

## Net Neutrality In Asia-Pacific

Trends, challenges and guidelines for regulators and policymakers

#### What is Net neutrality?

A network design principle that allows for a maximally useful public network that can carry and support all types of content, service and application

*'All traffic on the Internet must be treated equally and independently of content, services or applications on the basis of source or ownership'* 

Strongly associated with the Internet's growing socio-economic value, and prevalence as the largest and most diverse network for information and communication in recent history





#### Why are we talking about it

Net neutrality has grown in importance in recent years due to the rise of over-the-top services (OTT). It has implications on:

- Internet access and adoption
- Online innovation
- Privacy
- Freedom of information
- Global interoperability





#### **Some OTTs in Asia-Pacific**



## **Traffic management or arbitrary interference?**

- Traffic management: technical measures that allow ISPs to allocate available resources and maintain QoS for <u>all</u> users across a network
- It is a widely acceptable practice
- Traffic management should:
  - remain protocol or application neutral
  - be transparent
  - not be used as a tool for anti-competitive behavior
  - not be used as a substitute for adding capacity to alleviate congestion.



### This is not an ISP vs OTT debate

- The issue is centered on areas where ISPs and OTTs offer competing services (e.g. VoIP as a substitute for voice telephony)
- This makes ISPs more likely to discriminate against OTTs, or charge them extra for carriage
- But both sectors are starting to explore opportunities to collaborate, and venture in each other's domains



# Some outstanding issues

#### 'Same rules for same services'

- Similar voice and messaging services should be subject to same regulations and fiscal obligations, regardless of underlying technology, geographic origin or whether it's delivered by carrier or OTT
- This might mean charging upfront fees for VoIP licenses, getting a percentage of aggregate revenues as annual fee, or establishing termination charges
- Charging OTTs are unlikely to provide enough funds for network upgrades--many OTTs' value in stock market doesn't equate to actual revenue stream



### **Zero-rating**

- Mobile carriers enter into an agreement with content providers to offer free mobile data to allow customers to access particular online content or services free of charge
- Controversial in APAC because it is also seen as a means to expand Internet access
- Conflicts with Net neutrality if:
  - The platform isn't open to all content creators (ISP, big OTT acting as 'gatekeeper')
  - If OTT is being charged by ISP, or vice versa



## **Considering a neutral network**

- 'Fast lanes' and multi-tiered access can be a barrier for entry for start-ups –not good for innovation and content diversity
- Extra costs on content/service provision will be passed on to end users –those who can't afford it may not get the full benefits of the Internet
- Privacy –DPI can be used to collect data about users' behavior and activities online



# Net neutrality in Asia-Pacific

## Singapore

- ISPs cannot block legitimate content nor tweak the accessibility to websites, services or applications to the extent that they are unusable
- Traffic management practices that are anticompetitive, compromise QoS standards, or harm consumer interest are not allowed
- Niche or differentiated Internet service offerings allowed as long as they are transparent, and meets IDA's QoS and fair competition standards





- Current Telecommunications Business Act (TBA) regulates unfair competition of telecommunication companies, or infringement of consumer's rights
- In June 2012, KCC said that it will let local mobile operators block VoIP applications, or charge users extra fees to use them
- Not a popular decisions, and by many accounts did not succeed



## Japan

- 2007 MIC report on Net neutrality identified 2 issues:
  - fair allocation of network development costs
  - fair access to network by telecom operators, content providers
- Packet shaping generally prohibited under Telecommunications Business Law
- ISPs encouraged to respond to network congestion first by increasing network capacity, and to inform users about any traffic shaping policies



## India

- In March this year, the Telecom Regulatory Authority of India (TRAI) issued a 118-page consultation paper soliciting views on Internet regulation and Net neutrality
- Received 1 million comments from public, and inputs from Internet-related industries, mostly pro-Net neutrality
- DoT High Level Committee recommends prohibiting zero-rated plans, but regulating domestic VoIP services like their telecom equivalent



What this means for regulation

#### Industry responses

## ISPs

- tiered pricing-charging more for higher speed, level of service
- focus on their unique assets, and data provision

## OTTs

- build their own network infrastructure
- use content delivery networks (CDNs) to store data closer to the user, thus reducing latency and improving response times



#### **Regulatory responses**

- Current practices around the world show that there is no single solution or response to the Net neutrality issue. These include:
  - Revising regulations for communications services
  - Adopting a co-regulatory approach (e.g. UK)
  - Adopting a multi-stakeholder approach (e.g. Norway, Denmark)
  - Introducing legislation to enshrine Net neutrality (e.g. Netherlands, Chile, Peru)



## **Regulatory factors to consider**

## Transparency

 End users should have accurate, accessible and user-friendly information on their ISPs' traffic management practices

## Switching costs

- Users should be able to quickly and easily switch to a different ISP if they are unsatisfied with their existing one
- Any switching costs imposed by ISPs should be transparent and should reflect cost-recovery

## QoS assurances

Setting a minimum QoS can ensure that all content remain accessible amidst prioritisation



## Other responses that can help

- Ensure effective competition at the network and services level
  - e.g. Open access policies
- Provisions that target significant market power and discriminatory conduct
- Government investment in network rollouts better utilisation of funds like USO, spectrum fees



## **Self-regulation**

## Pro

 Minimizes costs associated with regulatory compliance

## Con

 Larger players can dominate the development of an industry code

- Voluntary and non-binding, rather than sanctionbased
- Codes of conduct at times are approved by regulator



## **Challenges for regulators**

- How do we distinguish between 'reasonable' and 'unreasonable' traffic management?
  - FCC: It's reasonable if it's appropriate and tailored to achieving a legitimate network management purpose
- Is more regulation better?
  - This is highly contextual, and varies from one country to the next
- Can we tax OTTs?
  - Implementation challenges, esp. for foreign OTTs, but this is being considered in fora like the G20





- Review existing regulatory frameworks and market based mechanisms first
- Users should be in control of their online experience—this means freedom to access content, run applications and use services of their choice
- Policies and provisions on Net neutrality must take into account the mobile and wireless environment—increasingly the primary means of access for users in Asia-Pacific



## Thank You

