

# Why Telstra Doesn't Peer

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## Internet Researcher

- 7 years of Peering Research
- 12 white papers on peering Ops and Strategy
- 3 minute Intro to Peering, Framework
- Apply to Australian Peering Ecosystem
- Predict the future

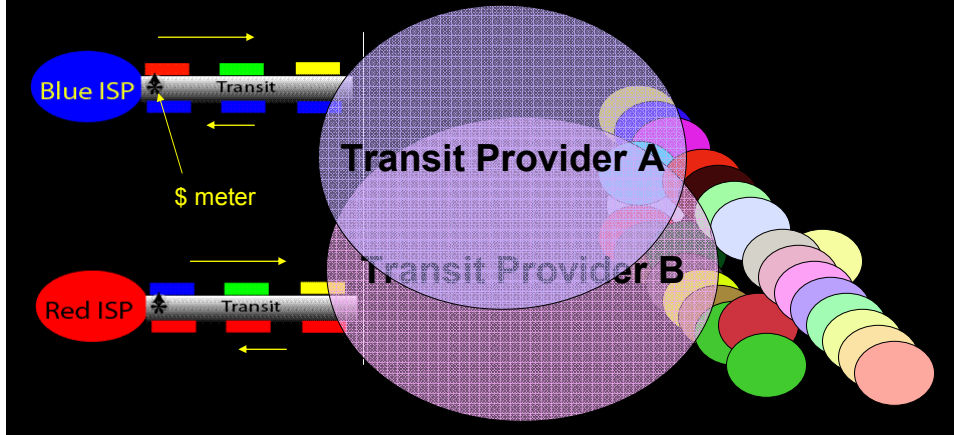
*Level set...Framework...Research shows...Future*

## The Internet is a Network of Networks.

An ISP sells access to the Internet, so...

...must itself get attached to someone who is already attached to the Internet.

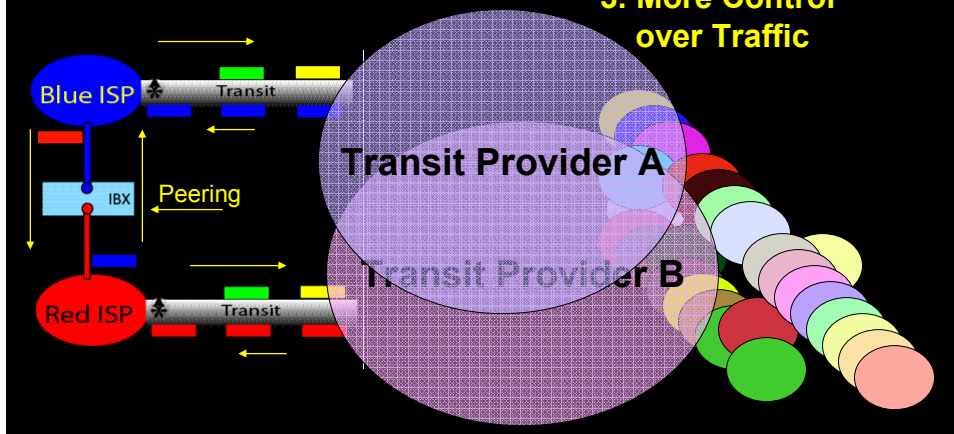
1) Transit Provider sells metered Internet access.



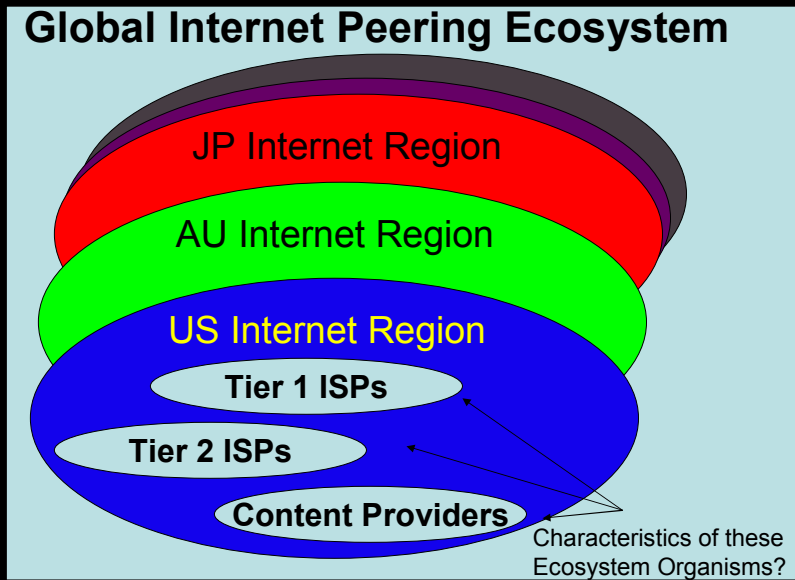
2) Peering is a business relationship whereby two companies **RECIPRICALLY** exchange access to each others customers.

