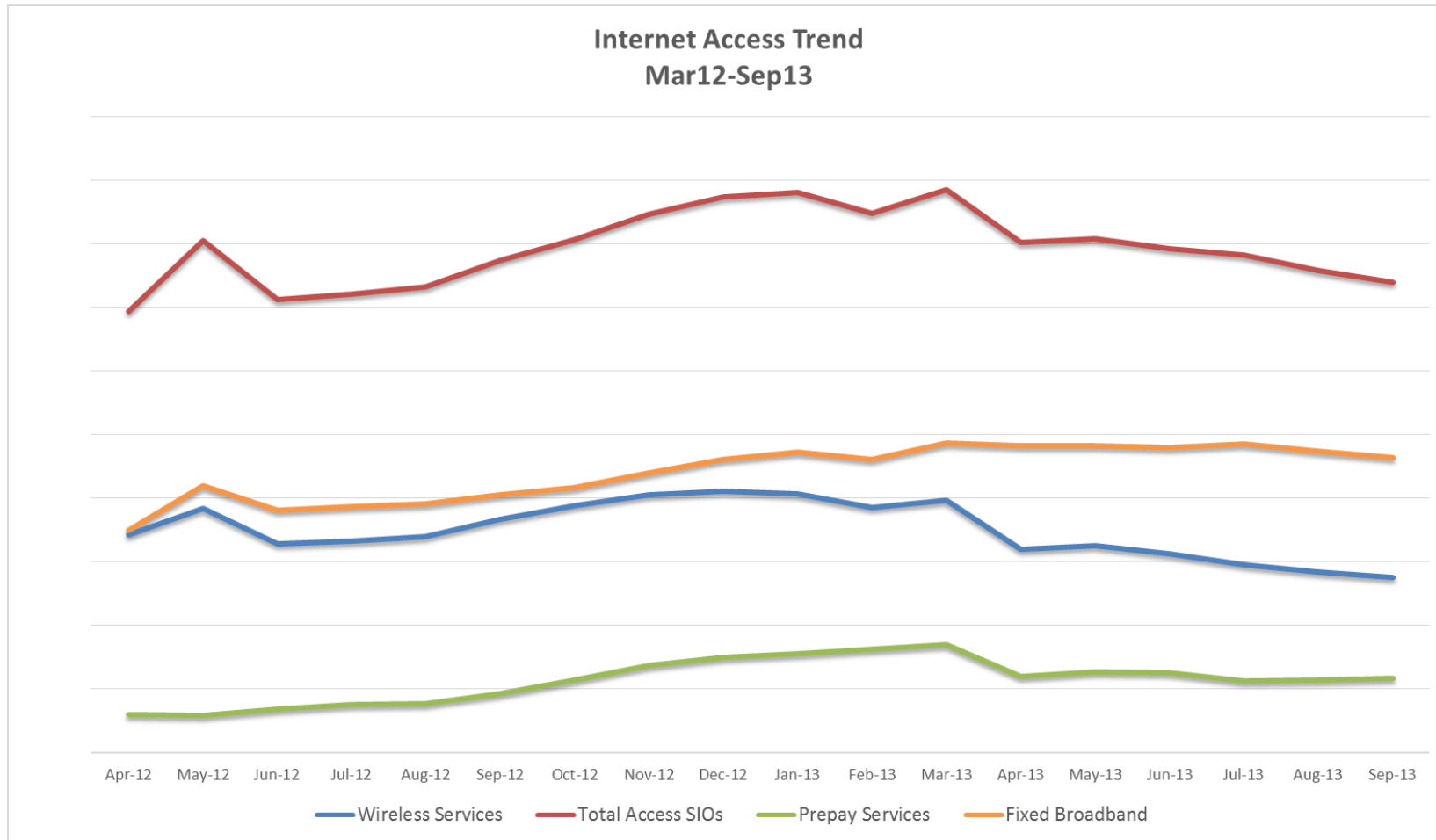# PacNOG 14 Educational workshops and Training
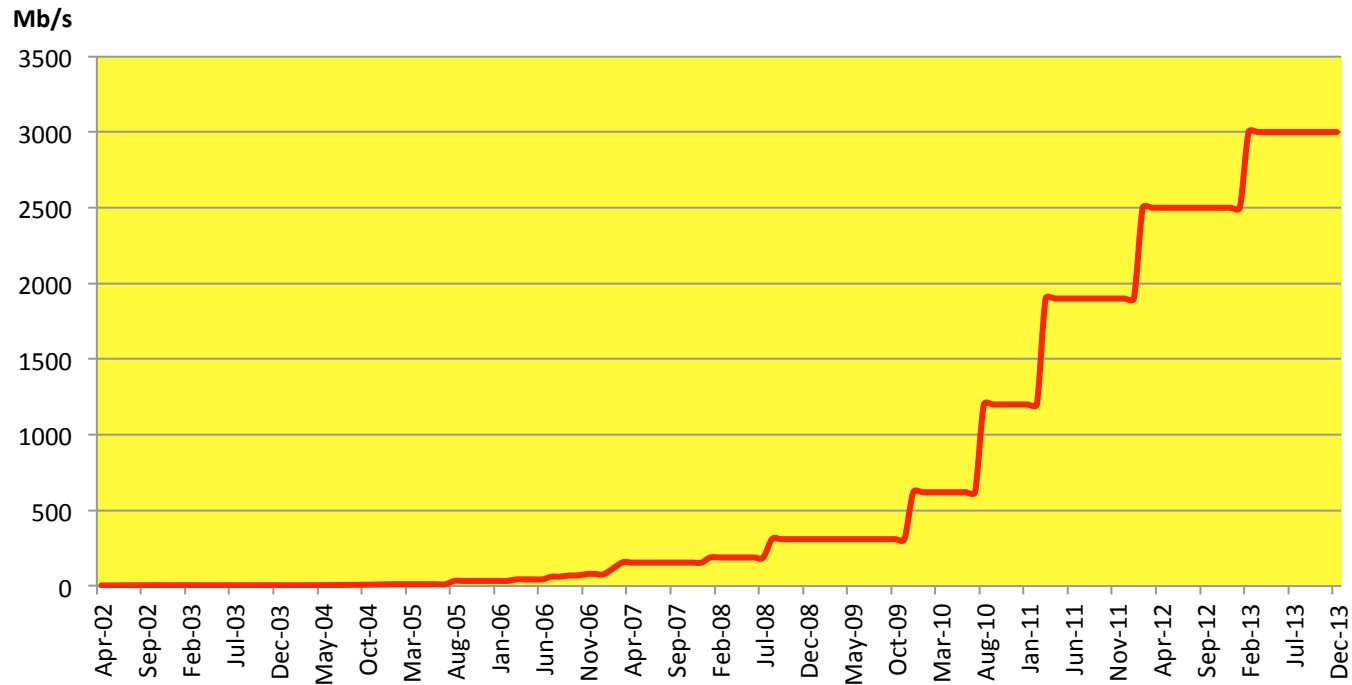
David Eyre
Group Manager Connect & New Ventures

