



# IPv6/v4 dual stack commercial ADSL service specification

- IETF v6OPS WG Interim Meeting on Sept.18,2002 -

Shin Miyakawa, Ph.D (宮川 晋)

Sr. Research Manager, IPv6 Group

Innovative IP Architecture Center

NTT Communications

miyakawa@nttv6.jp

# topics

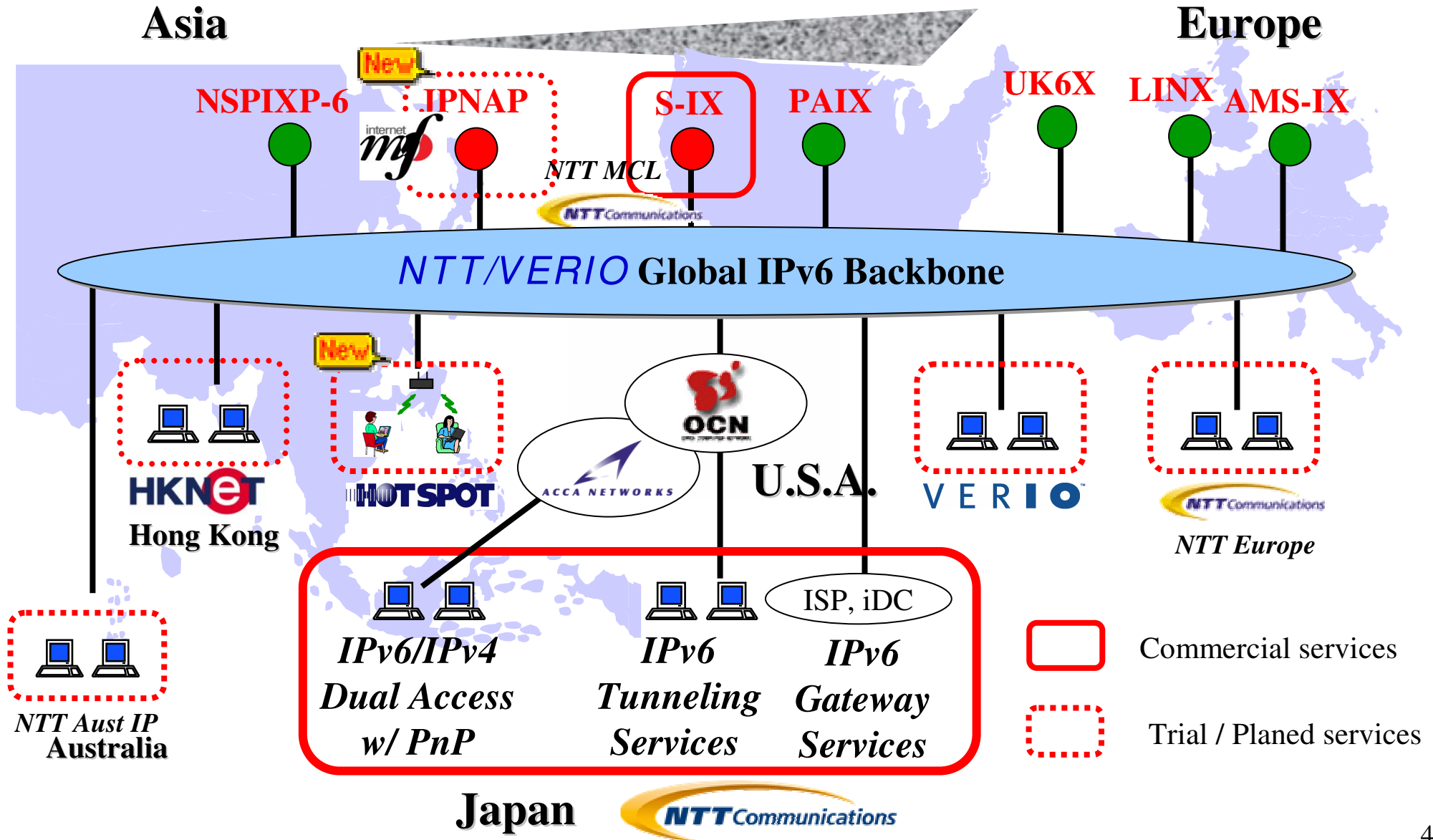


- We NTT Communications group has already started commercial IPv6/v4 dual stack commercial service in Japan, initially from down town Tokyo since this summer
- We have talked with the other ISPs and also (mostly Japanese based but not limited to) vendors who supplying equipments and softwares already about the specification which is opened to the public but written in Japanese
  - <http://www.v6.ntt.net/what/20020731.html>
- Some non Japanese based network operators and some other vendors/software developers are interested by the specification, because they could cut-off the cost of design work and implementation
- So, simply we'd like to translate our specification into English and publish as informational draft under the name of v6ops working group as an running example for ADSL IPv6/IPv4 dual stack service.

