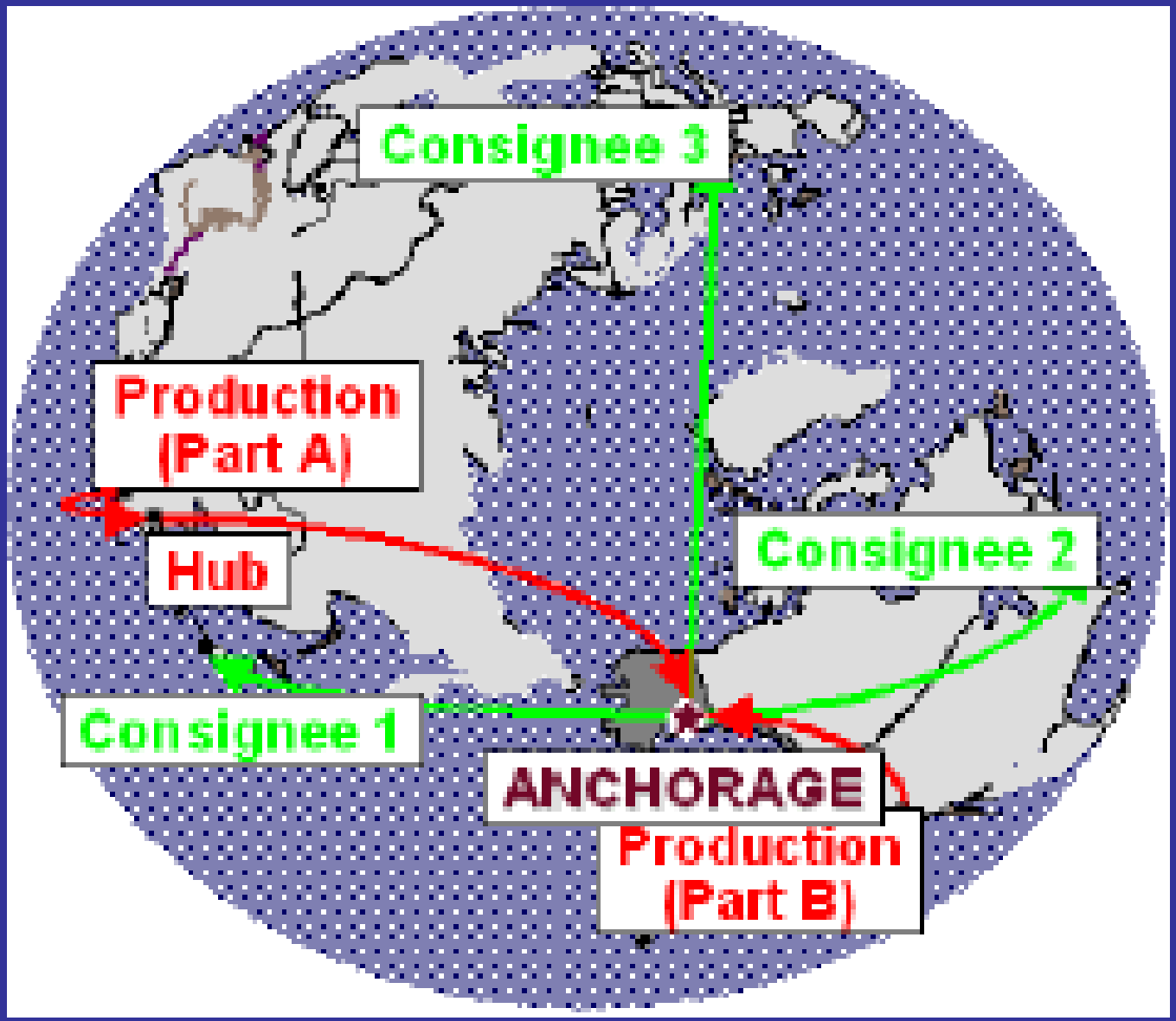


Asian Shipping Network



Strategic Location

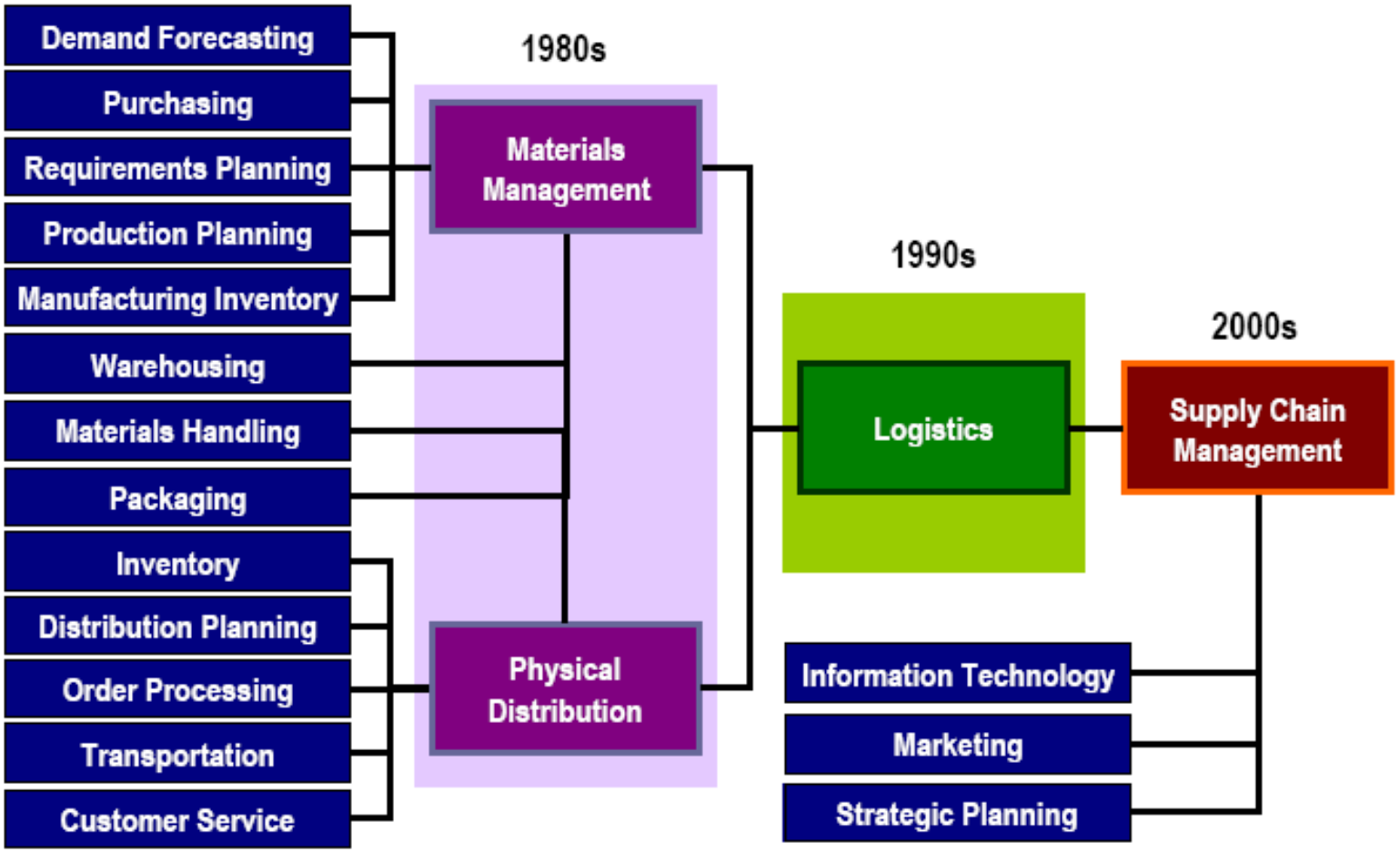


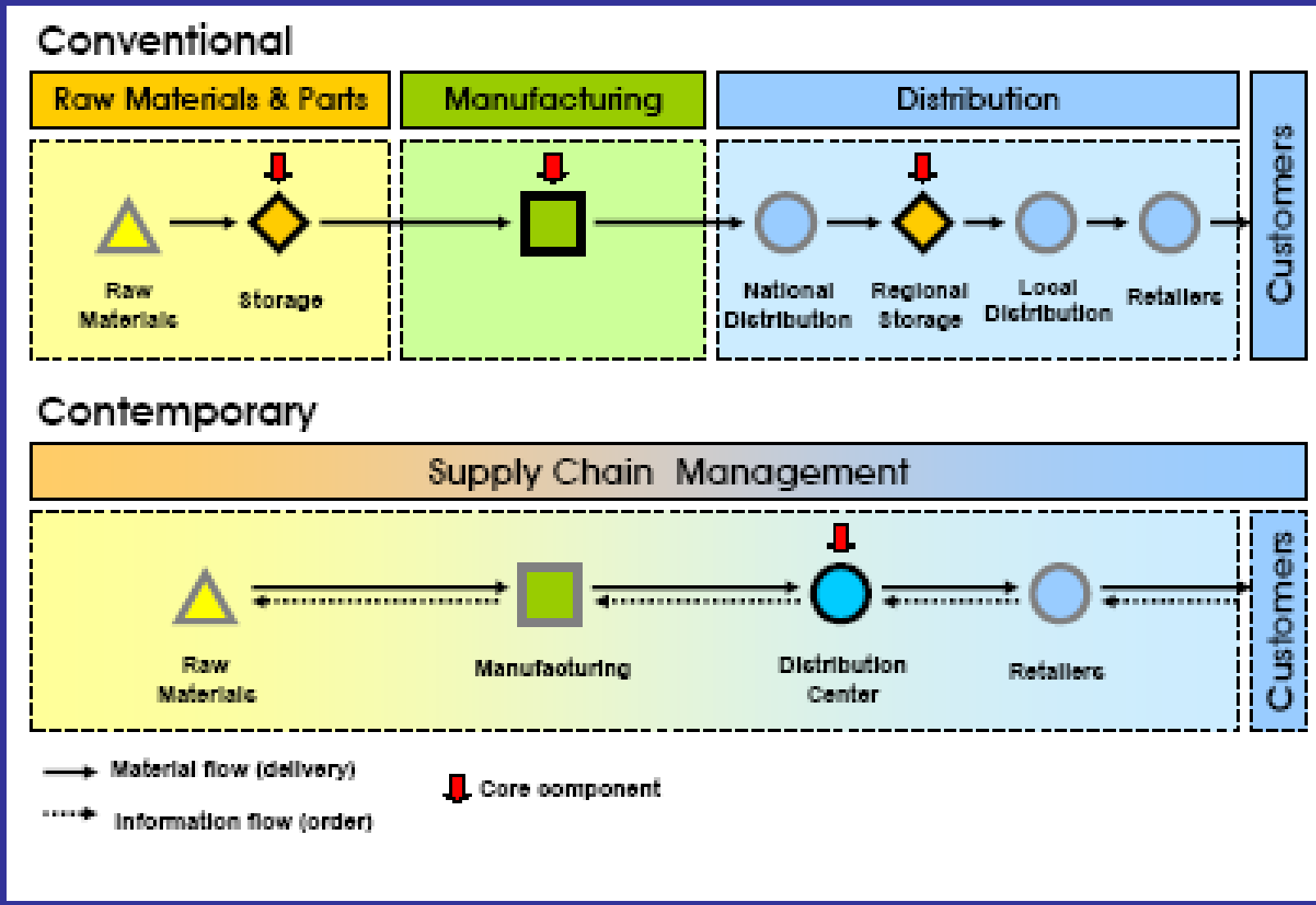

Consignee 3
Production
(Part A)
Hub
Consignee 2
Consignee 1
ANCHORAGE
Production
(Part B)

Opportunities

- Good location to provide or outsource value-added services:
  - Warehousing
  - Assembly
  - Kitting
