The Telecommunications Act of 1996: Ten Years Later
Universal Service and State Regulation

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Our pilot and our guide through the Telecosm

Overview

- Introduction
  - Network focus, connected issues
- Universal service
  - Contributions
  - Distribution
- Emerging state roles
  - Federalism
  - What is and is not required?
  - State universal service activity
- Concluding policy advice “from the experts”

“It’s all about the network”

Balhoff & Rowe’s focus: Identifying and supporting the conditions that enable investment in high quality network to serve customers

“How the Internet killed the phone business”
The Economist, headline
September 19 2005

“In the long run, we’re all dead.”
John Maynard Keynes

- Ultimately, applications depend on robust networks.
- Network operators want successful applications to help drive revenue and support investment.

Borders between markets eroding

- Technology development and (finally) rapid deployment
- Product markets converging
- Revenue spanning applications and platforms
- Networks competing
- Terms of engagement between network providers and applications providers need to be resolved

Slide 55

Slide 66

Source: Graphic from Legg Mason Investment Banking
Federal Legislation
FCC
State PUC/Legislation

Cause
Problem
Reform
Approach

Technology
Measurement, avoidance, revenue loss
Retail revenue pressure
Applications competition
Access revenue pressure/avoidance
Access competition
Induced competition
Uneven or confused policy changes
COLR continues
USF obligations growing CETCs, access replacement
USF base shrinking
Iatrogenesis - misdiagnosis leading to wrong prescriptions.

Combination of processes
Federal Legislation
FCC
State PUC/Legislation
Industry solution


One Fund, Four Programs

High Cost $4b
Schools and Libraries $2.525b
Low Income $794m
Rural Health Care $32m

Under '96 Act, universal service includes social, civic, and educational goals, as well as traditional support for networks. Subsequently, network support expanded to replace access (from implicit to explicit support) and include CETCs.

Problem
- Need for a funding mechanism that provides larger, more stable USF funding base, w/ equitable contribution requirements
- When DSL is eventually removed from base, assessment factor could raise 13%, from 10.2% to 11.5%, making prompt action important
- Uncertainty around future funding sources is clouding investment decisions

Assessment Increasing

Source: FCC

Contributions down
Distributions up

Source: FCC

-6.7% compound annual growth rate
Attributes of Contribution Reform

- Broadest possible funding base to achieve relatively low assessment rate on each consumer
- Minimize incentives for bypass or noncompliance
- Unequal obligation among similar services using different technologies could affect consumer choice
- Suficiency, stability, and predictability over time
- Better environment for network investment decisions
- Relatively technology and market resilient
- Providers that benefit from use of the network should be obligated to contribute to the support of the network

High Cost Fund Elements

HCF growth from ILEC access replacement and CETCs

<table>
<thead>
<tr>
<th>Year</th>
<th>ILEC</th>
<th>CETC</th>
<th>Incremental HCF Funding ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1998</td>
<td>1,723.1</td>
<td>0</td>
<td>1,723.1</td>
</tr>
<tr>
<td>2000</td>
<td>2,119.8</td>
<td>0</td>
<td>2,119.8</td>
</tr>
<tr>
<td>2002</td>
<td>3,021.2</td>
<td>0</td>
<td>3,021.2</td>
</tr>
<tr>
<td>2004</td>
<td>5,288.7</td>
<td>0</td>
<td>5,288.7</td>
</tr>
</tbody>
</table>

Source: USAC projections by Balhoff & Rowe and are based on USAC’s 2Q05 estimates for full year.

