



Ministry of Transport



Department of Rail Transport

WOMEN IN RAIL MALAYSIA CONFERENCE 2023

3rd August 2023 JW Marriott Hotel, Jalan Bukit Bintang, Kuala Lumpur

High Speed Rail : Thailand's Push To Promoting Greater Connectivity within Thailand and the larger ASEAN region

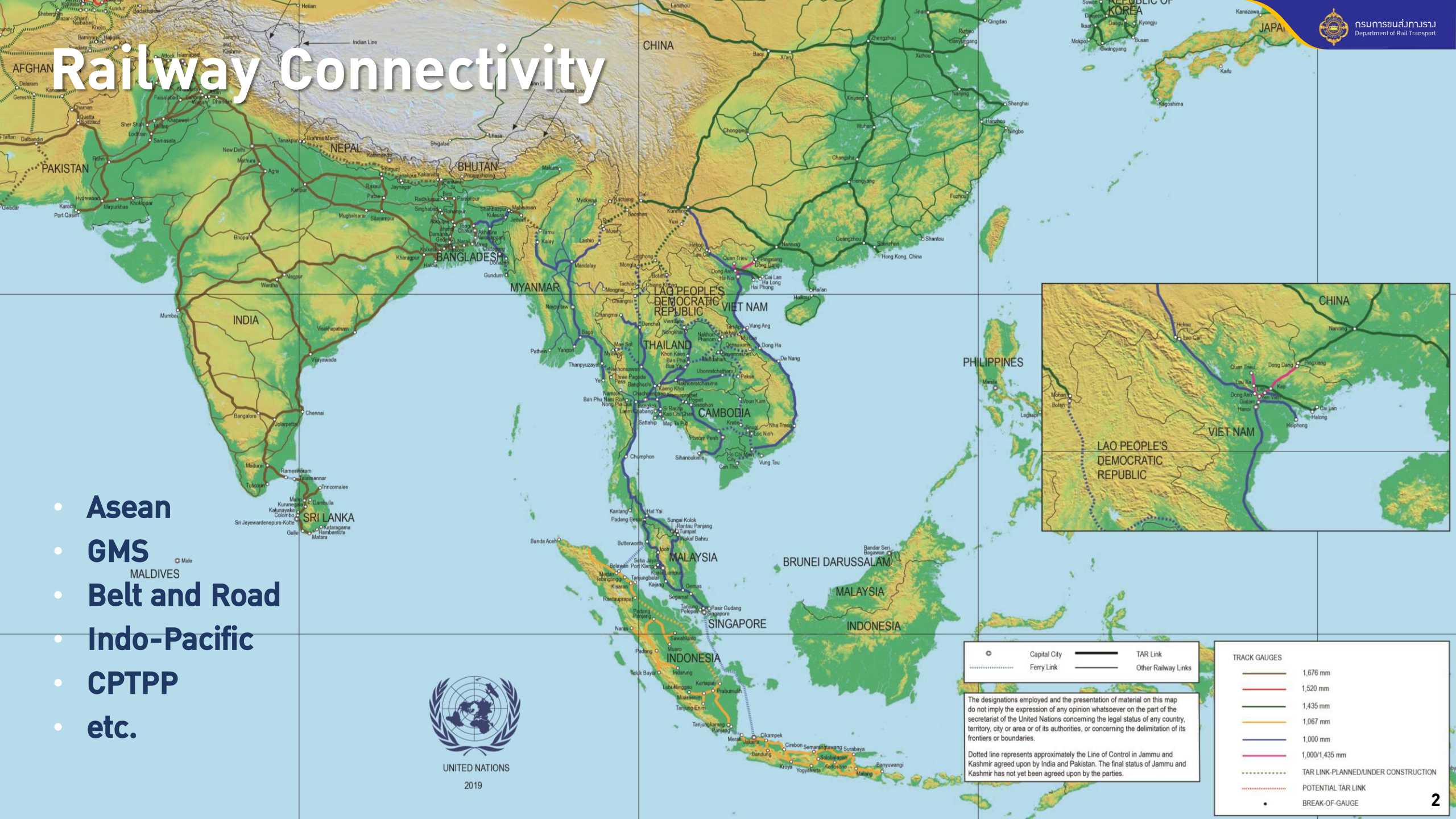
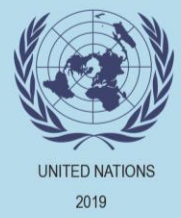
Dr. Pichet Kunadhamraks

Director General, Department of Rail Transport,
Ministry of Transport, THAILAND



Railway Connectivity

- Asean
- GMS
- Belt and Road
- Indo-Pacific
- CPTPP
- etc.



	Capital City		TAR Link
	Ferry Link		Other Railway Links

The designations employed and the presentation of material on this map do not imply the expression of any opinion whatsoever on the part of the secretariat of the United Nations concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries.

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.

