

Project OBOR (One Belt One Road) as a historic challenge for Central Asia. Look from Kazakhstan

(on the base of materials of members of Project Logistics Center: prof. Hanz Holzacker (Austria), Y.I.Lavrinenko (Republic of Kazakhstan), Max EE (Islamic Republic of Afghanistan))

Vassiliy V.Korolyov

Director PLC, Freight Company Transal

Honorary Professor of the Kazakh-German University

China goes international

The Chinese One Belt One Road Initiative is a development strategy that has a trade, a FDI and a transportation component, with an institutional superstructure on top.

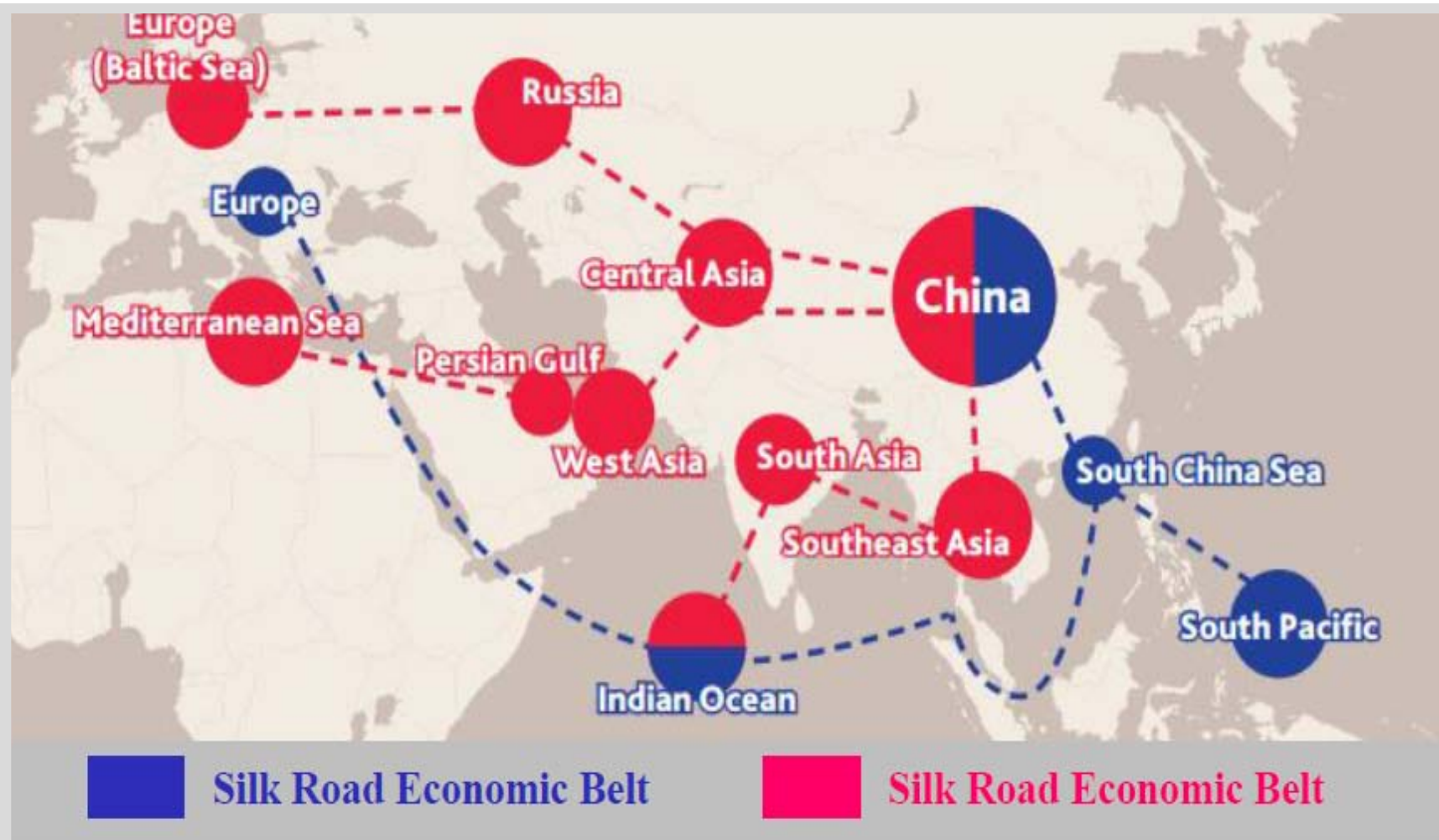
It calls for the **integration of** countries primarily in **Eurasia into a more cohesive economic area through**

- **building infrastructure,**
- **increasing cultural exchanges,** and
- **broadening trade.**

It has two main components, the **"Silk Road Economic Belt"** and the **"Maritime Silk Road"**.

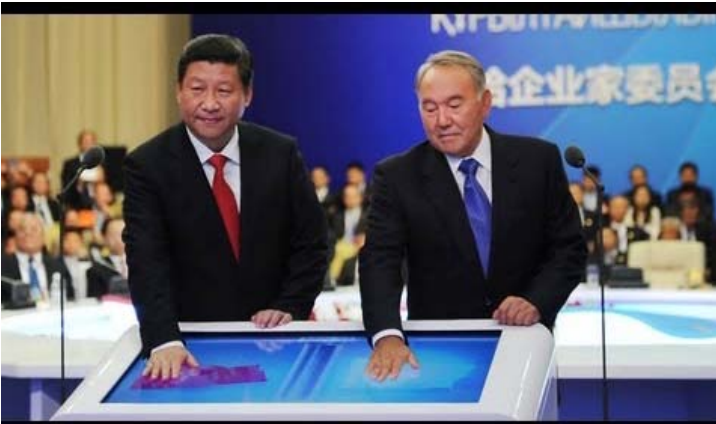
It goes along with China's push to take **a bigger role in global affairs.**

The One Belt – One Road Initiative (OBOR)



Source : "China Maps Out One Belt One Road with Action Plan, Global Times, March 31, 2015

Intensive diplomatic activity is going on.

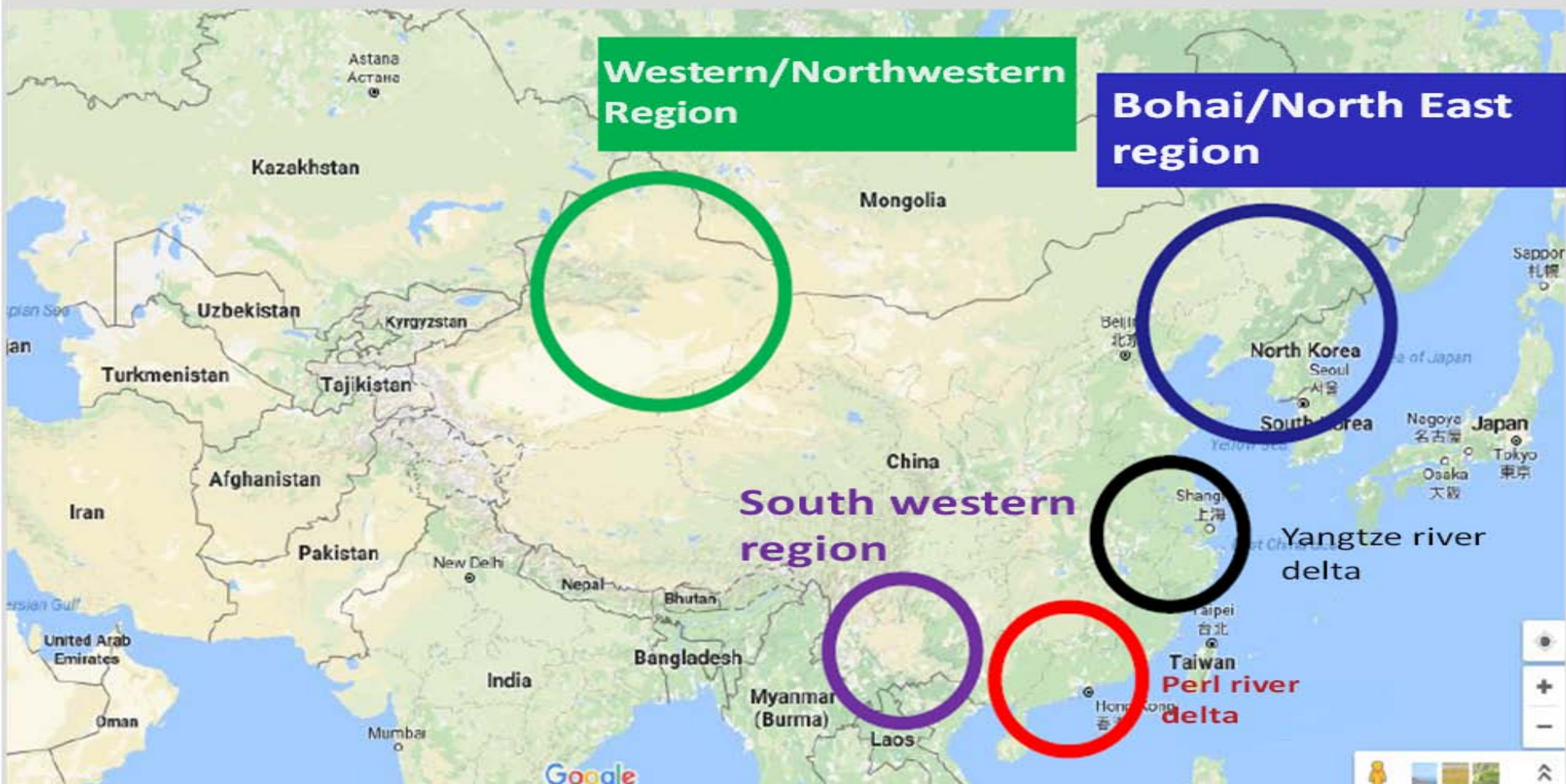


http://article.wn.com/view/2013/11/08/Europe_and_Central_Asia_Regional_Consultations_in_Istanbul_h/

