

**“Financing Transport
Infrastructure”**

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Director Transport and Communication

ECO

future of railway freight depend on

- travel time, costs,
- legal system,
- cargo types and,
- environmental considerations.

ECO Railway potential in East-West Asia

- The ECO rail network by connecting Europe to China, India and central Asia has the potential to offer a promising alternative to the sea-air option, if it can lower prices and offer a reliable and efficient service.

Rail Network Privilege

- Rail's primary advantage is its transport time. Railway transport from terminal to terminal is roughly twice as fast shipping by ocean – going vessel.

Outstanding Issues

- Obsolete rolling stock and shortage of rail cars, containers and locomotives;
- Non-compliance of existing infrastructure and technology with international quality standards;
- Inefficient processing capacity at border crossing points;
- Poorly developed logistic and communications networks and road services facilities;
- Insufficient capacity for cargo handling and,
- Different rail gauges

Rail transport on Euro-Asian routes governments/ operators

- Governments and investors need to modernize transport infrastructure and harmonies the legal environment.
- Operators have to improve their delivery time and service quality,

“ECO Railway Network Development Plan”

The **“ECO Railway Network Development Plan”** has been prepared by the **Consultant (Professor Dimitrios Tsamboulas-Consultant),.**

1. Identifying the main rail transport corridors in the ECO Member States .
2. Identifying the priority rail transport infrastructure projects along the proposed ECO priority rail routes.
3. Develop an ECO Railway Network Investment Plan of priority on-going and/or planned rail transport infrastructure projects along the proposed ECO priority rail routes.

Two key tasks of the study

- Identification of the main rail transport corridors in the ECO region
- Identification of the priority transport infrastructure projects along the proposed routes,

I-- ECO Rail Routes

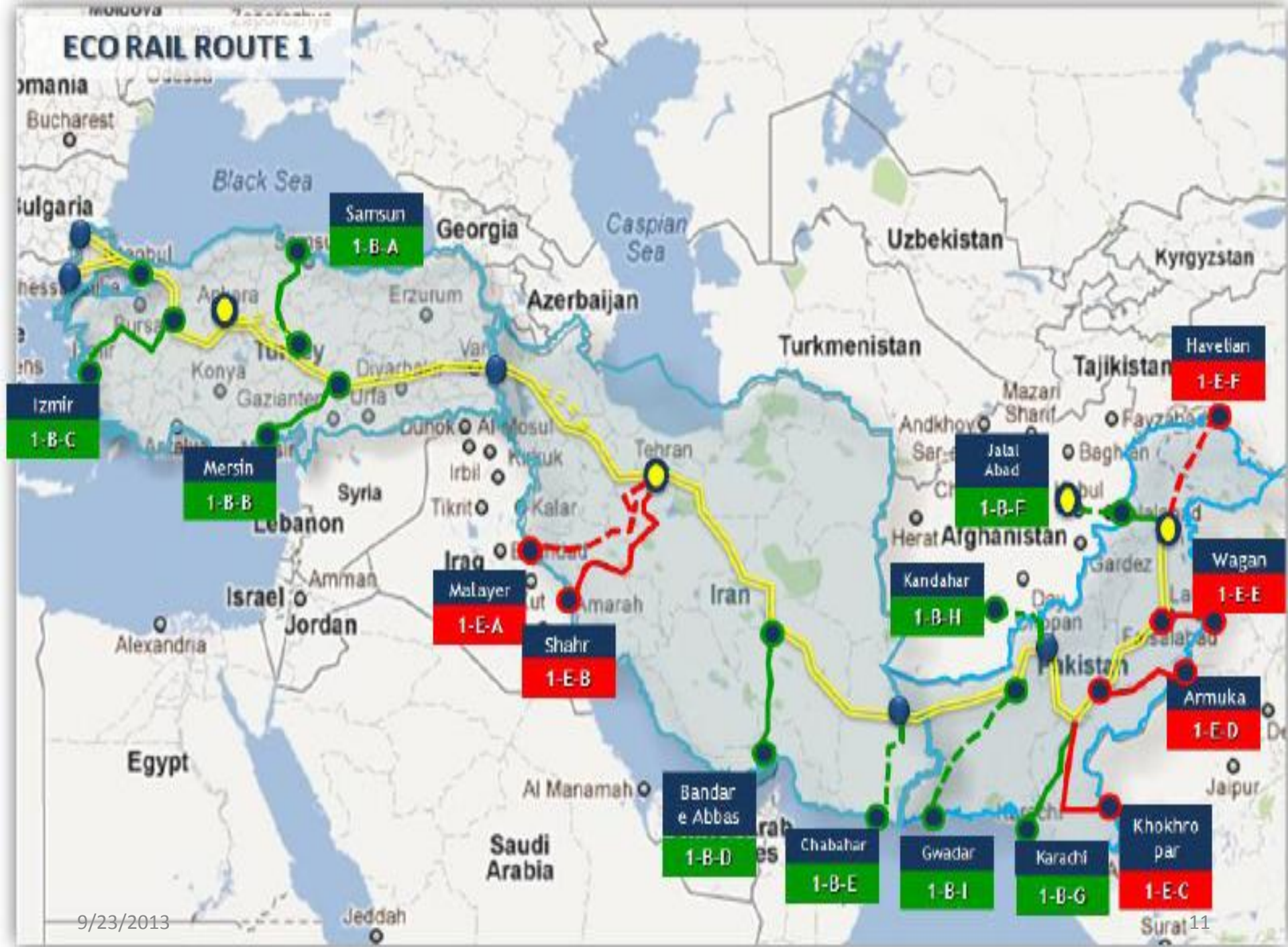
The key rail links and rail border crossings in the ECO territory, based on the following guidelines:

- Proposed links/routes should be of international importance for transport between the ECO countries
- Proposed links/routes should connect to the proposed ECO routes

ECO Rail Route 1

- **starts at the eastern borders of Turkey with Bulgaria and Greece, crosses Turkey through Istanbul, Ankara, as well as through the Lake Van by rail-ferry. It continues through the border crossing of Kapikoy onto Iran, crossing the Iranian territory through Aprin (near Tehran) and ending up at the border crossing with Pakistan (Mirjaveh). Finally, it follows a north-eastern direction through the Pakistani territory ending up in Islamabad.**
- The route serves the connection of the ECO Member States Turkey, Iran, and Pakistan with possible extensions towards India, Iraq and China. It is also connected to key maritime ports in the ECO region, in Turkey, Iran and Pakistan
- A missing link is considered as an additional extension to the route, that is, the Rawalpindi-Havelian towards the border with China onto Khanjurab.

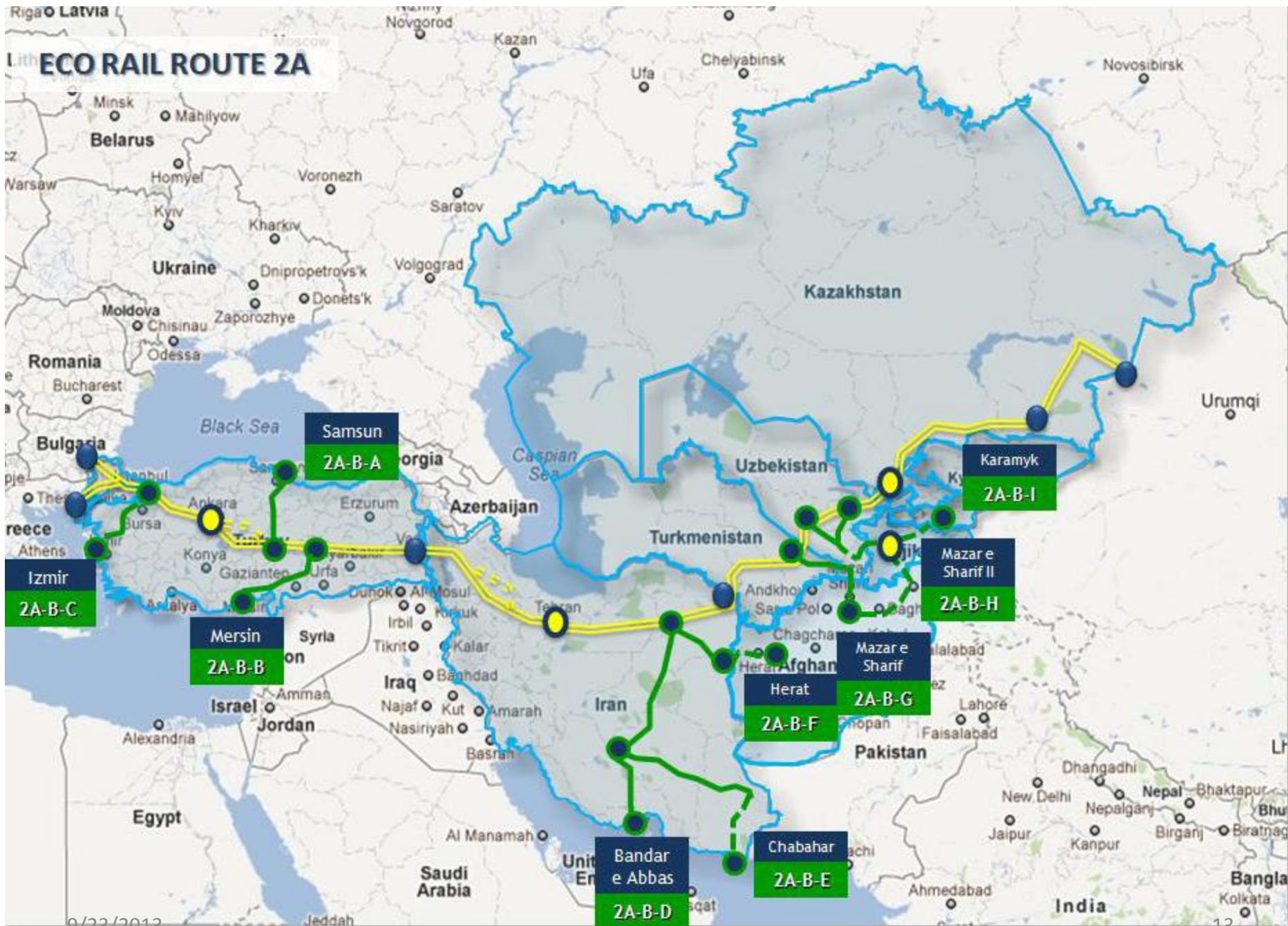
ECO RAIL ROUTE 1



ECO Rail Route 2A