TRACK GAUGES	
	1,676 mm
	1,520 mm
	1,435 mm
	1,067 mm
	1,000 mm
	1,000/1,435 mm
	TAR LINK-PLANNED/UNDER CONSTRUCTION
	POTENTIAL TAR LINK
	BREAK-OF-GAUGE

Intercity Rail Networks Development plan : Double track / New Line

Double track

Phase 1 (2017 – 2021) 7 Routes 993 km.

- 1 Chachoengsao Junction –Khlong Sip Kao-Kaeng Khoi
- 2 Chira Junction - Khon Kaen
- 3 Mab Kabao -Chira Junction
- 4 Lopburi - Pak Nam Pho
- 5 Nakhon Pathom - Hua Hin
- 6 Hua Hin-Prachuap Khiri Khan
- 7 Prachuap Khiri Khan – Chumphon

Phase 2 (2022 – 2026) 7 Routes 1,479 km.

- 1 Paknampho – Denchai
- 2 Denchai - Chiang Mai
- 3 Khon Kaen - Nong Khai
- 4 Chira - Ubon Ratchathani
- 5 Chumphon - Suratthani
- 6 Surat Thani - Hat Yai – Songkhla
- 7 Hat Yai - Padang Besar

Phase 3 (2027-2036) 2 Routes 391 km.

- 1 Khlong Sip Kao Junction–Aranya prades
- 2 Hat Yai Junction –Su ngai Kolok

New Line

New Line (2017 – 2021) 2 Routes 677 km.

- 1 Denchai - Chiang Rai - Chiang Khong
- 2 Ban Phai - Mukdahan - Nakhon Phanom

New Line phase

- 1 Kanchanaburi-Suphan Buri – Ban Phachi Junction
- 2 Si Racha - Rayong
- 3 Map Ta Phut – Rayong - Chanthaburi - Trat
- 4 Chumphon-Ranong
- 5 Surat Thani - Phang Nga - Tha Nun
- 6 Surat Thani – Don Sak
- 7 Thap Pu t- Krabi
- 8 Mukdahan-Amnat Charoen - Ubon Ratchathani