Key Implications of Current Approach to Designating & Funding CETCs

- Current fund growth associated with the rapid increase in wireless CETC funding
  - So far, the largest CMRS carriers (e.g., Verizon, Cingular) have largely refrained from seeking CETC status
  - Number of Competitive (mainly mobile wireless) ETCs increasing, with presence in more study areas
  - Under “identical support rule” they also receive access-replacement support, although they didn’t receive access replacement
  - Confusion over universal service purposes – promote rural service, promote competition, or both?
Greater CETC Discipline is Required

- Problem
  - CETCs are driving current fund growth
  - Unfocused policy goals in CETC regime
  - Absence of discipline and accountability
- Solutions
  - Clearly stated policy goals & targeted mechanisms
  - Adopt mandatory minimum national criteria for CETCs
    - CETC COLR requirements to receive USF
  - USF for ETCs based on their own costs
  - Address deficiencies in the guidelines, including not requiring compliance at the time the funds are received
  - Pursue appropriate tests/analyses, for national application, providing a “bright-line” for designating ETCs

Emerging State Roles

Federalism and Regulatory Reform

Regulatory choices

- What is the form of regulation?
- What is the governmental level of regulation?
- What is the substance of regulation?
- What is the direction of regulation, as markets change?

Ex: What don’t we need to do?

Federalism

- NARUC Resolution and White Paper, July 2005
  - Technological neutrality
  - Focus on core competencies
  - Allocate responsibilities concerning
    - Consumer Protection
    - Competition
    - Distribution/wholesale issues
  - Appellate relationships
  - Allocation of relationships among states
- Available at http://www.naruc.org/displaycommon.cfm?an=1&subarticlenbr=432

- Progress and Freedom Foundation “Digital Age Communications Act”
  - Integrated Regime – abolish Section 2(b) reservation to states
  - Retail rates – limited, especially as to new services
  - Competition
  - Consumer protection
  - Localities
    - Rights vs. Way
    - Video franchising
    - Broadband
    - Taxation
  - Available at http://www.pff.org/daca
Five buckets of policy?

<table>
<thead>
<tr>
<th>Function</th>
<th>Needed or not?</th>
<th>Who does it and how?</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;Bugsy sent me&quot; (Enforcement)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&quot;Can’t we all get along&quot; (Mediation and facilitation)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Information</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consumer protection</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Infrastructure support</td>
<td>(e.g. 254, 706)</td>
<td></td>
</tr>
</tbody>
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Which functions are needed? How are they best performed? By whom? Do some potentially conflict? (e.g., enforcement and facilitation)

State roles

- Regional approaches.
  - Minimize inconsistent requirements.
  - Better harmonize with market scope.
  - More efficient for regulators and market participants.
- Regional Oversight Committee for Qwest
  - Qwest: QPAP Audit – Liberty Consulting.
  - Thanksgiving on 13 state Section 271 collaboratives.
  - Wholesale.
- Implementation and monitoring of wholesale regimes.
- Sharply diminished.
- Phantom traffic – under-billed as well as unbilled.
- State rulemakings and enforcement.
- Coordination within NARUC.
- "Facilitation" of facilities deployment and access.
- Progress and Freedom Foundation suggests new role reviewing cost allocations for municipal broadband projects.

State roles

- Retail.
  - Lead implementation of "market-appropriate" rate and service regulation.
  - Numerous states moved ahead on reduced retail regulation, while no outcomes yet in Congress.
  - NY PSC Competition III proceeding recommends reduced regulation of Verizon and Frontier, finds significant competition at least in more urban areas.
  - Need to consider regulatory costs to small companies as well
  - Commission activity in Colorado, California, and Oklahoma.
  - Will the regulatory "hammer stay in the closet"?
- Intercarrier compensation.
  - Largest portion of ICC is intrastate.
  - NARUC convened ICC Forum.
  - Direct exchange among stakeholders.
  - Developed better understanding of numbers, issues, and positions.
  - Participants’ positions evolved.
  - States participate in shaping federal policy
    - ICC priorities
    - "Steel man" proposal

Universal Service

- ETC Certification
  - Opposite of "public choice" expectations – some states tougher than FCC, not treating as "free money."
  - FCC rules advisory to states.
    - Continued CETC support indicates more direction required from FCC.
    - NARUC ETC workgroup
  - ETC rulemakings - Montana and Missouri
  - States participate in shaping federal policy
    - Joint Board
    - "10th Circuit
    - State block grants
    - A breathtakingly bad idea whose time has gone
    - Inefficient and unpredictable
    - Prefer rules-based to adjudicated allocation
    - May constitute impermissible sub-delegation
    - "Punts" tough issues that need to be resolved

