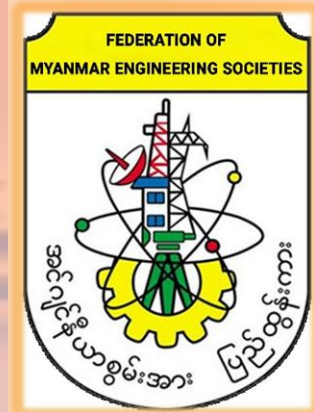


AQSA INTERNATIONAL CONGRESS 2023

Envisioning Sustainability and Digitalization in ASEAN Construction Industry

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**Infrastructure Development for ASEAN Connectivity
in Myanmar**

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- ❖ MBA, BSc (Quantity Surveying)HWU,UK
- ❖ Managing Director – Leng Consultants (Myanmar)
- ❖ Principal Trainer – LCM School of Built Environment
- ❖ Principal QS – Win Asia Consultants , Singapore



Myanmar Profile

- ❑ Population - 57.53 Millions
- ❑ Land Area - 676,578 sq.km
- ❑ Coastal Length – 2,800km
- ❑ Road Length - 148,690km



Vientiane Declaration on the Adoption

- ❖ @ Lao People's Democratic Republic
- ❖ 6 September 2016





- **VISION** : To achieve a seamlessly and comprehensively connected and integrated ASEAN that will promote competitiveness, inclusiveness, and a greater sense of Community.

ASEAN Connectivity 2025: An Integral Part of ASEAN Community Vision 2025



Infrastructure that will support greater connectivity among and within ASEAN Member States



Aspects which improve the regulatory environment which can enhance connectivity between ASEAN Member States

Promoting exchange of culture, tourism, education, and know-how



Ministry of Construction - Mission

- To upgrade the existing roads in the road network to meet at least ASEAN Class III Standard (18 feet in width DBST) by 2030
- To upgrade the existing bridges to meet ASEAN III Standards with 24 feet wide two way roadway permanent Bridge by 2030
- To modernize the 367 towns all over the country with systematic urban planning and in these towns, provisions of apartments for 1 million households by 2030.



Ministry of Construction - Strategy

- ❑ The projects will be carried out according to one of the followings:
 - For the potential projects, if possible, apply Public Private Partnership (PPP) for implementation with Win-Win situation
 - Implement projects with the financing of Government
 - Implement projects with the assistances like Grant, Aid, Loan from the development partners such as JICA, KOICA, ADB, WB as well as from the Donor Countries
 - To enact “Road User Tax Law” that will support the maintenance of Roads and bridges network effectively.

ANALYZING PROGRESS ON CONNECTIVITY

ASEAN HIGHWAY CONNECTIONS

ASIAN Highway Route Through Myanmar



AH 1 - Myawaddy - Payagyi (Bago) - Meikhtila -
Mandalay-Tamu (1650 km)

AH 2 -Tachileik - KyaingTong - Meikhtila (807 km)

AH 3 - Mongla - KyaingTong (93 km)

AH14 -Muse - Lashio - Mandalay(453 km)

Total length - (3003 km)

ASEAN Highway Network



-23 Routes , Length 36,000 kms

-7 Routes in Myanmar :

AH1, AH2, AH3, AH14, AH111, AH112, AH123

- 7 Highway Routes in Myanmar linked with ASEAN Highway Network.
- Total length of the border with neighboring countries is approximately 4,600 km.
- The total length of the coastline is around 2,000 km.

ASEAN Highways

ASEAN Highway - 1:
Tamu-Mandalay-Meiktila-
Yangon-Bago-Payagyi-Thaton-
Myawady Road

ASEAN Highway - 112:
Thaton-Mawlamyine-
Thanbyuzayat-Ye- Dawei-
Lehnya-Khamaukgyi-
Kawthaung Road + Lehnya-
Khongloi Road



