



VIET NAM RAILWAY AUTHORITY

CURRENT STATUS AND STRATEGY TO DEVELOPMENT VIET NAM RAILWAY BY 2020, VISION TO 2050

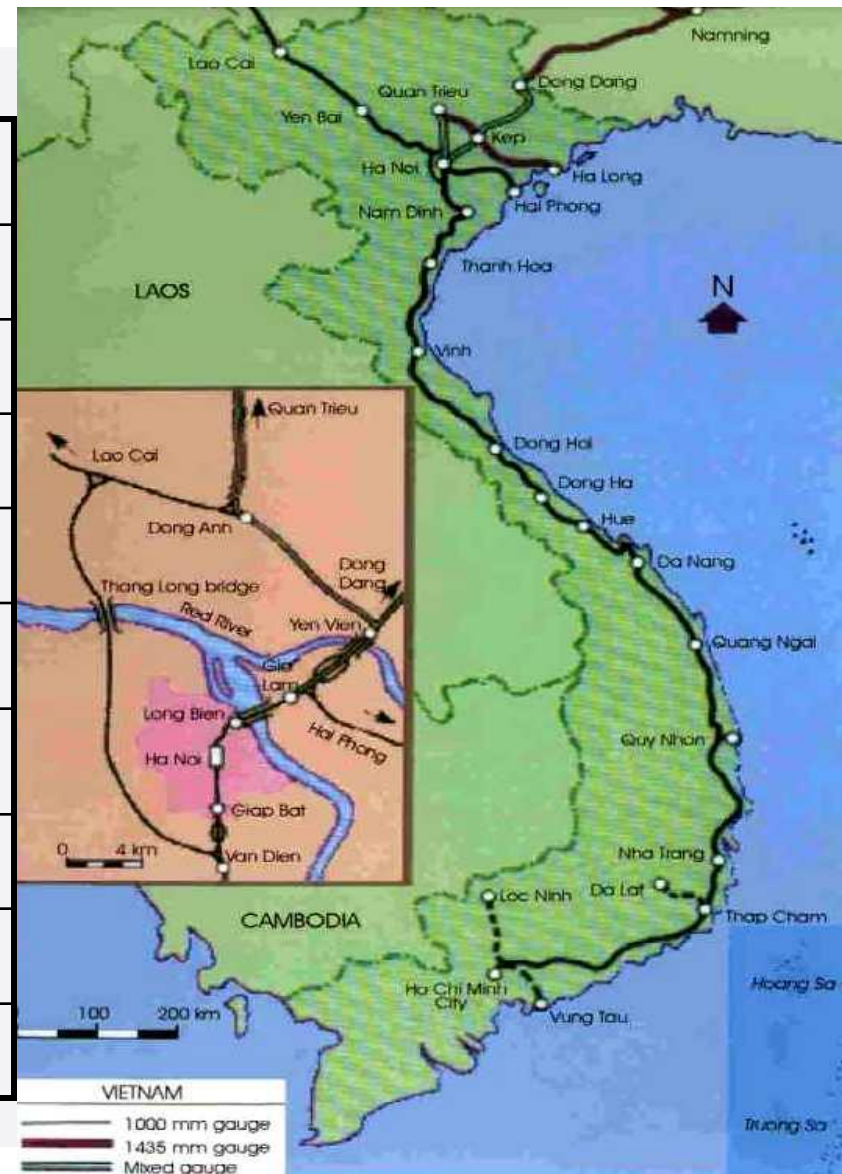


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Busan, 13rd June 2017

1. Current status of Viet Nam railway network

No.	Main lines	Gauge (mm)	Lenght (km)	%
1	Hanoi – Ho Chi Minh city	1,000	1,730	
2	Hanoi – Hai Phong	1,000	102	
3	Hanoi – Lao Cai	1,000	296	
	<i>Sub – Total</i>		2,124	84%
4	Hanoi – Dong Dang	Dual Gauge 1,000&1,435	162	
5	Hanoi – Quan Trieu	Dual Gauge 1,000&1,435	75	
	<i>Sub – Total</i>		237	9,5%
6	Luu Xa – Kep – Ha Long	1,435	163	6,5%
	TOTAL		2,524	