<http://www.dw.com/en/chinas-view-of-europe/a-18671213>

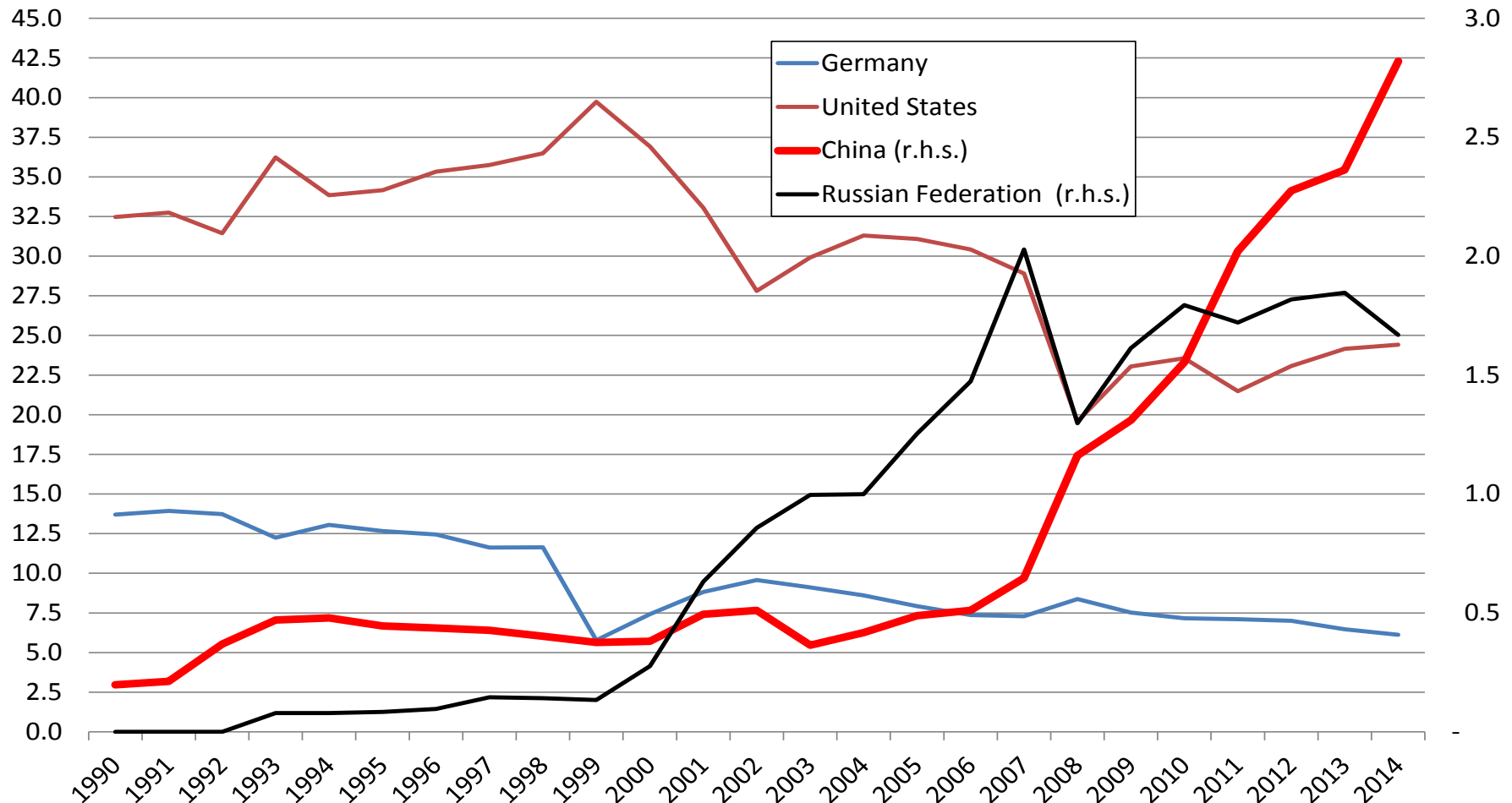
- The European Commission and the Chinese government signed a MoU on the **EU-China Connectivity Platform** to enhance synergies between China's **“One Belt One Road”** initiative and the EU's connectivity initiatives such as the **Trans-European Transport Network policy**.
- At the third China-Central Asia Co-operation Forum in June 2015, a **commitment to “jointly building the Silk Road Economic Belt”** was signed by China and the **five Central Asian countries**.
- Prior to that, China had signed **bilateral agreements with** Tajikistan, Kazakhstan, Kyrgyzstan and Uzbekistan .

The main economic centers in China



China's outward foreign direct investment stock grew from 0.5% of the global stock in 2006 to 2.8% in 2014.

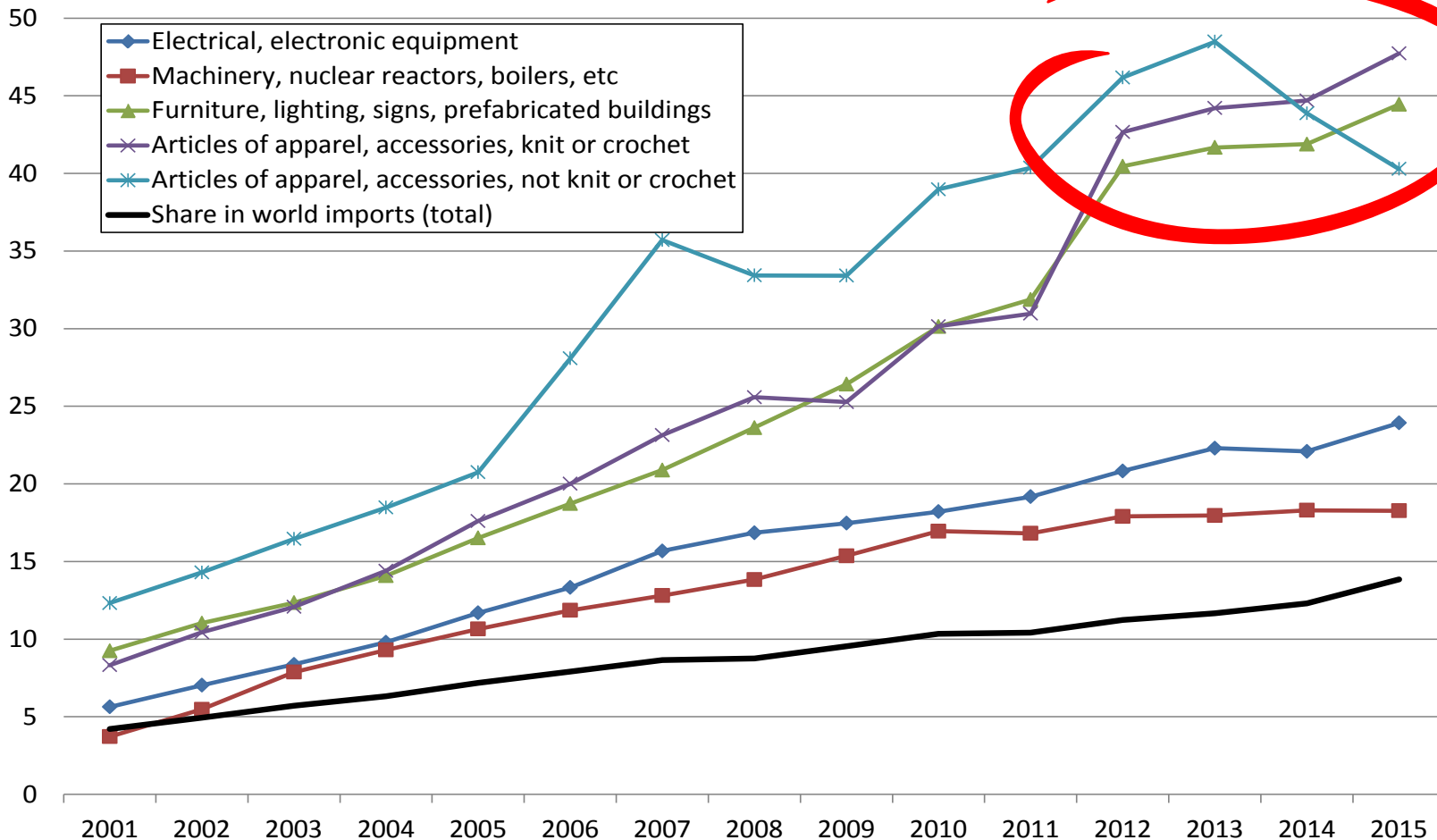
Outward FDI stock in % of the world's outward FDI stock



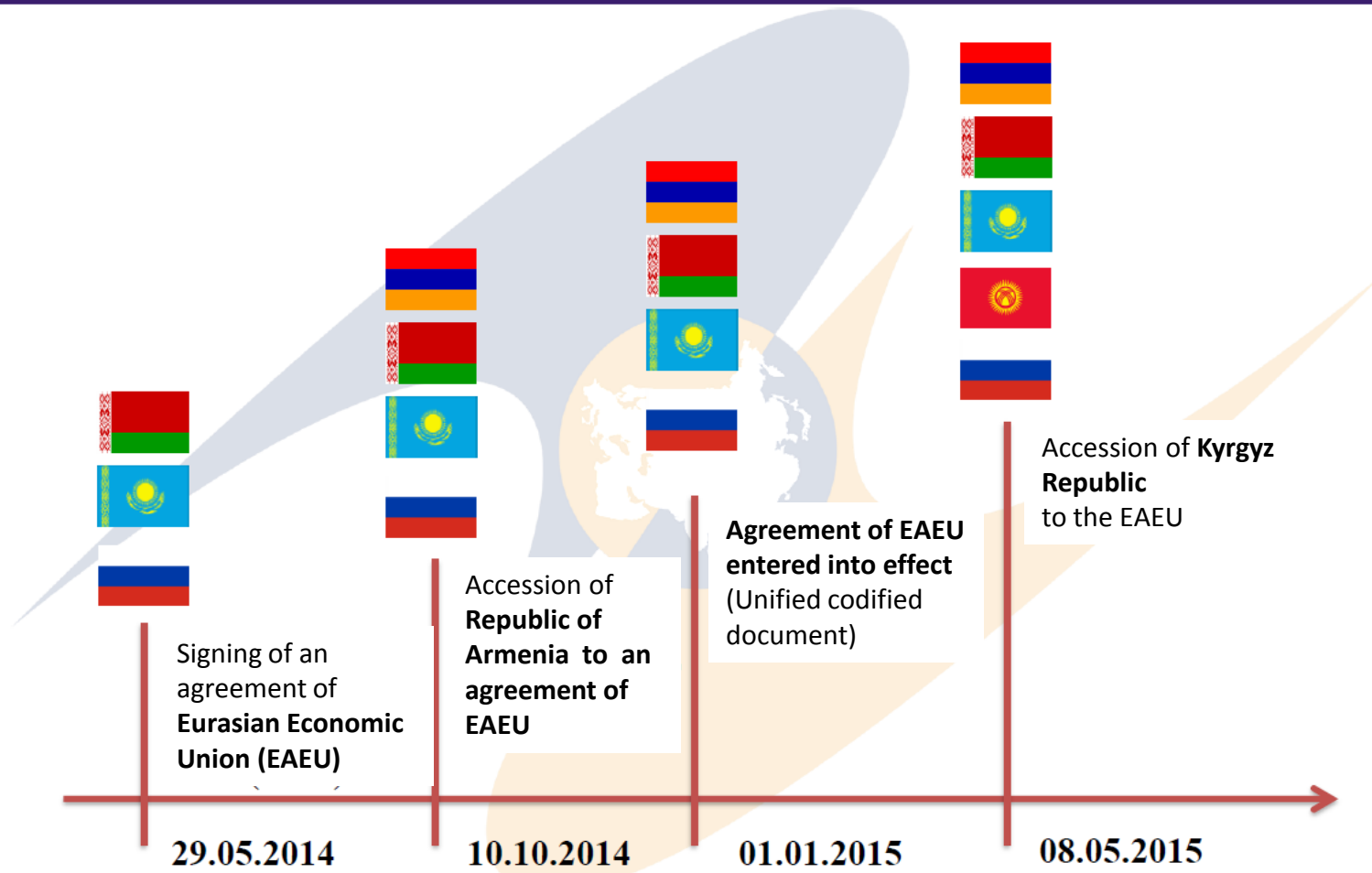
China supplies 20% of global machinery import, 45% of apparel.