State high cost and ICC funds

- By 2002 about half states had or were implementing USF.
- More states required wireless contribution than did not
- Most states supported through a percentage surcharge on intrastate, some assessed all, some used line charges
- Most had third party administrator
- Most had some version of federal ETC regime
- Increasing number have some broadband component
- Access reform an increasing concern
- Nebraska activity especially detailed
- New Mexico most recent to adopt legislation
- Texas conducting study of current program

State funds – common issues

- Legal authority
- Covered services
- Eligibility
- Post-designation review (e.g. annual certification)
- Earnings test or "make whole" all revenues
- Contribution sources
- Fund administration
- Role of PSC or other public entities
About Balhoff & Rowe

Balhoff & Rowe, LLC, is a specialized professional services firm focused on providing financial-regulatory advice. The principals have more than 40 years of experience in advising investors and regulators on complex investment issues. They have provided services to a wide range of communications companies, including incumbents, competitive carriers, wireless operators, and cable operators. Additionally, the firm has expertise in energy and other utility services. The services of Balhoff & Rowe include research, think-tank projects, professional facilitation, advocacy efforts, financial and restructuring advice for various companies, carriers, and policymakers. The company offers unparalleled combinations of expertise, strategic insight, and access in a rapidly changing environment.

Michael J. Balhoff, CFA, Managing Partner
Michael J. Balhoff, CFA, is managing partner at Balhoff & Rowe, LLC. Previously, Mr. Balhoff headed for 16 years the Telecommunications Equity Research Group at Legg Mason, which served thousands of clients in nearly 100 countries. He taught at both the graduate and undergraduate levels and has been named on six occasions as a Wall Street Journal All-Star Analyst for his telecommunications recommendations. His coverage of the sector has been named by Institutional Investor as the top telecommunications boutique in the country in 2003. He has also testified multiple times before congressional committees, is regularly a featured speaker at conferences for investors and policymakers, and is widely quoted in the media, including television, newspapers, as well as communications and business journals.

Robert C. Rowe, Esq., Senior Partner
Robert C. Rowe, Esq., is a senior partner at Balhoff & Rowe, LLC. Previously, Mr. Rowe served for 10 years as the Chairman of the Montana Public Service Commission, which has jurisdiction over electricity, natural gas, water, and video service. He is also the current chairman of the executive committee of the National Association of Regulatory Utility Commissioners (NARUC). He has also served on the board of directors of the Fiber to the Home Initiative, a national expert group that has written a national policy guide for communities interested in broadband deployment. He is also a seminar leader and speaker for Barron’s on Advanced Technologies and the Telecommunications Industry.

Bradley P. Williams, Esq., Principal
Bradley P. Williams joined Balhoff & Rowe in 2005. Previously, Mr. Williams was a member of the Strategic Planning & Business Development Group at Lowe’s Companies Inc., the Fortune 50 home improvement retailer. Prior to joining Lowe’s, Brad worked with Mr. Balhoff in the award-winning Telecommunications Equity Research Group at Legg Mason, focusing on incumbent and rural local exchange carriers. Previously, Mr. Williams was a co-founder of eSprocket / Beachfire, a venture-backed company that evolved into one of the pioneers in mediation technology solutions for the financial services sector. Previously, he served as a financial executive for Iron Road Railways Incorporated, a Washington, D.C.-based holding company that integrated, through acquisitions, into a significant regional freight rail network serving the northeastern United States. Brad began his career as an investment banker in First Union’s Capital Markets Group. He has a B.A. in Economics from the University of North Carolina and a J.D. from the University of North Carolina School of Law.

Concluding Advice

“from the experts”

“An amazing invention - but who would ever want to use one?”
- Rutherford B. Hayes (on the telephone)

“Telephone, n. An invention of the devil which abrogates some of the advantages of making a disagreeable person keep his distance.”
- Ambrose Bierce

“Our Age of Anxiety is, in great part, the result of trying to do today’s jobs with yesterday’s tools.”
- Marshall McLuhan