  - Packaging
  - Distribution/customer fulfillment
  - Reverse logistics
- Ideal location for storage and global distribution of time-critical, high value spare parts for worldwide express delivery in order to:
  - Reduce safety inventories
  - Improve service delivery times

Evolution of Logistical Integration, 1960-2000




Conventional
Raw Materials & Parts
Manufacturing
Distribution
Customers
Raw Materials
Storage
National Distribution
Regional Storage
Local Distribution
Retailers
Contemporary
Supply Chain Management
Customers
Raw Materials
Manufacturing
Distribution Center
Retailers
Material flow (delivery)
Information flow (order)
Core component

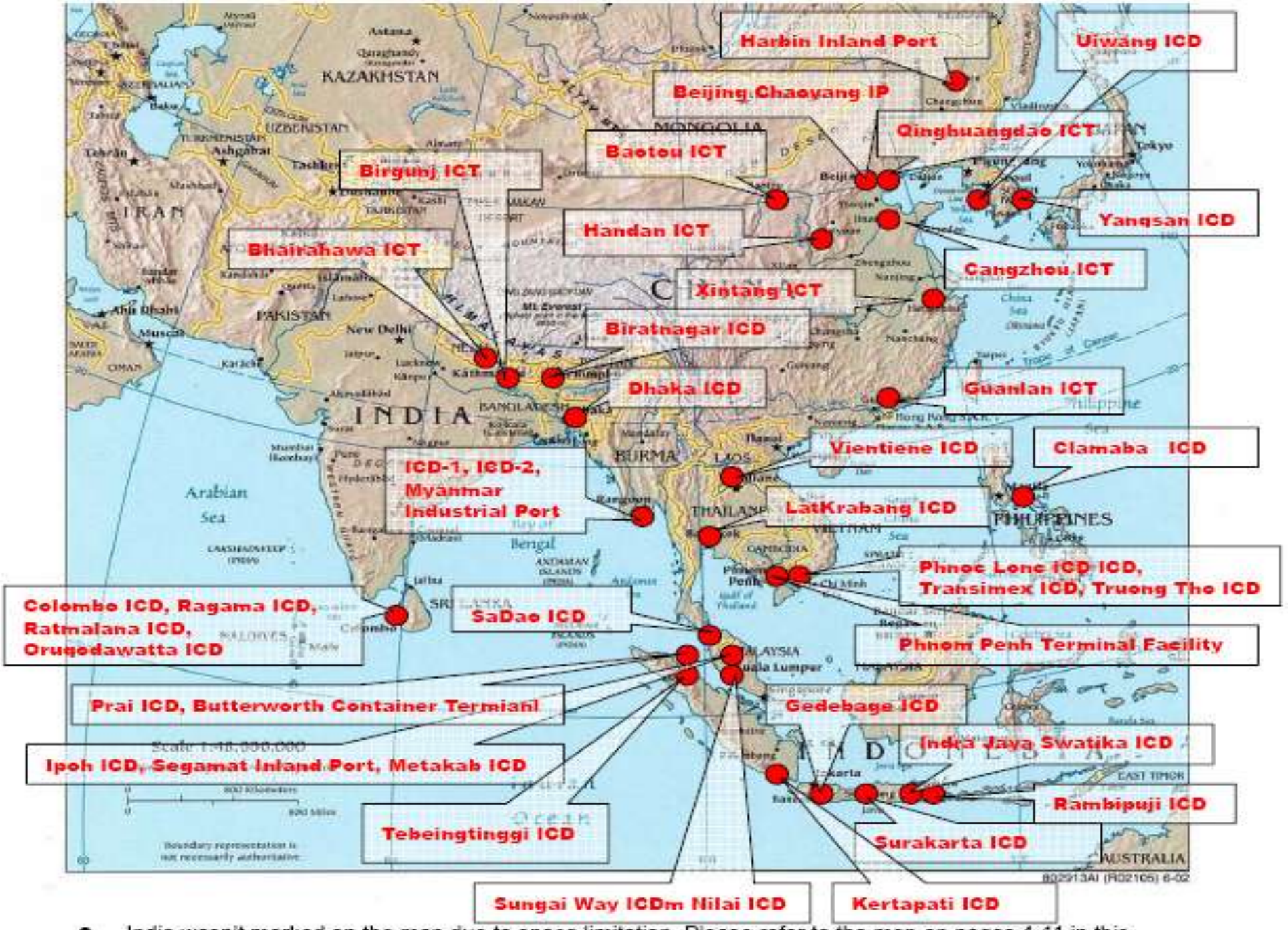
Railways as the logical extension of the maritime system