ASEAN Highway - 14:
Mandalay-Hsipaw-Muse Road

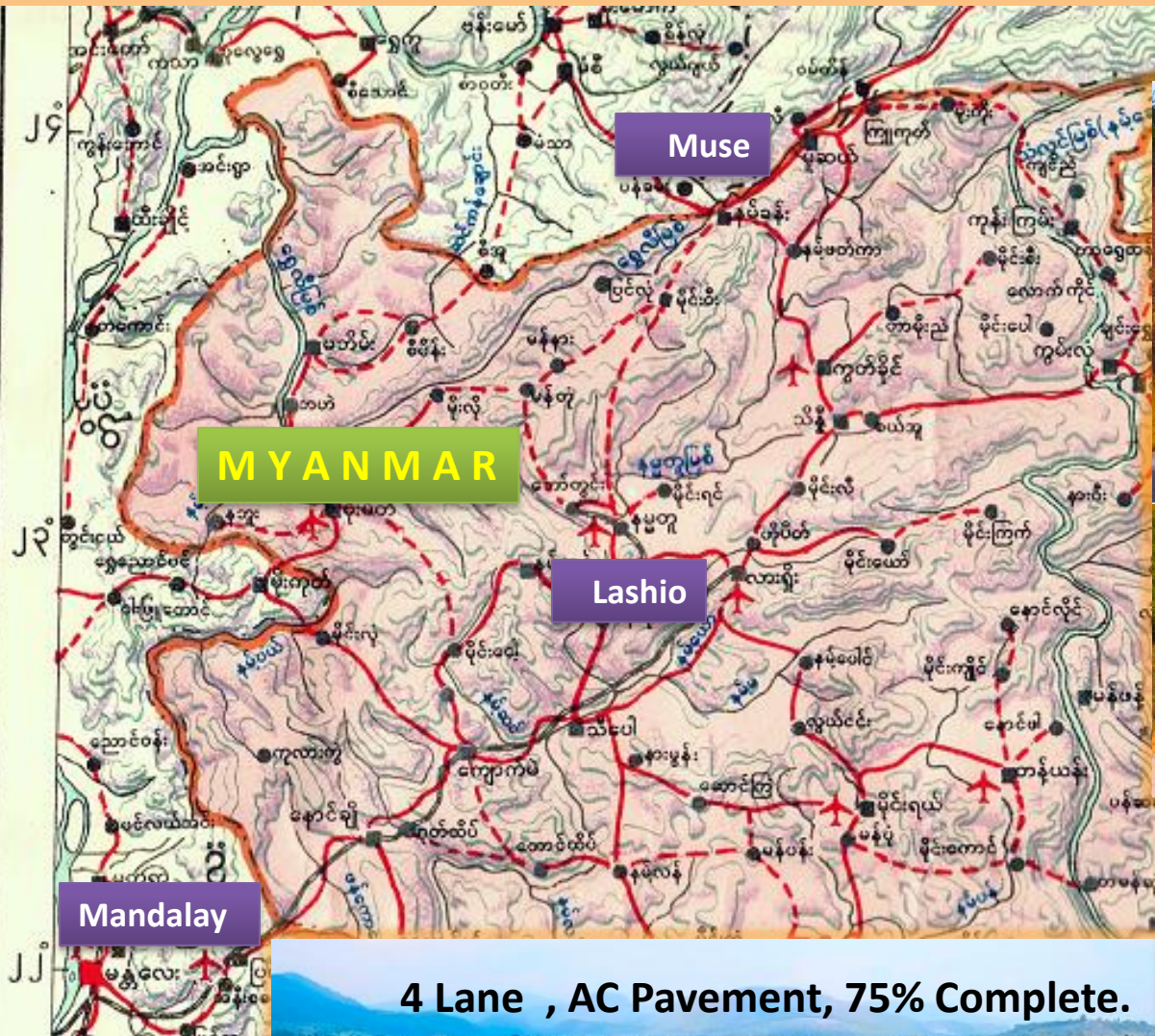
ASEAN Highway - 2:
Meiktila-Loilen-Kengtung-
Tachileik Road

ASEAN Highway - 3:
Mongla-Kengtung Road

ASEAN Highway - 111:
Hsipaw-Loilen Road

ASEAN Highway - 113:
Dawei- Htee Khee Road

AH.14 , Mandalay-Lashio-Muse , 453Km.



CHINA



4 Lane , AC Pavement, 75% Complete.

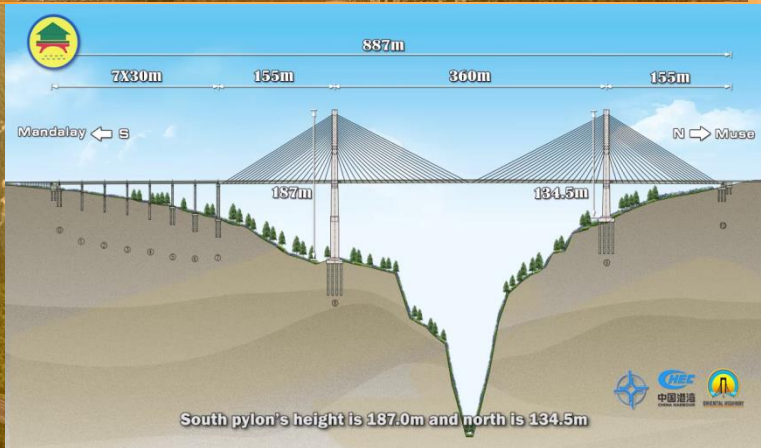
AH.14 , Mandalay-Lashio-Muse , 453Km.



**New Kun Lon Bridge ,
95% Complete**



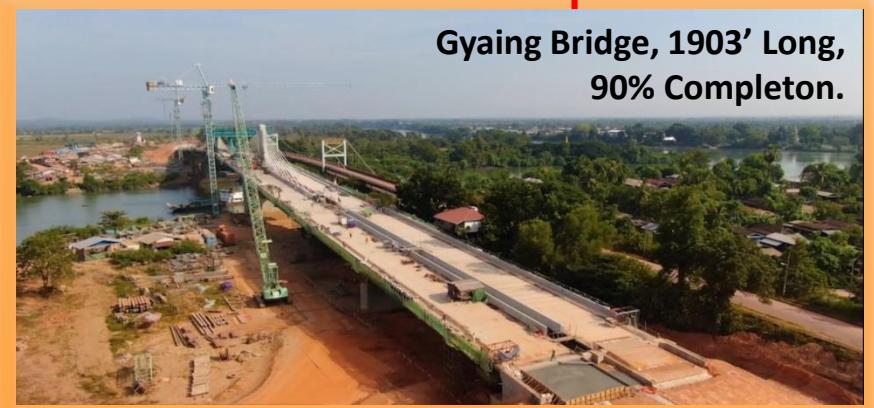
New Goke Hteik Bridge



AH.1 , Pa-an – Myawaddy Portion



Eaindu-Kawkareik , 76 KM



Gyaing Bridge, 1903' Long,
90% Completon.

