



Ministry of Transport



State Railway of Thailand



The Cooperation
 between the Government of
 the Kingdom of Thailand
 and the Government of
 the People's Republic of China



on Bangkok–Nong Khai
 HSR Development
 for Regional Connectivity

(Section 1:
 Bangkok–Nakhon Ratchasima)

Public relations document for February 2023

Thai-Chinese High-Speed Rail

Development of Thai Rail System
Connecting International Network

Route of the Bangkok-Nong Khai

HSR Development for Regional Connectivity Project

Section 1: Bangkok-Nakhon Ratchasima **Total distance: 250.77 kilometers**

Background of the Project

On 12 May 2016, the governments of the **Kingdom of Thailand** and the **People's Republic of China** jointly signed the minutes of the 10th joint committee meeting in Beijing on the railway cooperation between Thailand and China. At the meeting, both parties reached a mutual agreement to commence the project for the construction of the Bangkok-Nakhon Ratchasima railway route.

The Thai Cabinet approved the project on 11 July 2017.

In this regard, the State Railway of Thailand (SRT) was put in charge of implementation of the Project on Bangkok-Nong Khai HSR Development for Regional Connectivity (Section 1: Bangkok-Nakhon Ratchasima).



Phra Nakhon
Si Ayutthaya

Saraburi

Bangkok





Objectives

- 1 To bring prosperity to northeastern Thailand and ASEAN member countries.
- 2 To provide an option for public travel to northeastern provinces by rail and connect with Lao PDR and China in the future.
- 3 To encourage domestic tourism as well as international tourism with Lao PDR and China.
- 4 To enhance the national economy, develop the tourism sector, and promote the growth of products in the One Tambon One Product (OTOP) Project.
- 5 To increase transportation convenience and safety for better quality of life.

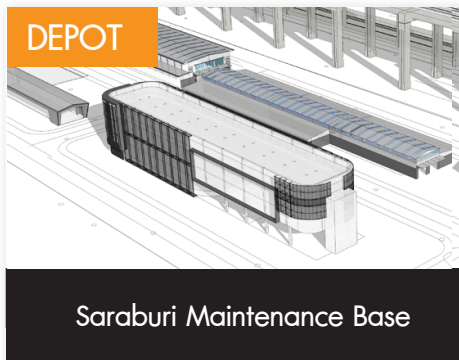
Budget:

THB179,412.21 million



The project is expected to start operation in

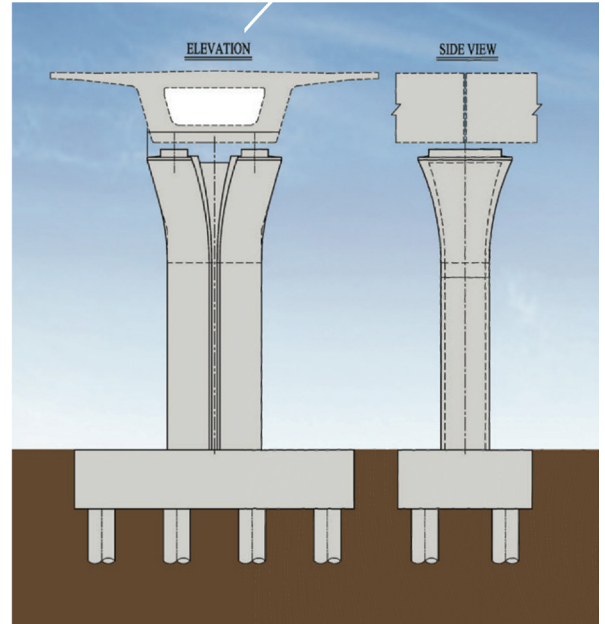
▲ 2027



Legend

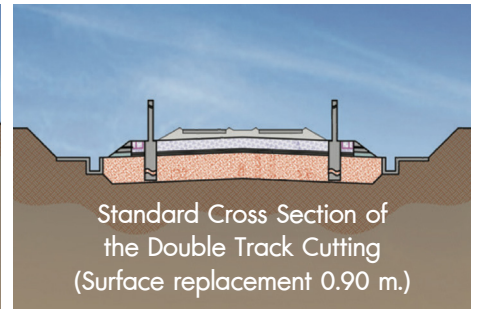
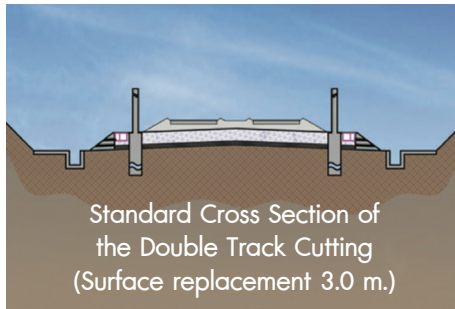
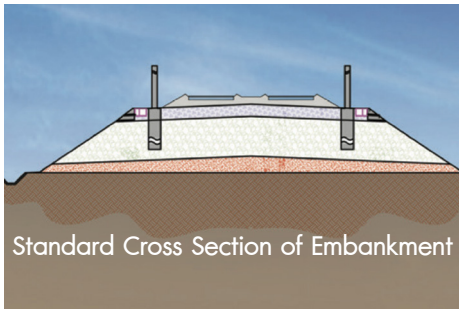
- Existing track
- HSR elevated track
- HSR at-grade track
- HSR tunnel
- 🚂 Station
- 🟠 Maintenance base
- 🏠 Operation Control Center

