Making and Keeping Regulatory Promises

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I. INTRODUCTION

Multiyear regulatory commitments, or their absence, are an important part of the functioning of the telecommunications services and products industries. Most regulators were probably taught by their parents to promise only what they intend to do and to do what they promise. Perhaps these parents did not discuss the economic efficiency of reducing uncertainty for companies and investors by committing to and complying with multiyear plans. Regulators are seldom forced to address the opportunity costs of not making or not complying with multiyear promises in issuing orders, in discussing their agendas with the industries and legislators, or in talking with their parents.

Any significant regulatory change requires regulators to weigh a variety of complex economic and political considerations. While focusing on multiyear plans for regulatory changes, this Article is not intended to belittle the difficulty of deciding on and implementing any significant regulatory change, even on an incremental basis. The point of this Article is that, under some conditions, it is both possible and beneficial for regulators to commit to a well-defined, multiyear sequence of regulatory changes. As

the Organisation for Economic Co-operation and Development ("OECD") observed in 1997:

> Comprehensive reform is based on a complete and transparent package of reforms (aimed at a single policy area, sector or multiple sectors) designed to achieve specific goals on a well-defined timetable. Comprehensive reform does not mean that all changes occur immediately; rather, it is consistent with sequencing strategies and transitional steps as long as they are temporary and steps and timing are clear. There are several advantages to comprehensive reform: benefits appear faster (which means that pro-reform interests are created sooner); affected parties have more warning of the need to adapt; vested interests have less opportunity to block change; and reform enjoys higher political profile and commitment.[1]

This Article examines several examples of how efforts for comprehensive reform fared in real multiyear implementations. It also explores how some piecemeal regulatory changes evolved into efforts for comprehensive reform based on a well-defined sequence.

Although regulators can sometimes choose between short-term and long-term approaches, most telecommunications carriers must operate on the basis of assumptions about long-term industry conditions. Generally, telecommunications carriers make large investments in long-lived assets and face long cycles for product/service development and competitive positioning.

Both regulated and unregulated businesses face uncertainties about factors such as market demand, technology changes, supply costs, and competitors' strategies. For businesses in regulated industries, uncertainty about future regulations can add to difficulties of companies in attracting capital and making investments in infrastructure, products, and services. Business plans are developed with long-term assumptions about a wide range of factors, some of which are heavily influenced by regulators. While regulators require or induce carriers to spend billions of dollars annually on networks and offerings, regulators also often preserve the flexibility of present and future commissioners to shape future regulations, which will determine in substantial part the carriers' returns on these investments. The business uncertainty for carriers resulting from such regulatory flexibility can impose costs on carriers in terms of less productive use of resources and lost opportunities. Costs can be imposed on consumers in terms of higher prices and lower service quality.

1. Organisation for Economic Co-operation and Development, *The OECD Report on Regulatory Reform: Synthesis* at 25 (1997), *at* http://www.oecd.org/pdf/M00007000/M00007872.pdf (last visited Sept. 6, 2002) [hereinafter OECD].

This Article considers the effects of multiyear regulatory promises through analysis of several regulatory actions involving telecommunications carriers in Mexico, Venezuela, Hungary, and the United States. Regulators have made and kept bold multiyear promises under some conditions. This analysis considers the conditions leading to the making of these promises and the decisions to comply with them, often under market and political conditions substantially different from what was expected when the promises were made. While multiyear plans may contain clear adjustment mechanisms for some possible future conditions, major macroeconomic downturns can swamp some of the rate and service commitments by both regulators and carriers. This Article also discusses attempts to make midterm changes to some elements of a multiyear promise; the balance of various interests through one set of regulations can be replaced by another plan which rebalances these interests through a different set of regulations as long as there is a net gain to distribute.

There appear to be substantial efficiency benefits from multiyear regulatory promises compared to ad hoc, piecemeal, short-term regulatory decisions whose timing and important details have large uncertainties for the telecommunications industry. Although conditions may not be conducive to multiyear promises in some areas, clarity in the standards and timing for some future regulatory actions can enhance the efficiency gains.

The remaining analysis of this Article is divided into four Sections: Section II presents the framework for analysis based on several economic perspectives and an overview of piecemeal regulatory decision making. Section III discusses examples of multiyear regulatory promises in four countries. The first part of this Section deals with three examples of the fairly unusual conditions surrounding the privatization of national telecommunications carriers; the second part deals with two areas of sequenced regulatory changes by the United States Federal Communications Commission ("FCC"). Section IV presents two conclusions about making and keeping regulatory promises, regarding procedures and benefits, and analyzes an example of a multiyear promise in the United States with too much uncertainty about timing, carriers' obligations, and regulatory standards. Finally, Section V summarizes the conclusions and recommendations for promoting greater use of multiyear regulatory plans.

II. FRAMEWORK FOR ANALYSIS

Regulatory decisions develop through a complex evaluation of various statutory, political, technological, economic, and other considerations falling within the "public interest." Legislative directions (or

their absence) often give regulators substantial discretion to fashion the scope and timing of their decisions. Many factors drive regulators to adopt decisions explicitly intended to address only a short time period. These factors include: obtaining information on and analyzing the market effects of the short-term rules before implementing rules for later time periods; testing the political waters before committing to multiyear regulations; allowing for judicial review before setting long-term expectations; reflecting the agendas of current commissioners without binding their successors; and developing a more complete record on options and their costs and benefits.

On the other hand, some short-term regulatory decisions can be costly in many ways, including in the productive use of economic resources. Telecommunications carriers and their suppliers run their businesses based on multiyear business plans. Predictable future regulations can help them plan their investments and operations, with benefits to competition, consumers, and investors.

The following framework for analysis of multiyear regulatory plans has two parts—an explanation of several economic perspectives, and a discussion of legal and political considerations in piecemeal regulatory decisions.

A. Economic Perspectives

Economists have focused on many principles and tools to improve the contributions of telecommunications regulations to enhancing consumer welfare and "efficiency."[2] Economists argue, for example, that the concepts

2. *See* WILLIAM J. BAUMOL & J. GREGORY SIDAK, TOWARD COMPETITION IN LOCAL TELEPHONY (1994); EDWIN MANSFIELD, PRINCIPLES OF MICROECONOMICS 240-60 (3rd ed. 1980); BRUCE M. OWEN & STEVEN S. WILDMAN, VIDEO ECONOMICS (1992); J. GREGORY SIDAK & DANIEL F. SPULBER, DEREGULATORY TAKINGS AND THE REGULATORY CONTRACT 522 (1998); R. H. Coase, *The Federal Communications Commission*, 2 J.L. & ECON. 1 (1959); Warren G. Lavey, *Inconsistencies in Applications of Economics at the Federal Communications Commission*, 45 FED. COMM. L.J. 437 (1993); Warren G. Lavey & Dennis W. Carlton, *Economic Goals and Remedies of the AT&T Modified Final Judgment*, 71 GEO. L.J. 1497 (1983); Gregory L. Rosston & Jeffrey S. Steinberg, *Using Market-Based Spectrum Policy to Promote the Public Interest*, 50 FED. COMM. L.J. 87 (1997).

There are a variety of definitions of "efficiency" in the economics and law-and-economics literatures. *See, e.g.*, RICHARD A. POSNER, ECONOMIC ANALYSIS OF LAW 4 (2d ed. 1977). "'Efficiency' means exploiting economic resources in such a way that . . . human satisfaction *as measured by aggregate consumer willingness to pay* for goods and services [] is maximized." *Id.* at 10. 2 THE NEW PALGRAVE DICTIONARY OF ECONOMICS AND THE LAW 19-27 (Peter Newman ed. 1998) (defining "efficient norms" and "efficient statute law"); SIDAK & SPULBER, *supra*, at 522 (describing allocative, productive, and dynamic efficiency: "Dynamic efficiency refers to decisions made over time and includes efficiencies in investment and technological innovation."). *See also* ROBERT H. BORK, THE ANTITRUST PARADOX 91 (1978) ("Productive efficiency refers to the effective use of resources by

of cross-subsidies and predatory pricing should be based on marginal costs rather than fully distributed or embedded costs. Spectrum should be allocated through auctions with flexible uses rather than through comparative hearings based on vague "public interest" criteria and with restricted, government-mandated uses. Moreover, maximum rates should be determined through incentive-based price caps rather than through rate-of-return, cost-based regulation. Economists argue that the application of these and other economic principles have added to the competitiveness, price decreases, and service improvements of telecommunications markets.

Many economists have addressed the importance of information on future market conditions in maximizing the efficiency of business operations.[3] In the world of standard economic theory, perfectly competitive markets occur when all actors have perfect information about current and future conditions affecting supply and demand, or when efficient markets exist for dealing with uncertainties, such as insurance or contingent contracts. The importance of clear information about future conditions, however, is not a principle that economists have emphasized in their writings on regulation.[4] Moreover, while risk arbitrageurs are active on some regulatory issues, such as whether a specific proposed merger will be approved by regulators, there are no organized markets to hedge, insure against, or trade contingent contracts for most regulatory uncertainties.