- **Route 2A is similar to Rail Route 1 up to the city of Aprin (near Tehran, Iran), following then a north eastern direction through Turkmenistan (Mary), Uzbekistan (Navoi, Tashkent) and ending up at the borders of Kazakhstan with China, after having passed the city of Almaty.**
- The route serves the connection of the ECO Member States Turkey, Iran, Turkmenistan, Uzbekistan and Kazakhstan. It is also connected to maritime ports in the ECO region, in Turkey and Iran.

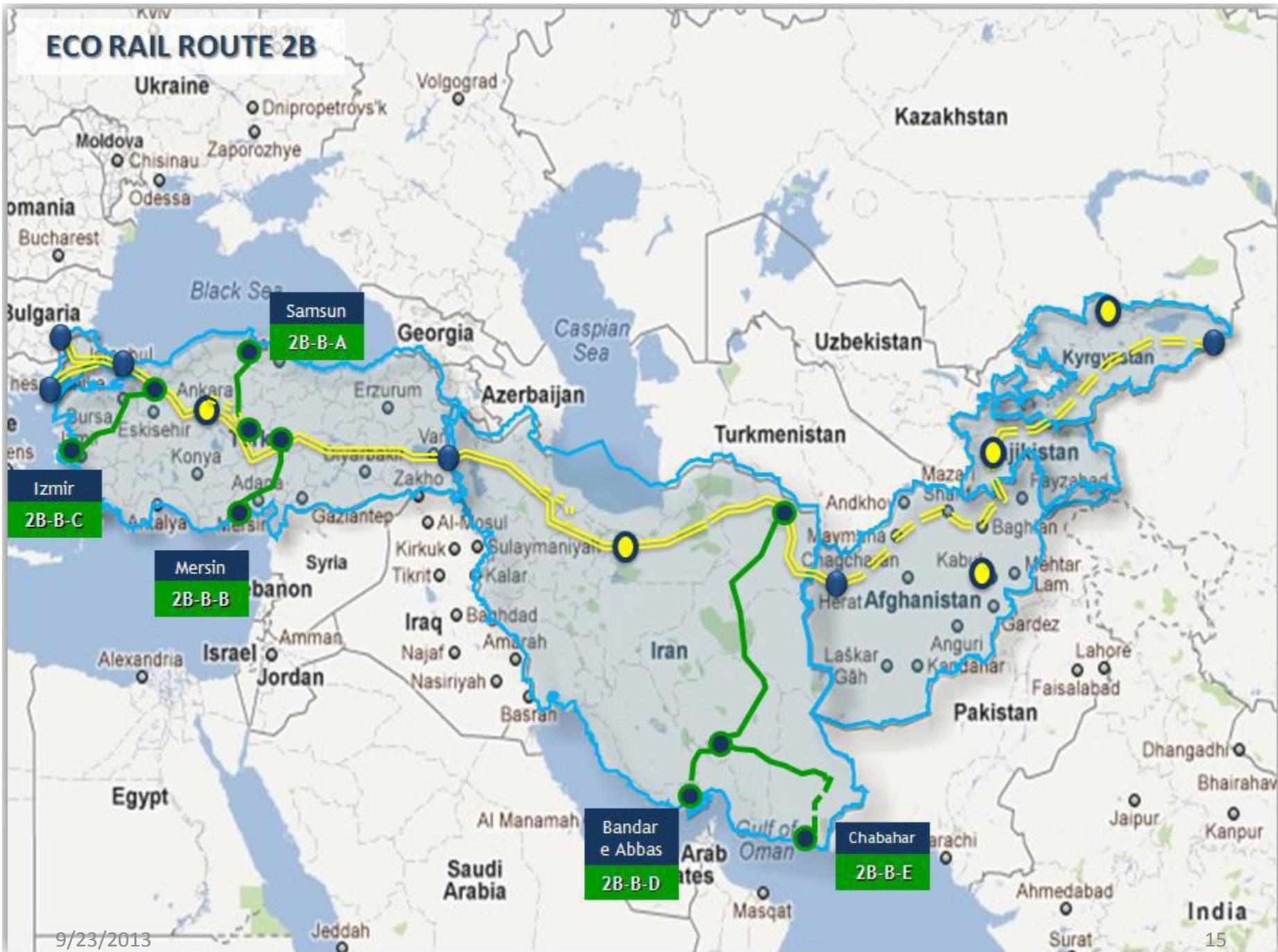
ECO RAIL ROUTE 2A



ECO Rail Route 2B

- **This route is similar to Rail Route 2A up to the city of Neyshabur in Iran, continuing on an eastern direction onto Afghanistan through Herat. Then it follows on the missing link Heart-Mazar e Sharif- Nijniy Pyanj (border with Tajikistan), followed by the missing link Nijniy Pyanj -Kurgan Tube in Tajikistan. Finally, the route ends with the missing link Karamyk-Irkhestam through Kyrgyzstan towards China.**
- The route serves the connection of the ECO Member States Turkey, Iran, Afghanistan, Tajikistan and Kyrgyzstan. It is also connected with maritime ports in the ECO region, in Turkey and Iran.

