

OSCE-UNECE Inter-Regional Workshop on Developing Euro-Asian Transport Links in Partnership with the Government of Turkmenistan

Turkmenbashi, 7 December 2010

# **Transport infrastructure development and border crossing facilitation:**

## **Infrastructure and Transport Services Needs in Central Asia**

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# Central Asia Transport Infrastructure

- ◆ Rapid growth has put severe pressure on the existing infrastructure, particularly transport.
- ◆ While parts of the region's transport infrastructure are up to international standards, in most cases, it is below the world average.
- ◆ Inland and remote areas, landlocked countries are isolated geographically, and thus economically.
- ◆ An aging and increasingly inadequate infrastructure:
  - bottleneck to growth (particularly for landlocked countries)
  - threat to trade competitiveness
  - obstacle to poverty reduction

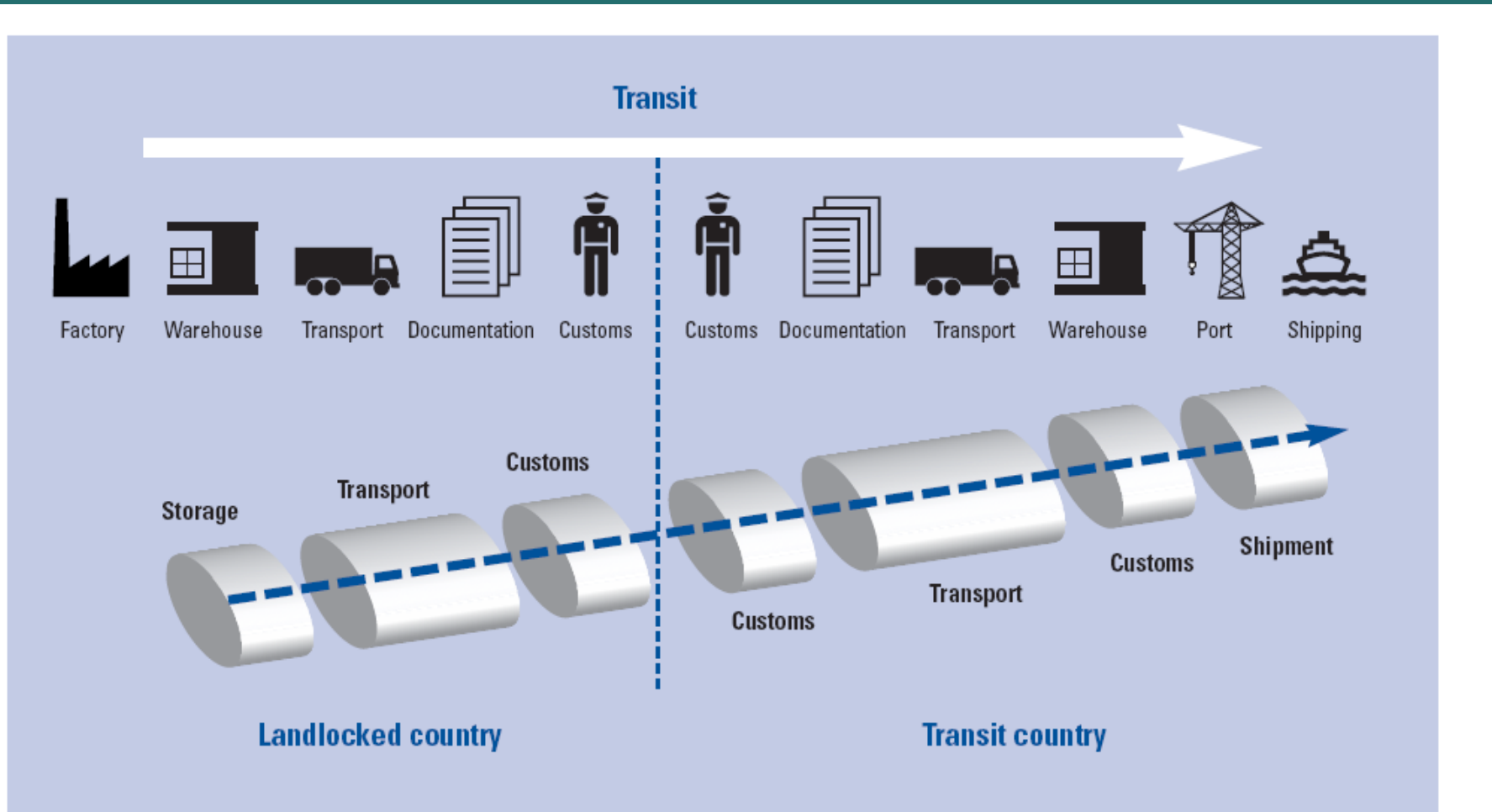
# Overview of Central Asia's Infrastructure

- ◆ Generally improved in the region in recent decades, albeit with huge variance by country and transport mode:
  - **Seaports** have expanded rapidly. Special attention to Caspian Sea
  - **Airport infrastructure** in Central Asia lags behind that of East Asia.
  - **Road** coverage has fallen in Central Asia, mainly due to poor maintenance and insufficient funding for upgrading
  - **Railways** constitute another weak link, as few new rail routes are created, while existing ones are not maintained.
- ◆ Transport network of Countries with coastlines are oriented towards their major ports.
- ◆ Land transport systems are not always connected due to a lack of comprehensive policies joining different transport modes and logistics networks.

