

AP-IS Network Topology in ASEAN sub-region

- **A Pre-feasibility Study on the Asia-Pacific Information Superhighway in the ASEAN Sub-region
(July 2014 ~ July 2015)**

October 1, 2014

ASEAN Feasibility Project Team

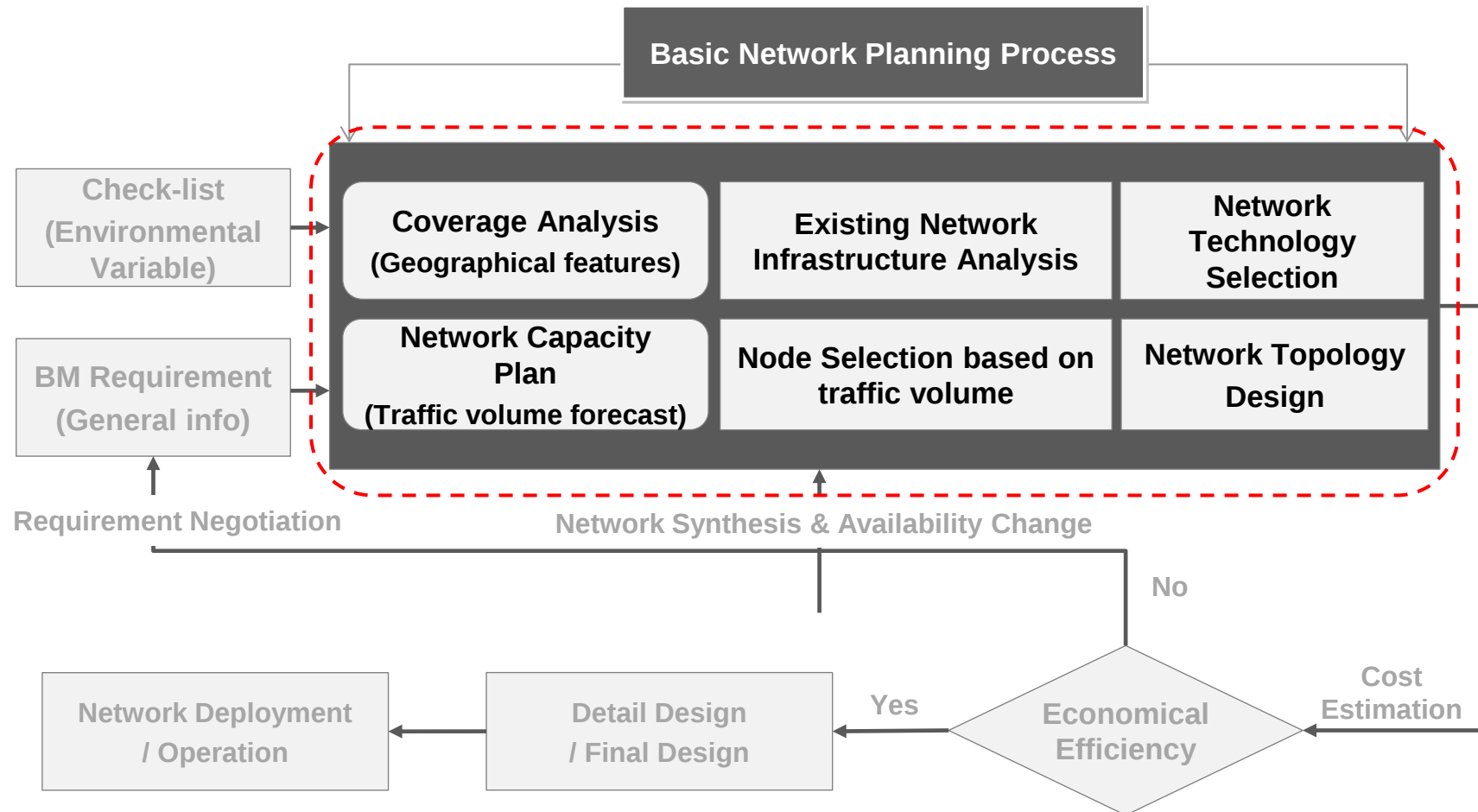
Junghun Lee, Network Consultant of KT

Contents

- 1 Introduction of Network Design**
- 2 Current Status of International Backbone Network in ASEAN
- 3 Potential AP-IS Network in ASEAN
- 4 Challenges for AP-IS Network
- 5 Collaboration

