



THE REPUBLIC OF THE UNION OF MYANMAR
MINISTRY OF TRANSPORT AND COMMUNICATIONS
MYANMA RAILWAYS



Status of Myanmar Railways
&
Current Development Projects

20th March, 2018

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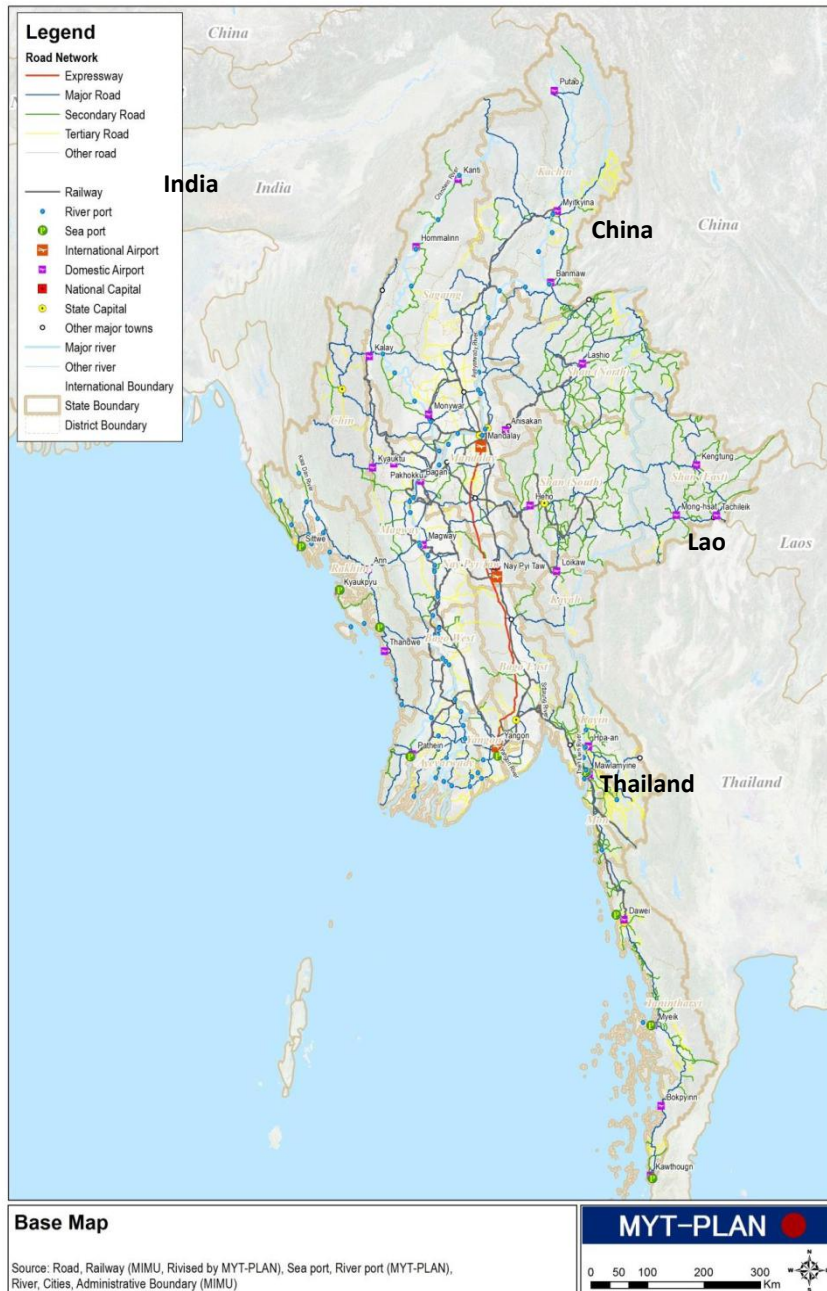
- **Introduction on situation of Transport sector in Myanmar**
- **Status of Myanma Railways**
- **Integration of Myanmar's rail network**
- **Current Infrastructure development Projects by External Assistance**
- **Investment Opportunities**



Brief Introduction on situation of Transport Sector in Myanmar



Overview of Transport Infrastructure in Myanmar



Myanma's Profile

- Population – 52 Million(2014)
- Area -676,578 Km²
- Coastal Line - 2800 km
- Road Length - approximately 150,000 km
- Railways Route Length - 6110.5 Km

Current Status

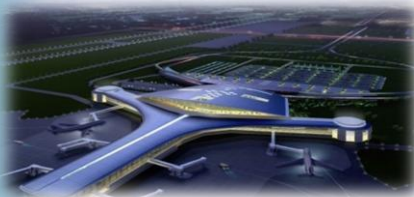
- Myanmar's Transport system lags behind ASEAN
- 60% of highways and rail lines in poor condition
- 20 million People without basic road access
- \$45-60 Billion investments needs (2016-2030)
 - Reduce transport costs by **30%**
 - Raise GDP by **13%**
 - Provide basic road access to **10 million** people
 - Save People's lives

Formulation of National Transport Master Plan

- Started in December, 2012 and completed in 2014 by the assistance of JICA.
- Master Plan is prepared in line with-
 - ✓ National Spatial Development Framework,
 - ✓ Regional Integration,
 - ✓ Demographic Framework,
 - ✓ Environmental Framework,
 - ✓ Financial Framework,
 - ✓ Economic Growth, and
 - ✓ Demand Forecast.

Projects in MYT-Plan

- | | |
|-------------------|----------------|
| ▪ Road Sector | (48) Projects |
| ▪ Rail Sector | (14) Projects |
| ▪ Maritime Sector | (15) Projects |
| ▪ Inland Waterway | (33) Projects |
| ▪ Air Sector | (32) Projects |
| ▪ Total | (142) Projects |



Formulation of National Transport Master Plan

Objective of the Myanmar National Transport Plan (MYT-Plan) 2014

- MYT-Plan is designed to provide guidance for a long-term investment program of transport sector in general that will assist the Government to achieve its economic growth targets by 2030.

Transport Sector Vision

“To develop an efficient, modern, safe, and environmentally - friendly transportation system in a coordinated and sustainable manner that embraces all transport modes for the benefit of the country and people of Myanmar.”