# Landlocked Countries

- ◆ 12 landlocked countries in Asia that fail to compete efficiently against coastal ones:
  - Limited availability and poor quality of infrastructure connections raise transport costs to and from those areas
  - Poorly integrated transport systems
  - Lack of streamlined procedures to support seamless movement of containers
  - Cumbersome and time consuming border procedures
  - Complex border-crossing requirements encourage corruption and informal trade.
- ◆ Where markets are distant and trade volumes low, justifying the construction and maintenance of even basic infrastructure is difficult.
  - Emphasis should be put on railways, particularly suited to transporting bulk commodities (greater share of inland production).
  - Improve maritime and inland waterways (mainly in Caspian ) connections through Motorways of the Sea (MoS).
  - Regional cooperation agreements on transit facilitation

# Transit Service Assembling Parts



Source: UNCTAD.

# Cross-Border Transport related Infrastructure

- ◆ Bottlenecks at Asia's borders often hinder the efficiency of its logistics systems.
  - Customs procedures need to be simplified and harmonized to avoid costly delays.
  - Reduce bureaucracy and inspection times
  - Simplify declarations and documentation process
  - Infrastructure improvements that raise port efficiency

**Table 1: Days to complete export procedures by selected countries in the Asia-Pacific region**

<b>Country</b>	<b>Pre-arrival documents</b>	<b>Port and terminal handling</b>	<b>Customs and inspections</b>	<b>Inland transport to warehouse</b>	<b>Total time</b>
<b>OECD High Income</b>	<b>8</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>14</b>
<b>East Asia &amp; Pacific</b>	<b>18</b>	<b>3</b>	<b>4</b>	<b>3</b>	<b>28</b>
<b>ASEAN</b>	<b>20</b>	<b>3</b>	<b>3</b>	<b>2</b>	<b>28</b>
<b>Brunei Darussalam</b>	n/a	n/a	n/a	n/a	n/a
<b>Cambodia</b>	31	2	1	2	36
<b>Indonesia</b>	18	2	2	3	25
<b>Lao PDR</b>	51	6	6	3	66
<b>Malaysia</b>	13	3	2	2	20
<b>Myanmar</b>	n/a	n/a	n/a	n/a	n/a
<b>Philippines</b>	8	7	2	1	11
<b>Singapore</b>	1	3	1	1	6
<b>Thailand</b>	15	4	1	4	24
<b>Vietnam</b>	24	2	5	4	35
<b>Central Asia &amp; Caucasus</b>	<b>6</b>	<b>10</b>	<b>15</b>	<b>37</b>	<b>68</b>
<b>Afghanistan</b>	44	15	2	5	66
<b>Azerbaijan</b>	40	14	10	5	69
<b>Kazakhstan</b>	30	29	23	11	93
<b>Kyrgyzstan</b>	n/a	n/a	n/a	n/a	n/a
<b>Mongolia</b>	39	18	6	3	66
<b>Tajikistan</b>	50	7	10	5	72
<b>Uzbekistan</b>	18	8	8	10	44

Source: UNESCAP based on data from [www.doingbusiness.org](http://www.doingbusiness.org)

# Border Trade Costs 2009

Subregion	Sub-Saharan Africa	East Asia and Pacific	South Asia	Central and West Asia	Latin America and Caribbean	OECD
<b>Exports</b>						
Documents needed (average number)	8	7	9	7	7	5
Time required (days)	34.7	23.3	33	29.7	19.7	10.7
Cost to (\$ per container)	1,878.8	902.3	1,339.1	1,649.1	1,229.8	1,069.1
<b>Imports</b>						
Documents needed (average number)	9	7	9	8	7	5
Time required (days)	41.1	24.5	32.5	31.7	22.3	11.4
Cost to (\$ per container)	2,278.7	948.5	1,487.3	1,822.2	1,384.3	1,132.7

\$ = United States dollar; OECD = Organisation for Economic Co-operation and Development.  
Source: World Bank (2009a).