The principal concern of this Article is that telecommunications carriers make less productive decisions on uses of resources because of uncertainties about future regulation. Professor Michael Porter's analysis of competitive strategies for businesses under uncertainty describes the

particular firms. The idea of effective use . . . encompasses much more than mere technical or plant-level efficiency." (distinguishing between "productive efficiency" and "allocative efficiency")).

> Productive efficiency is any activity by a business firm that creates wealth. . . . Economies of scale, specialization of function, ability to obtain capital, management skill—all of these and many more are elements that contribute to the firm's ability to please consumers, but they are causes rather than manifestations of efficiency. Efficiency is at bottom a value concept, not a description of mechanical or engineering operation.

Id. at 104-05.

3. *See* KENNETH J. ARROW & F.H. HAHN, GENERAL COMPETITIVE ANALYSIS 125-26 (1971); J.P. GOULD & C.E. FERGUSON, MICROECONOMIC THEORY 22, 479-82 (5th ed. 1980); SIDAK & SPULBER, *supra* note 2, at 436-38, 462; A. MICHAEL SPENCE, MARKET SIGNALING: INFORMATION TRANSFER IN HIRING AND RELATED SCREENING PROCESSES (1974); George J. Stigler, *The Economics of Information*, 69 J. POL. ECON. 213 (1961); Joseph E. Stiglitz, *The Contributions of the Economics of Information to Twentieth Century Economics*, 115 Q.J. ECON. 1441 (2000).

4. *See generally* STEPHEN BREYER, REGULATION AND ITS REFORM (1982); STEPHEN J. BROWN & DAVID S. SIBLEY, THE THEORY OF PUBLIC UTILITY PRICING (1986); ALFRED E. KAHN, THE ECONOMICS OF REGULATION (1988).

framework for this concern, without specifically addressing a long-term approach to regulatory decision making:

> Uncertainty is not often addressed very well in competitive strategy formation . . . . *When facing considerable uncertainty, firms tend to select strategies that preserve flexibility, despite the costs in terms of required resources or diminished competitive position.* . . . Industry scenarios allow a firm to translate uncertainty into its strategic implications for a particular industry. . . . The important uncertainties are those that will influence industry structure, such as technological breakthroughs, entry of new competitors, and interest rate fluctuations. External factors such as macroeconomic conditions and government policy affect competition through, and not independently of, industry structure. Structural change almost always requires adjustments in strategy and creates the greatest opportunities for competitors to shift their relative positions. . . . Early information about the future state of scenario variables has a high strategic value.[5]

Porter's analysis points to the various types of costs of industry uncertainty. According to Porter, when facing plausible scenarios with different strategic implications, companies can: bet on the most probable scenario; bet on the most advantageous scenario; hedge through a strategy that produces satisfactory results under all scenarios (usually implying higher costs or lower revenues than a betting strategy); preserve flexibility by delaying commitments (often sacrificing first-mover advantages); or use resources to influence the causal factors behind the scenario variables.[6] Uncertainty about industry conditions has negative implications for capacity utilization, planning and implementing investments, changing operations, developing product/service offerings, making procurement decisions, and other issues in productive use of company resources and competitive positioning.[7]

The business strategy of preserving flexibility by delaying commitments in the face of regulatory uncertainties is illustrated by the following recent statement about a large carrier's delays in deploying broadband services in the United States:

> The biggest thing we're seeing is that every vendor is asking us every day what the regulatory environment is going to be so they can start designing hardware. We can't go to our board of directors and make long-term investment decisions when we can't guarantee that we even have a chance to recover our cost of capital in the current regulatory

5. MICHAEL E. PORTER, COMPETITIVE ADVANTAGE 446-448, 478 (1985) (emphasis added).

6. *Id.* at 473-75.

7. *Id.* at 476-77.

> environment. And, at the same time, we're overwhelmed with demands from our consumers to get broadband.[8]

Along the same lines, in 1998, economists Janusz Ordover and Robert Willig observed: "[f]orced unbundling with its attendant regulatory uncertainty would likely slow down the investment in the development of broadband last mile data transport. Investing under the shadow of uncertain regulatory rules in an *innovative* service exacerbates the already substantial risks associated with that investment." [9] Similarly, although many U.S. regulators claim to support faster broadband deployment by carriers,[10] uncertainty about the details of future regulations can cause carriers and their suppliers to delay investment and service commitments.

Applying "real option theory" analysis from the corporate-finance literature, Martin Taschdjian comes to the same conclusion as Porter on the business strategy of preserving flexibility by delaying long-term investment commitments in the face of regulatory uncertainties.[11] Taschdjian assumes that, even if policymakers fail to recognize the effects of uncertainty about regulatory changes, the market does recognize regulatory uncertainty in

8. *With Fiber on the Horizon, SBC Seeks New Approach to Policy*, TELECOMM. RPT. Feb. 11, 2002, at W-1, W-3 (interview with Wayne Masters, Senior V.P., Network Svcs., SBC Comm., Inc.). *See also Internet Freedom and Broadband Deployment Act of 2001: Hearing on H.R. 1542 Before the House Comm. on Energy and Commerce*, 107th Cong. 51 (2001) [hereinafter *Internet Hearing*] (prepared statement of James H. Henry, Managing Gen. Partner, Greenfield Hill Capital LLP. "I have had a number of conversations with institutional investors, including private equity investors, public equity investors, and high yield investors, that have cited regulatory uncertainty as one of the principal reasons for avoiding the telecommunications sector in general and [competitive local exchange carriers] in particular."); OECD, *supra* note 1, at 25 ("[P]rivate investors are usually reluctant to enter the market when reform is unpredictable and there are risks of reversals and delays.").

9. Joint Application of AT&T Corp. and Tele-communications, Inc. for Transfer of Control to AT&T Licenses and Authorizations Held by TCI and Its Affiliates or Subsidiaries, AT&T's and TCI's Joint Reply to Comments and Joint Opposition to Petitions to Deny or to Impose Conditions, CS Docket No. 98-178, app. B, at 20-21 (filed Nov. 13, 1998) (declaration of Janusz Ordover and Robert Willig); *see also* Warren G. Lavey, *Innovative Telecommunications Services and the Benefit of the Doubt*, 27 CAL. W. L. REV. 51 (1990).

10. *See* Appropriate Framework for Broadband Access to the Internet Over Wireline Facilities, *Notice of Proposed Rulemaking*, 17 F.C.C.R. 3019, 3066-74 (2002) (separate statements of Chairman Michael Powell and Commissioners Kathleen Abernathy, Michael Copps, and Kevin Martin).

11. Martin Taschdjian, *From Open Networks to Open Markets: How Public Policy Affects Infrastructure Investment Decisions*, Program on Information Resources Policy, Harv. Univ. (Nov. 2000) 26-33, *available at* http://www.pirp.harvard.edu/publications/#2000 (last visited Sept. 6, 2002) [hereinafter Taschdjian]; *see generally* RICHARD A. BREALEY & STEWART C. MYERS, PRINCIPLES OF CORPORATE FINANCE 619-39 (6th ed. 2000) (discussing real option theory, effects of uncertainty on the value of real options, and analysis of deferring investments).

determining financial value and making investment decisions.[12] He analyzes a hypothetical decision on investing in a local telephone network under real option theory and concludes:

> If the public policy goal is to maximize the flow of investment into new networks and technology, the policy framework suggested by real option theory is very clear. In order to minimize the policy barriers to new investment, policymakers need to create a stable regulatory environment, removing policy as much as possible as a source of uncertainty. In this context, stability does not mean that policy never changes. Rather, it implies that the conditions that will cause intervention are announced in advance, so that investors understand and can consider the policy impacts on their decisions.[13]

Another analytic perspective on multiyear regulatory promises comes from the law-and-economics literature on contracts.[14] Under general contract law, legally enforceable promises allow one party to induce actions by the other party that would not be undertaken in response to an unenforceable statement of intent. Regulators may be able to induce industry actions which are attractive to the regulators by creating a binding obligation for future regulators to conform to an announced sequence of regulatory changes. Such industry actions would not be undertaken at all or as promptly in the context of piecemeal regulatory decisions or a mere statement of regulatory goals and agenda. According to this analysis, the effectiveness of regulatory decision-making suffers in some instances from the inability of regulators to create commitments which bind their agencies in the future.[15]

Finally, work by Douglass North and others in a field North called the "new institutional economics" analyzes the way that political and economic institutions affect the performance of private parties and economies over time.[16] Applying this framework to telecommunications regulatory policies

12. Taschdjian, *supra* note 11, at 30.

13. *Id*. at 33.