Why Peer?

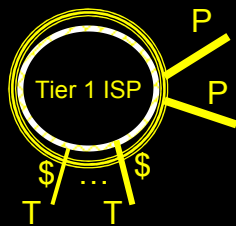
1. Reduce Transit Costs
2. Lower Latency
3. More Control over Traffic



# What is this Internet Peering Ecosystem anyway?



## Ecosystem Member: Tier 1 ISP

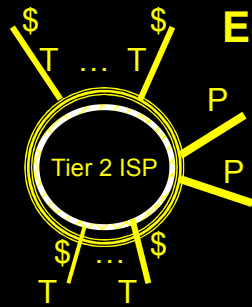


**Def:** A Tier 1 ISP is an ISP that has access to the **ENTIRE Internet Region Routing Table** Solely via Peering Relationships

(Doesn't buy transit from anyone to reach any destination in the Internet Region.)

Motivation: Is NOT motivated to Peer in region to reduce transit fees, Is NOT motivated to peer with anybody else.

Behavior: "Restrictive" Peering Policy



## Ecosystem Member: Tier 2 ISP

**Def:** A Tier 2 ISP is an ISP that has to purchase Transit to access some part of the Internet Region.

**Motivation:** Is motivated to Peer in region to reduce transit fees.

**Behavior:** "Open" Peering or "Selective" Peering Policy  
Active in Peering Forums

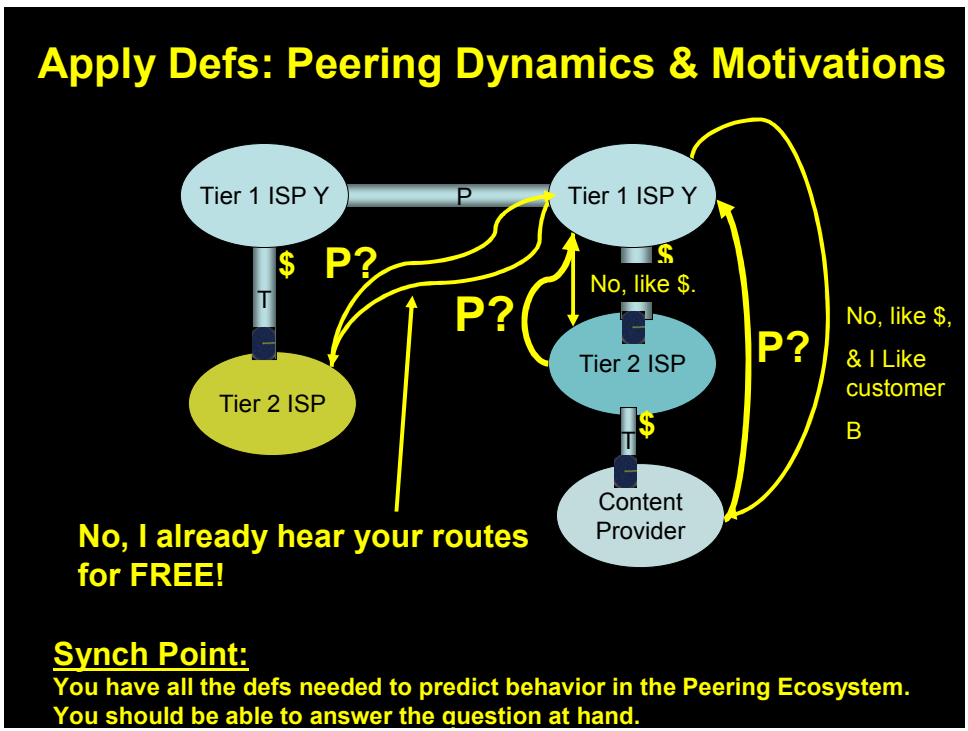
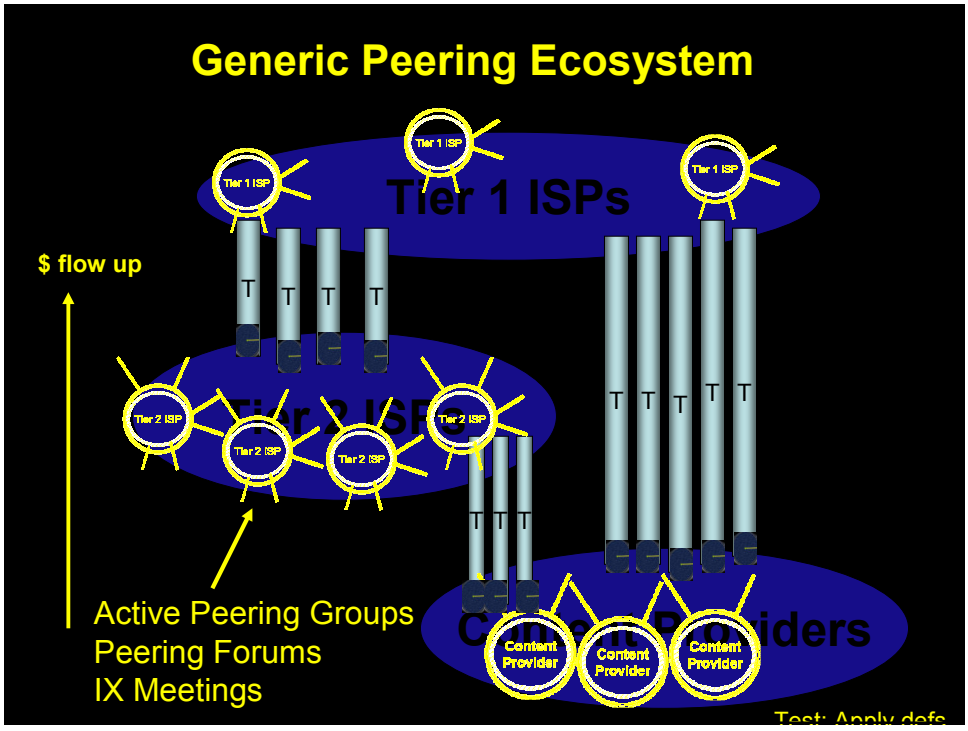