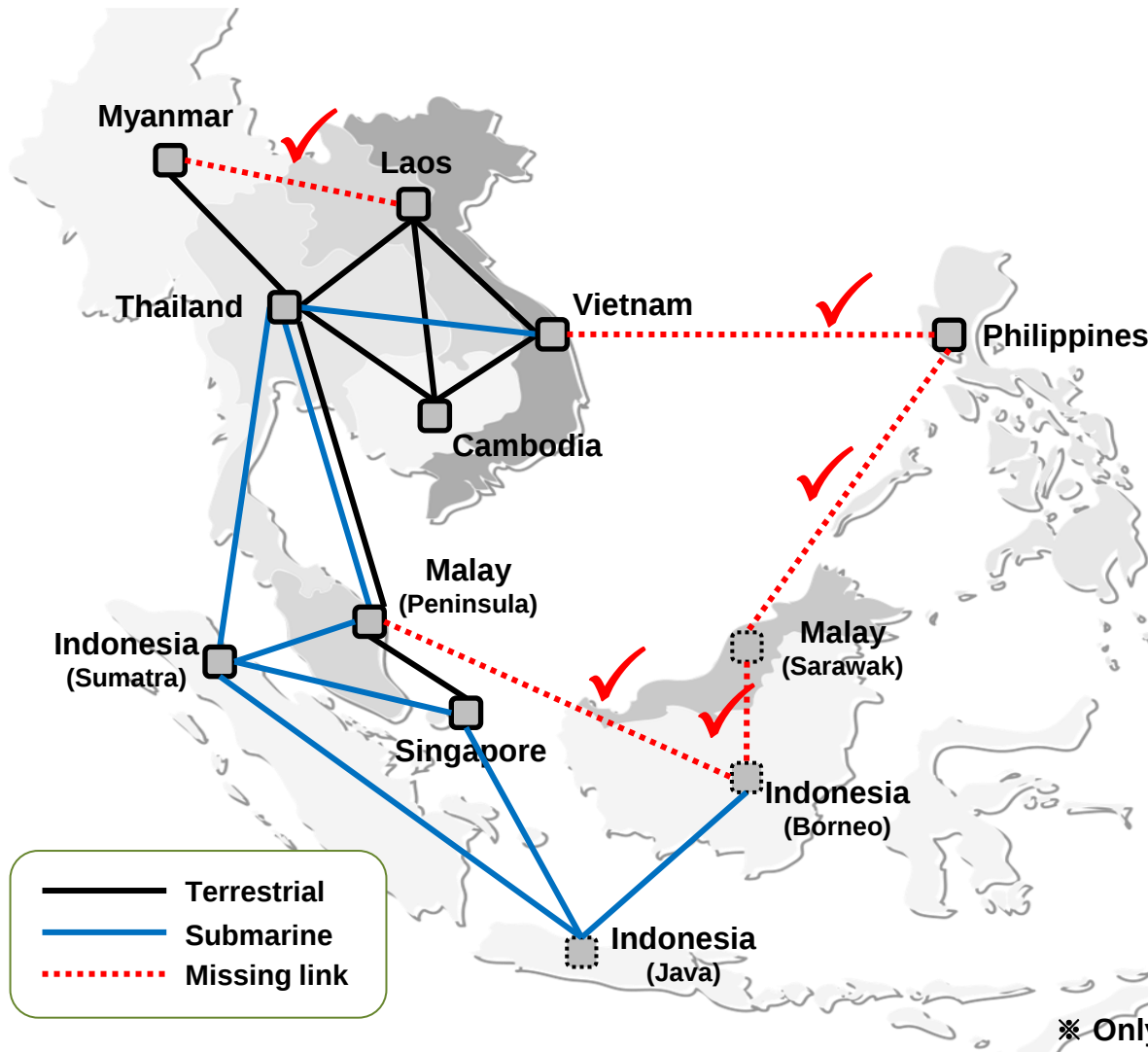
01 Introduction of Network Design – Process

It is possible to design network architecture and functions only when service types have been clearly defined; to design network capacity only when traffic volume has been identified



02 Current Status of International Backbone in ASEAN

For utilizing existing network infrastructure, explicit current status will be mandatory.