14. *See generally* POSNER, *supra* note 2, at 65-98; Richard A. Posner, *Gratuitous Promises in Economics and Law*, 6 J. LEGAL STUD. 411 (1977); Richard Craswell, *Two Economic Theories of Enforcing Promises*, *in* THE THEORY OF CONTRACT LAW: NEW ESSAYS 19-44 (Peter Benson ed., 2001); Louis Kaplow, *An Economic Analysis of Legal Transitions*, 99 HARV. L. REV. 509 (1986); RICHARD A. EPSTEIN, TAKINGS: PRIVATE PROPERTY AND THE POWER OF EMINENT DOMAIN (1985); Daniel R. Fischel & Alan O. Sykes, *Governmental Liability for Breach of Contract* 1 AM. L. & ECON. REV. 313 (1999) Abraham L. Wickelgren, *Damages for Breach of Contract: Should the Government Get Special Treatment?*, 17 J.L. ECON. & ORG. 121 (2001).

15. *E.g.*, William M. Landes & Richard A. Posner, *The Independent Judiciary in an Interest-Group Perspective*, 18 J.L. & ECON. 875 (1975).

16. DOUGLASS C. NORTH, INSTITUTIONS, INSTITUTIONAL CHANGE AND ECONOMIC PERFORMANCE (1990); BRIAN LEVY & PABLO T. SPILLER, REGULATIONS, INSTITUTIONS, AND COMMITMENT: COMPARATIVE STUDIES OF TELECOMMUNICATIONS (1996); Barbara A. Cherry,

in five countries, Brian Levy and Pablo Spiller studied how a country's political and social institutions shaped the credibility and effectiveness of a regulatory framework, particularly mechanisms for securing commitments. Levy and Spiller considered the effects of regulatory governance and a nation's other governmental institutions (legislative, executive, and judicial) on the ability of regulatory incentives to encourage private investment and support efficiency in the production and use of services. They concluded:

> Performance can be satisfactory under a wide range of regulatory procedures, so long as three complementary mechanisms are in place to restrain arbitrary administrative action: substantive restraints on discretionary actions by the regulator, formal or informal restraints on changing the regulatory system, and institutions to enforce the restraints.[17]

While Levy and Spiller found that a system granting a high level of administrative discretion may not be able to generate the expected levels of investment and welfare, a regulatory regime allowing little flexibility "though it looks very inefficient, might still provide adequate incentives for investment if it fits the country's institutional endowment."[18]

For industries with large investments in long-lived assets and long cycles for product and service development, regulatory uncertainty or churn has substantial costs. One type of cost is in terms of business planning and operations.[19] Consumers are harmed because businesses are

The Irony of Telecommunications Deregulation: Assessing the Role Reversal in U.S. and EU Policy, *in* THE INTERNET UPHEAVAL: RAISING QUESTIONS, SEEKING ANSWERS IN COMMUNICATIONS POLICY 355 (Ingo Vogelsang & Benjamin Compaine eds., 2000); INTERNATIONAL TELECOMMUNICATION UNION, EFFECTIVE REGULATION CASE STUDY: BRAZIL (2001); Barbara A. Cherry & Steve S. Wildman, *Institutional Endowment as Foundation for Regulatory Performance and Regime Transitions*: *The Role of the U.S. Constitution in Telecommunications Regulation in the United States*, 23 TELECOMM. POL'Y 607 (1999) (analyzing constitutional limits on regulatory discretion).

17. LEVY & SPILLER, *supra* note 16, at 1.

18. *Id*. at 2.

19. FCC Chairman Michael Powell recently recognized the benefits of reducing uncertainties in the forms of delays in reaching decisions and judicial reversals (but without addressing the benefits of providing a multiyear regulatory framework):

> [W]e have committed ourselves to *driving out uncertainty, by getting out decisions*. There is no greater threat to an entrepreneur, or any business, than uncertainty. A key government decision that hangs in suspended animation will kill the best-laid business plan. Competitors are risk takers and are incredibly agile in their ability to adapt to change, but they must know what to adapt to.
>
> I cannot promise that you will always like our decisions. I cannot make that promise to any industry, for we are charged with reaching decisions that are faithful to the statute, and that promote the public interest, not any one private interest. I can promise, however, that we will strive aggressively to get decisions out rapidly—decisions that are clear and sufficiently well-reasoned to withstand

handicapped in raising capital and are reluctant to develop services, add capacity, or enter new markets under conditions when regulators substantially change rules several times within a few months or years. Another type of cost is the limited ability of regulators to cause market changes through regulatory changes. When regulators make a determination, compliance requires businesses to make planning and operations decisions in light of uncertainties about how that ruling will evolve over many years. As regulators pursue new policies to promote the public interest, they attempt to steer providers of telecommunications services and products in different directions. The power of regulators to effectuate market changes is restricted by their limited influence over buyers from and suppliers to regulated carriers.[20] Moreover, the regulators' ability to cause these market changes usually is handicapped by their failure to lay out a predictable multiyear regulatory environment, as well as their precedent of revising or not enforcing many orders. For example, regulators are more likely to be frustrated by slow growth of investments by local telephone competitors when there is an overhang of uncertainty about interconnection terms and rates. The OECD concluded that "some reforms are nearly impossible to introduce in gradually without careful and transparent advance planning."[21]

B. Piecemeal Regulatory Decisions

Regulators tend to make decisions on rates, services, and other aspects of a telecommunications market one step at a time, based on the record that is developed for a single time in a narrowly focused proceeding. According to the OECD, piecemeal regulatory decisions tend to be unplanned and tend to address easy reforms first, even if more difficult reforms would have the most benefits.[22]

There is a reluctance to make decisions for steps to be implemented within one or more years after adoption of the decision. While agencies can reconsider and reverse their prior orders, decisions with multiyear implementations limit, at least somewhat, the regulators' discretion to

judicial scrutiny, for a decision made quickly that is overturned is of no use at all. We must avoid do-overs.

Michael K. Powell, Chairman, FCC, Remarks at the Ass'n for Local Telecomm. Servs. 2 (Nov. 30, 2001), *at* http://www.fcc.gov/Speeches/Powell/2001/spmkp111.pdf [hereinafter Powell].

20. *See* Michael K. Powell, Remarks at the Goldman Sachs Communacopia XI Conference at 3-4 (Oct. 2, 2002), *at* http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-226929A1.pdf.

21. OECD, *supra* note 1, at 25.

22. *Id.*

adjust their rules over time according to changing political and market conditions.[23]

Additionally, any steps which are to be implemented in the future are more likely to be overturned by the courts for lack of a reasoned decision based on record evidence. Even single-step decisions do not give the telecommunications service and equipment industries short-term regulatory certainty because of frequent changes in decisions through reconsideration of orders by the regulators and/or judicial review, as well as regulatory discretion in interpreting and enforcing their decisions.

Legislators may encourage regulators to take an incremental approach. Legislators rely on regulators' expertise to fill in details in statutory schemes, address fact-specific issues, and respond promptly to specific needs. On the other hand, legislators may be opposed to a commission's commitment to a well-defined sequence of regulatory changes or a long-term regulatory plan that may be viewed as invading the legislators' domain.

Most decisions by U.S. telecommunications regulators address a fairly narrow range of issues and time periods.[24] While there are often good reasons underlying the choice of a narrow scope and short-term duration for a regulatory decision, there may also be substantial costs in terms of the productive use of economic resources by carriers (such as the ability of companies to plan and implement their investments, run effective levels of capacity utilization, and develop and offer new services).

As examples, the FCC has been trying to increase the efficiency of spectrum uses;[25] however, efficiency is sacrificed by its separate auctions of

23. "We have recognized that the Commission is 'entitled to reconsider and revise its views as to the public interest and the means to protect that interest,' so long as it gives a reasoned explanation for the revision." MCI WorldCom Network Servs. v. FCC, 274 F.3d 542, 548 (D.C. Cir. 2001) (quoting DirecTV, Inc. v. FCC, 110 F.3d 816, 826 (D.C. Cir. 1997)). *See also* Motor Vehicle Mfrs. Ass'n v. State Farm Mut. Auto. Ins. Co., 463 U.S. 29, 56 (1983) ("While the agency is entitled to change its views on the acceptability of [a prior policy], it is obligated to explain its reasons for doing so.") (alteration in original). *See generally* United States v. Winstar Corp., 518 U.S. 839 (1996) (finding that the federal government breached its contractual obligations to certain savings and loan companies through subsequent legislation where the contractual obligations were formed by regulatory decisions); Chevron U.S.A. v. Natural Res. Def. Council, Inc., 467 U.S. 837, 843-45 (1984) (stating expert regulatory agency is entitled to deference by reviewing courts).

24. United States telecommunications regulatory decisions are used as illustrations here. The approach discussed is not confined to any one country or agency.

