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TITLE: Collection and Dissemination of Internet Bandwidth Data: A case study of Thailand
(presentation)

Collection and Dissemination of Internet Bandwidth Data: A case study of Thailand

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Outline

- Definition of Internet Bandwidth
- Background about Internet Services in TH
- Connecting ISPs to the Internet
- Internet Bandwidth Data Collection and Dissemination
- Experience Sharing
- Conclusion

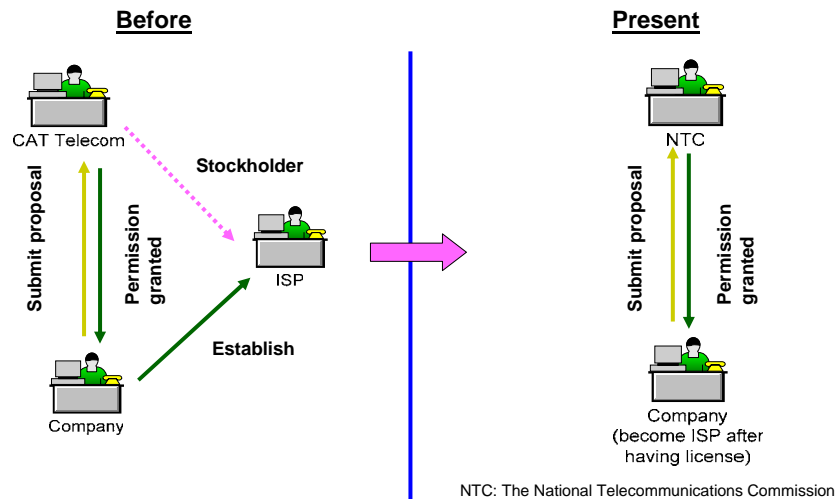
Definition

- International Internet Bandwidth :
“Total capacity of international Internet bandwidth in Mega Bits Per Second (Mbps). If capacity is asymmetric (i.e., more incoming than outgoing), provide incoming capacity.”
source: the ITU's current definition of the indicator for The fifth World Telecommunication/ICT indicators meeting (Geneva, October 2006)
- Definition of International Internet Bandwidth used in this work
“Total capacity of international Internet bandwidth in Mega Bits Per Second (Mbps) or higher (i.e., Giga Bits Per Second Gbps). If capacity is asymmetric (i.e., incoming is not equal to outgoing), provide larger capacity.”
→ Total capacity of International Internet Bandwidth = Sum of Internet Bandwidth from all ISPs, Telecom Operators, Research and Educational Networks that connect to international providers

Background

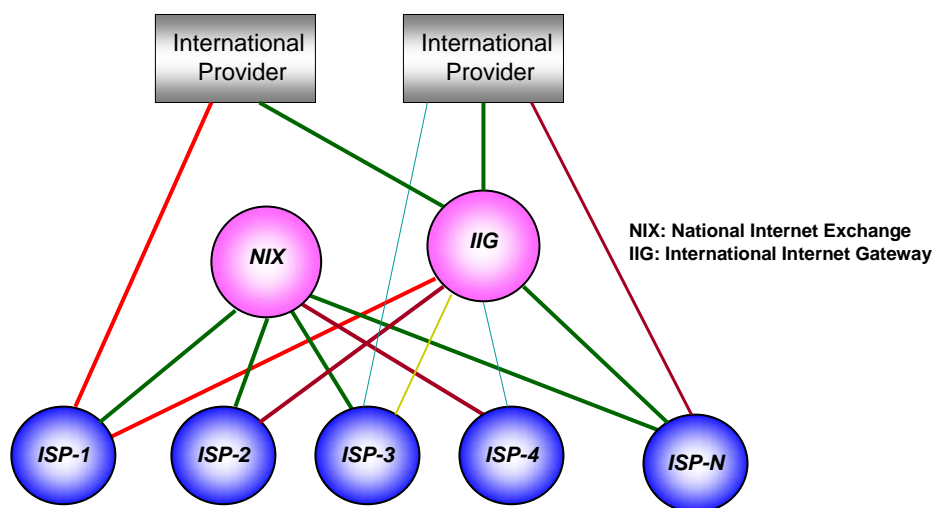
- The telecommunication industry in Thailand had been governed by two state enterprises – the Telephone Organization of Thailand (TOT) and the Communications Authority of Thailand (CAT) for a long time.
 - TOT controlled the domestic telephone services
 - CAT regulated the international telecommunications, including half-circuits to the Internet
- Recently, the Telecommunications Business Act B.E. 2543 (2000) defines the opening of the market with new regulations implemented by the National Telecommunications Commission (NTC).