Days gone by

Trailer on flat car (TOFC)

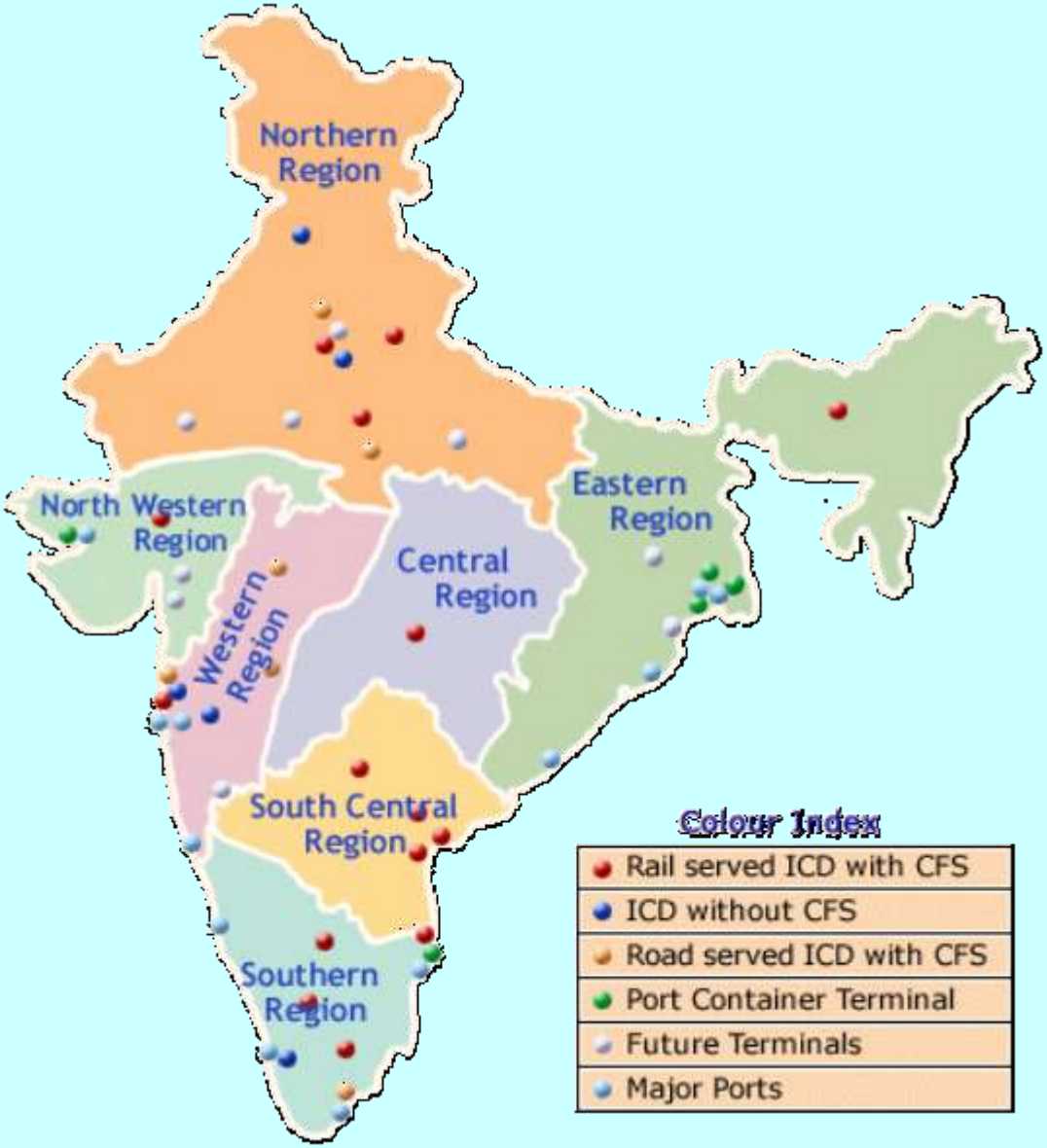
Container on flat car (COFC)

Experience from Asia and the Pacific



- India wasn't marked on the map due to space limitation. Please refer to the map on pages 4-11 in this report.