# Combined Approach for Interoperability

EXPORT CARGO SHIPPING INSTRUCTIONS

UN Layout Key

## Electronic Document Exchange XML or UN/EDIFACT

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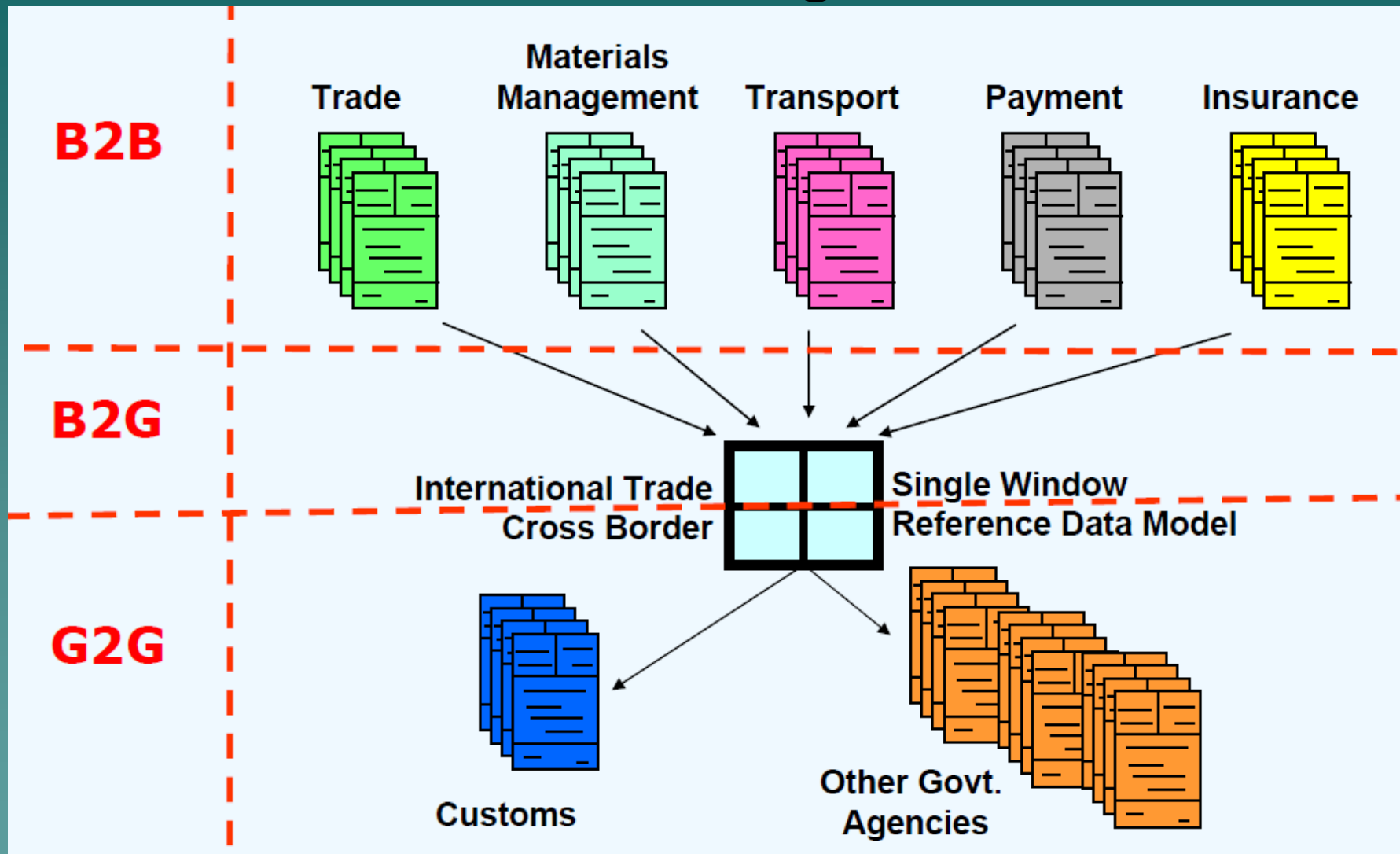
FIATA Freight Forwarding Instructions

Electronic Edit Form

Paper Document  
aligned to UN Layout Key

Electronic Edit Form

# Global Trade Single Windows



Source: UNECE/UNESCAP UNeDocs Workshop on Trade Facilitation, Bangkok 2007

# Major Regional Transport Infrastructure Projects for Central Asian Countries

- ◆ **TRACECA** (Transport Corridor Europe Caucasus Asia), EU funded Programme aiming to develop a west-east transport corridor from Europe, across the Black Sea, through the Caucasus and the Caspian Sea to Central Asia.
- ◆ **Asian Highway (AH)**
  - promoting the development of international road transport in the region
- ◆ **Trans-Asian Railway (TAR)**
  - objective of providing a continuous 14,000-km rail link between Singapore and Istanbul, with possible onward connections to Europe and Africa

# Sub-regional Cooperation Programs

- ◆ **CAREC:** Central Asia Regional Economic Cooperation, established in 1992
  - Regional Transport Sector Road Map:
  - Harmonization and simplification of cross-border transport procedures and documentation
  - Harmonization of transport regulations
  - Development and improvement of regional and international transport corridors
  - Restructuring and modernization of railways
- ◆ **SECSCA:** Subregional Economic Cooperation in South and Central Asia, established in 2003
  - Plan for two transport corridors, north-south and east-west, was formulated in 2006
- ◆ **ECO:** Economic Cooperation Organization is an intergovernmental regional organization established in 1985, to accelerate the pace of regional development
  - Several projects in priority sectors of its cooperation including energy, trade, transport

# Developing Effective Policies and Institutions

- ◆ Both SECSCA and CAREC in Central Asia have proposed multinational regulatory frameworks and policies but are facing problems in implementing them.
- ◆ Asia needs to strengthen national and subregional policies and institutions for the effective implementation of infrastructure programs:
  - Coordination among stakeholders
  - Identification, Prioritization, and Preparation of Viable Projects
  - Standards, Regulatory Policies, and Legal Frameworks
  - Strengthening Capacity Building
  - Encouraging Private Sector Participation
  - Managing Social and Environmental Problems
  - Governance

# Success Stories (1): ECO IRU Caravan

- ◆ ECO and International Road Transport Union (IRU) in cooperation with its national Member Associations located in the ECO region
- ◆ IRU-ECO Silk Road Truck Caravan 2010 “Driving Progress from Islamabad to Istanbul”
  - to further develop Euro-Asian road transport
  - strengthen trade and economic cooperation within the region and with the rest of the world.



