



การรถไฟแห่งประเทศไทย
State Railway of Thailand

The Development of Infrastructure in Thailand to Facilitate the Trans-Asian Railway Network

Presented by
State Railway of Thailand



Missions of SRT



Focus on providing services that respond to the needs of users.
To generate income and profits for the organization. To continue improving service efficiency to be an efficient transportation option.

Operate **social transportation services for the public and national interests.**
Respond to the government's low-cost and efficient transportation service policy.

Respond to the government's policy of developing, **expanding and linking passenger and freight transportation networks**

Over 122 Years of History



Railway Network in Thailand



—	Single Track	3,685	km (91.10%)
==	Double Track	251	km (6.25%)
≡	Triple Track	107	km (2.65%)
Total Route Length		4,043	km

Nong Khai: Connect to Lao PDR (Thanaleng)

(Forthcoming)

Aranyaprathet: to be connected to Cambodia

Songkhla: Connect to Malaysia (Padang Besar)

Su-ngai Kolok: Thailand/Malaysia Border



General Information



Services:

- SRT has a fleet of freight trains in operation of 54 trains a day with annual freight traffic of 10.2 million tons. For passenger service; there are 236 trains daily, serving 36.9 million passengers annually (2018 figures).

Infrastructure:

- Mainline:
 - BS100A CWR on PC sleepers
(20-t axle load, design speed 120 km/h)
- Double track projects are being carried out.
 - EN54E1 CWR on PC sleepers
(design speed 160 km/h)
- Bridges strengthening and siding rehabilitation to accommodate 20-t axle load are ongoing.

Key Development Projects in 2019



Double track projects: 7 lines (993 km)



New line projects: 2 lines (678 km)



Red line commuter projects: 2 lines (41 km)



High-speed train projects: 2 lines (473 km)



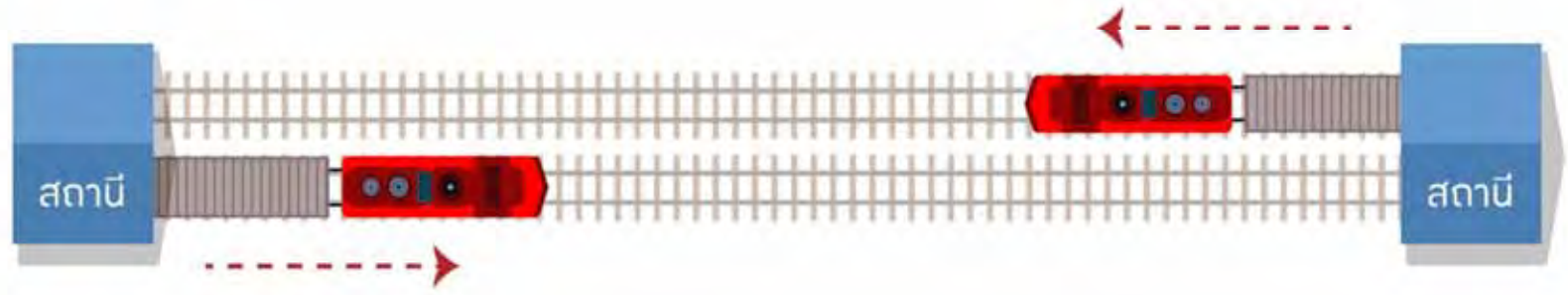
Signal Improvement to ETCS Level 1



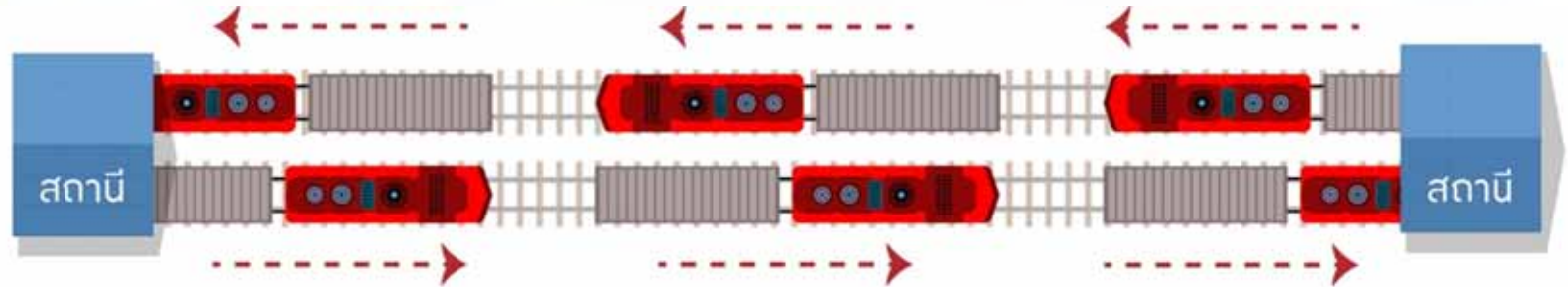
Single Track



Double Track






Double Track with ETCS Level 1



Railway Electrification Plan

Development concept for improvement of meter gauge rail network to accommodate electric trains connecting with the **red line** commuter rail network.