INDIA-MYANMAR-THAI TRILATERAL HIGHWAY

India-Myanmar-Thai Trilateral Highway (1,299.50 km)

India-Myanmar-Thai Trilateral Highway

2 lanes, 5.5 m
Upgraded by India
(BRO) from Tamu to
Kalewa

1. Portion aided by
Government of India
(Tamu-Yargyi)

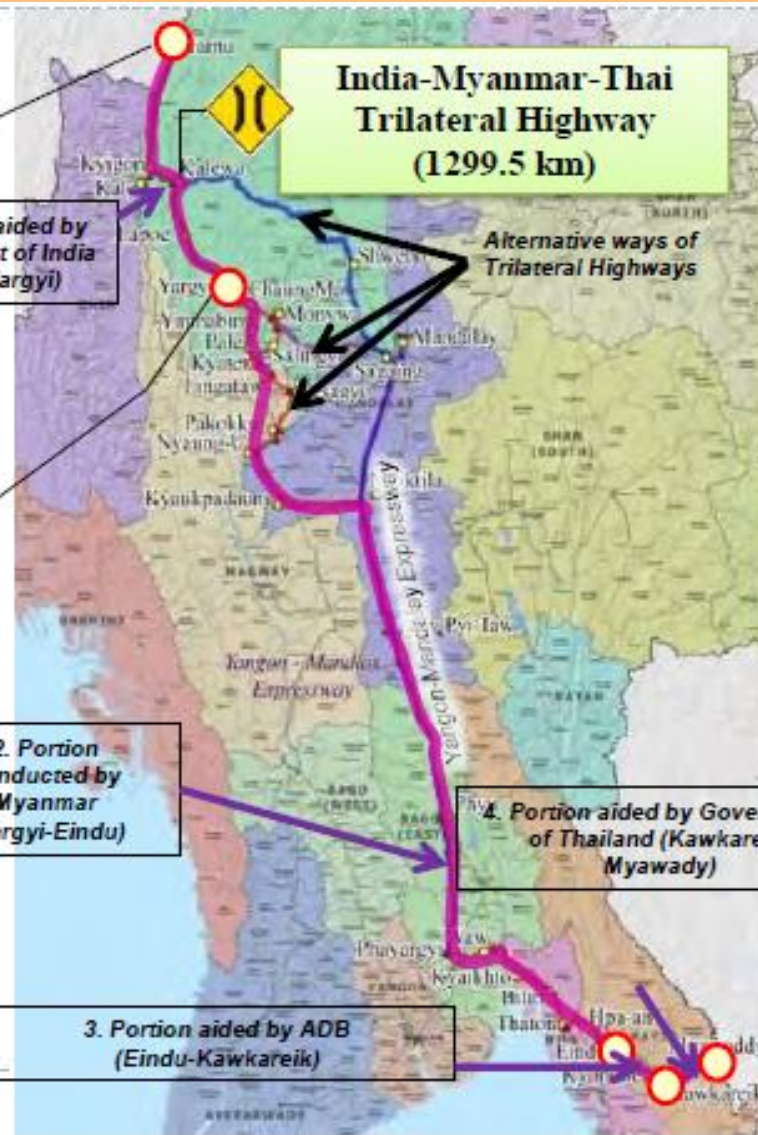
FS. By
UN-ESCAP
DPR by India(RITES)
Chaung Ma-Yinmabin-
Pale-Lingataw Portion

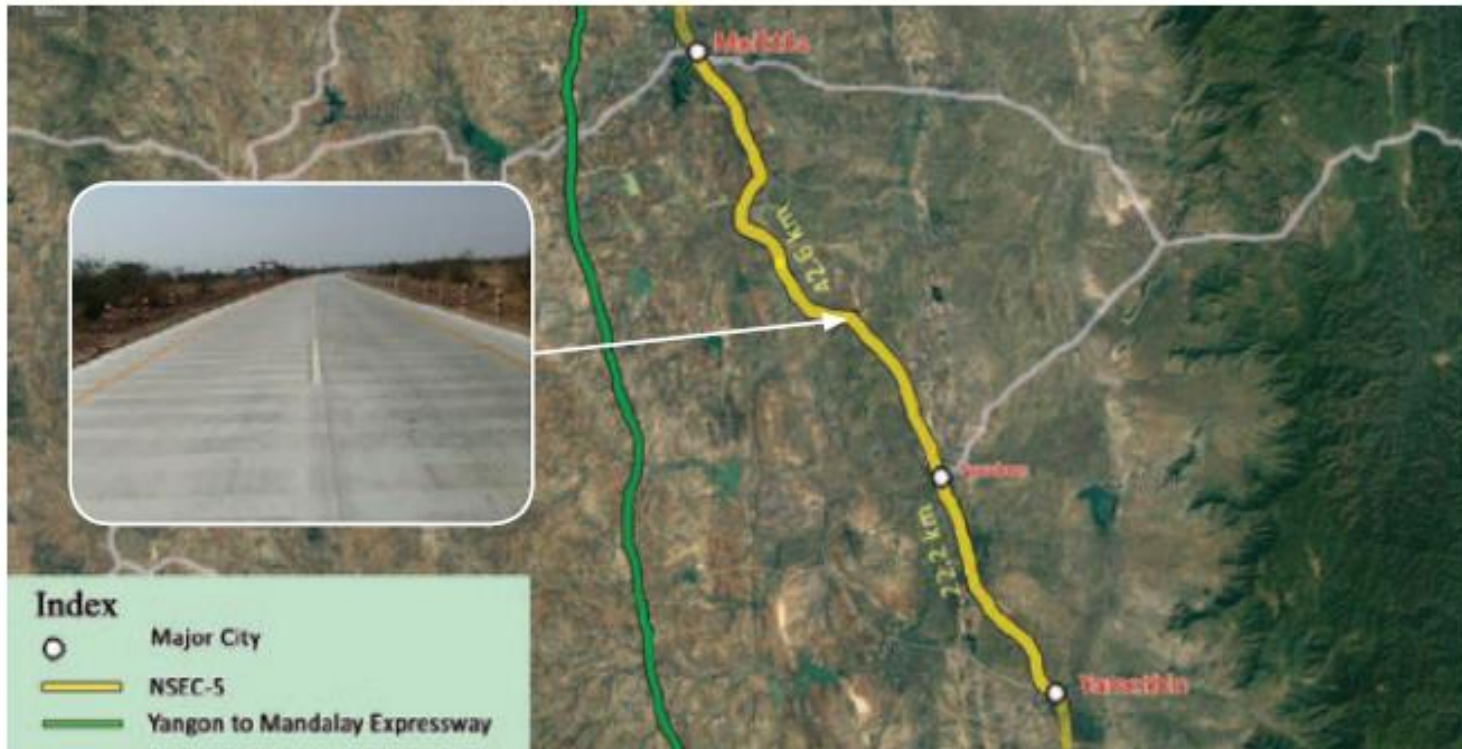
2. Portion
conducted by
Myanmar
(Yargyi-Eindu)