Getting ISP License

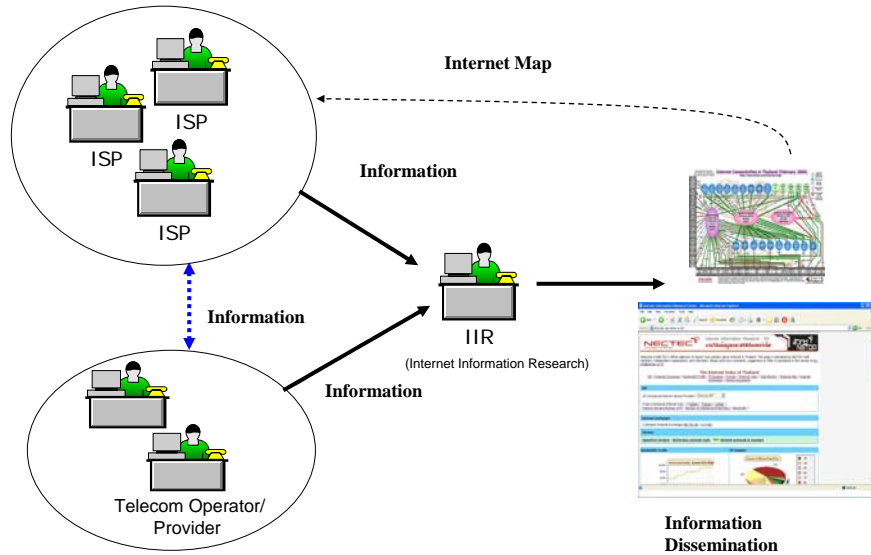


At present, there are 21 commercially licensed ISPs

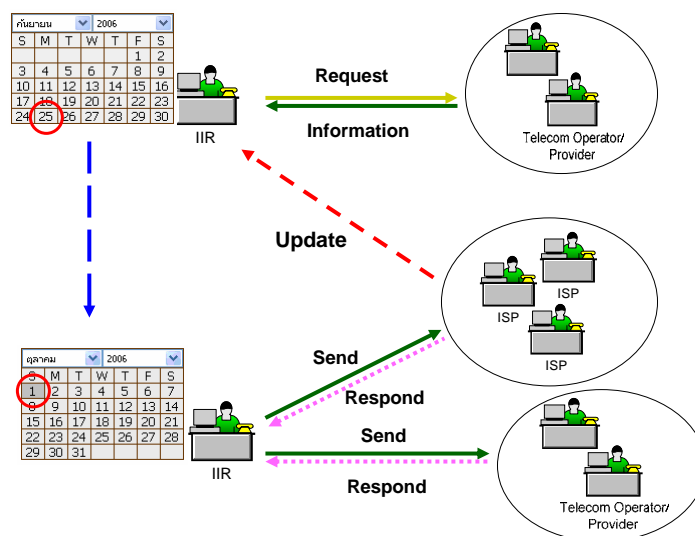
Connecting ISP to The Internet



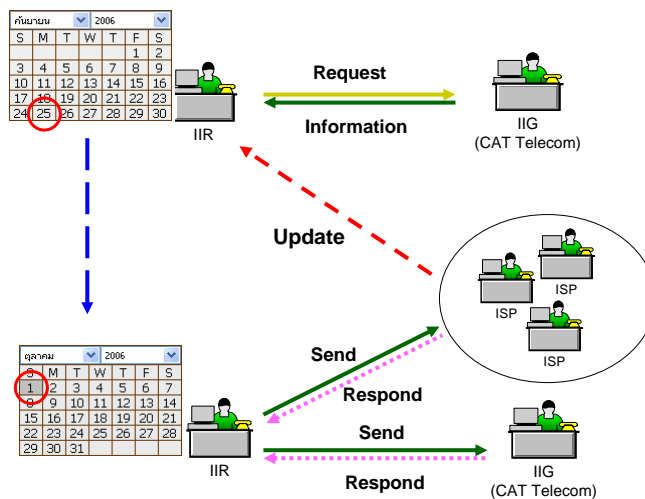
Internet Bandwidth Data Collection and Dissemination



