CURRENT STATUS AND DEVELOPMENT PLANS FOR CROSS-BORDER RAILWAY OPERATION IN VIET NAM



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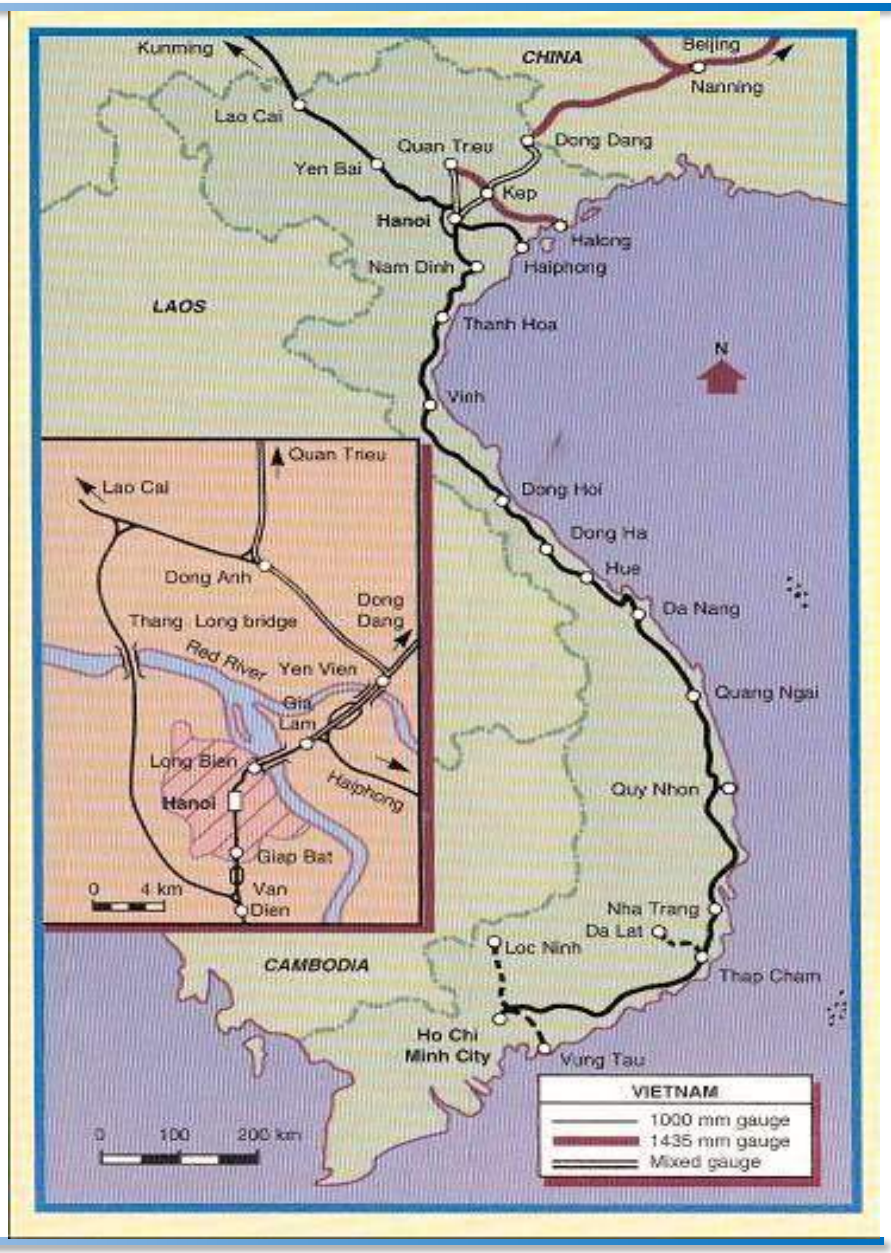
CURRENT STATUS OF CROSS-BORDER RAILWAY OPERATION