3. Portion aided by ADB
(Eindu-Kawkareik)

4. Portion aided by Government
of Thailand (Kawkareik-
Myawady)

Tamu-Kyigone-Kalaywa	=	160.0 Km
Kalaywa-Yargyi-Chaungma	=	159.5 Km
Chaungma-Pale-Lingadaw	=	73.0 Km
Lingadaw- Pakokku	=	77.5 Km
Pakokku-Bagan-Kyaukpadaung	=	
-Theegone	=	154.0 Km
Theegone-Naypyitaw-Bawnatgyi	=	393.0 Km
Bawnatgyi-Payagyi-Thaton	=	84.5 Km
Thaton-Hpa an	=	52.00 Km
Hpa an – Myawady	=	146.0 Km
Total	=	1299.5 Km

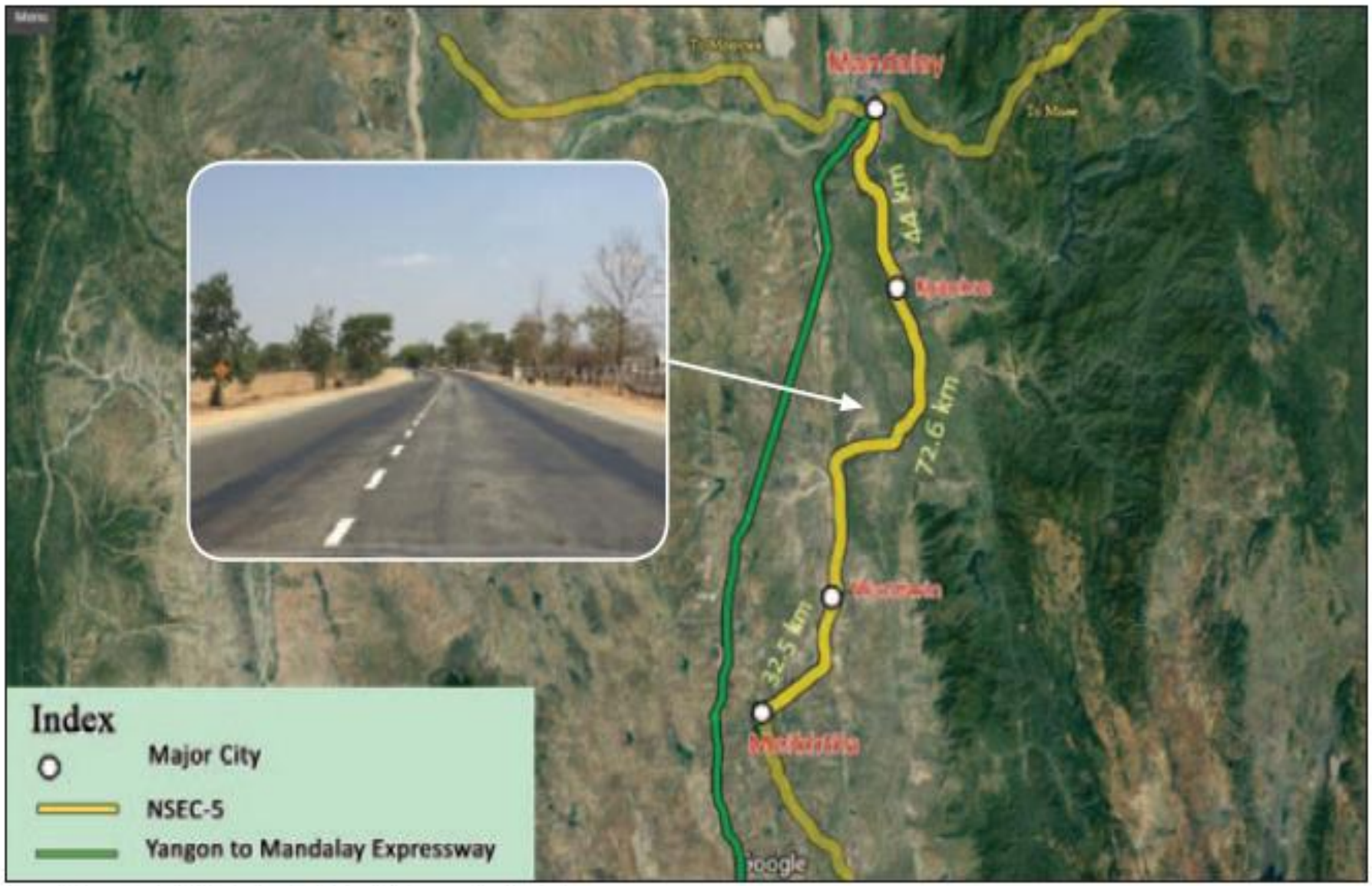




km = kilometer, NSEC = North-South Economic Corridor.
 Source: ADB. GMS Economic Corridor Assessment Team.



Yamethin-Meikhtila Section



km = kilometer, NSEC = North-South Economic Corridor.
 Source: ADB. GMS Economic Corridor Assessment Team.

Meikhtila –Mandalay Section



AH = Asian Highway.

Source: ADB. GMS Economic Corridor Assessment Team.

Mandalay-Monywar Section

RAIL TRANSPORTS

Rail Transport

Myanma Railways Network



- Started in 1877 (142 year old)
- Single Route 5405.285 km
- Double Route 705.196 km
- Total Route Length 6110.481 km
- Total Track Length 7944.320 km
(The longest transport rail network among ASEAN members.)
- Bridges - 12103 Nos
- Tunnels - 12 Nos
- Railway Stations - 960 Nos
- 1000 mm gauge (Narrow gauge)