Updated Transport Policies

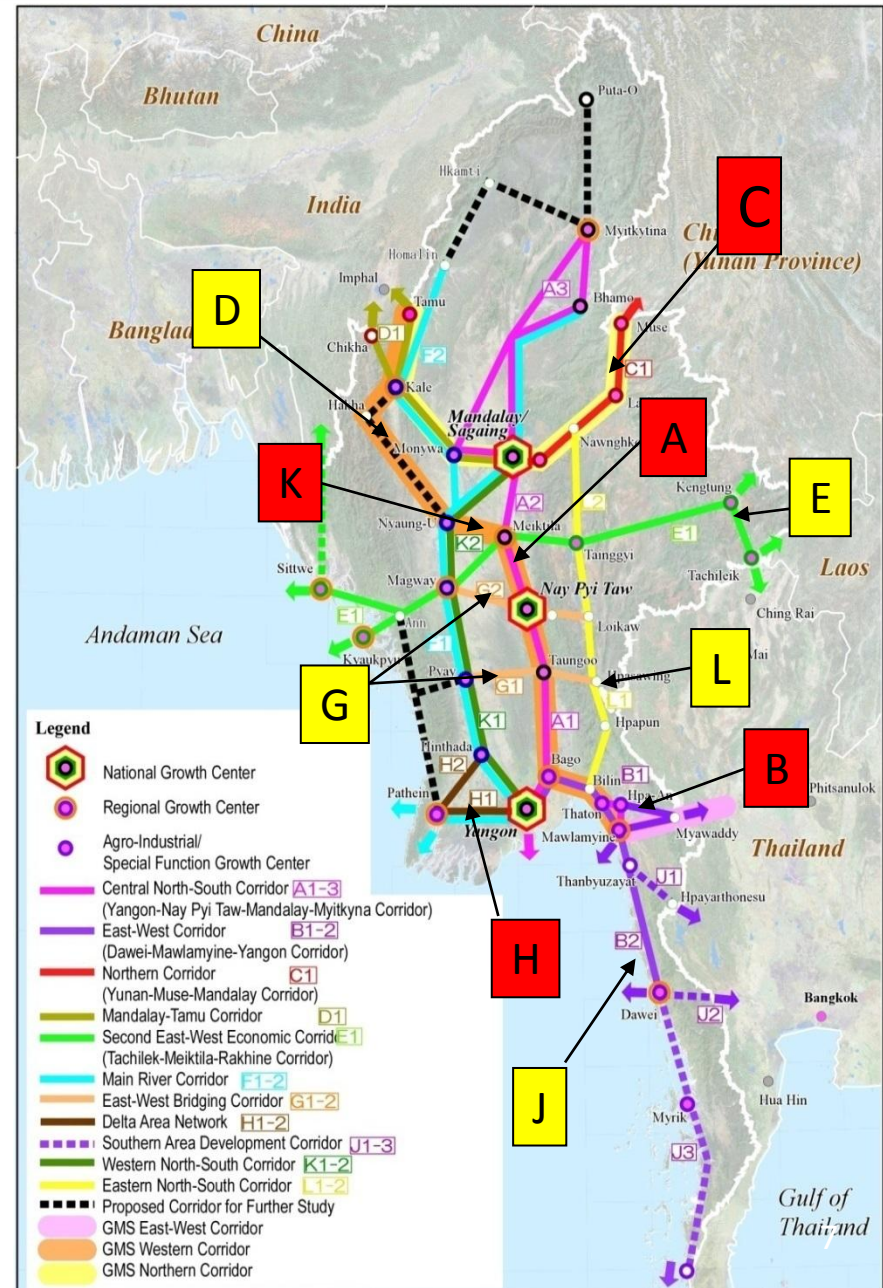
- Better planning and coordination,
- Infrastructure development,
- Better environmental, safety and security considerations,
- Institutional and regulatory development, and
- Reasonable transport pricing and secure budgeting

Corridor-Based Development Approach

10 Major Corridors

- A** Central North-South Corridor
- B** East - West Corridor
- C** Northern Corridor
- D** Mandalay - Tamu Corridor
- E** Second East - West Corridor
- G** East - West Bridging Corridor
- H** Delta Area Network
- J** Southern Area Development Corridor
- K** Western North-South Corridor
- L** Easter North-South Corridor

Priority corridors for urgent investment



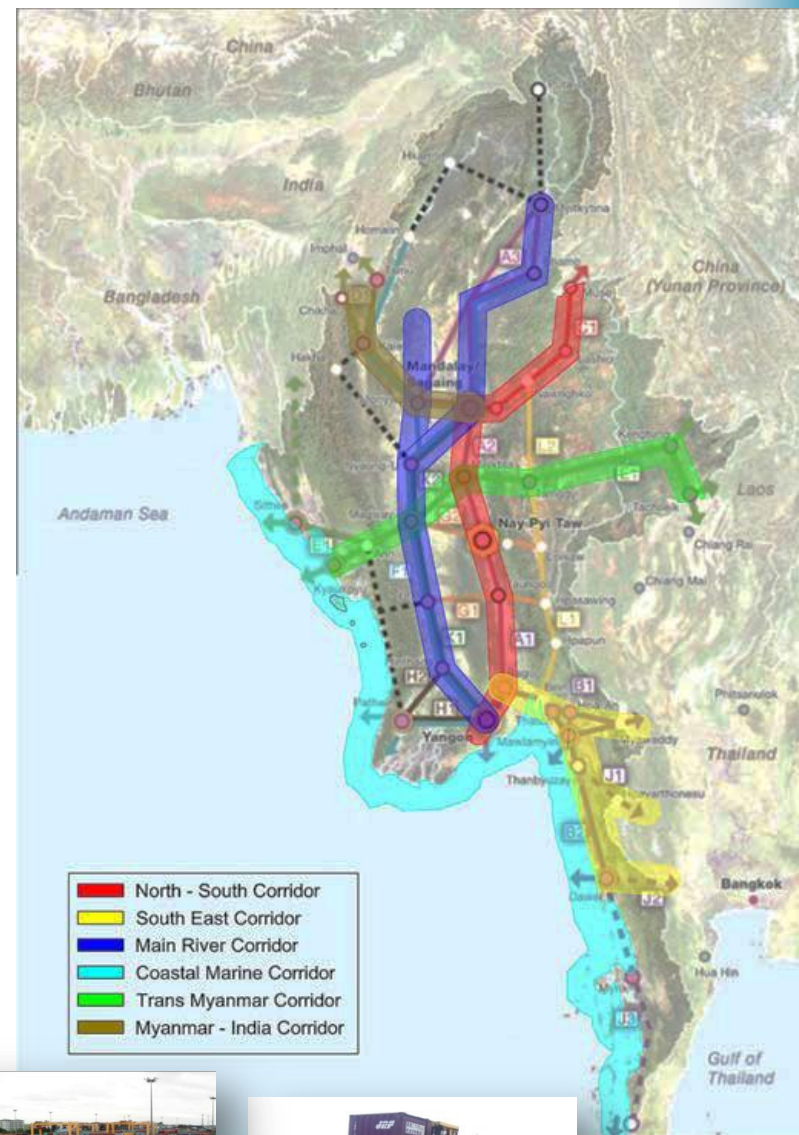
Preparation for the National Logistics Master Plan (MYL-Plan)

