Koren and Asia-Pacific Information Infrastructure Activities

Purpose: Information
Submitted by: Korea
KOREN & APII Activities

APEC-TEL 58 DSG meeting

Hyong-Soon Kim. PH.D
Executive Principal Researcher
Network Team, Department of
ICT Platform & Services
National Information Society Agency
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1. APII in Brief (1)

**Background**

- Proposed at the 1st APEC TELMIN in Seoul, 1995
- APII Korea-Japan link (2Mbps) was established in 1998
  - ‘98.1~’01.12 (2M ~ 8M), ’02.1~’07.12 (1G ~ 10G), ‘08.1 ~ ’15.12 (10G)
- Korea: National Information Society Agency
- Japan: National Institute of Information and Communications Technology

**Purpose**

Promote the construction and expansion of APII to realize the vision of Asia Pacific Information Society (APIS) and common prosperity of APEC

- Improve the interconnectivity and interoperability of intra/inter-regional networks to enhance regional and global connectivity
- Promote and support joint research and application on the APII links and other research Networks connected to APII
1. APII in Brief (2) - 1 KOREN International Infrastructure

- SOE: SingAREN Open Exchange
- HKIX: Hong Kong Internet Exchange
- APAN: Asia Pacific Advanced Network
- TEIN: Trans Eurasia Information Network
- SingAREN: Singapore Research Network
- Internet2: US Research Network
- JGN: Japan Research Network
- HARNET: Hong Kong Research Network
- PREGINET: Philippines Research Network
- ASGC: Research Network, Chinese Taipei
1. APII in Brief (2) - 2 KOREN International Infrastructure

New Int’ link of KOREN (‘19~’21)

- KOREN KR-HK 100G Circuit
- KOREN KR-SG 100G/10G Circuit
KOrea advanced REsearch Network: 79 members
KOREN network will be migrated to SDI in 3 years
KOREN users will use KOREN SDI service through one-click M&O portal

Phase I (2017)
- SDN & Cloud Infra Deploy -
  - ROADM 100G
  - POTN 100G
  - WhiteBox 10G (4 nodes)
  - IP Service: 28% (2 pops)
    (Seoul, Pangyo)
  - Optical Link (L2) Service
    (Seoul, Pangyo, Daejeon, Suwon)
  - IaaS
    (Storage @ Seoul)

Phase II (2018)
- SDN Expansion & M&O -
  - WhiteBox 100G (4 nodes)
  - WhiteBox 10G (6 nodes)
  - IP Service: 50% (6 pops)
    (Seoul, Pangyo, Daejeon, Suwon, Daegu, Gwangju)
  - M&O Portal

Phase III (2019)
- All SDI (NFV & SDN) -
  - Virtual Network Function
    (vDHCP, vNAT, vFirewall)
  - IP Service: 100%
    (All pops)
  - NFV Design
  - All SDI (NFV)
3. Activities Update (1) KOREN funding ICT projects

KOREN Future Applications

KOREN Software Defined Infrastructure Environment
3. Activities Update (2) - K-ICT NET Challenge Camp

K-ICT NET Challenge Camp 5

- Purpose of K-ICT Net Challenge Camp 5: To support and develop creative and innovative idea of future network services & applications over KOREN
- Challenge League for students & Champions League for companies
- Development Camp for Challenge League: 22 ~ 23 August, 2018
3. Activities Update (3)-1 Migration of users to SDI

Oct. 2018
3. Activities Update (3) -2 KOREN SDI service portal open
3. Activities Update (4) International Community

APAN (Asia Pacific Advanced Network)

- 45th (18.3.25~3.27) Singapore
- 45th (18.8.4~8.9) New Zealand
4. Future Plans

**Planned for KOREN & APII Activities**

- K-ICT NET challenge camp season 5: May ~ November
- KOREN SDI M&O service portal open: October
- K-ICT NET challenge camp season 5 Award Ceremony: November
- KOREN funded verification test project: July ~ December
- Final evaluation of KOREN funded test projects: December
- Completion of the New KOREN International Infra environment: December
Thank you