Conceptualization and Future Works

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

October 1, 2014

APIS Project Team

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Background and Introduction

❑ Project Structure

- Partnership between ESCAP and Ministry of Science, ICT & Planning of ROK
- ASEAN pre-feasibility study conducted by NIA/experts (LoA between ESCAP and NIA)
- Time Frame: Aug 2014 – July 2015

❑ Background

- ASEAN identified as a strategic sub-region for initiating "APIS"
  * In 2013, 'An In-Depth Study on the Broadband Infrastructure in the ASEAN-9 Region', Manila Consultation
- Support and collaborate ASEAN Master-plan on ICT connectivity

❑ Key Objectives

- Provide concrete and possible configurations/concept of APIS
- Conduct gap analysis between "as-is" and "to-be", for more universal, affordable, reliable international connectivity in the ASEAN region
- Identify potential APIS network topology in the ASEAN region
- Recommend implementation models, including funding mechanisms and partnerships

❑ Key Activities from October 2014

- International Internet Traffic Quality Measurement for ASEAN countries: traffic route, bandwidth, speed, data loss, latency
- In-depth interviews/surveys from Government, regulators, ISPs in ASEAN countries.

Time Table

Description	Stages	Time Frame
▪ Provide related ESCAP's studies, data in ESCAP's broadband back bone map, Asian Highway Agreement and other related documents	1st Stage	by 15/08/2014
▪ Facilitate collaborations between related experts and the Partner Institution		by 31/08/2014
▪ First workshop (Korean experts)		by 31/08/2014
▪ Examine related data/documents and conduct secondary data analysis		by 31/09/2014
▪ Participation and presentation in the South Asia regional Expert Consultation Meeting and CICT		By 31/10/2014
▪ Facilitate Internet traffic & quality measurement between selected countries and the Partner Institution	2nd Stage	by 30/10/2014
▪ On-line Measurement of Internet Speed and traffic in selected countries ▪ Surveys and face to face Interviews with Regulators and Operators		by 30/11/2014
▪ Collect and analyze data gathered from on-line, off-line		By 31/12/2014
▪ Submission of the first interim report: Conceptualization of Asian Information Superhighway	3rd Stage	by 31/12/2014
▪ Second workshop (Korean + ASEAN experts)		by 31/01/2015
▪ Gap analysis between As-is and To-be in international backbone connectivity of ASEAN		by 31/03/2015
▪ Submission of the report draft		by 30/04/2015
▪ Review and comments on the report draft		by 31/05/2015
▪ Submission of the final report		by 31/07/2015

Expert Consultation

Deliverables of the Study

Summary	• Executive Summary of the Report
Chapter I	• Conceptualization of APIS • Naming of APIS for ASEAN
Chapter II	• Regional Circumstance and ASEAN members' plan • Internet Traffic & Quality Analysis • To-be modeling and Gap Analysis between "As Is" and "To Be"
Chapter III	• Regional Network Topology and Options • Cross-Border Connectivity Improvement Plan (L1~L3) • Regional IXP establishment and Operational Model • Technology and Products applicable to the Network • Overall Amount of Investment for APIS
Chapter IV	• APIS Implementation Model and Regional Cooperation Model • * PPP Model Suggestion including SPV • E-Application and Contents deployment Model
Conclusion	• Conclusion and Policy Recommendation

* This presentation mainly covers "Red Colored" and some collaborative action items to be done

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History of ICT in ASEAN

ASEAN Sub-region

Master Plan on ASEAN Connectivity (2010)

ASEAN ICT Master Plan 2015 (Jan. 2011)

Mactan Cebu Declaration "Connected ASEAN: Enabling Aspirations" (Nov. 2012)

- ASEAN Broadband Corridor
- diversity of international connectivity
- ASEAN Internet Exchange Network
- ASEAN Single Telecommunications Market

- Increase Penetration
- Improve Affordability
- Achieve Universal Access

Global/ Regional

UN MDG
Resolution 64/186(Dec.2009)
UN Conference on Sustainable Development(Rio +20)

ITU's Global Broadband Targets 2015,

- Making Broadband Policy Universal
- Making Broadband Affordable(Less Than 5% of Average monthly Income)
- Connecting Homes to Broadband
- Getting People online

ESCAP GA resolution 62/5, 60/252, 64/186, 67/194, 67/195

ESCAP Resolution 69/10 (May, 2013)

- To promote regional cooperation to formulate and implement coherent information and communications technology policies
- To further develop a regional connectivity environment, regional and sub-regional levels
- To achieve a seamless regional information and communications space, with particular attention paid to gaps in backbone infrastructure networks

Expert Consultation on the APIS (Manila, Baku, Almaty,Paro,2013~2014)

Key Words Abstraction

onnectivity
etworks and Backbone, Reliable Network

ent mesh configuration;
se of Asian Highway, Trans-Asian railway and

t offers quality-of-service guarantees
er Connectivity
sea based fiber optic cables

→ **Geo-spatially Balanced Connectivity**

Network, ASEAN IXPs
onnectivity

the primary exchange
dvanced countries
st
ns and Resiliency

→ **Regional Internet(IP) Connectivity**

able(Less Than 5% of Average monthly Income)
adband

thin ASEAN

/Universal Access

→ **Low Cost and Broadband Affordability**

riminatory pricing
lability that allows participation by all

→ **Open Access and Network Neutrality**

nications Market
Universal(ITU)
pacity building

→ **Policy Universality**