# New developments in the Belt and Road strategy and the relationship between Pearl Delta region and Hong Kong



Thomas Chan,
One Belt One Road Research Institute,
Chu Hai College
July 2017, Hong Kong

# Geostrategic meaning of the Belt & Road strategy of China – for a multi-polar world



1. China will resurge as the largest economy of the world (already the largest by ppp in 2014) restoring the past glory during the Silk Road era for

a) continuous growth and development amidst competition with other industrializing and industrial economies – not to repeat the history of relatively slow growth during the rise of the west, and not fallen into the trap Japan has found itself now;

b) leading the world with a new development model – sustainable growth but with a more complete blending with new technologies (unlike the US new technologies are stored for military supremacy & economic domination in the world) – a new lifestyle based on ubiquitous & instant networking (on 5G mobile telephony & quantum technologies) first to be practice in China and exported in the form of commodities just like the lifestyles associated with silk and tea.

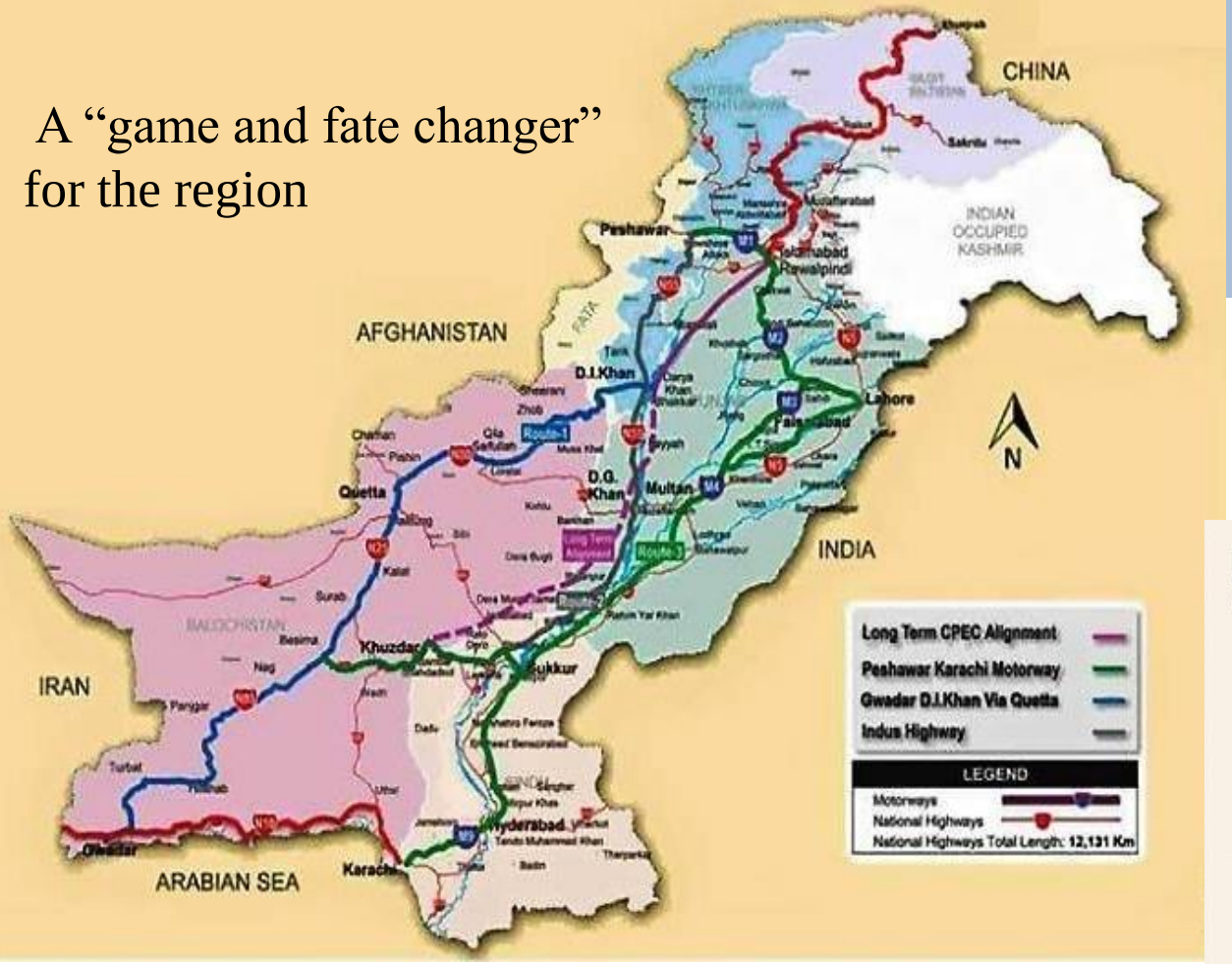
2 China resurgence promotes a world of peace and development, and alliance of civilizations, breaking down all politico-economic barriers created by previous or present hegemons

# Progress in the Belt and Road strategy



1. The strategy has been embraced by most, if not all countries and economies along the overland and maritime routes; over 100 countries joined by having some sort of agreements with China and commitment to it with their resources and policy efforts;
2. Through multilateral agreements, Chinese funds have been committed to set up specific regional funds (e.g. in Africa, South-eastern Europe), and international investment organizations (AIIB, BRIC Development Bank, & the proposed Shanghai Cooperation Organization Development Bank) to supplement funding for individual countries and projects by Chinese banks. There are also bilateral agreements in many other trade and economic cooperation areas;
3. The first country project is Pakistan (US$ 64 billion for 6 years, but after May 2017 would have another US$ 50 billion for hydroelectric projects), and the first completed project is the railway in southern Tajikistan (started in 2015 & in operation in late 2016);
4. The Chinese has however also promised to raise bilateral trade volume: with Russia to reach US$ 200 billion by 2020 (60 billion in 2015), Iran US$ 600 billion by 2026 (US$ 30 billion), Africa US$ 400 billion by 2020 (US$ 18 billion), EU US$ 1 trillion by 2020 (US$ 520 billion) and ASEAN also US$ 1 trillion (US$ 346 billion)

A "game and fate changer" for the region





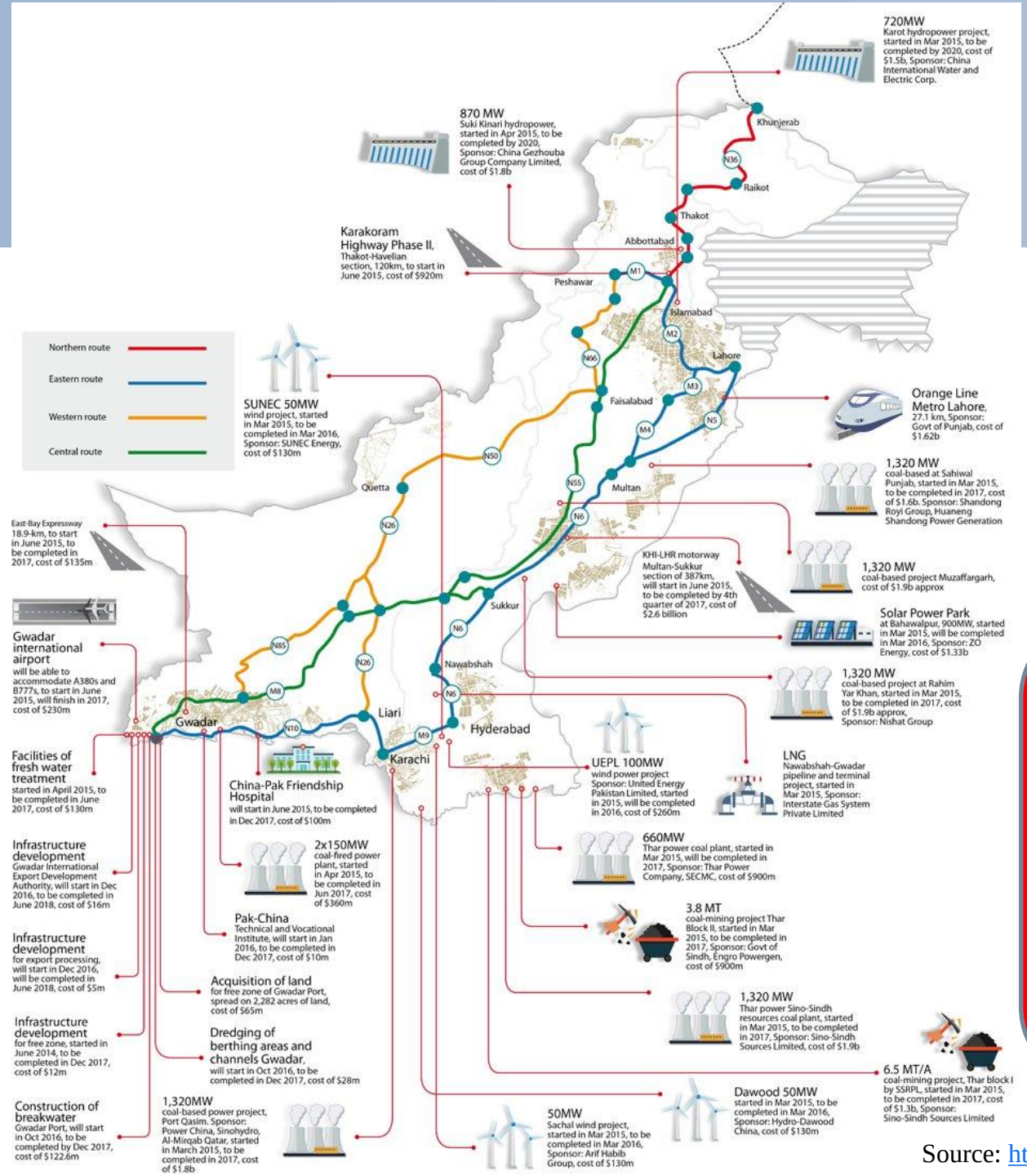

Source: Saleem Shahid, China-Pakistan corridor: NP criticises centre for not taking Balochistan govt on board, *Daw*n, May 27, 2015




Source: Afshan Subohi, China-Pakistan corridor: Visibility of the game changer, *Dawn*, April 27, 2015

"The Chinese are not just offering to build much-needed infrastructure but also make Pakistan a key partner in its grand economic and strategic ambitions. The project will also open trade routes for Western China and provide China direct access to the resource-rich Middle East region via the Arabian Sea, bypassing longer logistical routes currently through the Strait of Malacca." from *The Guardian*, (quoted in Lal Khan, The China Pakistan Economic Corridor, *Daily Times* (Pak), December 06, 2015)






China's commitment was US$ 46 billion in 6 years, but raised to over US$60 billion by end of 2016 and further adds US$ 50 billion for hydro-power for 10 years

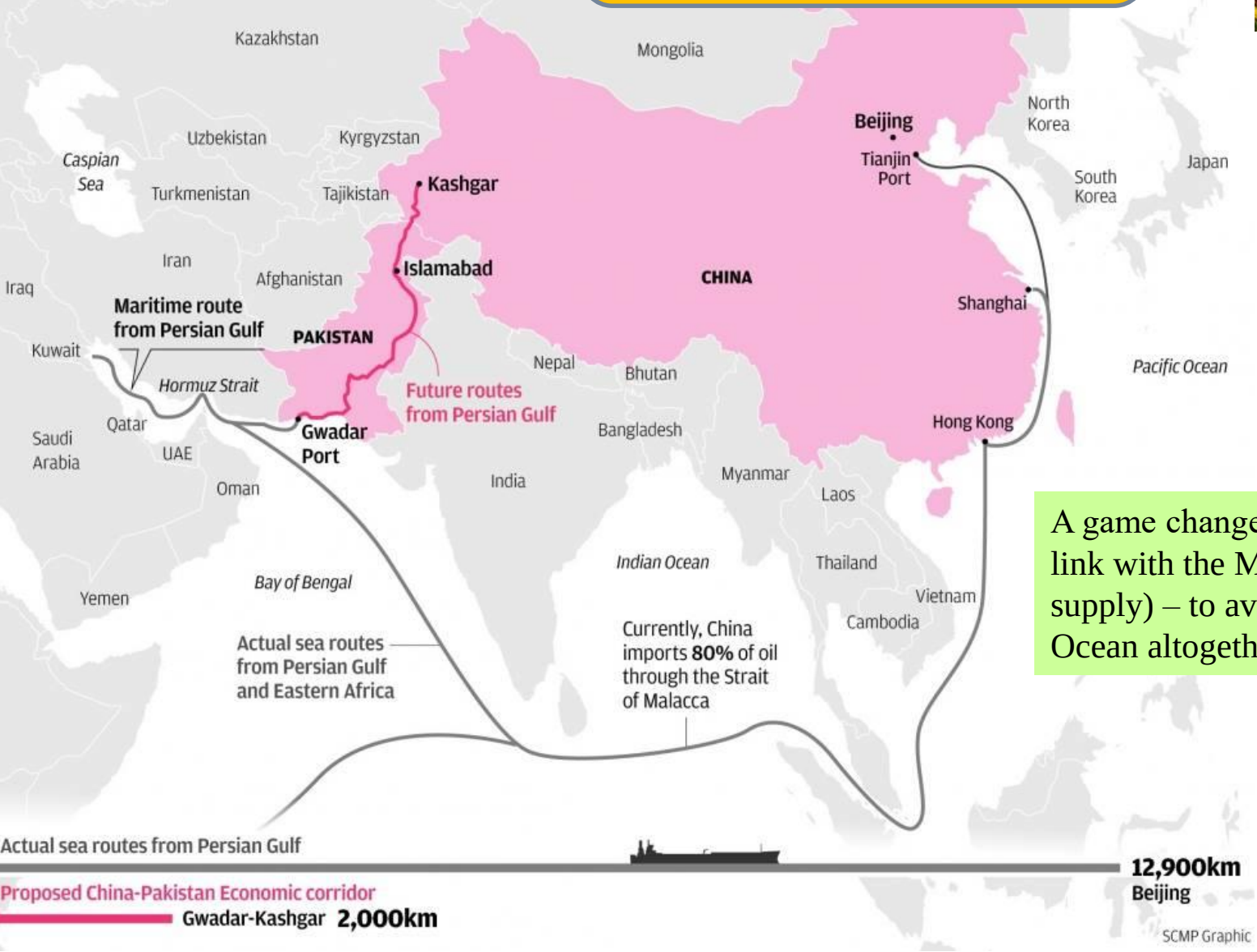
The Sahiwal coal power project in Punjab province has just come into operation in May, which has become the largest clean coal fired power plant in the nation and which will meet the electricity demand of nearly 10 million people. 17 priority energy projects would also be completed before 2019.

Source: https://c.tribune.com.pk/2015/05/1117.jpg

Source:
http://walizahid.com/2015/11/economic-corridor-gets-4-layer-security-as-gwadar-to-be-made-weapon-free/

The improved Gwadar port has started operation in 2017 with also cargoes carried from Kashgar for seaborne transport via the port






A game changer for China's link with the Middle East (oil supply) – to avoid the Indian Ocean altogether

# From Pakistan to Iran and beyond



The importance of Pakistan for China

a) China's most stable & reliable ally, politically & militarily; China has no competitor in Pakistan, as it has been abandoned by the west led by the US;

b) Geostrategic in linking South Asia, Central Asia & West Asia – the heart of Asia;

c) It supports and contains Taliban in Afghanistan and is crucial for any peace settlement there;

d) It could check any political expansion of India;

e) It has a young population of close to 200 million at early stage of industrialization; once industrialized or just to have adequate electricity supply would turn into a huge market & highly competitive low-cost production base;

f) The test case of China's Belt and Road strategy for development of the receiving country.

But there is competition with India – territorial disputes, military & religious rivalry – the use of nuclear weapons, & as the gateway to Central Asia & beyond. There is also a rivalry between China and India; India would like to block China's entry into the Indian Ocean

# Geo-political implications beyond Pakistan



- It allows not only Pakistan, but also the region as a whole to be increasingly self-sufficient, reducing its reliance on the West through enhanced intra-regional interdependence. Regional self-sustenance would be further enhanced if China and Pakistan were to grant numerous Central Asian states' wish to join the CPEC initiative. - Omar Alam (Fellow at the European Institute for Asian Studies), China-Pakistan Economic Corridor: Towards a New 'Heartland'? published by the LSE South Asia Centre on 16 November 2015.)

- If Chinese money and Chinese influence can return Pakistan to those rates of growth, then this will not only help to stabilise Pakistan and create a barrier to violence there. It will also mark China's arrival as a truly great - and positive - force on the world stage. By focusing on aggrandising its land-based influence in Eurasia through CPEC and a revamped Silk Road, China may finally validate Mackinder's assertion that "trans-continental railways are now transmuting the conditions of land-power, and nowhere can they have such effect as in the closed heart-land of Euro-Asia". The continental connectivity web that China seeks to establish in Eurasia would largely be safe from meddling by part of the US, whose naval forces dominate global sea-lanes. - Anatol Lieven (professor at Georgetown University in Qatar), The China-Pakistan corridor: A fate-changer? 16 Nov 2015, jazeera.com

Rivalry between Pakistan and India over regional oil & gas pipeline routes (connecting Iran or Turkmenistan), IP vs TAPI – to overcome the energy deficits of the 2 countries & allows diversification of market for the producing countries.

Map: TAPI and IPI Pipelines




Source: EIA



## Two Proposed Pipelines in South Asia




Source: 2008 map
http://www.heritage.org/~/media/images/reports/2008/bg2139_map1sm/bg2139_map1.ashx

Source:
http://2.bp.blogspot.com/-vhyj7eG2dWk/Te3OuvbpVWI/AAAAAAAABs0/olmFGbrIkzs/s1600/TAPI-and-IPI-Pipelines.gif

China finances the new route to Gwadar

China & Russia support the IP pipeline while the US and India support TAPI (to diversify Turkmenistan gas from China & Russia)

# Gwadar port (Pakistan & China) versus Chabahar port (Iran & India) (100 km apart)

India has agreed with Iran to build the Chabahar port in 2015 with a dual purpose - to encircle Pakistan by maintaining cordial relations with Iran and Afghanistan, & to counterweight China. India has developed a highway from Chahabhar to Kandahar-Herat as it has minerals investment there.

30 days vs 45 days via the Suez Canal




Sources: http://thelondonpost.net/china-pakistan-economic-corridor-gwadar-port/ & CIA

Iran invites China to invest in Chabahar




Source: http://image.slidesharecdn.com/yamashams-afghanistanrailwayauthority-141028005141-conversion-gate01/95/yama-shams-afghanistan-railway-authority-7-638.jpg?cb=1414457809



Both Gwadar & Chabahar ports will connect Central Asia via Afghanistan

Gwadar Port has the capacity to handle large crude containers of up to 500,000 tonnes deadweight. It will have three containers terminal, a bulk- cargo terminal, a grain terminal and an oil terminal. Yet, it is yet to be developed, including the planned Free-Trade and Economic Zones and Export Processing Zone.

Iran established Port of Chabahar for more congenial trade with other countries to escape international isolation if there is foreign blockade of the Strait of Hormuz, while Bandar Abbas Port will remain as the port for Russian and European trade.

# New developments that are in favour of or counterbalance to the Belt & Road Initiative

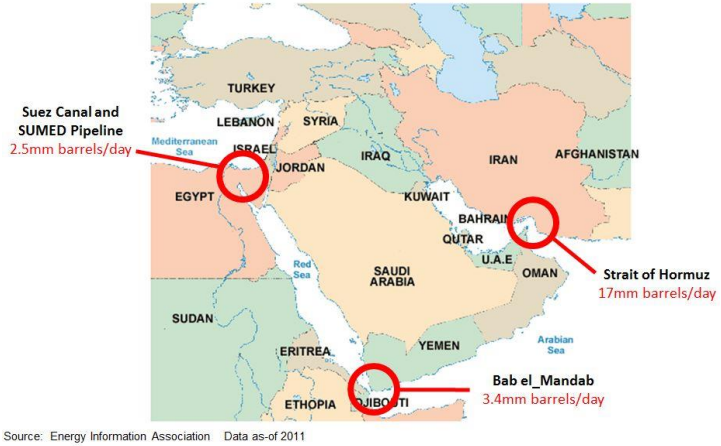


- Afghanistan, Iran, and Uzbekistan have already signed an agreement to develop a trans-Afghan transport corridor. The 75-kilometers single-rail line from Hairatan to Mazar-i-Sharif is in operation since 2011.
- Quadrilateral Traffic in Transit Agreement (QTTA) with Pakistan in 1995 to use the Karakoram Highway (KKH) which too passes through Gilgit-Baltistan. Kazakhstan, Kyrgyzstan and Tajikistan have joined QTTA & Kazakhstan wishes to join CPEC. Pakistan agrees Russia to use the Gwadar port. Other Central Asian countries are also interested.
- On 23 May 2017, India and Japan proposed a multi-billion dollar Asia-Africa Growth Corridor (AAGC), which would focus on creating new sea corridors linking the African continent with India and other countries in South and South-East Asia.
- On 24 May 2017, the US administration proposed two connectivity projects: a) reviving the New Silk Road (NSR) project to focus on Afghanistan and its neighbours, and b) the Indo-Pacific Economic Corridor (IPEC) linking South and Southeast Asia

Any transportation or military problems in the Straits of Malacca, the Straits of Hormuz, the Suez Canal or anywhere along Asia's southern coastline will further boost the importance of Central Asia as a transport and trade corridor






Sources: http://www.instc-org.ir/Maps/map205.jpg & http://prophecytracker.org/2015/08/oil-surges-to-45-after-saudi-troops-invade-yemen/

India's intention with Iran's cooperation is to bypass Pakistan & even Afghanistan to link up Central Asia via pipelines, railways & ports in Iran with the Indian Ocean






Source: Gabriel Domínguez, 15 December 2015, http://www.dw.com/en/china-seeking-to-link-iran-to-its-new-silk-road/a-18917586

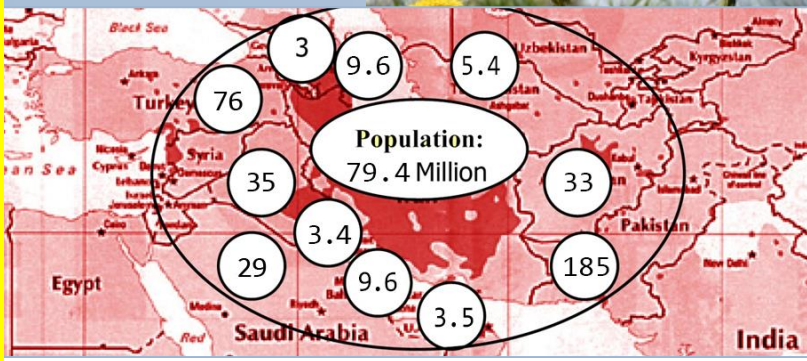
It would link up all national railway systems along the routes

China Railway Corporation proposed a China-Iran high speed standard gauge railway of 3,200-kilometer long (nearly 2,000 miles) in November 2015.