Key Findings

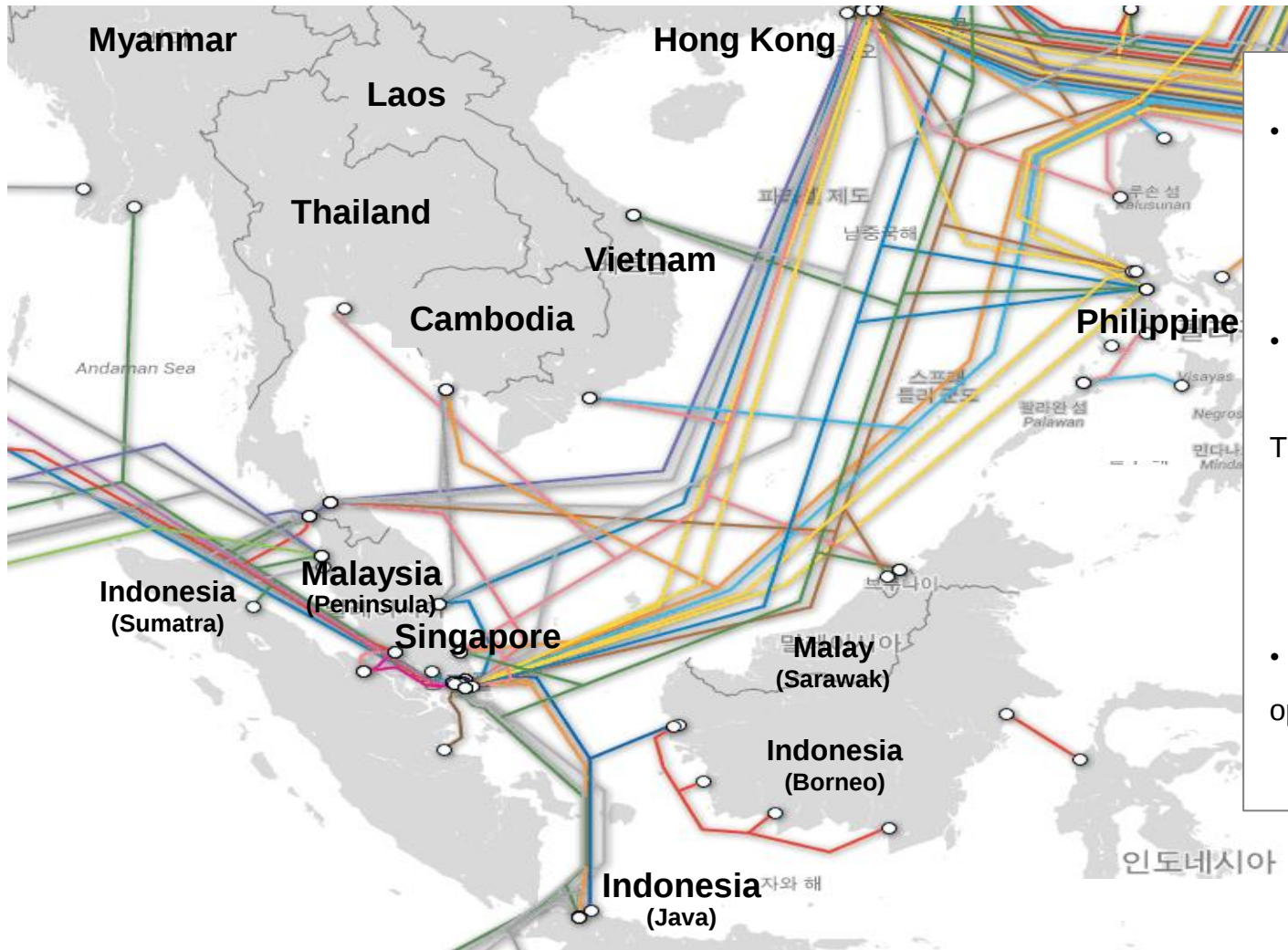
- **No physical connection (Intra-ASEAN region)**
 - Laos-Myanmar
 - Malaysia-Indonesia(Borneo)
 - Vietnam-Philippines
 - Malaysia(Sarawak)-Philippines
- **Insufficient bandwidth or capacity**
 - Laos-Cambodia
- **International capacity pricing (Unreasonable to use)**
 - Thailand-Cambodia