25. *See* Michael K. Powell, Chairman, FCC, Remarks at FCC Press Conference 7 (Oct. 23, 2001), *at* http://fcc.gov/speeches/powell/2001/spmkp109.html ("It is important that the Commission move from its traditional spectrum management paradigm of 'command and

limited blocks of frequencies without a firm, publicly announced schedule for additional spectrum auctions.[26] Efficiency is also forfeited in the FCC's decisions to allow more flexible uses of limited blocks of frequencies without addressing future actions for other frequencies.[27] Similarly, the FCC issues individual orders from time to time requiring telecommunications carriers to repeatedly modify their networks, so as to allow automatic location identification,[28] electronic surveillance,[29] collocation,[30] line sharing,[31] number portability,[32] and interconnection with

control' to a paradigm of market-oriented allocation policy to provide more flexible allocations that allow multiple uses so that spectrum can be put to its highest and best use.").

26. *See, e.g.*, Amendment of Part 95 of the Comm'n's Rules to Provide Reg. Flexibility in the 218-219 MHz Serv., *Report and Order and Memorandum Opinion and Order*, 15 F.C.C.R. 1497, para. 18, 17 Comm. Reg. (P & F) 222 (1999) [hereinafter *Part 95 Report and Order*].

> All auctions applicants participate in the Commission's auctions process subject to a developing telecommunications market. . . . [W]e conclude that auction winners have no expectation that they will be shielded from potential competitors when the Commission determines that it is in the public interest to allow such potential competition—either through allocations or expansion of existing services . . . .

Id. *See also* Amendment of the Comm'n's Rules to Establish Part 27, the Wireless Comms. Serv., 12 F.C.C.R. 10785, paras. 4-10, 6 Comm. Reg. (P & F) 771 (1997) (auction of the frequencies at 2305-2320 and 2345-2360 MHz).

27. *See Part 95 Report and Order*, *supra* note 26, para. 18 ("We have repeatedly allowed for the provision of additional services in existing licensed services after concluding that it was in the public interest to do so."); *see also* Amendment of Part 2 of the Comm'n's Rules to Allocate Spectrum Below 3 GHz for Mobile and Fixed Servs. to Support the Introduction of New Advanced Wireless Servs., including Third Generation Wireless Sys., *First Report and Order and Memorandum Opinion and Order*, 16 F.C.C.R. 17222, para. 1, 24 Comm. Reg. (P & F) 880 (2001):

> We recognize that consideration of this band for advanced wireless services has created uncertainty about the future of the new broadband fixed services being developed under the current allocation and service rules. Because we believe it is important to remove this uncertainty, we are now separately addressing and resolving the allocation issues involving this band . . . .

Id. Protracted litigation over the interplay between the bankruptcy and communications laws in connection with the FCC's 1996 auction of certain spectrum licenses for personal communications service further illustrates the regulatory-related uncertainties facing some carriers. *See*, *e.g.*, NextWave Personal Comms. Inc. v. FCC, 254 F.3d 130, 133 (D.C. Cir. 2001), *cert. granted*, 122 S. Ct. 1202 (2002); *see also* Requests for Refunds of Down Payments Made in Auction No. 35, *Order*, 17 F.C.C.R. 6283 (2002).

28. *E.g.*, Revision of the Comm'n's Rules to Ensure Compatibility With Enhanced 911 Emerging Calling Sys., *Report and Order and Further Notice of Proposed Rulemaking*, 11 F.C.C.R. 18676, 3 Comm. Reg. (P & F) 967 (1996) [hereinafter *E911 Order*]; Dale Hatfield, A Report on Technical and Operational Issues Impacting the Provision of Wireless Enhanced 911 Services 6-11 (2002), *available at* http://gullfoss2.fcc.gov/prod/ecfs/retrieve.cgi?native_or_pdf=pdf&id_document=6513296239 (hereinafter Hatfield).

29. *E.g.*, The Comms. Assistance for Law Enforcement Act (CALEA), Section 107(c) Extension of Capability Req., *Order*, 16 F.C.C.R. 15210 (2001).

30. *E.g.*, Deployment of Wireline Servs. Offering Advanced Telecomms. Capability and Implementation of the Local Competition Provisions of the Telecomms. Act of 1996,

unbundled network elements.[33] Productive efficiency would rise if carriers could plan and implement interrelated network upgrades of software features, hardware configurations, and switching/transmission capacity reflecting a predictable plan for such regulatory requirements. Another area of inefficient regulatory signals involves local service competition. The FCC has repeatedly changed the rules for compensation to competitive and incumbent local exchange carriers[34] as well as interconnection

Order on Reconsideration and Second Further Notice of Proposed Rulemaking in CC Docket No. 98-147 and Fifth Further Notice of Proposed Rulemaking in CC Docket No. 96-98, 15 F.C.C.R. 17806, 21 Comm. Reg. (P & F) 1026 (2000).

31. *E.g.*, Deployment of Wireline Servs. Offering Advanced Telecomms. Capability and Implementation of the Local Competition Provisions of the Telecomms. Act of 1996, *Third Report and Order in CC Docket No. 98-147*, 14 F.C.C.R. 20912, 18 Comm. Reg. (P & F) 758 (1999).

32. *E.g.*, Tel. Number Portability, *First Report and Order and Further Notice of Proposed Rulemaking*, 11 F.C.C.R. 8352, 3 Comm. Reg. (P & F) 600 (1996); Tel. Number Portability, *Second Report and Order*, 12 F.C.C.R. 12281, 8 Comm. Reg. (P & F) 1377 (1997).

33. *See*, *e.g.*, Performance Measurements and Standards for Unbundled Network Elements and Interconnection, *Notice of Proposed Rulemaking*, 16 F.C.C.R. 20641, at 20643-44 (2001) [hereinafter *Performance Measurements*]:

> Implementation of the [Telecommunications Act of 1996] in these numerous proceedings has yielded benefits to the public in the form of increasing local competition. The sheer variety and number of regulatory requirements, however, has also led to concern about how or whether these rules should operate together at present and in the future. Indeed, at the federal level alone, the Commission's obligations to implement and enforce the Act have relied largely on general, prophylactic regulations, case-by-case adjudication, and, in the context of [§] 271 proceedings, analysis of performance standards on a state-by-state basis. This regulatory patchwork fails to provide industry with consistent and 'bright line' guidance as to whether an incumbent [local exchange carrier] has provided just, reasonable and nondiscriminatory service in any given situation. This makes it harder for the industry to comply with the Act and more costly to both the industry and the Commission to enforce it.

Id. (footnote omitted).

34. *See* Access Charge Reform, *Seventh Report and Order and Further Notice of Proposed Rulemaking*, 16 F.C.C.R. 9923, 23 Comm. Reg. (P & F) 1260 (2001); Developing a Unified Intercarrier Compensation Regime, *Notice of Proposed Rulemaking*, 16 F.C.C.R. 9610 (2001); Implementation of the Local Competition Provisions in the Telecomms. Act of 1996, *Order on Remand and Report and Order*, 16 F.C.C.R. 9151, 23 Comm. Reg. (P & F) 678 (2001); Powell, *supra* note 19, at 4:

> The reciprocal compensation issues remained unresolved at the FCC for several years, having bounced back from court and then remaining unresolved for far too long. The uncertainty of the outcome was draining the life out of many [competitive local exchange carriers], as the capital markets assumed the worst from our impending decision.

Id.

requirements,[35] making it difficult for all carriers to plan investments and services.

While far from comprehensive in addressing a relevant business planning period, even these narrow orders often are far from straightforward. In many cases, a regulator's incremental approach removes only as much uncertainty as the regulator can achieve at that time. The FCC often receives a wide range of opposing comments which conflict on factual and legal issues.[36] Months or years are spent developing proposals, findings, statutory interpretations, policy judgments, and rules while the agency addresses congressional inquiries, concerns, and legislative proposals, and suffers reversals from court reviews. The FCC does not fully control its agenda, but must deal with carriers filing sporadic applications to merge, petitions for waivers of rules, claims for enforcement actions, or other requests for regulatory action. Months or years later, the FCC may identify flaws in the rules it adopted from market experience, by assessing changing market conditions, by developing a new evaluation of options, or after judicial reversal.

Yet there are some circumstances in which regulators in the United States and other countries seek to implement a predictable multiyear regulatory environment in order to expand beyond the efficiencies that would be gained through step-by-step orders. As discussed below, establishing multiyear regulatory promises often promotes efficiency even when the regulator retains the authority to, and does, change the rules during the applicable term.

III. MULTIYEAR REGULATORY PROMISES MADE AND ENFORCED (MORE OR LESS)

This Section considers three sets of examples of multiyear regulatory promises that were made and enforced: (A) privatizing national telephone companies, including promises as to competition, rates, network expansion, and service quality standards; (B) restructuring U.S. interstate access charges and universal service funding; and (C) implementing automatic

35. *See Performance Measurements*, *supra* note 33, para. 3; Powell, *supra* note 19, at 5:

> Another critical proceeding in the area of unbundled elements is the Triennial Review . . . . This proceeding is designed to roll up a number of [unbundled network elements] issues that have been pressed upon us in piecemeal fashion. A comprehensive proceeding will allow us to examine the host of UNE related issues that have been swirling around.