High-Speed Rail Structures



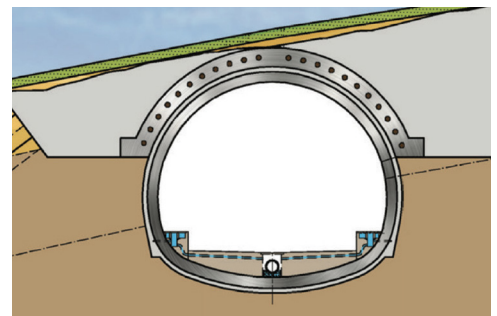
Elevated track **Total distance: 188.68 kilometers**

Elevated railway will be constructed in areas with land-use restrictions such as densely-populated areas, areas involving people on both route sides, sites that are mainly characterized by soft clay, and riverine areas.



At-grade track **Total distance: 54.09 kilometers**

At-grade railway will be constructed in open areas and areas without dense populations and construction restrictions.



Tunnels **Total distance: 8 kilometers**

The tunnels will pass through mountainous areas and shorten the route's total distance. The project will have two tunnels, one in Muak Lek District and the other at Lum Takong Reservoir.

Railway system works

include:



Railway installation



High-speed rail system units
(electrical system, signaling system, and communication system)



High-Speed Train procurement



Personnel training on railway operation and maintenance



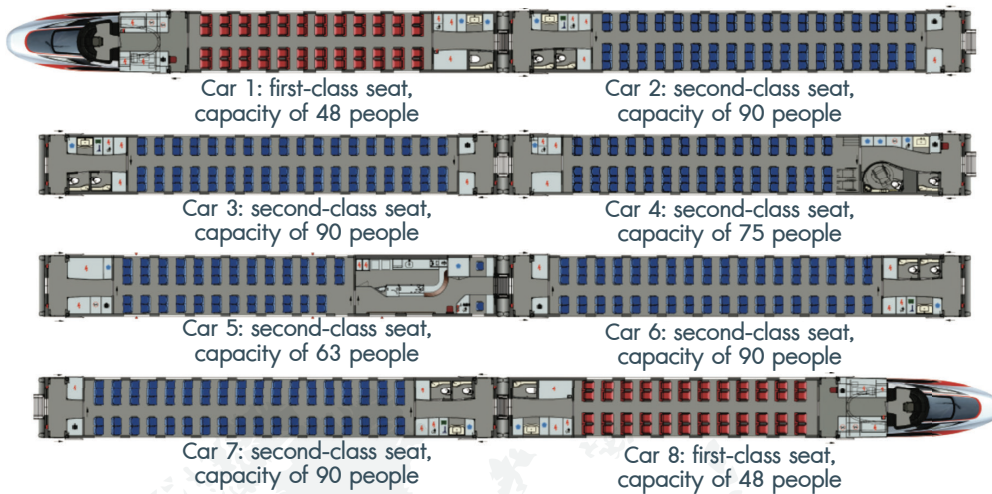
Technology transfer

High-Speed Trains

The Thai-Chinese
High-Speed Rail
Project
Top speed:
250
kilometers
per hour



Source: <https://th.wikipedia.org/wiki/รถไฟความเร็วสูงในประเทศไทย>



Automatic Fare Gate

Railway Passenger Ticketing System




Maintenance & Repair

Driving Simulation System

EMU Service

Service Information

 6 high-speed trains	 6 stations	 Service hours: 6 am - 10 pm	 Departs every 90 minutes	 1 hour and 30 minutes from Bangkok to Nakhon Ratchasima	 Top speed of 250 kilometers per hour
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Construction Progress

Contract 1-1 Civil Works (Klang Dong-Pang Asok Section)