Completed



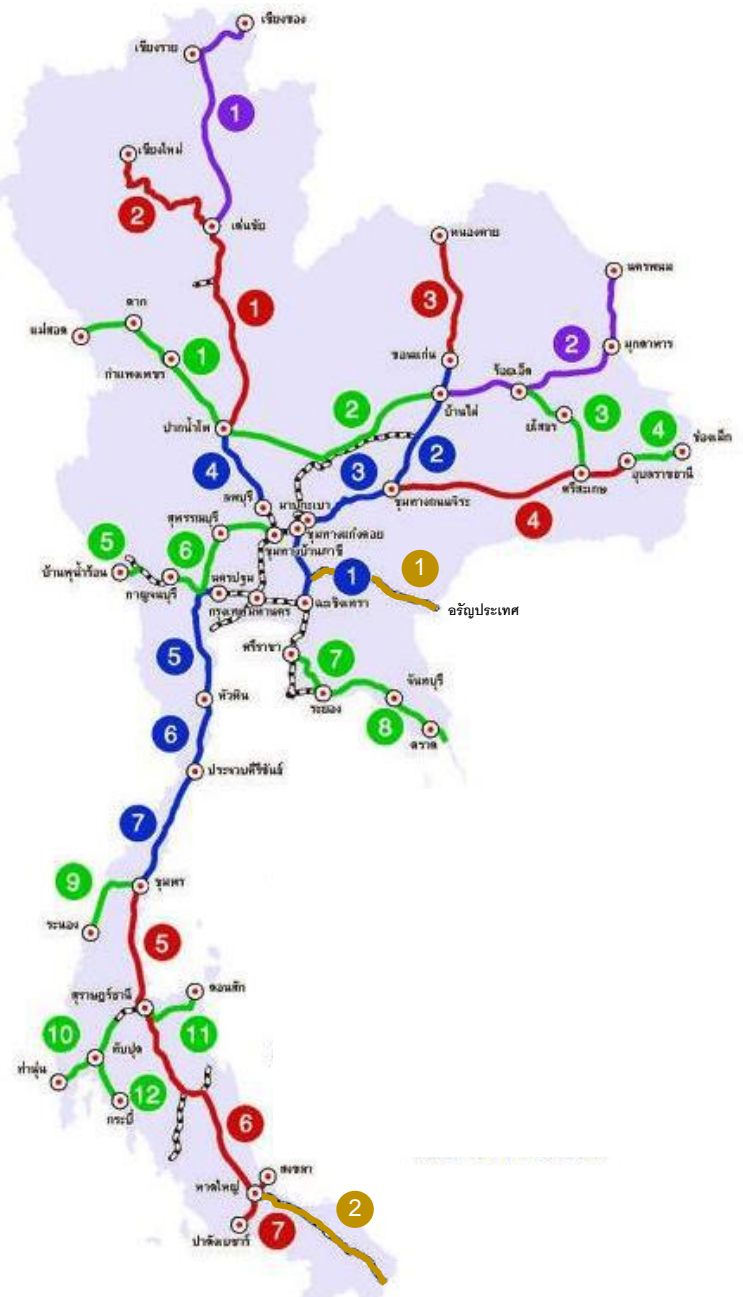
Under Construction



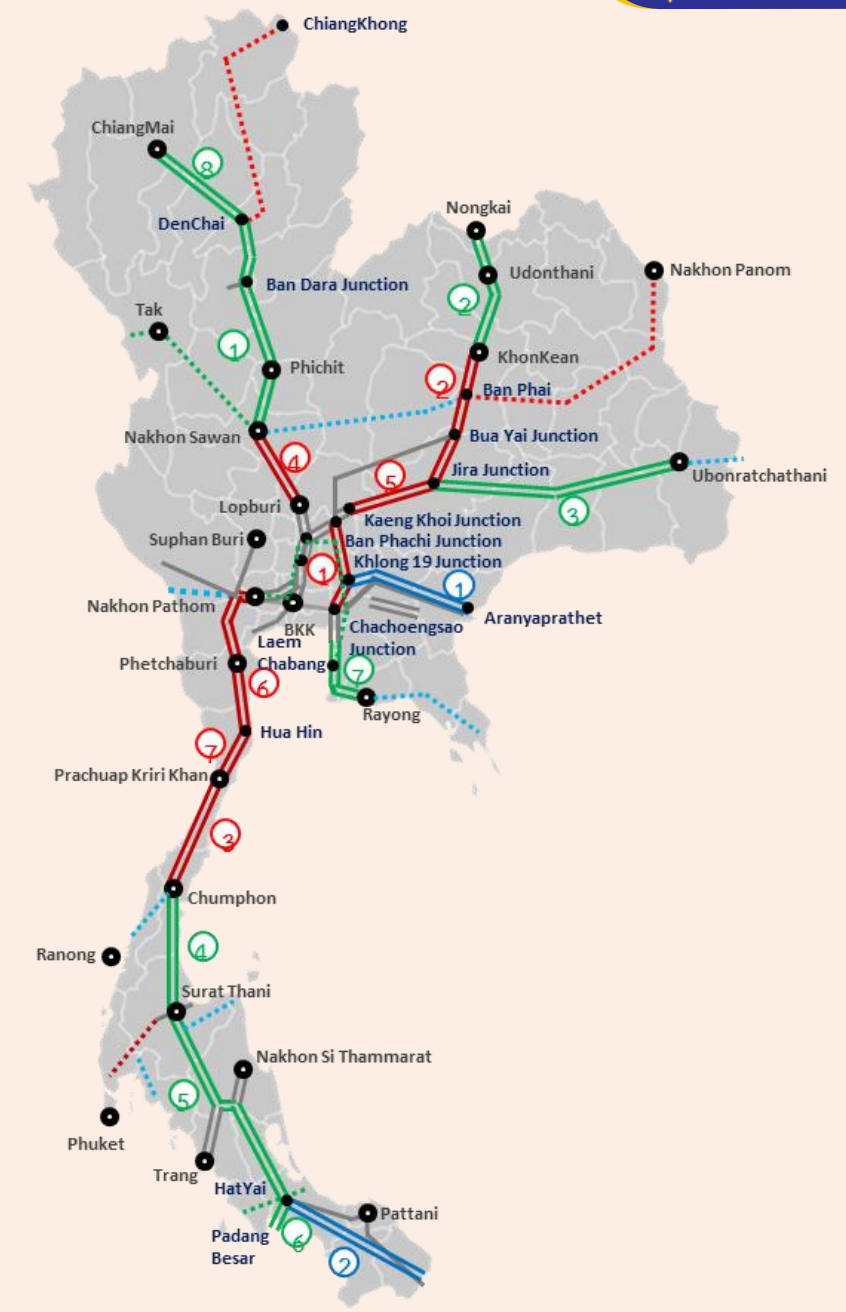
Ask for Approval/EIA report

APPROVED

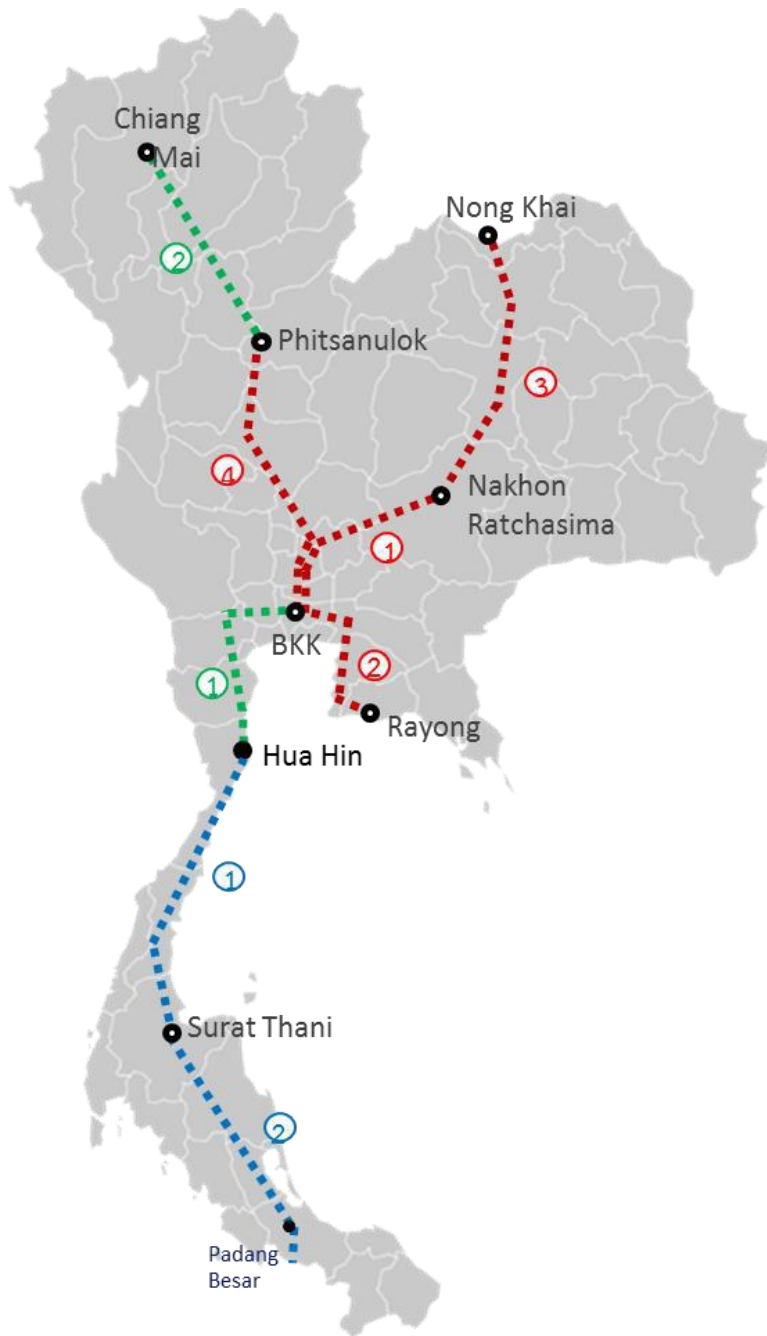
Cabinet Approved



Existing > Future Railway Network



4,044 km.	Total	4,722 km.
3,310 km. (81.85%)	Single track	1,215 km. (25.73%)
627 km. (15.50%)	Double track	3,400 km. (72%)
107 km. (2.65%)	Triple track	107 km. (2.27%)



Intercity Rail Networks Development plan : High Speed Rail

Immediate Phase (2017 – 2021) 4 Routes 1,248 km.

- ① Bangkok – Nakhon Ratchasima
- ② Bangkok – Rayong
Phase 1 : 3 Airports Seamless Connections
Phase 2 : U Ta Pao – Rayong
- ③ Nakhon Ratchasima – Nong Khai
- ④ Bangkok – Phitsanulok

Medium Phase (2022 – 2026) 2 Routes 499 km.

- ① Bangkok – Hua Hin
- ② Phitsanulok – Chiang Mai

Long Term Plan (2027-2036) 2 Routes 759 km.

- ① Hua Hin – Surat Thani
- ② Surat Thani – Padang Besar

High Speed Rail

4 Routes in 2032



2026

Bangkok - Nakhon Ratchasima
253 km.



2030

Nakhon Ratchasima - Nong Khai
355 km.