In % terms this might be the peak, but volumes will continue to rise.

The share of Chinas exports in global imports %



Stages of formation of the Eurasian Economic Union (EAEU)

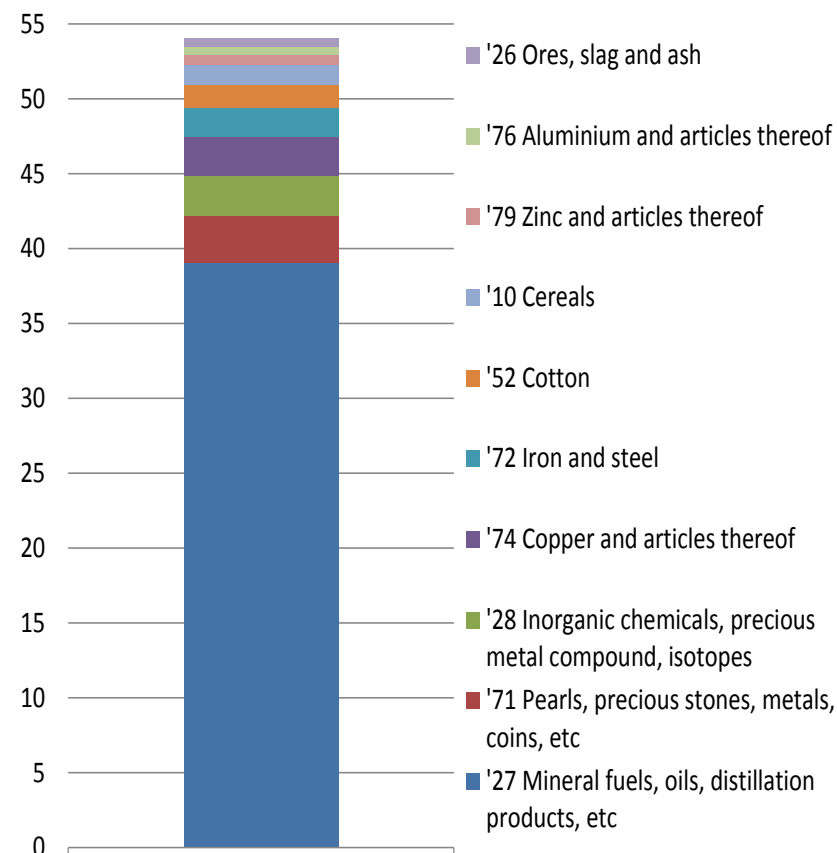


Central Asia exports fuels and metals, and also cereals and cotton, imports machinery, electronics, vehicles, apparel.

10 largest Central Asian exports 2015,

Total exports: USD
58bn

USD bn

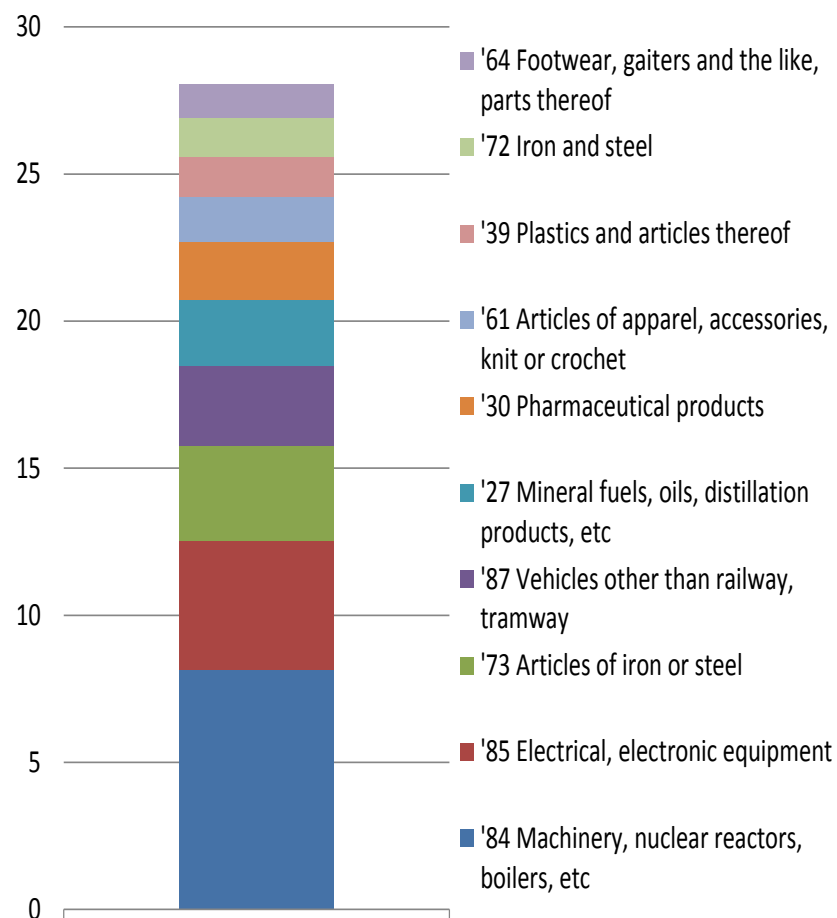


Source: Trade map, author

10 largest Central Asian imports 2015,

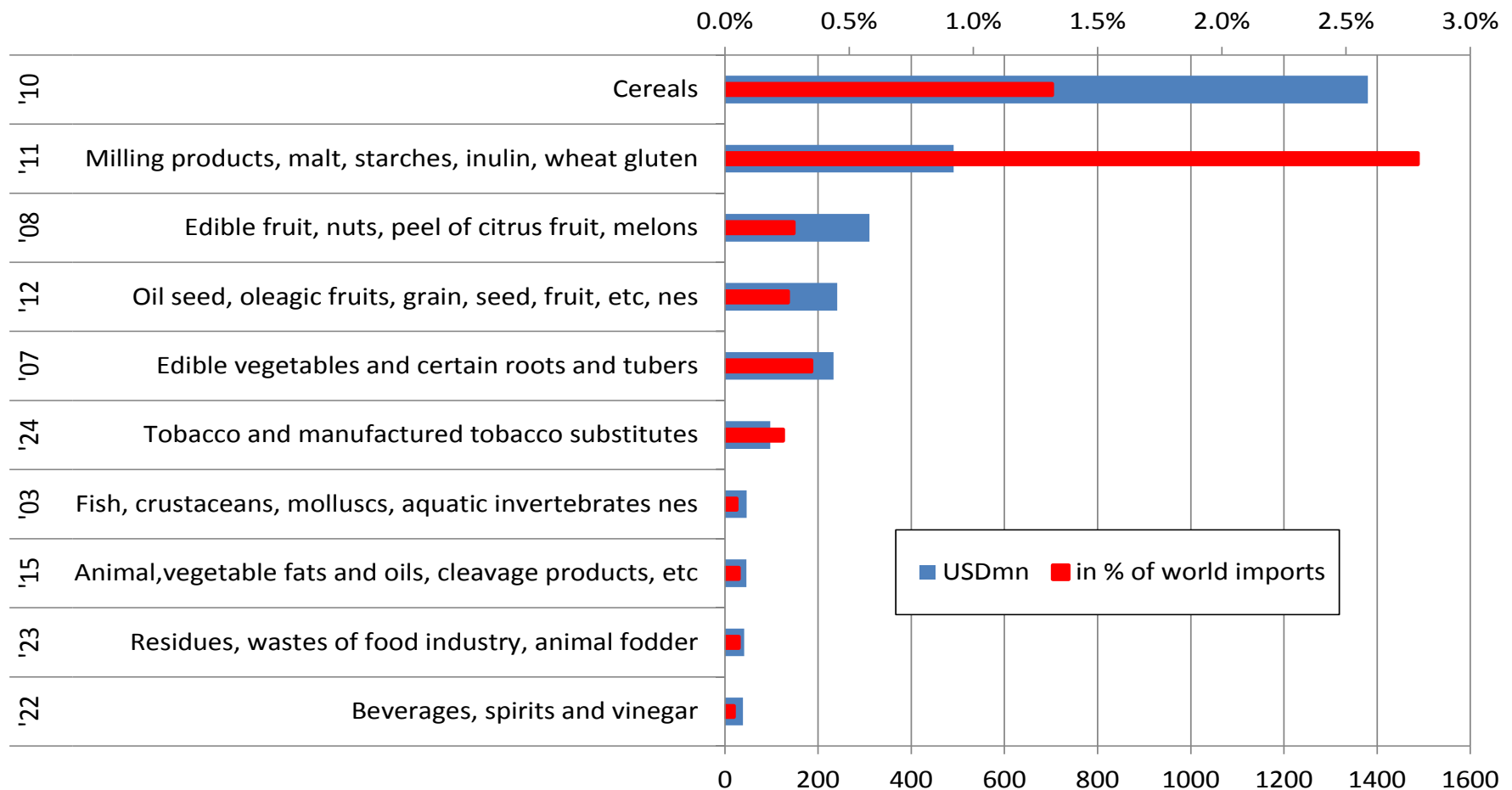
Total imports: USD
45bn

USD bn



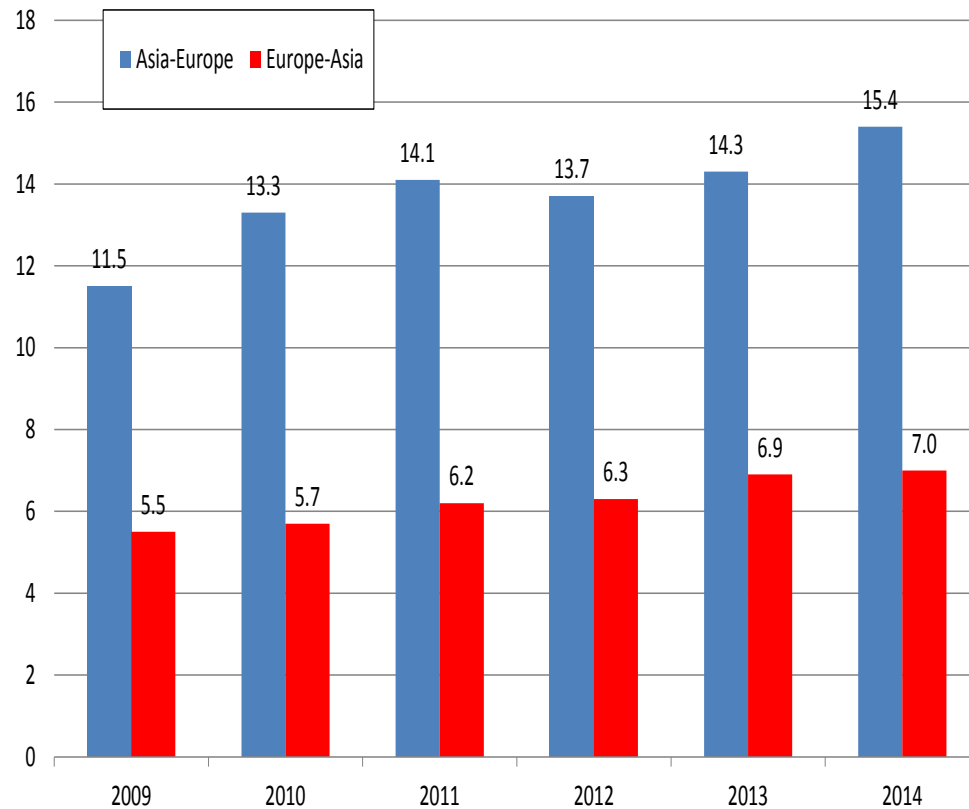
Central Asia supplies more than 1% of the world's cereal imports and more than 2.5% of the world's imports of milling products.