## Content Providers

**Def:** A Content Provider focuses on content development and does not Sell access to the Internet.

**Motivation:** SLAs w/well known ISP

**Behavior:** "No Peering" Policy



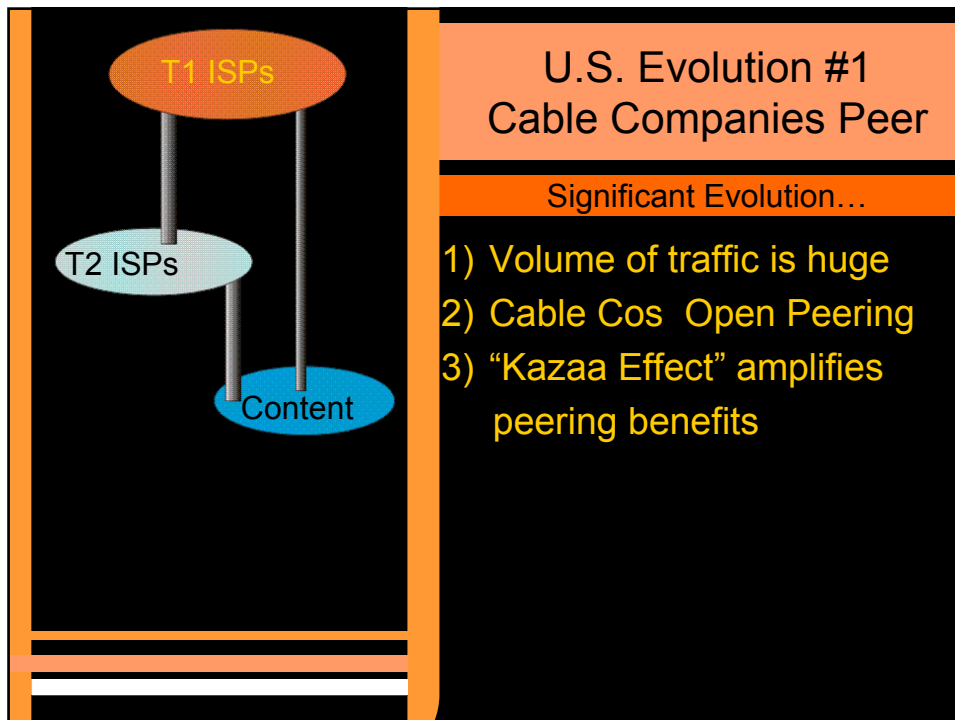
Why Telstra Won't Peer?

Why Telstra Won't Peer?  
That's right.  
They don't have to.