Objective of the Project

- To formulate a strategic and workable logistics development master plan by adding and supplementing the existing National Transport Master Plan.

Time Frame of this Project

- The Project was started from June, 2016
- Submitted to approve Government and Parliament



Identified and Prioritized Projects

■ Number of Identified Projects up to 2030

	Total	National Transport Master Plan (MYT-Plan)	Logistics
Projects	167	108	59
US\$ 1 billion	41	18	23

■ Type of Projects Identified

Hard Components (167 projects) :

- 1) Logistics facilities (truck terminals), transport infrastructure (roads, railways, ports, river ports, domestic ports, airports)
- 2) Creation of Multi-modal Freight Logistics Hubs at Strategic Locations / nodes.

Soft Components (22 projects) :

- 1) Legislation of Laws and Regulations
- 2) Capacity Building of Administrators
- 3) Fostering logistics providers
- 4) Undertaking various feasibility studies

Transport Sector Administration

Ministry of Transport and Communications

Aviation, Maritime, Road and Rail transport

Ministry of Construction

Construction and maintenance of national roads and bridges

Ministry of Agriculture, Livestock and Irrigation

Construction and maintenance of roads and bridges in rural areas

Ministry of Border Affairs

Construction and maintenance of roads and bridges in border areas

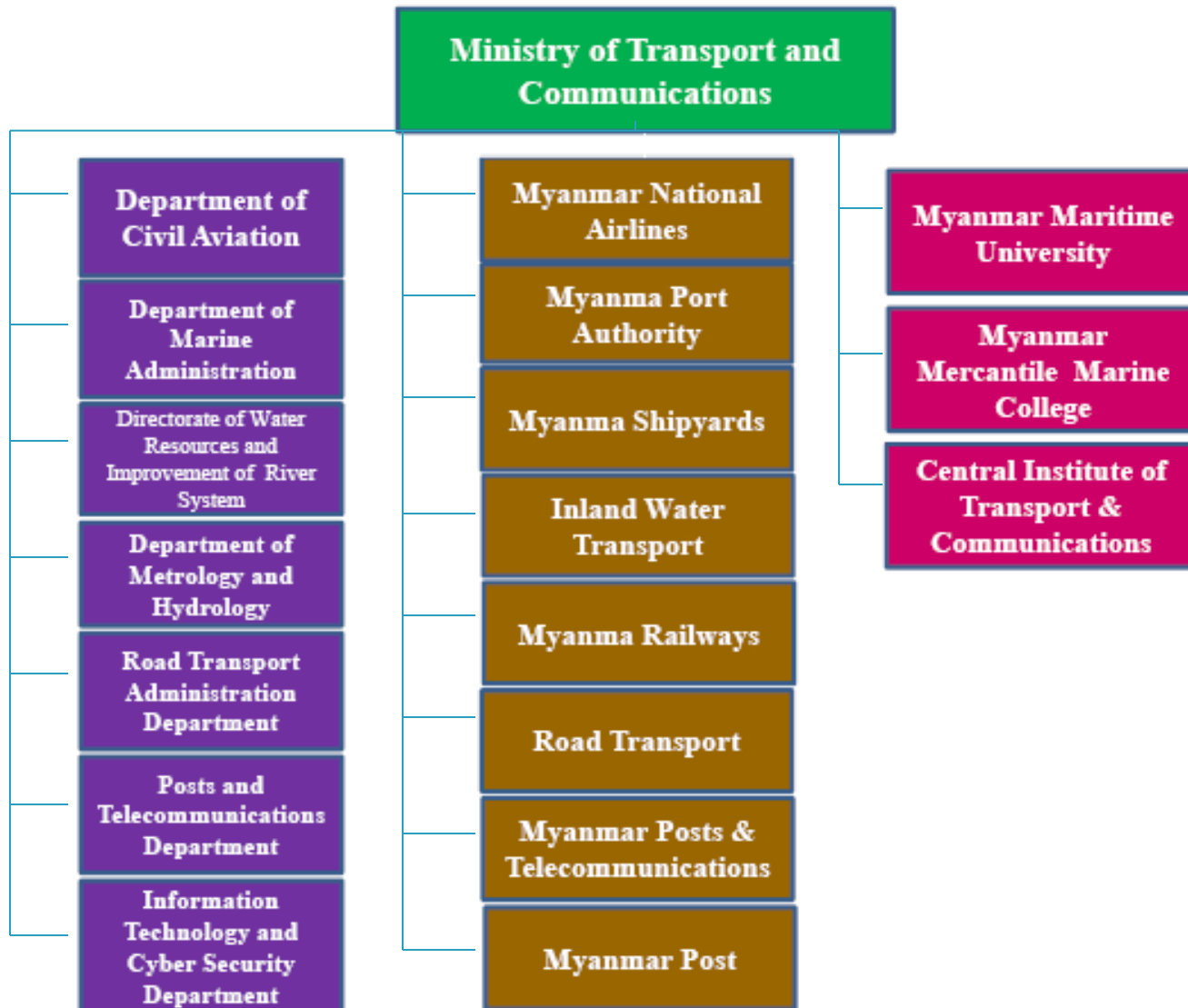
Naypyitaw Development Committee

Yangon City Development Committee

Mandalay City Development Committee

Urban Transport

18 Units of Departments, Enterprises and Institutes under Ministry of Transport and Communications



Status of Myanma Railways



Memorable Picture

- The first railway line in Myanmar, between Yangon and Pyay, 161 miles apart, was opened on the 1st of May 1877, by the Irrawaddy State Railway (British Company).