Source: Terabit report (2013)

* Only ASEAN internal cable are considered

03 Current Status of Submarine Cables in ASEAN

Unbalanced International connectivity is one of the reasons in Digital Divide in ASEAN.



Key Findings

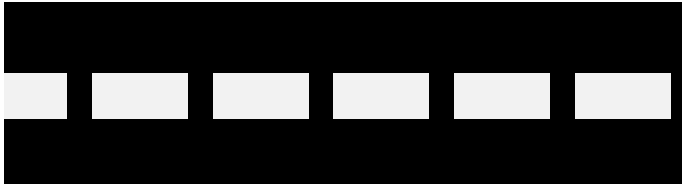
- **10 Consortium Submarine Cables**
 - 7 cables in operation
 - 3 cables under construction
- **International Connectivity**
 - **Excellent:** Singapore, Malaysia, Thailand
 - **Good:** Philippine, Vietnam
 - **Poor:** Myanmar, Cambodia, Laos
- **Only submarine cables status** opened in public media.

Source: submarinecablemap.com

04 ICT Infrastructure



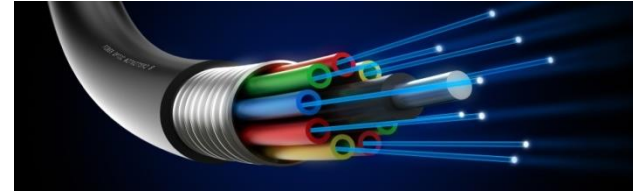
Car Infrastructure



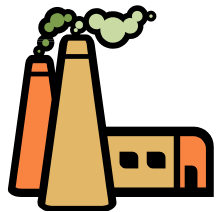
Road / Highway



ICT Infrastructure



Fiber Optic Cable



Car
Factory



Parking
lots



Data Center /
Contents
provider



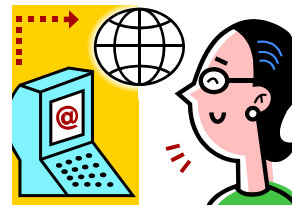
Road
Maintenance and
Construction



Internet
provider



Drivers

