

Thailand IPv6 Status



18-25 February 2005



Sinchai Kamolphiwong, Ph.D

Thailand IPv6 Forum
Department of Computer Engineering,
Faculty of Engineering, Prince of Songkla University (PSU)
Thailand



Thailand Information

- Population: ~63 millions
- Land Area: 510,890 sq km (197,255 sq miles)
- 58.3% average annual growth in Internet usage during 1999- 2003
- Fixed phones: 12.9% of population
- Cell phones: 30.6% of population

Current Internet in Thailand

- ◆ 13,861 domains under .th,
- ◆ 8,872 Class-C IP addresses,
- ◆ ~7 millions Internet users,
- ◆ 18 commercial ISPs,
- ◆ International Bandwidth 2,240 Mbps,
- ◆ National Exchange 18,000 Mbps,
- ◆ Total Domestic Traffic 8,700 Gb/day.

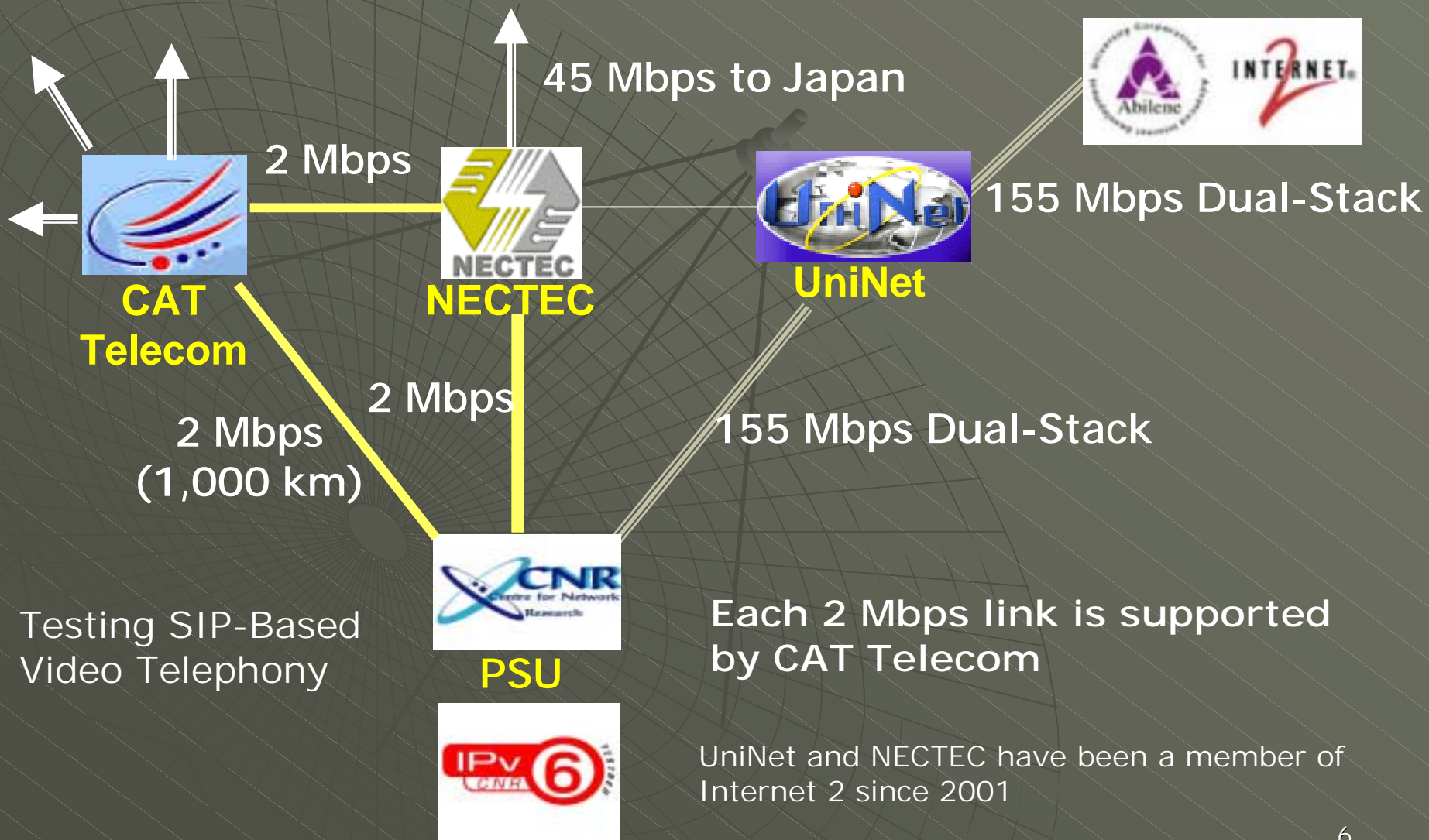
Thailand IPv6 Forum

- ◆ First meeting on December 2004
- ◆ Now, officially established (Feb 2005),
- ◆ Members:
 - Most of ISPs, TSPs
 - Some state enterprises (e.g. EGAT: Electrical Generation Authority of Thailand),
 - Network/Software Companies, e.g. Cisco, Microsoft,
 - Academic/universities, e.g. UniNet, NECTEC
- ◆ Our Web: <http://thailandipv6.net>