2. National railway network - By 2020

No.	Investment projects list	Lenght (km)	Investment scale	Expected capital
I	Renovate and upgrade existing railways			
1	Hanoi – Ho Chi Minh city	1,726	Meet the National railway technology standard	State, private
2	Hanoi - Lao Cai	285		
3	Hanoi - Hai Phong	96		
4	Hanoi - Thai Nguyen	54		
5	Hanoi - Lang Son	156		
6	Kep - Chi Linh	38		
7	Kep - Luu Xa	56		
II	To study the plan for the construction of new railways with great transport demands, trans-Asia railway			
1	High-speed rail on the north-south axis	1,570	Double track, 1435mm, electrification	State, private
2	Lao Cai - Hanoi - Hai Phòng	380	Electrification	
3	Hanoi - Dong Dang	156		
4	Ho Chi Minh city - Can Tho	320		
5	Vung Ang - Cha Lo (Mu Gia)	119	Single track	
6	Bien Hoa - Vung Tau	84	Single track and double track	
7	Di An - Loc Ninh	128		
8	Hai Phong - Lach Huyen	40		
III	To put into operation the entire route of Yen Vien - Pha Lai - Ha Long - Cai Lan	129	Đường đơn	State, private



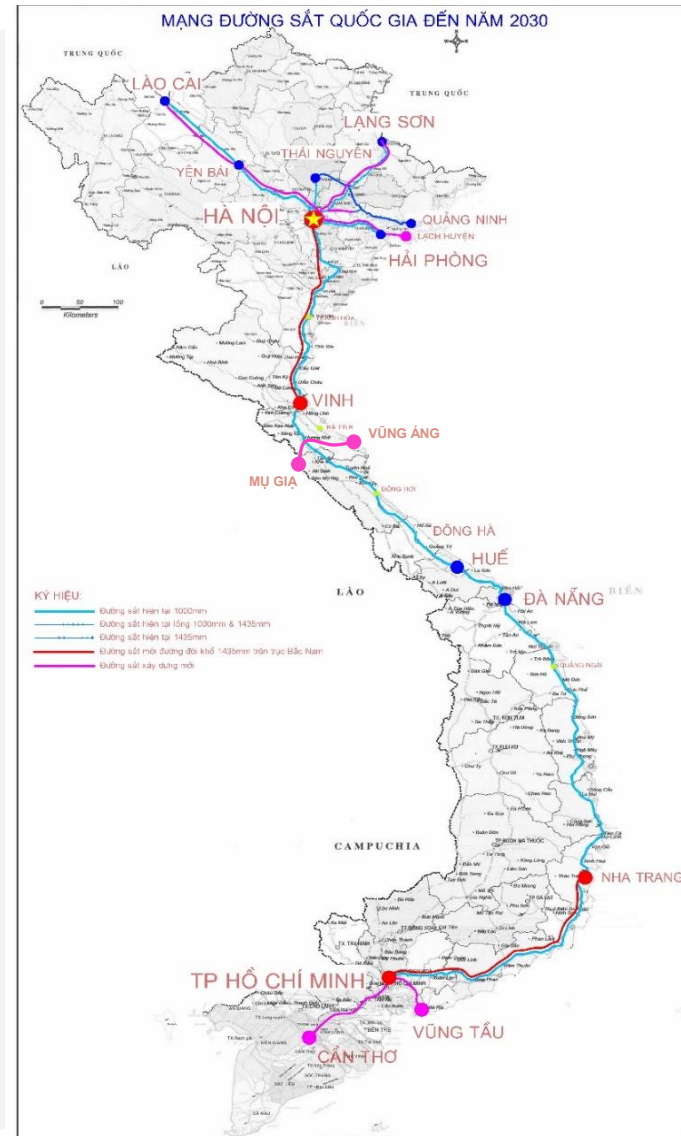
2. National railway network - 2020 ÷ 2030

