Purpose of this talk

Construct a picture of the emerging relationship between facilities and services in local residential access.

Speculate on what this might mean for industry structure, competition and regulation.

Provide a framework for debate.
Start an argument?

The naïve model of competition in local access

Simple head-to-head facilities-based competition.
- Lots of people install copper pairs to sell POTS.
- Lots of people install HFC to sell cable TV.
Does not seem to be happening...

Uncertain business case.
- Can competition be sustained?
- Significant costs

Regulatory barriers (your country may differ)
- Long run unbundled pricing.

New approaches to service offering.
- Need technology to support multiple businesses.

What is actually happening?

1) Wireline services.
   - Incremental upgrade of existing technology
   - Permit entry into new lines of business.

2) Wireless services.
   - More greenfield (tower) investment.
   - Waiting for the launch of satellite.

The old order
The emerging order

This picture raises questions...

Is there adequate competition?
- What does competition mean?

Is there a need for regulation?
- Of what?

How to evaluate competition

Should we look:
HERE?

Or

HERE?
The service-centric view

Consumer does not care about competition in facilities.
Consumer cares if there is adequate competition in services.
  • Actually, consumer only cares about shape of product space...

This conclusions raises questions...
  • What constitutes a service?

Telephone as an example

Two interpretations of this picture

1) This represents rich competition in telephone service.

2) This represents a number of distinct services, some of which are competitive.
   • Distinguish each sort, and separately assess.
Which approach is right?

There is no *a priori* answer.
It depends on the specifics.

What features constitute POTS?
(Is POTS the right baseline?)

Great debate material.

Another question...

What does “facilities-based competition” actually mean?

One answer: not much.
Only can be discussed in context of particular service.

Internet as an example.

The Internet picture
Is Internet service competitive?

(At least) two sorts of service:
- **High performance.**
  - Two facilities-based providers.
  - No unbundling likely.
- **Basic**
  - Lots of providers over POTS.
  - Fight over the bones--low value subscribers.
- **Nomadic (wireless, satellite, etc)**
  - Too immature to be sure.
  - Love to discuss.

What is the effect of the Internet?

Internet seems to lead to open competition above it.
- **Vertical integration of Internet and applications not likely.**
  - Why? Open interfaces, diversity of content.

Integration of facilities and Internet service more likely.
- **Limited evidence to date supports this.**

Need to observe, and perhaps rethink, where we focus concern about depth of competition.

A new wireline facilities build-out?

Fiber to the ??
- Not likely to be many such investments.
- But might just make existing services more competitive.
- But what if it is so much better it kills off all the current infrastructure?
- So if it happens, must it be “unbundled”??
The regulator’s dilemma

Better to regulate (or not) service than facilities.
- But what is a “service”.
- Convergence blurs all boundaries.

If there is a new generation of facility installed, is that pro or anti-competitive?