- Due to sanctions, Iran keeps its oil revenues (some $ 20 billion) from export to China in China, where it will fund ongoing Iranian purchases of Chinese goods;
- As many as 20 Chinese companies intend to invest $150 million in the Salmas special economic zone located in the Iranian province of West Azerbaijan (Trend: 28 November 2014);
- China National Petroleum Corporation will develop the second phase of the North Azadegan Field on the Iran-Iraq border. (Mehr News Agency, 26 December 2015)

## Islamic Republic of Iran

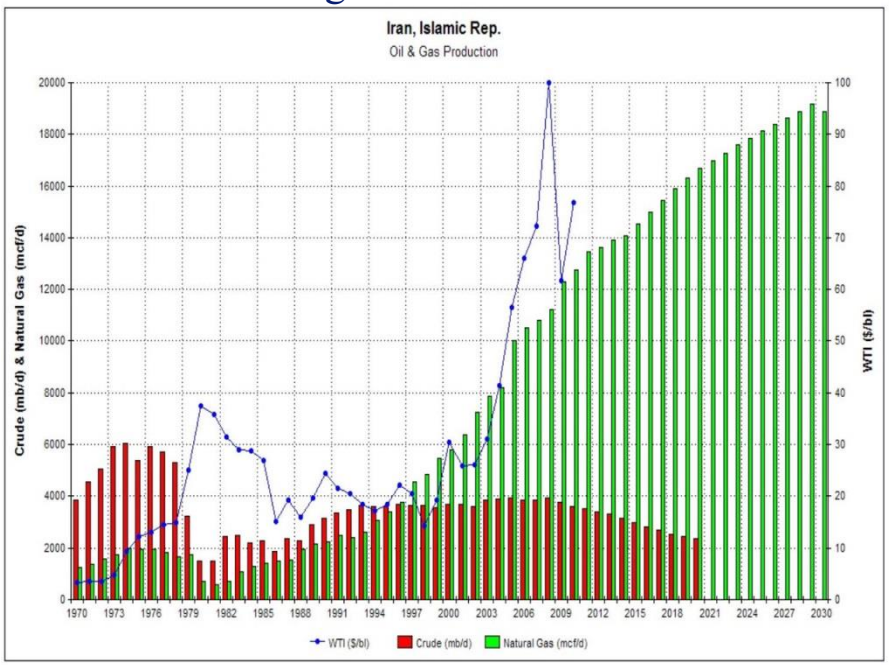
"Geopolitical realism, from Europe to Asia, cannot ignore a nation placed in the intersection of the Arab, Turk, Indian and Russian worlds, underscored by its role as privileged entry and exit point to the vast Caucasus-Central-Asia ensemble, which also includes Afghanistan". - *Pepe Escobar, Iran: The New China? 29 January 2016,* [ww.telesurtv.net](ww.telesurtv.net)







Having the world's 2nd largest gas reserve after Russia, Iran is set to dominate the gas market in Asia (& Eurasia) and has the energy sector as the foundation of its coming 'economic miracle'




Source: http://cdn.energytribune.com/wp-content/uploads/Iran%20Map%20sept%2007.gif

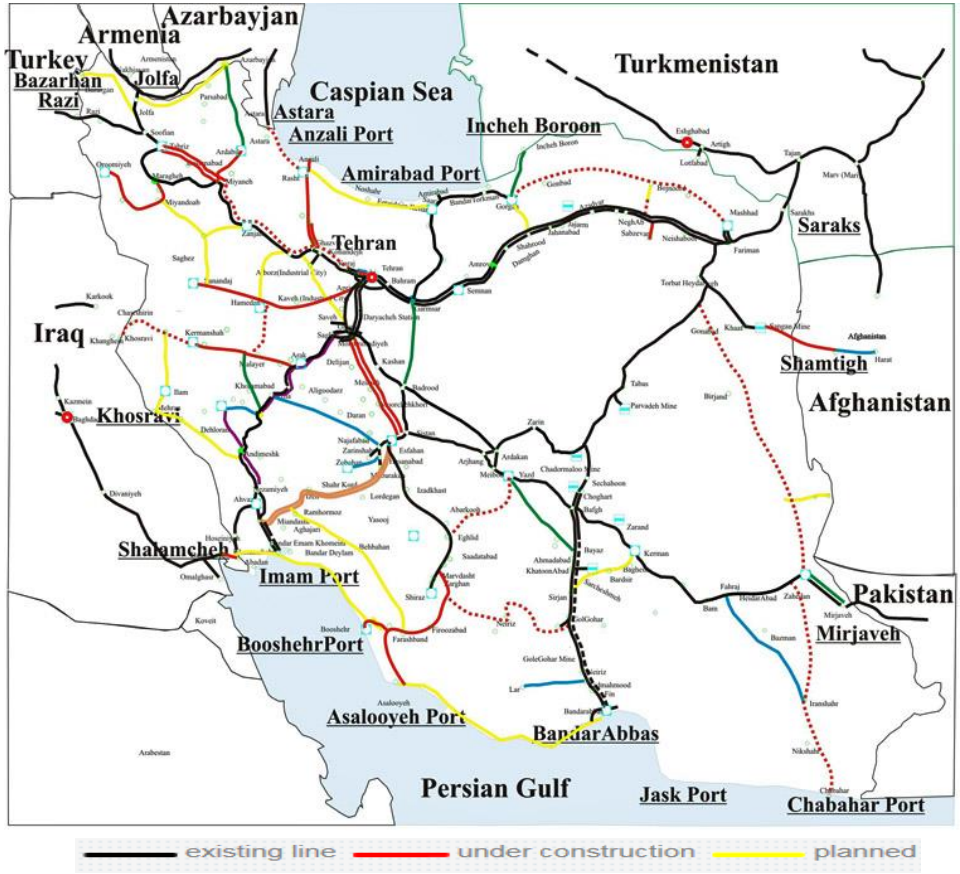
Source: "IRAN oil&gas production" by SSZ - Own work. Licensed under CC BY-SA 3.0 via Commons - https://commons.wikimedia.org/wiki/File:IRAN_oil%26gas_production.jpg#/media/File:IRAN_oil%26gas_production.jpg

- Iran plans to invest $25bn (initially but will attract foreign funds) over the next ten years in the electrification and expansion of its railway network from the current 15,000km to 25,000km by 2025. The system will connect to China's Silk Road and the International North-South Transport Corridor.
- The construction of a high-speed railway (350 khr), of 400 kilometers from Tehran to Isfahan, started in February 2015, underwritten by China & expected to be completed in 2019.
- An agreement signed in December 2014 between China, Kyrgyzstan, Tajikistan, Afghanistan and Iran, for a transit railway link connecting Iran and China passing through six Afghan provinces. It would run from Kashgar in China to Herat in Afghanistan, then run on to Iran – presumably using the Khaf to Herat line currently under construction.
- Russia agreed in December 2015 to finance $1.3bn to electrify Iran's main north-east train line for 3 years between Garmsar, 100km south-east of Tehran, and Inche Burun on the Turkmenistan border. It will connects the Central Asian railways leading to both Russia & China.



Map in 2010

Source: www.iranrail.net



# Iranian plans for railway expansion






Source: David Rogers, Iran's railway revolution, 14 December 2015, http://www.globalconstructionreview.com/client_media/imagecontent/846.graphic_rail_now.jpg

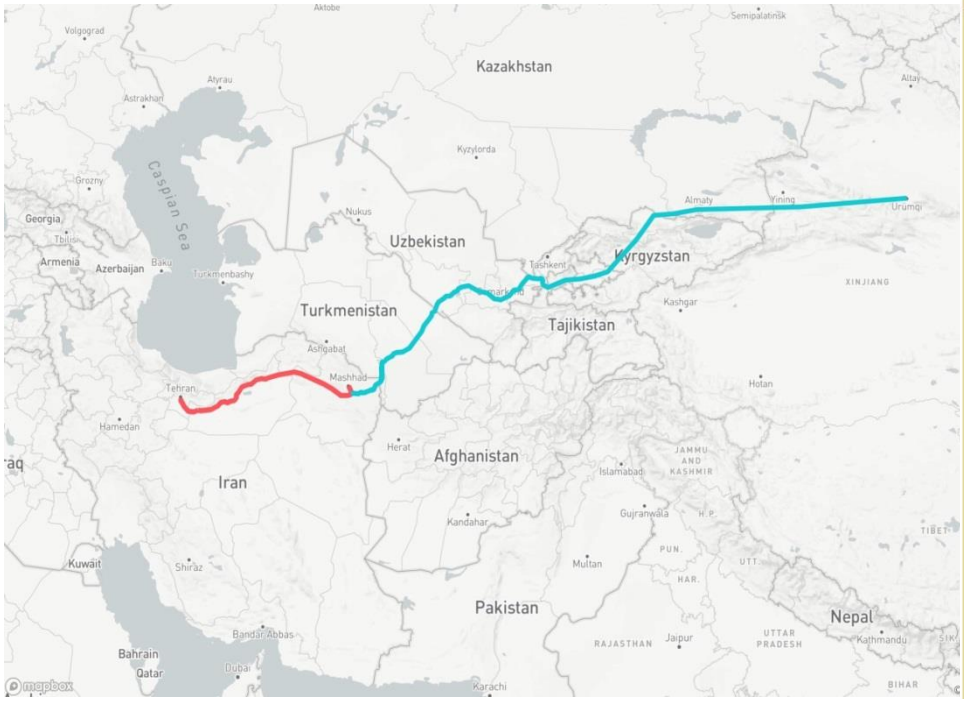
## The present railway system

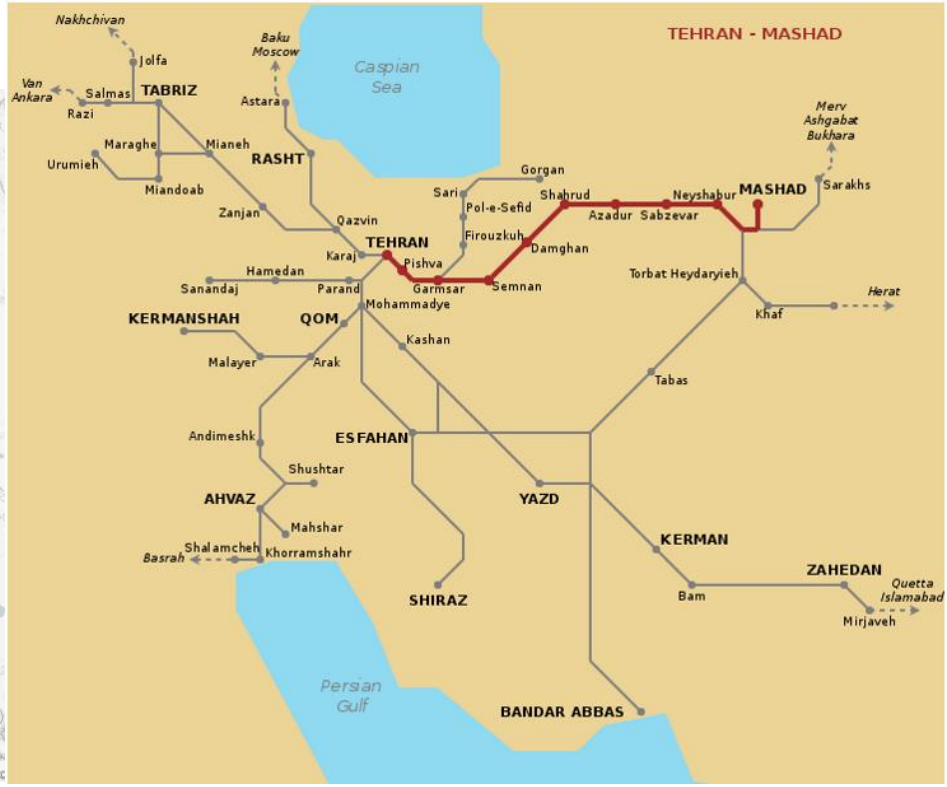




The Tehran-Mashhad line is double-tracked and both tracks will be electrified to raise the speed from 160 kph to 200 kph. It will be built from the second half of 2016 for 4 years by Chinese firms with two thirds project finance funded by the Chinese. The line will be part of the late 2015 Chinese proposed 3,200-kilometer New Silk Road rail link to begin in Urumqi and connects Kazakhstan, Kyrgyzstan, Uzbekistan and Turkmenistan joins Iran's east-west network leading to Turkey and eastern Europe or to the Persian Gulf.

Source: www.iranrail.net



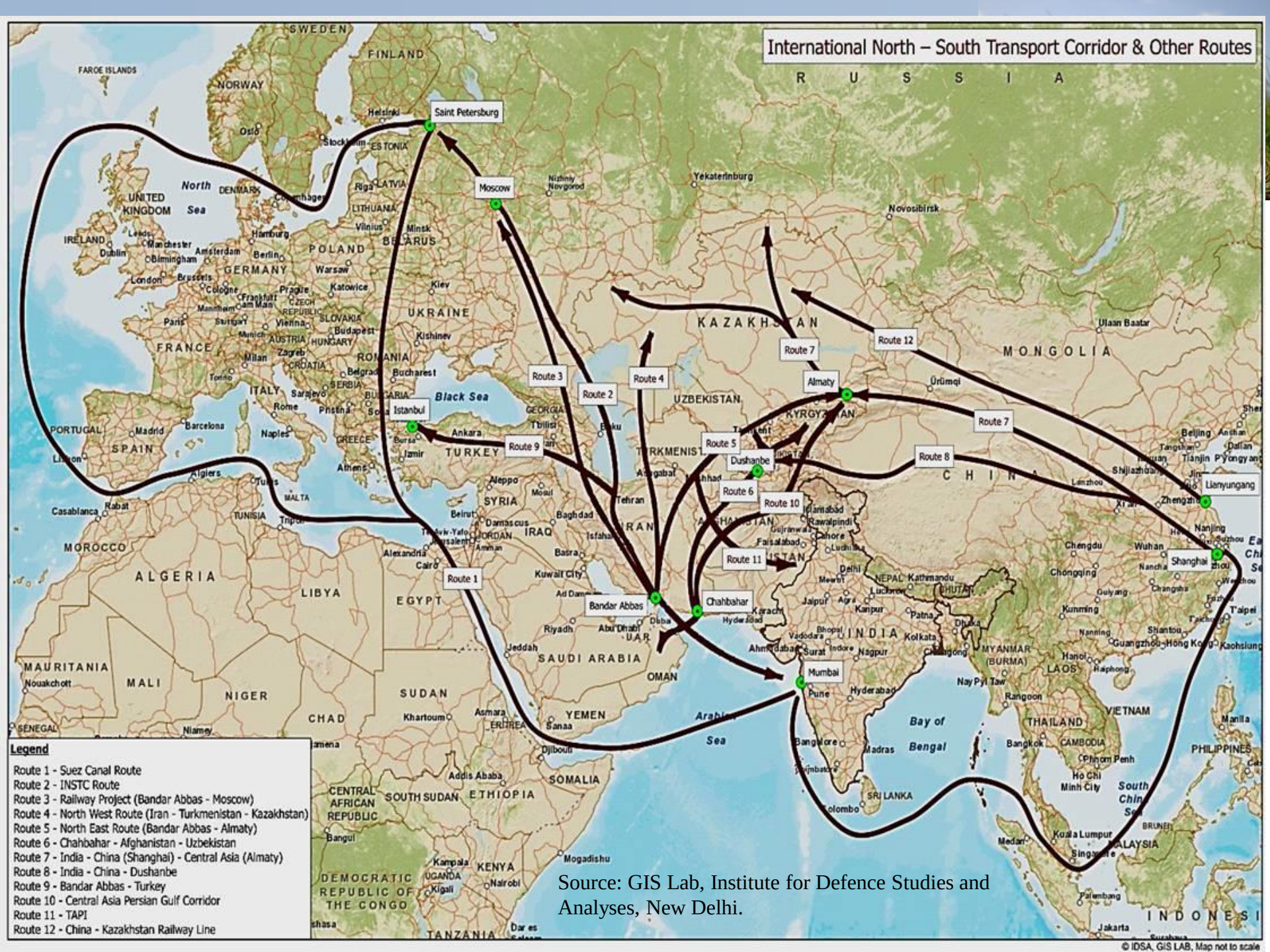
# International North-South Transport Corridor: a joint venture of Russia, Iran & India






A multi-modal transportation route linking India Ocean and Persian Gulf to the Caspian Sea via Iran, and onward to northern Europe via St. Petersburg in Russia for movement of goods from Mumbai (India) to Bandar Abbas (Iran) by sea, from Bandar Abbas to Bandar-e-Anzali (an Iranian port on the Caspian Sea) by road, and then from Bandar-e-Anzali to Astrakhan (a Caspian port in the Russia) by ship across the Caspian Sea, and thereafter from Astrakhan to other regions of Russia and further into Europe by Russian railways.

Source: International North South Transport Corridor, by Mr. Shankar Shinde & Mr. Sohel F Kazani, Federation of Freight for Forwarders' Association of India.


International North – South Transport Corridor & Other Routes
Saint Petersburg
Moscow
Istanbul
Dushanbe
Almaty
Bandar Abbas
Chahbahar
Mumbai
Route 1
Route 2
Route 3
Route 4
Route 5
Route 6
Route 7
Route 8
Route 9
Route 10
Route 11
Route 12
Legend
Route 1 - Suez Canal Route
Route 2 - INSTC Route
Route 3 - Railway Project (Bandar Abbas - Moscow)
Route 4 - North West Route (Iran - Turkmenistan - Kazakhstan)
Route 5 - North East Route (Bandar Abbas - Almaty)
Route 6 - Chahbahar - Afghanistan - Uzbekistan
Route 7 - India - China (Shanghai) - Central Asia (Almaty)
Route 8 - India - China - Dushanbe
Route 9 - Bandar Abbas - Turkey
Route 10 - Central Asia Persian Gulf Corridor
Route 11 - TAPI
Route 12 - China - Kazakhstan Railway Line
Source: GIS Lab, Institute for Defence Studies and Analyses, New Delhi.
© IDSA, GIS LAB, Map not to scale

# The Iron Silk Road – regaining & refocusing on Eurasian connectivity overland



## Advantages of overland fast speed transports

1. Speed to market - faster than sea transport (less restricted by the geography of riverways & sea lanes) and cheaper & with much less pollution than air transport;
2. Mass customization of goods in shops or online – deliveries in smaller batches but in greater time frequency;
3. Larger number of stops to increase freight loads and to serve a larger number of cities and populations –by a larger catchment area to achieve a reduction in freight costs and better and more diversified services;
4. Together with local transport network the larger catchment areas could become sites of local economic development facilitated by greater connectivity of the places (esp. cultural & technological exchanges and transfers); the various forms of improved connectivity would enhance diversity, economies of scale & scope, expansion of markets and sources of supplies – greater integration and incentives for innovation

# Kazakhstan's 2012 version of Trans-Euroasian routes –itself as the Eurasian transport hub & linking up the northern and southern corridors.



| Route | Distance, km |
|---|---|
| Lianyungang – Riga – Krasta exp. | 9 754 |
| Lianyungang – Brest – Severny exp. | 9 654 |
| Lianyungang – Chop exp. | 10 184 |
| Lianyungang – Poti exp. | 9 195 |
| Lianyungang – Ablyk | 6 128 |
| Lianyungang – Sarakhs exp. | 6 721 |
| 7-1 Nahodka exp. – Brest – Severny exp. | 10 504 |
| 7-2 Zabaykalsk exp. – Brest – Severny exp. | 7 739 |
| 7-3 Naushki exp. – Brest – Severny exp. | 6 981 |

**Building of a railways line Zhezkazgan – Beineu**

Length – 988 km;

Cost – 3.9 bill. USD

Volume of transportations to 2020 – 13 mln.t/year

Reduction of distance of a route Dostyk st. – Aktau st. on 1200 km;

Beginning of implementation – December, 2012




Robert Mactier, *The Map of the Transeuroasian Routes* (Kazakhstan – New Silk Road) Published on Aug 29, 2012, Source: The of the Republic of Kazakhstan, Kazakhstan Temir Zholy JSC, Mar. 27, 2012. http://www.slideshare.net/RobMactier/the-map-of-silk-road

# Kazakhstan to Bandar Abbas & the Persia Gulf and the Indian Ocean to the south and via Turkey to Europe to the west – all for developing transport routes without relying on Russia



Source: http://rameuic.com/uploads/turk2_1538.jpg




- 13 million tons of grain is being exported annually from Kazakhstan to Persian Gulf countries.
- Kazakhstan and Turkmenistan will thus have an alternative connection to ocean bypassing Russia.