-  Development plan for the red line commuter rail (100 km around Bangkok)
-  Development plan for phase 1 railway electrification (250 km around Bangkok)
-  Development plan for phase 2 railway electrification (500 km around Bangkok)



Facilitation of Modal Shift



Government invests on rail infrastructure to shift from road to rail transport.



Improved Service Design



Improved Facilities in D.T. Projects



993 km double tracks for better meet and pass



Grade separation for safety improvement



Enhanced traffic control for better track utilization and safety



Reduced gradient to allow better cruising speed

Completed D.T. Section

Thanon Jira Jct. – Khon Kaen (NE Line)



Construction of New Terminal Station: Bang Sue Grand Station



Regional Connectivity to Reduce Transportation and Logistics Cost



Potential products for rail transport:

- crude oil
- consumer products
- LNG
- container products
- Cement
- mineral resources





Thailand – Lao PDR Rail Link

(Nong Khai – Thanaleng)



- **2009:** Passenger rail service started in 2009 using SRT rolling stock and personnel. CIQ procedures take place at each of the border stations.
- **2018:** The construction of CY at Thanaleng was completed, and the technical arrangement of freight cross border was signed.
- Both sides agreed to permit SRT to operate freight trains through the first Thai-Lao Friendship Bridge using locomotive and wagon with axle load not exceeding 15 tons per axle, twice a day on weekdays.
- **August 1, 2019:** The opening ceremony of the first freight train through the first Thai-Lao Friendship Bridge was launched.
- Since **August 2, 2019**, the shuttle train has been operating using mixed trains with 2 trains/day between Nongkhai Station (Thailand) and Thanaleng Station (Lao PDR) and vice versa, crossing the first Thai-Lao Friendship Bridge.

Thailand – Lao PDR Rail Link (Nong Khai – Thanaleng)



The Opening Ceremony of the Transit Cargo Train
on the First Thai-Lao Friendship Bridge on August 1, 2019

Thailand – Lao PDR Rail Link (Nong Khai – Thanaleng)



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Thailand – Cambodia Rail Link

(Klong Luk – Poi Pet)



- **July 25, 2014:** the ground-breaking ceremony was held in Poipet, Cambodia to reinstate the cross-border railway between Thailand and Cambodia.
- **2015:** The construction of the 6-km missing railway link between Aranyaprathet and Klong Luk (Thai-Cambodia border) and the new steel bridge across the border were completed.
- **2018:** The construction work of the 6.5-km missing link between Klong Luk in Thailand and Poipet in Cambodia and the temporary border station at Km. 260+210 in Thailand were completed in 2018.
- **April 22, 2019:** the Agreement on Joint Traffic Working over Railway between the Government of the Kingdom of Thailand and the Government of the Kingdom of Cambodia was signed by the two governments.



Thailand – Cambodia Rail Link

(Klong Luk – Poi Pet)



- **April 22, 2019:** The two PMs witnessed the signing ceremony at a Thai border post, and travelled over the newly completed 1.3-km section between Ban Klong Luk and Poipet by a four-car Hitachi DMU handed over to Cambodia by Thai Government.
- **July 1, 2019:** The daily local train service from Bangkok to Thai-Cambodia border has started. The new temporary border station at Ban Klong Luk will be fully furnished with CIQ and will be ready for cross-border service within 2019.
- **July 2, 2019:** SRT and MPWT of Cambodia had a kick-off meeting on the joint traffic master plan, aiming to activate the cross-border passenger train service between Ban Klong Luk Border station and Poipet station in timely manner.

Thailand – Cambodia Rail Link (Klong Luk – Poi Pet)



Ban Klong Luk Border Station



Joint Traffic Agreement Signing
and DMU Handover Ceremony
on April 22, 2019

Thailand – Myanmar Missing Link (Kanchanaburi – Ban Phu Nam Ron – Dawei)

- **April 2015:** FS on railway link between Dawei Port – Laem Chabang Port was completed. Total cost is about 162,300 M THB or 4,774 M USD for 464-km route.
- SRT submitted the request for DD. However, the MOT decided to postpone the project due to the low rates of returns.
- **September 2019:** The 21st SWG SKRL Meeting in Vientiane viewed that based on the result of the current FS, the market demand to utilize this railway connection is not strong enough to warrant the conduct of additional FS. Therefore, in the absence of the availability of the external funding, the timeline to conduct FS for this missing link could be adjusted.



Development Plan of New Lines in East-West Economic Corridor (EWEC)



Ban Phai – Mukdahan – Nakhon Phanom (355 km):
Project approved by the Cabinet on May 28, 2019

Nakhon Sawan – Ban Phai (291 km):
FS to be completed by Jan 2020

Nakhon Sawan – Khamphaeng Phet – Tak – Mae Sot (256km):
FS completed in 2015.
Plan to request 2020 budget to conduct DD

Expected Rail Network in 2027

	No. of Project	Distance (km)	Project Cost (Mil. THB)
 Double Track	14	2,476	400,949
 New Line	7	1,478	374,184
 High-speed Train	4	1,208	906,793
Total	25	5,162	1,681,926



THANK YOU FOR YOUR ATTENTION