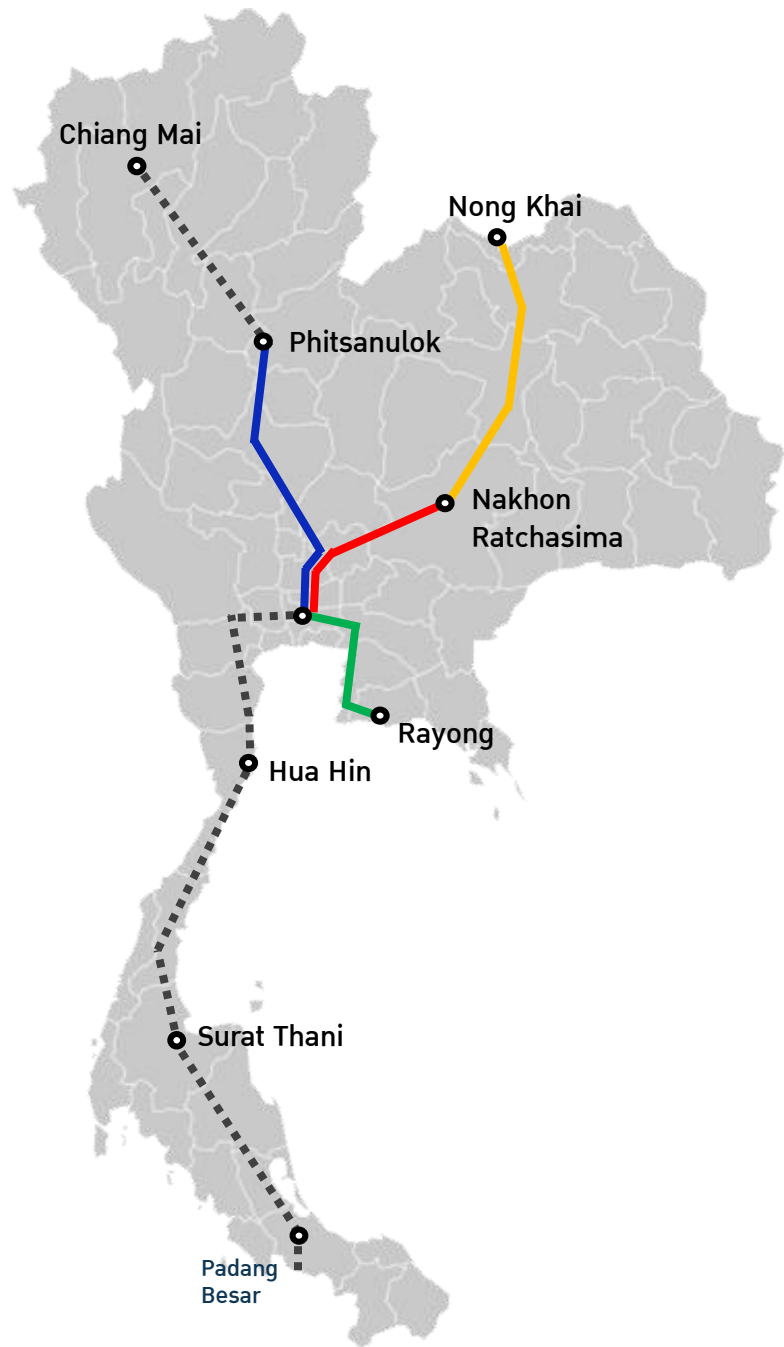
2028

Don Muang - U-Tapao (Bangkok-Rayong)*
220 km.



2032

Bangkok - Phitsanulok
384 km.



* Public-Private Partnership (PPP)