Data Collection Method



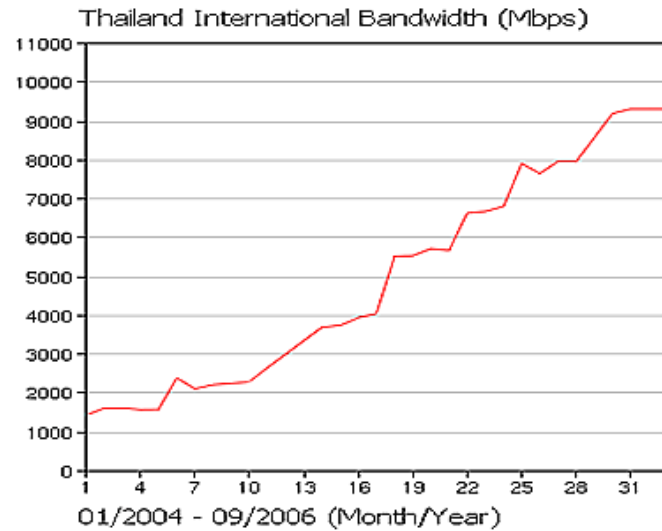
Previous Data Collection



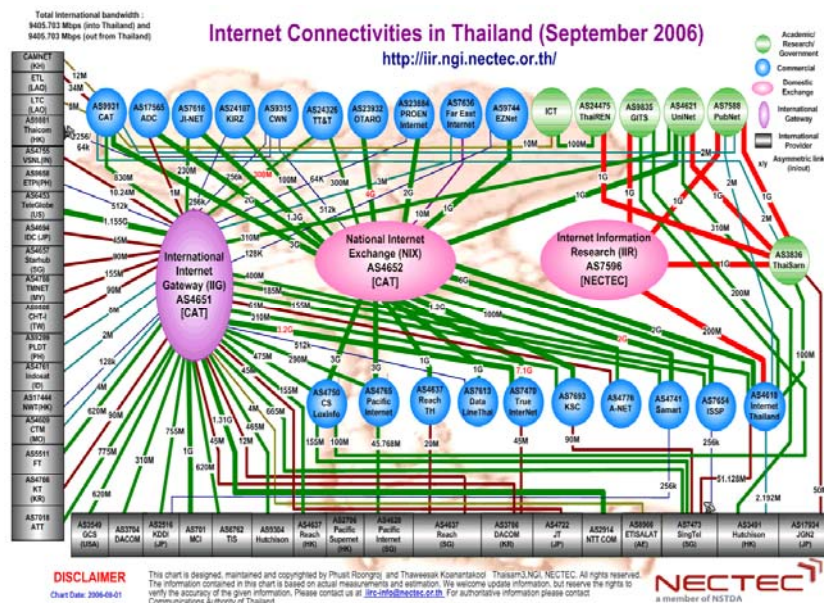
International Internet Bandwidth Data

Year / Month	In coming Bandwidth(Mbps)	Outgoing Bandwidth(Mbps)	International Internet Bandwidth(Mbps)
2006-09	9315.703	9315.703	9315.703
2006-08	9315.703	9315.703	9315.703
2006-07	9315.513	9315.513	9315.513
2006-06	9199.703	9199.703	9199.703
2006-05	8579.703	8579.703	8579.703
2006-04	7965.511	7965.321	7965.511
2006-03	7965.511	7965.321	7965.511
2006-02	7657.639	7657.449	7657.639
2006-01	7910.871	7910.671	7910.871
2005-12	6807.871	6807.681	6807.871
2005-11	6681.631	6681.441	6681.631
2005-10	6640.503	6640.313	6640.503
2005-09	5675.503	5675.313	5675.503
2005-08	5720.503	5720.313	5720.503
2005-07	5540.223	5540.033	5540.223
2005-06	5524.223	5524.033	5524.223
2005-05	4054	4053.810	4054
2005-04	3942.25	3942.060	3942.25
2005-03	3746.75	3746.560	3746.75
2005-02	3699.625	3699.435	3699.625
2005-01	3354.625	3354.435	3354.625
2004-12	3005.875	3005.685	3005.875
2004-11	2660.875	2660.685	2660.875
2004-10	2296.875	2296.685	2296.875