Central Asian 10 largest agricultural exports 2015



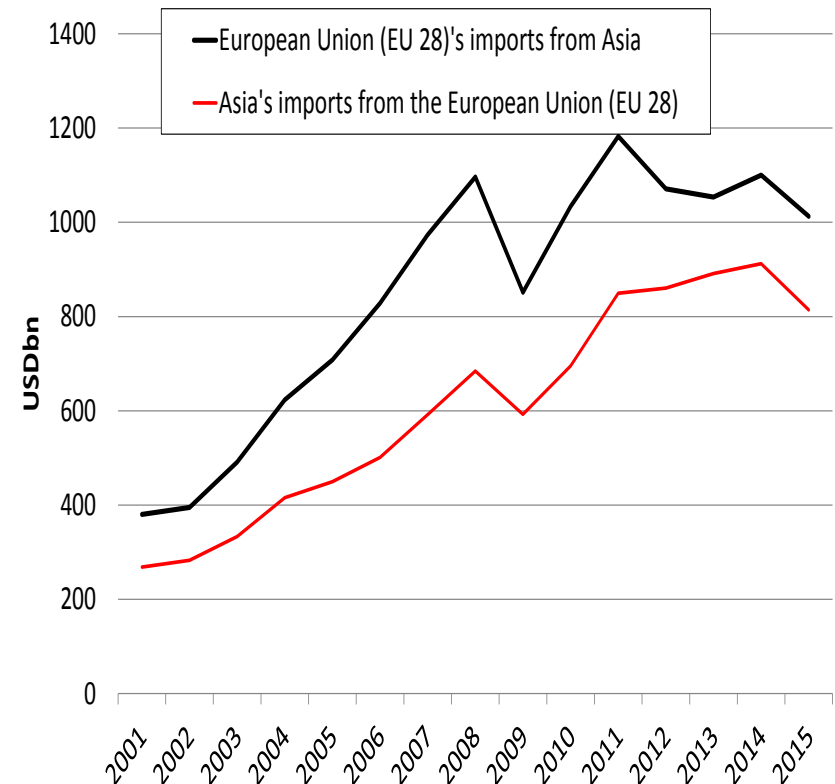
Trade turnover EU-Asia was about USD 1.8trn in 2015, maritime trade routes are an indicator of the transportation potential....

Maritime trade routes - containerized cargo flows,
million TEUs



Source: UNCTAD, Trade map, author

Kazakh Railways (KTZh) is hoping to capture 6% of the trade between China and Europe by 2020 according to the FT; however, currently 98% goes by sea.



...transportation over land will only be a fraction, however. Specialization on specific goods is needed (high value added, medium time-sensitive).

A FASTER ROUTE FOR TRADE



Source: <http://euap.hkbu.edu.hk/main/wp-content/uploads/2015/06/OBOR-railway.jpg>

Railways:

2011, Chongqing to Duisburg, Germany;
 2012, Wuhan to Pardubice, Czech Republic;
 2013, Chengdu to Lodz, Poland;
 2013, Zhengzhou to Hamburg, Germany;
 2013 Suzhou to Warsaw, Poland;
 2014, Yiwu to Madrid, Spain;
 2015, Wuhan to Hamburg.

- Several railways linking China and Europe were able to **reduce the number of days of shipment** to average **15 days**, compared with 30-40 days required by sea.
- The land route costs around **20-25% of airfreight**.
- **Concerns** include **political landscape**, **border** constraints and seasonality.
- To maximize the cost-efficiency, it would be also important to ensure there will be **enough shipment from Europe to China** as well.

Transportation costs are still relatively high and speed relatively low

Corridor	2013			2014		
	Mean	Median	Margin	Mean	Median	Margin
Time taken to clear a border crossing point, hr						
Overall	10.0	5.3	± 0.5	14.1	5.8	± 0.5
1	23.0	8.0	± 2.3	16.8	2.7	± 1.4
2	7.2	6.3	± 0.7	6.1	5.9	± 0.1
3	3.2	2.0	± 0.3	4.4	3.4	± 0.9
4	10.4	6.6	± 0.5	13.0	5.5	± 0.8
5	3.0	2.3	± 0.2	28.9	36.0	± 1.6
6	6.5	5.6	± 0.4	9.6	6.8	± 0.8

Corridor	2013			2014		
	Mean	Median	Margin	Mean	Median	Margin
Cost incurred at border crossing clearance, \$						
Overall	235	120	± 10	172	125	± 5
1	233	165	± 17	128	81	± 8
2	175	153	± 17	169	87	± 15
3	55	36	± 10	112	48	± 27
4	387	310	± 24	236	145	± 11
5	123	81	± 13	171	196	± 6

Cost incurred to travel a corridor section, \$ per 500km, per 20-ton cargo

Corridor	2013			2014		
	Mean	Median	Margin	Mean	Median	Margin
Cost incurred to travel a corridor section, \$ per 500km						
Overall	1,467	1,018	± 49	1,360	937	± 46
1	1,261	831	± 94	1,180	939	± 62
2	610	497	± 51	513	481	± 15
3	2,167	1,902	± 161	2,348	1,162	± 301
4	1,177	1,229	± 54	1,269	1,031	± 86
5	2,393	2,451	± 124	2,050	1,882	± 96
6	1,145	548	± 114	769	517	± 60

Corridor	2013			2014		
	Mean	Median	Margin	Mean	Median	Margin
Speed to travel on CAREC Corridors, kph						
Overall	20.0	18.2	± 2.2	20.8	20.6	± 1.7
1	23.4	20.5	± 5.8	24.1	24.5	± 3.2
2	23.8	22.2	± 5.1	23.6	22.1	± 3.7
3	22.0	21.1	± 4.9	27.2	23.7	± 5.9
4	12.0	10.4	± 2.5	15.9	12.4	± 3.8
5	18.1	15.9	± 4.3	17.1	18.0	± 2.0
6	27.7	31.0	± 4.3	25.3	30.6	± 4.7

Speed Without Delay

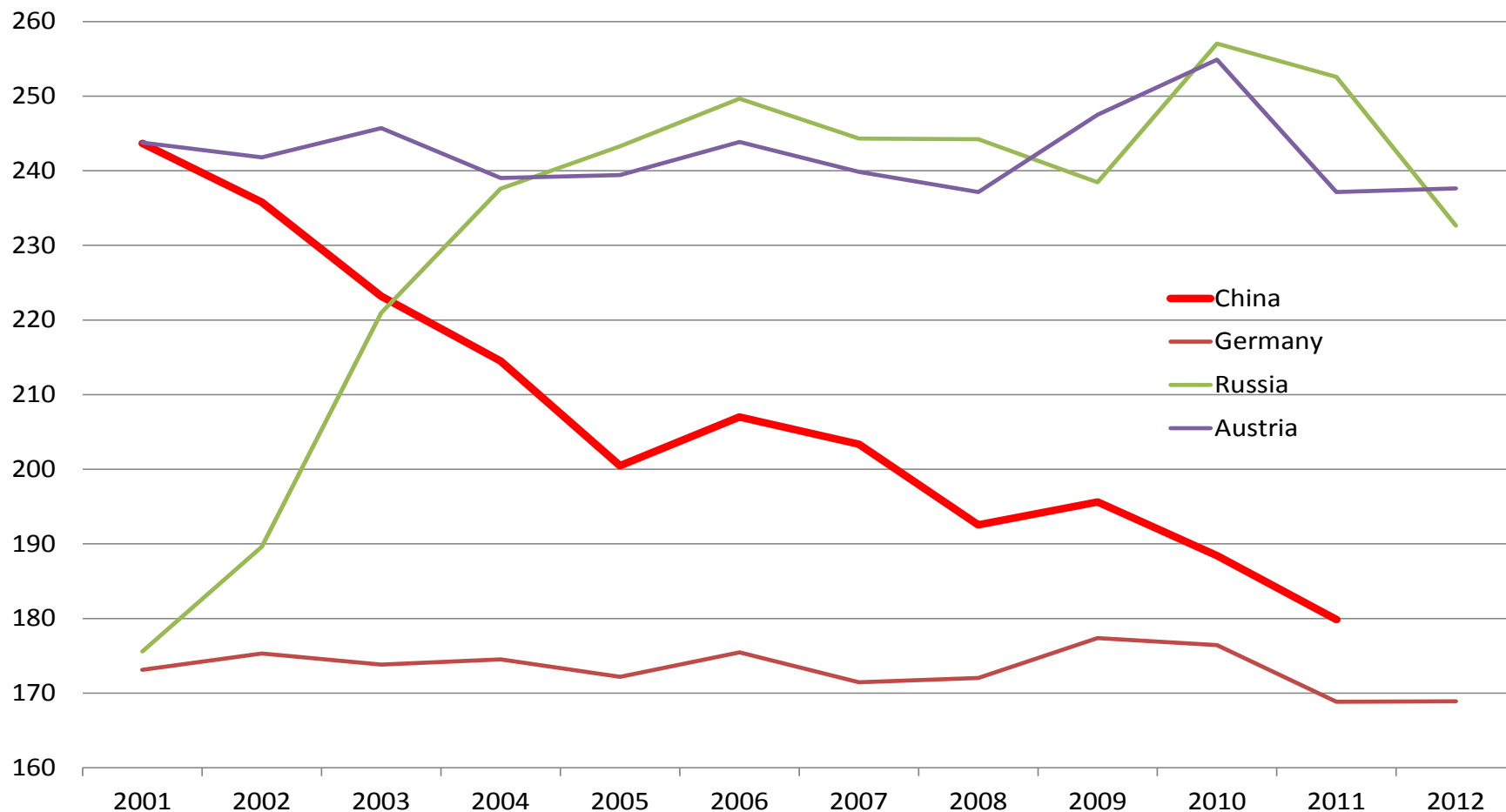
Corridor	2013			2014		
	Mean	Median	Margin	Mean	Median	Margin
Speed Without Delay						
Overall	36.3	34.2	± 2.8	40.2	41.4	± 2.1
1	47.4	46.2	± 5.1	44.7	47.7	± 3.1
2	48.7	49.7	± 4.0	49.1	49.5	± 2.1
3	37.8	37.0	± 7.7	48.1	47.5	± 5.1
4	22.1	19.2	± 3.8	32.0	32.8	± 5.8
5	28.5	28.1	± 4.2	36.1	29.2	± 4.6
6	44.5	47.5	± 4.4	46.1	47.0	± 2.7