Lines	Length (km)	Gauge (mm)
Hanoi - Ho Chi Minh city	1,726	1,000
Hanoi - Hai Phong	96	1,000
Hanoi - Lao Cai	285	1,000
Hanoi - Dong Dang	165	1,435&1,000
Hanoi - Quan Trieu	55	1,435&1,000
Kep - Hạ Long - Cai Lan	108	1,435
Luu Xa - Kep	57	1,435
Bac Hong - Van Dien	40	1,000

- Route length: 3,159 km (2,532 km of main lines), 277 stations
- Density 9.5 km/1000 km2
- Connectivity to 4/6 regions, 34 provinces/cities. Hanoi - Ho Chi Minh City and Lao Cai - Hanoi - Hai Phong accounts for 78% railway network, 98% passenger, 84% freight transport
- International railway connectivity: China in Lang Son and Lao Cai; 10 standard gauge locomotives.



CURRENT STATUS OF CROSS-BORDER RAILWAY OPERATION

Viet Nam joined Organization for Railways Cooperation (OSJD) since 1956, until now, there are 30 members.

No.	Freight transport volume	2020	2021	2022
I	**Export commodity**			
1	Tonnage (1000 tons)	381	461	583
-	To P.R of China	378	453	477
-	Transit to third country	3	8	32
2	TKm (1000 TKm)	123	118	99
II	**Import commodity**			
1	Tonnage (1000 ton)	459	647	748
2	TKm (1000 TKm)	73	65	69

No.	Passenger transport volume	2019	2020
I	**From Viet Nam**		
1	Passenger (trip)	24.783	1.809
2	Pax.Km (1000 TKm)	4.139	301
II	**To Viet Nam**		
1	Passenger (trip)	20.244	5.519
2	Pax.Km (1000 TKm)	3.299	527



CURRENT STATUS OF CROSS-BORDER RAILWAY OPERATION

VIET NAM – CHINA RAIL CONNECTION: WESTERN LINE

- Hanoi - Lao Cai railway line provide freight transport for border crossing to inland P.R of China and transit to third country among OSJD's members;
- Vietnamese train can cross the border without stop to the Shan Yao railway station via the existing one-metered gauge railway section for trans-shipment and roll back with loaded train.
- Total freight transport volumes (in tons): 278,239.97 (2023), 432,477.00 (2022), 611,046 (2021), 568,265 (2020).
- Potential capacity will increase once the standard gauge line is realized from Lao Cai Station to North He Kou Station for seamless connection to the planned and ongoing Lao Cai – Ha Noi – Ha Phong standard gauge railway line.

