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The Changing Web of FCC Regulation of Telephone Services

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Caught off-guard by the recent universal service requirements? Wondering what other FCC regulations may apply to your institution? This session will discuss topics such as: the FCC regulation of the Internet, Internet telephony, long distance resale, slamming, payphone revenues, universal service contributions, universal service support, fax machines, telephone numbering (e.g., area codes, toll-free codes), carrier identification codes (e.g., 10288, 1010288), hearing aid compatible phones, and volume controls on telephones. We will focus on how federal regulations may affect your long-term planning, and how you may profit from the recent changes in the FCC regulation of telephone services.

Trying to Decide Whether to Attend This Session?

Take this quiz of your telephone knowledge. Decide whether each statement is true or false.

- T F 1. When I dial 10288 before a long distance telephone number, I should reach AT&T.
- T F 2. When I dial 1010288 before a long distance telephone number, I should reach British Telecom.
- T F 3. A federal tax on modem use begins on January 1, 1998.
- T F 4. I need to use a lead sheet even when I send a fax using a fax/modem.
- T F 5. Long distance resellers provide service that is inferior in quality.
- T F 6. If my long distance company is changed without my consent, I can get a refund of any payments I make to the new, unauthorized company.
- T F 7. My office telephone should be hearing aid compatible.
- T F 8. The federal universal service support benefits elementary/secondary schools and libraries, not colleges and universities.
- T F 9. My college does not need to contribute to the federal universal service support.
- T F 10. As of October 7, 1997, all payphones were supposed to charge 35 cents for each local call made using coins.

The answers to all of these questions will be given during the session.

I. BACKGROUND

A. The Federal Communications Commission (FCC)

The FCC is an independent federal agency. Pursuant to the interstate commerce provisions of the Constitution, Congress passes laws concerning interstate telephone services. These laws usually are rather general in nature. The FCC then adopts more detailed rules to be followed by telephone companies and end users. Before the final version of the rules are adopted, interested parties can provide input to the FCC's proceedings by filing "comments." Parties who are harmed by the FCC's rules may be able to appeal those rules to a federal appeals court. (See Figure 1.)

B. This Session

This session concerns the status of rules already adopted by the FCC, rules being challenged in court, and issues which the FCC is trying to resolve. The issues we plan to address include those described below. The issues may be modified slightly because of any FCC or court action preceding the conference and the time constraints for the presentation.

II. Telephone Numbering

A. Carrier Identification Codes (CICs)

- 1. When you dial 10288 before a long distance number, the "10288" is a carrier access code (CAC) that permits you to reach the carrier identified by the 3-digit CIC "288."
- 2. Similarly, 1010288 is a 7-digit CAC that permits you to reach the carrier identified by the 4-digit CIC "0288."
- 3. 5-digit CACs cannot be used after 6/30/98 (a new deadline).
- 4. Colleges may need to check fax machines, modems and alarm systems for compatibility with 7-digit CACs, and to reprogram such equipment, if necessary.
- 5. We plan to provide an update on the implementation schedule.

B. Toll-free codes

- 1. 800, 888 - 877 is next
- 2. We plan to provide an update on the conversion to 877.

III. Internet - Rates and Services

A. Congestion of the telephone network

THE FCC's PROPOSED SOLUTION TO NETWORK CONGESTION

The FCC has found a new reason to promote local competition: the Internet. According to outgoing FCC Chairman Reed Hundt, key congestion points for accessing the Internet include the local loop, local switch and T1 lines. Introduce sufficient competition at these congestion points and congestion will be reduced, he maintains.

Accomplishing these goals with the help of Congress and the courts in the near future would take a stroke of magic. In the meantime, telephone companies, packet network service providers, Internet service providers (ISPs) and end users can work together to develop alternative ways to control data traffic.

THE LOCAL LOOP

Hundt states that the local loop wasn't designed for digital packet-switched communications, but that competitors should lease the loops for high-speed digital traffic. Existing local telephone companies also can use the loops for digital transmission. A first step may be increased customer education about the variety of existing services for connecting to the Internet, such as Integrated Services Digital Network (ISDN).

Hundt suggests competitors should be able to route data traffic around the congested local switch. But existing local telephone companies can do that; in fact, many are testing or offering Digital Subscriber Line technologies which use existing copper loops and route traffic around the local switch.