Main problems:

trans-loading due to cabotage rules preventing foreign trucks delivery within Kaz,
little use of containerization,
congestion at border crossing points,
documentation errors

China's trade costs are on the way to German levels, One Belt One road will them reduce further

"Trade costs"



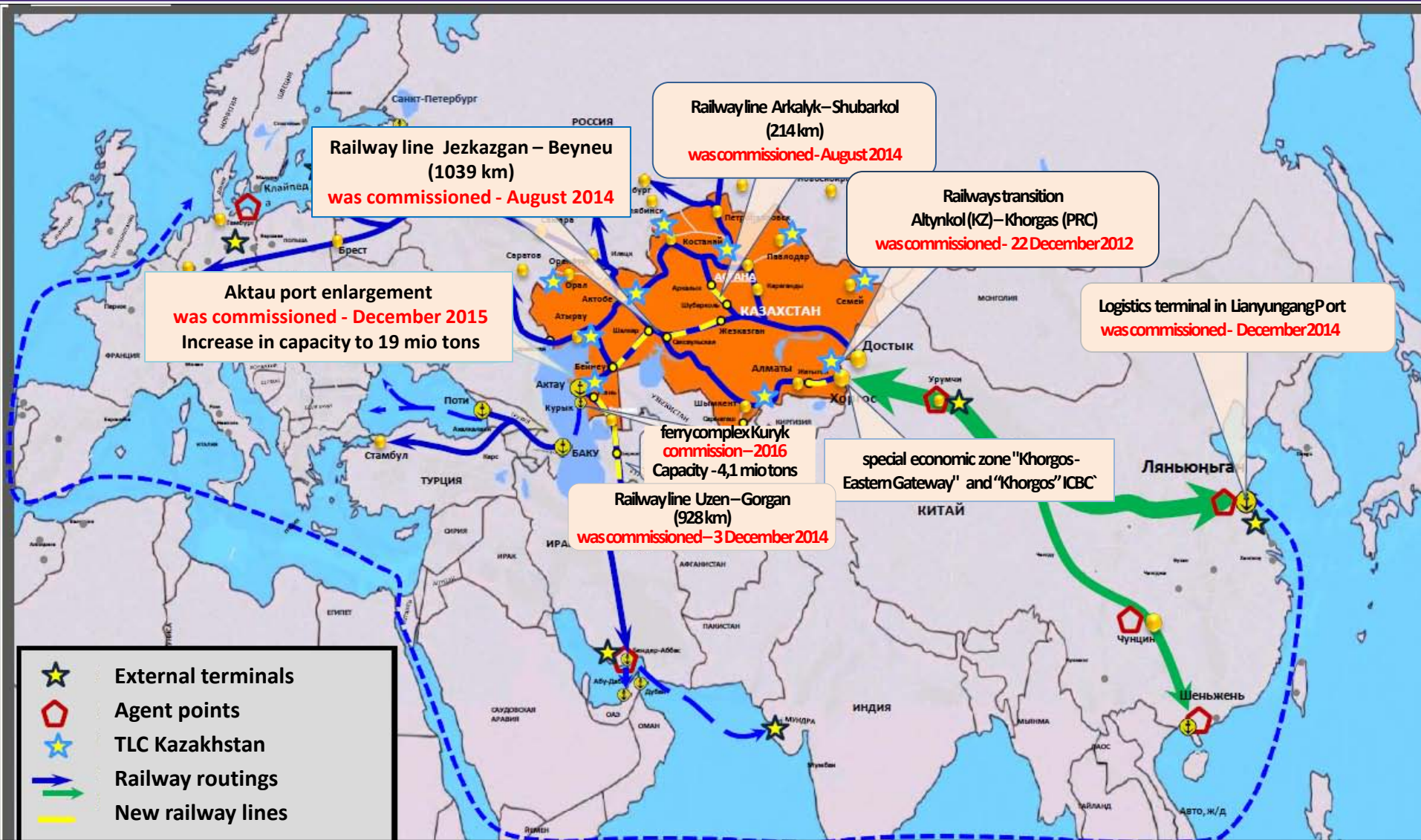
Transportation corridors need to become the basis of “economic corridors”

The "Silk Road Economic Belt" initiative is likely to stay and will likely be the geopolitical project with the highest economic impact.

However, **to become beneficial not only for the end-locations**, but to utilize the better connectivity for the development of the countries alongside the transportation lines, **transportation corridors have to become “economic corridors”**.

Falling trade costs have to be met by **new economic initiatives in the region, investment, improved management and social programs** to prepare for the resulting change.

Formation of transport and logistics infrastructure



Единое транспортное пространство и общий рынок логистических услуг

Joint transport space and common market of logistics service

Joint transport space – is a complex of transport systems of States Parties, in frames of which are provided the unhampered movement of passengers, movements of goods and vehicles, their technical and technological compatibility, based on harmonized legislation of States Parties in transport sphere



Common market of logistics service – is a form of economic relationships in which are created the equal and parity conditions of provision of transport services. Features of functioning of their market by mode of transport are specified by current protocol and international agreements in frames of Union.

CREATION OF BACKBONE NETWORK OF TRANSPORT-LOGISTICS INFRASTRUCTURE ON THE EURASIAN TRANSCONTINENTAL CORRIDORS

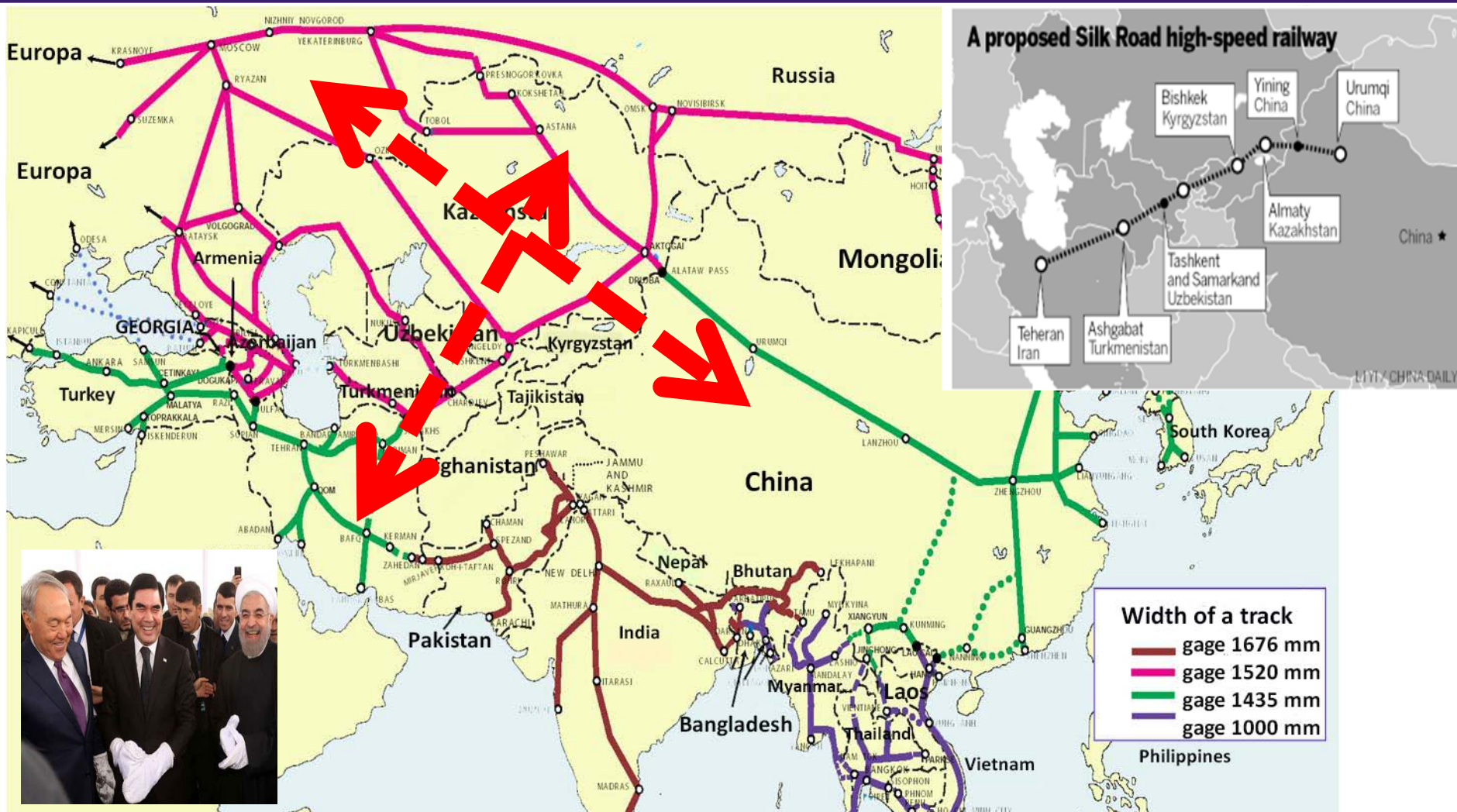


Internal terminal network	implementation period
Astana (second queue)	3 Quarter 2016
Shymkent	1 Quarter 2016
Aktobe	2016-2017
Atyrau	2017
Oral	2017
Aktau	2017
Kostanay	2017
Pavlodar	2017
Semey	2017

External terminal network	implementation period
1) TLC in port Bandar Abbas (Iran)	2016
2) TLC in port Klaipėda (Lithuania)	2016
3) TLC in port Mundra (India)	2017
4) TLC in Moscow (Russia)	2017
5) TLC in Yekaterinburg (Russia)	2017
6) TLC in Novosibirsk (Russia)	2017
7) TLC in Xi'an (PRC)	2018
8) TLC in Zhengzhou (PRC)	2018