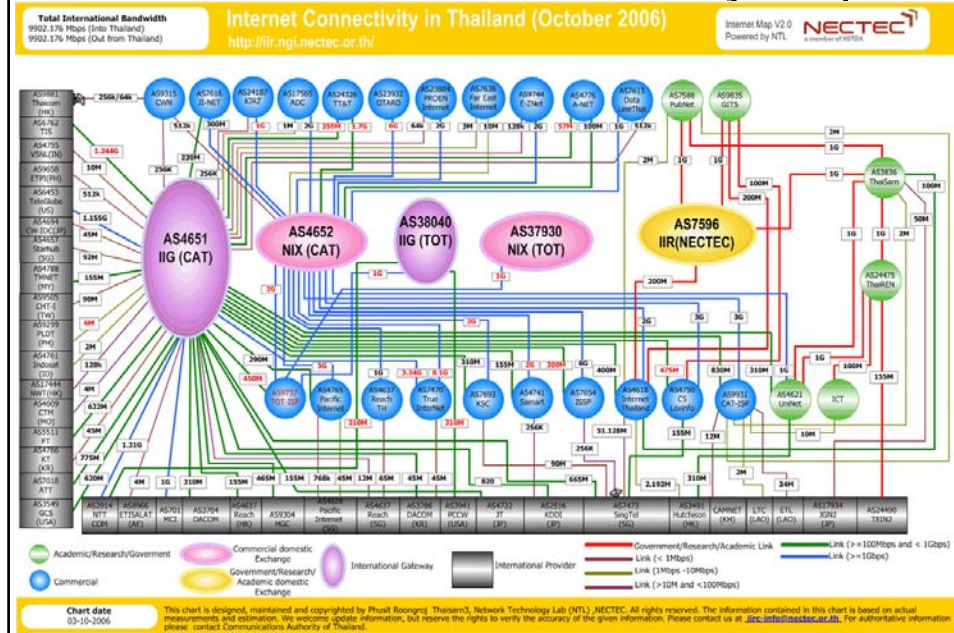
International Internet Bandwidth Data



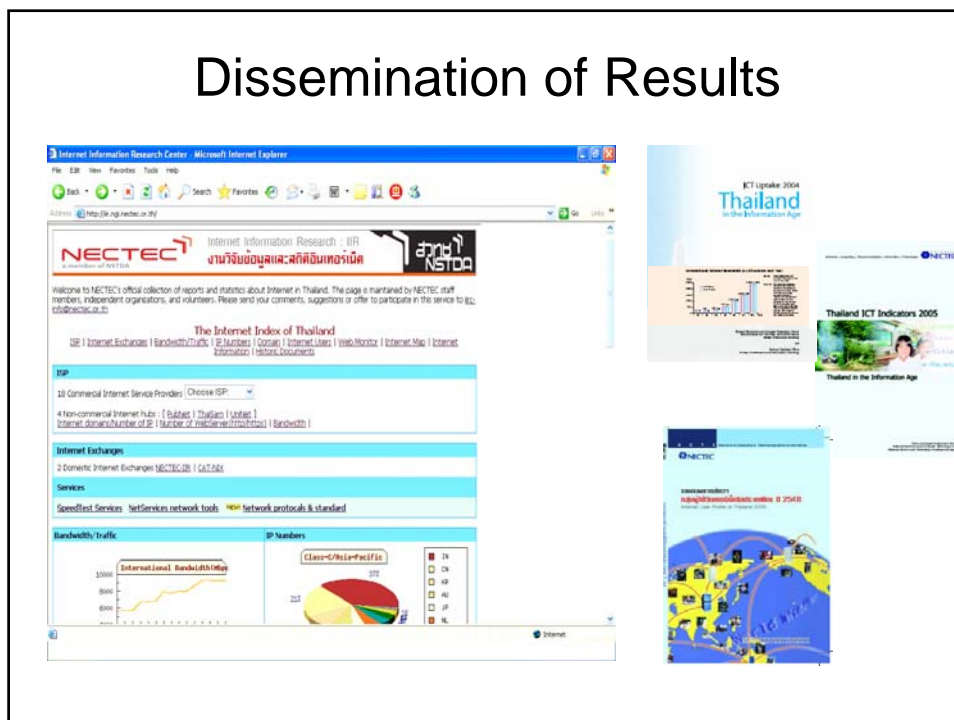
Internet Connectivity Map



Latest Internet Connectivity Map



Dissemination of Results



Experience Sharing

- Collecting Internet bandwidth data requires quite a bit of human efforts and collaborations
- ISPs want the Internet connectivity map for business use
 - Impact customers' decision in selecting ISPs
- Immediate update of Internet bandwidth data and connectivity map are sometimes requested

Conclusion

- Collection and dissemination of Internet bandwidth data are very useful and important
 - The work should be handled by neutral and reliable party
 - Collaboration is a key factor to success !!!

Thank you

Question and Discussion