Source: http://railturkey.org/2014/12/03/kazakhstan-turkmenistan-iran-railway/

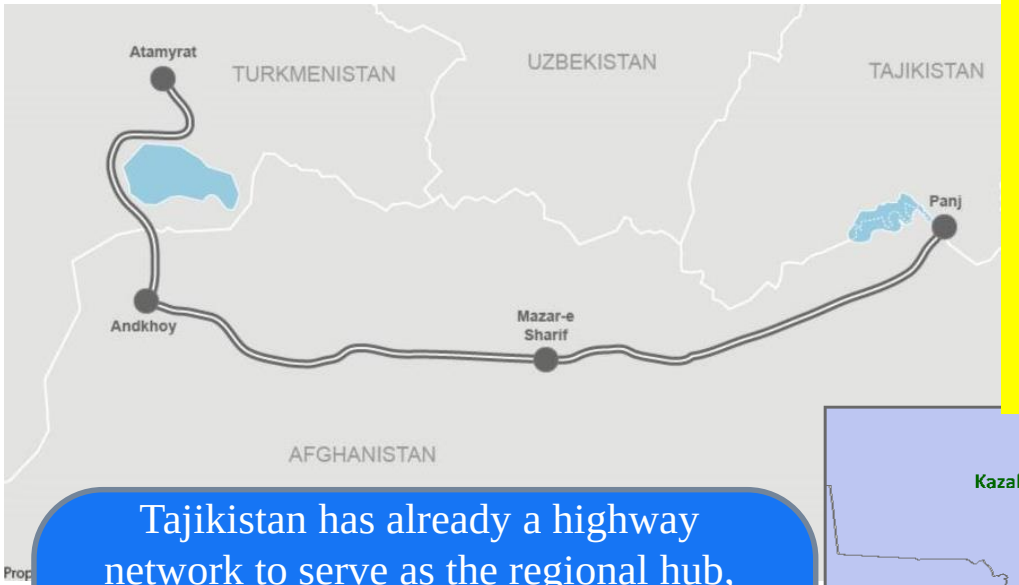
The 908 km North-south railway starts at Uzen in Kazakhstan(120 km), goes through Gyzylgaya-Bereket-Etrek in Turkmenistan (700 km) and ends at Gorgan in Iran (88 km) and has been in operation since December 2014.

- Gorgan in Iran is already connected to Iran's national rail network, which enables transportation between Central Asia and Persian Gulf. The connection will shorten the route by 400 km, and reduce freight transport time from 45-60 days at present to 25-30 days.



# Turkmenistan – Afghanistan – Tajikistan (TAT) Railway – a link in the Central Asian system

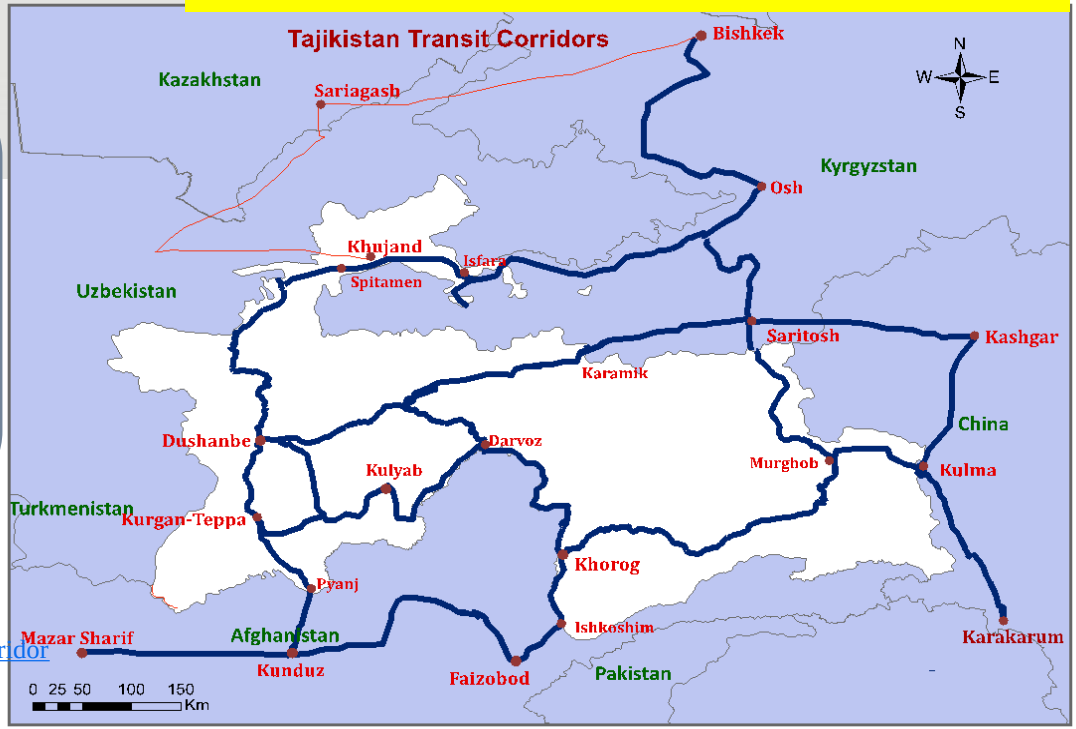





Intention: To bypass Uzbekistan (to avoid blockade of Tajikistan by Uzbekistan) and financed by Turkmenistan and ADB; Original completion date of 2015 too optimistic. With US endorsement, it might be constructed in 2 years from 2015;

China and Kyrgyzstan expressed interest to connect their national railway system with TAT.

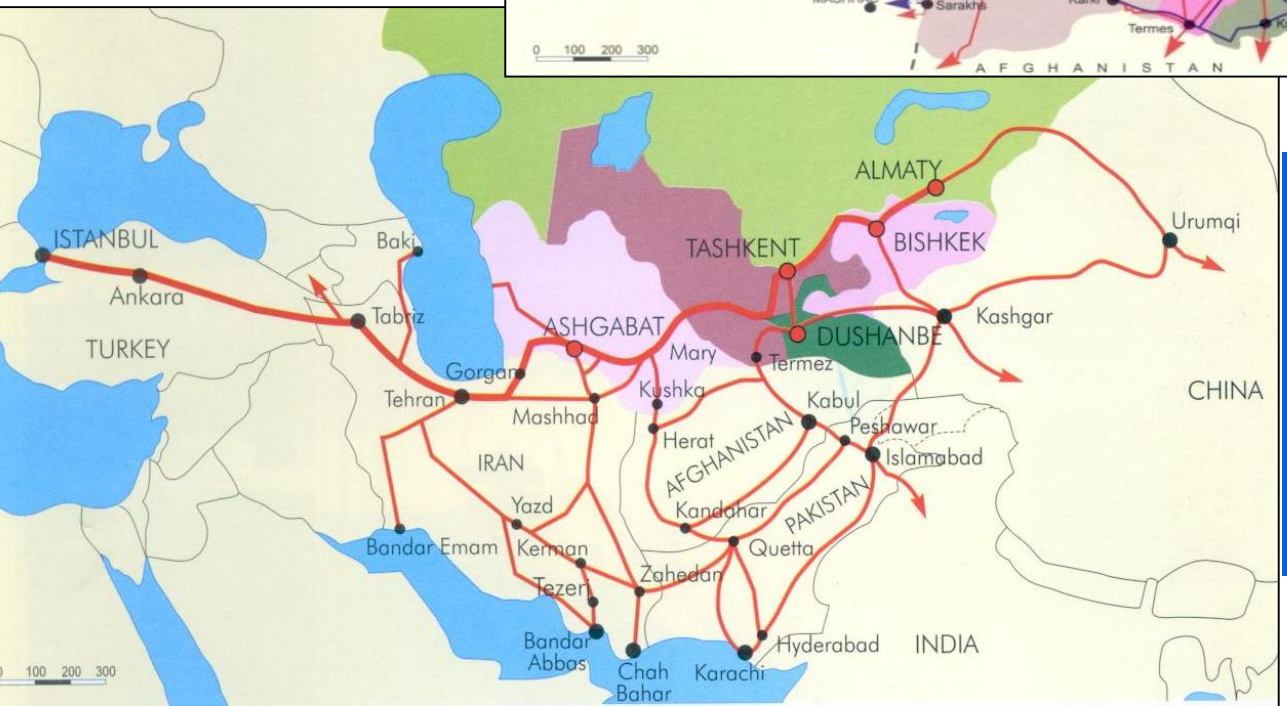
Tajikistan has already a highway network to serve as the regional hub, including extension under construction into China to Kashgar via Kasmir; it has also completed a railway connection from the south of the nation to Dushanbe, which could further run to the Ferghana Valley

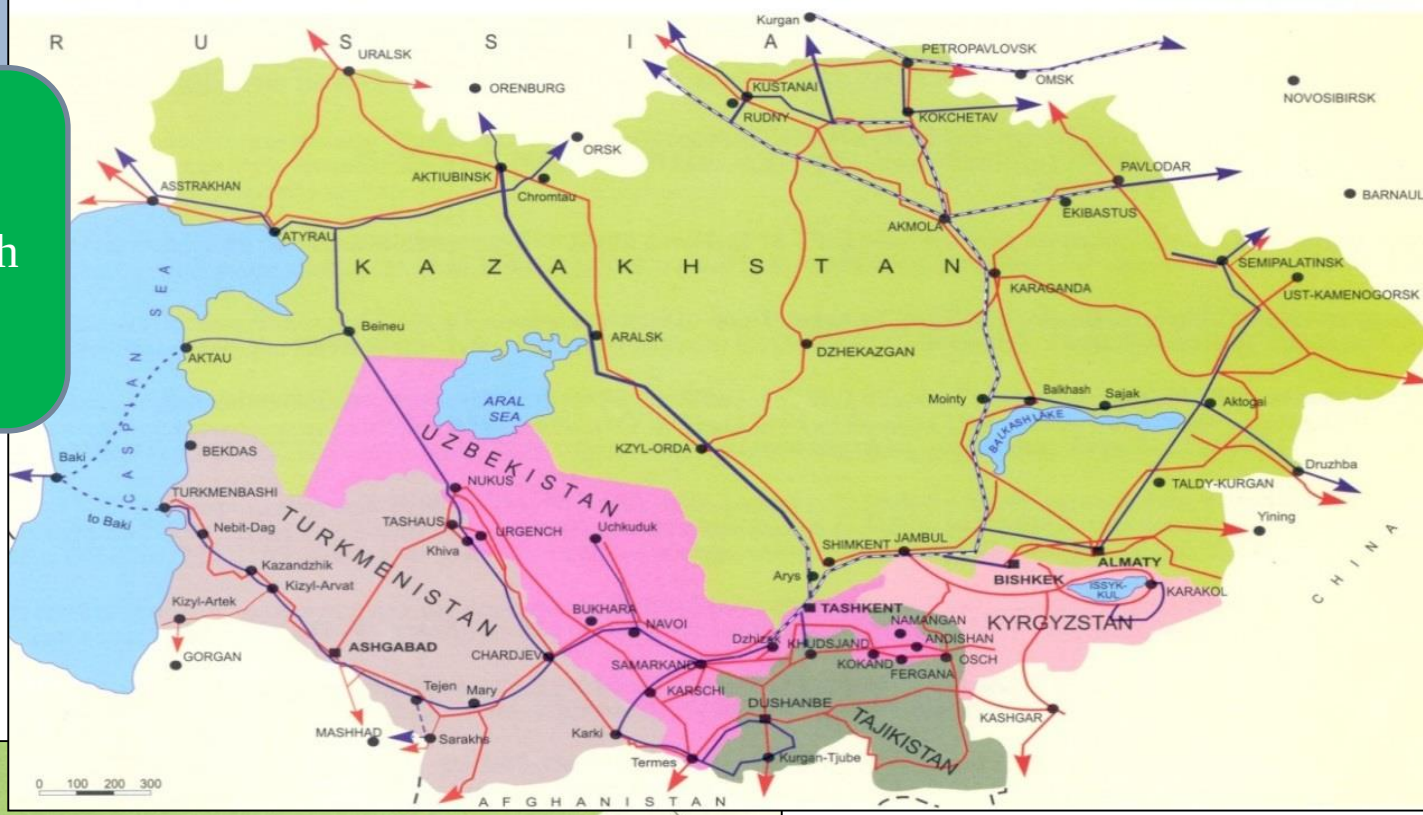



Sources: http://www.russiasupplychain.com/wp-content/uploads/2013/06/Proposed-route-of-Turkmenistan-Afghanistan-Tajikistan-railway.jpg; & http://dlca.logcluster.org/display/public/DLCA/2.3.1+Tajikistan+Road+Corridors+to+Afghanistan;jsessionid=A6CBEC061283F7849F5E5DF61FFEF2DF

From Tajikistan, by means of TAT railway Central Asia could reach the Persian Gulf via Afghanistan and Iran

Source: Henry Kerali, Senior Transport Specialist, The World Bank, Presentation: *Transport and Trade Linkages: Central Asia & Eastern Europe*

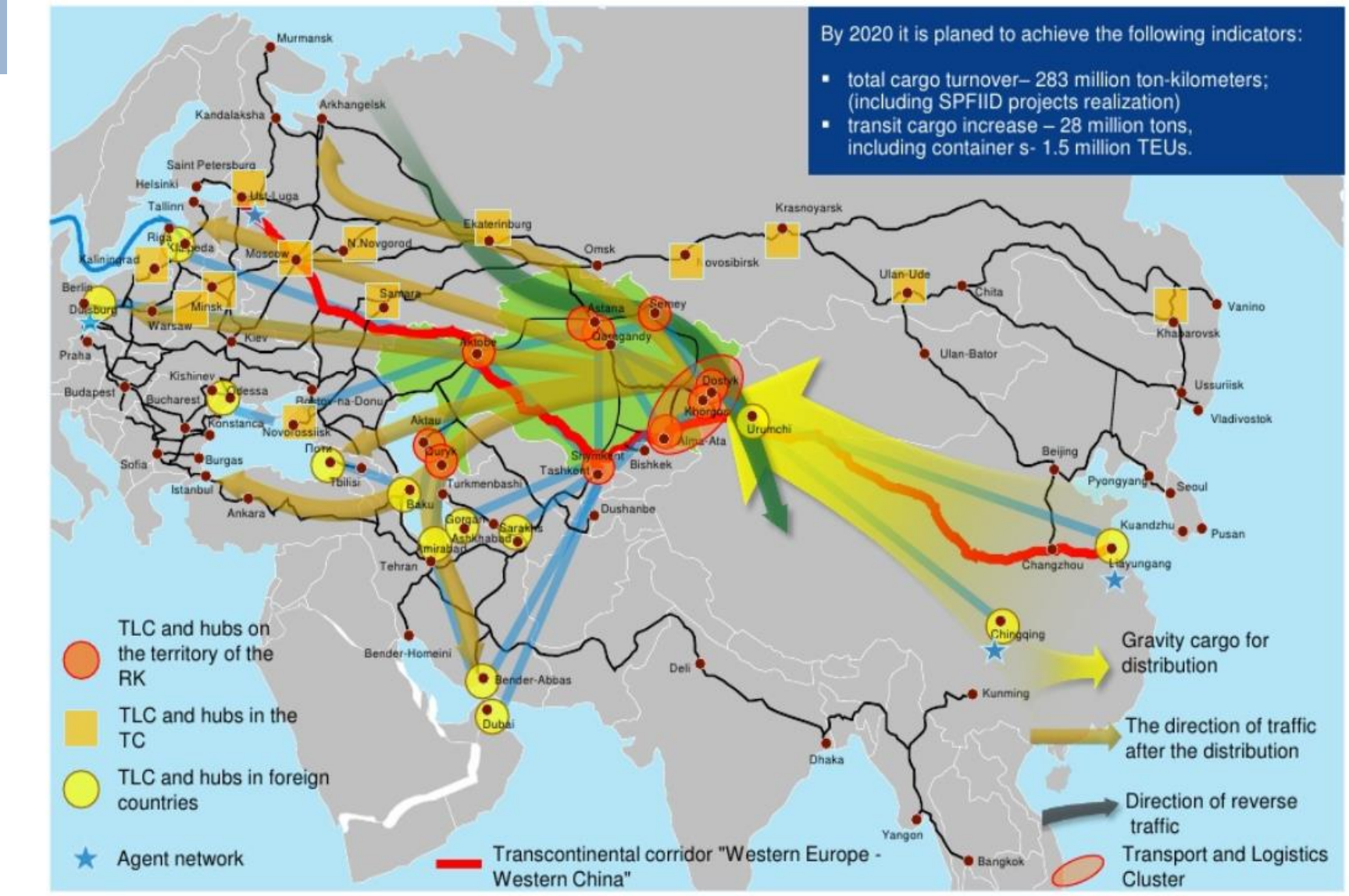



TAT railway serves to avoid transiting through Uzbekistan & would save time & cost to overcome the landlocked-ness of Central Asian economies – to open up north south trade routes

## Map of Kazakhstan's positioning strategic

# Kazakhstan will be a powerful transport and logistics hub in the Eurasian space by 2020 - New Silk Road




Source: Yerkhat Iskaliev, (VP of Logistics of National Company, KTZ. JSC), Presentation – *The development of transport logistics system of the Republic of Kazakhstan*, 27 March 2012.