No.	Investment projects list	Lenght (km)	Investment scale	Expected capital
I	Continue to renovate and upgrade existing railways			
1	Hanoi – Ho Chi Minh city	1,726	Meet the National railway technology standard	State, private
2	Hanoi - Lao Cai	285		
3	Hanoi - Hai Phong	96		
4	Hanoi - Thai Nguyen	54		
5	Hanoi - Lang Son	156		
II	Construction of new railways with great transport demands, trans-Asia railway			
1	High-speed rail on the north-south axis	1,570	Double track, 1435mm, electrification	State, private
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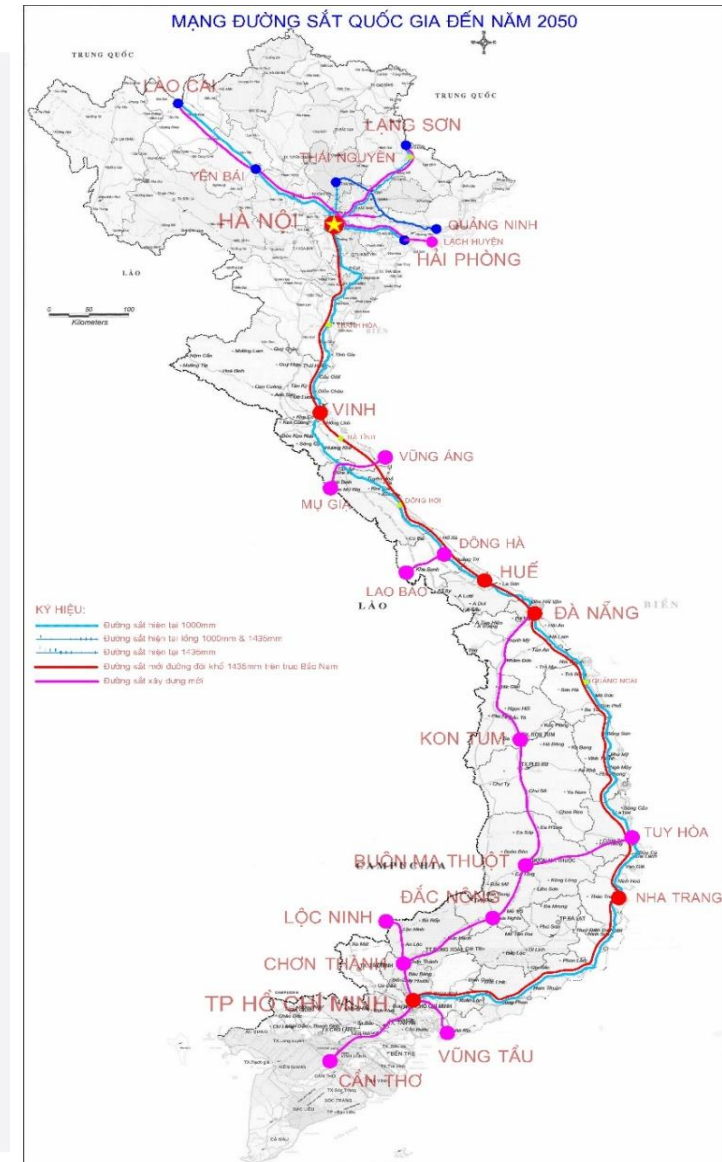
2. National railway network - 2020 ÷ 2030

No.	Investment projects list	Length (km)	Investment scale	Expected capital
III	To study the plan on building new routes connecting seaports, industrial parks and tourism			
1	Thap Cham - Da Lat	84	Single track	State, private
2	Dong Ha - Lao Bao - My Thuy seaport	114		
3	Tuy Hoa - Buon Ma Thuat	169		
4	Dac Nong - Binh Thuan	121		
5	Dac Nong - Chon Thanh	67		
6	High land railway network	550		
7	Thai Nguyen - Tuyen Quang - Yen Bai	73		
8	Nam Dinh - Thai Binh - Hai Phong - Quang Ninh	120		
9	Lạng Sơn - Quang Ninh (Mũi Chua)	95		
10	Ha Long - Mong Cai	150		



2. National railway network – Vision to 2050

- ❑ Strive to complete the 1435mm high speed double rail line on the North - South axis; After 2050 deployment of high speed operation 350km/h;
- ❑ Modernization of the existing rail network meets primarily with demand for local passenger and cargo transport;
- ❑ To complete the construction of the Central Highlands railway, trans-Asia railway, railway linking industrial parks and large seaports.