Id.

36. *See, e.g.*, filings in FCC Dkt. No. 01-338, in response to Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers, *Notice of Proposed Rulemaking*, 16 F.C.C.R. 22781 (2001), *at* http://www.fcc.gov/e-file/ecfs.html.

location identification capabilities for U.S. wireless services. This analysis deals with the conditions from which the multiyear promises developed, the terms of the obligations on both the regulators and the carriers, and the record of enforcement and compliance.

A. Privatizing National Telephone Companies

One set of conditions giving rise to multiyear regulatory promises involves the privatization of national telephone companies through sales of equity interests to strategic buyers.[37] Under these conditions, the buyers are asked to pay a large up-front purchase price for the equity interest and, as a result, want to know the multiyear outlook for the company. Regulatory issues are of great importance in valuing the company, including: what services it will be allowed to offer, when it will face competition for various services, what rates it can charge, what service deployment schedules it must satisfy, and what network and service quality improvements it must implement. Prospective buyers want certainty as to these regulatory issues for at least several years, such as a five-year period for the incumbent national carrier to engage in network expansion, service quality improvement, and rate restructuring before the incumbent national carrier faces competition in some services.

Uncertainty lowers the amounts that prospective buyers are willing to bid, thereby working against the interest of the government in maximizing the sale price. Also, uncertainty limits the bidders' willingness to commit to some proposed restrictions and obligations. Rather than committing to aggressively investing in network expansion and upgrades, a bidder facing regulatory uncertainty about rates and competition would likely take a more hedged approach and attempt to preserve its flexibility to invest only where the payoff is most attractive. Moreover, there is usually no history of regulatory decision making or judicial review of regulatory actions in the country at the time of the privatization, and this increases the bidders' desire to have the future regulatory conditions spelled out in detail in a contract enforceable against the government.

37. *See generally* BEN A. PETRAZZINI, THE POLITICAL ECONOMY OF TELECOMMUNICATIONS REFORM IN DEVELOPING COUNTRIES: PRIVATIZATION AND LIBERALIZATION IN COMPARATIVE PERSPECTIVE (1995); William E. Kennard, CONNECTING THE GLOBE: A REGULATOR'S GUIDE TO BUILDING A GLOBAL INFORMATION COMMUNITY (1999), *available at* http://www.fcc.gov/connectglobe/cover.html; Charles Vulylsteke, *Methods and Implementation*, *in* TECHNIQUES OF PRIVATIZATION OF STATE-OWNED ENTERPRISES, at 8-20 (World Bank, Tech. Paper No. 88, 1988); Bjorn Wellenius et al., TELECOMMUNICATIONS: WORLD BANK EXPERIENCE AND STRATEGY 7-10 (World Bank, Discussion Paper No. 192, 1993); LEVY & SPILLER, *supra* note 16.

This Section reviews promises made in the context of privatizing three national telephone companies, presented in chronological order: (1) Teléfonos de México, S.A. de C.V. ("Telmex"); (2) Compañía Anónima Nacional Teléfonos de Venezuela ("CANTV"); and (3) Magyar Távközlési RT. ("MATAV"). Regulators and carriers agreed to detailed long-term plans for radically transforming all aspects of the national telecommunications sector. Aside from showing that detailed, complex multiyear regulatory promises were made by diverse regulators, these three examples also reflect diverse experiences in complying with and enforcing these promises by both regulators and carriers. Although major macroeconomic downturns swamped some of the rate and service commitments by both regulators and carriers, some of the experiences described show that the multiyear plans functioned as part of the ongoing relations between the carrier and regulator, with room for amendments in light of market experience and changing conditions. There appear to be clear efficiency gains from these long-term plans compared to ad hoc, piecemeal, short-term regulatory decisions that leave carriers and other interest groups with large uncertainties about future regulatory rules and actions.

1. Telmex: Good Guidance from the Plan

In August 1990, the Mexican government amended the license agreement or concession of the sole provider of landline public telecommunications services in Mexico in connection with the sale of stock to a strategic investor group.[38] The changes in the concession were in three main areas, each involving multiyear promises.

First, the agreement established a new method of rate regulation applicable with some differences in the periods 1991-96, 1997-98, and 1999, and thereafter.[39] Through 1990, Telmex had to apply to the Mexican Ministry of Communications and Transportation ("Ministry") for any rate change, with rates established separately for each category of service. The Ministry applied various analyses and responded to various political interest groups in deciding whether to allow a particular rate change, including a policy of keeping local service rates low. The new method in the concession agreement replaced the ad hoc rate filings and broad

38. The shares sold represented 20.4% of the capital stock and 51% of the voting shares of Telmex. The investor group, which was viewed as having capabilities to transform the national carrier, consisted of a group of Mexican investors and subsidiaries of Southwestern Bell Corp. and France Telecom. TELÉFONOS DE MÉXICO, S.A. DE C.V.: 40 MILLION AMERICAN DEPOSITARY SHARES, SEC PROSPECTUS 3 (May 13, 1991) [hereinafter TELMEX PROSPECTUS].

39. *Id.* at 36.

Ministry discretion over rates with formulae involving aggregate price caps and individual service rate flexibility for Telmex. In aggregate, the carrier's rates could increase to reflect Mexican national consumer price inflation. Different productivity adjustments to the national inflation index applied to the aggregate prices in the three different periods.[40] Within the applicable ceiling on aggregate charges, the method gave Telmex substantial flexibility to restructure its rates for particular services with the goal of gradually reducing cross-subsidies (increasing local service rates to cover costs and decreasing long-distance rates). As long as Telmex complied with the price cap formulae in the concession agreement, the carrier did not require the approval of the Ministry to change rates, although the Ministry retained the ability to modify rates when required by the public interest.[41]

Second, the concession agreement established annual standards for line growth, expansion of rural service, and quality of service.[42] Telmex agreed to: (1) expand the number of lines in service by an average minimum annual rate of 12% from August 1990 to December 1994; (2) expand its services to rural areas, in part by providing by December 31, 1994, at least one public telephone or other service in each town with more than 500 inhabitants; (3) expand the number of public telephones from 0.8 per 1,000 inhabitants in 1990 to 2 per 1,000 inhabitants by the end of 1994, and 5 per 1,000 inhabitants by the end of 1998; and (4) reduce the maximum waiting time for installation of telephone service in certain cities to six months by 1995 and to one month by 2000. The concession also set forth annual standards for increased service quality.

Third, as long as Telmex complied with the concession, the Ministry could not license a competing provider of domestic or international long-distance services or local services to operate before August 1996.[43] Thereafter, Telmex would be required to allow resale of its services by other long-distance carriers. The concession further provides that after December 31, 1996, Telmex would have to interconnect its network with other licensed carriers and allow customers to choose their long-distance carrier.

In summary, the Telmex concession contained commitments by the regulators and carrier extending for at least six years as to performance in rates, network expansion and service quality, and competition, with many

40. The annual productivity adjustment was 0% for 1991-96, 3% for 1997-98, and to be determined by the Ministry for 1999 and every four years thereafter to permit Telmex to earn a rate of return equal to its weighted average cost of capital. *Id.*

41. *Id.*

42. *Id.* at 36-37.

43. *Id.* at 37.

standards applicable annually or for other periods. The concession represented a huge change from the uncharted, ad hoc approach to these regulatory issues which maximized regulatory discretion. The new framework, built on multiyear promises, not only increased the value of the equity sale but also created incentives for investments which were lacking in the prior approach. For example, Telmex could plan network expansions with the knowledge that for at least six years it could implement rates designed to stimulate demand for particular services in particular areas; that it would not be required by regulators to meet new, unexpected network and service standards; and that it would not be forced to face competition, with consequent possible losses of revenues and costs for interconnection.

How did the multiyear promises fare in Mexico? In general, the regulator and carrier complied with the promises over many years and varied market conditions. A report at the end of 1996 concluded that "[b]y all accounts, [Telmex] fulfilled [its] part of the bargain."[44] This report cited network expenditures of "$12 billion laying more than 18,000 miles of fiber-optic cable, increasing the number of telephone lines in the country by 66 percent . . . extended phone service to 25,000 small towns and boosted the extent of the network's digitalization . . . from 30 percent to 90 percent."[45] In early 1991 (about nine months after grant of the concessions), Telmex reported that it budgeted capital expenditures (expressed in constant pesos) for each of the years 1991-95 that were at least 50% higher than the capital expenditures in 1990.[46] Of the carrier's total lines in service on December 31, 1996, 35% were restored or replaced since 1991.[47] In terms of competition, Telmex implemented changes in its network and systems to allow interconnections with competitors starting on January 1, 1997, and nine competing long-distance carriers were in operation in 1997.[48] In 1998, Telmex reported that it had met all of the requirements established in the concession agreement to be met through the end of 1997, surpassed many of these standards, and implemented many other operating efficiency and service improvements.[49]

44. John Ward Anderson, *Mexico Hangs Up on Long-Running Phone Monopoly; Laggard Service Primes Market for Major Bidders from Abroad*, WASH. POST, Dec. 30, 1996, at A13.