There is the joint effort for the Trans-Caspian international transport route that organizes container service on the China – Kazakhstan – Azerbaijan – Georgia – Turkey route using different combination of existing and newly constructed railway and sea port terminals. The early 2016 freight cargo link between the Ukraine – China container route and the Baltic Sea, and therefore Northern Europe by Ukraine and Lithuania has also presented a non-Chinese approach to connect with and optimize the transport along the Silk Road



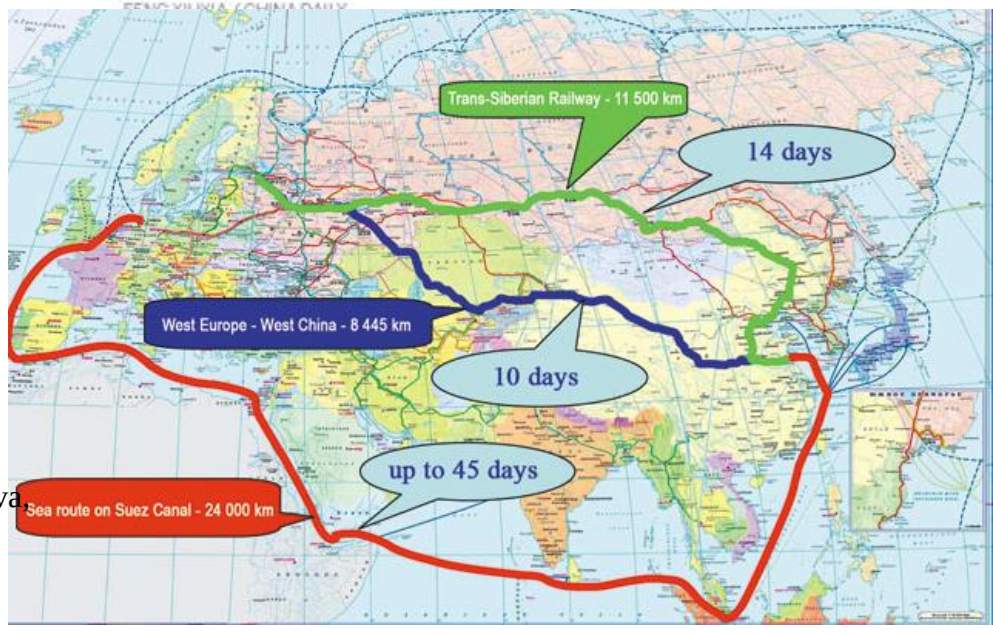

Source: [http://www.businesswire.com/news/home/20160208005531/en/Republic-Georgia-Selects-Anaklia-Development-Consortium-Build](http://www.businesswire.com/news/home/20160208005531/en/Republic-Georgia-Selects-Anaklia-Development-Consortium-Build)






Resurgence of the traditional overland Silk Road routes

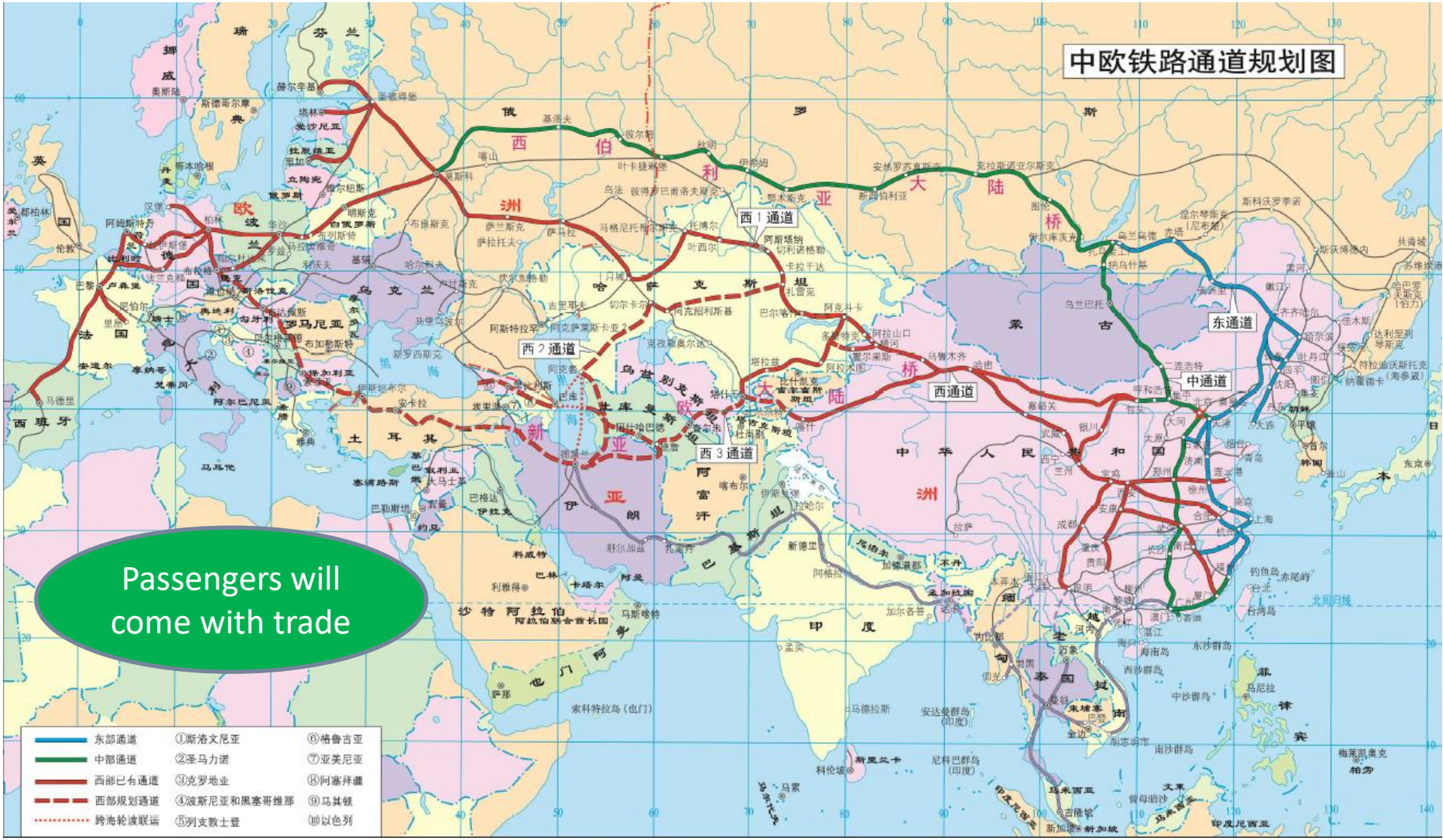
Overland routes could avoid risks on the sea: territorial disputes, political & military blockades by hostile enemies




Sources: http://euap.hkbu.edu.hk/main/wp-content/uploads/2015/06/OBOR-railway.jpg & Maryam Turezhanova, Major Transport Corridor to Connect Kazakhstan, Russia, China by 2015, *The Asian Times* (Astana), 20 February 2013

# The first achievement - freight train links with Europe & West Asia





By mid-2016 China has 39 China-Europe rail freight routes connecting 16 Chinese cities and 12 European cities with traveling time from 10.5 days (Chengdu) to 19 days (Dongguan). There are plans to expand to 62 routes by end 2016.



Selected China-Europe routes

| 口岸 | 阿拉山口/霍尔果斯 Atalaw Pass & Khorgos pass | 二连浩特 Erlian | 满洲里/绥芬河 Manzhouli/Shuifenghe |
|---|---|---|---|
| 1 | 汉新欧 | 郑连欧 | 苏满欧 |
| 2 | 渝新欧 | 苏连欧 | 营满欧 |
| 3 | 蓉欧快铁 | 津连欧 | 津满欧 |
| 4 | 西（西安）新欧 | 济连欧 | 鄂满欧 |
| 5 | 粤新欧 | 汉连欧 | 湘满欧 |
| 6 | 郑新欧 | 蓉莲欧 | 昆满欧 |
| 7 | 义（义务）新欧 | 蒙连欧 | 哈满欧 |
| 8 | 连新欧 | | 渝满欧 |
| 9 | 湘新欧 | | 沈满欧 |
| 10 | 合新欧 | | 长满欧 |
| 11 | 兰新欧 | | 盘满欧 |
| 12 | 西行班列 | | 临满欧 |
| 13 | | | 赣满欧 |

5,000 trains targeted by 2020 from 2200 in 2017

Since 8 June 2016, they have been called China Europe Express

Source: 习近平同波兰总统共同出席中欧班列首达波兰仪式 , 2016-6-21, http://www.zobl.cn/thread-178-1-1.html

## The Yiwu-Madrid line

- 21 days, 6,200 miles with the first train in November 2014






The longest rail link in the world & the first direct link between China & Spain completed its maiden journey of 8,111 miles to Madrid in December 2014 and extended to London in 2017

Source: http://www.railnews.co.in/china-now-owns-worlds-longest-rail-route/

## Yiwu - Bandar Abbas line

with the first rain in January/February 2016 of 10,399 km in 18 days – about 578 km journey per day including two breaks of gauge, cutting short by half the distance & 30 days less than by sea

# Different China-Europe freight rail links



## Chengdu-Europe Express & Chengdu-Europe plus




## Changsha-Europe Express




Source:张欢 白田田, 保障基础货源助湘欧快线常态化运营,新华社, 2015-11-13

## Xiamen-Europe/Central Asia line




Sources: http://www.maxxelli-consulting.com/wp-content/uploads/2015/02/1234.png & http://www.nsrxm.com/uploadfile/image/20150911/20150911144672417241.jpg

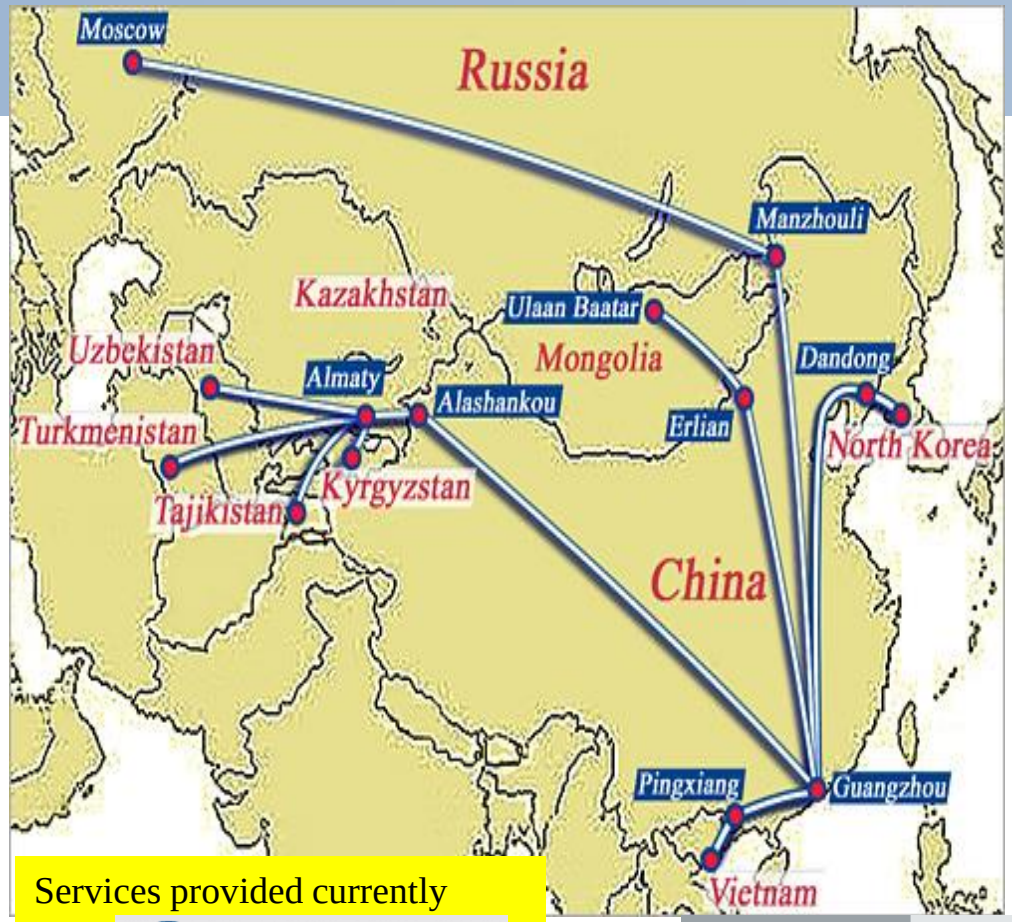
New focus on rail-sea multimodal transport links

# Dongguan hopes to be the hub & terminal for China-Europe & China-Central Asia rail transport





Source: http://www.sinotrans-csc.com/art/2015/9/16/art_12507_178686.html




DB Schenker a rail-based door-to-door solutions between China and Europe, Russia, Central Asia & Mongolia as well as China domestic with regular intermodal services, truck, rail & air.




Services provided currently by 中国外运广东有限公司 SINOTRANS GUANGDONG CO., LTD.

Guangzhou has started to offer its China-Europe service from September 2016

| | |
|---|---|
| **Task** | ▮ Route: Shanghai and Guangzhou, both CN, to Almaty, KZ<br>▮ Lead time: 24 days ex Shanghai, 28 days ex Guangzhou (door-to-terminal) |
| **Solution by DB Schenker** | ▮ Consolidation of shipments from several suppliers at a central location in Guangzhou and Shanghai<br>▮ Organization of rail shipments, either direct or via short-sea connection to Lianyungang |
| **Customers benefit** | ▮ Reduction of transit time by more than 25 days and reduction in transportation cost<br>▮ Based on the success of the product customer has started to ship goods from the U.S. using our rail service via Lianyungang |

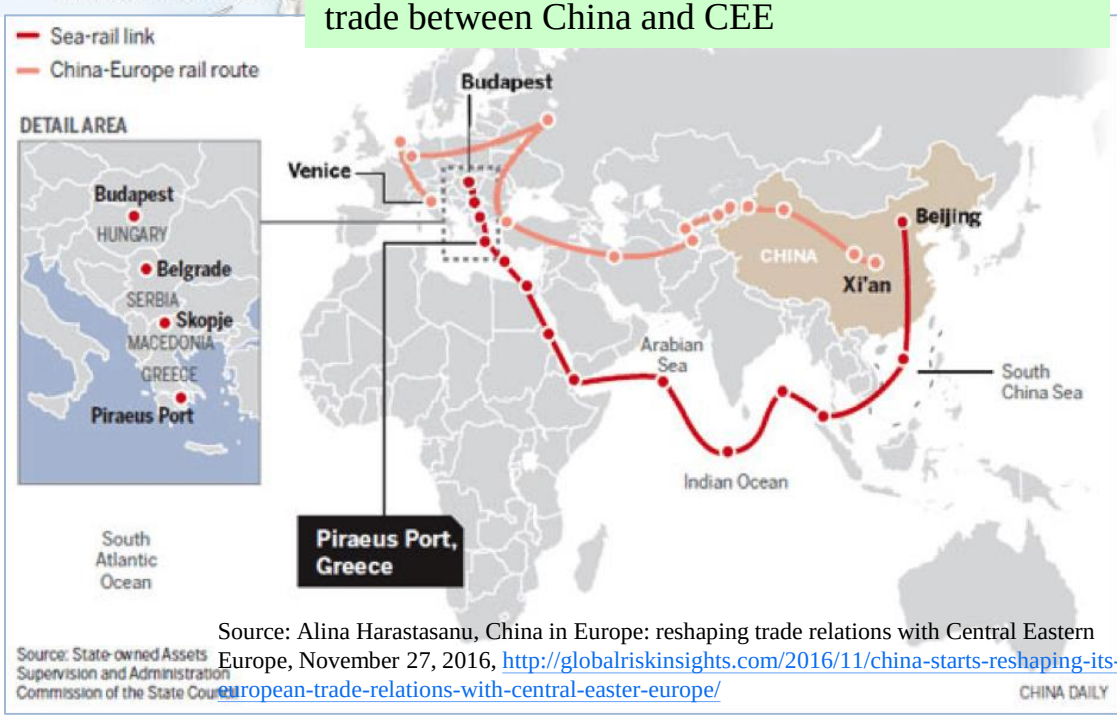





To build up a Southern Balkan route to China-European trade diverting traditional trade to Northwestern European ports

Port of Piraeus: a key element in the expansion of trade between China and CEE

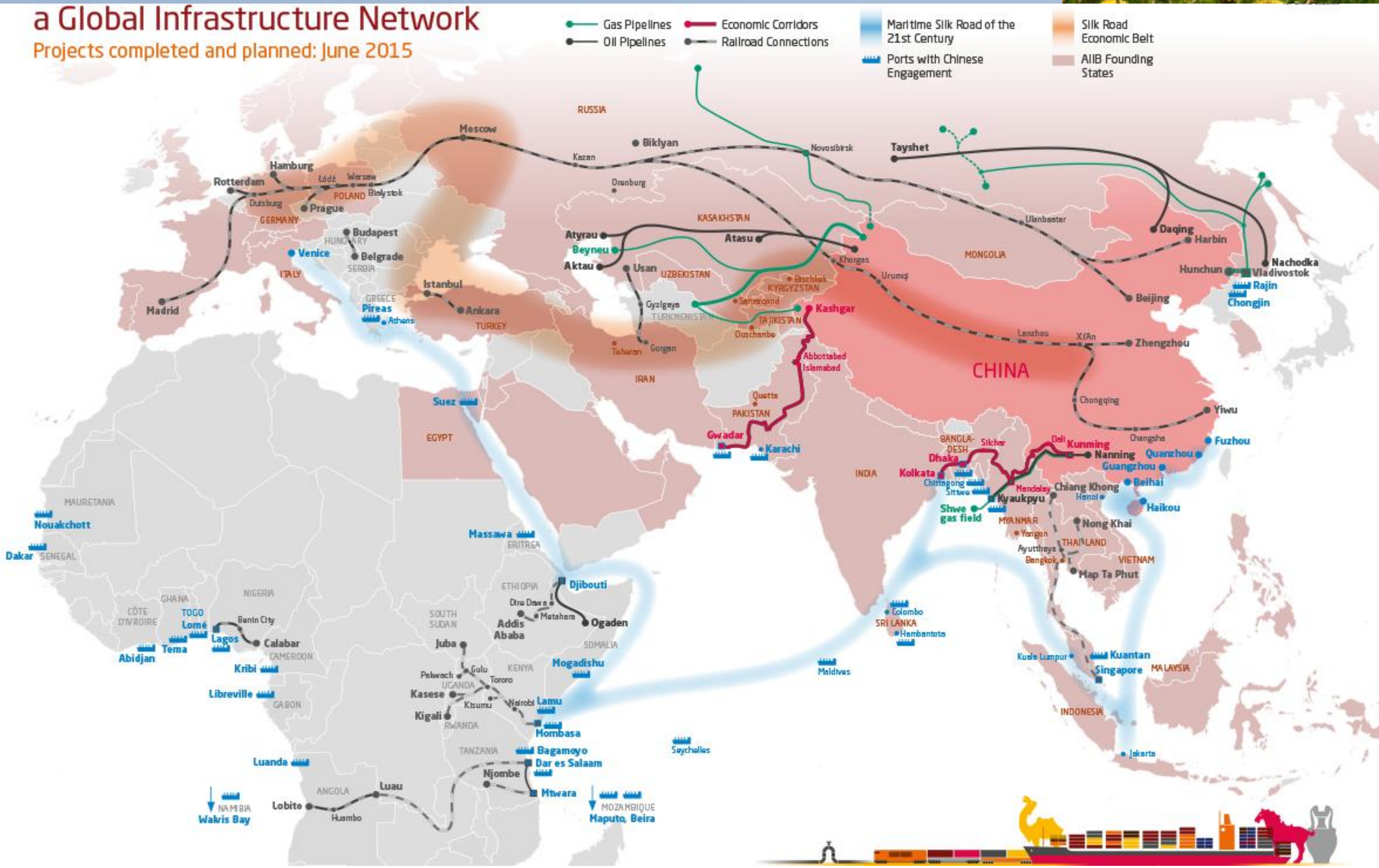
Works on a project for the overhaul of the High Speed Belgrade-Budapest railway line would start in November with the modernisation of the Stara Pazova-Belgrade section with a loan agreement with the Export-Import Bank of China worth $297.6 million (264.5 million euro)




Source: Alina Harastasanu, China in Europe: reshaping trade relations with Central Eastern Europe, November 27, 2016, http://globalriskinsights.com/2016/11/china-starts-reshaping-its-european-trade-relations-with-central-easter-europe/

# Return to the connectivity of the Eurasia – Africa in history but at a greater compression of tie and space






Source: Image from Roman Wilhelm/ MERICS, quoted in Moritz Rudolf, China's 'Silk Road' Initiative Is at Risk of Failure, *The Diplomat*, September 24, 2015



# China's latest investments in Djibouti



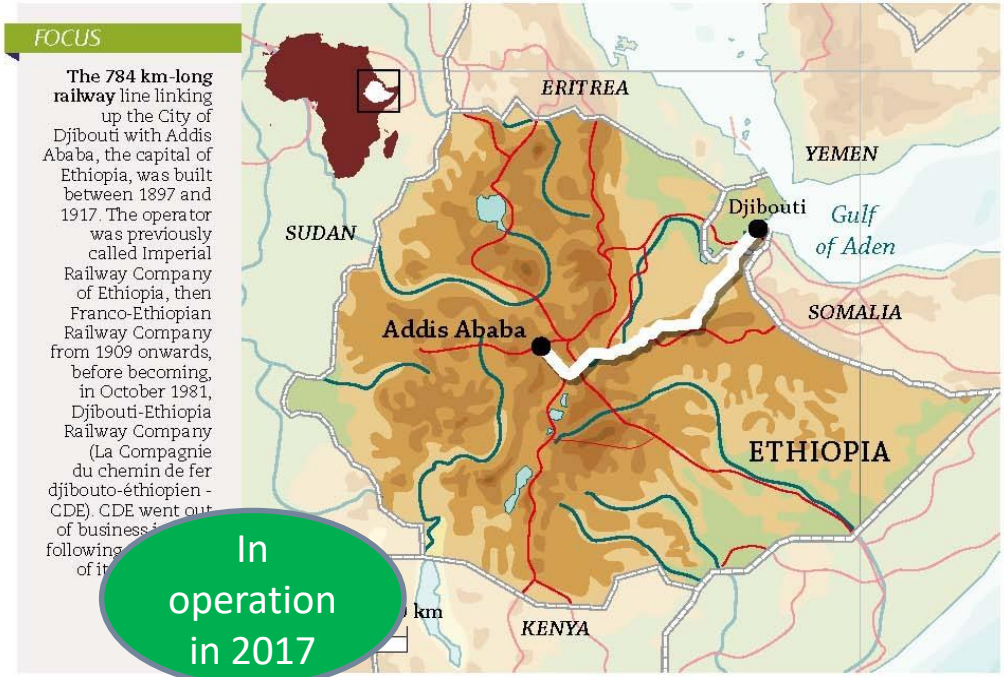
14 major infrastructure projects currently planned & under construction — all financed mainly by Chinese banks amounting to $14.4 billion, including

1. Ports -$185 million stake in the port of Djibouti with management from 2015, & $ 400 million to develop port facilities;
2. Railway – the recently completed $4 billion, 450-mile railway line linking Djibouti port with its landlocked neighbor, Ethiopia's capital, Addis Ababa – to be carrying100% exports of Ethiopia replacing truck transports from 2 days to 10 hours;
3. 2 airports;
4. Free Trade Zone - A 10-year project to create new warehouse and office space facilities near the port, the largest FTZ in Africa.