- Daily train operating (Total 422 nos. of trains) (168 Inter-City, 229 Urban and Suburban, 25 freight)
- Current Employment strength -20,900

DRY PORTS

Dry Port Implementation Plan in Myanmar

Objectives

- To support as logistics hub improvements in Myanmar

Activities

- Proposed eight potential locations in Myanmar (Tamu, Monywa, Muse, Mandalay, Bago, Pyay and Mawlamyine)
- Signed on the “Intergovernmental Agreement on Dry ports” at Nov 7, 2013.
- Out of eight, two Dry Ports Ywathargyi at Yangon and Mitinge at Mandalay are implementing under PPP Scheme.
- The other six (6) potential Dry Ports at Bago, Muse, Tamu, Monywa, Pyay and Mawlamyine are being Prepared to study for future development.



Dry Port in Yangon and Mandalay

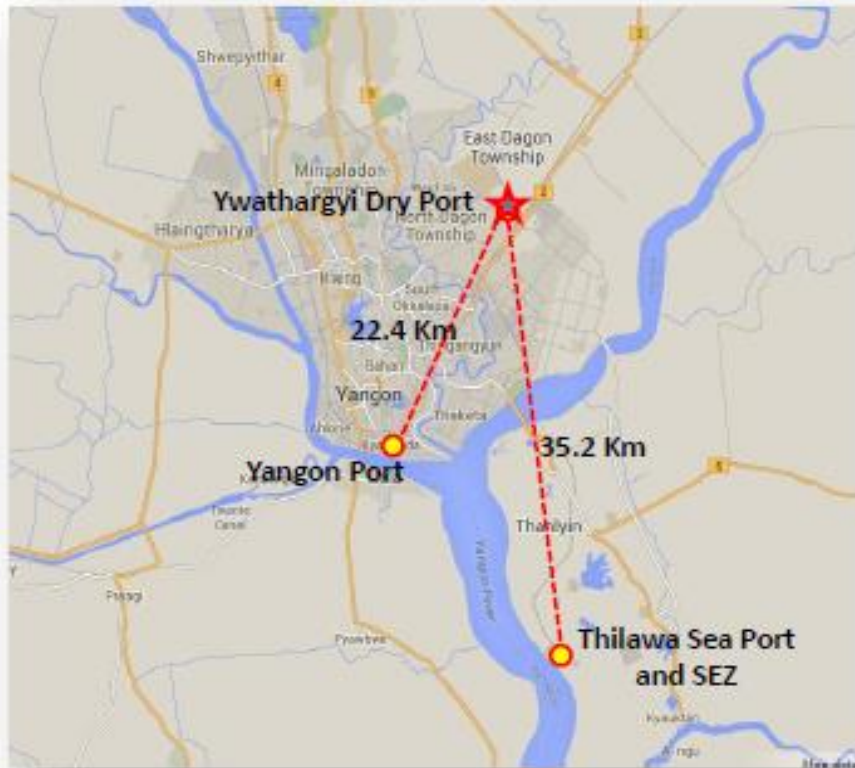


Dry Port (Mandalay)



Dry Port (Yangon)

Ywathargyi (Yangon) Dry Port progress



- Project area - About 100 Acres
- Rail and Road Link with Thilawa Seaport (35.2 Km) and Yangon ports (22.2 Km)
- 25.6 Km far from Yangon Internal Airport
- Modes of Transport access – Rail/Road/Air port and Maritime
- Located on the AH-1/TAR
- Proper Road Access with Industrial Zones inside of Yangon Region
- Capably expand the area on future development volumes