The "Silk Road Economic Belt": one of the initiatives by various (geopolitical) sides for denser connectivity on the Eurasian continent



Source: <http://kk.convdocs.org/docs/index-73634.html?page=11>, http://www.chinadaily.com.cn/china/2015-11/21/content_22506412.htm, <http://www.railwaygazette.com/news/news/asia/single-view/view/iran-turkmenistan-kazakhstan-rail-link-inaugurated.html>, author

Integration in the field of railway transport

Unified tariffs of the Member States of the Eurasian Economic Union in rail transport services for the carriage of goods by types of communication (export, import and domestic)

Defined the conditions of application of the domestic tariff for transit traffic in the national territory of the Member States

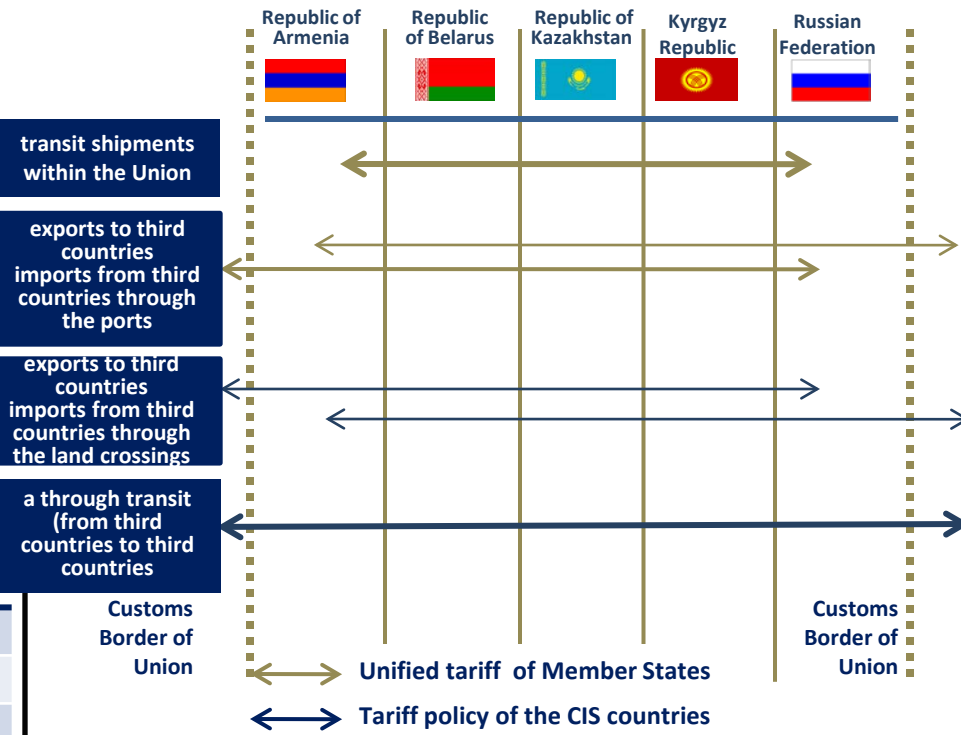
Defined the conditions of access of carriers of the Member States of the Union to the adjacent infrastructure of the Member States

Adopted recommendation on common approaches to the requirements and procedure for issuing safety certificates to railway transport

KEY INDICATORS OF THE RAILWAY TRANSPORT DEVELOPMENT EAEU MEMBER STATES IN 2014

	Republic of Armenia	Republic of Belarus	Republic of Kazakhstan	Kyrgyz Republic	Russian Federation	EAEU
Operating tracks, K km	0,8	5,5	15,3	0,1	86,3	108,3
Including electrified truck, K km	0,8	1,0	4,2	-	43,3	49,3
to a total in %	100	18	28	-	50	46
Locomotives, pcs	124	828	1941	53	17914	20 860
Freight wagons, K pcs	1,6	32,5	128,7	1,7	1206,5	1 371
Railroad passenger cars, pcs	41	1642	2413	430	23193	27 719
Rail freight turnover, bln tons/km	1	45	214	1	2298	2 559
Passenger miles, bln passengers /km	0,1	7,8	28	0,1	128,6	164,6
Transportations of freight, mln tons	3,0	141,4	275,4	1,5	1375	1 796,3
Passenger transportation, mln people	0,4	91,6	34,4	0,3	1076	1202,7

APPLICATION OF RAILWAY TARIFFS FOR TRANSIT TRANSPORTATION WITHIN THE UNION



transit shipments within the Union

exports to third countries imports from third countries through the ports

exports to third countries imports from third countries through the land crossings

a through transit (from third countries to third countries)

Customs Border of Union

Customs Border of Union

Unified tariff of Member States

Tariff policy of the CIS countries

Integration in the field of transport by road

International road transportation of goods performed by carriers registered on the territory of one of the Member States, carried out on without permit-based

between Member States on whose territory the carriers are registered and another State member







transit through the territory of other Member States

Between other Member States

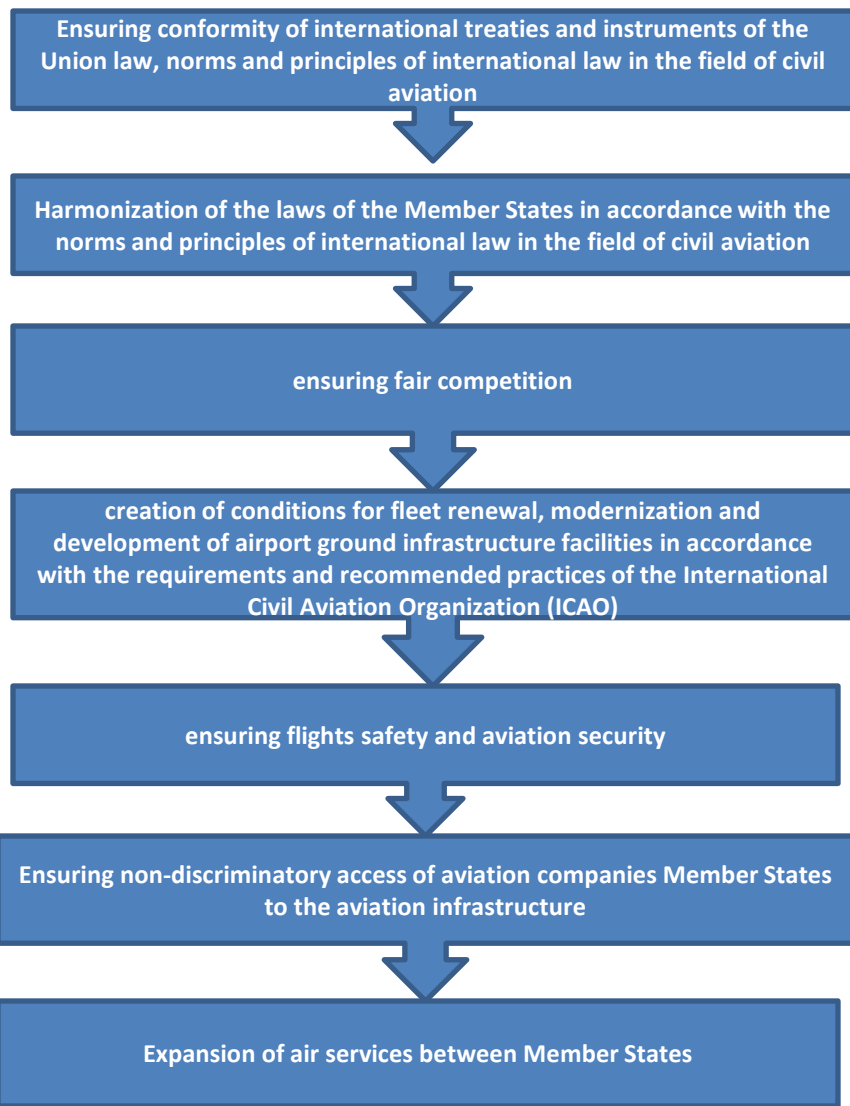
Defined the order of control of the vehicles (car) at the external border of the Eurasian Economic Union







The Member States adopted the Program of gradual liberalization of performing by carriers which are registered on the territory of one of the Union's Member States, road transport of goods between places on the territory of another Member State for the period from 2016 to 2025.

KEY INDICATORS OF THE HIGHWAY TRANSPORT DEVELOPMENT EAEU MEMBER STATES IN 2014

	 Republic of Armenia	 Republic of Belarus	 Republic of Kazakhstan	 Kyrgyz Republic	 Russian Federation	 EAEU
General-purpose roads, K km	7,8	101	97	34	1 396	1 635,8
Lorries, K pcs	15	414	569	115	6 235	7 348
Turnover, bln tons/km	0,5	27	155	1,3	247	430,8
Passenger miles, bln passengers /km	2,5	9,8	215	8	127,4	362,7
Cargo carriage, mln tons	5,4	196	3 129	27	5 414	8 771,4
Passenger transportations bln people	0,2	1,3	21,2	0,6	11,5	34,8
Quantity of International Automobile Border-crossing Point located on the external border of the Customs Union	4	25	18	6	120	173
* Taking into account the assessment of traffic volumes of individual entrepreneurs						

Integration in the field of air transport



KEY INDICATORS OF THE AIR TRANSPORT DEVELOPMENT EAEU MEMBER STATES IN 2014						
	 Republic of Armenia	 Republic of Belarus	 Republic of Kazakhstan	 Kyrgyz Republic	 Russian Federation	 EAEU
Length of air path , K km	7,8	101	97	34	1 396	1 635,8
Quantity of airline companies, pcs	15	414	569	115	6 235	7 348
Quantity of international airports, pcs	0,5	27	155	1,3	247	430,8
Turnover mln tons/km	2,5	9,8	215	8	127,4	362,7
Passenger miles, bln passengers /km	5,4	196	3 129	27	5 414	8 771,4
Freight transport, K tons	0,2	1,3	21,2	0,6	11,5	34,8
Passenger transportations mln people	4	25	18	6	120	173

The coordinated (approved) transport policy



Tasks

- creation of the total market of transport services
- acceptance of agreed measures on providing general benefits in the sphere of transport and implementation of general the practician
- integration of transport systems of the states members into world transport system
- improvement of quality of transport services
- safety on transport
- decrease in harmful effects of transport on the environment and human health
- forming of the favorable investment climate