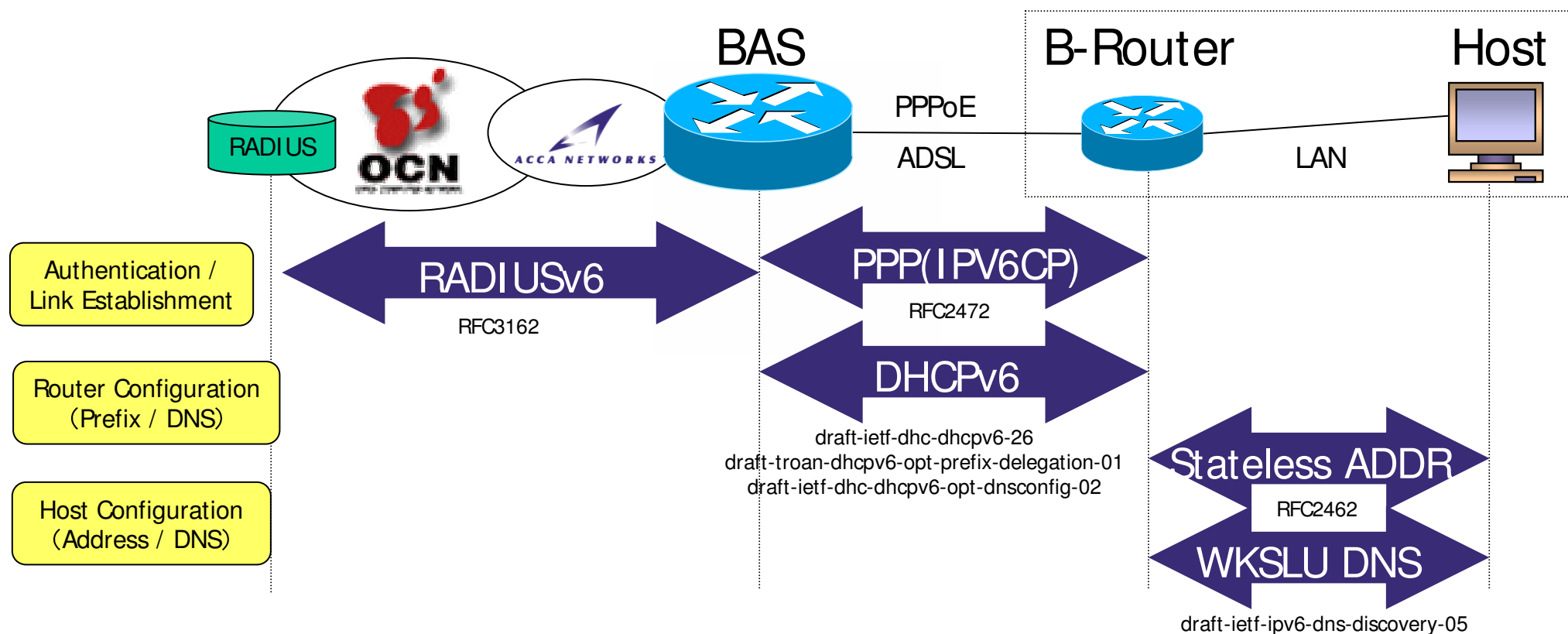
# The Company NTT

- Nippon Telegraph and Telephone
  - history started in 1869
    - the ministry of telecommunication of Japanese government
  - became a “public corporation” in 1952
  - incorporated (or “privatized”) in 1984
  - re-organized on 7/1,1999
    - The company NTT became the share-holding and R&D company which has
    - NTT East and NTT West as two local service companies,
    - NTT Communications as long-distance, international, FR, ATM and Internet service,
    - NTT DoCoMo doing cellular phone business,
    - NTT Data as a system solution service company,
    - and a lot of group subsidiaries.
  - URL: <http://www.ntt.co.jp/>
  - NTT-Communications <http://www.ntt.com/>
    - World operation <http://www.nttverio.com/>
    - IPv6 related <http://www.v6.ntt.net/> (mostly Japanese, sorry)

# NTT/VERIO Global IPv6 Backbone & Solutions



# Specification summary



# Specification hi-light

- 1 IPv4 address + 1 IPv6 prefix (usually /48)
- Using DHCPv6 (especially PD option) as (Dynamic) Site Configuration Protocol. Please do not be confused.
- IPv6 prefix delegation statically
  - Subscriber gets same prefix
- IPv4 address assignment dynamically
  - IPv4 address may change
- IPv6 friendly DNS operation
  - Our DNS servers have IPv6 transport and accepting DNS transfer by that
  - Can be customer's secondary server
  - Assuming [assigned prefix]::53 as customer's DNS primary server location
  - So that customer can run
    - Dual Stack Mail Server
    - Dual Stack WWW Server
    - and more

# At the end



- We hope that we could publish a detailed specification as Informational RFC as so that anybody who interested by same kind of service can use it to save time and efforts
- Also from vendors point of view, if this method would be widely used in the world wide, that means they also can save time and costs for development