Plot A and B



Layout Plan of Kerry Logistics Network



Myitnge (Mandalay) Dry Port progress

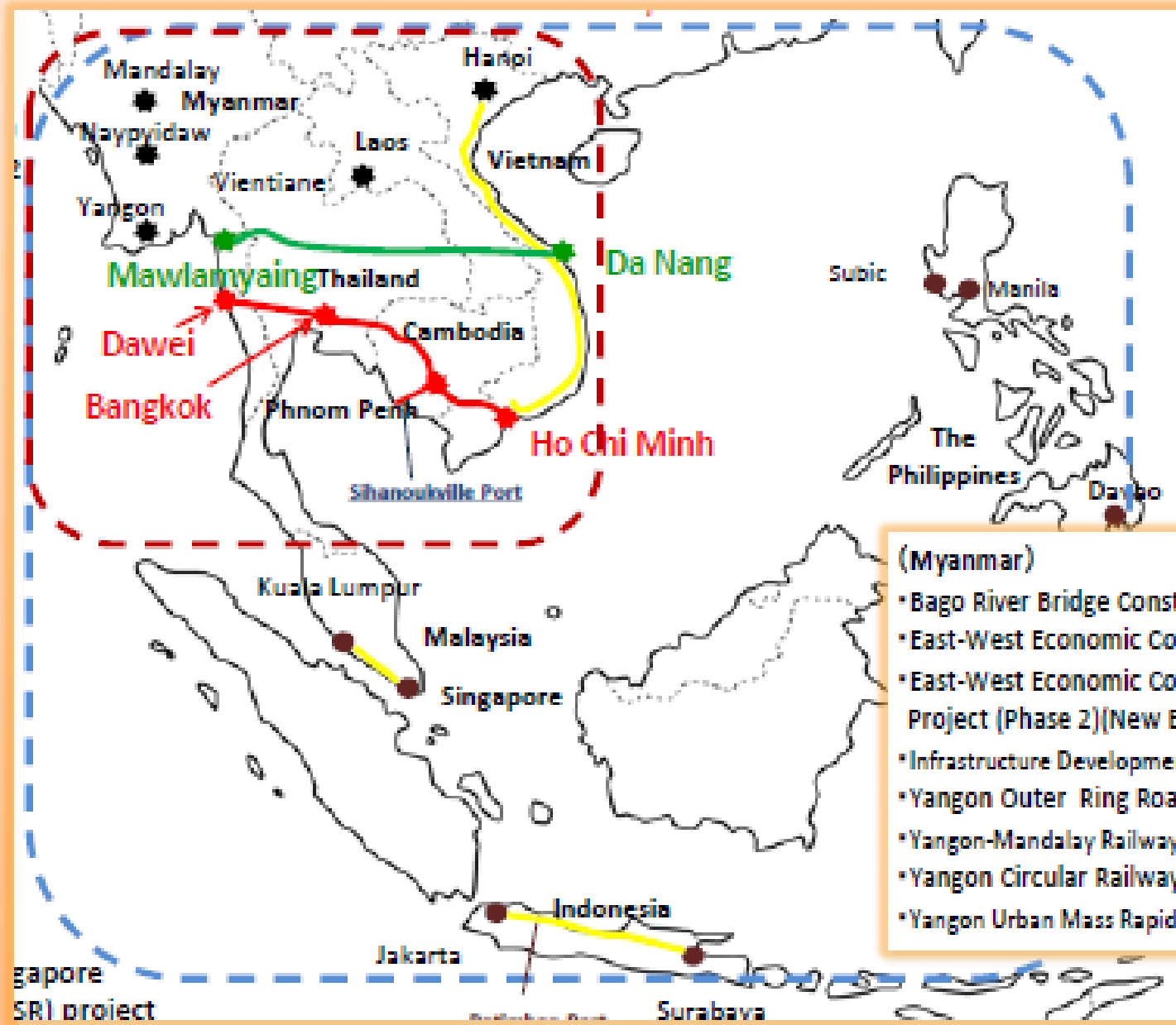


- Project area - About 90 Acres
- Located at the Junction of AH-1 and AH-14 , on TAR S1 & S2
- Existing on Rail and Road Link with other Regions and States , also link with Border Trade area
- 24 Km far from Mandalay Internal Airport and only 7 Km away from River Port
- Very near with High way Truck Terminal
- Modes of Transport access – Rail /Road / Air and Inland water way
- Proper Road Access with Industrial Zones inside of Mandalay Region



GREATER MEKONG SUBREGION (JAPAN ASEAN CONNECTIVITY)

