

The Day Things Really Changed!

The FCC didn't do anything unexpected on February 12, 2004. But the things they did do are changes the telecommunications common carrier world has been waiting to happen for a long time. Broadcasters need to be aware of what they mean.

For most of the almost 100 years that we've had a "telco" to buy transmission services from, the "telco" has really been the only game in town.

Dependence on Incumbent Local Exchange Carriers (ILEC)

Broadcasters have long used various forms of "bypass" of the phone companies' wireline networks: techniques such as microwave Studio-Transmitter Links (STLs), VHF radio Remote Pickup Unit's (RPU's), the Electronic News Gathering (ENG) units most television stations have, and even satellite uplink trucks.

But, when it came to the last resort, that line capacity that would "always be there,"—the only game in town—has been the embedded local phone company. It's called an ILEC, or "Incumbent Local Exchange Carrier" in FCC parlance.

Broadcasters have been increasingly counting on the ILEC, either in conventional dial phone lines or for ISDN services to dial up remote lines, even for transmitter remote control systems and such.

It's been that way and we've been accustomed to it because way back in 1913, when the Feds nailed AT&T for monopolistic practices in the then-unregulated phone business, a principle called "Universal Service" was built into the antitrust agreement that Ma Bell signed.

Universal Service

In 1913, a model was set for the phone companies that financially protected their investment in a wired telephone plant. It was intended to provide phone service to everywhere in the nation, at costs that everyone could afford. Universal Service guaranteed monopolies of both business and territory for the established phone companies.

That model worked rather well through the period when "phone lines" were analog things that had to make their dial connections through large, cumbersome connecting devices called "switching machines."

In fact, not only did Universal Service protect and encourage the phone companies to build their plant and run wires everywhere, it also just happened to make "the phone business" such a huge cash handler, that the government fed itself well on an increasing set of taxes for various aspects of the business.

New Technology-Alternative Choices-Same Connectivity

As technology advanced, and others were able to decode and get their fingers into the intercity transport of phone lines, we saw alternative companies. MCI is the earliest notable example that encroached on parts of the historic domain. But, even to use those facilities, you had to get connectivity at the end through the ILEC.

The first of a few dirty secrets emerged to public view in the 1970s when there began to be a choice of interstate long distance companies. That was when MCI and Sprint and such first came to the fore, requiring subscribers to dial dozens of digits to use a different long distance dial service.

It was the fact that when AT&T owned the only "long distance" operation (if you're old enough, you remember the AT&T "Long Lines Department"), AT&T was paying out to the ILECs for providing the connections on dial calls to and from long distance. Measured in nickels and quarters, it was billions of dollars.

As soon as there were others running those calls, the ILECs ran to the governments, both federal and state, and got themselves compensated for

the loss by adding "FCC access charges" to the monthly local phone bill.

More Add-ons Drive Higher Total Costs to Consumer

And, more and more social demands piled up on the ILECs. These included services, such as 911, that had to forward the location and identity of every calling phone in town to the public safety agencies, and TTY services for the deaf. In one grand social swoop, our governments decided for us that we should all subsidize below-cost "lifeline telephone service" for the indigents and poverty-level people among us.

As each of these added technologies and services for the public came along, we saw another line item added to the phone bill – in addition to the array of taxes the state and local governments piled on.

In short, the ILECs became handlers of huge amounts of cash flowing through them to provide various functions or to pay the government for its beneficent thoughtfulness in letting us become addicted to "Universal Service."

Along Came Competitive Local Exchange Carriers (CLECs)

Then, Competitive Local Exchange Carriers or CLECs, came upon the scene. The dirty secret beneath them was that they really didn't have any wires of their own.

They were mere sales agents who, at first, did no more than take your order and rent the selfsame wires and switchpoints you used from the ILEC in your town.

As technology evolved, they began to be able to rent space from the ILEC, and put in their own smaller switching machines, but still rent the actual wire circuits from the ILEC.