DJIBOUTI-ETHIOPIA RAILWAY COMPANY

China's 1st overseas naval logistics base




In operation in 2017

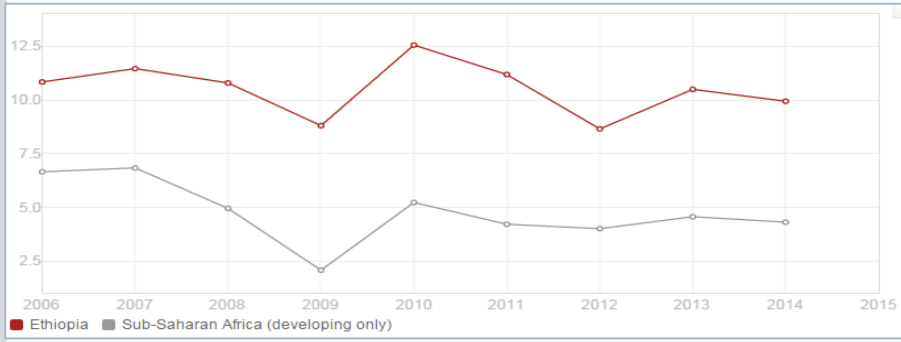
Source: [http://private-sector-development.solidairesdumonde.org/media/02/01/223657234.jpg](http://private-sector-development.solidairesdumonde.org/media/02/01/223657234.jpg)

# Djibouti to become Singapore/Dubai



1. A host of logistics, shipping and trading companies have set up emerged. Its ports went from handling 160,000 containers per year in 2004 to 830,000 containers in 2014. With the widening of the Suez Canal and the continuing prosperity of Ethiopia (increase in agricultural exports and imports for industrialization) & stability of South Sudan (the pipeline through Ethiopia to Djibouti for exports), port economy would grow further.
2. It is a major transport hub of East Africa and Sub Sahara Africa, a region expected to develop fast in the coming years & decades. Ethiopia is particularly bullish with infrastructure led growth.

Ethiopia's 10% growth decade



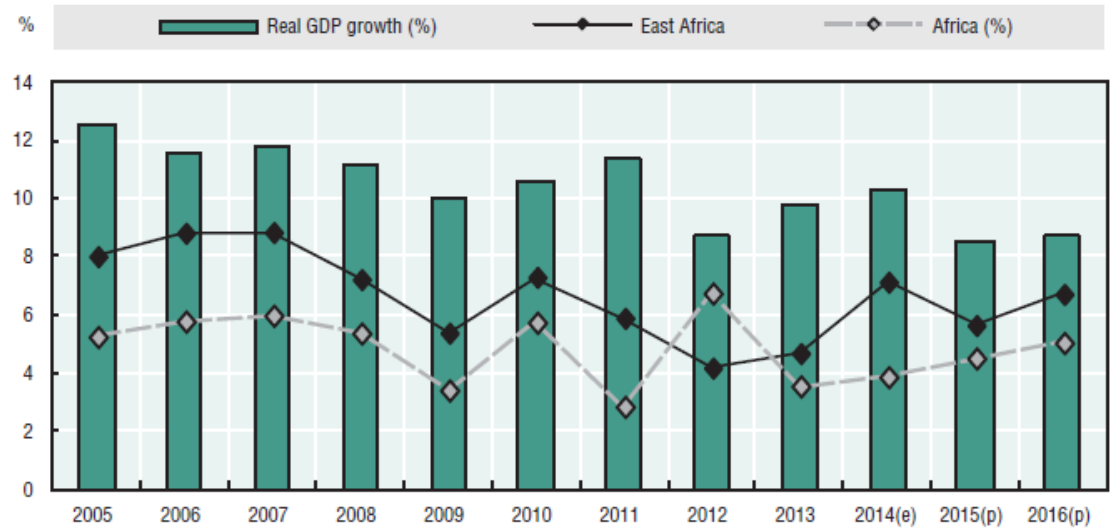

With year-on-year growth of between 7% and 9%, Ghana, Angola, Mozambique, Zambia and Ethiopia have already played a pivotal role in helping Africa's economy triple in size since 2000. The same again is expected to happen in the next 15 years, as half the continent's population migrates to urban centers and its middle class overtakes that of India. - *Global Finance Magazine*, 7 May 2015

# Ethiopia – one of the poorest but also the fast improving country with per capita below US$ 1,000



one of the world's fastest growing economies; they have done a good job in meeting the Millennium Development Goals (poverty reduction & health); they are building what will soon be Africa's largest hydroelectric dam; their national airline dominates the continent's skies; they have achieved an admirable level of political stability in one of the region's roughest neighbourhoods, and their capital Addis Ababa, whose skyline is dotted with construction cranes, is the continent's diplomatic capital, thanks to the presence of the African Union's headquarters.

Figure 1. **Real GDP growth**

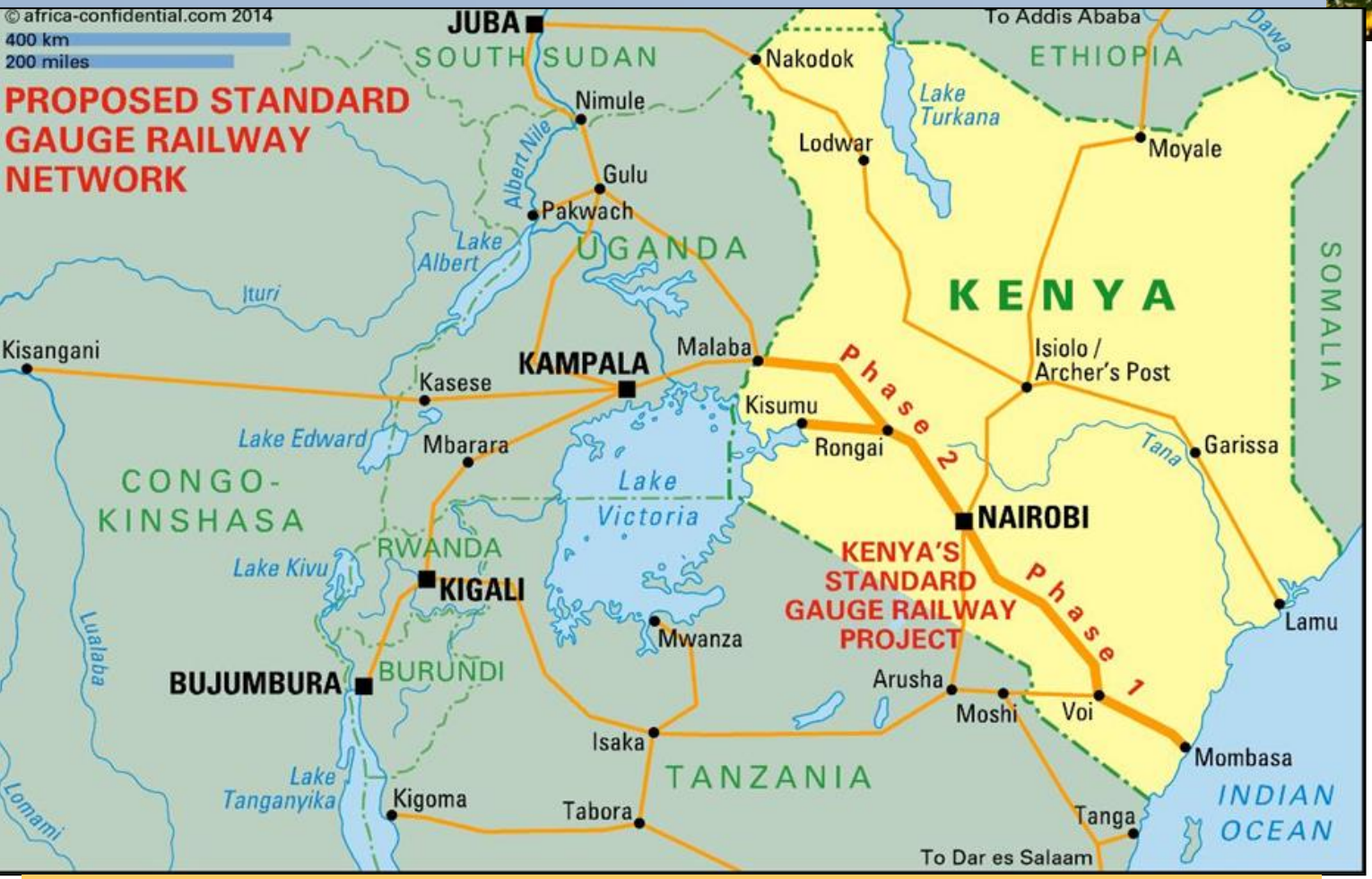



*Source*: AfDB, Statistics Department AEO. Estimates (e); projections (p)

A developmentalist model after the Chinese with public investment led growth – plan to become middle income economy by 2025

# The standard gauge East African railway in Kenya from Mombasa to Nairobi (started in 2014 & completed by June 2017)






The first stage will be from Mombasa to Nairobi and will extend eventually to Uganda, Rwanda, Burundi and South Sudan.
In September 2015 it was extended to Naivasha, 120 km from Nairobi.

The 'Look East' initiative of the current Kenyatta government (after 2013) got $5 billion investment from China, the railway is part of it.

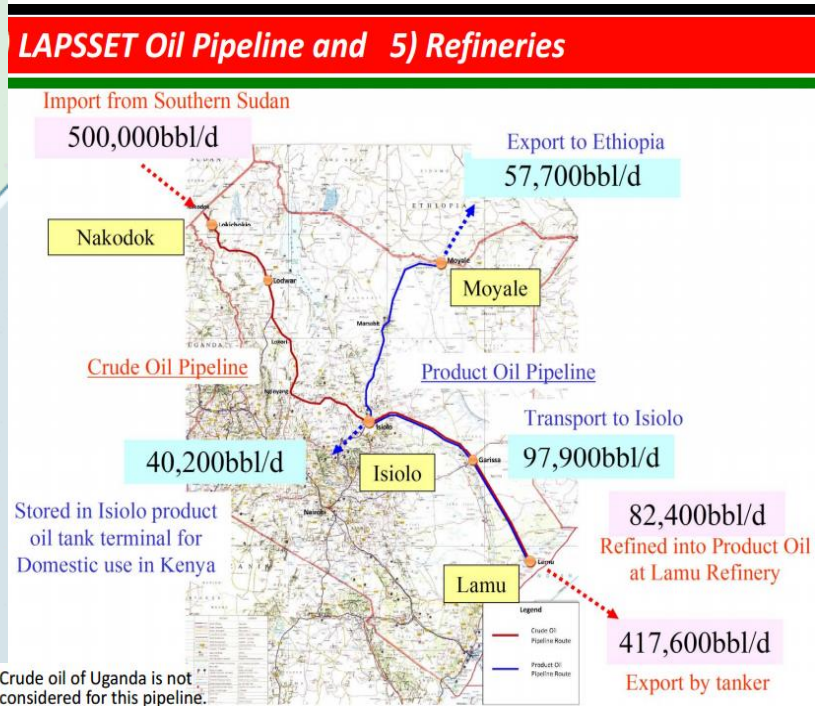
Kenya's Vision 2030

Source: http://www.africa-confidential.com/resources/1/uploads/content/14%20kenya%20rail%20COL.jpg

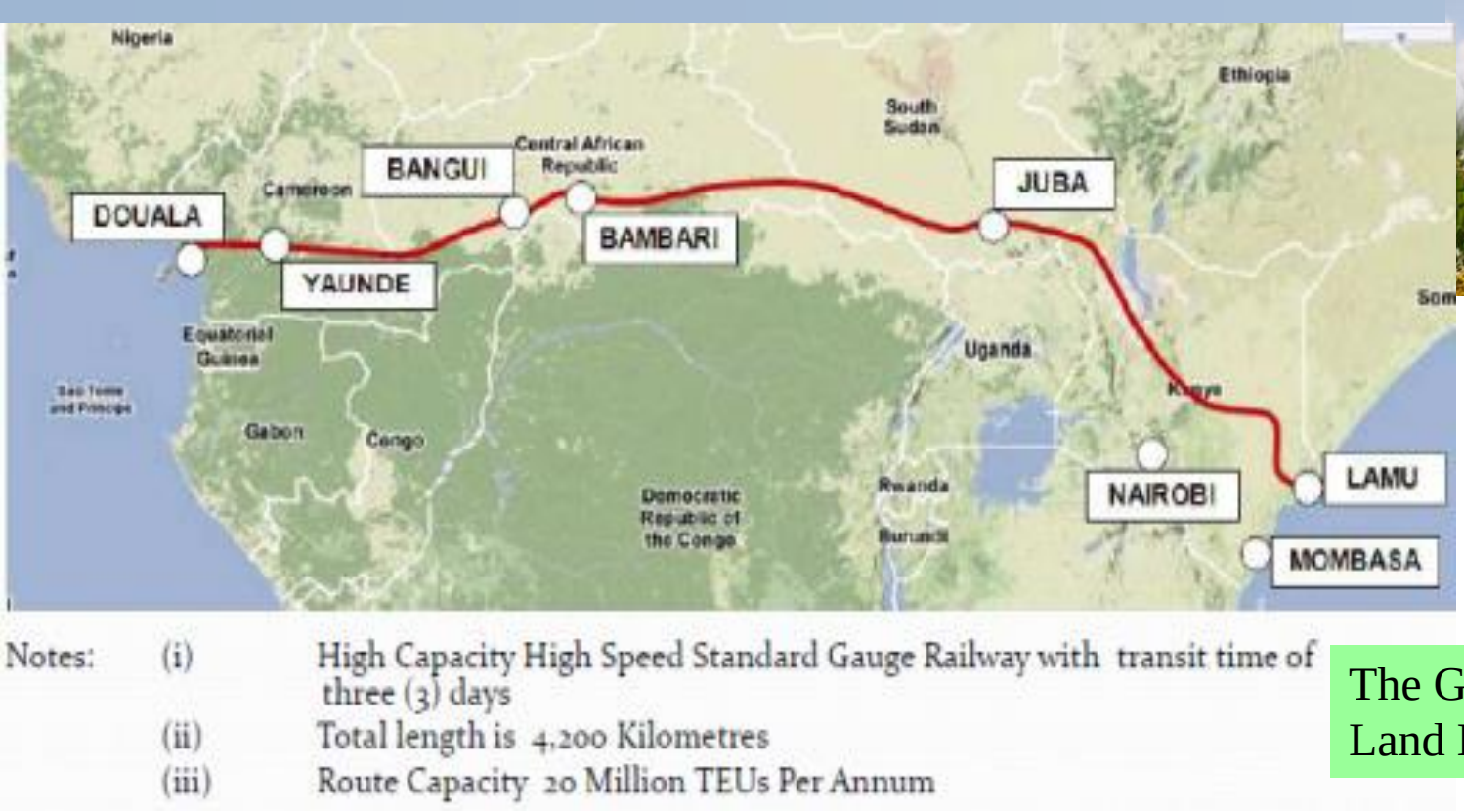


Kenya's ambitious LAPSSET corridor project to serve as the transport hub in East Africa & link up with the hinterland to the Atlantic Ocean




Source: http://cdn.static-economist.com/sites/default/files/imagecache/original-size/images/print-edition/20140315_MAM930.png



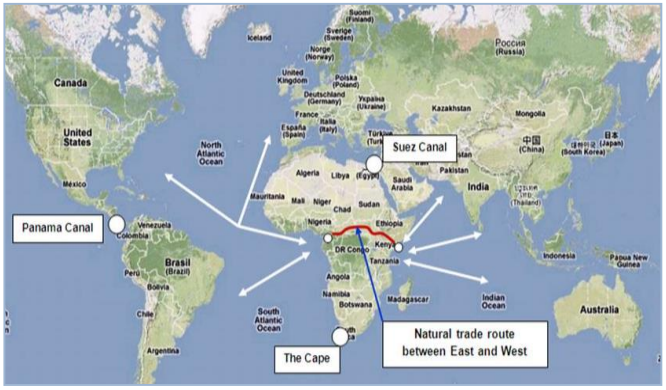

Notes:
(i) High Capacity High Speed Standard Gauge Railway with transit time of three (3) days
(ii) Total length is 4,200 Kilometres
(iii) Route Capacity 20 Million TEUs Per Annum



Source: http://www.oilnewskenya.com/wp-content/uploads/2015/09/Lapsset-transport.jpg

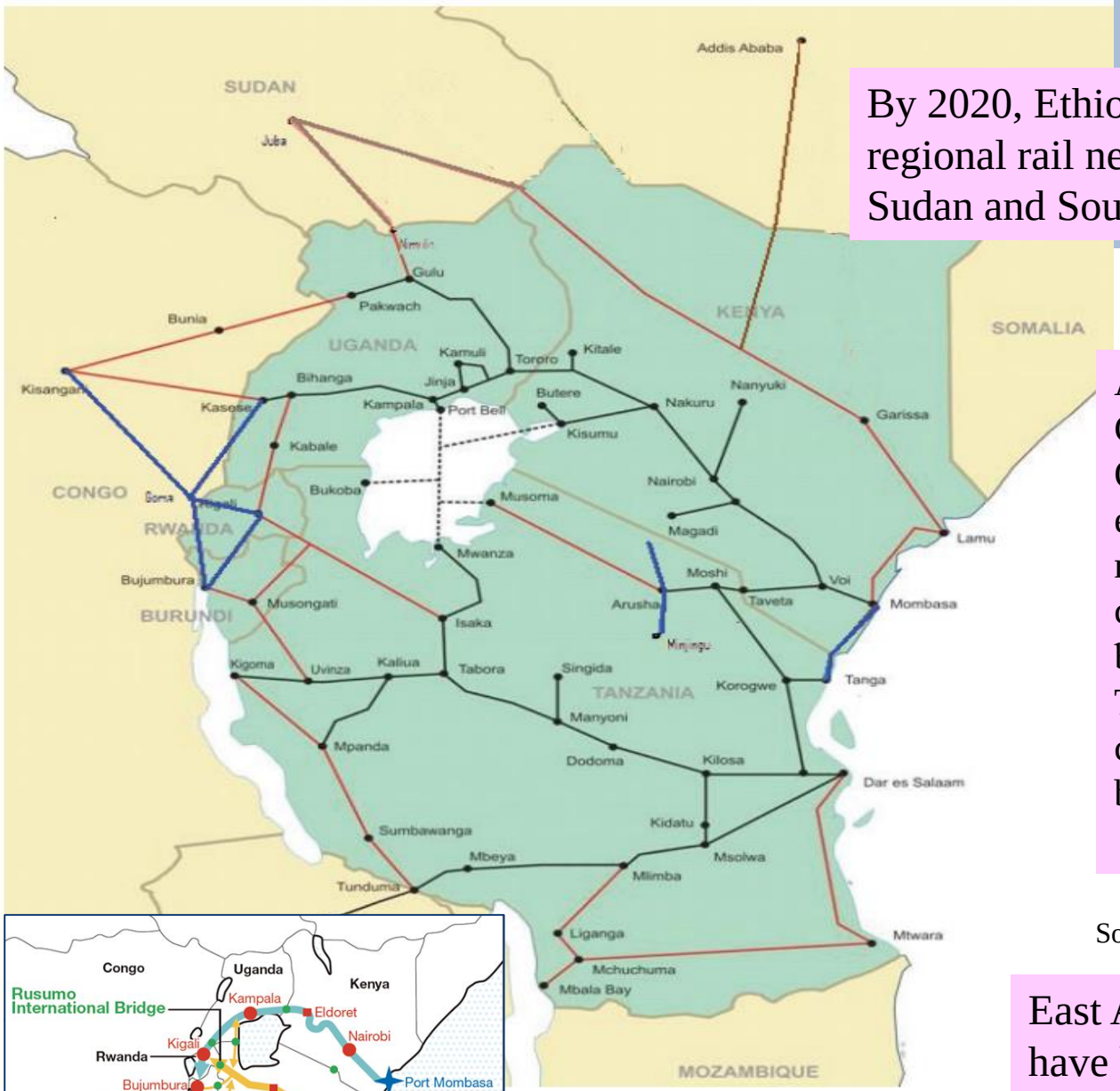
# The Great Equatorial Land Bridge

The opportunities presented by LAPSSET promise:
- new trade routes with international partners in the Middle East and Asia,
- greater regional stability arising from a secure export corridor for South Sudan, and
- the very real potential to lift millions from poverty through jobs and economic infrastructure development.




Source: http://venturesafrica.com/lapsset-a-peep-at-the-east-african-trade-corridor/

Figure 7: East African Community Railway Network







Source: http://www.japan.go.jp/tomodachi/_src/7751965/08_06.png

By 2020, Ethiopia plans to build a 5,000km regional rail network, running through Kenya, Sudan and South Sudan.