Concor Terminal Network in India

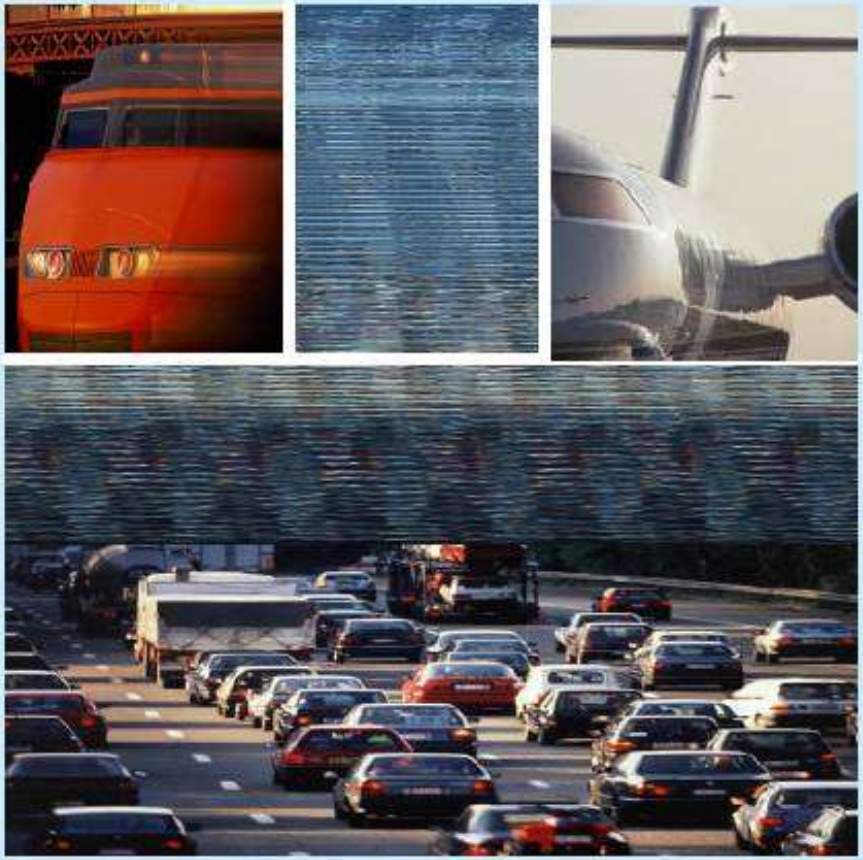


ICDs in China

- **Intermodal service in China dominated by two state owned enterprises: Sinotrans and Cosco**
  - **more than three-fourths of market share in the inland market**
  - **dominance → costly and less user oriented service provision**
  - **Sinotrans: 15 container stations as well as 34 stations belonging to different warehouses. Most of the stations are located along coasts and riversides.**
  - **Cosco: 10 terminals in Hong Kong and Shenzhen in the Pearl river delta, Shanghai and Zhangjigang in the Yangtze river delta, and in Qingdao and Dalian in the Northern China.**
- **Major ICDs:**
  - **Guanlan ICD**
  - **Harbin Inland Port**
  - **Beijing Chaoyang Inland Port**
  - **Xingtang International Container Terminal**
  - **Baotou International Container Terminal**
  - **Handan International Container Terminal**
  - **Cangzhou International Container Terminal**
  - **Qinhuangdao International Container Terminal**

Experience from outside the region

European Commission



WHITE PAPER

European transport policy for 2010:

Time to Decide

Brief presentation

September 2001

3. White Paper proposals

Shift the balance between modes of transport

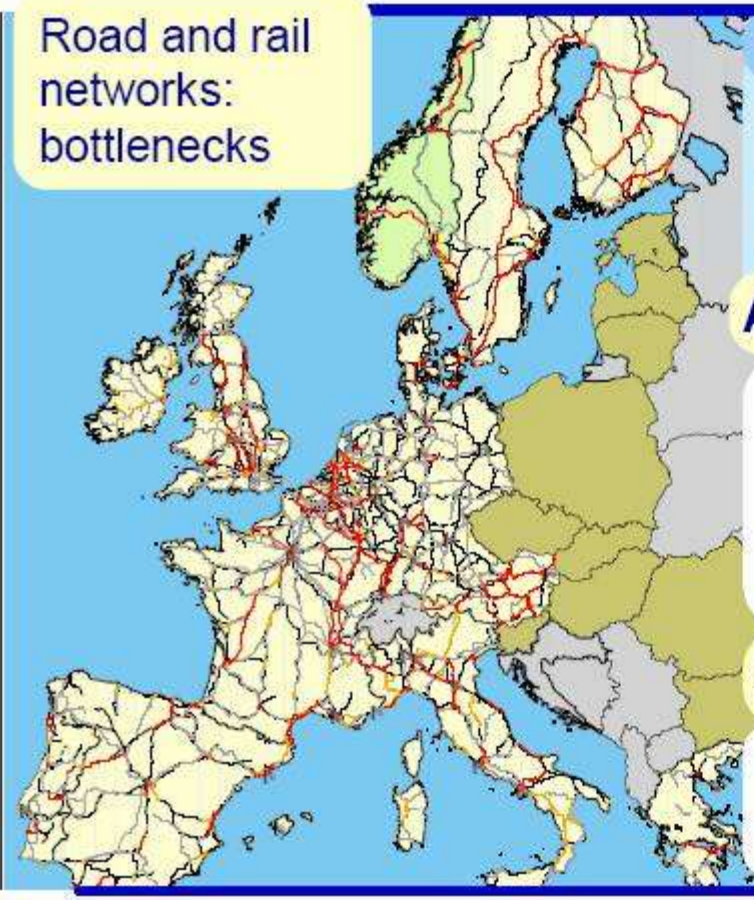
Eliminate bottlenecks

Place users at the heart of transport policy

Manage the globalisation of transport

The trans-European networks

Road and rail networks: bottlenecks



Delays in the TEN programme

Only 20% of the infrastructure planned under the TEN programme has yet been built.