FACTS Of MYANMA RAILWAYS



- Started in 1877 (140 year old)
- Single Route 5405.285 km
- Double Route 705.196 km
- Total Route Length 6110.481 km
- Total Track Length 7942.372 km
(The longest transport rail network among ASEAN members.)
- Employment strength – 19466
- Bridges - 12099 Nos
- Tunnels - 12 Nos
- Railway Stations - 960 Nos
- 1000 mm gauge (Narrow gauge)
- Daily train operating
(190 Inter-City, 221 Urban, 21 freight, total 432 nos. of trains)

Current Situation of Myanmar Railways

- Two Major Locomotive Workshops
- One Carriage & Wagon Workshop

Existing Strength for Rolling Stocks

- **Total Number of Locomotives**
(Including Overage 224 Nos. 60 %)
- **Total Number of Passenger Coaches**
(Including Overage 404 Nos. 29 %)
- **Total Number of Wagons**
(Including Overage 1573 Nos. 46 %)

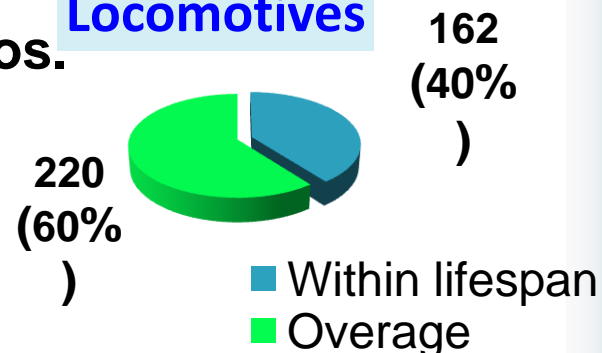


382 Nos.

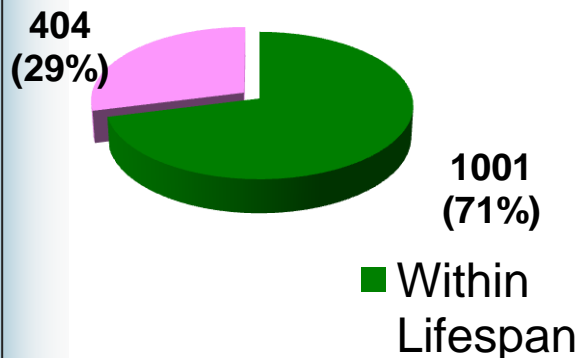
1405 Nos.

3449 Nos.

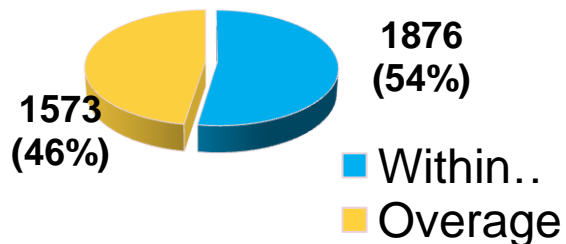
Locomotives



Passenger Coaches



Wagons



Current Situation of Myanmar Railways

Situation of Track Standard.

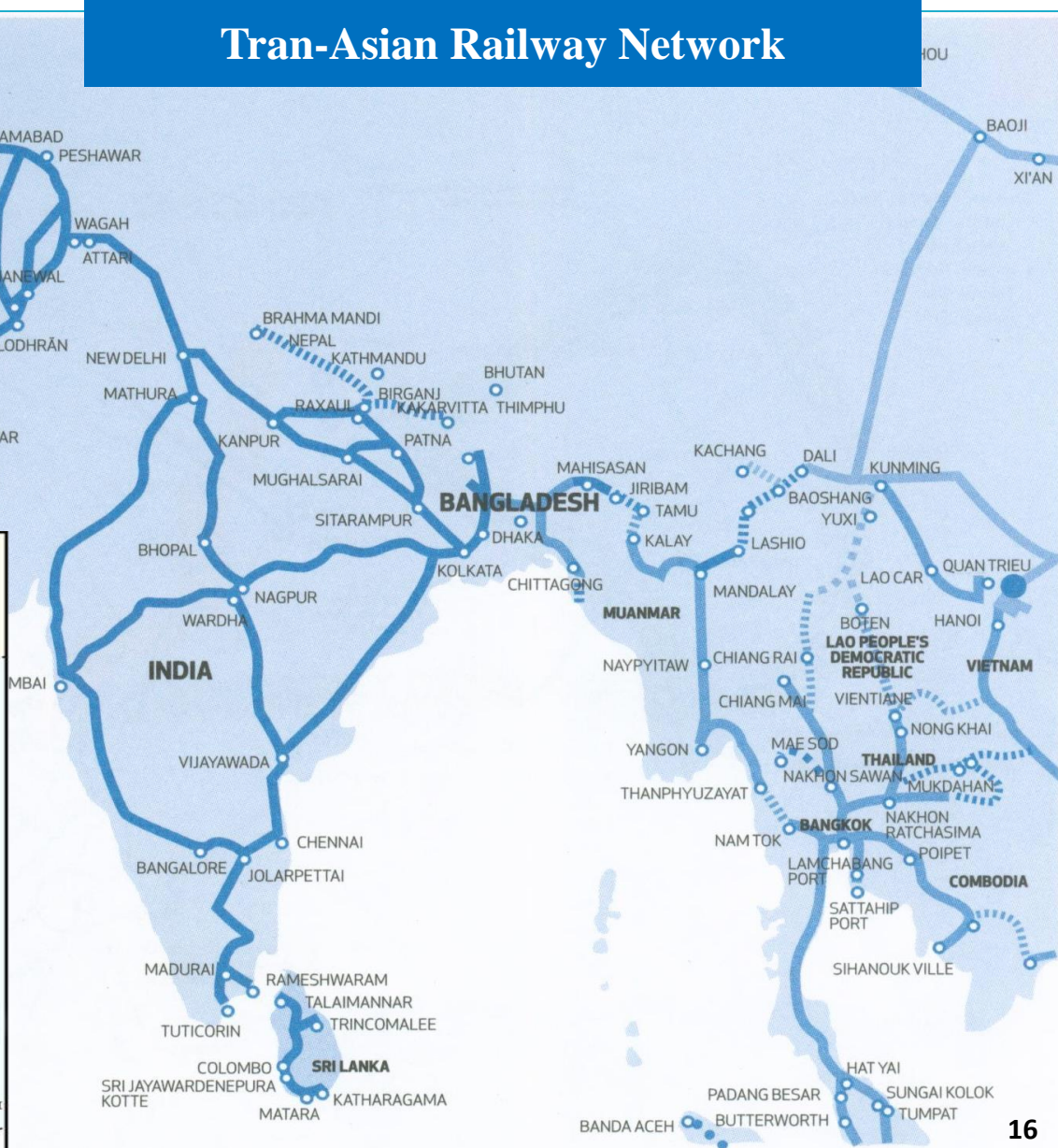
- Gauge - 1000 mm (Meter gauge)
- Axle Load - 12.50 Tons
- Rails - BS 75 R (37 Kg)
- Sleeper - P.C Sleeper , Timber Sleeper
- Ballast Cushion - 200 mm
- Rail Fastening - Fishplate and Bolt & Nuts , Pandrol Type Elastic Rail Clip, Dog Spike
- Max: Speed - 75 Km /hr.
- Track Maintenance - Manual and Technology was based on British Railways Standard and Indian Railways Standard.