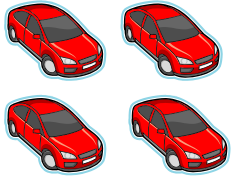


Internet
Users

05 Network Design – Traffic Forecast Concept

Traffic forecast will play a pivotal role in estimating Network capacity

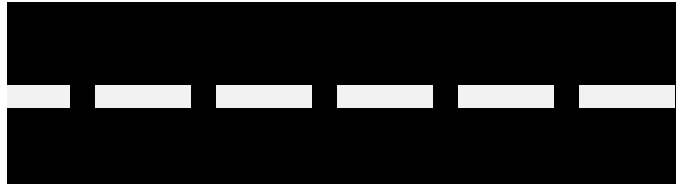
Traffic Volume



2014

Current Traffic

Road Width



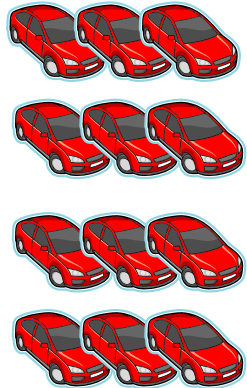
Road / Highway



Number of Cables

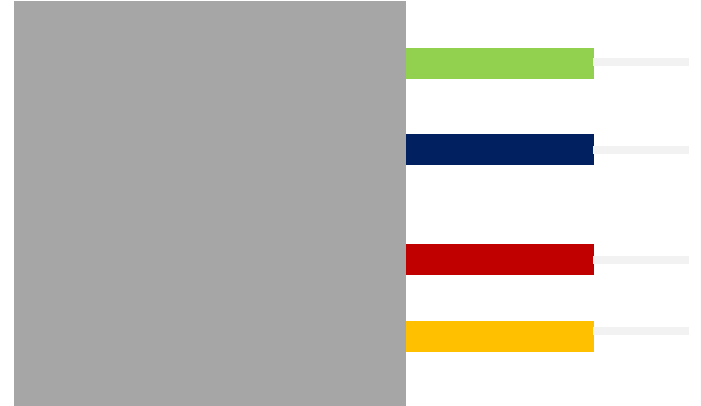
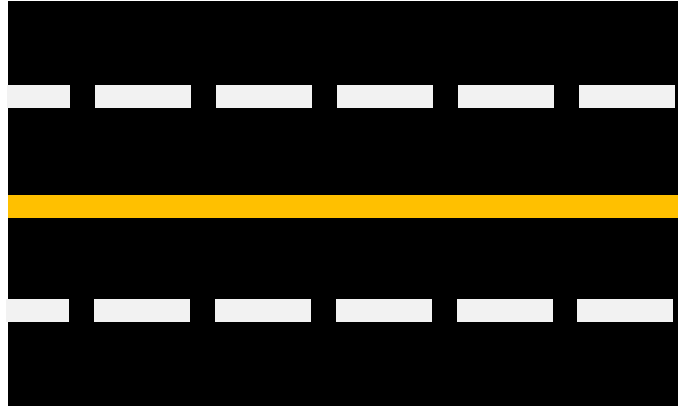


Fiber Optic Cable



2020

Traffic Forecast



06 Infrastructure Differences

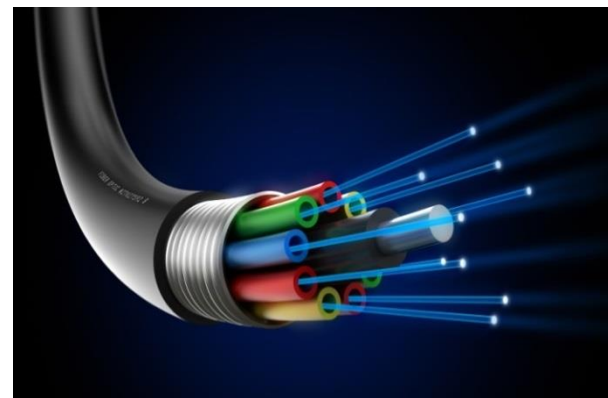
These infrastructure differences occur CAR (Information) cost and quality gap



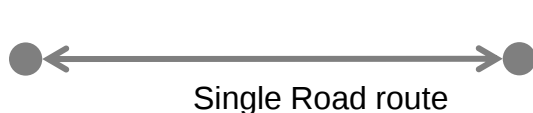
Narrow Road Width



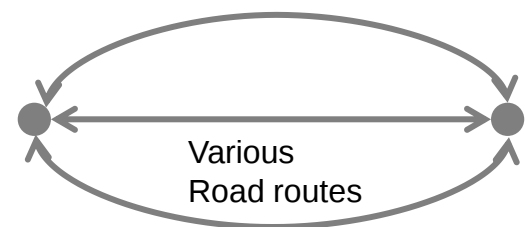
Wide Road Width



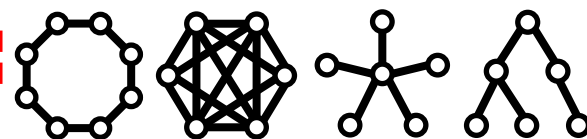
Fiber Optic Cables



Single Road route



Various Road routes



Various Network Routes

预览已结束，完整报告链接和二维码如下：

https://www.yunbaogao.cn/report/index/report?reportId=5_5030