Why?

- inadequate funding
- lack of cross-border priority

A partial revision in 2001

- concentration on the planned infrastructure
- new projects to relieve blockages, corridors giving priority to freight, HST-air integration
- increase from 10 to 20% of financing for rail bottlenecks at natural barriers and at borders with the candidate countries.

A major overhaul in 2004

Integration of the candidate countries' stretches of pan-European corridor, motorways of the sea, airports and links with outlying regions.

US Policy

- **Intermodal Surface Transportation Efficiency Act (1991)**
- **Transportation Equity Act for the 21st Century (1998)**
- **Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (2005)**
- **DOT Strategic Plan 2003-2008**

US Department of Transportation

OFFICE OF INTERMODALISM

In its simplest terms, "intermodalism" covers all of the issues and activities which may affect or involve more than one mode of transportation. It has several aspects:

Connections: the convenient, rapid, efficient, and safe transfer of people or goods from one mode to another (including end-point pick-up and delivery) during a single journey to provide the highest quality and most comprehensive transportation service for its cost.

Choices: the provision of transportation options through the fair and healthy competition for transportation business between different modes, independently or in combination.

Coordination and Cooperation: collaboration among transportation organizations for the purpose of improving transportation services, quality , safety, and economy for all modes or combinations of modes in an environmentally sound manner.

http://www.dot.gov/intermodal/about_us.html

AGTC

- **European Agreement on Important International Combined Transport Lines and Related Installations (AGTC), of 1 February 1991**

List of legal instruments in the field of transport: http://www.unece.org/trans/conventn/legalinst.html

Freight Villages

Quadrante Europa Verona

Quadrante Europa Verona

CONSORZIO ZAI
consorzio per la Zona Agricolo Industriale di Verona (Zai)

INTERPORTO Quadrante Europa

Verona Eur•infra

INTERPORTO
Quadrante
Europa

» society | » logistics center | » freight village | » services | » company | » info | » links

