# Regional cooperation for expanding connectivity

Rohan Samarajiva, CEO, LIRNE*asia* & Abu Saeed Khan, Senior Policy Fellow, LIRNE*asia* UNESCAP Committee on ICT, 2<sup>nd</sup> Session, Bangkok, 24-26 November 2010



This work was carried out with the aid of a grant from the International Development Research Centre, Canada and UKaid from the Department for International Development, UK.







### Agenda

- Lessons from voice success
- International backhaul as major barrier to connectivity
  - Reliability
  - Affordability
- A win-win REGIONAL solution that leverages UNESCAP's unique strengths



## Success in voice: Low prices → greater connectivity (India SEC D&E)



— Mobile tariff (effective charge)

— Urban Indian SEC D and E mobile penetration

..... Rural Indian SEC D and E mobile penetration

Necessary condition for affordable broadband: Lowering international backhaul costs

- Asian operators who are very good at controlling costs in voice are also offering value for money in broadband WITHIN ISP DOMAIN
- When it comes to broadband in the INTERNATIONAL DOMAIN, less value for money because operators are economizing on that costly input



### Delivered vs. Advertised Download Speeds



### International bottleneck confirmed

#### Analysis: Traceroute to www.yahoo.com

#### 🖽 사 🚯 😑 📢 🖸 🖸

This trace was started on 24-Jul-09 PM 01:50. The host 'www.yahoo.com' (known as f1.www.vip.re1.yahoo.com) has been found, and is reachable in 14 hops.

In general this route is reasonably quick, with hops responding on average within 139ms. However, all hops after hop 7 in network 'Cable & Wireless' respond particularly slowly.



### Cause: Asian backhaul prices = 3x N. Am. & European prices



Not just about getting to N America: Internet backbone connections within region & outside, 2001 v 2009

	2001	2009
Asia, intra-regional	17%	30% (almost x2)
Asia, with US &	80%	50%
Canada		
Europe, intra-regional	75%	76% (same)
Europe, with US &	25%	19%
Canada		

### 预览已结束, 完整报告链接和二维码如下:

https://www.yunbaogao.cn/report/index/report?reportId=5\_7999