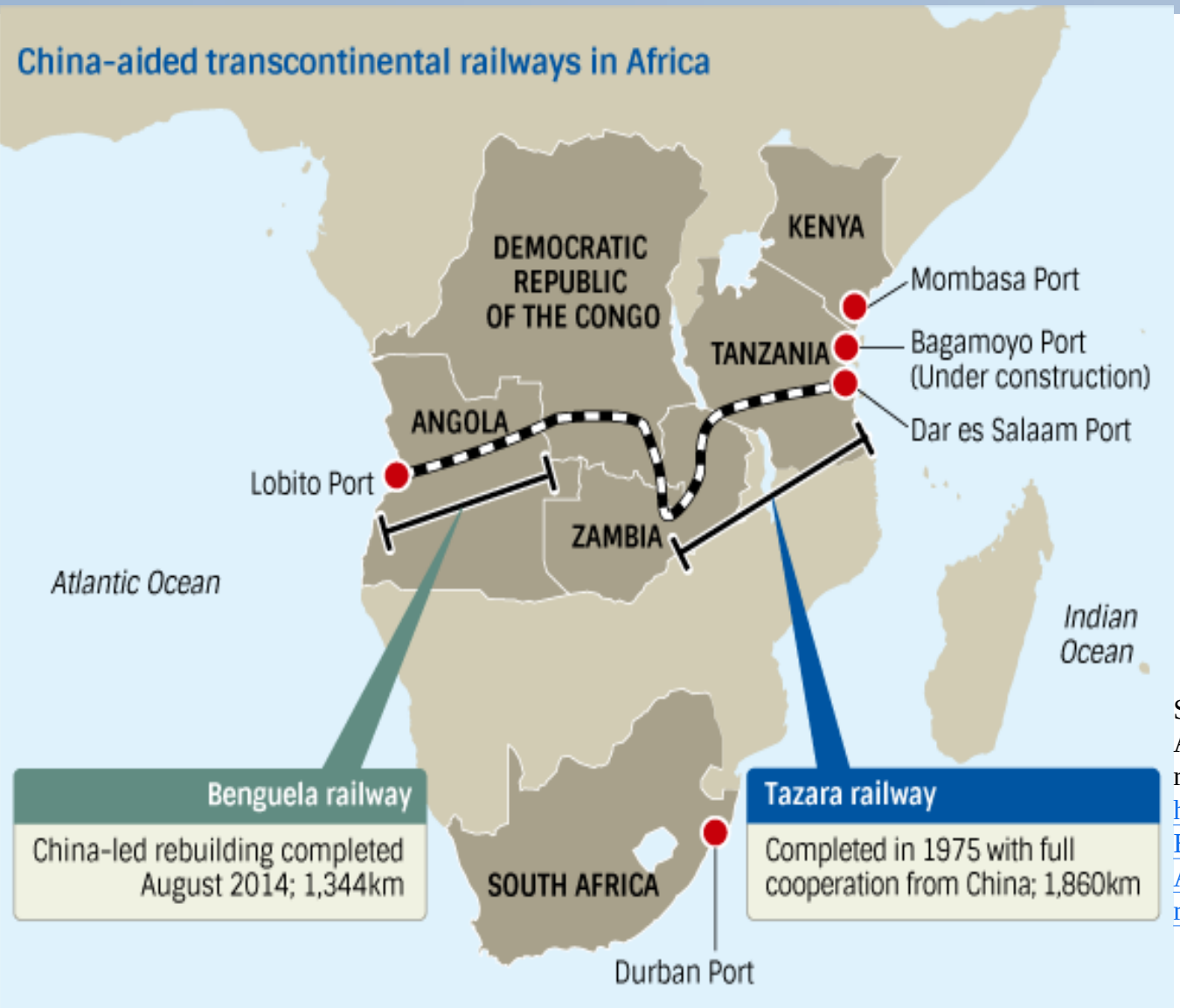
African Union Commission and China signing an agreement on 5 October2015. The five-year plan envisions an integrated high-speed railway network in Africa, a key component of Agenda 2063, the AU blueprint for Africa's development. The target is to connect all African capital cities and other major cities by high-speed rail.

Source: *East African Community Vision 2050*

East African Community aspires to have high-speed, high capacity trains using the latest technology for both passenger transport and cargo freight by 2050

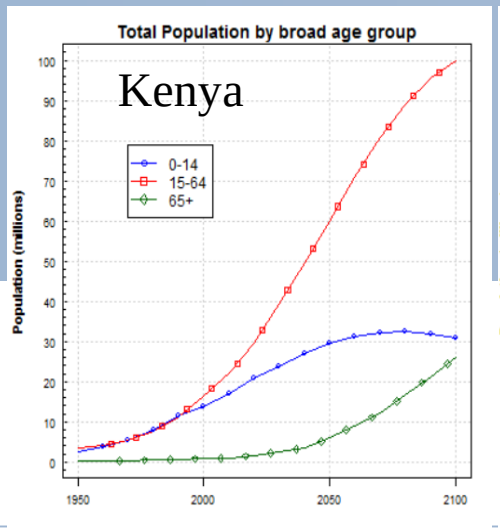
The trans-African railways will connect the Atlantic coast with the Indian coast and thus the Maritime silk Road

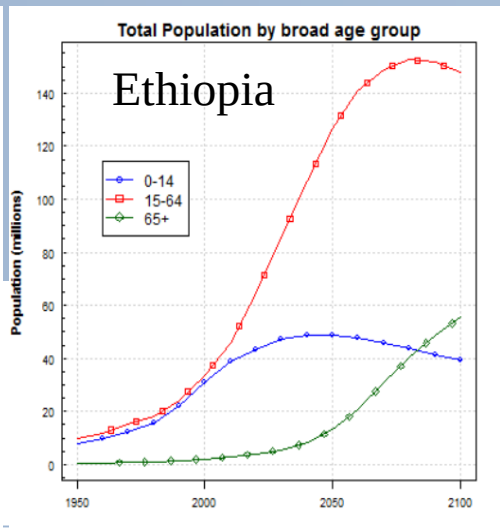


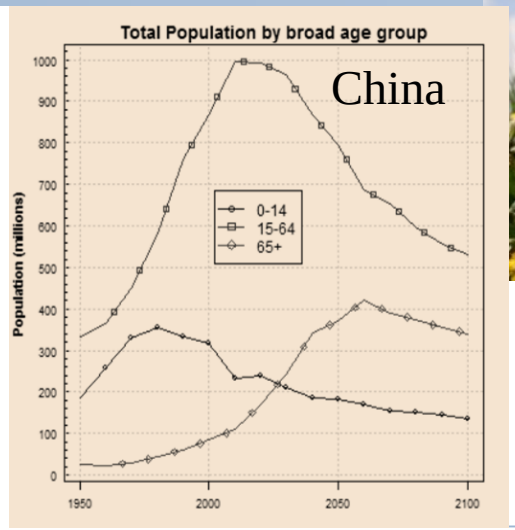



Angola is China's second largest import source of oil; DC Congo exports oil & Zambia copper to China

Source: Ken Moriyasu, China-aided trans-Africa railway line likely to transform regional trade, 25 August 2014, http://asia.nikkei.com/Politics-Economy/Economy/China-aided-trans-Africa-railway-line-likely-to-transform-regional-trade



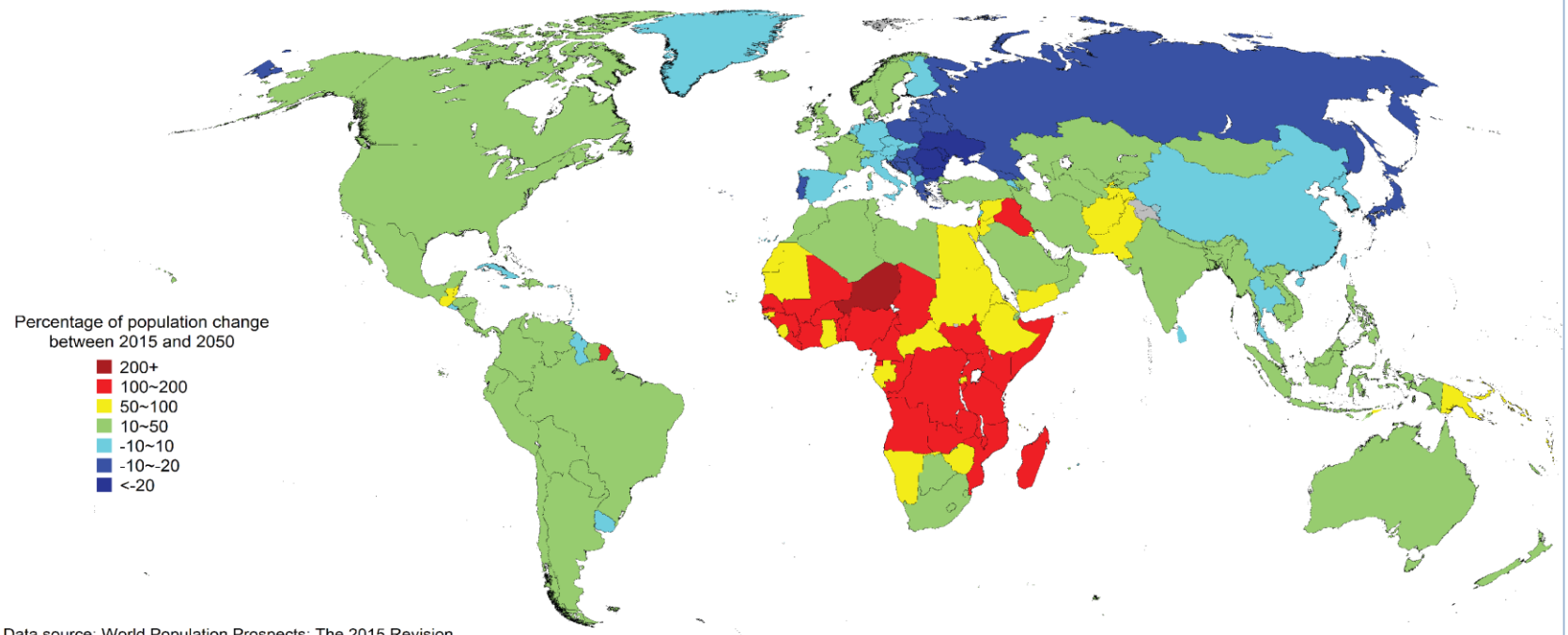






Source: UN, *World Population Prospects, Volume I: Comprehensive Tables*, The 2015 Revision.

# World map: Projected population growth, 2015-2050




Data source: World Population Prospects: The 2015 Revision
The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations.
Dotted line represents approximately the Line of Control in Jammu and Kashmir agreed upon by India and Pakistan. The final status of Jammu and Kashmir has not yet been agreed upon by the parties.
Final boundary between the Republic of Sudan and the Republic of South Sudan has not yet been determined.

# China's Belt and Road Initiative in ASEAN – railway investment



## 1. China – Lao Railway

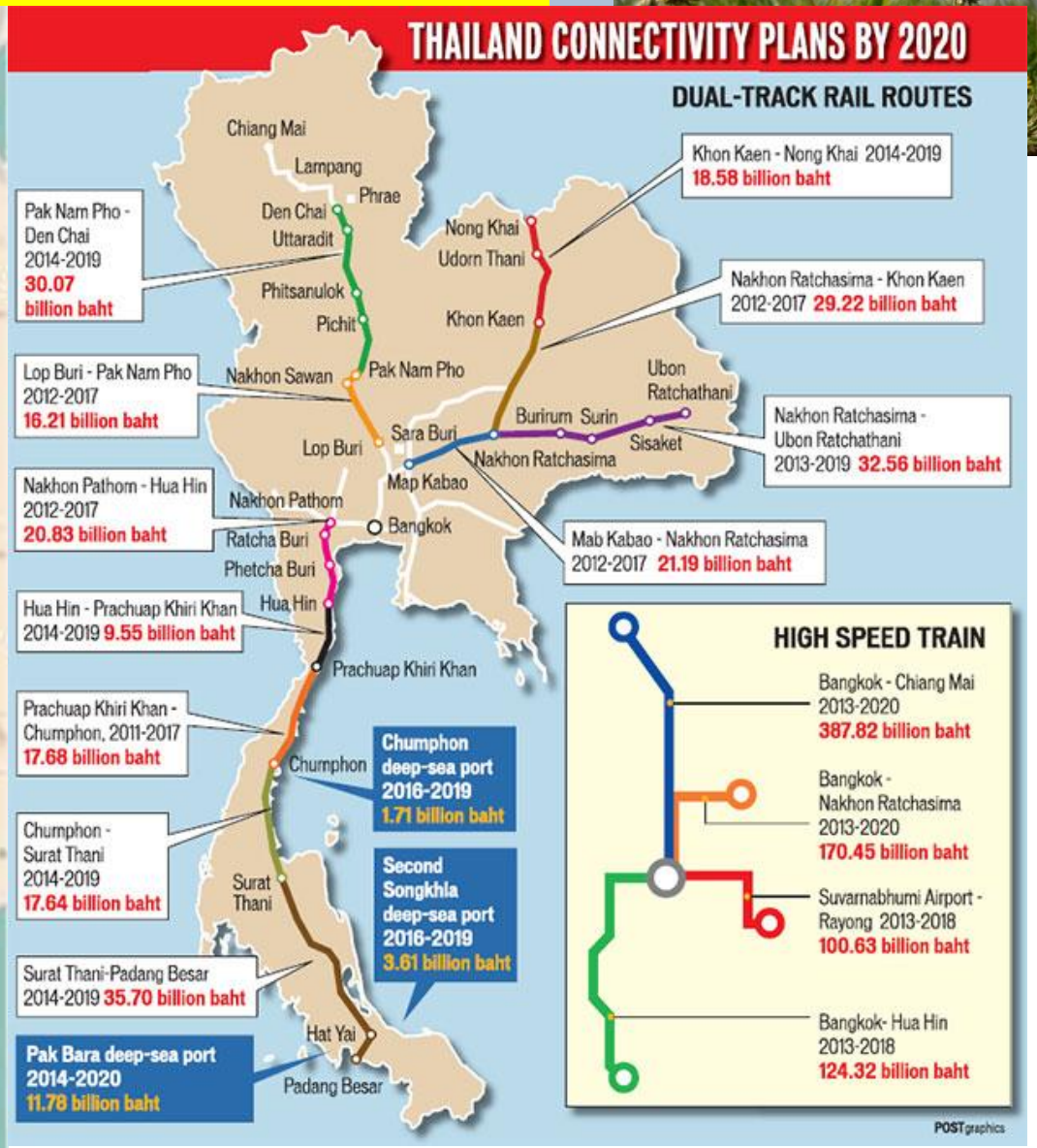



Source: Laos and China to Set Up Joint Company for High-Speed Railway, Radio Free Asia, 2015-06-05

1. Construction started in December 2016 for 5 years.
2. Single track, standard gauge, 414 km from Chinese border to Vientiane, interconnecting Yunnan in China to Bangkok in Thailand;
3. Speed of for 160 km/h passenger and 120 km/h freight trains;
4. Construction costs at US$ 5.8 billion, almost half of Laos' GDP in 2015 with about 70% of Chinese funding

# 2. China – Thailand Railway




Sources: http://www.nationmultimedia.com/new/2015/05/18/national/images/30260325-01_big.jpg & http://www.dickvanderlugt.nl/wp-content/uploads/2013/03/2-biljoen-baht-plannen.jpg



# The Bigger picture of regional connectivity – GMS corridors of ADB

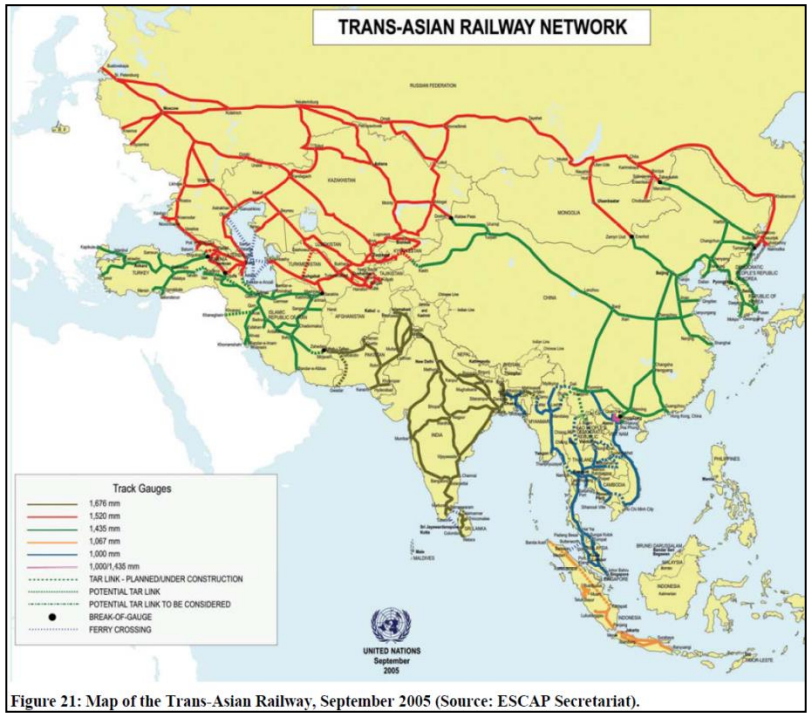



Figure 21: Map of the Trans-Asian Railway, September 2005 (Source: ESCAP Secretariat).

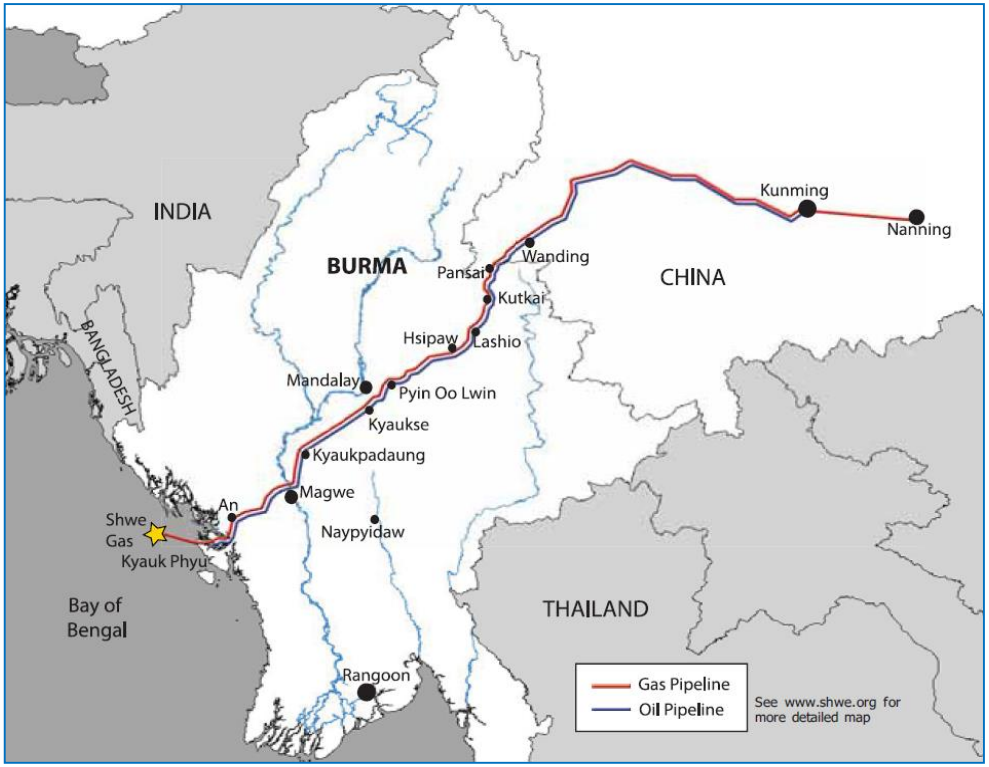
# China – Japan competition






Source*: Bangkok Post*, 28 Jan 2015

China - Myanmar Gas and Oil Pipelines and the proposed railway & highway




Source: *Corridor of Power: China's Trans – Burma Gas and Oil Pipelines*, Shwe Gas Movement, (Chiang Mai, Thailand),September 2009

# 3. China Indonesia high speed railway – Jakarta to Bandung in Java Island



1. Jakarta – Bandung section (142 km), awarded to China in September 2015, to be completed by May 2019
2. Construction costs at US# 5.5 billion with 75% funding by China;
3. Speed – 350 km/hr
4. Chinese technology standards




Source: Gunawan Kartapranata - Own work, CC BY-SA 4.0, https://commons.wikimedia.org/w/index.php?curid=43926417

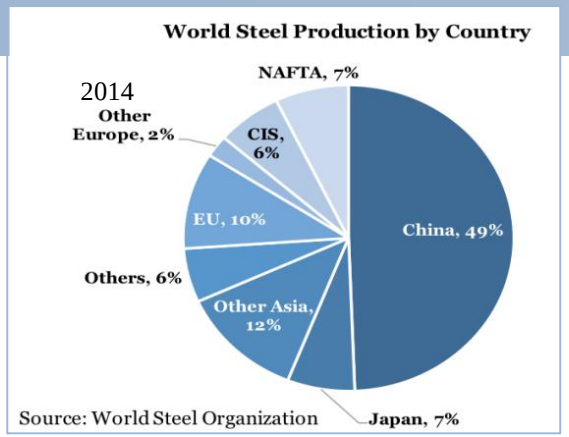
# Competition of investment is good for Asia



1. China's initiative has been emphasizing on open regionalism and cooperation and collaboration. It is not a Chinese version of the Marshall Plan and the China-Pakistan Economic Corridor programme is the benchmark.
2. One of China's aim is to mobilize investment and involvement by all stake-holders, from different countries and from private and public sectors. The competition from Japan (and to a lesser extent India) will create a virtuous cycle of investment and development and reverse the previous era of lack of investment for least developed hinterland & landlocked economies – spreading industrialization and ideas, enhancing comparative advantages and fostering economic and social synergy.
3. Infrastructure (esp. of public goods nature) - led investment has proven to be a successful first step for economic catching up (as exemplified by China & more recently by Vietnam). China's investment makes the best use of the recycling of trade surplus and is important for local development and balancing structural problems of FDI-led industrialization for exports by and for multinational corporations.