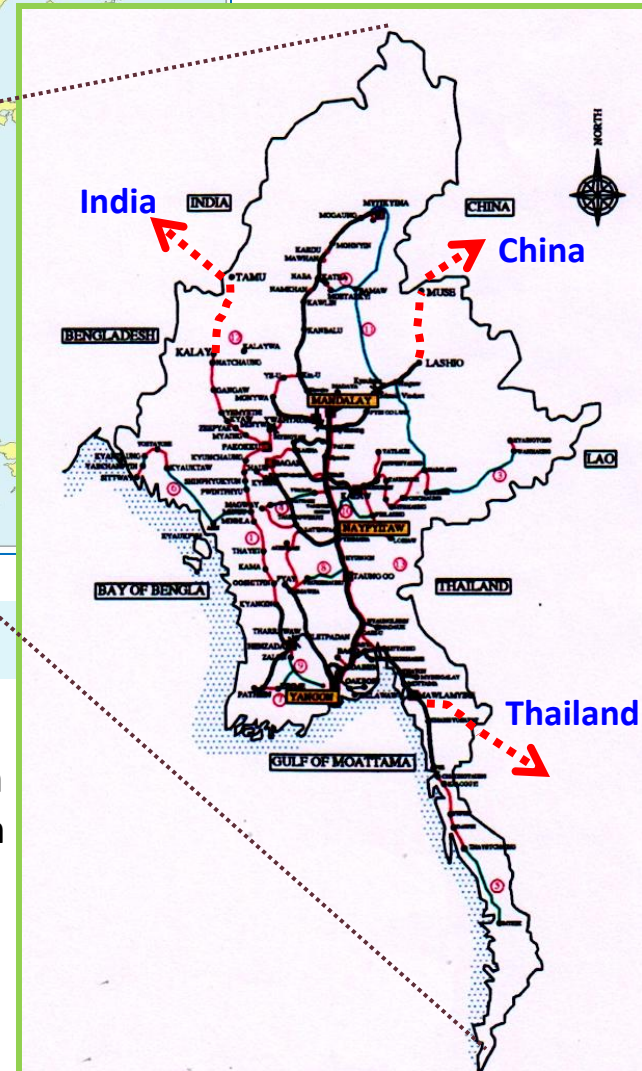
Integration of Myanmar's rail network

Tran-Asian Railway Network

Map of Singapore - Kunming Rail Link



Missing Links in the Trans-Asia Railway Network



Railway Lines of International Importance in Myanmar

Existing lines

Mandalay-Yangon	- 617 km
Mandalay-Lashio	- 313 km
Mandalay-Kalay	- 539 km
Bago-Thanbyuzayat	- 270 km

Missing lines

Kalay-Tamu	- 127.4 km
Lashio- Muse	- 126.1 km
Thanbyuzayat-	
Three Pagoda Pass	- 110 km

Total Route Length - 6110.5 Km

Railway Links of International Importance in Myanmar



Missing link with India

- Tamu (border with Moreh, India) - Kalay , 127 Km in Myanmar Territory.
- RITES conducted F/S at 2004-2005 estimated cost 97.68 mil USD.
- Furthermore, GoM requesting to GoI to conduct F/S from Tamu to Mandalay with new alignment.

Missing link with China

- Muse(border with Rueli, China) - Lashio 126.13Km
- Recently, CREEC of China proposed to conduct F/S for Muse-Mandalay new railway line project.

Missing link with Thailand

- Thanbyuzayat-Three Pagoda Pass (border NamTok, Thailand) - 110 km
- KOICA conducted F/S at 2005-2007 estimated cost 246.171 mil USD for Myanmar side.
- Due to construction of dam in Thailand side, they considered to construct new rail line between Dawai – Kanchanaburi instead of Three Pagoda Pass .