2. National railway network - Performance situation

Projects preparation investment

Performance situation

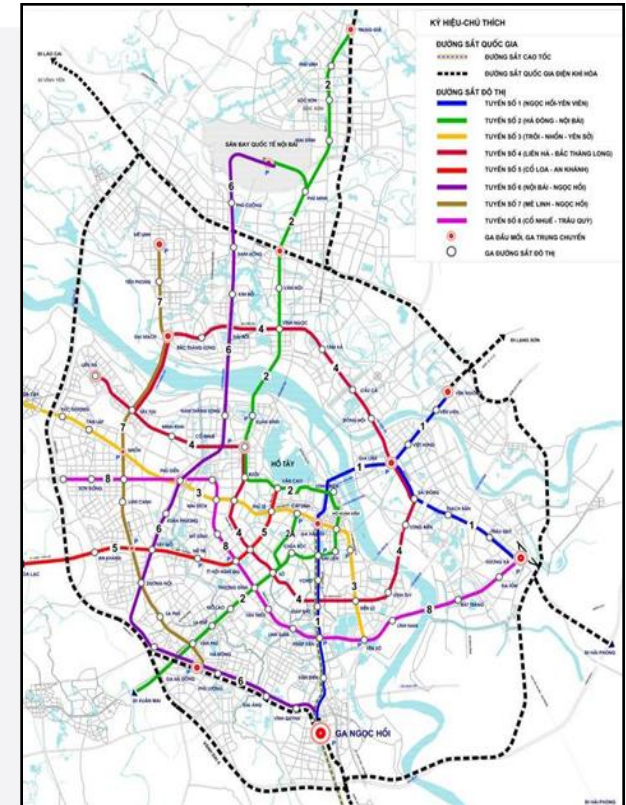
Ongoing projects

- High-speed rail on the north-south axis.
- The railway belongs to the project of two corridors and one economic belt: Lao Cai - Hanoi - Hai Phong.
- Trans-Asia railway and railway linking with sea ports: Bien Hoa - Vung Tau; Di An - Loc Ninh; Vung Ang - Tan Ap - Mu Gia.
- Dak Nong - Chon Thanh railway, connecting with the railway to Thi Vai seaport.

- North-South railway: implementing concrete sleeper change projects, modernizing signaling information, improving railway safety, improving weak bridges ...
- Ha Noi - Lao Cai route: has been constructed and to date has completed the construction items.
- Yen Vien - Pha Lai - Ha Long - Cai Lan route: newly completed sections of Ha Long - Cai Lan, construction of some river bridges, roads and road embankments in some sections.