45. *Id*.

46. TELMEX PROSPECTUS, *supra* note 38, at 33.

47. TELÉFONOS DE MÉXICO, S.A. de C.V., 1996 SEC FORM 20-F 6 (June 30, 1997) [hereinafter 1996 TELMEX 20-F].

48. *Id.* at 11.

49. TELÉFONOS DE MÉXICO, S.A. DE C.V., SEC FORM 20-F 5 (June 30, 1998) [hereinafter 1997 TELMEX 20-F].

A deeper look at 1995-97 reveals more about the challenges facing multiyear regulatory promises typically, and the Telmex concession specifically. A Mexican economic crisis from about December 1994 through early 1996 affected the rate adjustment mechanism in two ways. First, Telmex postponed its inflation-based rate adjustments in "voluntary compliance" with the price stabilization measures implemented by the Mexican government in December 1994; the measures generally froze prices of public utilities.[50] Beginning on March 1, 1995, and through monthly rate increases in 1996, Telmex raised its aggregate rates, but by less than the amount allowed in the concession agreement in light of the 52% inflation for 1995.[51] Second, Telmex slowed the elimination of cross-subsidies in its rate structure during 1995. To catch up, throughout 1996-97 Telmex introduced extensive rate increases for local services and redesigned its rate structures for local and long-distance services.[52]

Partly as a result of the effects of this economic crisis on Telmex's rates, the transition to competition in 1996-98 may have been rougher than what the parties anticipated when they entered into the concession agreement in 1990. Among other issues,[53] a major dispute arose over the fees paid by interconnecting carriers for use of Telmex's lines to originate and terminate calls. The concession agreement provided that the terms of interconnection, including fees, were to be negotiated between the carriers, with the Ministry to impose terms if the carriers were unable to agree.[54] Because the carriers were unable to agree, the Ministry stepped in amidst

50. *Id.* at 7.

51. *Id.* at 7.

52. *Id.* at 7-8. *See also* Julia Preston, *Mexico's Telephone Revolution*, N.Y. TIMES, Nov. 14, 1996, at D1 ("In the midst of a national economic crisis in 1995, Government regulators refused to allow big increases in local phone rates. [In 1996], with Telmex forced to prepare for diminishing long-distance revenue, it felt compelled to jack up local rates rapidly."); Barry Geldzahler, *Get a Good Partner: Mexican Telecommunications Market*, TELEPHONY, June 24, 1996, at 92. Telmex reported that it eliminated cross-subsidization by the end of 1997. 1997 TELMEX 20-F, *supra* note 49, at 7.

53. Another dispute arose over Telmex's resale obligations in the concession agreement. Through November 1998, the Ministry did not license non-facilities-based carriers to provide "pure" switched resale services. Telmex did allow licensed facilities-based carriers to resell its services. The FCC alleged that the limited scope of resale authority violated Mexico's commitment made in the World Trade Organization's Basic Telecommunication Services Agreement. Telmex/Sprint Comm., L.L.C., *Order, Authorization and Certification*, 12 F.C.C.R. 17551, paras. 20-22, 10 Comm. Reg. (P & F) 549 (1997) [hereinafter *Authorization Order*]; Telmex/Sprint Comm., L.L.C., *Order to Show Cause*, 13 F.C.C.R. 24990, para. 7, 14 Comm. Reg. (P & F) 413 (1998) [hereinafter *Order to Show Cause*]. Also, the Ministry released technical rules in 1994 and 1996 addressing various issues in long-distance competition, such as points of interconnection and customer selection of carriers. 1996 TELMEX 20-F, *supra* note 47, at 15-16.

54. 1996 TELMEX 20-F, *supra* note 47, at 15.

reported threats by Telmex to increase its local rates by as much as 70% if it did not get the interconnection fees from long-distance services it wanted.[55] In April 1996, the Ministry established the structure for these fees, including a 58% surcharge on inbound international calls paid to Telmex in 1997-98.[56] This surcharge had the effect of partially protecting from competitive erosion the remaining cross-subsidies in Telmex's rates (below-cost local rates and above-cost long-distance rates).

The Ministry's surcharge concerned several U.S. inter-exchange carriers, inciting claims that the Mexican government failed to comply with its commitment to open its market to competition. This promise was made in the World Trade Organization's Basic Telecommunication Services Agreement, and U.S. concerns led to discussions between the U.S. Commerce Department and the Mexican Ministry in April 1998.[57] The FCC expressed concern over this surcharge as discriminatory in an October 1997 order and issued a show cause order in November 1998 stating its belief that this "surcharge discriminates against the new facilities-based international carriers."[58] The Ministry responded to these pressures by eliminating this surcharge in December 1998.[59]

In review, it appears that the multiyear promises in the concession agreement established a predictable regulatory framework which fostered Telmex's large increase in network investments and improved operations. Telmex satisfied the targets without having to seek modification of them or waiver of penalties, in part because of the need to prepare for competition in long-distance services and the profits associated with expanded and improved services. The Mexican economic crisis of 1994-96 led to pressures for Telmex to forgo some rate increases and rate restructuring allowed under the concession agreement. Despite these changes from what

55. Bloomberg News, *Mexico Sets Telmex Fees Before Allowing Competition* (Apr. 26, 1996), *available at* LEXIS, News Library.

56. 1996 TELMEX 20-F, *supra* note 47, at 16.

57. Bloomberg News, *U.S. Backs MCI and AT&T in Mexican Dispute* (Apr. 21, 1998), *available at* LEXIS, News Library.

58. *Authorization Order*, *supra* note 53, paras. 78-81; *see also Order to Show Cause*, *supra* note 53, para. 11.

59. Bloomberg News, *Mexican Competitors Receive Interconnect Reprieve* (Dec. 2, 1998), *available at* LEXIS, News Library. *See also* WORLD TRADE ORGANIZATION, MEXICO—MEASURES AFFECTING TELECOMMUNICATIONS SERVICES; REQUEST FOR THE ESTABLISHMENT OF A PANEL BY THE UNITED STATES, Feb. 13, 2002, *at* http://www.wto.org (request for dispute settlement panel under the World Trade Organization's General Agreement on Trade in Services alleging, inter alia, Telmex's failure to provide interconnection to U.S. telecommunications carriers at reasonable rates and on reasonable terms and conditions); David Luhnow, *Politics Disrupts Mexico's Telecom Liberalization*, WALL ST. J., June 4, 2002, at A19 (describing ongoing interconnection, regulatory, and political disputes in Mexico in 2002 regarding competitive telecommunications services).

the parties may have expected in 1990 and how Telmex had been preparing to compete, the Ministry adhered to the dates for competitive entry and interconnection in the concession agreement. While the concession agreement left open the level of interconnection charges for competitors, the pressures by Telmex resulting from its "voluntary" restraints on its rates most likely led the Ministry to adopt higher interconnection fees through the 58% surcharge than what it may have expected for a competitive market. Thus, deviation from one part of the multiyear plan (rates during and following the economic crisis) had an impact on another part of the multiyear plan (competitive entry under reasonable interconnection rates).

The multiyear commitments in the concession agreement likely fostered substantial productive efficiencies for the carrier compared to the regulatory approach which preceded it. Before the concession agreement, governmental decisions on the national telephone network were piecemeal, with large uncertainty about the timing and details of other actions. The concession agreement stated a unified, long-term framework for the interrelated aspects of rates, network expansion and upgrades, service quality and competition. This framework facilitated a large increase in network expansions and upgrades. There was less business justification for hedging or preserving flexibility, such as regarding investments in facilities to support services for which the regulator promised rate increases to be phased in over several years. With explicit service improvement standards, the carrier could take an orderly approach to improving its network and operations. On the other hand, the incomplete aspects of the plan regarding interconnection charges for competitors (which were not specified by the regulators until the eve of competitive entry and then sharply revised two years later) produced uncertainty and some inefficiencies for competitors as well as Telmex. This uncertainty likely decreased the consumer benefits from the early years of competition and, thus, from the period covered by the plan.