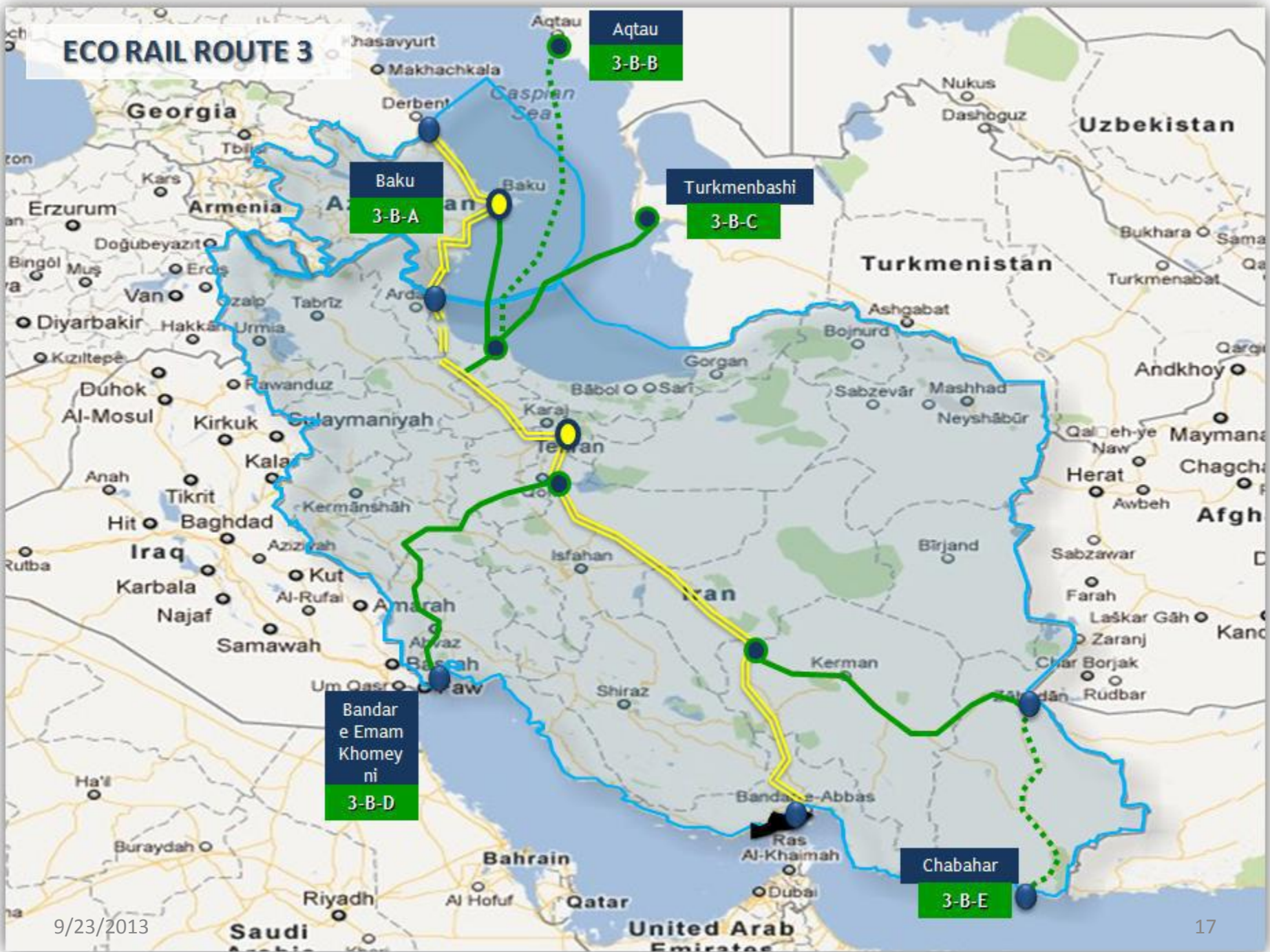
ECO RAIL ROUTE 2B



ECO Rail Route 3

- **Route 3 constitutes the “left side route” of the Caspian Sea. It follows a southern direction, originating at the border crossing of Afghanistan with the Russian Federation, crossing on a southern direction the two ECO Member States, Azerbaijan and Iran, ending up at the Bandar e Abbas port in Iran. In this particular route, a key link is under construction, this of Astara, which involves a bridge connecting the railway of the two countries.**
- The route serves the connection of the ECO Member States Afghanistan, Azerbaijan and Iran. It is also connected with key maritime ports in the ECO region, in Turkey and Iran.