# Why Telstra Won't Peer?

They don't have to. And,  
No different from other  
Tier 1's in the world

Let's look at the evolution of another Ecosystem



The diagram shows a vertical hierarchy. At the top is an orange oval labeled 'T1 ISPs'. Below it is a light blue oval labeled 'T2 ISPs'. At the bottom is a blue oval labeled 'Content'. Two vertical lines connect 'T1 ISPs' to 'T2 ISPs', and two vertical lines connect 'T2 ISPs' to 'Content'. The background is black with orange and white horizontal bars at the bottom.

**U.S. Evolution #2**  
 Large Scale Content Players Peer

Significant Evolution...

- 1) Volume of traffic is huge
- 2) Content is Open Peering
- 3) Improves End-User Experience
- 4) Leading Players are paving the way

...need to move out of Bankrupt colo anyway...

The diagram shows a vertical hierarchy similar to Evolution #2. At the top is an orange oval labeled 'T1 ISPs'. Below it is a light blue oval labeled 'T2 ISPs'. At the bottom is a blue oval labeled 'Content'. Two vertical lines connect 'T1 ISPs' to 'T2 ISPs', and two vertical lines connect 'T2 ISPs' to 'Content'. In the middle, between 'T2 ISPs' and 'Content', there are several smaller ovals representing content providers: 'Yahoo', 'EA', 'Mst', 'Google', and 'Sony'. A green and yellow spiral graphic surrounds these content providers. The background is black with orange and white horizontal bars at the bottom.

**U.S. Evolution #3**  
 Cable Cos Peer w/Large Scale Content Players

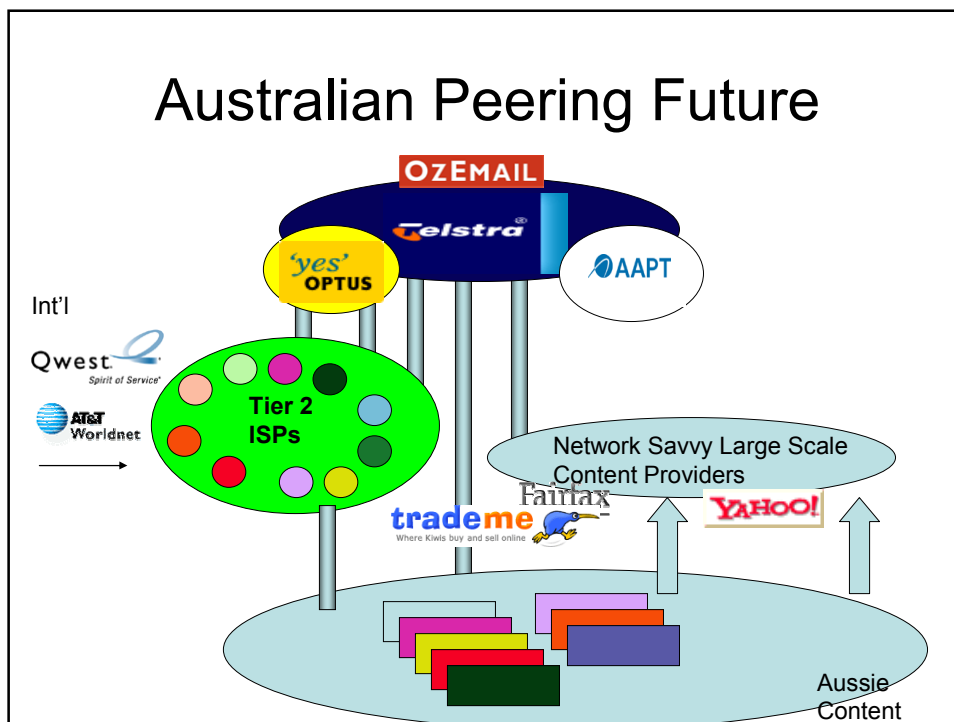
Significant Evolution...

- 1) Volume of traffic pulled away from T1s is huge
- 2) Reduces perceived need for T1s (for local delivery anyway)
- 3) T1s still needed for distance

→ Content Literally right on the Cable Company Network

## So, Might the same happen in the Australian Peering Ecosystem

- “The Art of Peering: The Peering Playbook”
- **20 Tactics** ISPs have used to successfully obtain peering, where they would otherwise not be able to obtain peering.
- **Freely available** – send e-mail to [wbn@equinix.com](mailto:wbn@equinix.com) or search the web for the title.



## Call to Action

- Sydney Peering Forum & ATUG
  - Unite the ISP Community
  - Together we are strong
- ACCC won't solve Peering Problem
- Think Selfish Best Interest