2. CANTV: Baseline Plan with Many Deviations and Renegotiations

Like the Telmex concession, the CANTV concession established a complex, detailed, multifaceted plan for the Venezuelan telecommunications sector from 1991 through 2000, in connection with the

government's sale of a strategic interest in the national telephone carrier.[60] The plan included: (1) quarterly adjustments in aggregate rates according to a price cap related to the rate of inflation in Venezuela; (2) measures to achieve rate rebalancing gradually, with some flexibility for the carrier in setting individual service rates; (3) detailed standards for the expansion, modernization, and improvement of the quality of CANTV's network and services; and (4) assurance that CANTV would be the exclusive provider of local, national, and international switched landline telephone services until October 2000, except in areas where it failed to meet service requirements.[61]

The years after adoption of CANTV's multiyear promise were filled with the carrier's expansion and improvements, but also deviations from, and substantial amendments to, the requirements. The causes of the deviations fall into three major categories: The first category of deviations resulted primarily from factors beyond the control of CANTV or the Venezuelan Ministry of Transportation and Communications ("Venezuelan Ministry"). Macroeconomic conditions in Venezuela experienced serious declines from late 1992 through 1996.[62] With the decreased demand for telephone services, CANTV failed to satisfy certain service expansion requirements in the concession agreement. The Venezuelan Ministry agreed to reduced requirements for 1996 through 2000 together with a commitment to review the expansion standards from 1999 to 2000, to reflect economic conditions as they developed.[63] The carrier cited the government's imposition of exchange controls as causing delays in obtaining equipment and leading to its failure to install required numbers of public telephone lines in 1995.[64] CANTV reported that it remedied the shortfall in early 1996 and that the Venezuelan Ministry decided to waive any penalties applicable under the concession agreement.[65] Similar to the Telmex example, high inflation led the Venezuelan Ministry to confine some aggregate rate increases to levels below those provided for by the price cap formulae in the concession agreement, and to limit rate increases

60. The interest sold represented operating control and 40% of the equity share capital of CANTV. The strategic investor group included subsidiaries of GTE Corp., Telefónica Internacional de España, La Electricidad de Caracas, and AT&T Corp. COMPAÑÍA ANÓNIMA NACIONAL TELÉFONOS DE VENEZUELA (CANTV), SEC PROSPECTUS at 6-7 (Nov. 21, 1996) [hereinafter CANTV PROSPECTUS].

61. *Id.* at 8.

62. *Id.* at 61.

63. *Id.* at 61-62.

64. *Id.* at 17, 63.

65. *Id.* at 63.

for basic residential local service.[66] In light of concerns about CANTV facing competition in 2000, the Venezuelan Ministry and the carrier entered into a rebalancing agreement in 1996 providing for "catch-up" rate adjustments in the following years.[67]

The second category of deviations from the multiyear plan involved shortfalls in the carrier's performance in many categories. Some of these shortfalls led to remedies provided under the concession agreement, while others triggered further negotiations between the carrier and the Venezuelan Ministry. As an exception to the general prohibition on competition until 2000, the concession agreement allowed the Venezuelan Ministry to grant other concessions to provide basic local service if CANTV failed to serve a rural area, or failed to meet its network expansion, modernization, and service quality requirements in an urban area for two consecutive years. Starting in 1996, the Venezuelan Ministry exercised this authority to award other concessions in several areas.[68] Also, CANTV reported repeated shortfalls in its network expansion and service quality performance, such as timely installation of new lines, repair times, and billing statement improvements.[69] Following CANTV's request and several years of negotiation, the Venezuelan Ministry and CANTV in February 2000 entered into an agreement which superseded the service levels and rate structures in the concession agreement.[70] This agreement added some requirements based on technologies developed after the 1990 concession agreement; one such requirement was the installation of a new signaling system for interconnections.

Third, some deviations can be viewed as reluctance from time to time by the regulator to limit its discretion or abide by some provisions of the concession agreement when CANTV was in breach of other provisions. For example, in 1997 the regulator announced that it would not permit CANTV to receive the full amount of the tariff increases and rate rebalancing provided by the concession agreement and the rebalancing agreement until

66. *Id.* at 17, 20, 64.

67. *Id.* at 66.

68. COMPAÑÍA ANÓNIMA NACIONAL DE TELÉFONOS, 1997 Form 20-F 31 (Apr. 24, 1998).

69. *Id.* at 26. On the other hand, CANTV reported that it exceeded several modernization and quality improvement requirements for several years. *Id.* From 1991 to 1999, customer satisfaction jumped from an average of 47% to 90%, and CANTV nearly doubled its number of users. Raymond Colitt, *CANTV Gets Ready to Line Up Rivals*, FIN. TIMES (London), May 18, 1999, at 30.

70. COMPAÑÍA ANÓNIMA NACIONAL TELÉFONOS DE VENEZUELA, 2000 ANNUAL REPORT 42 (May 25, 2001) [hereinafter 2000 CANTV ANNUAL REPORT].

the regulators completed a review of the carrier's costs.[71] According to CANTV, the concession provided for such a review but did not make the review a condition for implementing the rate changes.[72] Subsequently the carrier and regulator entered into an agreement allowing the rate changes to go into effect and having the carrier file cost information.[73] Following further delays in tariff approvals in 1999 and "the commencement of a preliminary proceeding in contemplation of a legal action by CANTV against the Government for breach of the Concession," the carrier and regulator entered into an agreement in February 2000 which superseded the concession as to rate rebalancing and service level mandates.[74]

Aside from these deviations and amending agreements, the most important development in the multiyear plan, competitive entry in late 2000, went forward largely on schedule.[75] A new telecommunications law was enacted in June 2000 which, inter alia, sought to establish conditions for fair competition between operators and service providers.[76] In November 2000, the regulator adopted regulations for new concessions and interconnection requirements applicable to CANTV and other carriers.[77] Also, in November 2000, the regulator began the auction of frequencies for wireless local loop services. Six such concessions were granted by early 2001 with CANTV not allowed to participate in the auction.[78] Other technologies were also open to competitors in local and long-distance services, and several competitors were licensed.[79]

Even this development was not as straightforward as contemplated in

71. Raymond Colitt, *CANTV Hit by Row Over Rate Rise*, FIN. TIMES (London), Mar. 12, 1997, at 28; COMPAÑÍA ANÓNIMA NACIONAL TELÉFONOS DE VENEZUELA, 1997 ANNUAL REPORT 29 (Apr. 24, 1998) [hereinafter 1997 CANTV ANNUAL REPORT].

72. 1997 CANTV ANNUAL REPORT, *supra* note 71, at 29.

73. *Id*.

74. 2000 CANTV ANNUAL REPORT, *supra* note 70, at 43. The regulator sought improvements in service quality as a prerequisite for rate increases. Bloomberg News, *Venezuelan Government to Meet CANTV, Discuss New Phone Rates for 1999* (Aug. 23, 1999), *available at* LEXIS, News Library. In July 1999, CANTV sued the Venezuelan government; CANTV demanded $8.7 million in damages for the government's noncompliance with the terms of the concession. *Venezuela's CANTV Sues Government*, WALL ST. J., July 23, 1999, at A10. In October 1999, CANTV and the government agreed to appoint a panel of independent telecommunications experts to help resolve the tariff dispute. Raymond Colitt, *Experts to Judge CANTV Dispute*, FIN. TIMES (London), Oct. 8, 1999, at 26.

75. 1997 CANTV ANNUAL REPORT, *supra* note 71, at 20, 31.

76. 2000 CANTV ANNUAL REPORT, *supra* note 70, at 43.

77. *Id.* at 44.

78. *Id*. at 17. *See also* Reuters, *Genesis Wins Two Venezuelan Telecoms Licenses* (Dec. 19, 2000), *available at* LEXIS, News Library.

79. 2000 CANTV ANNUAL REPORT, *supra* note 70, at 17.

the concession agreement. In 1997 and 1998, the government took several actions aimed at authorizing new carriers to build telecommunications infrastructure prior to November 2000, with competitive services starting at that time.[80] In 1999, CANTV and the regulator negotiated, without finalizing an agreement, a package of amendments to the concession involving an early end to CANTV's monopoly as well as revisions of CANTV's remaining investment requirements and performance targets.[81] In 2001, CANTV stated that there could be no assurance that rate rebalancing to prepare CANTV for competition would ever be completed as contemplated by the concession and the 1996 rebalancing agreement.[82]

What is to be learned from this regulatory promise covering ten years? As in Mexico, the experience in Venezuela teaches that major macroeconomic downturns can swamp the rate and service commitments by both regulators and carriers. An additional lesson from Venezuela goes to the difficulty in specifying network modernization and service standards by area over a multiyear period. Such standards are designed to promote the public interest, by requiring investments to serve areas which would not be profitably served in an unregulated market and to guide the carrier's investment decisions. With uncertainties about demand for services, upgrading large networks, changing telecommunications technologies and changing international standards, it is difficult to select reasonable network modernization and service standards over a long period. Another lesson is that a multiyear agreement is made in the context of ongoing relations between the carrier and regulator. The carrier can seek waivers of penalties and amendments to the agreement, and the regulator can also seek additional restrictions on rates, new service standards and amendments to the agreement. The promises of one party do not result in completely predictable actions for the other party.