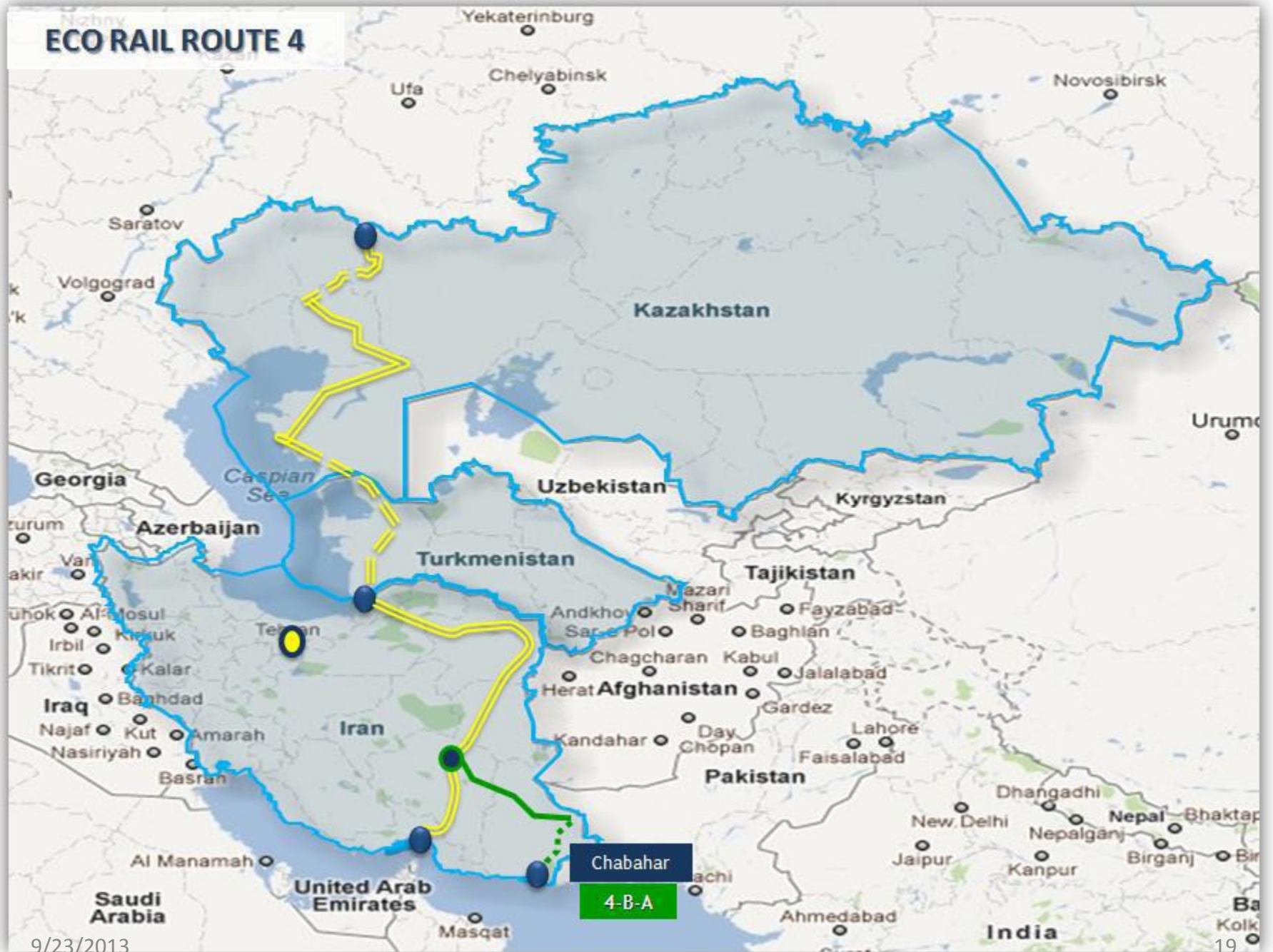
ECO RAIL ROUTE 3



ECO Rail Route 4

- **constitutes the “right side route” of the Caspian Sea. It starts in Kazakhstan at the border crossing with the Russian Federation (Zhaisan), continuing on a south-western direction to Aktau, continuing then south onto Turkmenistan (Bereket), to the border with Iran, crossing the Iranian territory through Neyshabur and ending up in Bandar e Abbas port. There is a major link under construction at the borders of Turkmenistan with Kazakhstan. This route constitutes the main alternative to the North-South corridor that currently connects the Russian Federation with the port of Bandar Abbas in Iran.**
- The route serves the connection of the ECO Member Kazakhstan, Turkmenistan and Iran.

