ASEAN Infrastructure Market Overview

Towards socialising and disseminating the ASEAN Masterplan for Connectivity – Stage 2

Proposed by

Indonesia Infrastructure Week

In co-ordination with

KADIN INDONESIA
Indonesian Chamber of Commerce and Industry

Coordinating Ministry of Economic Affairs

BKPM
Indonesia Investment Coordinating Board
Rise of ASEAN Market / Economy

World GDP Ranking

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<td>Spain</td>
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<tr>
<td>ASEAN</td>
<td>0.7</td>
<td>2.4</td>
<td><strong>12%</strong></td>
<td>5.1</td>
<td><strong>12%</strong></td>
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<td>Brazil</td>
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<td>Source: Dinesh Khanna, The Boston Consulting Group, 2014</td>
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Double-digit growth comparable to BRIC
The number of ASEAN households in the consuming class is expected to double by 2030, with strong gains in Indonesia. Consuming class households, 2013–30

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<thead>
<tr>
<th>Country</th>
<th>2013</th>
<th>2030</th>
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<tbody>
<tr>
<td>Indonesia</td>
<td>34</td>
<td>74</td>
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<tr>
<td>Philippines</td>
<td>11</td>
<td>23</td>
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<tr>
<td>Vietnam</td>
<td>10</td>
<td>21</td>
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<tr>
<td>Thailand</td>
<td>13</td>
<td>20</td>
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<tr>
<td>Myanmar</td>
<td>3</td>
<td>9</td>
</tr>
<tr>
<td>Malaysia</td>
<td>6</td>
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<tr>
<td>Cambodia</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Singapore</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Laos</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>ASEAN</td>
<td>81</td>
<td>163</td>
</tr>
</tbody>
</table>

1 Defined as households with more than $7,500 in annual income (in 2005 purchasing power parity terms). This is the income level at which households begin to make significant discretionary purchases; Brunei not shown on chart as number of consuming class households in 2030 is only ~0.1 million.

SOURCE: McKinsey Global Institute Cityscope database; national statistics offices; McKinsey Global Institute analysis
ASEAN needs an estimated $3.3 trillion in infrastructure to support growth to 2030

Required infrastructure and real estate investment, 2014–30

$ trillion

NOTE: Numbers may not sum due to rounding.

SOURCE: Pike Research; IHS; McKinsey Global Institute analysis
ASEAN Highway Network (AHN)

- No more missing link in AHN
- Total length of roads below Class III reduced by 46.2%, from 5,311.2km in 2010 to 2,454km in 2015, which include 1,200km on the priority Transit Transport Routes (TTR).
- Installation of Road Signage and Route Numbering Sign on designated Transit Transport Routes (TTRs) in Myanmar and Philippines have been completed
**Roll-On/Roll-Off (RORO) Network**

- Conduct feasibility study on the establishment of an ASEAN RO-RO Network and Short-Sea Shipping

  - Study completed,
  - Operationalising RO-RO prioritised routes and harmonisation of institutional arrangements.
Enhance the performance and capacity of the 47 designated ports

ASEAN Power Grid

1) P. Malaysia - Singapore (New)
2) Thailand - P. Malaysia
   • Sadao - Bukit Keteri
   • Khlong Ngae - Gurun
   • Su Ngai Kolok - Rantau Panjang
   • Khlong Ngae – Gurun (2nd Phase, 300MW)
3) Sarawak - P. Malaysia
4) P. Malaysia - Sumatra
5) Batam - Singapore
6) Sarawak - West Kalimantan
7) Philippines - Sabah
8) Sarawak - Sabah – Brunei
   • Sarawak – Sabah
   • Sabah – Brunei
   • Sarawak – Brunei
9) Thailand - Lao PDR
   • Roi Et 2 - Nam Theun 2
   • Sakon Nakhon 2 – Thakhek – Then Hinboun (Exp.)
   • Mae Moh 3 - Nan - Hong Sa
   • Udon Thani 3- Nabong (converted to 500KV)
   • Ubon Ratchathani 3 – Pakse – Xe Pian Xe Namnoy
   • Khon Kaen 4 – Loei 2 – Xayaburi
   • Nakhon Phanom – Thakhek
   • Thailand – Lao PDR (New)
10) Lao PDR - Vietnam
11) Thailand - Myanmar - Cambodia (New)
12) Vietnam ew)
13) Lao PDR - Cambodia
14) Thailand - Cambodia (New)
15) East Sabah - East Kalimantan
16) Singapore – Sumatra

Earliest COD

- Post 2020
- Existing
- TBC
- Not Selected
- Future

Source: Modified from Syaiful Bakhri Ibrahim, May 2015

Legend:
- Existing
- Under Construction
- Future

Priority Projects under MPAC
Additional Info
ASEAN Connectivity - Key Facts
THE VISION OF ASEAN CONNECTIVITY

ASEAN Connectivity is an integral part of building the ASEAN Community. To achieve the ASEAN Community, connectivity in terms of infrastructure, institutions and people interactions need to be strengthened, contributing towards a more competitive and resilient region, where peoples, goods, services and capital are brought closer together. ASEAN Connectivity is working to improve the lives of ASEAN citizens by giving people more opportunities and boosting prosperity through enhanced economic and social development.