3.50 kilometers, constructed by the Department of Highways

Progress: **100%**



At-grade embankment



At-grade embankment



At-grade embankment



Local road

Contract 2-1 Civil Works (Sikhio-Kut Chik Section)

11 kilometers, constructed by Civil Construction Services & Products Company Limited

Progress: **96.54%** (as of 25 February 2023)



Elevated track structure



At-grade embankment



Signaling control facility



Office building

Contract 3-2 Civil Works for Tunnels (Muak Lek and Lum Takong Sections)

12.23 kilometers, constructed by Nawarat Patanakarn Public Company Limited (Tel: +669 0230 2584)

Progress: **13.38%** (as of 25 February 2023)



Contract 3-3 Civil Works (Bandai Ma-Lum Takong Section)

26.10 kilometers, constructed by Thai Engineers and Industry Company Limited (Tel: +669 5374 8458)

Progress: **20.84%** (as of 25 February 2023)



Contract 3-4 Civil Works (Lum Takong-Sikhio and Kut Chik-Khok Kruat Sections)

37.45 kilometers, constructed by Italian-Thai Development Public Company Limited (Tel: +666 6121 8101)

Progress: **50.18%** (as of 25 February 2023)



Retaining wall installation



Portal frame construction



Column construction



Segment installation

Contract 3-5 Civil Works (Khok Kruat-Nakhon Ratchasima Section)

12.38 kilometers, constructed by SPTK Joint Venture Company Limited (Tel: +669 3556 3586)

Progress: **3.68%** (as of 25 February 2023)



Foundation work



Bored piling work



Concrete segment fabrication



Column construction

Contract 4-2

Civil Works (Don Mueang-Nava Nakorn Section)

21.80 kilometers, constructed by Unique Engineering and Construction Public Company Limited (Tel: +668 4356 1853)

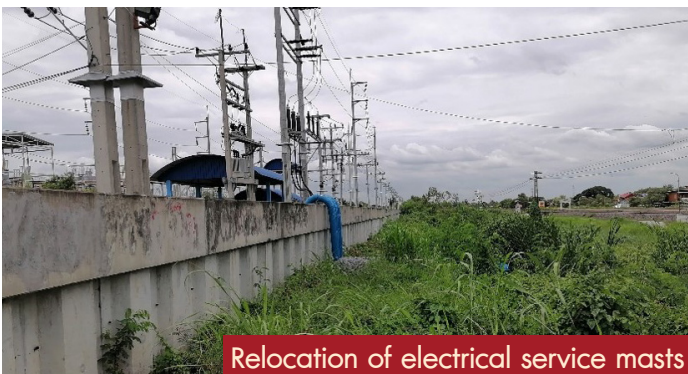
Progress: **0.14%** (as of 25 February 2023)



Community relations activity



Environmental examination



Relocation of electrical service masts



Public relations activity

Contract 4-3

Civil Works (Nava Nakorn-Ban Pho Section)

23 kilometers, constructed by C.A.N. Joint Venture Company Limited (Tel: +669 4986 0666)

Progress: **7.80%** (as of 25 February 2023)



Foundation work



Column construction



Concrete segment fabrication



Segment installation

Contract 4-4 Civil Works (Chiang Rak Noi Depot)

Constructed by Italian-Thai Development Public Company Limited (Tel: +669 2395 9296)

Progress: **0.05%** (as of 25 February 2023)



Clearing and grubbing



Spun pile testing



Public relations and public participation activity



Monitoring of environmental impact measure implementation

Contract 4-6 Civil Works (Phrakaew-Saraburi Section)

31.60 kilometers, constructed by Unique Engineering and Construction Public Company Limited (Tel: +668 4356 5207)

Progress: **0.22%** (as of 25 February 2023)



Clearing and grubbing



CSC's field office



Community relations activity



Safety work

Contract 4-7 Civil Works (Saraburi-Kaeng Khoi Section)

12.99 kilometers, constructed by Civil Engineering Public Company Limited (Tel: +668 1984 2234)

Progress: **35.69%** (as of 25 February 2023)



Foundation work



Segment installation



Community relations activity



Column construction

Contract 2.3 Railway System, Mechanical and Electrical Systems, Procurement of Rolling Stocks, and Personnel Training

Contract partners: China Railway International Company Limited and China Railway Design Corporation (a Chinese state enterprise)

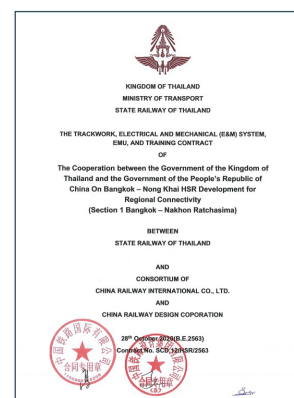
Scope of work:

- Railway system
- High-speed train system (e.g. electrical system, signaling system, communication system)
- Procurement and supply of rolling stocks
- Personnel training (for train operation and maintenance)
- Technology transfer

Contract signing: 28 October 2020

NTP for design: 22 December 2020

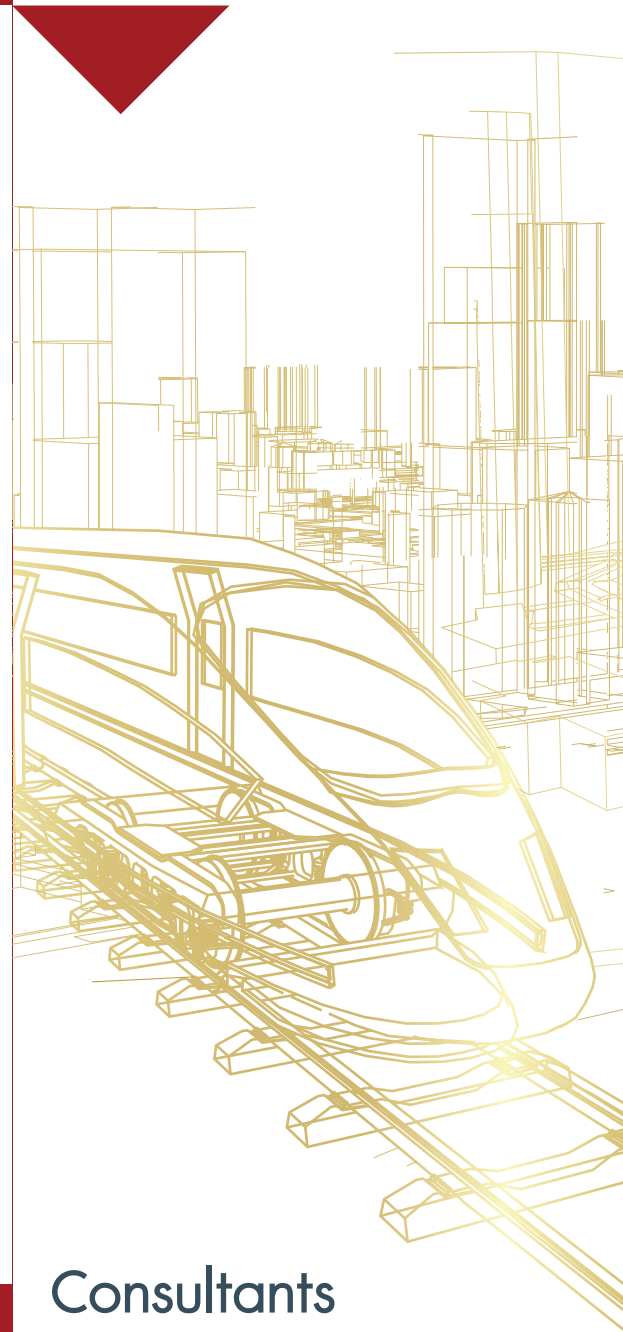
Status: In the designing stage



Upgrade Thai Railways, Boost the Economy

The project will:

- ▲ Enhance the stability of national infrastructure in the long term as targeted by the government, the 20-year National Strategy (2018–2037), and the Eastern Economic Corridor (EEC) development scheme.
- ▲ Connect to China's transportation network as a complement to the Belt and Road Initiative, which will have geopolitical impact at the global level and help to strengthen international relations.
- ▲ Promote Thailand as the regional hub for transportation and logistics.
- ▲ Strengthen national potential and open up opportunities for trade, investment, and tourism.
- ▲ Encourage the expansion of cities and areas along the project's route.
- ▲ Propagate development appropriately and reduce social inequality.
- ▲ Improve quality of life in terms of transport via reduced travel time and costs.
- ▲ Alleviate traffic congestion on main roads in the provinces and urban communities.
- ▲ Increase travel safety and convenience while reducing accident cases.
- ▲ Help to save on fuel used by individual vehicular travel.
- ▲ Enable Thai personnel to learn about China's railway technology and enhance necessary skills for the development of the high-speed rail system.



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Website: www.railway.co.th

Consultants

Project Management

 Epsilon Company Limited

 Chotichinda Consultants Limited

 MHPM Company Limited

 WSP (Thailand) Company Limited

Civil Work Construction Supervision



China Railway International Company Limited
and China Railway Design Corporation
(CRIC & CRDC)

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