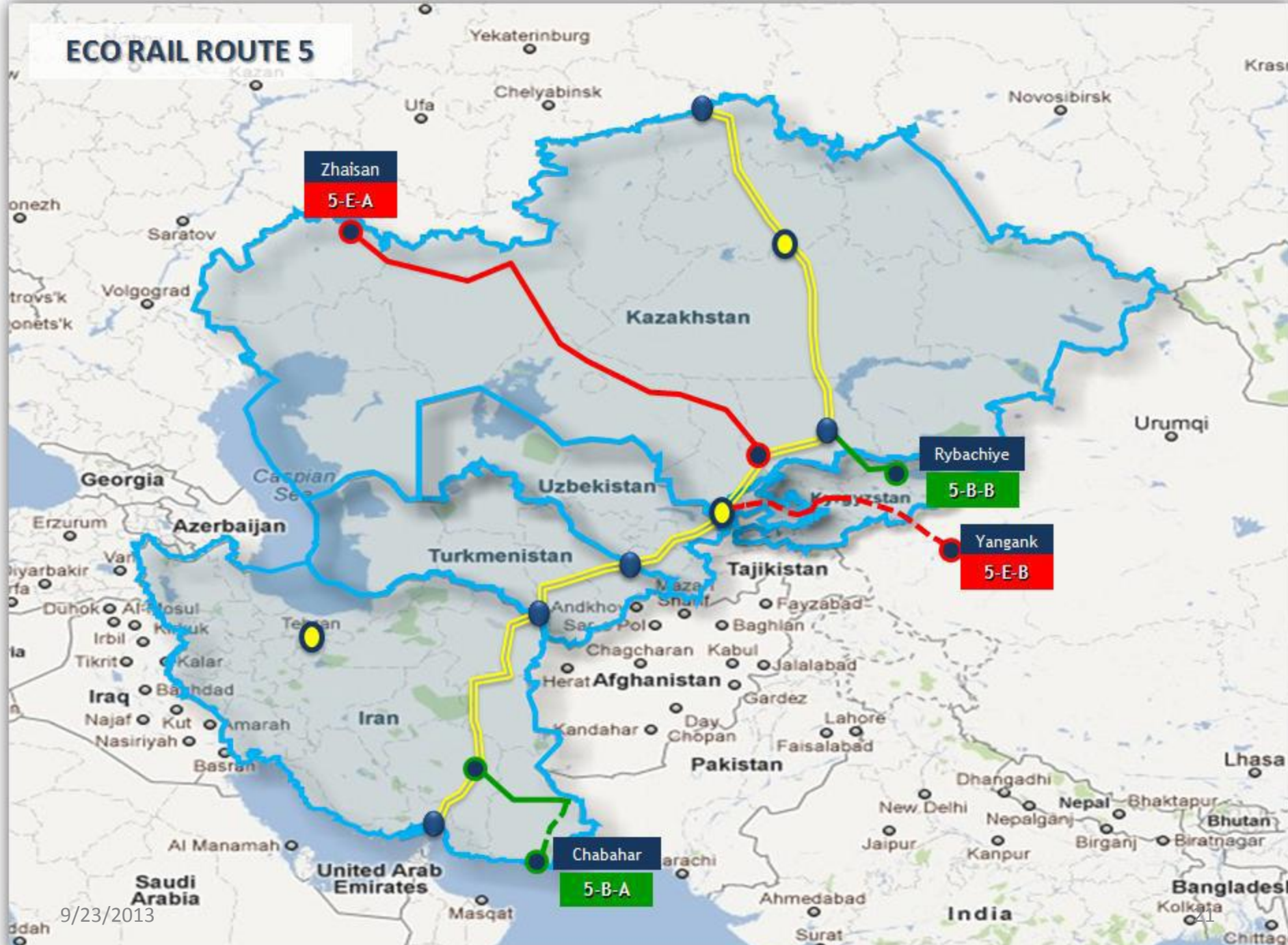
ECO RAIL ROUTE 4



ECO Rail Route 5

- **Route 5 Originates in the borders with the Russian Federation (Mamlyutka or Bulaevo), crossing Kazakhstan on a southern direction through Shymkent, crossing onto Uzbekistan through Tashkent and Bukhara to the border with Turkmenistan. It then continues on a south-western direction through Turkmenistan, crossing over to Iran and ending up at the Bandar e Abbas port.**
- The route serves the connection of the ECO Member Kazakhstan, Uzbekistan, Turkmenistan and Iran, with extensions towards China and the Russian Federation. It is also connected with key maritime ports in Iran.

ECO RAIL ROUTE 5



9/23/2013

II--ECO rail transportation infrastructure projects

- a database, listing the rail infrastructure projects per country, together with key information regarding their location with regard to the identified routes, current status, start and end dates, cost and sources of financing, etc.

key information database listed on the basis of 4 Categories

- **Category I: projects, which have funding partially secured and are on-going and expected to be completed in the near future (up to 2013).**
- **☐ Category II: projects, which may be funded or their plans are approved and are expected to be implemented rapidly (up to 2016).**
- **☐ Category III: projects requiring some additional investigation for final definition before likely financing and implemented (up to 2020).**
- **☐ Category IV: projects requiring further investigation for final definition and scheduling before possible financing, including projects, for which insufficient data existed. (most likely to be implemented after 2020)**

key information (Iran/Afganistan)