Japan-ASEAN Connectivity Initiative



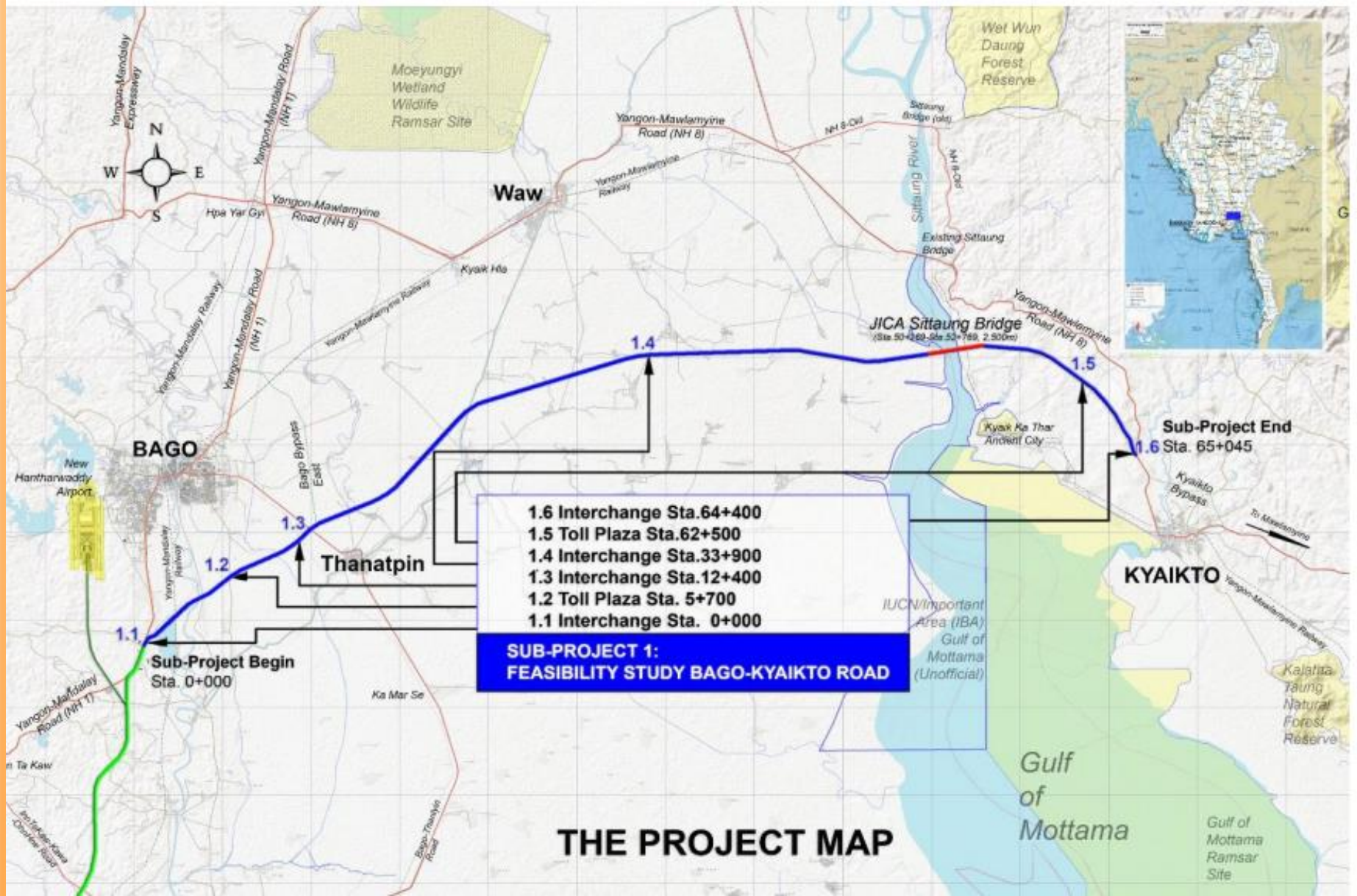
- (Myanmar)
- Bago River Bridge Construction Project
 - East-West Economic Corridor Improvement Project
 - East-West Economic Corridor Highway Development Project (Phase 2)(New Bago-Kyaikto Highway Section)
 - Infrastructure Development Project in Thilawa Area Phase 2
 - Yangon Outer Ring Road Construction Project
 - Yangon-Mandalay Railway Improvement Project Phase 1,2
 - Yangon Circular Railway Line Upgrading Project
 - Yangon Urban Mass Rapid Transit Construction Project