# Northern Route



The route's approximate length is 6,500 km (from Uzbekistan via Kazakhstan, Russia, Belarus, to European Union)

**Freight:** textiles, agricultural products, industrial equipment, food and pharmaceuticals

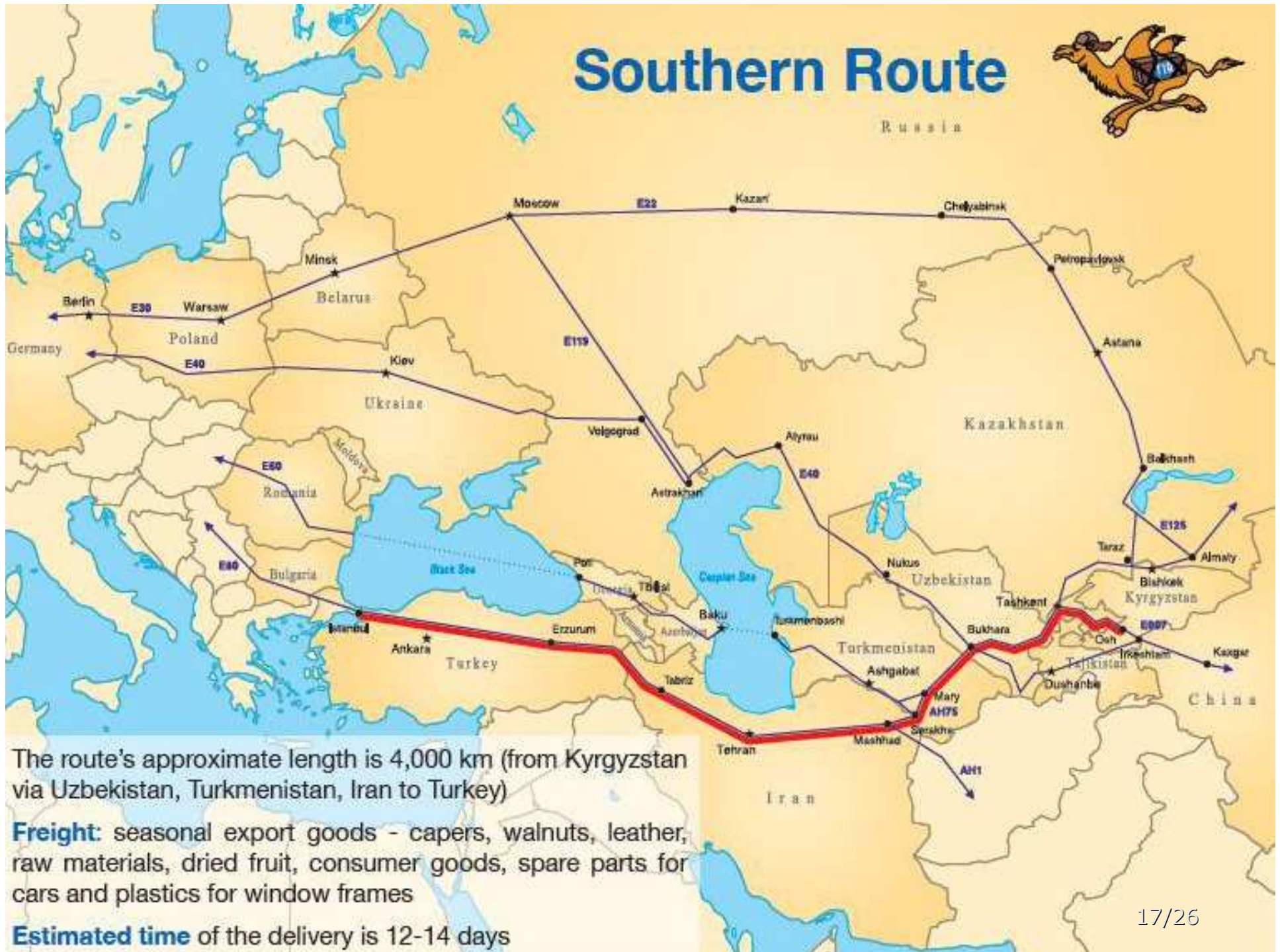
**Estimated time** of the delivery is 12-14 days