					mil USD)	
Afghanistan	Survey, design, and construction of second phase of rail way from Kunduz to Shikhan Bander	2B		3 years	120	IV
Afghanistan	Survey and Construction of rail way from Tarkham to Jalalabad	1-B-F	2011	2013	130	I
Azerbaijan	The construction of the railway line of Astara-Iranian border across the North-South transport corridor	3	After completion of the construction of the railway line Qarvin-Rasht-Astara (Iran)			IV
Iran	The route starts from Miyanch existing station (along Tehran-Tabriz railway), passes mainly through mountainous areas and reaches Tabriz existing station.	1,2A,2B	2001	2014	487.3	I
Iran	Construction of two routes: Qarvin-Rasht-Anzali and Rasht - Astara - The project serves to connect Gilan Province, Anzali port and Astara		2002	2014	329.3	II
Iran	Border to the country rail network	3	2010	2015	256.8	II
Iran	Gorgan-Inchikhan: The route starts in Iran and continues to Turkmenistan and ended in Khazkhatan	4	2009	2012		I
Iran	Electrification of Bafq-Bandar Abbas	1-B-D	2012	2016	560	II
Iran	Electrification of Tehran-Mashhad	2	2012	2014	1200	II
Iran	The route will starts from Torbat e Heidarich , stretches towards Maidan Sangan (Khat) and ended in Hrat	2A-B-F	2005	2012	141.28	I
Iran	Arak-Kermanshah-Khoranvi	1-E-A	2001	2013	670	I
Iran			2012	2016		I
Iran	Chabahar-Zahedan Railway	1-B-E		2014	3931	I

key information(Kazakhstan)

Iran	Chabahar-Zahedan Railway	1-B-E		2014	3951	I
Kazakhstan	Electrification section of the Makat-Kandygash	4			240	IV
Kazakhstan	Electrification section of the Dostyk - Aktogai	2A	2009	2012	546	I
Kazakhstan	Electrification section of the Almaty - Aktogai	2A	2009	2013	1054.4	I
Kazakhstan	Construction of second tracks at sunset stretches on sections Iletska – Zhaisan and Kyzylorda – Shieli	5				IV
Kazakhstan	Increasing transport capacity of the railway line Shu-Almaty	2A	2012			I
Kazakhstan	Construction of a new railway Uzen- border of Turkmenistan - This project aims at the creation of additional transit routes directly connecting Kazakhstan and central regions of Russia, Turkmenistan, Iran, Persian Gulf countries, South and South-East Asia	4	2009	2011	442	I

key information (Turkey)

Turkey	Ankara – Istanbul High Speed Train Project	1,2A,2B	2003	2013	3713.9	I
Turkey	Marmaray Project - It covers the railway line between Halkali – Sirkeci (Istanbul) – Tube Tunnel under Istanbul Strait - Haydarpaşa (Istanbul) – Gebze	1,2A,2B	2004	2013	5037.5	I
Turkey	Bogazkopru – Ulukisla, Ulukisla-Yenice, Mersin – Adana – Toprakkale Signalling, Telecommunication and Station Extension Project - The existing railway line will be rehabilitated with station loop extensions, new signaling and telecommunication systems will be installed during the years of 2008 – 2012.	1,2A,2B,6	2008	2012	179.4	II
Turkey	Electrification Project - new electrification system will be installed along the route during the years of 2011 – 2015.	1-B-B, 2A-B-B, 2B-B-B	2011	2015	89.6	
Turkey	Ankara Sivas High Speed Train Project - new double track high speed line with signalling, electrification and communication systems will be constructed, 461 km in length, along with constituting the East-West axis in the high speed train line and shortening of the current travelling time from 12 hours to 3 hours.	1,2A,2B	2007	2014	1461.3	II
Turkey	Eskisehir - Kutahya - Balikesir Signalling & Telecommunication Project will be realized during the years of 2011 – 2015.	1-B-C, 2A-B-C, 2B-B-C	2011	2015	237	III
	Electrification project will be installed along the route during the years of 2012 – 2016.		2012	2016		
Turkey	Initially Technical Assistance Project will be realized to facilitate the modernisation of the existing railway infrastructure between Samsun and Kalin	1-B-A, 2A-B-A, 2B-B-A	2012	2013	179	III
	Samsun - Kalin Modernization Project - Initially Technical Assistance Project will be realized to facilitate the modernisation of the existing railway infrastructure between Samsun and Kalin		2013	2016		
Turkey	Lula Van New Ferry Procurement (Northern Pass Project): The overall objective of the project to improve the infrastructure and the modal split in favour of railway sector, while increasing safety level and reducing travel time, by procurement of new ferries and upgrading existing piers.	1,2A,2B	2006	2011	79.6	I
Turkey	Kaysi – Otlukaya Electrification Project	1,2A,2B	2011	2015	116	II
Turkey	Pehlivanöyü - Uzunköprü –Bardir with Green Modernization Project: the whole line section consisting of 99 km single track will be signalled and its infrastructure will be upgraded for higher operational speed and higher line capacity.	1,2A,2B	2010	2012	17	I

key information (Kyrgyzsatn)

Kyrgyzstan	China-Kyrgyz-Uzbek trunk railway project - Project's main idea is a creation of south corridor of Eurasian transcontinental trunk railway, which is to connect pacific ports with Persian Gulf and Mediterranean getting through the territory of Kyrgyzstan.	5-E-B	2012	2018	2000	II
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key information (Pakistan)