Current Infrastructure development Projects by External Assistance



The Oldest Railway Bridge in Myanmar, “Gokteik Viadut”
Construction start/end: 28-4-1899/1-1-1900
Total length: 689 Metres (2,260 ft)

Current Infrastructure development Projects by External Assistance

- **Yangon-Mandalay Railway Improvement Project**
- **Mandalay -Myitkyina Railway Line Rehabilitation Project**
- **Yangon-Pyay Railway Improvement Project**
- **Yangon Circular Railway Line Upgrading Project**
- **Yangon- Mawlamyine Railway Improvement Project**



Yangon-Mandalay Railway Improvement Project

by Japanese ODA Loan of US\$ 1.782 billion

Two Portions

- **Phase 1** Yangon - Taungoo 267 km
- **Phase 2** Taungoo - Mandalay 353 km

Scope of Works

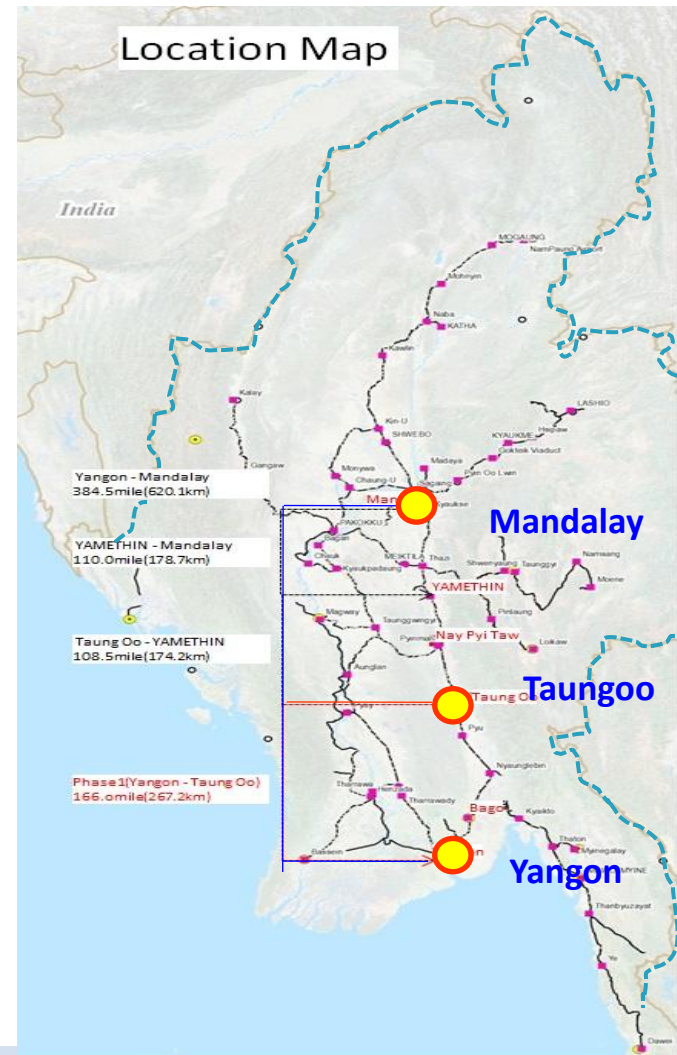
- Civil & Track Works, bridge work, installation of new signaling system, procurement of Modernized DEMU, establishment of Workshop and depot etc.

Project Period

- 2017 to 2023 (7 Years)

Activities to Implement

- L/A signed, Detailed Design is completed by JICA's grant aid, Construction Management Consulting Firm has been selected and on going consultancy services.
- 8 nos. of Tender packages is being floated, almost are on going, some are under preparation



- After completion of the project, trains running time will be not more than 8 hours with maximum operation speed 100 km/h

Mandalay –Myitkyina Railway Line Rehabilitation Project



Current Condition

- 547.4 Km Long, Single lane, Meter gauge Track
- High gradients and Curves on some portion,

3 priority sections to be upgraded

- Mandalay- Kawiin, Section I (3rd Priority)
- Kawiin – Mohnyin, Section II (1st priority)
- Mohnyin-Myitkyina, Section III (2nd priority)

Activities to upgrade for 1st Priority Section

▪ By ODA Loan of Korea EXIM Bank

- About 54.6 Km as bottle neck along the whole section
- Korea EXIM Bank pledged to provide EDCF Loan USD 100 million of EDCF Loan, Aide-Memoire was signed on January, 2016.
- F/S is on going process

▪ By National Owned Budget (4 Years Plan 2017-2021)

- Replacement with new rail and Long Rail welding works
- Ballasts Filling and Tamping works for

Yangon-Pyay Railway Improvement Project

Project Area

- Western part of Ayerwaddy River, About Route length -237.2 Km
- First railway line and opened since 1st May of 1887.