3. Subway network - Hanoi

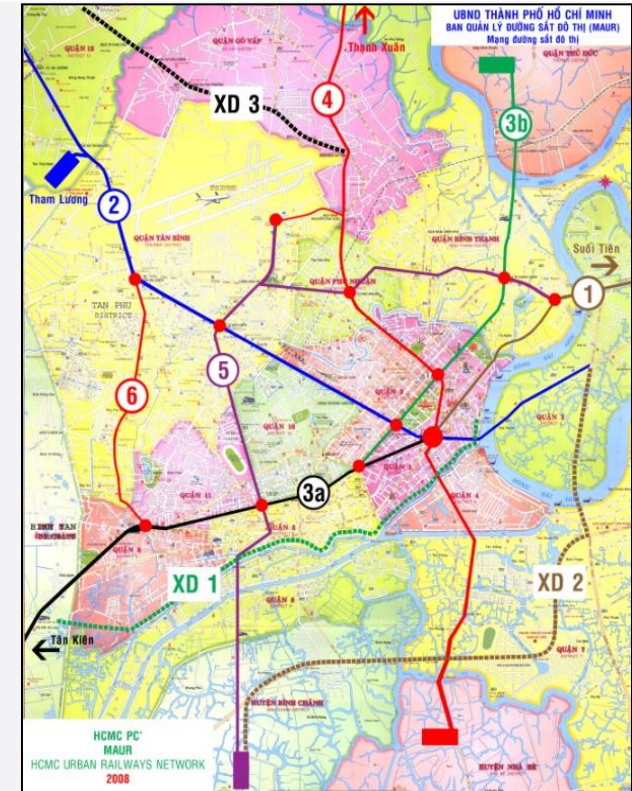
No.	Investment projects list	Length (km)	Investment phase		
			By 2020	2020 ~2030	After 2030
I Subway					
1	Ngoc Hoi - Yen Vien - Nhu Quynh	36	x	x	
2	Noi Bai - Thuong Dinh - Buoai (next period extends to Soc Son)	51	x	x	x
2A	Cat Linh - Ha Dong (next period extends to Xuan Mai)	34	x		x
3	Troi-Nhon-Hanoi station-Yen So (next period extends to Son Tay)	57	x	x	x
4	Me Linh - Sai Dong - Lien Ha	54			x
5	Van Cao - Lang - Thang Long Boulevard - Hoa Lac	40	x	x	
6	Noi Bai - Ngoc Hoi	43		x	
7	Me Linh - Ha Dong	28		x	
8	Son Dong - Mai Dich - Duong Xa	37		x	x
II Monorail					
1	Line M1: Lien Ha - An Khanh	11		x	
2	Line M2: Mai Dich - Phuc La and Giap Bat - Phu Luong	22		x	
3	Line M3: Nam Hong - Dai Thinh	11		x	



Currently, there are 4 routes in the research stage (lines 1, 2, 3 and 5) and two routes are being constructed, namely 2A (Cat Linh - Ha Dong) and Line 3 (Nhon - Hanoi station)

3. Subway network - Ho Chi Minh city

No.	Investment projects list	Length (km)	Investment phase		
			By 2020	2020 ~2030	After 2030
I	Subway				
1	Ben Thanh - Suoi Tien; Study extended to Dong Nai, Binh Duong	19.7	x		
2	North West urban area (Cu Chi Dist.) - Thu Thiem	48		x	x
3a	Ben Thanh - Tân Kiên station; Study extended to Long An province	19.8		x	x
3b	Cong Hoa 6 fork - Hiep Binh Phuoc; Study extended to Binh Duong	12.1		x	x
4	Thanh Xuan - Hiep Phuoc urban area	36.2		x	x
4b	Gia Dinh park station - Lang Cha Ca station	5.2		x	x
5	New Can Giuoc bus station - Sai Gon bridge	26		x	x
6	Ba Queo - Phu Lam roundabout	5.6		x	x
II	Tramway and Monorail				
1	Ba Son - Mien Tay bus station; Orientation extends to Binh Quoi urban area	12.8		x	x
2	No. 50 route - Binh Quoi urban area (Thanh Da - Binh Thanh); Orientation connect to Line 3a.	27.2		x	x
3	Phan Van Tri - Nguyen Oanh 4 fork - Tan Chanh Hiep station	16.5		x	x



Currently there are 6 routes in the research stage (lines 2, 3a, 3b, 4, 5, 6) and is implementing the construction of 1 route, line 1 (Ben Thanh - Suoi Tien)

4. Evaluate the implementation of the strategy

Advantage:

- The relevant units are actively implementing the assigned tasks to ensure the implementation of the railway development strategy is effective and highly feasible:
- ✓ Revised Railway Law 2005; Development of guiding decrees; Amendments to relevant circulars.
- ✓ Review and adjust the planning in the field of railways.
- ✓ Implementing the project of Restructuring Viet Nam Railway Corporation.
- ✓ To perfect the system of standards, technical regulations and technical and economic norms.
- ✓ Coordinate with investors interested in implementing the socialization of land funds at the stations and yards.