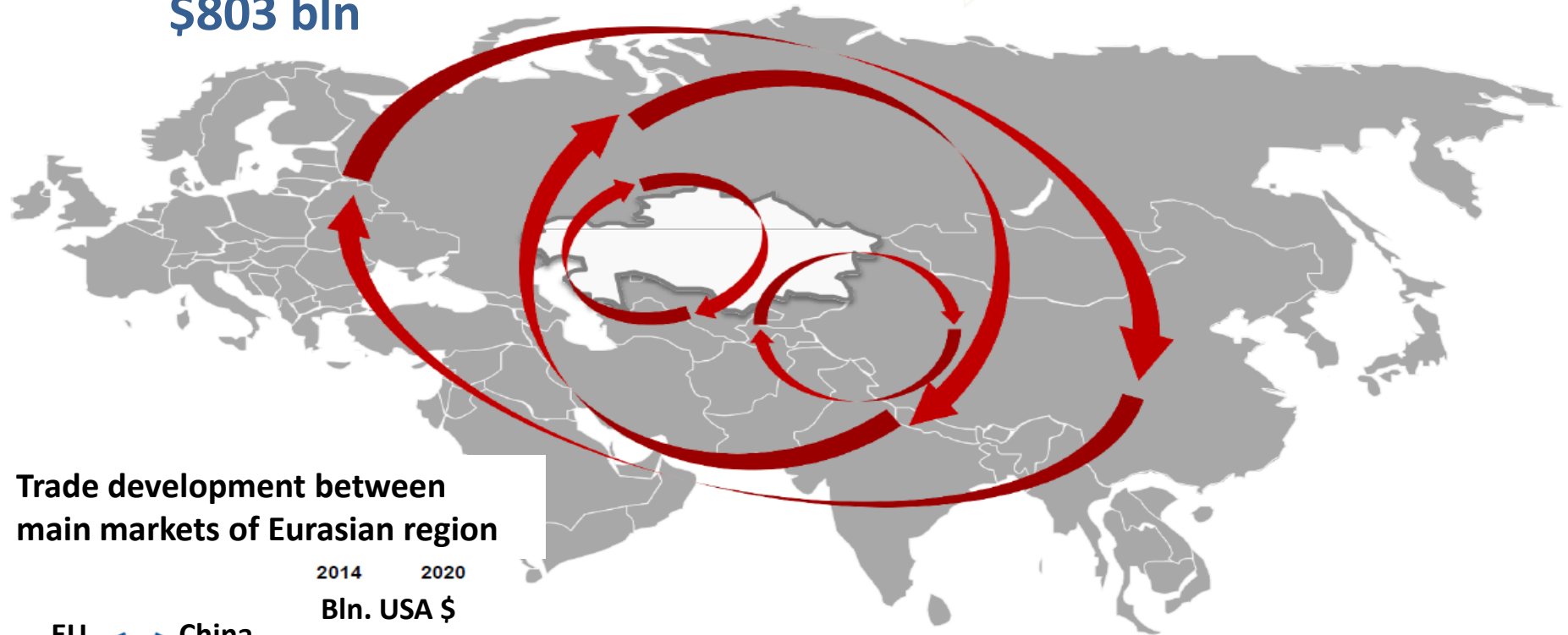
Priorities

- forming of single transport space
- creation and development of the Eurasian transport corridors
- implementation and development of transit potential within the union
- coordination of development of transport infrastructure
- creation of the logistic centers and transport organizations providing a transportation process optimization
- safety on transport
- creation of conditions for attraction and use of highly skilled personnel capacity of the states of members
- development of science and innovations in the field of transport

Dynamics of Change of amounts of Foreign Trade

Growth of trade volume

2014 y. **\$803 bln** in 1,5 time → **2020 y. \$1 200 bln**



Trade development between main markets of Eurasian region

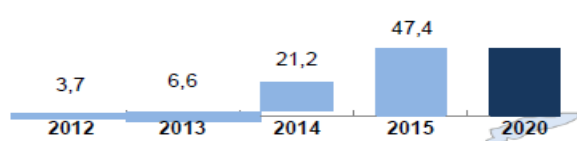
	2014	2020
EU ↔ China	615	800
RF ↔ China	95	200
Turkey ↔ China	24	100
Iran ↔ China	52	60
RK ↔ China	17	40

Growth of amounts of transportations between China and the EU

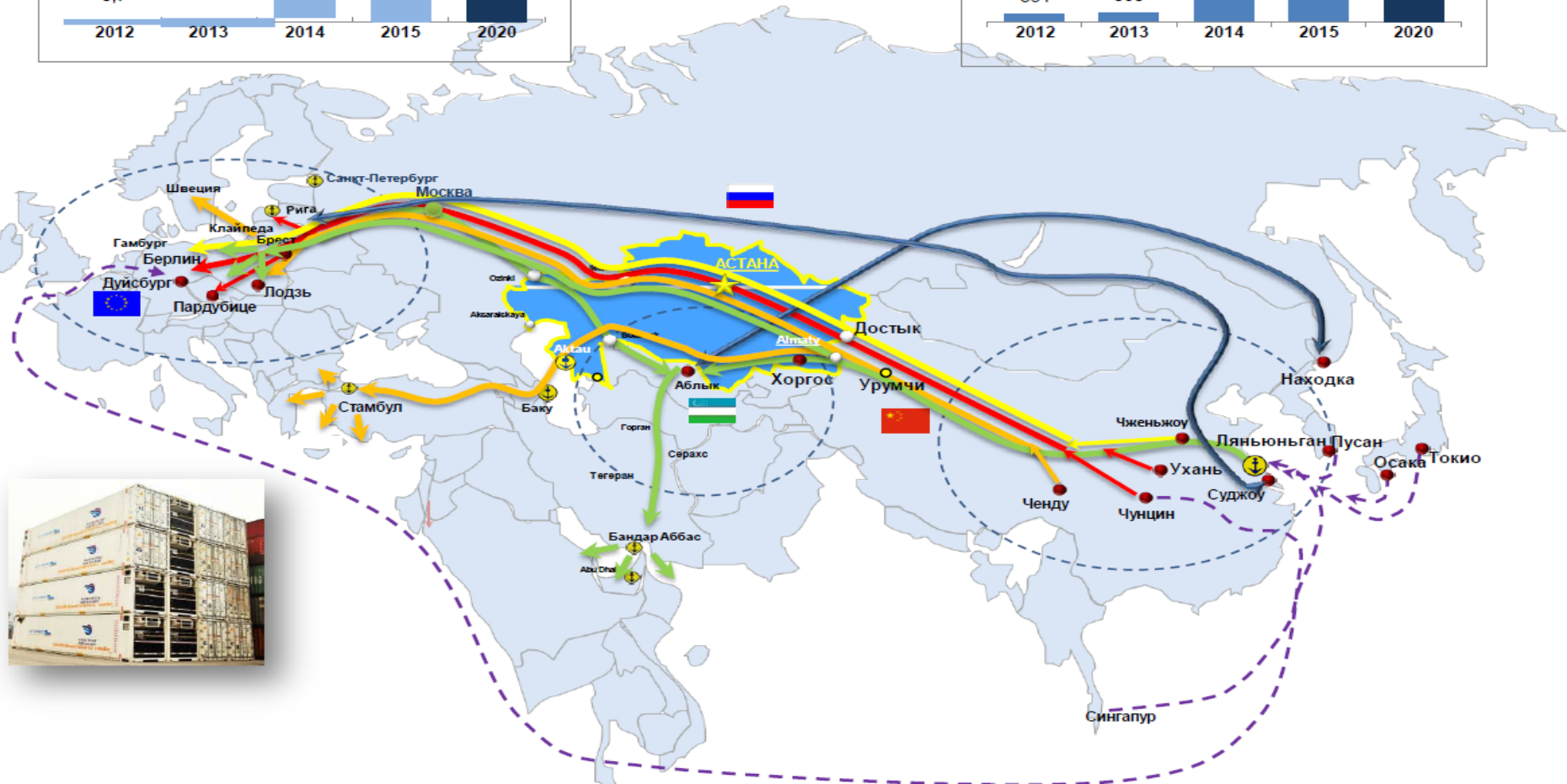
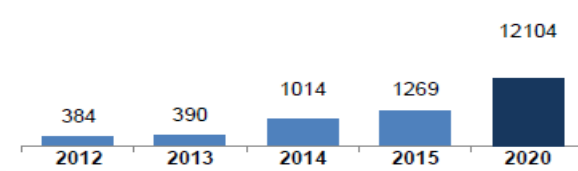
From 177 mln. tons to 170 mln. tons by 2020 y.

Development of Container transports through the territory of the Republic of Kazakhstan

Container transports China-Europe-China (thousands TEU)



Transit container trains (qnty. Trains)

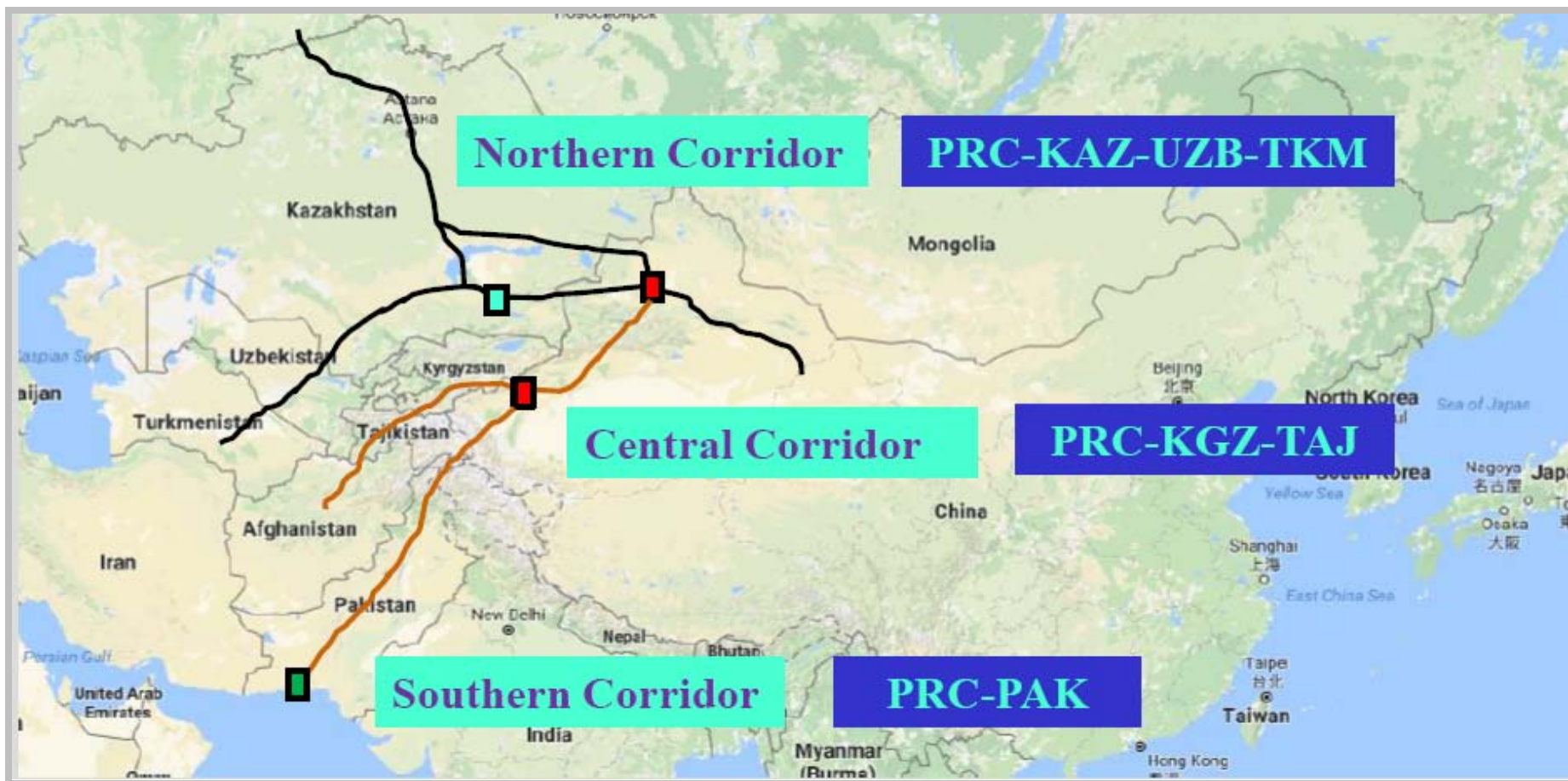


Development and upgrade of assets of RK for the period 2015-2020.