Scope of Works

- Track and Bridge upgrading works
- Installation of new signaling system

Project period

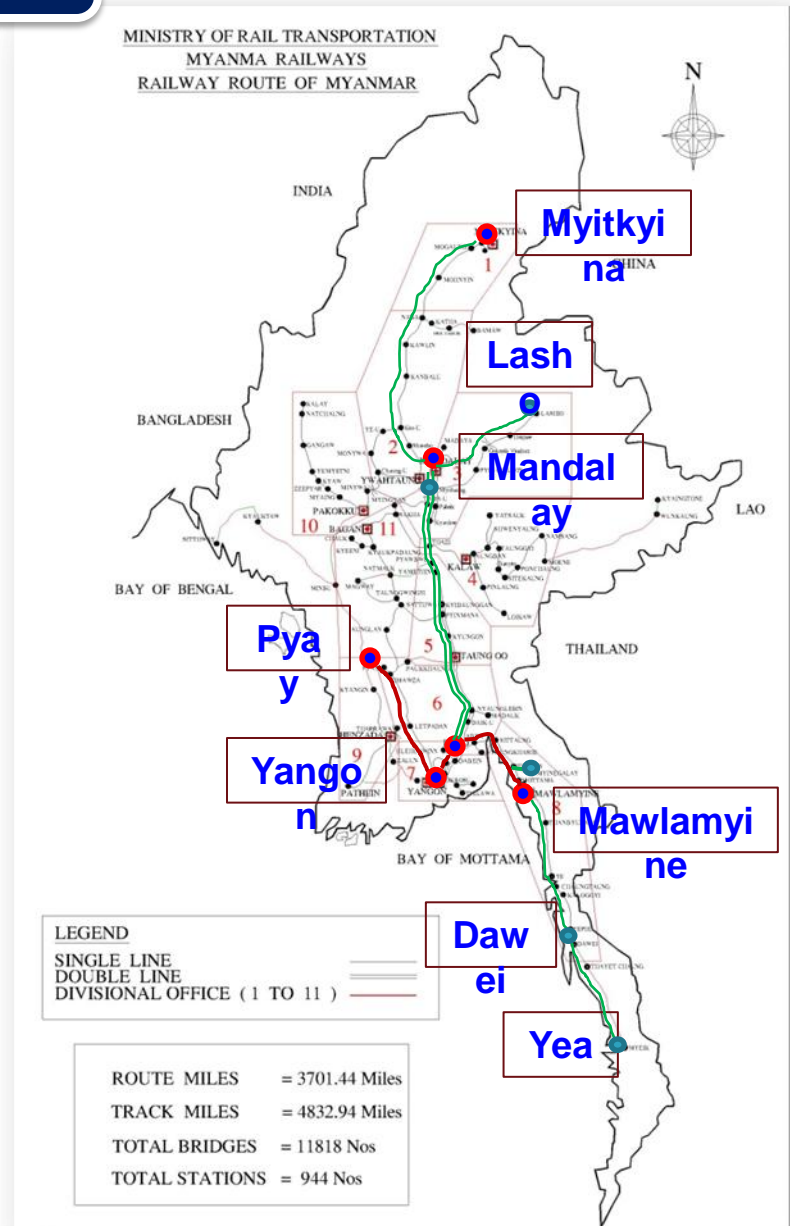
- 3 Years

Project Estimated Cost

- ADB Loan USD 100 Million
- Co Financier USD 60 Million
- And owned budget on some portion

Status of Project

- Surveyed at June,2017
- Singed MoD at 30th June,2017
- Under Loan Negotiation Process



Yangon Circular Railway Line Upgrading Project (47 km)

■ The project consists of two parts:

- Japanese ODA Loan (US\$ 207.8 million)
- The other is cover by National Budget (US\$ 43.38 million)

■ Project Composition

Project components covered by Japanese ODA Loan	Signaling Work
	DEMU Procurement work
	Consulting Services
Project components covered by National Budget	Civil and Track Works

■ Project Period 2017 to 2022 (6 Years)

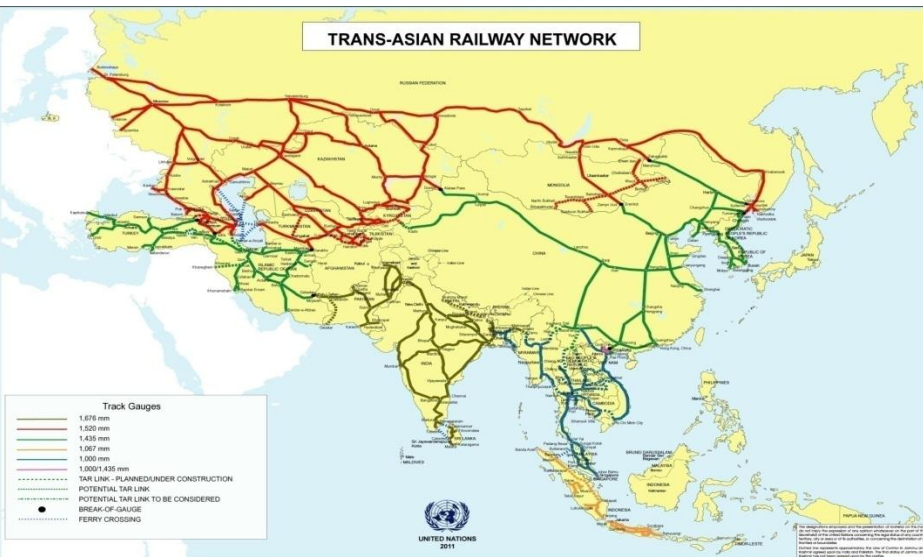
■ Activities to Implement

- Loan Agreement was signed in 2015.
- Completed Basic Design and Consulting Firm selection
- 2 nos. of Tender packages for each work of ODA Loan and National Budget are being floated, almost are on going process.
- Civil and Track works are implementing.

