

# EFM - A network/service provider's perspective

David Thorne

BTexaCT

# BT Background

- The UK ILEC
- Interests in Europe, UK
- Aggressive ADSL rollout
  - 50% of UK homes passed
- SDSL technology trial
- Founder member of FSAN
- A customer.....

# General Observations

- Calling an Access system Ethernet does not automatically make it successful or cheaper
  - comment made that DSL could not provide cheap access, EFM could - proof?
- Need radically cheaper system components or radically different architecture to achieve this e.g. remove system components
- Ultimately volume driven - but volumes of Access components (not NICs)
- Core BW is not free

# Fibre

- FTTH very expensive to deploy
- Who is going to pay ?
- ILECs have spent a lot on 3G, DSL
- Small operators have less money
- New-build is a small market
- FTTH will not happen fast

# Fibre Topology

- Cost studies have shown that PON is the only viable option to the res market
- Pt to pt is OK for the MDU and business
- Must not forget the effect of take up rate
  - pre-provision of provision on demand ?
- Must be aware of hybrid alternatives
  - satellite/DTTV/DSL/cable

# Copper

- There are large DSL deployments (homes passed)
- Need a very good reason to do something else
  - marginally cheaper capital cost is not enough
- If cheapness is achieved as a result of service support limitation then wide open to a service attack
- Ethernet over DSL already exists
  - not widely deployed

# Short term

- Need to look at a copper variant
- Hard to compete with DSL
- Ethernet over VDSL for the MDU may be a better bet
- Needs to serve the res/hospitality market
  - Must include video
- Interoperable DSL is hard
- DSL is hard

# Home network

- Must not ignore
- No distribution - no multi-service
- Only proposal was CATV co-ax
- US focus
- Already have the cable company as a competitor
- Must look at Cat 5 and other legacy cabling systems



# Suggestions

- Find out what service providers want
  - to some degree
- Look carefully at PON vs pt to pt
- Look at EPON vs APON
- At least learn from APON
- Talk to FSAN

# Suggestion 2

- See where EFM could make a significant difference cf. DSL
  - ADSL
  - VDSL to the MDU
  - only do if there is a good reason
- Telcos require scalability, reliability, deployability, resilience, security (DOS)
- Don't forget the customer network