I wrote this essay in response to this post suggesting that carriers can avoid becoming dumb pipes. The term “dumb pipe” means that the carriers can’t make money by adding value to their basic commodity transport.

Very simply – society needs dumb-pipes and carriers cannot survive being dumb-pipe providers. We have to face up to this stark truth and move on. The longer we wait the longer our economy is harmed and the more their shareholders continue to be at risk.

If the carriers fear becoming dumb-pipes we must seize the moment rather than stretching out the pain by giving them false hope.

Owning your own infrastructure has become a liability with digital signaling. And maintaining control over a essential public infrastructure is a clear violation of the spirit of antitrust and restraint of trade rules (as in forcing customers to limit how they use their bits).

In the analog days each infrastructure was special because each signal had its medium – as in a telegraph system. But digital infrastructures are increasingly interchangeable. To use a simple example, VoIP can use anyone’s dumb-pipe. So why would I want to own my own and bear costs others don’t have?

Tiered billing isn’t sustainable because the bits have no intrinsic value. If there is scarcity you can force people to pay any price but this model fails in the face of abundance. Value is created and money is made by using networks – not by trying to own yet another commodity network. The need for abundance is at odds with tiered pricing.

We see this playing out as broadcasters and cable companies start to do Internet delivery using sites such as Hulu (NBC Universal) and Fancast (Comcast). These sites give me far more choice than “cable” and let me use any path.

Carriers have tried to make their networks more valuable with NGN (Next Generation Networks) that offer SLAs (Service Level Agreements, a cousin of QoS).

But they lose out to competitors who aren’t burdened with expensive promises as their customers find cheap capacity trumps QoS. Remember when IMS was the next big thing? The carriers may try to monetize their assets by offering APIs to services such as billing but that has nothing to do with the network itself. Worse, those businesses are enfeebled having grown up deep within the carriers’ protected world.

We need to be very wary about examples such as Google owning some of their own infrastructure. They do so in reaction to the carriers’ control and not as a business in itself.

In the 1970’s IBM was forced unbundle software from hardware. This gave us today’s vibrant software industry and personal computing. The lesson of the Internet and the IBM unbundling is that society thrives by decoupling the value chain and giving us the ability to find far far more value than is possible when the physical assets are locked into a retro-value chain.

Imagine if FedEx and UPS each built their own interstate highway systems. But it’s far more extreme because telecom costs are an artifact of the business model of the carriers. So it’s not just the cost of owning a private pipe but the cost of owning a carrier-class (AKA very expensive) pipe.

At least many of the people inside the carriers are well aware of the plight – many policy makers aren’t forced to face up the reality of the carriers’ plight and aren’t aware of the possibilities outside the carrier model. I worry about giving the illusion that they can continue to protect the carriers from reality by keeping the pipes smart.

I don’t really care if the carriers live or die. What I do care about is being deprived of the ability to use dumb-pipes to create value and to discover new possibilities. This is the real price of giving false hope to those within the carriers who want to believe that they can make it another year before their business model implodes. And we have a responsibility to give the shareholders the unvarnished truth, especially institutional investors using our money.
We need to look ahead and the government that protected the carriers has a role in transitioning us to a future in which we have companies maintaining physical infrastructure and other companies that use this infrastructure.