

The Quality of Regulation in the Telecommunications Sector: Three Questions

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I. Is competition analysis keeping pace with technological and market change?

Example: Dr. Ed Rosenberg of NRRI is studying the problem of how to account for entry by broadband and wireless providers, in the measurement of the competitiveness of local telephone service. He writes:

"Until recently, most state analyses of competitive conditions in local telephone markets considered the impact of competition only from other wireline providers, whether facilities-based, via resale, or via UNEs. For example, as of 2003, fewer than half the states that had done a competitive analysis considered the effect of wireless or cable-based service, and only six states had considered IP telephony or VoIP in their analysis."

"In the past few years, however, several states' competitive analyses have acknowledged the increasing importance of wireless and broadband competition. The following discussion presents excerpts from a few recent state studies. States are keenly aware of the increasing competitiveness of wireless and broadband services, and they are also aware of both the difficulties encountered in including wireless and broadband and the potential problems resulting from excluding them in their analyses."

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"The Florida Public Service Commission's (FPSC) 2006 Report on the Status of Competition in the Telecommunications Industry took considerable notice of intermodal competition from wireless and broadband providers. The report notes "the increasing acceptance of intermodal competitors, especially wireless and Voice over Internet Protocol (VoIP) service providers, as adequate substitutes for wireline telecommunications service by the consuming public." The FPSC also noted that, because wireless, VoIP, and broadband services are not subject to its jurisdiction, its ability to gather data on these services is limited."

"The Iowa Utilities Board's (IUB) Second Statewide Telecommunications Competition Survey for Retail Local Voice Services in Iowa presents the results of an exchange-level study. The IUB notes wireless substitution, increasing rollout of cable telephony, growth of VoIP, and BPL in experimental stages. However, the IUB notes that growth of wireless service does not necessarily lead directly to substitution of wireless for wireline service, because "[f]or a rural state like Iowa, the substitution of wireless for wireline may be less than national studies suggest. This is because quality of wireless reception could be lower in rural areas where, presumably, there are fewer cell towers." The IUB also noted the difficulty in gathering information regarding the extent of VoIP penetration and noted specific problems including the fact that "there have been no blocks of numbers directly assigned to any VoIP provider."

"It is important that analysts consider the extent to which wireless and broadband services are available, used, and viewed by customers as reasonable substitutes for traditional wireline service. However, explicitly including wireline and broadband in competitive analyses results in its own set of problems, including difficulties in gathering information on wireless and broadband penetration in a state or within smaller market areas and in determining the extent to which wireless and broadband services are substitutable for traditional wireline service. Nevertheless, failure to include wireless and broadband services will bias competitive analyses towards concluding that incumbent wireline providers have more market power than they actually do. This could result in inappropriate regulatory and policy decisions."

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Dr. Rosenberg thus poses a difficult question: Can we preside over industry transitions, where market access follows technological development, when regulators lack the information necessary to monitor progress? Is the answer to "believe in markets"? Or is the answer to "believe in facts"?

II. Is the relationship between federal and state regulation keeping pace with technological and market changes?

A. The key questions

As phrased by Ohio University Professor Phyllis Bernt, the key questions are:

"What provisions are necessary to ensure the quality of regulation, both state and federal? That is, what authority do state and federal regulators need to ensure the ability to ensure workably competitive markets and to protect consumers when markets are insufficiently competitive?"

Dr. Bernt writes:

"In examining the basis for the states' regulatory role in this new telecommunications environment, the NARUC [National Association of Regulatory Utility Commissioners] report on Federalism and Telecom calls for a move away from "end-point jurisdiction" toward a "functional-focus" model in which state authority is based on the states' superior ability to exercise specific regulatory functions. The NARUC report points to areas in which states excel - such as providing consumer protection, assessing market power, setting just and reasonable rates, and providing arbitration and adjudication."

"The NARUC report suggests a new model upon which to base state authority. If state commissions are to remain relevant in the face of new technologies and policies, it is important to explore the soundness of that model and others. In this era of convergence, it is important for state commissions to consider a variety of questions:"

1. "Is the functional-focus model a workable replacement for end-point jurisdiction?"
2. "Are there other approaches that can define a viable role for the states?"
3. "What regulatory changes would be required to facilitate the shift from platform-specific regulation into a technology-neutral approach?"
4. "What should the relationship among regulatory bodies (FCC, state commissions, local franchise authorities, etc.) be under this new regulatory framework?"

B. What are our choices for federal-state regulatory relationships? There are at least four generic types:

1. Federal role is exclusive and preemptive of the states.
2. State role is exclusive, with no federal role.
3. Federal and state roles are --
 - a. concurrent and conflicting.
 - b. concurrent and cooperative.
 - c. concurrent and noncommunicative.

Meshing these options with the concept of "who does what best," in a context driven as much by politics as facts and logic, will be a challenge no less than that of updating competition analysis.

III. How well are regulators managing the mix of regulatory theory with practical politics?

In simpler days, the practice of economic regulation was straightforward: On the premise that a product or service, essential to the public, was a natural monopoly, (a) appoint a single company to provide the service, and (b) create a regulatory infrastructure to ensure that this monopolist provided service at a price and quality comparable to what vigorous competition would induce.

In the telecommunications sector, those days disappeared at least a generation ago. Telecommunications regulation now is at least as much "communications" policy as it is economic regulation. Regulators now focus not only on market power, but on markets, in all respects. They stimulate technology, they stimulate consumer demand, they further the national goal of competitiveness globally. They even address themes core to democracy itself, such as universal service, services to schools and libraries, efforts to tie rural America to urban America.