# Reindustrialization of China









- Science-based & internet connected – the defense sector will be the leading force and has strong spilling over effect on the civilian economy – high speed railway, large aircrafts, advanced telecommunications (including quantum networking), nuclear & other energy systems, with many disruptive technologies.
- Internet led transformation of conventional manufacturing – lifestyle industries – transaction cost reduction, shrinking scale economy, system integration. (5G to be commercialized by 2020)
- Culture and craftsmanship – from functional products to cultural/symbolic products embedded in history and civilization values

China has over 60% of the world market of chips & plans to have from 20% at present to 40 percent self-sufficiency by 2020 and 70 percent by 2025.

# Achievements of the PRD



**Economic ranking –** nominal GDP was 6.79 trillion yuan in 2016, almost almost US$ 1 trillion making it at 16th in the league of nations, at par with with Mexico, & larger than Indonesia, Turkey & Saudi Arabia; its per per capita GDP was around US$ 16,000, breaking through the middle middle income trap (with Shenzhen at US$ 23,000 & Guangzhou US$ US$ 20,000).

**International competitiveness** – exports were US$ 600 billion in 2015 2015 with trade surplus equivalent to 22.5% of GDP; trade surplus was was 9.46 times of actually utilized FDI from 1.01 times in 2000. The region has abundant foreign exchange funds.

**Industrial capability** – industrial value added constituted 40% of regional regional GDP, with continuous high investment in manufacturing industries – 502 billion yuan fixed asset investment in manufacturing manufacturing equivalent of almost 10% of regional GDP, mostly in areas areas of industrial upgrading. Now the world's 5th largest industrial economy from no.8 position in 2008.

# PRD – a beneficiary of China's reindustrialization & the Belt and Road strategy with its own industrial upgrading



PRD, the growth engine and institutional reform leader of China since the Economic reform and open-door policy, will be the main beneficiary.

a) The strategy will bring economic development and increase in purchasing power of the developing economies along the route, most of which are at the early stage of industrialization that would see explosion in consumption and demand for consumer goods in the process. PRD is the world class producer of consumer goods ranging from textile, garments to electrical appliances, household goods & telecommunications equipment and smart phones. The strategy works as the tool to expand the PRD's market from traditional developed countries (already saturated) to huge populations from developing countries by means of greatly improved connectivity;

b) The current industrial upgrading in the region improves local competitiveness through expanded machinery & equipment industries, compensating for the increase in labour costs, and new IT & telecommunication products and services









The strength of PRD is its flexible & easily scalable manufacturing capability and the supporting trading establishment (wholesales 4x retail sales) & logistics facilities (surpassing Hong Kong); cheap labour has been only one factor

Economic comparison of Beijing, Shanghai, Guangzhou and Shenzhen, 2015

Source: http://news.southcn.com/gdnews/fsdf/node_297911.htm

| City | Population (million) | Per capita GDP (yuan) | Per capita retail sales (yuan) |
|---|---|---|---|
| **Beijing** | 21.70 | 106,284 | 47,630 |
| **Shanghai** | 24.15 | 103,100 | 41,634 |
| **Guangzhou** | 13.50 | 134,066 | 58,758 |
| **Shenzhen** | 15.80 | 157,985 | 44,098 |

Sources: Annual statistical communiques of the various cities, 2015.






# Economic indicators of the Guangdong-Hong Kong-Macao Big Bay Area, 2016

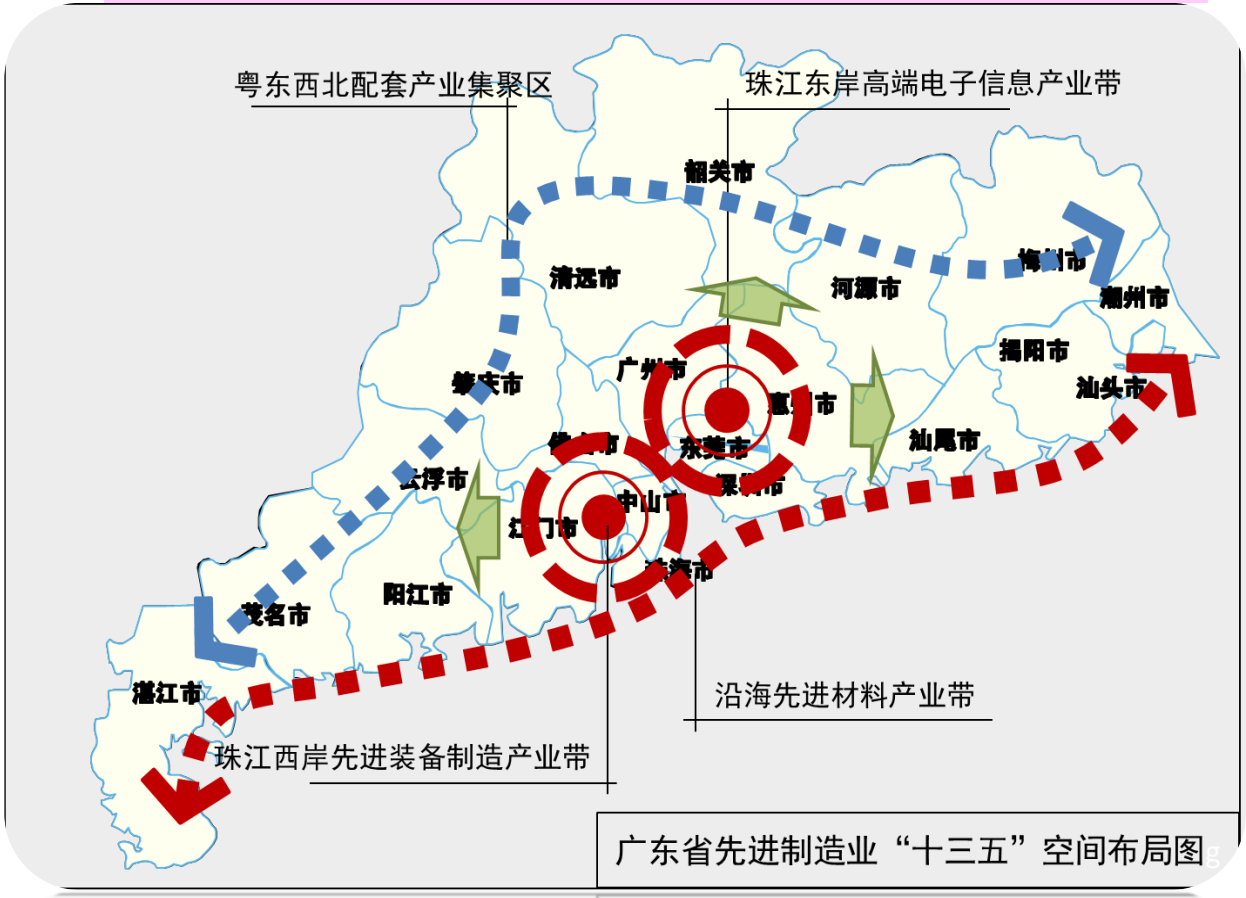
| | GDP at current prices | Fixed asset investment | Retail sales | Exports |
|---|---|---|---|---|
| Hong Kong | 2190 (1.9%) | n/a | 384.3 (-8.1%) | 378.0 (-8.5%) |
| PRD total | 6790 (8.3%) | 2231.7 | 2388.4 | 3737.5 |
| Guangzhou | 1961 (8.2%) | 570.3 (8.0%) | 870.6 (9.0%) | 518.7 (3.0%) |
| Shenzhen | 1949 (9.0%) | 407.8 (23.6%) | 551.2 (8.1%) | 15680 (-4.5%) |
| Foshan | 863 (8.3%) | 351.2 (15.7%) | 301.7 (11.6%) | 310.5 (3.6$) |
| Dongguan | 682 (8.1%) | 155.7 (7.7%) | 247.0 (13.1%) | 655.6 (2.0%) |

# *Made in China 2025*: PRD implementation

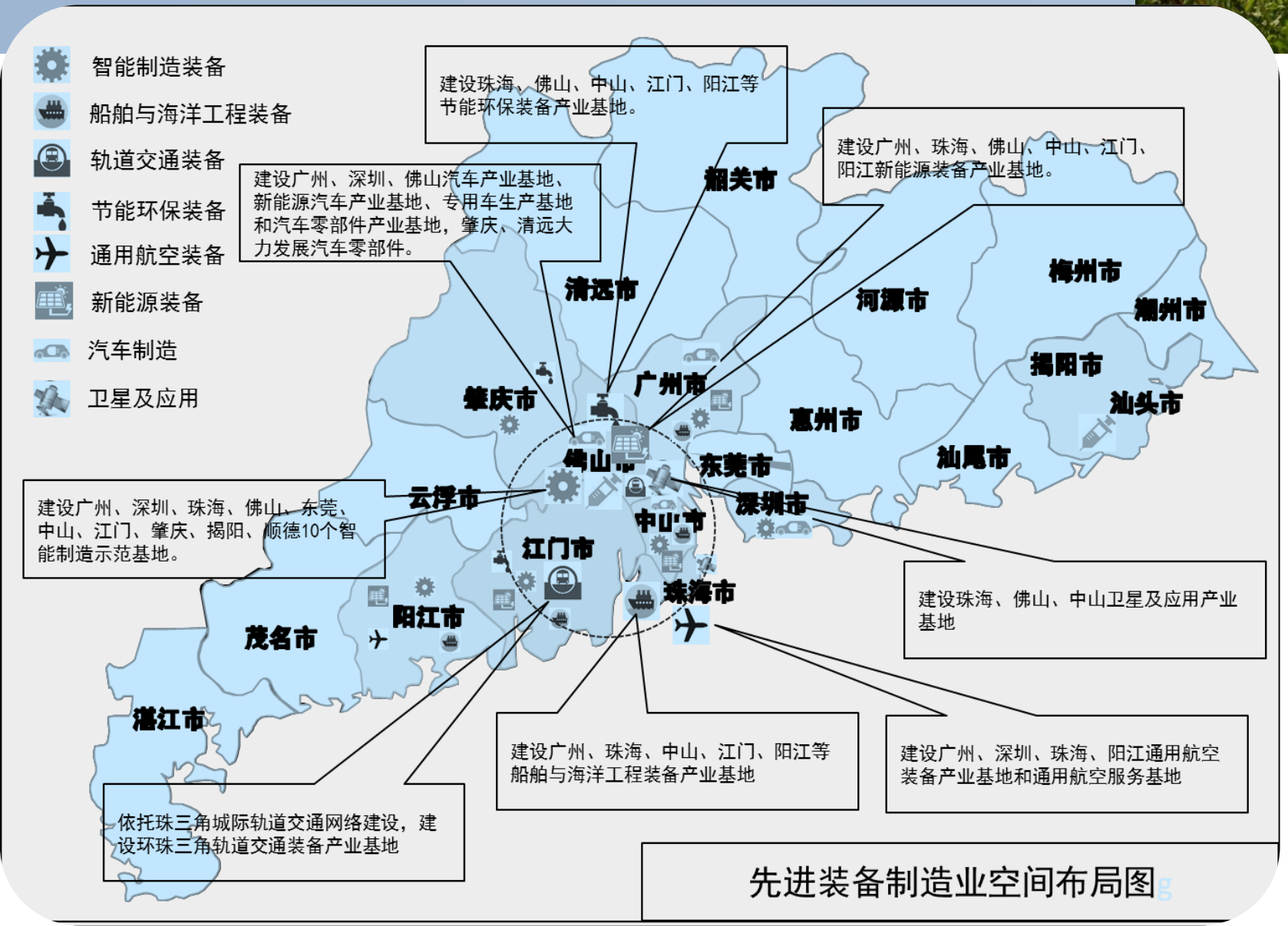


Guangdong and PRD have moved one step before the national industrial plan of 2015 and push aggressively industrial upgrading in the PRD (Dongguan and Foshan had produced their industrial restructuring & upgrading programmes in 2014). The provincial move has been guided by Guangdong intelligent manufacturing development programme (2015-2025) with city level action plans. It has also been incorporated in the provincial 13th Five-year plan for advanced manufacturing industries (2016-2020).

The vision is for the eastern coast (led by Shenzhen, Dongguan & Huizhou) on electronics & information industries while the western coast (led by Foshan) on advanced equipment manufacturing.



# Spatial development of advanced equipment industries in Guangdong under the 13th Five-year Plan




先进装备制造业空间布局图

Source: Guangdong Provincial Government, Guangdong's13th Five-year Plan of advanced manufacturing industry development (2016-2020) (consultation paper) (广东省先进制造业发展“十三五”规划（2016-2020年）（征求意见稿）), April 2016.

# *Made in China 2025* – national and Guangdong versions



| National | Guangdong |
|---|---|
| New generation information technology industry | New generation information technology industry<br>- Integrated circuit & key components<br>- IT communications equipment<br>- OS & industrial software<br>- New flat panel display |
| Advanced numerical controlled machine lathes & robots | Advanced equipment manufacturing<br>- smart equipment manufacturing<br>- Ships &Ocean engineering equipment<br>- railway transport equipment<br>- Energy saving & environmental protection equipment<br>- commercial aircraft equipment<br>- new energy equipment<br>- automobile manufacturing<br>- satellite applications |
| Aero and space equipment | |
| Ocean engineering equipment & high tech ships | |
| Advanced railway transport equipment | |
| Energy saving & new energy vehicles | |
| Power generation equipment | |
| Farm machinery equipment | |
| New materials | New materials |
| Biomedical & high quality medical equipment | Biomedical industry |

Sources: State Council, Made in China 2025 (《中国制造2025》) (19 May 2015) and Guangdong Provincial Government, Implementation Notes on enforcing Made in China 2025 (广东省人民政府关于贯彻落实《中国制造2025》的实施意见), 12 September 2015.

# PRD City level *Made in China 2025* action plans



| Guangzhou | Shenzhen | Foshan |
|---|---|---|
| Smart equipment & robots | Digital network equipment | New generation information technology industry |
| New generation information technology<br>- Big data & IT services<br>- Industrial software & OS<br>- Integrated circuits & key components<br>- Internet terminal equipment | New display equipment | Smart manufacture equipment |
| Energy saving & new energy vehicles | Integrated circuits | Automobile industry |
| New materials & fine chemicals | New components & parts | New energy equipment |
| Energy (power generation & grid equipment) & environmental protection equipment | Robots | Energy saving & environmental protection equipment |
| Railway transport | Precision manufacturing equipment | Producer's services |
| Advanced ships & ocean engineering equipment | New materials | |
| Aero & satellite applications | New energy vehicles | |
| Urban consumption industries (e.g. (e.g. smart household & fashion garments) | Aero & space technologies | |
| | Ocean engineering equipment | |
| | Genetic engineering equipment | |

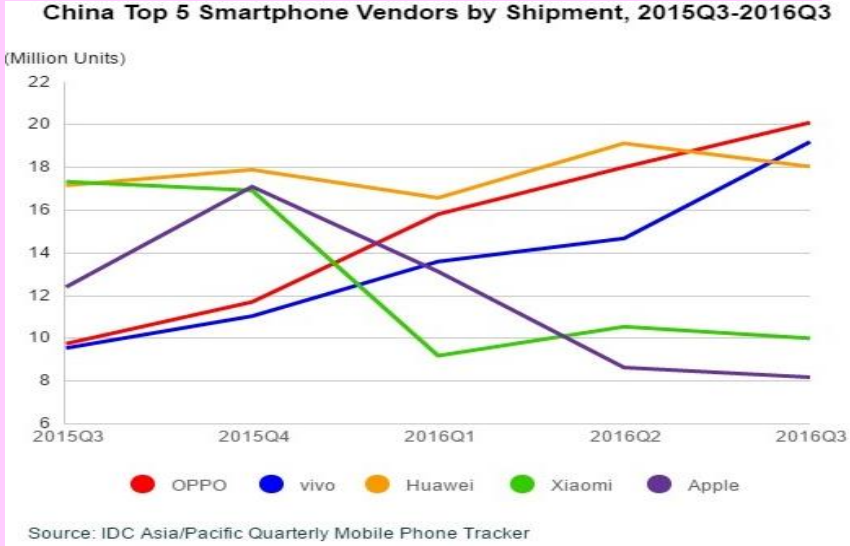
Sources: Guangzhou Municipal Government, Made in Guangzhou, 2025 Strategic Plan (《广州制造2025战略规划》), 26 February 2016; Shenzhen Municipal government，Made in China 2025 Shenzhen Action Plan (《中国制造2025》深圳行动计划), 8 December 2015; Foshan City Government，Made in China 2025 Foshan action Plan, (《中国制造2025佛山行动方案》), 16 June 2015

# PRD further industrialization focuses



1. Advanced IT industries with backward linkage to semi-conductor production & design and forward linkage to services & software, business model development, led by growing share in world market of smart phone. Will also capitalize on the commercialization of 5G mobile technology before 2020.

Huawei (Shenzhen) & OPPO, vivo (Dongguan) have become top 6 brands in the global market and top 3 in the Chinese markets, and well positioned to take over
Samsung & Apple in the expanding world demand. Combined with 5G it would transform the mobile ecology

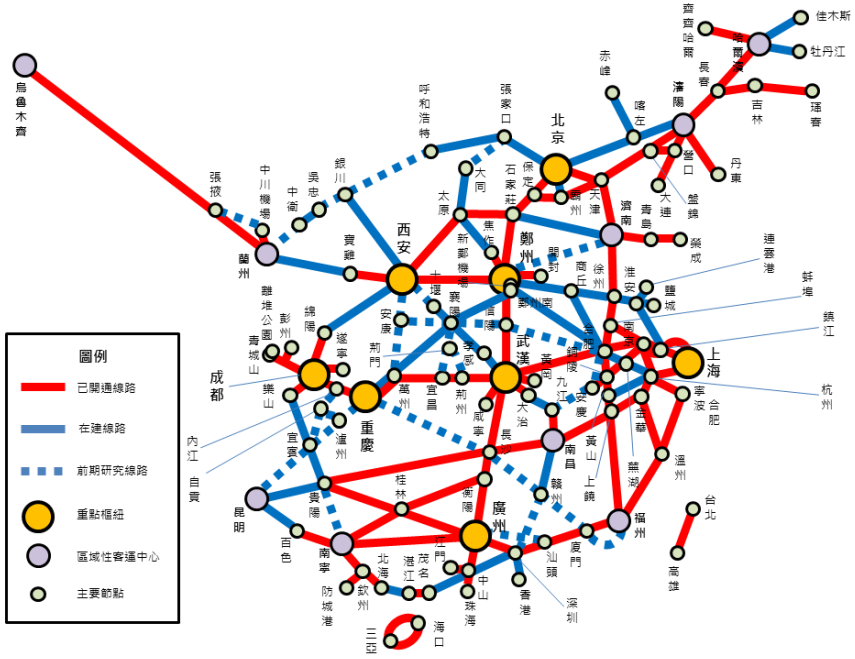



2. Advanced equipment industries to upgrade & reduce production costs of existing household industries for the expected increase in demand from newly industrializing economies under the Belt and Road strategy