« home page

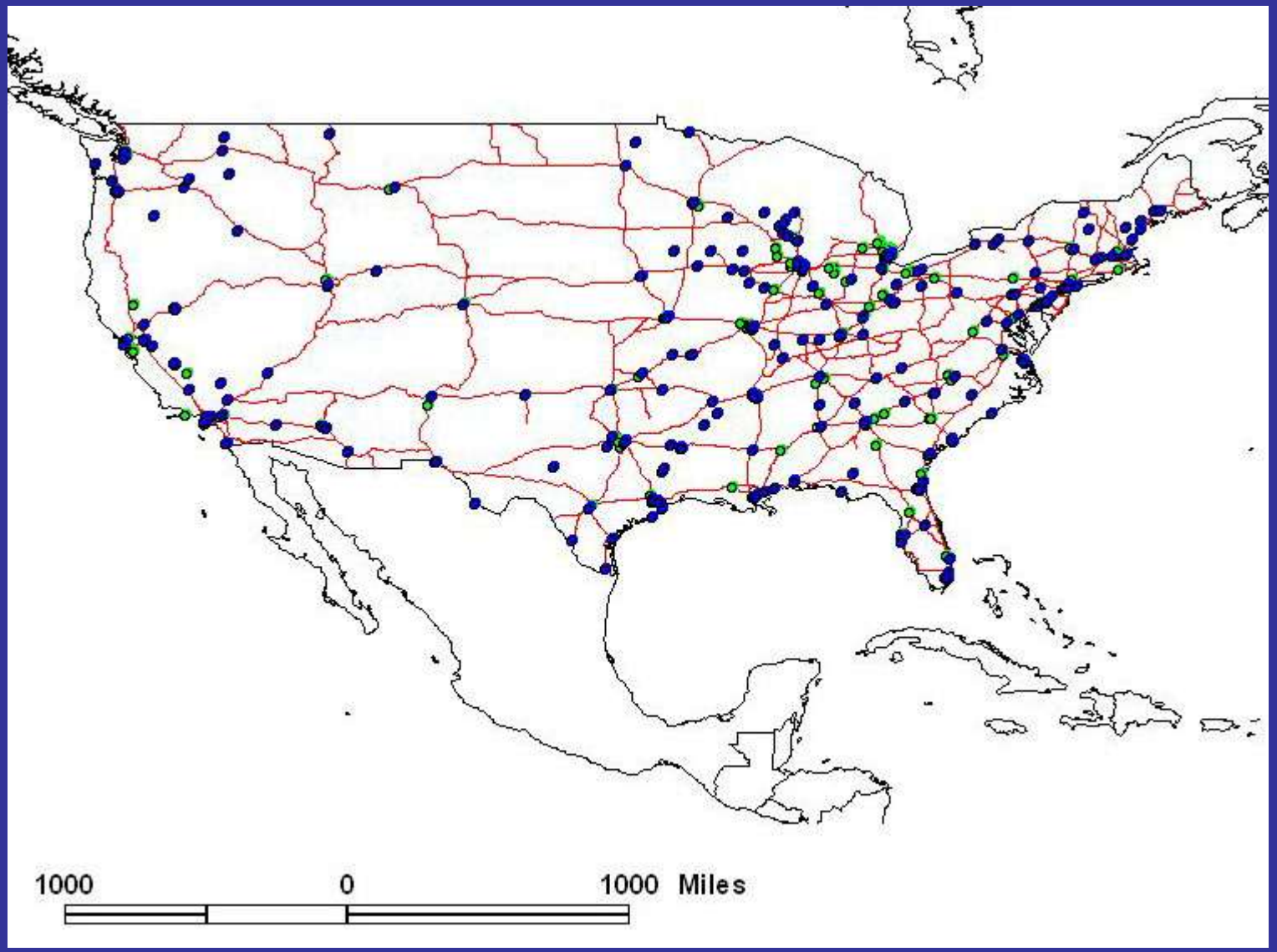
» autogerma

logistics center

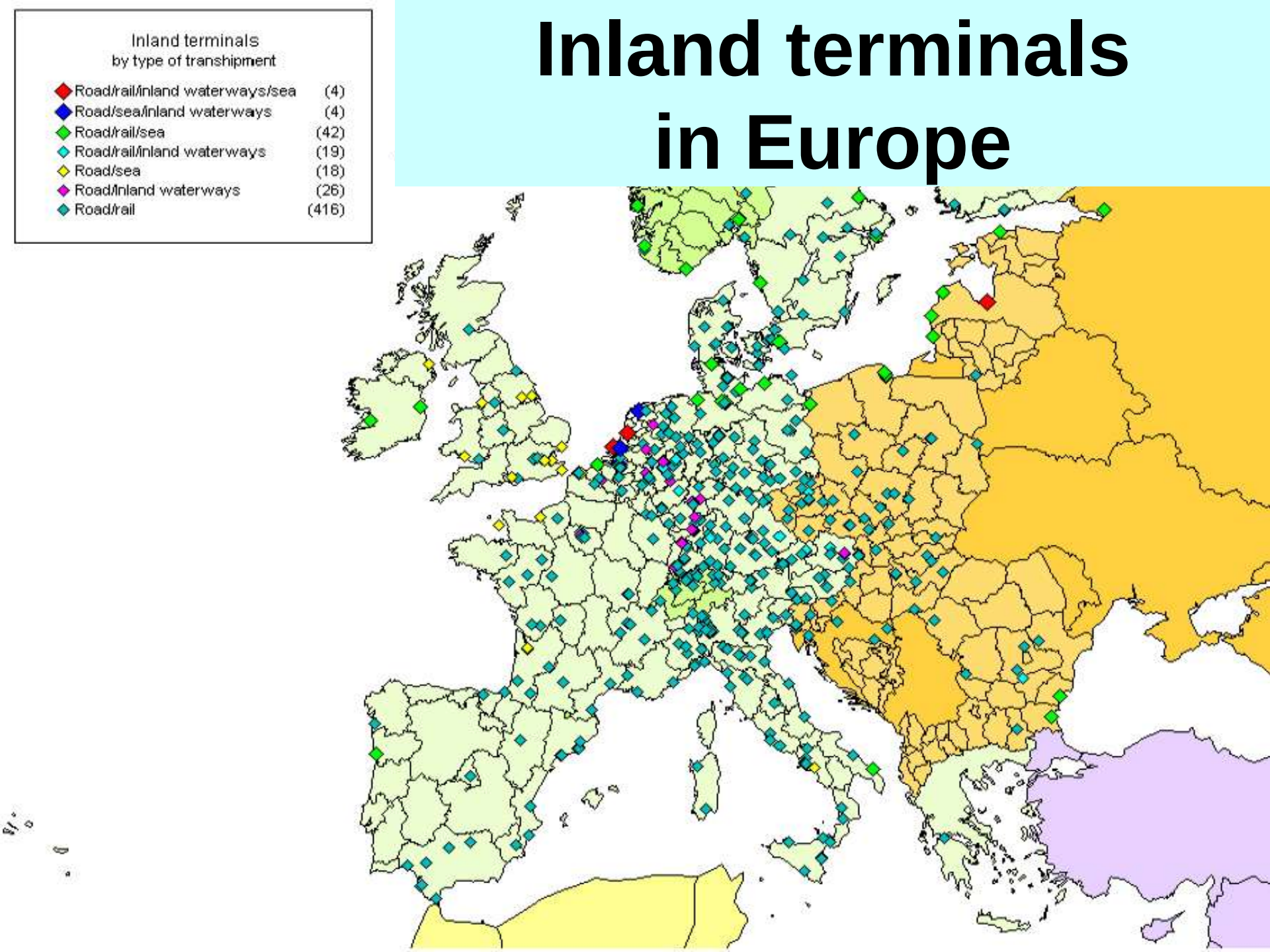
» The Logistics Centers are a strategic connection between production and market and represent a supplement and a completing component for Freight Village structures that use rail and road systems with reference to intermodal equipment.