HSR NE Project

Scheme : **Thailand-China cooperation**

Section : **Bangkok–Nakhon Ratchasima–Nong Khai**

Status : **Under construction**

Speed : **250 km/h**

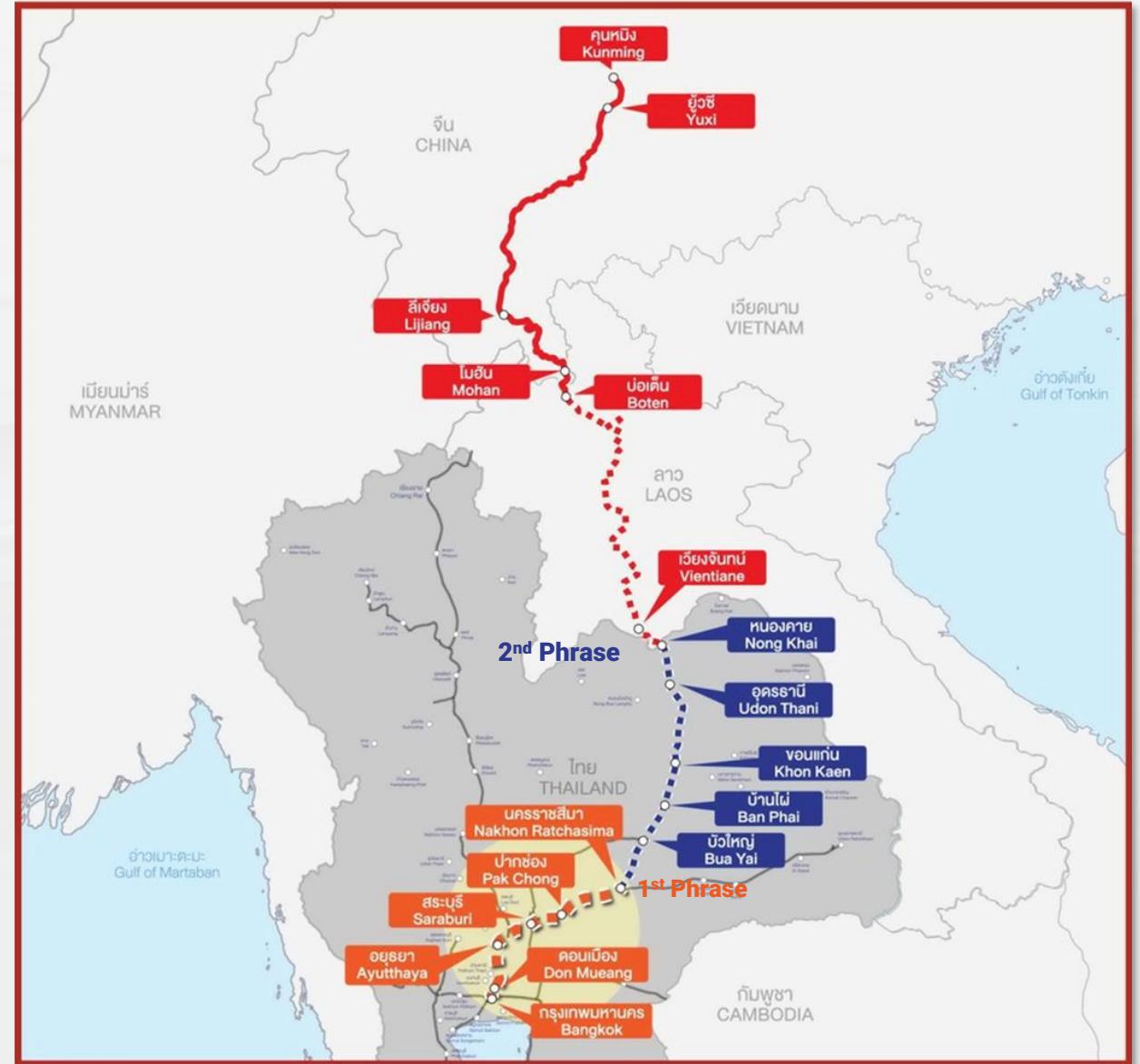
Operator : **New Agency**

Opening : **1st Phrase 2026**

2nd Phrase 2030

Length : **1st Phrase 253 km**

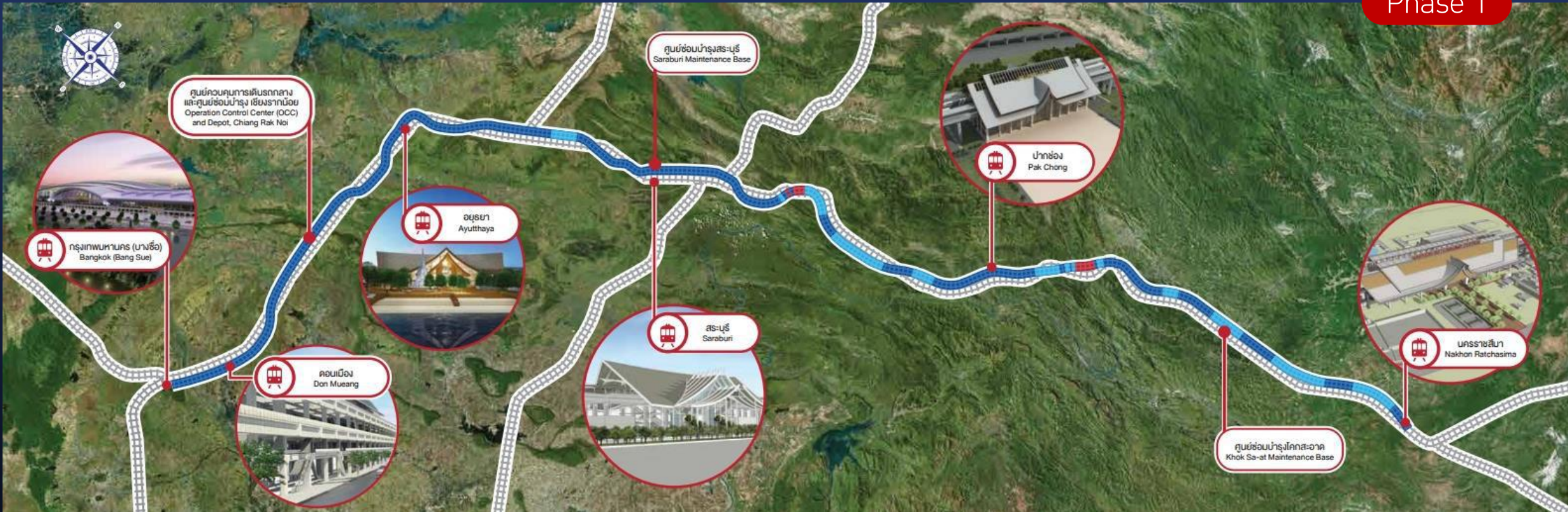
2nd Phrase 355 km



Bangkok-Nong Khai HSR for Regional Connectivity

Route Alignment : Phase I Bangkok - Nakhon Ratchasima

Phase 1



Distance : 250.77 Km.

Max Speed : 250 Km./Hr.

Budget : 179,412.21 MB

Elevated Track : 188.68 Km.

Travel Time : 1.30 Hr.

Construction completed : April 2026

Tunnel : 8.00 Km.