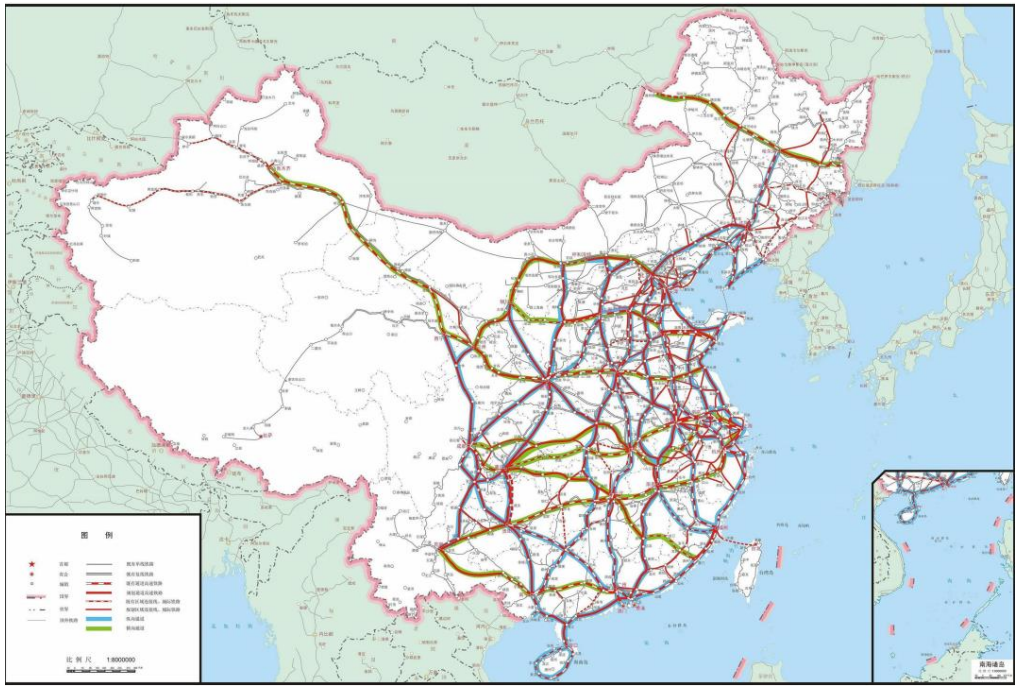
# The national connectivity



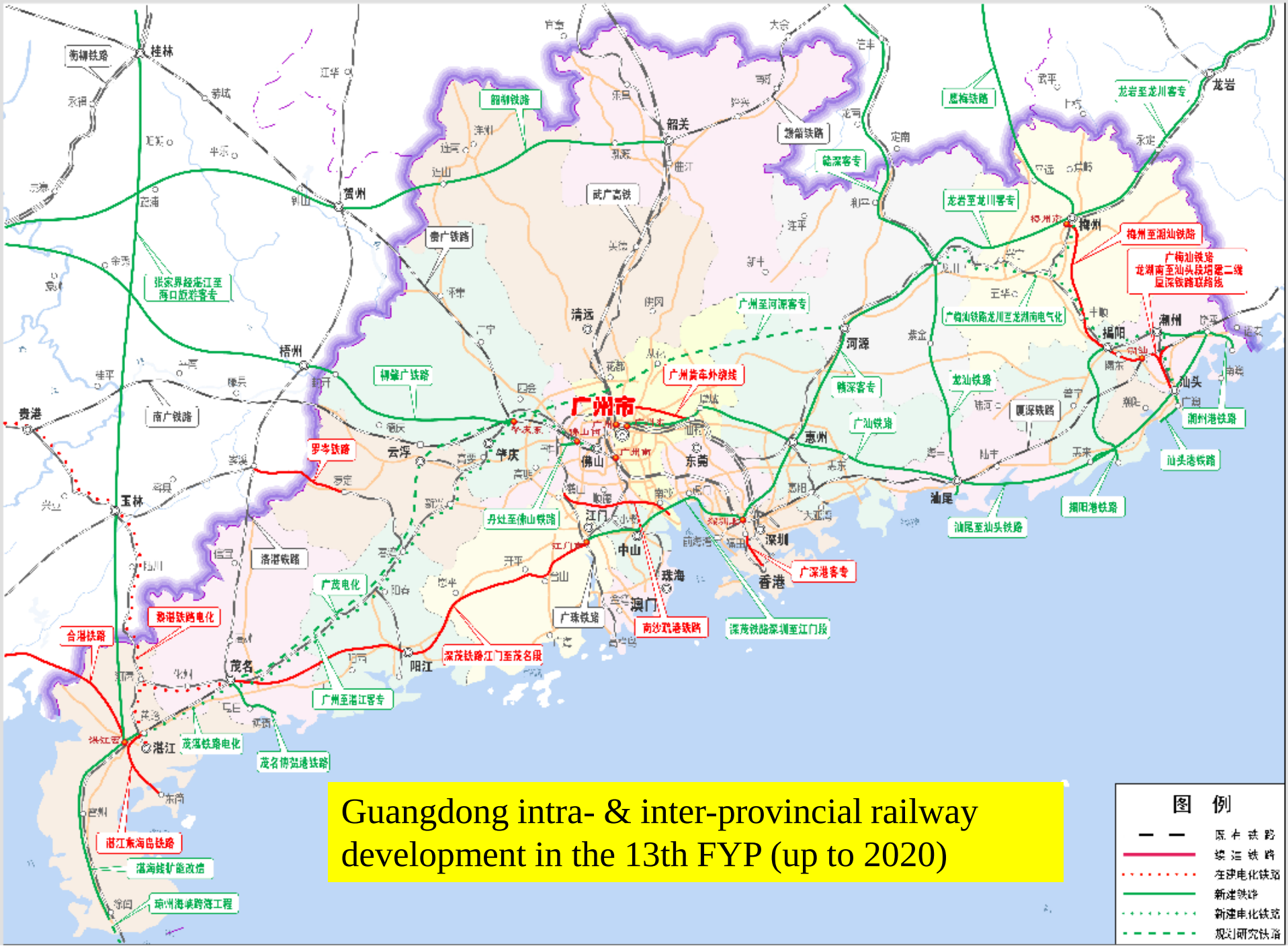
1. 8-horizontal & 8-vertical network at 250 km/hr;
2. Covers all cities with 0.5 million population;
3. Creates 0.5 ~ 4-hour city clusters

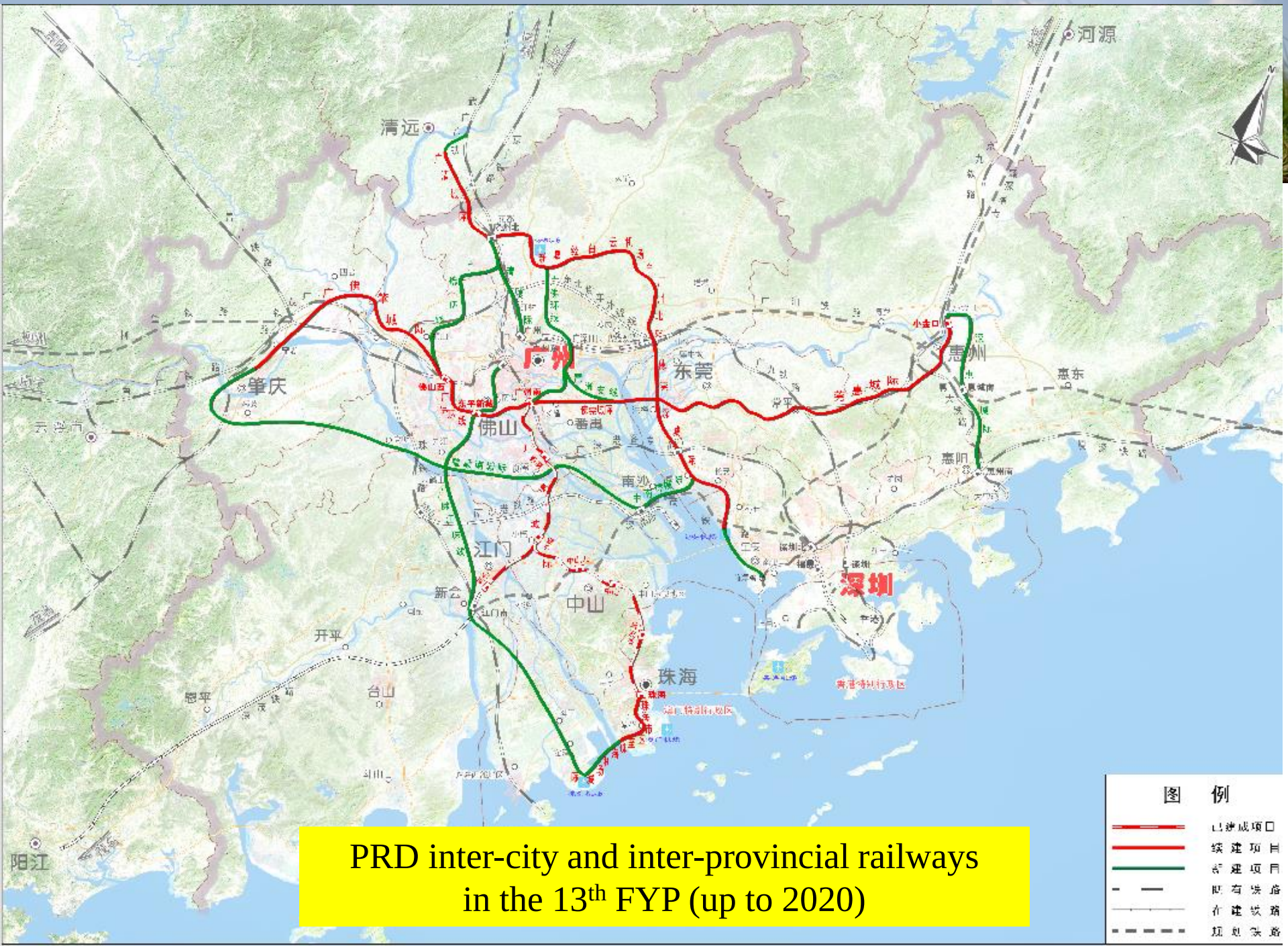



China's high speed railways in 2016



Medium-long term high speed railway network plan as promulgated in July 2016

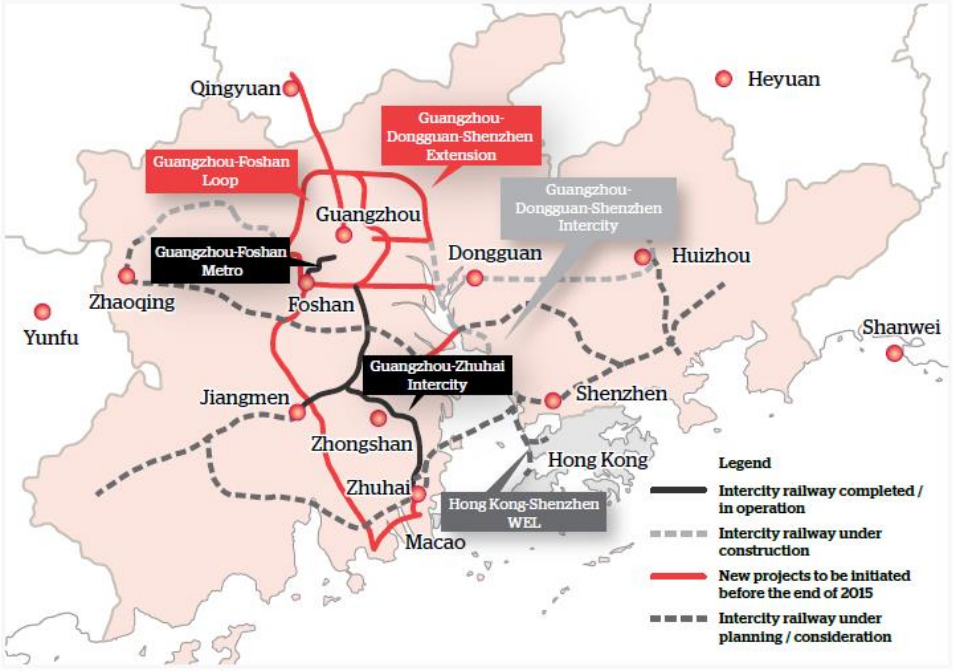

Guangdong intra- & inter-provincial railway development in the 13th FYP (up to 2020)
图 例
原有铁路
续建铁路
在建电化铁路
新建铁路
新建电化铁路
规划研究铁路
广州市
深圳
香港
澳门
珠海
佛山
东莞
中山
惠州
汕尾
河源
梅州
潮州
揭阳
汕头
湛江
茂名
阳江
肇庆
云浮
江门
清远
韶关
贺州
梧州
玉林
桂林
贵港
南宁
柳州
龙岩
厦门
广州至河源客专
广州至湛江客专
广深港客专
深茂铁路深圳至江门段
深茂铁路江门至茂名段
南沙港铁路
广珠铁路
广茂电化
合湛铁路
湛江东海岛铁路
梅州至潮汕铁路
广梅汕铁路龙湖南至汕头段增建二线及深铁路联络线
广梅汕铁路龙川至龙湖南电气化
龙岩至龙川客专
厦深铁路
龙汕铁路
广汕铁路
汕尾至汕头铁路
揭阳港铁路
汕头港铁路
潮州港铁路
南广铁路
贵广铁路
武广高铁
柳肇广铁路
罗岑铁路
洛湛铁路
茂湛铁路电化
茂名博贺港铁路
湛海线扩能改造
琼州海峡跨海工程
张家界经龙江至海口旅游客专

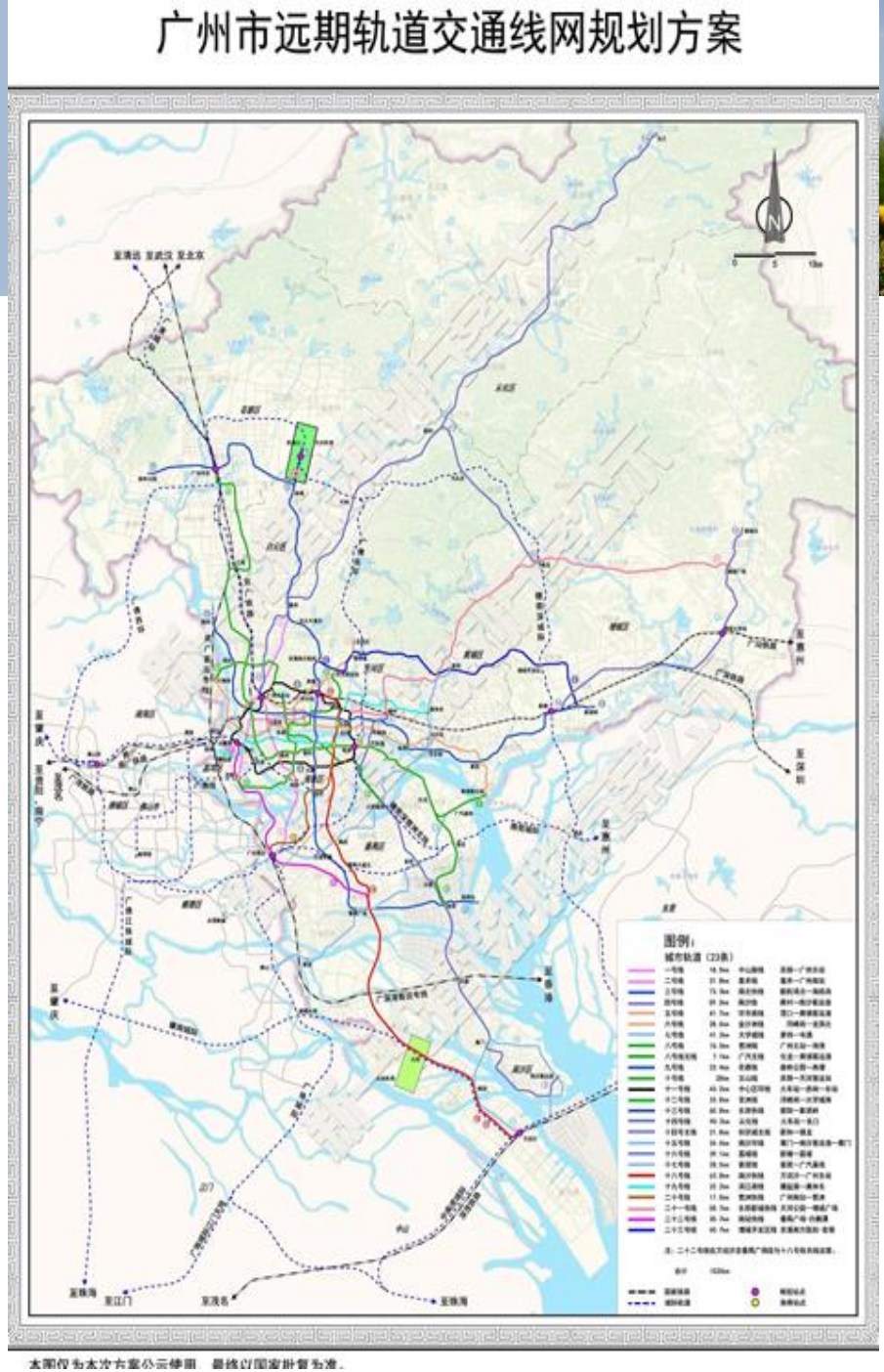



PRD inter-city and inter-provincial railways in the 13th FYP (up to 2020)

# The local connectivity

A regional one-hour economic zone with city-centered one-hour zones within & 3 hours to provincial capitals of neighbouring provinces



# Guangdong comprehensive transport system development 13th Five-year Plan (April 2017)



- By 2020 PRD inter-city railways will have 1100 km making the 9 cities in the PRD into 1-hour zone and creating a 2-hour zone with other cities in Guangdong & 3-hour zone with neighbouring provincial capitals by means of inter-provincial high speed railways;
- There will be subways in Guangzhou, Shenzhen, Foshan & Dongguan with extensions to Huizhou, Qingyuan and Jiangmen;
- Guangzhou will have 18 subway lines of over 800 km by 2023 which will be 3 times the mileage of all railways in Hong Kong. Foshan will have 10 subway lines to connect seamlessly with 13 subway lines of Guangzhou;
- Guangzhou will build a second airport in Foshan and Shenzhen a second airport in Huizhou fully integrated with local, regional and provincial, interprovincial railways and highways. The PRD will have a better connectivity than most other metropolitan regions in the world.
- Hong Kong might become the periphery to the intensively integrated transport system of the PRD.






2023 will be in operation with 8-lane highway bridging the two sides of the PRD in 45 minutes







Source: 深中通道開建 過江車程縮至20分, 中山日報, 2017年01月02日;深中通道再传新进展 锦绣海湾城现投资新契机，网易房产(珠海), 2016-08-22，



## Grand strategy of Jiangmen







将海铁港（广海湾港+江门南站）、空港（珠三角新干线机场）、铁路港（深茂铁路与鹤台城际交汇——江门西站）互联互通

Source: 打造"制造强市" 积极融入粤港澳大湾区, 房天下, 2017-01-25

# Massive further investment in infrastructure to enhance connectivity, 2017-2020 – Beyond PRD



Five-vertical & two-horizontal network of high-speed railways (250-350 km/h) in Guangdong by 2020




Source: 未来广东交通将覆盖全省、通达全国、连通世界，南方都市报, 25 May 2017

Highway and High-speed railway intensity in Guangdong tops the world now and, between 2017 & 2020, the province will further invest 2.5 trillion yuan in infrastructure (136 billion in HSR, 130 billion in Intercity railways & 458 billion in highways)

Source: 广东省推进基础设施供给侧结构性改革实施方案 (28 June 2017)



## Socio-economic background

- 50-60 million population;
- Annual retail sales volume exceeds 2000 billion yuan with the highest per capita retail sales in China
- China main export base
- World class production centres – electrical appliances, telecommunications, etc.
- China's main civilian innovation and entrepreneurial base
- Largest integrated regional metropolitan area in China

What will be the future of re-industrialization in the PRD?

- Internet service & hardware industries
- Upgraded lifestyle industries, esp. electrical appliances
- Upgraded conventional industries, esp. new energy atuos

# PRD strategy



1. Improve connectivity for economic and social integration as the foundation and platform for future upgraded development as a metropolitan region;
2. Investment in R & D capabilities and facilities and building up advanced equipment industries for industrial upgrading and transformation;
3. Promotion of innovation, entrepreneurship and craftsmanship through incubators, technician training and maker movement with heavy government subsidies (Shenzhen's R&D spending in GDP to reach beyond 4% at a par with the leaders in the world – Israel and Korea;
4. Building a sustainable region of cities – massive investment to improve and upgrade local economy – livable cities.

# Hong Kong, the future opportunities: 1



To be the City of London for the Belt and Road countries

- just like the City serving the Greater London, SE England and the world as the offshore centre of Renminbi serving the globalized connected world of the Belt and Road strategy.

But:
Has the financial centre of Hong Kong have the depth & breadth like London in 1958 and after?
Has Hong Kong the supporting knowledge services like those of Britain based on its colonial & global reaches for over 2 centuries?
Is Hong Kong open & diligent enough to start learning for the new role?



# The future opportunities: 2



Hong Kong could integrate with the PRD region to take advantage of its industrial upgrading and metropolitanization of 50 million strong population –

a) with the industrial capacity to equip the Belt and Road countries and China's investment strategy;

b) to offer the market and human resources for cooperation & exchanges with the Belt and Road countries.

But:

Does Hong Kong have the will, mentality & learning capability to cooperate with PRD cities beyond spatial & institutional barriers?

Do the PRD cities with the offshore centres of Free Trade Zones need the international financial centre functions of Hong Kong?





Another question:

Will there be a chance for the development of the Silk Road by air and would it give Hong Kong great opportunity in the socio-economic evolution and growth of the Belt and Road countries and China? Could Hong Kong follow the examples of Singapore and the Gulf countries by building up their own competitive advantages from almost nothing?

The sky is the limit but it depends on …