

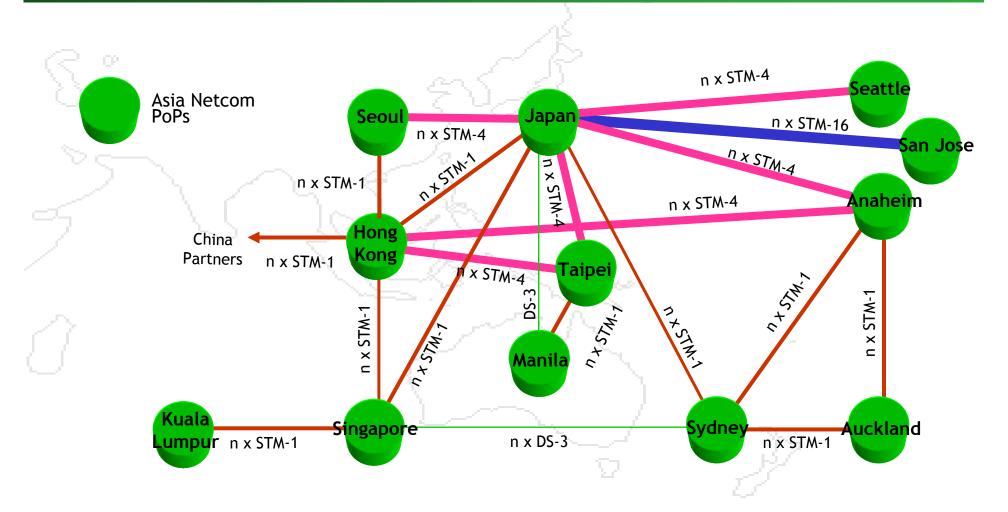
What we learn in Asia

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

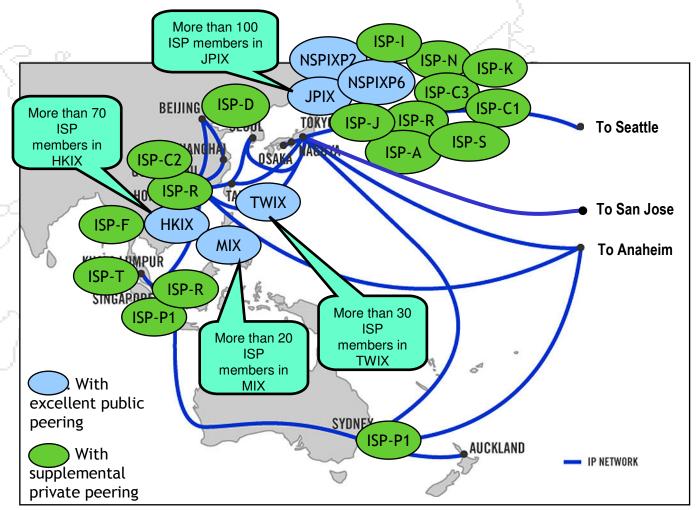
ANC IP Backbone

> We operate an industry leading IP backbone





ANC IP Network Gravity



Peering:

Total Sessions > 200 Total Bandwidth > 5Gbps



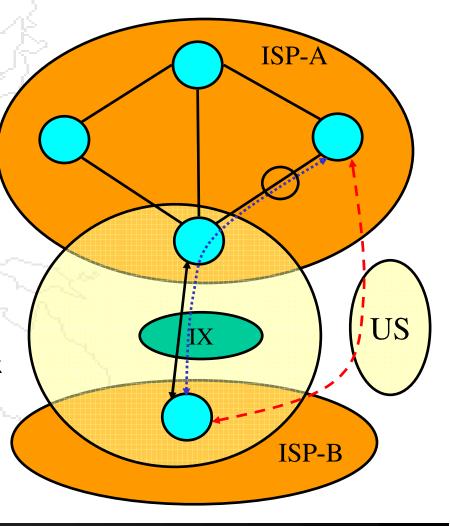
Key Lessons we Learn

- 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 !!!