# Central Route





# Southern Route



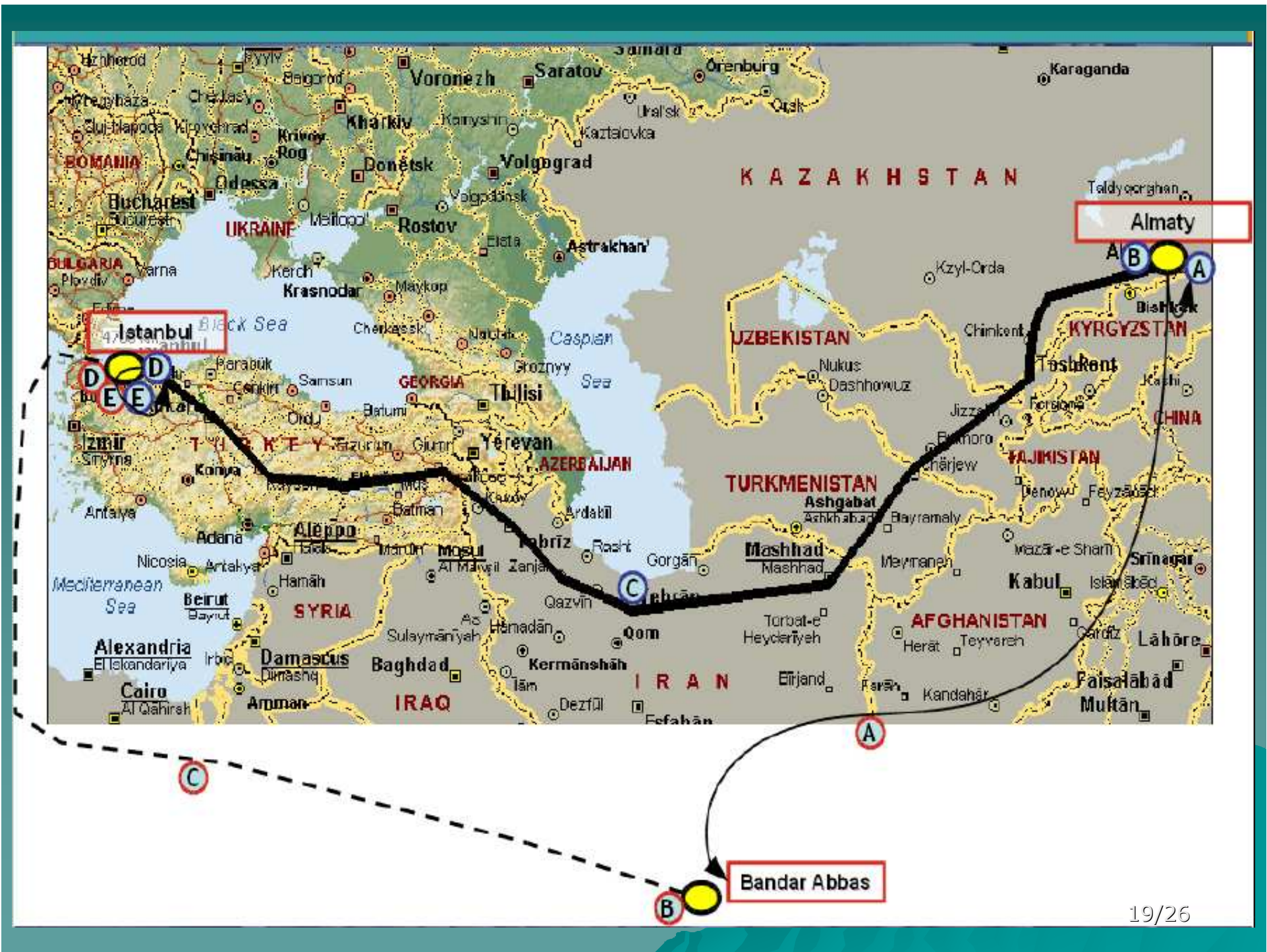
The route's approximate length is 4,000 km (from Kyrgyzstan via Uzbekistan, Turkmenistan, Iran to Turkey)

**Freight:** seasonal export goods - capers, walnuts, leather, raw materials, dried fruit, consumer goods, spare parts for cars and plastics for window frames

**Estimated time** of the delivery is 12-14 days

# Success Stories (2): Istanbul-Almaty Block Trains

- ◆ Block trains can change landlocked countries into land-linked countries.
  - Transport of container by truck from original shipper to main train station to be loaded on the train
  - Loading/documentation expenses
  - Rail transport of container from station of origin to station of destination
  - Delivery of the container by truck from the final unloading station to the final shipper.
  - Unloading /documentation expenses