2 December 2013

Internet Access Trend

Internet Access Trend
Mar12-Sep13

International Bandwidth Trend – All ISPs

- In 2011 Total Bandwidth into Connect & TFL was 300M
- Today YouTube Traffic alone is 300M
- Price of internet access went:
  - From $35 for 256kbps & $450 for 2Mbps
  - To $35 for 10Mbps access

A multi-access Network

Fixed Access
- DSL Customers getting good data caps
- Challenge is making this data cap mobile
- Copper networks need constant O&M

Mobile Access
- CDMA network capacity – populations shift making dimensioning an issue

Rollout of WiFi
- Off-load of traffic
- Cheap to deploy
- CPE built in to devices

Connect UniFi

Features of the Service:

- Not a product but a concept
- Marketing Tag – "Take your Fixed Data Mobile" and "Take your Mobile Data Fixed"
- Make the best of both worlds – Fixed & Wireless
- We sell you a data bucket and not access
- Fi in UniFi is WiFi but your bucket is available from DSL, CDMA and WiFi
- In some places WiFi will be the primary mode of access

Challenges of Connect UniFi:

- Account portability increased
- Sponsors multiple use from many places

Service Delivery

- Challenge for a fixed line ISP is to get utilization of copper up
- Service Provisioning and Restoration compared to wireless
  - Additional step in this process is where challenge lies
- Aligning front-line with technical operations
  - 24-hr call centre creates an expectation of service
  - Service delivery distorted – customer expects instant service although they pay a retail rate
- As more applications are sold & supported the skill set of the front-line person needs to be upgraded - managed services provision also needs to be priced into service
- Provisioning of services via OSS/BSS becomes more complicated as scale grows

TFL in the Content & Application Space

Access was a goal before now applications in both retail and business space are being sought after. Hence as an ISP we are also looking at applications that can drive revenues as well as access

Education

    Distance Learning Network

- Focused on rural areas

    Bus Fare Portal

- Registration database: Fully developed within TFL

    Education Servers

- Taking the university environment into Primary and Secondary Schools

Video Streaming

- Streaming : On local networks working with broadcasters etc
  - PPV and Free-to-Web

CCTV/Digital Signage

- Delivered over retail products such as Velocity

Thank you