IPv6 Status in Thailand

- ◆ First IPv6 Tunnel: April 2000
 - A contribution of Robert Elz
- ◆ First dual stack link: October 2003
 - PSU to UniNet to Abilene
- ◆ UniNet (Thai University Network)
 - ~200 Institutions connected,
 - 6 universities are running dual stack
 - 10 are using tunnelling
- ◆ NECTEC offers peer-to-peer tunnelling

IPv6 Native Link Testbed



IPv6 Status in Thailand (cont)

- ◆ No IPv6 commercial offered yet,
- ◆ Only 6 blocks of v6 addresses allocated from APNIC
- ◆ CAT Telecom is the IPv6 national Exchange,
- ◆ International v6 gateways:
 - CAT Telecom, NECTEC, UniNet

Co-operate IPv6 Working Groups in Thailand

- ◆ UniNet,
- ◆ NGI, NECTEC,
- ◆ APAN-TH,
- ◆ CNR, PSU

Office of **Information Technology** Administration
For Educational Development **UniNet** *Inter-University Network*



Some Activities

- ◆ IPv6 workshop/training,
- ◆ IPv6 Seminars (e.g. with UniNet, NECTEC, Cisco),
- ◆ IPv6 Application Demonstration:
 - e.g. SIP-Based Video phone, Network mobility,
- ◆ Joining SOI-Asia Project:
 - Testing IPv6 operation (VIC, RAT, Multicast over Satellite)



Some Activities (cont)

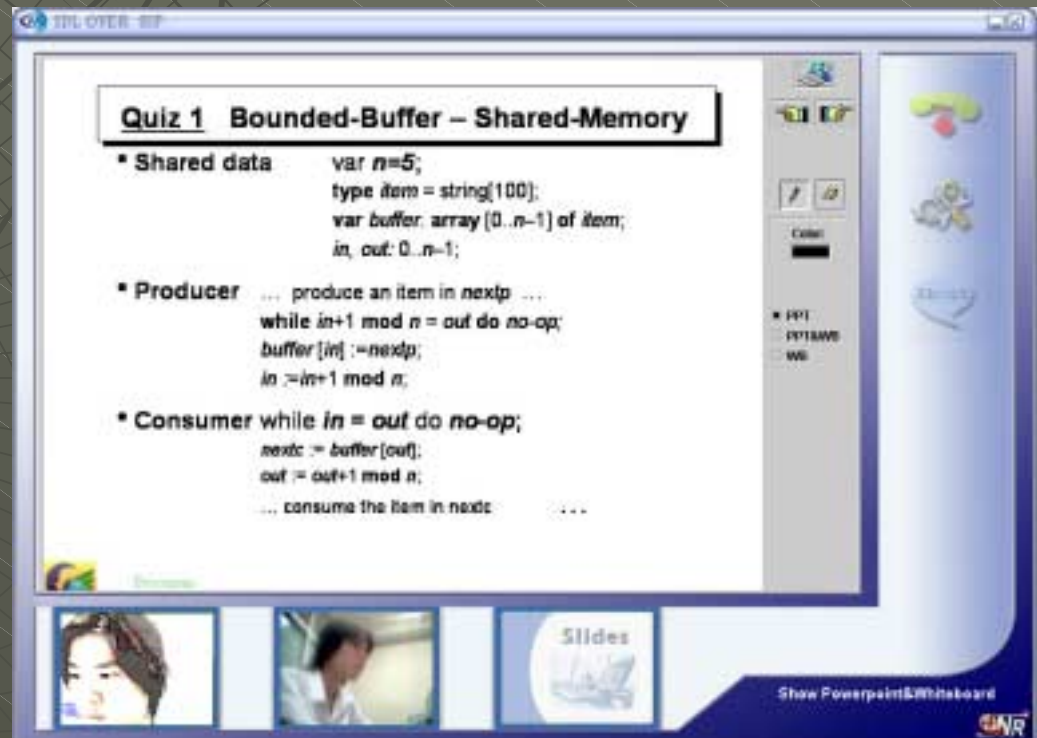
- ◆ APAN Meeting, Bangkok
 - 21-26 Jan 2005
- ◆ APEC TEL, IPv6 workshop,
 - 3-8 Aril 2005, Bangkok