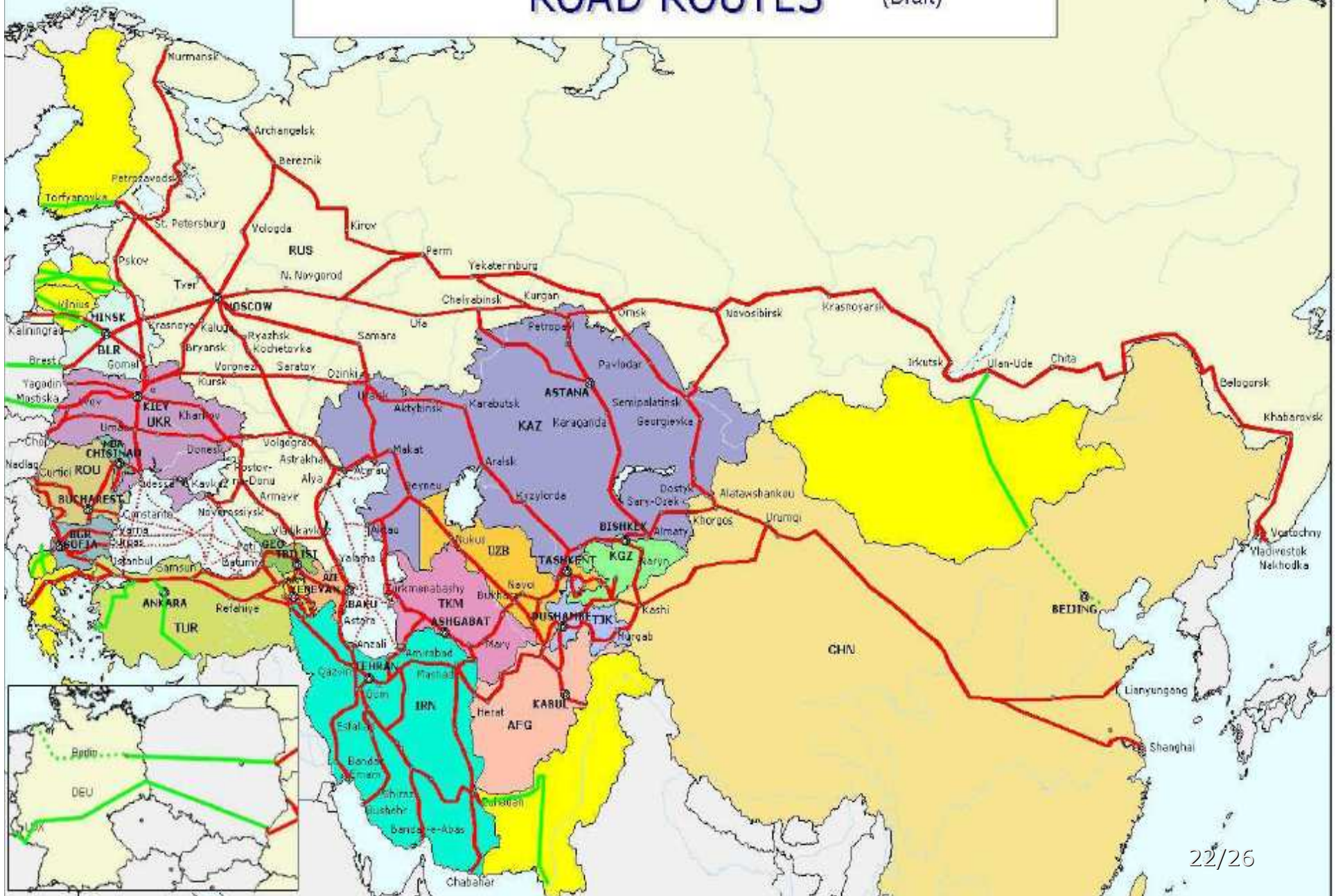
# Investing Needs in Transport Infrastructure

- ◆ The Asian Development Bank (ADB)\* estimated \$8 trillion are needed for infrastructure from 2010 to 2020
- ◆ Approximately \$2.4 trillion is required to be invested in national transport infrastructure (90% of this for roads).
- ◆ A further \$204 billion of investments required in regional/transnational transport infrastructure, with the Asian Highway and the Trans Asian Railway accounting for more than 60% of this.