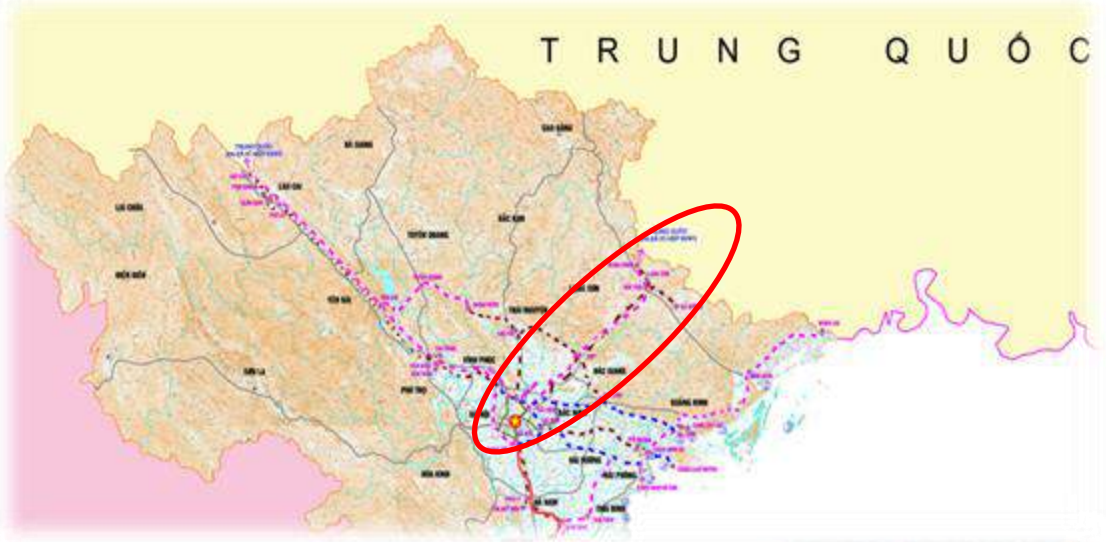




CURRENT STATUS OF CROSS-BORDER RAILWAY OPERATION

VIET NAM – CHINA RAIL CONNECTION: NORTHERN LINE

- Hanoi – Dong Dong standard gauge railway line provide freight and passenger transport for border crossing to inland P.R of China and transit to third country among OSJD's members;
- Vietnamese trains stop at Dong Dang railway station for trans-shipment and roll back with loaded trains
- Chinese trains cross the border point without stop to the Dong Dang railway station for trans-shipment and locomotive change then roll back with loaded train.
- Total freight transport volumes (in tons): 348,755.00 (2023), 748,198.00 (2022), 487,693 (2021), 295,547 (2020). Total passenger transport volumes recorded appx. 50,000 pax annually in 2019, 2018.
- Potential capacity will increase once upgraded Dong Dang – Hanoi standard gauge railway project is realised.





PLANNING AND DEVELOPMENT PLANS FOR CROSS-BORDER RAILWAY PROJECTS

LAO CAI - HA NOI - HAI PHONG: WESTERN LINE

2019 -2023:

- Detailed planning was carried out with Technical Assistance from P.R of China;
- Appx. 392 km in length, standard guage, single track in phrase 1, double track in pharse 2, electrification, 160 kmh for passenger train; 80 km/h for freight train;
- Expected volume: 7.28 million tons of freight per year, 16 pair of passenger trains per day.

2024 -2025:

- Pre Feasibility Study approve by the National Assembly;
- Feasibility Study shall be carried from July 2025, tentatively completed in 12 months

2026 -2030:

- Estimated cost for construction of 11 billions USD;
- Start construction in 2026;
- Complete and put into operation by 2030



PLANNING AND DEVELOPMENT PLANS FOR CROSS-BORDER RAILWAY PROJECTS

DONG DANG – HA NOI: NORTHERN LINE

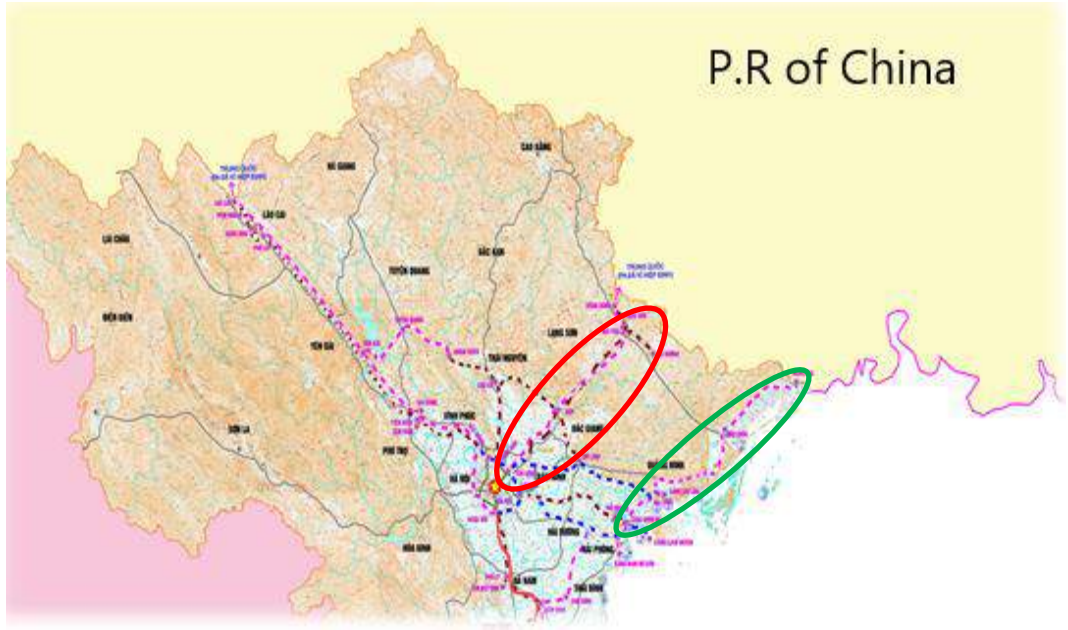
2024:

- Appx. 167 km in length, dual standard guage (1435mm & 1000mm), single track, small curve (300m), steep gradient 18 per thousand, Vmax = 60 km/h, 16 train pairs capacity;
- Current cross border train operation with Nanjing Province, P.R of China and transit to third country in North Central Asia and Europe among OSJD;
- Belong to Trans Asia Railway Network;
- Detailed planning to be implemented with Technical Assistance from P.R of China, duration 12 months, ended in May 2026;
- Pre-F/S, F/S to be carried out in 2026, 2027; construction is expected to start in 2026, 2027.

HAI PHONG – HA LONG – MONG CAI: EASTERN LINE

2024:

- Appx. 200 km in length, new connectivity alightment;
- Connectivity with Guangxi Province, P.R of China via Dōngxìng, Fángchéng district;
- Belong to Trans Asia Railway Network;
- Detailed planning to be implemented with Technical Assistance from P.R of China, duration 12 months, ended in May 2026.



PLANNING AND DEVELOPMENT PLANS FOR CROSS-BORDER RAILWAY PROJECTS

VIET NAM – LAO: CENTRAL LINES

Vung Ang – Tan Ap – Mu Gia:

- Belong to Vung Ang – Thakhet – Vientiance corridor with appx. length of 103 km on Vietnam side, total length appx. 554 km; Planned as standard gauge, electrified, designed speed 160km/h, railway level I;
- Investment proposal for section on Vietnamese side is being carried out by a joint venture, scheduled to complete in 2025, submitted C for approval and start selection of PPP contractors;

My Thuy - Dong Ha - Lao Bao:

- 114km, standard gauge, single track, electrified; construction period is planned after 2030.



VIET NAM - CAMBODIA: SOUTHERN LINE

Alightment options:

- Option no.1: Sai Gon – Loc Ninh: 128km, standard gauge, single track, electrified;
- Option no.2: Sai Gon – Ba Vet: Under discussion between two governments.

CHALLENGES AND OPPORTUNITIES OF CROSS-BORDER RAILWAY OPERATION

CHALLENGES

- Huge budget burden: Total investment demand to 2030 set out in Master Plan on the railway network for the 2021-2030 period, the vision till 2050 in viet nam is estimated at 240.000 billion VND (equal to 100 billion USD), accounting for 13% total transport sector.
- Railway industry is still limited in quantity and scale; Railway vehicles are of many different types, have been in use for a long time, and the quality of the vehicles only meets domestic transport requirements but is not qualified to participate in international intermodal transport.
- Technical issues: Viet Nam yet has experience in building electrified railway line, operating medium HSR, laying demand for training and technology transfer for smooth operation.

OPPORTUNITIES

- Railway is a specific domain playing an essential role in the transport infrastructure system, which is identified by the Government as one of three strategic breakthroughs to be prioritized for investment in service of socio-economic growth;
- Current GDP/capita of about 17.5 thousand USD, and the population size is forecasted of 108.4 - 112.1 million people by 2050, laying feasible background for railway investment to satisfy mobility demand.
- Major national railway projects have been approved for implementation shall be the boost for railway development in Viet Nam;
- Long standing in cross border railway operation since 1965, with stable annual volumes and established partnerships.



thank you