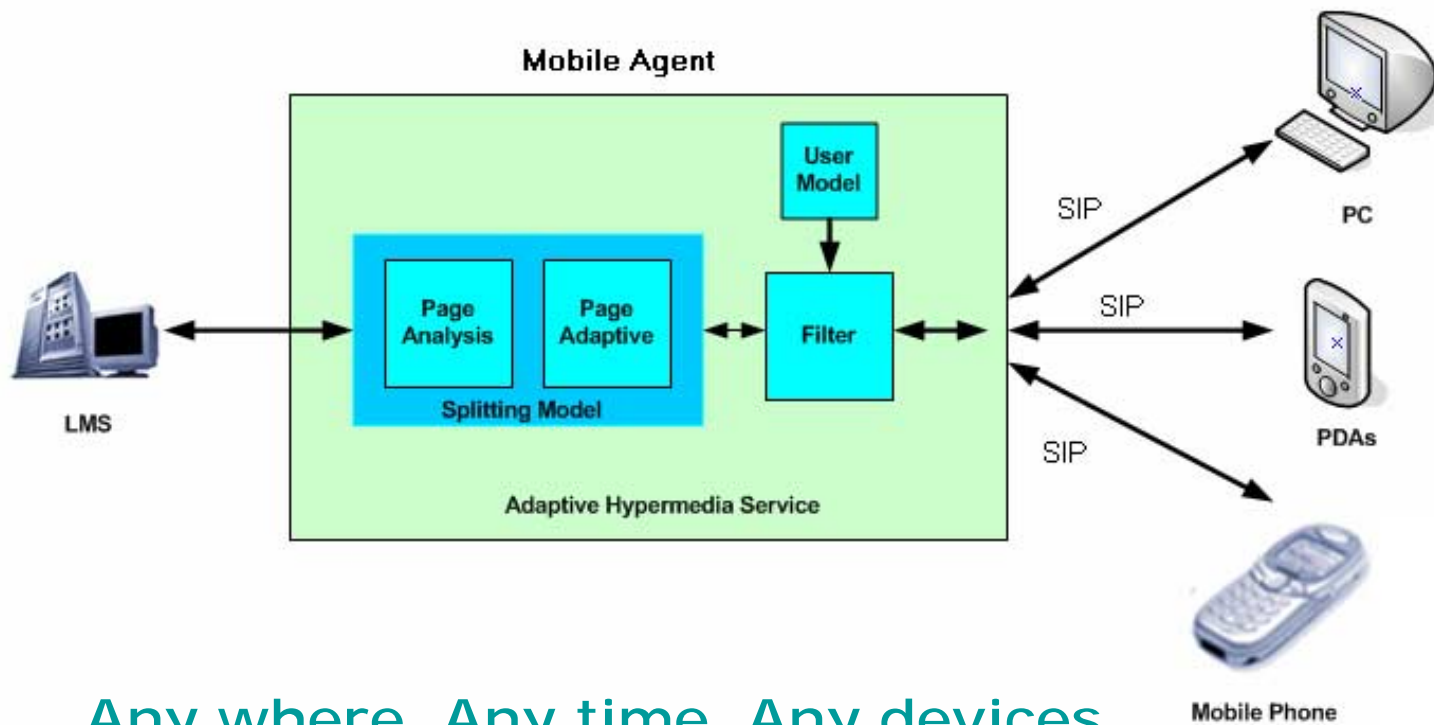
SIP-Based IDL

(IDL: Interactive Distance Learning)

- ◆ IDL application runs over SIP,
- ◆ Gaining benefits from SIP features
- ◆ Run on both IPv4 and IPv6



e-learning with Mobility Support (based on SIP)



Run on both IPv4 and IPv6 networks
Designed to support 'Session Mobility'

IPv6 Status in Thailand (cont)

◆ Our Target in 2005

- 5 ISPs plan to offer IPv6 connection to public,
- Some state enterprises will have pilot projects, e.g. video conferencing,
- More members,
- Some applications, e.g.
 - ◆ SIP-Based applications,
 - ◆ One-ISP-One-Application (OIOA),
- Setup .th Root DNS Server.

Waiting for ...



- ◆ 10 Gbps link from Japan
- ◆ TEIN2 Link from Europe,
- ◆ ICT corridor to Laos, Cambodia and Vietnam.



Thank you very much for your attention