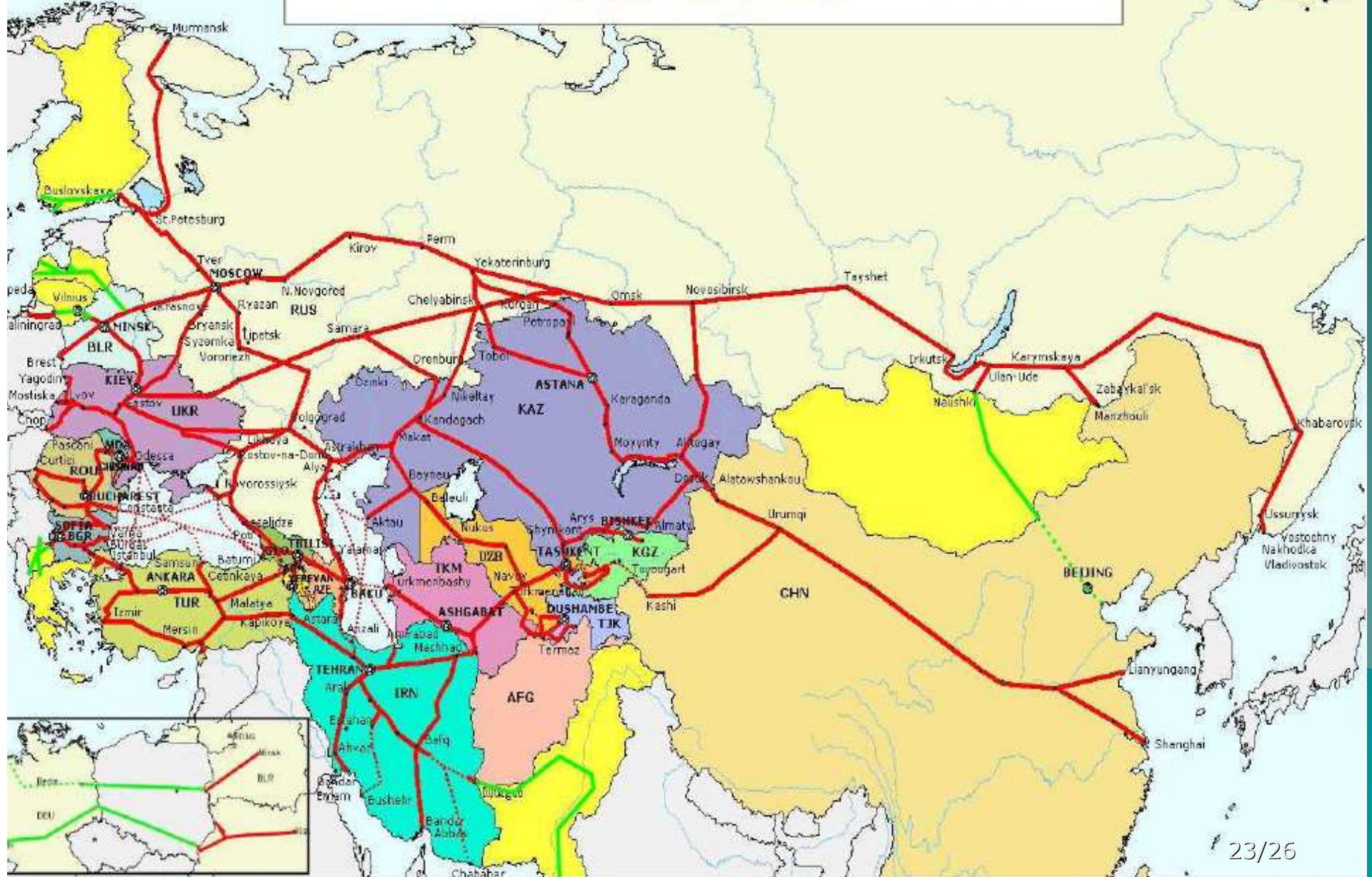
# EATL Phase II-Central Asian Countries

- ◆ From data available for 9 countries
  - Afghanistan, Azerbaijan, China, Iran, Kazakhstan, Kyrgyzstan, Pakistan, Uzbekistan and Mongolia
- ◆ 100 projects are proposed:
  - 73 road projects (73%)
  - 24 rail projects (24%)
  - 3 maritime port (and intermodal terminal) projects (3%)
- ◆ Project Total Cost: 22 billion \$
  - Road projects: 12 billion \$ (55%)
  - Rail Projects: 8 billion \$ (38 %)
  - Maritime port: 1.6 billion \$ (7%)

# UNECE-UNESCAP Euro-Asian Links Project ROAD ROUTES (Draft)



# UNECE-UNESCAP Euro-Asian Links Project RAIL ROUTES (DRAFT)



# EATL Phase II-Results Summary (No of Projects per Category)

Country	Per Category				
	I	II	III	IV	Completed
	No. of projects	No. of projects	No. of projects	No. of projects	No. of projects
Afganistan	2			17	
Armenia	4				
Azerbaijan	4			2	
Belarus					
Bulgaria	23	3	3	2	1
China	10	4	4		
Georgia	8			16	
Iran				16	
Kazakhstan	2				
Kyrgystan	9	1			2
Republic of Moldova					
Romania	5			4	4
Russian Federation	5			66	
Pakistan	11	11			
Tajikistan					
Turkey	10			8	
Turkmenistan					
Ukraine					
Uzbekistan	1			0	
Finland					
Germany		1	1	3	
Greece	3			1	
Latvia					
Lithuania	15				
Luxemburg					
Mongolia				4	
The former Yugoslav Republic of Macedonia	4	2			
<b>Total</b>	<b>116</b>	<b>22</b>	<b>8</b>	<b>139</b>	<b>7</b>



# EATL Phase II-Results Summary (Project Cost in mio \$)

Country	Total Cost	Per type of infrastructure			
		ROAD	RAILWAY	MARITIME	INW
		Cost	Cost	Cost	Cost
Afganistan	1454	1454			
Armenia	517	517			
Azerbaijan	938,48	938,48			
Belarus					
Bulgaria	7720,74	283,92	7236,72	200,1	
China	6670,9	5045,9		1625	
Georgia	922,66	372,66	550		
Iran	3108		3108		
Kazakhstan	1574,58		1574,58		
Kyrgystan	1861,2	511,2	1350		
Republic of Moldova					
Romania	10059,4	9546,84		202,86	309,682
Russian Federation	86727	58943	19124	8660	
Pakistan	4185,9	4185,9			
Tajikistan					
Turkey	26516,7	12927,8	13588,9		
Turkmenistan					
Ukraine					
Uzbekistan	30		30		
Finland					
Germany	1799,52	365,7	1433,82		
Greece	837,66	837,66			
Latvia					
Lithuania	2988,942	1784,478	1024,098	170,706	9,66
Luxemburg					
Mongolia	2405		2405		
The former Yugoslav Republic of Macedonia	1405,806	354,246	1051,56		
<b>Total</b>	<b>161723,488</b>	<b>98068,784</b>	<b>52476,678</b>	<b>10858,666</b>	<b>319,342</b>