Hundt supports creation of a nationwide packet-switched network for data communications as an alternative to the current circuit-switched network, which is more appropriate for voice. A call to an ISP could be recognized by a local switch based on the ISP's telephone number, and the local switch could hand off the call to a packet-switched network.

Hundt does not want packet-switched networks to pay into or take out of subsidy pools. He wants the building of such networks to be

market-driven. But a no-subsidy approach could mean that packet-switched networks will be dedicated to high-density urban areas, leaving many rural areas to continue to use the circuit-switched network for data traffic.

Hundt also feels that T1 lines, which are used by ISPs, are overpriced. The FCC should have power to lower the prices for interstate and intrastate T1s, he says, and the FCC should have congressional authority to preempt state regulation of any digital packet network services. But the FCC has been fenced off from regulating intrastate rates and services, as recognized in the local competition and dialing parity cases in the Eighth Circuit Court of Appeals. It likely would take an Act of Congress to let the FCC regulate intrastate T1 rates and packet network services. State regulatory commissions likely would pose strong opposition.

Hundt and other commissioners will soon leave the FCC. Their replacements will need to determine which goals to pursue. If any goals require assistance from the courts and Congress, it likely will take years before they are realized.

LET THE USERS MONITOR THE TRAFFIC

In the short term, however, service providers could share traffic congestion information on a real-time basis, and make that information available to end users. The Network Reliability and Interoperability Council (NRIC) made a similar recommendation to the FCC. Telephone companies could use such information to route calls to ISPs via a different node on a network than is used to access the ISP, or perhaps to a different network. Information about the local network, ISPs and the networks that support them could be aggregated and made available to end users on a real-time basis.

With information about Internet traffic, end users that have access choices could make informed decisions about which ISP to use, how to access that ISP and when -- helping to balance the load on the electronic highways just as rush-hour traffic maps in large cities help drivers balance the load on asphalt. Also, real-time Internet traffic information could reduce the number of calls telephone companies receive from their customers when problems occur.

Implementing Hundt's goals in the near term would be like pulling a rabbit out of a hat. But service providers can act now, without any additional regulation, to provide increased choices for data communications traffic.

- * We plan to provide an update on formal FCC actions to implement recommendations of the NRIC**

- B. Internet telephony - Will the FCC regulate it as it regulates other wireline telephone services? The changes to the five-member Commission likely will impact the FCC's Internet policies.**

SIGNIFICANT CHANGES TO THE FCC

By the time CAUSE'97 commences, four of the five seats for FCC Commissioners likely will have been filled by new Commissioners. With such a large changeover, the federal regulation of telecommunications could change course.

The FCC can have five Commissioners. For most of 1997, there were only four: Chairman Reed Hundt, James Quello, Susan Ness and Rachele Chong. All but Ness were leaving.

A Democrat in the White House means there can be up to three Democrats on the FCC. Ness is a Democrat; thus, President Clinton needed to nominate two more Democrats and two Republicans. He nominated FCC General Counsel William Kennard (a Democrat) whom he intends to designate as FCC chairman, once Kennard is confirmed by the Senate. Clinton also has nominated another Democrat, Gloria Tristani, an attorney on the New Mexico Corporation Commission, and two Republicans: Michael Powell (son of retired Army General Colin Powell) and Harold Furchtgott-Roth (an economist).

The Senate Commerce Committee held confirmation hearings and approved their nominations. The full Senate is scheduled to vote on the nominations in the latter part of November. The outgoing Commissioners and the nominees expect the new commissioners to be

approved and in place before end of November. Once the new Commissioners are in place, they will be rather busy handling major issues left from Hundt's term.

HUNDT ON TELCOS...

One of Hundt's major challenges was implementing the Telecommunications Act of 1996. The FCC adopted a "trilogy" of orders on local competition (a.k.a. interconnection), universal service and access charges. All three orders have been appealed. The FCC lost most of the local competition appeal; other appeals are pending.

HUNDT ON-LINE...

From outside the Beltway, one of the key benefits of Hundt's term is the FCC's Web site, where the FCC posts many of its orders, public notices and news releases. Anyone with Internet access now has easy access to FCC documents at www.fcc.gov.

Internet service providers (ISPs) also appreciate the FCC's recent decision to continue to refrain from imposing access charges on ISPs. Whether market-driven solutions will resolve the alleged congestion of the telephone network or whether the FCC will seek Congressional authorization to pursue regulatory solutions is an issue that the new Commissioners will need to decide.

KENNARD IN COURT...

