## In the Beginning……a background to BushNet

- Dominant driver was the School of Medicine
- Traditionally 3 years on campus/3 years in hospital
- Late 90s a greater role for teaching hospitals introduced
- Late 90s a greater role on rural exposure for all students
- 2000 Dubbo, Orange, Bathurst Clinical Schools established.

## Geography


## Wants to vs Can do

- Remote (non-suburban) clinical schools required considerable network access
- Students spend around 6 months during the 4 year course at remote schools
- Equity of access
  - Lectures from Sydney
  - Lectures from teaching hospitals
  - Grand Rounds from hospitals
- Internet (e.g. medline)
- Lifelong learning
- CSU – E3 (34 Mbit/sec) to Dubbo and Orange, 2 Mbit/sec to share
- Very limited carrier offerings

## Desires vs Requires

**Desires**

- Fibre access ex-Sydney to each remote Clinical School
- Wide bandwidth cost effective managed services
- 100 Mbit/sec plus IP

**Requires**

- High quality video for lectures
- Wide bandwidth internet
- VOIP (future)
- Low latency, high capacity IP

## Technology vs Marketing

**Technology**

- Managed Services
- Fibre
- Microwave

**Carriers (Suppliers)**

- Telstra
- Optus
- NextGen
- Transgrid
- Railways
- SPT
- ATI

**Results**

- No rational responses from carriers
- Affordable microwave option

## Reality vs Budget

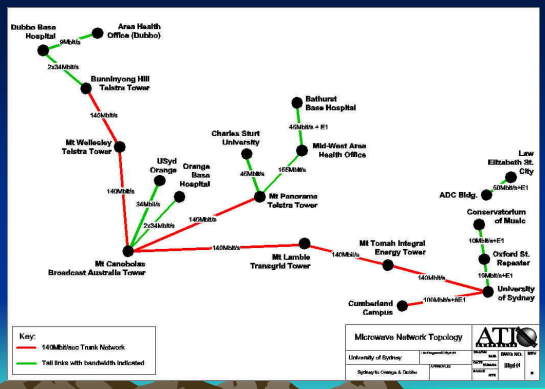
- Possible sharing with other users in the region
  - CSU
  - CSIRO
  - Midwest Health
  - Macquarie Area Health
  - NSW Department of Health
- Funding options
  - NCF
  - Rural bonded student funds
  - Commonwealth Department of Health, one off grants

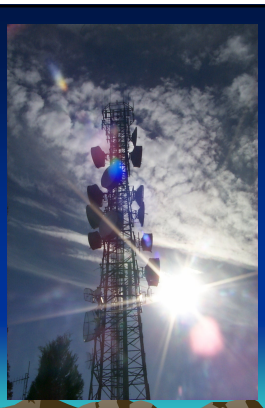
## Futures

- NextGen/AARNet
- More cost effective and accessible fibre
- Video streaming

## Lessons

- Applications not technology drive networks
  ……understand your requirements
- Promises don't carry traffic
  ……..know your suppliers
- Aggregate funding buys more
  ……play the politics

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