# Trade corridors and role of ports

- Three types of trade corridors:
  - domestic trade corridors;
  - foreign trade corridors; and
  - transit trade corridors.
- The second and third types are important for ports and their hinterland flows.
- Foreign trade corridors perform a role in moving imports and exports for a particular country, using either ports or international land border crossings.
- Transit trade corridors are used to move goods between other countries, normally with a port or land border crossing at one end and a land border crossing at the other.
- Well performing corridors of both types are important in enabling international trade and improving efficiency and competitiveness as a result of economic cooperation and regional integration.

# Role of the Ports

- Increase the efficiency of the whole transport system
- Encourage growth of intra-regional trade and trade with third countries
- Overcome congestion of the main land-corridors or substitute missing links

Ports act as nodal points for

- logistical transport chains
- intermodal transport

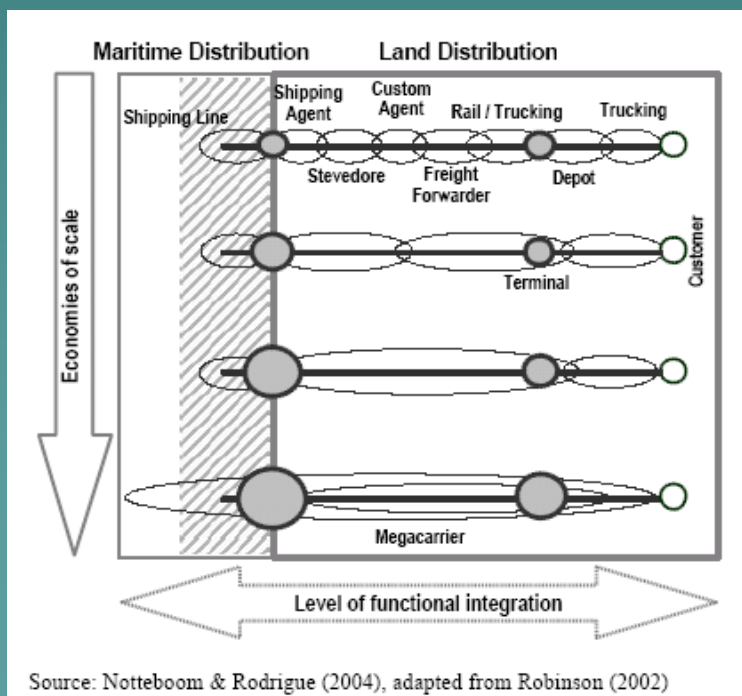
Ports integrate

- Land transport infrastructure
- Transport related services and ships
- Maritime transport and any other land transport mode

Ports have a strategic role as industrial and logistic platforms and as part of the **Motorways of the Sea** concept

# Role of Freight Villages

- Offer alternative transport solutions more efficient and complete
- Move part of the freight transport from road to other modes of transport (intermodality/multimodality)
- Manage the exponential increase of freight transport in the optimal way of supply chain operations with Freight Villages



# Proposed MoS (I)

## ➤ Objectives

- Concentrate flows of freight on sea-based ( Caspian Sea is large enough to fall under this) logistical routes/ reduce road congestion
  - Improve existing maritime/inland waterways links
  - Establish new viable, regular and frequent maritime links for the transport of goods between countries
- Focus on the overall logistic transport chain, comprising:
- different transport modes
  - infrastructure (land, ports)
  - transport operators (road, rail, maritime)
  - most important of all, the logistic transport services

# Proposed MoS (II)

- **MoS –Maritime: Black Sea** (connections between Turkey, Georgia, Russian Federation, Ukraine, Romania, Bulgaria)
- **MoS- Maritime: Persian Gulf-Arabic Sea** (connections between Iran, Pakistan, India)
- **MoS-Maritime: East Mediterranean** (connections between Turkey, Greece, Italy, Slovenia)
- **MoS-Inland Waterways: Caspian Sea** (connections between Iran, Azerbaijan, Russian Federation, Kazakhstan Turkmenistan)

# Recommendations

- ◆ A priority for the region's policymakers should be to construct transport infrastructure networks (and associated services) that:
  - provide efficient connections to regional and global markets
  - Support a seamless transport supply chain
  - are built up from either national, bilateral, or subregional programs
  - are coordinated and supported by regional frameworks that can ensure their development and financing.
- ◆ Further progress requires creating an effective new framework for regional cooperation, as well as strengthening the coordination among and capacity of existing ones.
- ◆ Concessionary financing from external sources may be necessary to make such infrastructure projects more attractive to investors.
- ◆ Lessons learned from success stories:
  - Development of block trains could be considered for landlocked countries in Central Asia
  - IRU road caravans
  - MoS-intermodality (mainly from Europe)

Thank you for your  
attention!