

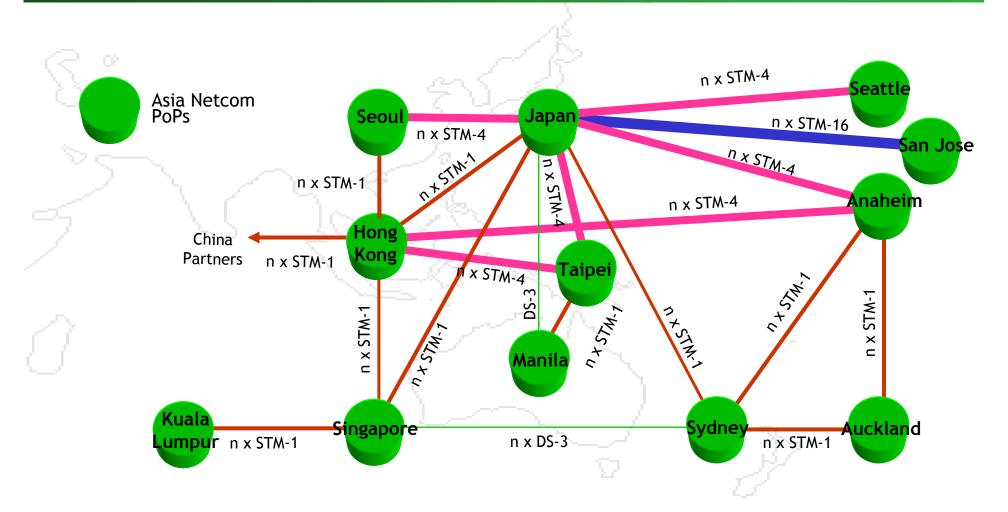
#### What we learn in Asia

Zwicky Cheung Product Management, Asia Netcom

#### **ANC IP Backbone** ...extensive regional coverage... BJ Osaka Tokyo **North America** & Europe **Tai**pei GZ **Hong Kong North America** Manila & Europe Kuala Lumpur Singapore Asia Netcom PoPs Parent PoPs Brisbane Asia Netcom IP Network Parent Backbone Network Sydney Adelaide **Perth Auckland** Melbourne Wellington

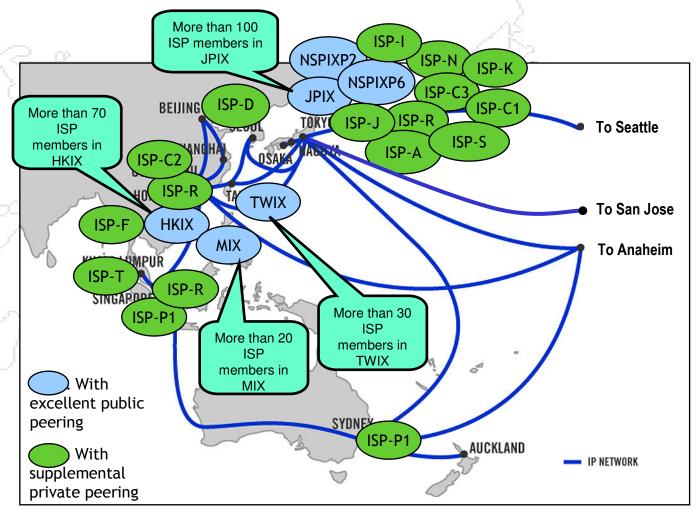
#### **ANC IP Backbone**

> We operate an industry leading IP backbone





#### **ANC IP Network Gravity**



#### **Peering:**

Total Sessions > 200 Total Bandwidth > 5Gbps



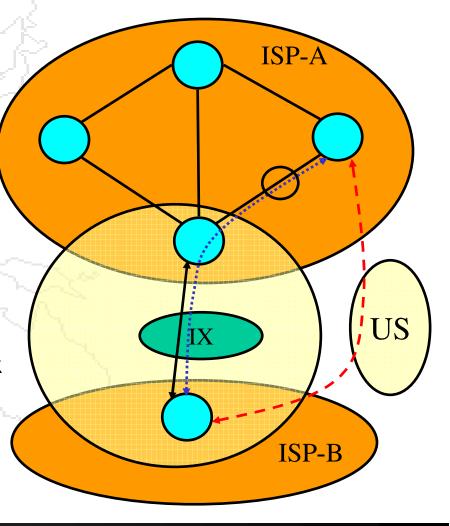
# Key Lessons we Learn

- What to consider when enter multilateral IX point?
- How to peer with Asia in-country incumbent ISP.
- Experience in peering discussions



### What to Consider when enter Multilateral IX in Asia

- Multi-lateral IX, e.g. HK, Taiwan
  - Advantages
    - Cost effective, Efficient
  - Route announcements and peering strategy
    - Traditionally exchange domestic traffic only
    - Your focus countries
    - Performance consideration
    - Backbone Capacity planning
- Key to success:
  - Define your strategy clearly and stick to it in all multilateral IX points.
  - Cost effective, efficient and scalable intra-region backbone will provide flexibility to achieve your goal.





# How to peer with Asia in-country incumbent ISP

- Local vs regional / global ISP
  - Tier 1? Tier 2?
  - Small countries vs Big country
    - Connects with international capacity
    - Peering requires in each country
  - Unique Peering policy in different countries
    - In some countries, only agree to exchange domestic routes under your AS (no ISP customer traffic)
    - Most of them do not want to peer in home country
  - Leverage with other existing relationships with incumbent ISPs.
- Key to Success
  - Determine the best location to peer with them



# Experience in Peering Discussions

- Try different angle to locate the right person "or moment"
  - We experienced a peering request had been rejected formally, but was accepted 6 months later with different contact.
  - We believe not only right person, but right moment is the key as this ISP's backbone was congested and looking for a release.
- Local presence is important
  - Local line-up is a key driver to make thing moving and happen.
  - Not only related to culture, chemical happens in face-to-face discussion as well as commercial relationship occasionally.
- Difficulties increase with time during pass 4 years.
  - Not simply a technical setup, but rather a commercial issue
  - More and more decision was made based on commercial consideration instead of best traffic flows.



## Summary

- Know what your strength and focus before enter into Multilateral IX points.
- Define your strategy and stick to it
- Think from the potential peering partner's angle before you approach them.
- Get local support in the discussion as much as possible.
- Be quick !!!