The challenge of connecting ASEAN

• Connecting more than 600 million people; around 9% of the entire earth’s population.
• Connecting a land area covering over 4.46 million cubic kilometers; around 3% of the earth’s land mass.
• Connecting an ocean around three times larger than the land.

The Master Plan on ASEAN Connectivity is the roadmap to achieve this with a focus on three key dimensions:

1. Physical Connectivity
   Improving infrastructure critical to transport, communications and energy.

2. Institutional Connectivity
   Providing the trade, investment and regulatory framework to enable optimal economic growth and prosperity.

3. People-to-People Connectivity
   Expanding educational opportunities and promoting human resource development, preserving ASEAN culture, and promoting increased tourism across the region.
INSTITUTIONAL CONNECTIVITY

Institutional connectivity refers to strategies, international and regional agreements, and legal and institutional mechanisms to facilitate international transactions of goods and services, the appropriate types of investment policies as well as the movement of people across borders. It works towards aligning institutional and regulatory arrangements to create more efficiency across the ASEAN region.

Progress with Key Institutional Connectivity Projects

Framework Agreements on Transport Facilitation
ASEAN is working across three framework agreements to boost transport facilitation.

• The ASEAN Framework Agreement on the Facilitation of Goods in Transit (AFAFGIT) is working to establish an efficient, effective and integrated harmonized transit transport system.

• The ASEAN Framework Agreement on Multimodal Transport is working to increase the governance and simplify the process of the door-to-door delivery of goods, across multiple modes of transport.

• The ASEAN Framework Agreement on the Facilitation of Inter-State Transport is making it easier to move goods across borders by streamlining customs regulations so they are simpler, effective and more comparable across the region.

The Single Aviation Market and the Single Shipping Market
Both projects work to integrate regional aviation and shipping.

• The ASEAN Single Aviation Market (ASAM) works to deal with the rapidly growing importance and popularity of air transportation by integrating member states into one market and helping the region keep up with the accelerated restructuring of the global aviation market.

• The ASEAN Single Shipping Market is working to develop a single maritime network with the infrastructure needed to improve efficiency across the regions maritime transportation sectors.
Trade and the ASEAN Free Trade Area (AFTA)

Across ASEAN approximately 99.65% of tariffs have been removed. The ASEAN Free Trade Area is now almost complete. The latest members of ASEAN have up 2015 (Laos and Myanmar) and 2017 (Cambodia) to meet requirements to reduce tariff barriers to the required level. Greater market access has also been brought by negotiating a series of ASEAN +1 agreements, which mean that ASEAN countries have greater access to regional markets. ASEAN +1 agreements include:

- ASEAN–Australia–New Zealand Free Trade Area
- ASEAN–India Free Trade Area
- ASEAN–Japan Comprehensive Economic Partnership
- ASEAN–Korea Free Trade Area
- ASEAN–China Free Trade Area

The ASEAN Single Window

The ASEAN Single Window (ASW) is a platform designed to expedite customs clearance and release of shipments coming to and departing from ASEAN. It is working to seamlessly integrate each ASEAN member state National Single Window (NSW) into one. The ASEAN Single Window (ASW) will bring international open communication standards to the ASEAN region so each member state can exchange information securely and reliably with their trading partners, making the process of trade much easier. It works to improve information sharing and speed up customs procedures.

Investment

ASEAN has put forward a new investment agreement called the ASEAN Comprehensive Investment Agreement (ACIA), which contains comprehensive provisions, covering investment liberalization, protection, facilitation, and promotion. ACIA grants immediate benefits to ASEAN investors and ASEAN-based foreign investors to achieve free and open investment by 2015. Institutional connectivity has contributed to making ASEAN a more prosperous region:

- The per capita GDP in each ASEAN nation has grown from an average of $1,500 in 2004 to $3,745 in 2012
- FDI into ASEAN has increased from around $39,400 million in 2004 to $110,300 million in 2012
- FDI inflow within ASEAN countries has increased from $3,510 million in 2004 to $20,160 million in 2012

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PHYSICAL CONNECTIVITY

Physical connectivity encompasses transport, information communications technology (ICT) and energy infrastructure as well as the regulatory framework and the software necessary to deliver associated services and utilities. It plays a crucial role in achieving a more economically and socio-culturally integrated ASEAN region, through trade and investment facilitating infrastructure, reductions in trade related costs, and by facilitating people-to-people contact.