Pakistan	Up-gradation of Quetta-Kohi Taftan section which will be an important part of the international route starting from China to Europe as conceived under Trans Asian South Corridor.	1			625	III
Pakistan	New rail link for connecting Gwadar Port with existing Railway network at Mastung. The rail link is considered absolutely essential for the optimum operation of the port to transport the goods from the port to up country and neighboring states i.e. Afghanistan, Iran, and Central Asian Republics.	1-B-I			1987	III
Pakistan	New rail link from Havelian (Pakistan) to Khanjurab (Pak-China Border). It would provide a direct link between Pakistan and China, which mutual trade is bound to grow manifold in the future. The project would provide an opportunity to create a new international corridor to link China, Central Asian States and Russia.	1-E-F			9589.6	II
Pakistan	New rail link between Peshawar and Jalalabad. It will boost up trade and strengthen socio cultural relations between Pakistan and Afghanistan. It will provide new opportunities to explore the vast market of Central Asia and even Russia.	1-B-F				II
Pakistan	New rail link between Chaman (Pakistan) to Kandhar (Afghanistan). It will provide access to Pakistani sea ports and as such, this route would be one of the busiest and important links between the two neighboring countries.	1-B-H			148	II
Pakistan	Provision of 3rd and 4th freight lines between Karachi-Kotri.	1-B-G			184.5	III
Pakistan	Provision of alternative route to link Sibi with Spezand bypassing Bolan pass.	1			296.5	II

key information (Tajikistan)

Tajikistan	Construction of new railway line Ayvaj(Tajikistan) – Taganguzar – Khulm – (Afganistan). It will allow the transportation of goods and passengers within Tajikistan territory from Russia, Kazakhstan and other interested CIS countries, as well China through Afghanistan to Iran, India, Pakistan, Turkey and others.	2B			30.4	II
Tajikistan	Construction of Kolkhozabad-Nijniy Pyanj-Kunduz (Afghan border). It aims to create new transportation opportunity for the country and allow other countries to reach Afghanistan using transit potential of Tajikistan.	2B			90	II
Tajikistan	Construction of Vahdat – Karamyk railway. It will create a new railway network connecting China with Iran through the territory of Kyrgyzstan-Tajikistan and Afghanistan	2B			3000	II

Follow up actions on effectiveness of ECO Rail Routes and Projects

- The Council requested IDB to continue its assistance to ECO projects envisaged in the ECORNDP for conducting technical and financial pre-feasibility or feasibility studies. The Council asked the CPR to replenish the TTFA Fund to assist in financing feasibility studies and other activities related to effective implementation and monitoring of the ECORNDP.
- The Council called on all relevant national, regional and international organizations and funding institutions, including IDB, ADB, ECO-TDB and WB to actively participate in financing and implementing the projects envisaged in the ECORNDP.
- The Council instructed the Secretariat to organize donor conferences and inter-agency meetings in the context of the trilateral MoUs among ECO-IDB/UNEESCAP and ECO/IDB-UNECE to accelerate the preparation of the action plans and smooth financing of the projects.
- The Council asked the ECO-TDB to set up a regional partnership forum to boost partnership with the development and financial agencies, and national and regional stakeholders for implementation of the ECORNDP.

Follow up actions on harmonization the Rail legal environment in ECO region

- **Joint workshop with UNECE on Annex 9 of Harmonization Convention**
- **Joint workshop with UNECE on Unified Rail Law**
- **Action Plan signed between the ECO and the UIC**

Joint workshop with UNECE on Annex 9 of Harmonization Convention

- the ECO Secretariat will planning a joint workshop with UNECE to encourage all member states to join Harmonization Convention and to promote implementation of the Annex 9 of the harmonization convention with the main objective the decrease of travelling time along ECO rail corridors

Joint workshop with UNECE on Unified Rail Law

- ECO organized a joint workshop with UNECE on June 2013 for promoting implementation of the common CIM/SMGS consignment note and the principles of the unified railway law with the main objective the decrease of travelling times and of the operational costs

Action Plan signed between the ECO **and the UIC**

- ECO plans to take concrete measures for implementing the activities envisaged in the Action Plan signed between the ECO and the UIC in June 2012

ECO Road/Transit Facilitation Projects

- Islamabad- Tehran- Istanbul Corridor (ITI)
- Kyrgyzstan, Tajikistan, Afghanistan , Iran Corridor (KTAI)

ECO-IRU cooperation

Action plan

- OBJECTIVES:
 - strengthen joint ECO/IRU inter-Organizational cooperation
 - Promote the TIR system
 - Support implementation of TTFA
 - Cooperate to ensure IDB technical assistance to ECO
 - Promote road transport
 - Improve road safety
 - Fight against narcotics

ECO/IRU cooperation

Joint achievements

- (iii) Upon instruction of ECO Heads of State in December 2010, they agreed to implement ECO Regular Monitoring of Trucks in partnership with NELTI-3 (ECO RMT), where 29 companies in 8 ECO Member States regularly provide data, now.
- (iv) IRU supports to create a regional ECO License similar in nature with the ECMT.
- (v) IRU supports to develop Islamabad-Tehran-Istanbul Corridor (ITIC) as proposed by some Member States and approved within the ECO. IRU proposed a draft framework and action plan and remain ready for necessary more support.

Thanks

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