Development and modernization railway assets	\$9 210 mln
Construction of internal and external TLC network	\$930 mln
Development of the Aktay port	\$140,2 mln
Acquisition of dry cargo ships	\$208,4 mln
Construction of SEZ “Khorgos”	\$1521,8 mln
Investment UTLC	\$445,7 mln
Updating and rehabilitation of road infrastructure	\$8854,5 mln
Updating air transport and modernization airport infrastructure	\$1905,2 mln
Updating and modernization of sea transport	\$479 mln

Total amount of investments - \$23,7 bln

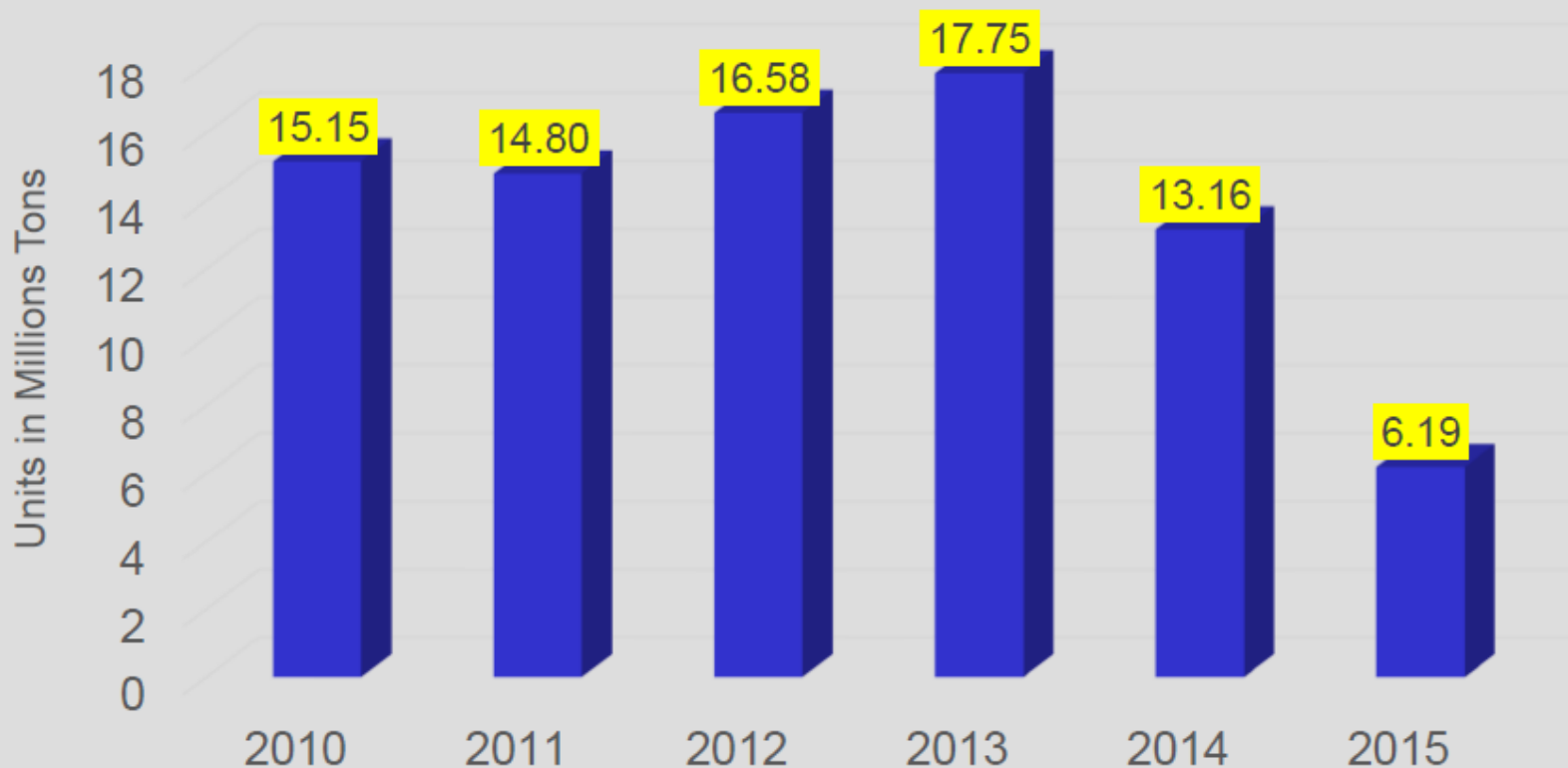
New Silk Road Transit Corridors



Comparisons of Transit Corridors

Corridors	Countries	Characteristics
Northern	PRC-Kazakhstan	<ul style="list-style-type: none"> ❖ Multi-modal, but railway is strategic ❖ Urumqi and Almaty are hubs ❖ Need to trans-load cargoes at border ❖ Important for transit to Azerbaijan, Uzbekistan and Turkmenistan
Central	PRC-Kyrgyz Republic-Tajikistan-Afghanistan	<ul style="list-style-type: none"> ❖ Road only ❖ Kashi is a transit hub (also special economic zone) ❖ Karamyk is not open to international transit
Southern	PRC-Pakistan	<ul style="list-style-type: none"> ❖ China-Pakistan Economic Corridor (CPEC), investment of USD 46 billion ❖ Links to Karachi and Gwadar (seaports have shortest distance to Central Asia) ❖ Potential as transit and energy corridor

Annual Tonnage Through Alashankou



Source : Urumqi Customs

Comparing Conventional vs Express Trains

Comparison	Conventional	Express
Route	Urumqi-Farap (Turkmenistan)	Chongqing-Duisburg (Germany)
Distance	2,833 km	11,179 km
Travelling Time	63 hours (2.5 days)	232 hours (9.5 days)
Border Crossing Time	272 hours (11 days)	112 hours (4.5 days)
Travelling Speed	45 kilometers/hour	48 kilometers/hour
Overall Speed	8.5 kilometers/hour	38 kilometers/hour
Cost	\$4,672	\$8,278
Cost per 500 km	\$824	\$370

Both samples are shipments of 40'' container of electrical products.

Key Barriers to Regional Trade

Macro-Economic Factors

- ❖ **Weak global demand**
- ❖ **Sharp devaluation of domestic currencies**
- ❖ **Restrictive policies and taxes on transit trade**
- ❖ **Difficult to draw talents (e.g. In PRC, remote areas like Xinjiang will find it hard to attract talents from more developed coastal provinces)**

Limited Industrial Eco-system

- ❖ **Generally the industrial eco-system in Xinjiang and Central Asia are not diversified and deep**
- ❖ **Little complementarity in trade structure limits regional trade**

Key Barriers to Regional Trade

Transport

- ❖ Cabotage restrictions result in need for trans-loading
- ❖ Empty backhaul increases transport cost
- ❖ Lack of trade finance facilities (e.g. limited liability insurance for carriers)

Border Crossing

- ❖ Khorgos – Shipments of consumer goods are assortment (high variety, low volume). Clearance are cumbersome and results in long delays for trucks.
- ❖ Alashankou-Dostyk – Imbalanced capacity on both sides restricts smooth throughput of trains

The main problems of the OBOR project

- Disproportion in international trade between Europe and Asia, weak participation of the countries of Central Asia due to weak demand and mismatch of technical and technological standards, which leads to the empty transport traffic, the high cost of service and downtime.
- The presence of the legal contradictions and different targeted programs participants of transit. Weak interactions and underdeveloped institutions to solve problems. Non-application of international experience.
- Technological incapacity in competitive struggle. FDI programs aren't contain articles on development and innovative solutions to problems of education, applied research and science.
- The weak interaction of developed European logistics schools with growing educational and research infrastructure in Central Asia and China.
- The internal problems of the transport sector of Central Asia: the struggle of the hierarchy with the market, the failing of client-orientation, low logistics culture.

PLC offers on cooperation with International partners

- Organization of monitoring sites for monitor the technical, technological and economic parameters of transport for making the foundations of transportation and logistics options, their evaluation and transfer into sales.
- Formation of laboratories on price, speed, route, transport and legal optimizations of logistics services, offering the product line of logistics services in Central Asia and Kazakhstan, which provide the infrastructure created for the management of the markets in Europe, Central Asia and China.
- Joint R&D work in the interdisciplinary research and international projects, joint development opportunities of projects of Horizon2020, Marie Skłodowska-Curie, joint crowdfunding and fundraising in logistics studies. Creation of constants and the temporary working groups on facilitation methods on the basis of universities and the project centers.

PLC offers on cooperation with Austrian partners

- Holding joint “work shops”, “ summer schools”, webinars, simulation software for logistics in Europe, Central Asian countries and China to study trends and concepts in logistics activities on the principles of definition and broadening the base “hard skills” and “soft skills” with the help of the concept of “agile”.
- The study and comparison of opportunities and risks, implementation experience, logistics performance standards (starting with ODSP) and the products of the European logistics market to the market of Kazakhstan, participated in the implementation of the principles of 5S transit potential of Central Asian (Speed + Service + Safety + Cost + Stability)
- Joint training of qualified specialists who are able to provide logistic approach in the management of the created corridor. Attracting young talents to the industry.

Every Friday from 14: 00 doors of Project Logistic Center are open for all interested persons..

The additional meeting and consultations we ask to co-ordinate beforehand by phone: 8 (727) 272 55 65

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Project Logistics Center

Kazakhstan, 050010 Almaty, Kunayev Str. 181-B, off. 703, Telephone/Fax: +7 727 267 23 76; 272 55 65