Progress with Key Physical Connectivity Projects

Roads and the ASEAN Highway Network (AHN)
The AHN is an extension of the Trans-Asian highway network within the ASEAN region, with 23 designated routes spanning 38,400 kilometers. Across ASEAN in general, a total of 120,000 kilometers of roads have been laid and improved.

The Singapore-Kunming Rail Link (SKRL)
The rail link covers several routes connecting Singapore, Malaysia, Thailand, Cambodia, Viet Nam and Kunming in China as well as spur (or branch) lines between Thailand and Myanmar and between Thailand and Laos, aiming to bridge the 4,069 kilometers of missing lines or lines that need upgrading.

Maritime Transport and Inland Waterways
ASEAN has around 51,000 kilometers of navigable inland waterways where route networks and upgrades to river transportation and ports are taking place. Across ASEAN, 47 ports have been designated to upgrade ship and cargo capacity, working to improve shipping across the region and bring down logistics costs. The Roll-on/Roll-off maritime network will reduce costs as by as much as 30-40 per cent in some ASEAN areas, boosting intra-ASEAN shipping and regional trade.

Air Transport
ASEAN member states are upgrading airports across the region and improving runways to facilitate greater use of air travel and air cargo in the decade ahead. Since 2004, a further 10 international airports have been built across the region to increase capacity.

Energy
The Trans-ASEAN Gas Pipeline (TAGP) is part of the development of a regional gas grid by 2020 which will connect existing and planned gas pipelines of member states in order to provide greater energy security and transport gas across ASEAN borders. So far around 3,020 kilometers of pipelines have been put in place. Alongside this, the ASEAN Power Grid (APG) aims to help ASEAN Member States meet their increasing demand for electricity and improve access by improving trade in electricity across borders, optimizing energy generation, and developing and encouraging possible reserve sharing schemes.

ICT Infrastructure and the ASEAN Broadband Corridor
Improved ICT and digital communication will be vital for ASEAN in the decades ahead. Mobile, satellite and internet lines are being upgraded to enhance communication networks. The ASEAN Broadband Corridor works to promote seamless broadband quality across member states.
PEOPLE-TO-PEOPLE CONNECTIVITY

People-to-People connectivity works to bring the people of ASEAN together by promoting deeper intra-ASEAN social and cultural understanding and increasing greater intra-ASEAN mobility.

Progress with Key People-to-People Connectivity Projects

ASEAN Virtual Learning Resource Centers (AVLRC)
AVLRC aims to foster greater information and knowledge sharing about ASEAN and its member countries by using IT technology to make it easier to access and share information about the people, culture, history, places of interest, and economies of each ASEAN Member State.

Increasing Educational Opportunities
Increasing education, understanding and people-to-people contact is being fostered through a number of projects.
- The ASEAN University Network consists of 26 leading universities across the region. It provides exchange and placement opportunities for both staff and students to study and learn.
- The ASEAN International Mobility for Students program is also expanding student mobility and now includes Indonesia, Malaysia, Thailand, Brunei, the Philippines and Vietnam, allowing ASEAN member state students to move and study across these ASEAN countries. By 2015, the program aims to expand across all of ASEAN’s 10 member states. The program now has 48 participating higher education institutions across the region.
- The ASEAN Curriculum Sourcebook is helping to educate primary and secondary school students about ASEAN and what it involves, so they have a greater understanding of the region and its peoples.

Visa Exemptions and Tourism
To make it easier for the citizens of ASEAN member states to move around the ASEAN region, visa exemption are being put in place. This has already streamlined and made the visa process a lot faster across many ASEAN states. Eventually people across ASEAN will be able to visit other ASEAN countries for up to 2 weeks without the need for a visa or prior processing. Projects such as this have already contributed to greater people-to-people connections and tourism across the region.
- Between 2000 and 2012, tourist arrivals into ASEAN countries more than doubled from 39.14 million to 89.23 million people.
- Intra-ASEAN tourists increased from 15.92 million in 2000 to 39.85 million people in 2012. This number is still rising.

People Mobility
The movement of skilled labor from one ASEAN country to another is being enhanced by a number of Mutual Recognition Arrangements (MRAs) across several areas. They make it easier for skilled workers to move around and work across the region. Current Mutual Recognition Arrangements (MRAs) include: Engineering, Architecture, Nursing, Tourism, Medical Practitioners, Dental Practitioners, Accountancy, and Land Surveying. The first five have already been implemented while the latter two are currently being facilitated through framework agreements. In addition, ASEAN ICT Skills Standards are also being developed.