gapore
SR) project

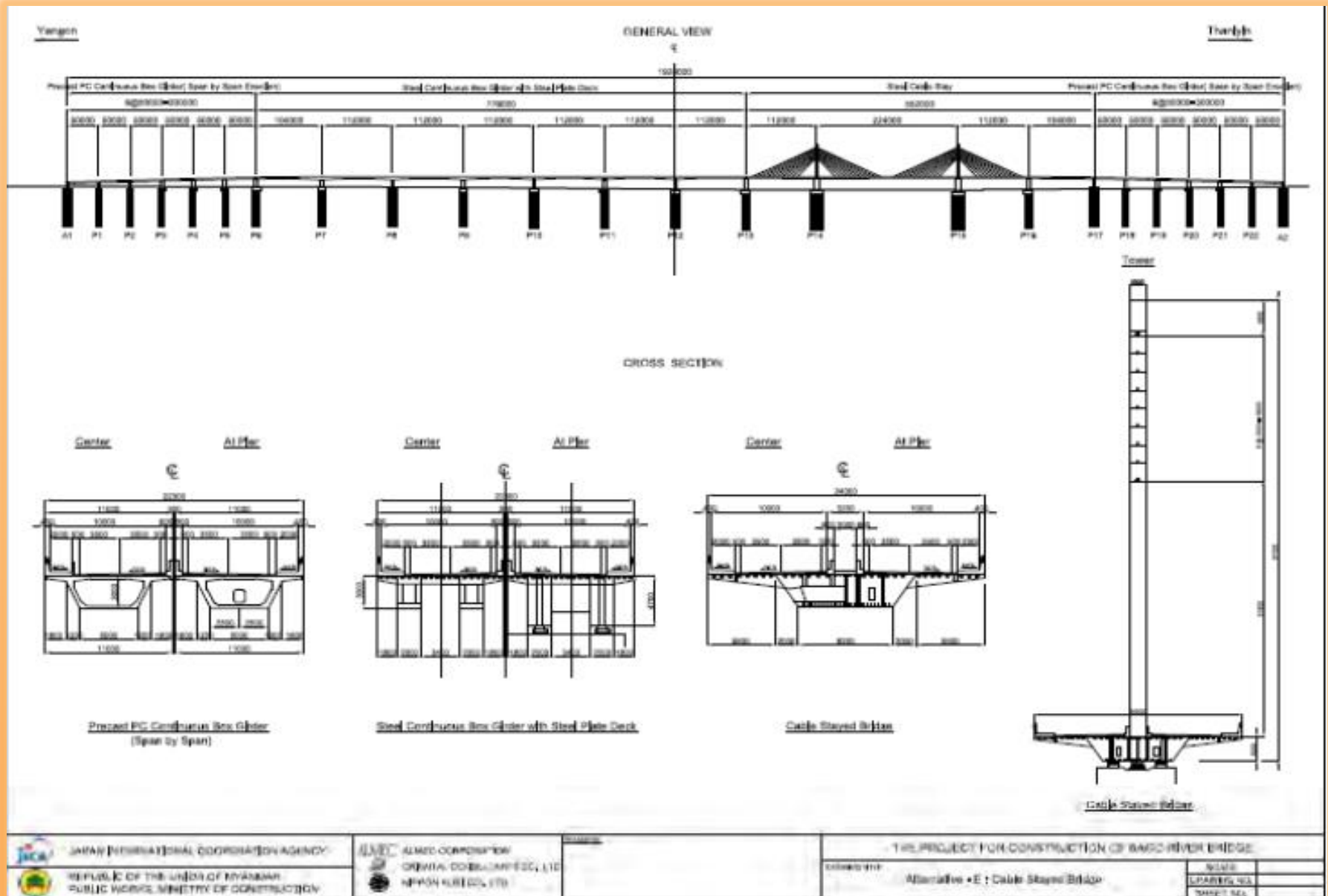
Yangon-Mandalay Expressway (0 Km to 62.39 Km)



Bago – Kyeikhto Expressway Road Project Location Map



Bago River Bridge Construction



Bago River Bridge Construction



OBJECTIVES

The 10 trends have important implications for the ASEAN Connectivity agenda

Relevance

Large
Medium
Limited

Relevance for ASEAN Connectivity dimensions

Trend	Physical	Institutional	People-to-people
1 Consuming class		Intra-ASEAN trade	Intra-ASEAN tourism
2 Productivity & competitiveness	Need to reduce logistics costs	Improve border management & trade facilitation; attract FDI	Skills development to move up value chain
3 Rise of the middleweights	Infrastructure spend to connect middleweights; focus on "sustainable" city development	Intra-ASEAN trade boost to middleweight cities	New skills needed as people move from agricultural jobs to urban jobs
4 Infrastructure opportunity	\$3.3 trillion of infrastructure needed to 2030		
5 Transformation of global flows		Coordination with other cooperation frameworks (e.g., APEC, GH, GMS)	
6 The skills challenge			Focus on skills development and labour mobility
7 Deploying disruptive technologies	Development of digital infrastructure	Regulatory frameworks to support digital technologies	Retraining of workers
8 The resource revolution	Development of APG; renewable energy infrastructure	Sharing of expertise on resource efficiency	
9 The patchwork global economy		Ability to attract FDI; G-2-G interest in connectivity agenda	
10 Geostrategic concerns	Alignment of infrastructure with national priorities		Need for MPAC 2025 to be seen as relevant to ASEAN population



Sustainable infrastructure

What are the strategic objectives?

- 1 Increase public and private infrastructure investment in each ASEAN Member State, as needed
- 2 Significantly enhance the evaluation and sharing of best practices on infrastructure productivity in ASEAN
- 3 Increase the deployment of smart urbanisation models across ASEAN



What are the key initiatives?

- 1 Establish a rolling priority pipeline list of potential ASEAN infrastructure projects and sources of funds
- 2 Establish an ASEAN platform to measure and improve infrastructure productivity
- 3 Develop sustainable urbanisation strategies in ASEAN cities



People mobility

What are the strategic objectives?

- 1 Support ease of travel throughout ASEAN

- 2 Reduce the gaps between vocational skills demand and supply across ASEAN

- 3 Increase the number of intra-ASEAN international students



What are the key initiatives?

- 1 Enhance ASEAN travel by making finding information easier

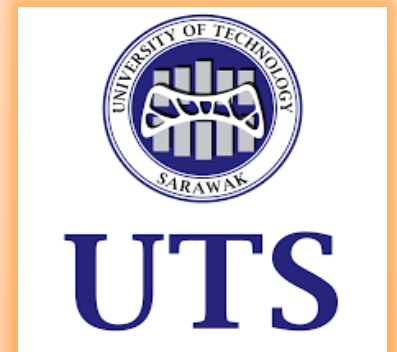
- 2 Ease ASEAN travel by facilitating visa processes

- 3 Establish new vocational training programmes and common qualifications across ASEAN Member States, in accordance with national circumstances of each ASEAN Member State

- 4 Support higher education exchange across ASEAN Member States

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- **Sustainable Infrastructure** - to discuss the sustainability constraints of these mega projects and collaboration between countries in the era of digitalization
- **People Mobility** - to provide students the opportunities for networking with those from other institutions and to provide an outreach platform for employers to scout for potential employees



Thank You very Much!