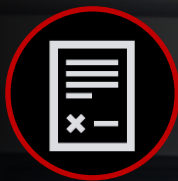
At-grade Track : 54.09 Km.

EIA : 6 July 2017

HSR NE Project 5,500 ML USD



Thai Side
Civil work



Chinese Side
Detailed Design



Construction Supervision



Railway System and training





**The civil work
of HSR NE
is now in progress**

**Progress of HSR
Bangkok-Nakhon Ratchasima**





Fuxing Hao CR300



Max Speed: 250 km/h



The total capacity 594 people
Including 96 the first-class seat passengers and 498 the second-class seat passengers

Number	1	2	3	4	5	6	7	8
Level	first class	second class	second class	second class	second class	second class	second class	first class
Capacity	48	90	90	76	63	90	90	48



 6 Cars	 8 carriages	 1 hrs 17 min	 105-535 thb
 594 seats	 1st 2nd	 253 km.	 Passenger

The design of the station combines local identity and nature.



Bangkok-Nong Khai HSR for Regional Connectivity

Route Alignment : Phase II Nakhon Ratchasima - Nong Khai

Phase 2



Distance : 355 km.

5 Stations:

Bua Yai, Ban Phai, Khon Kaen,
Udon Thani, and Nong Khai

Status : The design has been completed. Currently, the SRT is updating the EIA report. **It is expected to open in 2030.**

The High-Speed Rail Linking Three Airports Project

The project will use high-speed rail to connect five provinces in Eastern : Bangkok, Samut Prakan, Chachoengsao, Chonburi, and Rayong. The extension of the Don Mueang - Bang Sue - Phaya Thai (ARL Extension), with the rail connected to the existing ARL line and a new route to U-Tapao in eastern area where the industrial and tourist destination are located.



Status : **Preparing for construction**

Speed : **250 km/h**

Operator : **Asia Era One Company Limited**

Planned opening : **2028**

Length : **220 km (140 mi)**

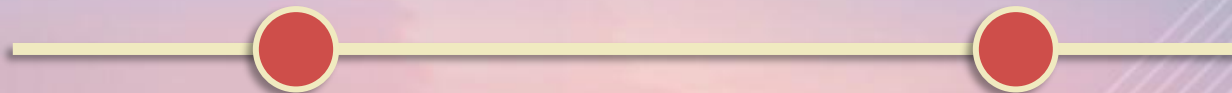


Project Scheme : PPP Net Cost 50 years

Period :

5 years
Design and Construction

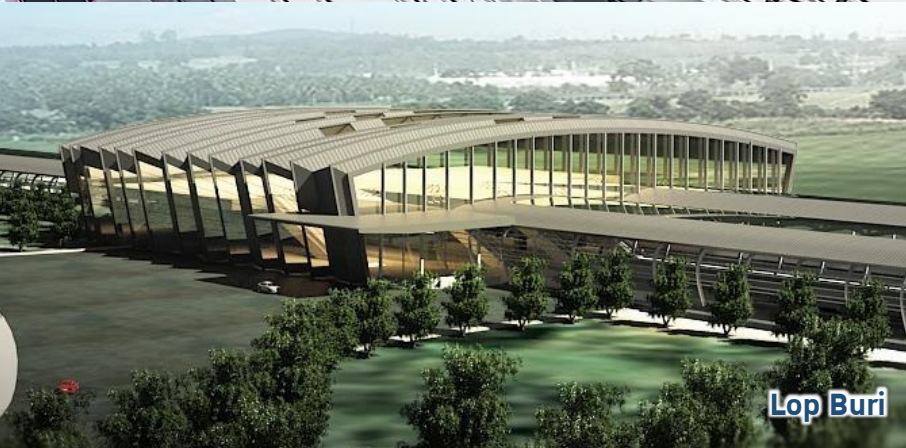
45 years
Operation



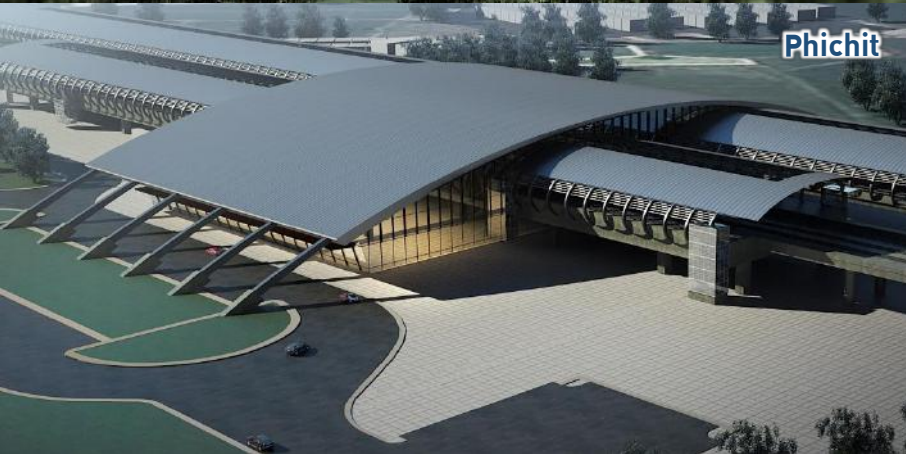
HSR Northern Line

Thai-Japan signed MOC on May 27, 2015 in Tokyo, Japan, to develop high-speed train rail between Bangkok and Chiang Mai using the Japanese high-speed rail system (Shinkansen) with maximum speed of 300 kilometers per hour.