The railroad-connected area assigned to Logistics Centers covers 220,000 square meters of which 150,000 square meters have been assigned to AUTOGERMA (Italian distributor for Volkswagen, Audi, Skoda, Seat) which has built an office building with exhibition hall, a mess building, a porter's lodge, an educational and training building and a logistic warehouse on approximately 60,000 square meters.

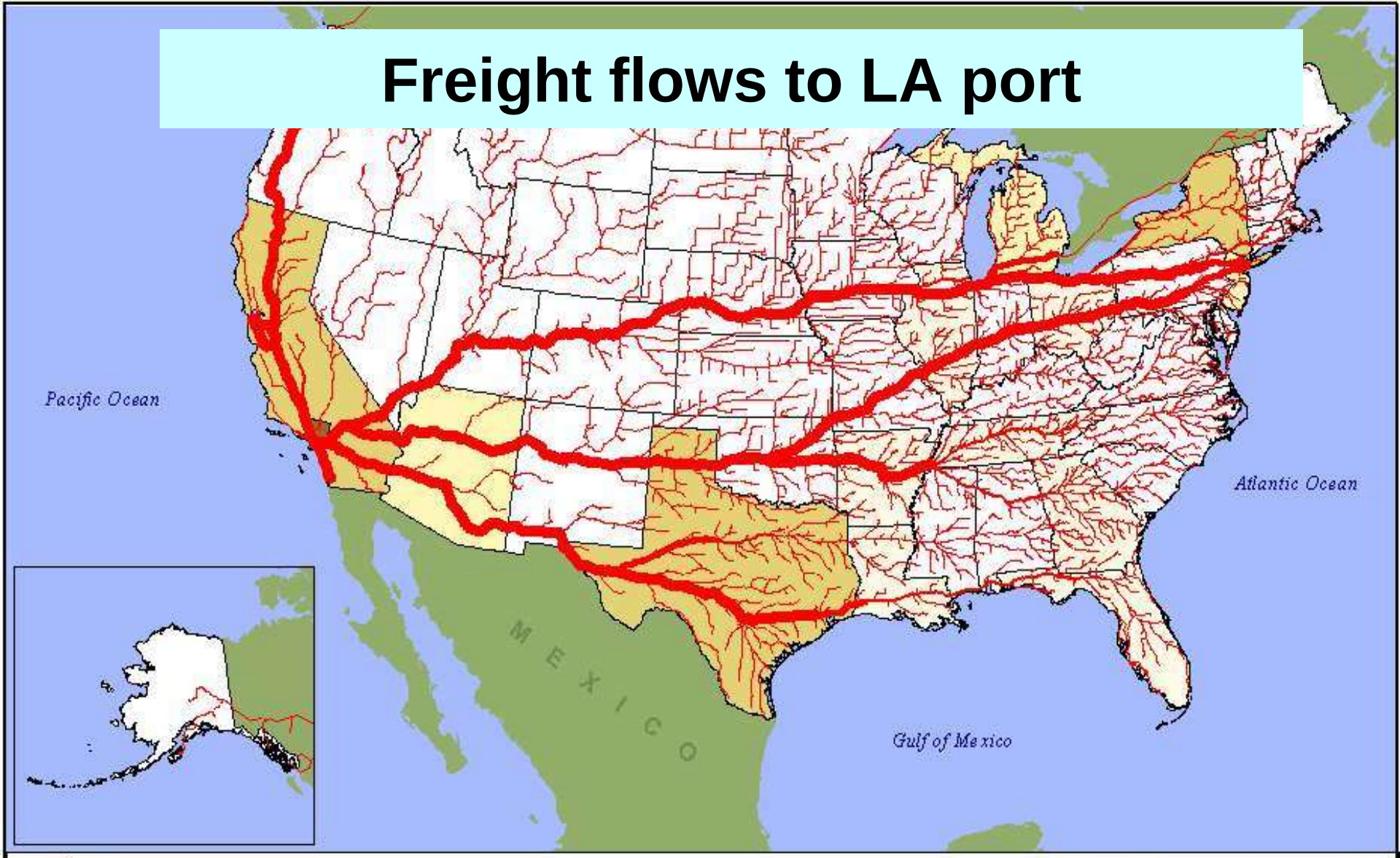
Inland container depots in the USA



Inland terminals in Europe



Freight flows to LA port



U.S. Department of Transportation
Federal Highway Administration
Office of Freight Management and Operations
Operations Core Business Unit

LOS ANGELES

Inland Movement of Maritime Cargo by Truck
(1998)

Port to State Flows
(Tons)

- 1 to 250,000
- 250,001 to 500,000
- 500,001 to 1,000,000
- More than 1,000,000

Network Flows
(Tons)

- 1 to 250,000
- 250,001 to 500,000
- 500,001 to 1,000,000
- More than 1,000,000

Thank you.

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http://www.unescap.org/ttdw