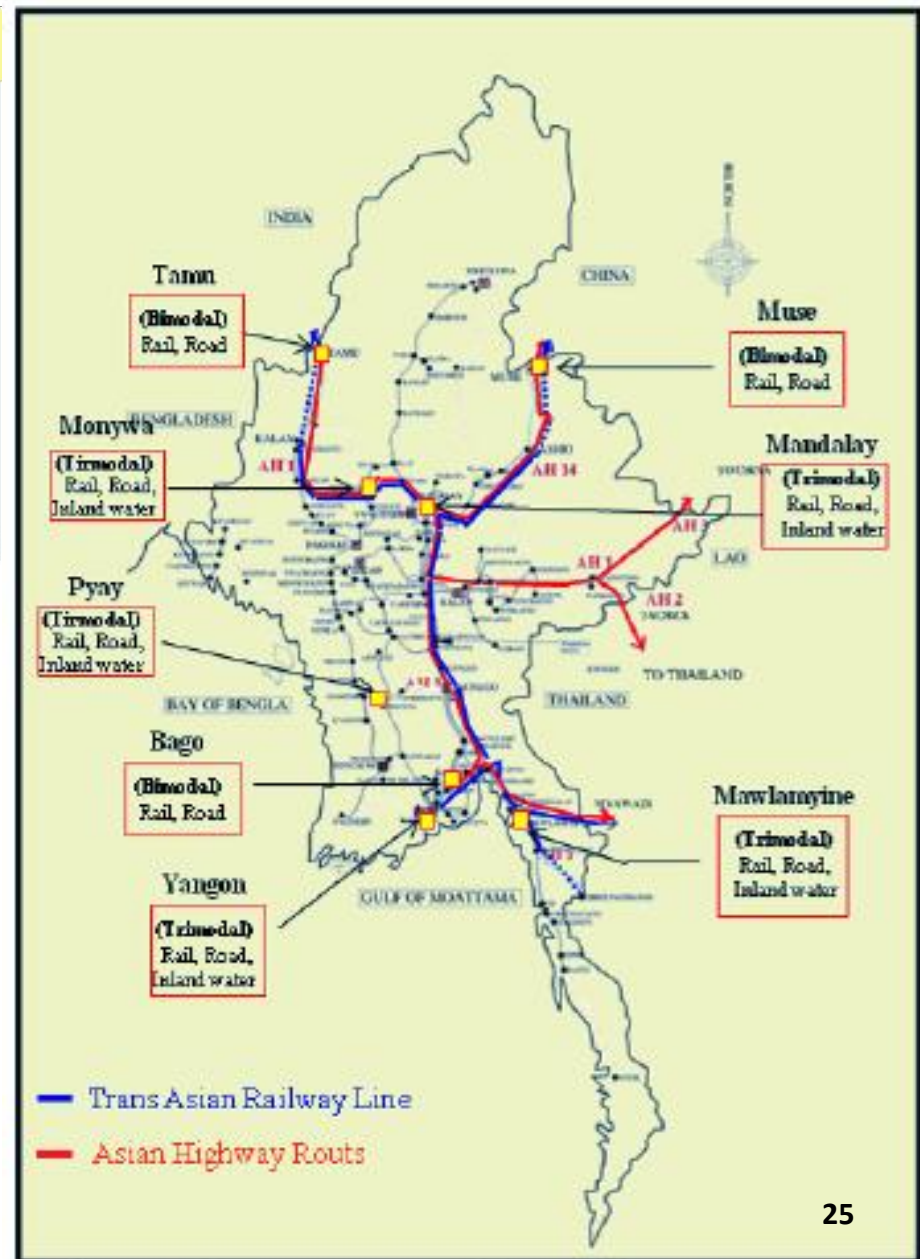


- After completion of project, travel time of passenger trains will reduce from 2 hours and 50 minutes to 1 hour and 50 minutes

Status of the Dry Port Projects in Myanmar



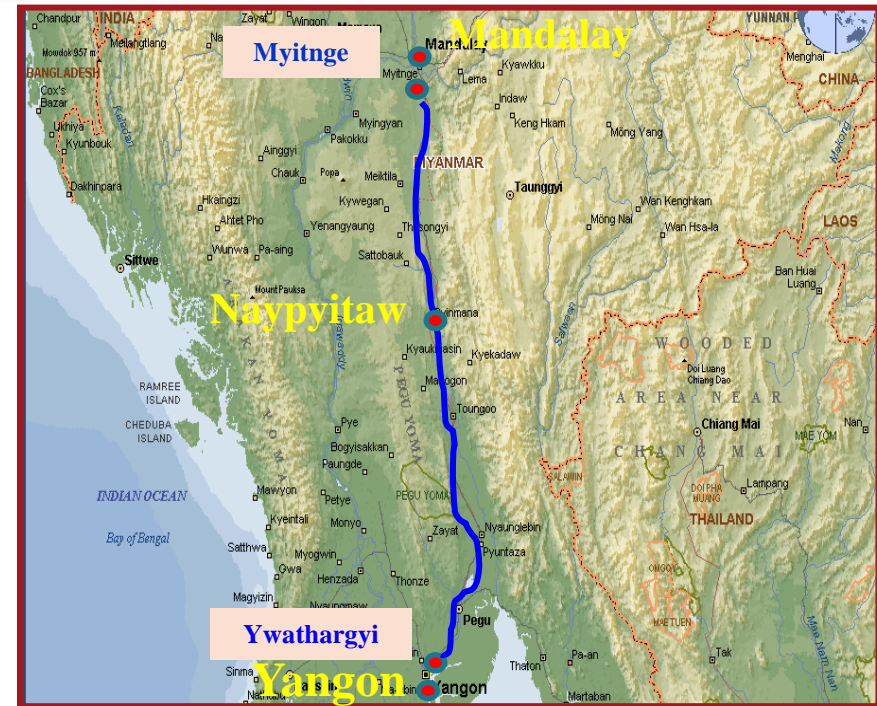
- TAR network and AH Network.
- Eight potential dry port places has been proposed to UNESCAP
- Myanmar signed on the Intergovernmental Agreement on Dry Ports” in Nov, 2013.
- 8 potential key site are Mandalay, Tamu, Muse, Mawlamyine, Bago, Monywa, and Yangon.
- It will contribute not only for the Nation’s Transport Sector but also for the ASEAN, GMS, BIMSTEC regional rail transport sector



Status of the Dry Port Project in Myanmar

Activities to Implementation for Two Dry ports

- **Location and Area** - Ywarthargyi (Yangon) - 80 acres Myitnge (Mandalay) -75.1 acres
- **Estimated Investment** - Total 80 million USD
- **Concession Period** - 50 years, Under PPP Scheme.
- **Tender Process** - Invited EOI at August 2014, Submitted Pre-Survey Reports and RFP at July 2015, and Awarded the Two Developers for each at April, 2017
- **BOT Agreement Contract** – 3rd Apr,2017
- **Current Activities** – Under construction process (Duration – Within 2 Years after contract signing)



Investment Opportunities

Railway Operations for Passenger and Freight

- **Urban Mass rapid Transit Projects**
- **Passenger and Freight Train Operation under PPP Scheme**
- **Freight Station Development Project in Thilawa with Thilawa Line Improvement**
- **Procurement of Locomotives and Container Wagons for Container Block Train Projects**
- **Bulk Cargo Railway Freight Improvement Projects**

Logistics Facility Related Projects

- **Establishment of Dry ports as Multimodal Logistics Hubs at Tamu, Monywa, Muse, Bago, Mawlamyine and Pyay**
- **Freight Station Development Project in Thilawa with Thilawa Line Improvement**
- **Improvement of Yangon CBD Freight Stations**
- **Intermediate Freight Station Improvement Project**
- **Tathon - Myaingglale Track Improvement with Myainggale CFS**

Investment Opportunities

Upcoming Railway Lines Investment Projects

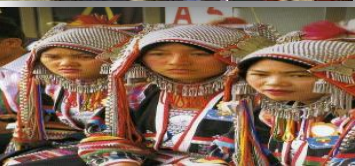
- New Mandalay - Muse Railway Development Project
- Yangon-Pyay Line Improvement Project
- Yangon Outer Ring Freight Railway Development Project
- Passenger and Freight Train Operation under PPP Scheme
- New Yangon - Hanthawaddy Line Development Project
- Thilawa - Bago New Line Development Project
- New Tamu - Mandalay Railway Development Project
- Study on Thailand – Myanmar Railway connectivity



Conclusion

- Increasing passenger and cargo demand
- Currently Infrastructures are being tried to develop.
- Emphasis to the transport sectors development to meet the international standards.
- Potential investors are warmly welcomed to cooperate, coordinate and collaborate.
- Good cooperation and connectivity for the development of transport and related industry.
- Welcome to participate on the Rail transport Sector infrastructure development.





Thanks for Your Kind Attentions.