The presence of so many non-economic themes introduces non-economic pressures -- political pressures. Regulators who thought their field consisted of applying the principles of economics to monopoly transactions now find themselves balancing pressures brought by multiple interest groups and multiple national objectives, many of them in mutual tension. I'll focus on two examples: service quality, and homeland security.

A. Service Quality

Dr. Lilia Perez-Chavolla of NRRI has written:

"With rate regulation of local exchange carriers (LECs) by state commissions diminishing, the role of the state commissions is increasingly focusing on monitoring service quality (SQ) and ensuring that consumers have adequate information about their rights and obligations with respect to the different telecommunication services. Moreover, the shift from rate of return regulation of local exchange carriers to alternative forms of regulation brought to the forefront the need for state regulatory commissions to monitor any changes in service quality that may be related to cost saving strategies on the part of the carriers."

"Enforcement capabilities also vary across commissions due in most cases to a limited staff. Enforcement is also affected by the capability of the commission to impose effective penalties. In some cases, the size of the penalties imposed is so small that it fails to create a behavioral constraint on carriers. A few commissions have begun publishing LECs service quality reports on their websites to inform consumers of the performance provided by their carriers. The accessibility and type of information provided to consumers vary from state to state. Some states have expressed an interest in improving the quality of information provided in this area."

Dr. Perez then lists the following issues for investigation:

1. Relationship of carrier performance, service quality standards, and effective penalties.
2. Definition of core service quality standards to monitor across technologies.
3. Limitations faced by commissions in monitoring and enforcing SQ standards for LECs and wireless.
4. State role in the SQ provision of VoIP.
5. Service quality provision and competition: Are market forces sufficient to ensure compliance?
6. Value of regional cooperation in setting and monitoring SQ standards for RBOCs, including consumer perception surveys

7. Assessment of the quality and extent of SQ information provided to consumers through different mechanisms, including PUC website, and recommendations of potential improvements.

B. Homeland Security

How should telecommunications regulation deal with homeland security concerns? Ohio University's Professor Andrew Snow has written:

"There is natural tension between the needs of homeland security officials (state and federal) in lowering vulnerability through secrecy, and regulators (state and federal) who might seek to decrease vulnerability through competitive market forces and state laws/public rule making."

"State regulators and legislators must decide what role they need to play in telecommunications infrastructure protection. Dependence on federal government initiatives may not provide information to perform meaningful oversight."

"Outage data is the bellwether of infrastructure vulnerability. Currently, the only public source of outages in the PSTN is local switch outages from the FCC Automated Reporting Management Information System (ARMIS) database. State regulators need to decide what reporting requirements are necessary, if they wish to provide oversight. Reporting requirements might relate to the frequency, magnitude, duration, and reporting threshold for outages within the state."

"Technology platform convergence has enabled telephone carriers and cable operators to offer the "triple play" - that is, the provision of voice, video and internet services--over a single infrastructure. In the past, the separate nature of three distinct and mostly separate networks for telephony, internet, and broadcast TV offered protection and resiliency, as it is difficult to disrupt three different infrastructures. Currently, states have some regulatory oversight over traditional telephony carriers for voice. What non-preempted laws and regulations should states adopt to provide adequate oversight of infrastructure protection levels? What federal regulatory authority should states lobby for?"

"Separate service providers such as wireline, wireless, and cable companies may share infrastructure or geography that masks vulnerabilities. What data should states request to ensure that seemingly separate entities do not overlay to create highly concentrated points of vulnerability?"

"To what extent does secrecy regarding vulnerabilities prohibit the adequate oversight by state regulator and legislative bodies? Is there a necessary conflict between the oversight and security? How can this conflict be reduced?"

IV. Conclusions

A. Problems common to each of the three foregoing questions

1. Technology moves faster than government decisionmaking.
2. The sum of all private interests does not equal the public interest.
3. There is constant tension between static efficiency and dynamic efficiency.
4. Regulatory authority often lags regulatory stature.
5. The line between regulatory role and the legislative role is rarely clear, leading to unpredictable intervention by the latter into the former.
6. The line between consumer complaint and market power abuse is not always clear.
7. The role of regulation is not always clear; it can range from protector against monopoly abuse to booster of economic development to investor in public communications.

B. What is the "public interest" that regulation is supposed to serve?

1. Any debate about regulatory policy should begin by defining regulatory purpose. The purpose of regulation is to align private behavior with the public interest. Regulation requires justification. Regulatory justification has two ingredients:
 - a. a definition of the public interest, clearly communicated; and
 - b. for each regulatory action, an explanation of how private behavior, if unregulated, would diverge from the public interest.
2. Without these two ingredients, regulation is unexplained. Unexplained regulation leads to unjustified regulation; unjustified regulation produces opposition to, or avoidance of, regulation.
3. What do we mean by the public interest? The concept is often cited but rarely defined, by practitioners, statutes or courts. I view it as a composite of economic efficiency, social equity and political reality.

- a. Economic efficiency means what it sounds like: seeking biggest bang for the buck.
 - b. Social equity means shaving the hard edges off economic efficiency so that the short term pain is not so high as to distort the long term signals that are the purpose of economic efficiency.
 - c. Political reality means that the regulator, while acting from a core of objectivity, also has to preserve the political credibility of the regulatory process. Political reality does not mean caving to interest group pressures; it does mean acting gradually when necessary to build support for the right actions, rather than taking actions regardless of support.
4. Regulators cannot serve the public interest only by reacting to proposals. Regulators need to --
- a. establish principles,
 - b. gather facts relevant to those principles,
 - c. fashion policy by applying the principles to facts, and finally,
 - d. create a process for evaluation and feedback, allowing them to modify policies to make them work.