HSR Northern Line
Phase 1:
Bangkok-Phitsanulok
380 km.
7 stations 8 Provinces

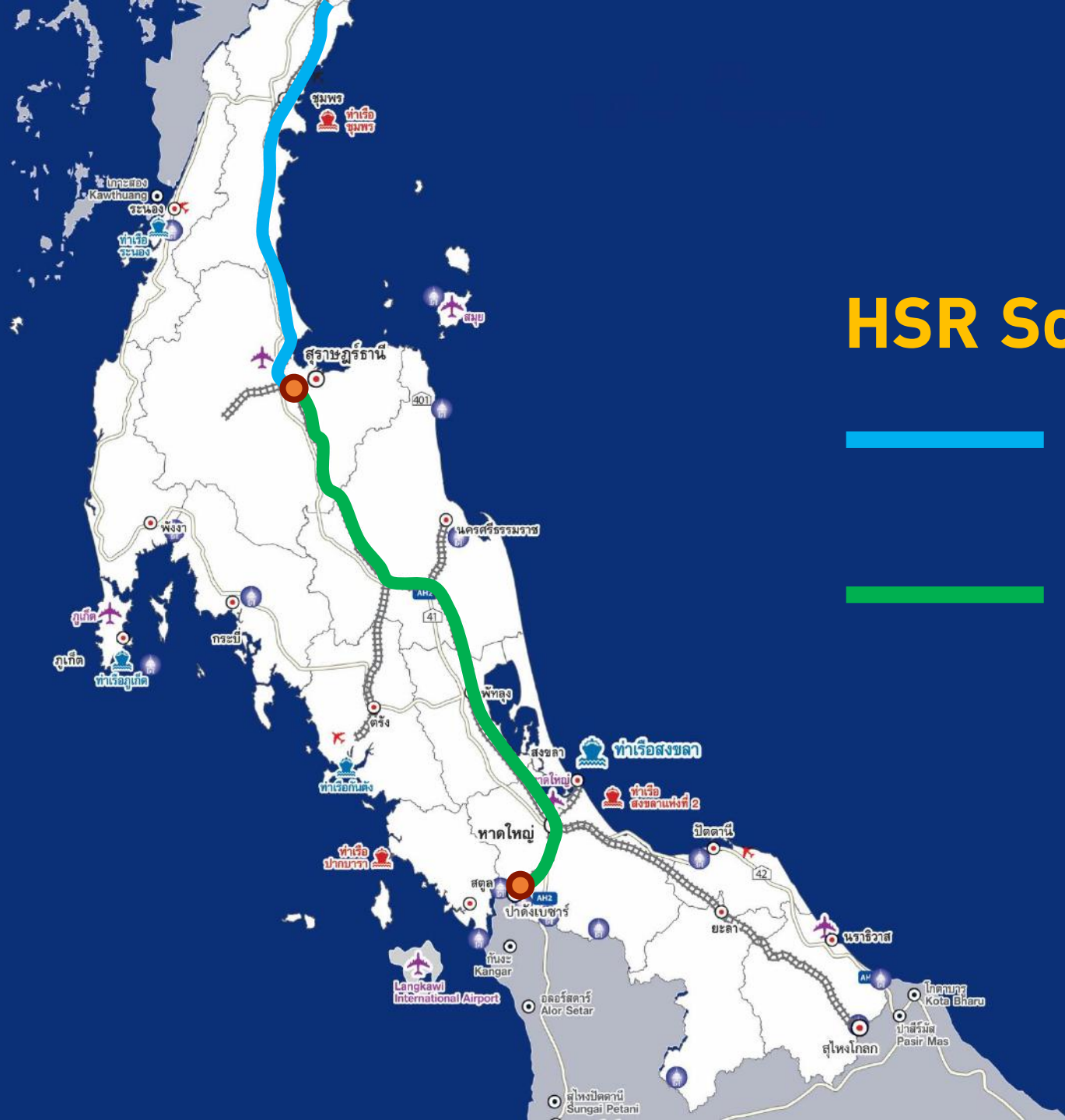


KrungThep Aphiwat Central Station

New national railway terminal
Replace Hua Lamphong
The largest railway station in Thailand



The third floor of
Bang Sue station
will be reserved for
HSR platform.



HSR Southern Line

— Huahin - Surat Thani
424 km

— Surat Thani - Padang Besar
335 km

Railway Connectivity between Thailand and Malaysia





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Thank you