Kennard, the Chairman-to-be, became FCC General Counsel in 1993. His presence has been felt throughout the FCC, with his Administrative Law Division assisting the bureaus with drafting orders that are legally sound to help prevent legal challenges. His presence also has been felt in court, with the FCC winning more cases than it ever did before Kennard -- according to the FCC.

One notable loss is the recent court decision overruling the FCC's local competition order. The FCC had adopted rules for intrastate rates; however, state regulatory commissions and local telephone companies said the FCC infringed on their turf. The court

agreed.

KENNARD IN CONGRESS...

Although mostly invisible to outsiders, Kennard has made several appearances before Congress. For example, Kennard went to the Hill to defend the FCC's tax certificate program for minorities acquiring broadcast and cable companies. Kennard personally supported promoting diversity of ownership.

THE POST-HUNDT YEARS

It's hard to predict how the other four commissioners will decide issues that arise during their terms.

Ness has not been one to leave issues for the marketplace to resolve; however, she has opposed FCC regulation of the Internet.

Furchtgott-Roth, one of the two Republicans nominated to the Commission, holds a Stanford Ph.D. and is chief economist for the House Commerce Committee. His economic experience includes international trade, regulation of the media, copyright and the U.S. software industry. His deregulatory mindset could lead him to favor a market-driven approach to spectrum policy. While Hundt staunchly defended limits on ownership of PCS and cellular licenses in the same area, Furchtgott-Roth may question whether there should be any limits on spectrum ownership.

Powell is the real unknown. He graduated from Georgetown University Law Center only four years ago. After graduating, Powell landed a plum post as a clerk in the D.C. Circuit Court of Appeals for Chief Judge Harry Edwards. Powell next worked at a Washington law firm for two years, and now is chief of staff of the Department of Justice's Antitrust Division. Given his relative newness to telecommunications, his political views may still be evolving.

Tristani will bring her experience on the New Mexico Commission and likely will be especially attentive to rural issues.

With any luck, the five-member Commission will be approved

and in position by the time CAUSE'97 commences. Ness and the new commissioners will have to figure out what to do about pending Internet issues -- including telephone network congestion and its antithesis, the provision of voice services over the Internet. In their confirmation hearings, the nominees seemed to agree that the Internet should be left alone. But only time will tell what decisions the new Commissioners will make once they are in office.

- C. Modem Tax - a perpetual rumor
- D. Faxes
- E. In a margin at the top or bottom of each transmitted page, or on the first page of the transmission, a fax must include:
 - 1. The date and time it is sent
 - 2. An identification of the business, other entity or individual sending the message
 - 3. The telephone number of the sending machine or sender
- F. Fax machines made after 12/20/92 (and fax/modem boards made after 12/13/95) must clearly mark such info on each message
- G. What to do about unsolicited faxes

IV. Long Distance Service

- A. Slamming - What rights end users have when they are slammed
- B. Resellers - Re-billers vs. facilities-based resellers
- C. Detariffing of interstate long distance service:
 - 1. What happens to long-term contracts?
 - 2. An update will be given of ongoing court and FCC proceedings

V. Volume Control and Hearing Aid Compatibility for Telephones

- A. Volume Control
 - 1. Most phones: January 1, 2000
- B. Hearing Aid Compatibility

1. **Telephones now affected include:**
 - a. **Most telephones located in elevators and workplace common areas**
 - i) **Most telephones in private enclosed offices and mail rooms if they are purchased or replaced with newly acquired telephones**
 - b. **20% of guest rooms in a hotel or motel**
- C. **We plan to discuss the difference between volume control and hearing aid compatibility, and how to tell whether a telephone complies with either requirement**

VI. Universal Service

- A. **Support for elementary/secondary schools and libraries**
 1. **Colleges and universities may benefit by joining bidding groups and obtaining discounts on computer and telecommunications equipment and services**
 2. **We plan to give an update on the application process**
- B. **Contributions**
 1. **The entities that must make contributions include:**
 - a. **Every telecommunications carrier that provides interstate telecommunications services**
 - b. **Every provider of interstate telecommunications that offers telecommunications for a fee on a non-common carrier basis**
 - c. **Payphone providers that are aggregators**
 2. **We plan to discuss the types of telecommunications services provided by colleges that may be subject to the contribution requirements.**
 3. **We also plan to give an update on:**
 - a. **The FCC's responses to requests for clarification as to which entities need to contribute**
 - b. **The contribution deadlines**

VII. Payphones

- A. **Local Coin Rate**

1. Deregulated as of October 7, 1997
2. Likely will become 35 cents

B. Payphone Revenue Flow

1. Customers pay long distance companies to make call; long distance companies pay payphone owners for dial-around and 800 calls; payphone owners pay premises owners; and long distance companies pay premises owners. (See Figure 2.)
2. The amount long distance companies were to pay payphone owners increased from November 1996 forward. Depending on contracts, premises owners may earn more.