Difficult:

- The cost of railroad investment is huge so it requires a lot of resources, so it is very difficult to implement a project, especially for new railway projects.
- Human resources for access to new railway technology are not yet met, so training needs to be available in order to participate in the implementation of the project.
- The level of technology is low and backward compared to other countries in the region

5. Solution implementation



MAKE CAPITAL SOURCING

To take initiative in allocating capital from the state budget; Priority is given to ODA, preferential loans from governments and international donors (ADB - OCR, IBRD ...), government bonds, corporate bonds...

To formulate and promulgate mechanisms to encourage all economic sectors to invest in the development of infrastructure and railway transport business in the forms of BOT, BT, PPP contracts.

To build the mechanism of exploiting the land fund from the projects, especially the railway projects through urban areas, the station works ... to mobilize investment capital for the development of national railway infrastructure.

Promote the policy of socialization in railway transport business; Strongly attract economic sectors, including foreign investors to invest.

5. Solution implementation



HUMAN RESOURCE DEVELOPMENT

Reasonable investment for training and human resource development. Develop policies to encourage and attract good professionals working in the field of rail transport especially railways.

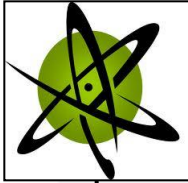
Increased investment in material facilities, renovation of the program and expansion of training forms; To attach importance to the work of socialization in training, ensuring sufficient human resources of high quality to well serve the needs of modern railway development.

To adopt wage policies and incentives for laborers working in the railway sector's particular conditions, especially in remote and difficult areas.

To set up research bases for in-depth training and research in the railways field, to invest in upgrading railway vocational schools so as to be capable of training human resources to meet the railway development demands.

Priority is given to overseas training targets on railways.

5. Solution implementation



SCIENCE AND TECHNOLOGY

To adopt policies to encourage the research and application of scientific and technological achievements; Applying new scientific and technological achievements in training, transport exploitation, construction and maintenance of infrastructure, industry and services. Particular attention should be paid to the application of information technology to plan the organization of the exploitation, collection and processing of customer information; Develop ticket sales and ticket control systems, promote quality management, standardize industrial products in accordance with national technical standards of Vietnam and other international standards (ISO, UIC). , ...).

To formulate policies to encourage the cooperative research and transfer of advanced technologies from abroad in the railway sector, especially high-speed railways.

5. Solution implementation



RAILWAY INDUSTRY

To formulate policies to encourage and create all conditions for the railway industry enterprises to expand joint ventures and domestic and foreign partnerships in order to mobilize capital, transfer technologies and exchange managerial and executive experiences. And implemented the localization route in assembling, manufacturing locomotives, wagons, equipment and spare parts for the railways. At the same time, encourage other industries in the country to participate in the railway industry production process, especially the auxiliary mechanical industry.

6. Conclusions, recommendations

- ❑ **The national railway network of Viet Nam was built in 1881. Over 136 years there have been many changes, however, due to not invest so far is very backward and degraded.**
- ❑ **Currently, the Government of Viet Nam has determined clearly in the coming years, it is necessary to step up investment in upgrading and modernizing the existing railway system, combining the construction of new railway lines linking seaports and railways. Connecting with neighboring countries, trans-Asia railway, high-speed rail on the north-south axis, urban railway in Hanoi and Ho Chi Minh City.**
- ❑ **Along with the restructuring of the state rail business; Separation of railway infrastructure business with rail transport business to ensure the establishment of a healthy business environment, non-discrimination between railway business enterprises under the market mechanism, the Government of Viet Nam has formulated strong mechanisms and policies on land, credit, enterprise income tax, import tax, land clearance... to attract domestic and foreign investors to invest in railway business, develop railway industry, train human resources for railway...**

6. Conclusions, recommendations

- ❑ **In recent years, we have received a lot of support and cooperation from international organizations and countries such as China, France, Germany, Japan, Korea, ADB and WB. To invest in upgrading the existing railway system, to study the construction of new railways.**
- ❑ **In the coming time, in order to develop the railway network under the Strategy, apart from the best efforts of the Government and Vietnamese organizations and individuals, we look forward to continuing to receive more assistance on investment, exchanges of development experience from international organizations and countries; The interest and investment cooperation of foreign enterprises in the railway sector in Viet Nam.**

Thank you for your attention!