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The hope of futurists was that the CLECs would eventually build a parallel plant to the ILEC, but that is largely still an item out somewhere there in the future (at least in the sense of classic wireline architectures). We do have the possibility of others like the cable companies doing that. Indeed, in other nations, notably England, there have been completely parallel competing local networks riding on the cable TV lines. Ironically, you can even find that some of their investors are the US CLECs who compete against such cable inroads in the US.

However, in the US, there's generally not been quite enough customer density to get a parallel investment made in "the last mile" as yet; not enough for other than industrial users who need a number of T-1s carried across town. We've had another form of common carrier animal named the "Alternative Access Vendor" or AAV, who placed fiber cables in cities for industrial users.

But, beginning with the CLECs selling to low-volume users, the ILECs started to bemoan that the many revenue sources for them and the government which were readily collected in the historic plant were being eroded away. They campaigned at both the federal and state levels, pointing out the losses of revenue that were only on the ILEC bill, but not the bills of these emerging suppliers.

Internet Add-On (Voice Over Internet Protocol (VOIP))

Then came the straw that forced the camel drivers of the business, the regulators, to realize their beast of revenue burden, the ILECs, were perceiving pain. This was the arrival and easy, inexpensive deployment of dial-up phone service that was almost invisible to the phone networks – Voice Over Internet Protocol – VOIP, or dial up phone lines running digitized speech over the Internet.

With VOIP, speech, music and even video is reduced to simply some more bits and bytes on the burgeoning sets of dedicated lines and fiber optics we call the Internet. Since the "calls" and "connections" are set right at the user's premises and usually in the user's PC, there's no measuring how many "minutes" or what is "billable" are being created. Even more so, there's no way to measure nor collect for all those juicy social services and taxes the ILECs had been collecting for years now.

Potential VOIP Tax Burden Excused, Further Compromising VOIP/ILEC Competitive Posture

So, February 12, 2004 was the day the FCC had to address if and how this lost revenue would be collected. The FCC was forced to step up to the bat – and the FCC blinked.

It decided that, seeing as its role was to foster competition, the new providers of all these alternative VOIP services would not be taxed nor required to bear the burden of handling all the extra collections the regulators had piled onto the ILECs over the years.

We'd all been waiting for the day when the issue would emerge. Now, we're going to see another whole series of argument as the ILECs run to their states to seek a maintenance of "the good old days." Expect increased local rates in order to support the social and government the ILECs will claim they are mandated to maintain.

Furthermore, there will be a dwindling customer base as the public discovers it can be its own dial "telco" with its PCs, that will get more and more of their connectivity via their cable and satellite modems, bypassing the ILEC in a big way.

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Apples and Pears Rationale For Rate Increases

Of course, when the ILECs get rate increases, the alternate providers including CLECs and VOIPs, will perceive they can raise their rates. And, we'll all have a nicer, larger, fatter "phone bill" pie, won't we?

It all puts me in mind of the chap who got himself cryogenically preserved by the undertaker. As the story goes, when he was defrosted in the year 3000, his first action was to call his stockbroker. He got on the nearest phone, dialed the number and an automated service told him, "Your AT&T stock is worth \$14,000 a share." Overjoyed, he queried the system for IBM. It told him his IBM was worth \$17,000 a share. He was sure he'd made a good investment in his years in the deep freeze. That came to a sickening halt when a voice interrupted his call,

saying, "Please insert one hundred dollars for the next three minutes."

Changing of the Guard?

Some broadcasters may be using VOIP already, if they have found out some VOIPs provide no-charge, or nearly no-charge voice phone services. Others will certainly begin using it as they learn how. We will probably see "wideband" VOIPs who offer program channel services at prices well below what the ILECs charge for ISDN. The only limiting factor will be if there's broadband Internet service to both locations. Just think about it: That Saturday morning remote at the car dealer or the Sunday church service will only need a cable modem at the car dealer and the church – and there's a good chance they already have that today!

Just remember that it all began to emerge widely on February 12, 2004. Ω