MORE THAN POCKET CHANGE

This year marks a milestone in payphone history. Last fall, the FCC raised the fixed monthly amount that long distance companies (aka "interexchange carriers" or "IXCs") compensate payphone providers for non-coin calls (such as 10XXX dial-around calls) by \$39 per phone. Previous compensation was \$6 per month per phone; from November 1996 to October 6, 1997, the compensation rate was more than \$45 per month, per phone. For a payphone provider with 100 phones, that's an increase of more than \$3,900 in monthly revenue.

The FCC also deregulated local coin rates by October 7, 1997. That means that coin rates for local calls may increase, and some payphone operators may receive even higher monthly compensation from IXCs. Higher payphone revenues may attract new players into the payphone business.

Previously, the coin rate for local payphone calls was \$0.10 to \$0.35 in regulated states and \$0.35 in most deregulated states. Industry insiders bet that local coin rates across the country will gradually rise to about \$0.35 -- or more. Pocket change adds up: Consider a payphone on which 800 local coin calls are made each month. If the local call rate was \$0.25 and was raised to \$0.35 in October, and assuming that 25% of callers will deposit two quarters rather than \$0.35 even, that phone will receive an additional \$110 per month. If the provider owns 100 phones like that one, it pockets \$11,000 per month in extra revenue.

EASY COME, EASY GO

It's tempting, but presumptive, to add the \$11,000 increase in coin revenues to the \$3,900 increase in compensation. But as of October 7, the fixed monthly compensation rate became a per-call rate of about \$0.284, as a default, or a different amount, if individually negotiated between the IXC and the payphone owner. Some phones won't receive any compensation, because they have no "compensable calls," such as dial-around calls. Those phones will lose the \$45 per month they had been receiving. Yet, other phones with heavy dial-around use, such as in airports, may receive hundreds of dollars per month.

The number of calls eligible for compensation may rise as a result of the increasing popularity of prepaid cards. But prepaid card calls may displace operator-assisted calls. Payphone providers that receive operator service commissions for 0+ calls could end up with lower 0+ commissions.

Payphone providers often pay commissions to the owners of the premises where the payphones are located. Higher revenues may mean higher commissions. A provider that pays \$60 per month to a college for the privilege of placing a payphone on that campus, may need to increase that monthly payment, depending on its contract with the college.

THE CONSUMER REACTION

The impact on payphone usage is the big unknown. Will per-phone use decrease if the number of payphones increases? What will consumers do when they don't have enough change for a \$0.35 call -- will they not make the call or will they use a calling card? As Shakespeare said in Henry IV: So far as my coin would stretch; and where it would not, I have used my credit.

Consumers may pay more for local coin calls, depending on the payphone's location. Consumers also may pay more for calling card, collect and credit card calls if long distance companies raise their prices (as AT&T did in May) to offset the payphone compensation they're paying. End users with 800 numbers could end up paying more

for their 800 service if the per-call compensation of \$.284 is passed on to them. However, consumers could end up paying less for the network services that previously subsidized telephone company-provided payphone service.

Payphone service providers and premises owners may benefit from increased payphone rates and heightened competition. The three keys to payphone success will remain: location, location, location.

3. Session will discuss:
 - a. How to increase revenues from campus payphones
 - b. How the compensation long distance companies pay to payphone owners may affect rates for toll-free (e.g., 800) services
4. We plan to give an update not only on the FCC's revisions to the payphone compensation requirements, but also on any court appeals

VIII. Penalties for Violating FCC Rules

- A. Up to \$10,000 per day for each day of a continuing violation, up to \$75,000

IX. Conclusion

- A. The session will end with:
 1. A discussion of the answers to the quiz given at the beginning of this paper
 2. A list of tasks to be performed upon return to the participants' respective colleges, including:
 - a. Investigating how to profit from payphone deregulation, detariffing, universal service
 - b. Ensuring compliance with FCC regulations
- B. On-line Information Sources
 1. <http://www.fcc.gov>