Because the national telephone company had been operated as a branch of the government with no history of regulation of a private company by an independent regulator, a concession agreement with multiyear commitments was necessary both to attract a private strategic investor to CANTV and to satisfy political concerns in Venezuela. Aside from the threshold conditions which produced the multiyear agreement in

80. Raymond Colitt, *Caracas Takes Phone Dispute to Court*, FIN. TIMES (London), May 1, 1998, at 5 (3d ed. London). In 1997, the regulator announced an international tender for additional operators to compete in basic telephony; and in 1998, he sought a Supreme Court ruling on the scope of CANTV's monopoly under its concession agreement.

81. Raymond Colitt, *CANTV Wants To End Monopoly*, FIN. TIMES (London), May 5, 1999, at 32 (1st ed. London); Raymond Colitt, *Experts to Judge CANTV Dispute*, FIN. TIMES (London), Oct. 8, 1999, at 26 (2d ed. U.S.).

82. 2000 CANTV ANNUAL REPORT, *supra* note 70, at 14.

Venezuela, the following inquiry is helpful in order to develop general lessons: With so many deviations and amendments, does hindsight make the multiyear agreement for CANTV look like it enhanced economic efficiency in developing the telecommunications sector in Venezuela?

This multiyear promise probably did enhance economic efficiency compared to piecemeal, ad hoc, short-term regulatory actions addressing limited changes in the telecommunications sector. At minimum, it established a time frame for competitive entry with which the regulator complied; it specified formulae for quarterly rate adjustments with inflation—this replaced a completely ad hoc process built on government discretion; and it set forth a process for gradual rate rebalancing toward cost-based rates. Compared to sporadic, ad hoc decisions to transform the national telecommunications sector, having a specified ten-year framework for these major regulatory changes was of likely benefit to CANTV's ability to attract capital and planning of its investments, operations, and service offerings. Even though disputes with the regulator arose as to implementing the rate changes in some years, the multiyear promise of inflation-based increases in aggregate rates and rate rebalancing prior to competitive entry probably facilitated the "catch-up" agreements in 1996 and 2000.

Next, consider the network modernization and service improvement standards, which were exceeded in some regards and unsatisfied in others. The multiyear promise probably enhanced efficiency by providing a baseline for the carrier to plan investments and operational changes, as well as a framework for discussions between the regulator and the carrier. The carrier probably recognized, at many times and for many areas, that it would not satisfy some of the standards. But, as in the case of the shortfall in public telephone lines in 1995, the multiyear plan allowed the carrier and regulator to discuss this performance in the context of catching up to the standard shortly thereafter. In other cases, the multifaceted plan allowed the carrier to point to standards that it exceeded in order to argue that it should not be penalized for some shortfalls or that other standards should be amended. For some standards that were unsatisfied repeatedly, the plan forced the carrier and the regulator to address the reasonableness of the standard from the baseline of the mutual prior commitment to that standard. Perhaps they could agree that, in light of the carrier's satisfaction of other standards, changed circumstances, or new evidence on the cost of compliance, the standard should be modified.

Of course, even if an agreement developed to waive or amend a standard for the carrier, any such process had costs including negotiating with the regulator, and perhaps trading off other obligations. Initially

agreeing to a "better" requirement in the plan would have promoted efficiency. Yet, there may still be efficiencies from somewhat imperfect stated standards over a multiyear period as opposed to no agreement. Silence produces greater uncertainty about what a regulator may require and when.

3. MATAV: More Renegotiations and Narrowing of Exclusivity

The MATAV concession in Hungary granted in December 1993 gave the national telephone company exclusive rights to provide local, domestic long-distance, and international public telephone services for most of the country through December 2001.[83] As in Mexico and Venezuela, this concession also established for this period detailed annual standards for line growth, service quality improvement, network expansion, and network modernization; a mechanism for adjusting aggregate rates according to inflation-based price caps; and a process for rate rebalancing.

The regulator agreed in the concession contract that until December 22, 2001, it would use its best efforts to prevent changes in the decrees relating to interconnection, tariffs, or other telecommunications matters which would have a material adverse effect on MATAV.[84] On the other hand, in the concession agreement, the Hungarian government retained the ability to review periodically the provisions of the concession "in the interest of national defense, public security, consumer interest, economic development and the fulfillment of Hungary's international agreements."[85] Subject to a reconciliation procedure in which the government's conclusions must be supported by evidence, the government could unilaterally modify such provisions in which event MATAV would be entitled to compensation.[86]

Following the fairly lengthy discussions of the multiyear promises in Mexico and Venezuela, this Author will limit the analysis of the Hungarian regulatory commitments to two topics: penalties and accelerating competition.

83. The strategic investors in MATAV at the time of the 1993 concession agreement were Ameritech and Deutsche Telekom. That agreement covered service in thirty-one local concession areas as well as domestic long-distance and international services. MATAV entered into subsequent agreements giving it exclusive rights to provide local public fixed-line telephony services through May 2002 in an additional five local concession areas. Together, MATAV's local concession areas covered approximately 75% of Hungary's population. The remainder was served by other local operators, which interconnected their networks with MATAV's networks. MAGYAR TÁVKÖZLÉSI RT.; PROSPECTUS 1 (Nov. 14, 1997) [hereinafter MATAV PROSPECTUS].

84. *Id.* at 78.

85. *Id.* at 12.

86. *Id.*

Regarding penalties from service-quality and network-improvement commitments, MATAV increased the number of telephone lines from 1.3 million in 1993 to 2.1 million in 1997.[87] MATAV, however, reported that it paid monetary penalties as provided in the concession agreement for failing to meet certain targets in 1995, 1996, and 1997.[88] MATAV stated that each year it had agreed with the regulator on the penalties charged for failure to meet quality of service targets.[89] The targets originally established in the concession agreement were adjusted twice, on a mutually agreed basis, to achieve what MATAV described as more closely reflecting international and European standards.[90] For failing to connect some subscribers within the period required by the concession agreement, MATAV had to pay additional liquidated damages in 1998 and 1999.[91] MATAV stated that it did not have to pay any such penalties or liquidated damages in 2000.[92]

It is hard to say whether the penalties specified in the multiyear plan served their purpose of providing incentives for compliance without unreasonable costs for failure. Clarity in the standards and penalties in a plan can reduce disputes and decrease the costs of implementing and enforcing a plan.

A longer discussion is required to address the developments regarding the exclusivity granted to MATAV under the concession agreement. Apparently, the government decided about mid-1997, three and one-half years into the eight-year exclusivity period, to take steps to increase competition in public telephony services.[93] Among the possible reasons for this policy: MATAV's failure to satisfy certain service quality and network improvement targets; a determination by the Hungarian Competition Council in February 1997 that MATAV set unreasonably high access fees for access to its rights-of-way by a cable television company; claims by telephony operators in areas not served by MATAV that MATAV abused its dominant position in setting high interconnection charges; Hungary's efforts to gain membership in the European Union, which established

87. Anatol Lieven & Anthony Robinson, *Making Impressive Progress*, FIN. TIMES (London), Dec. 9, 1997, at 4.

88. The service targets included percentage of call completion, dial-tone delays, customer service call response times, and number of billing complaints. MATAV PROSPECTUS, *supra* note 83, at 79. *See also* MAGYAR TÁVKÖZLÉSI RT., 1997 FORM 20-F 32 (Apr. 24, 1998) [hereinafter 1997 MATAV 20-F].

89. 1997 MATAV 20-F, *supra* note 88, at 32.

90. *Id.*

91. MAGYAR TÁVKÖZLÉSI RT., 2000 FORM 20-F 34 (May 9, 2001) [hereinafter 2000 MATAV 20-F].

92. *Id.*

93. MATAV PROSPECTUS, *supra* note 83, at 70; Sheridan Nye, *Alliances Set to Clash Over Hungary* (June 9, 1997), *at* http://www.totaltele.com.

policies requiring telecommunications competition; and the replacement of the dominant government coalition, starting in July 1998.[94]

The government took several types of action to promote competition against MATAV before the end of the exclusivity period. In May 1997, the government announced that it wanted the state-owned broadcaster to establish a second national telecommunications operator along with the state rail operator, the national oil company, and a foreign telecommunications operator or consortium.[95] For this joint venture, called PanTel, the Hungarian government actively sought bids from foreign telecommunications operators. The new operator was granted two licenses by the regulator in 1999 for voice-over Internet telephony services.[96] These licenses for telephony, provided via a new technology which was not available when the MATAV concession was granted, were treated by the government as outside the scope of MATAV's exclusivity but clearly competitive with MATAV's exclusive services. PanTel targeted business users, which paid the highest prices relative to the costs of serving them, while MATAV was gradually rebalancing its rates over the exclusivity period.

Three other operators were licensed in 1999 and began offering advanced data services for business users (again treated by the government as outside the scope of MATAV's exclusivity on public telephony services), and voice-over Internet telephony services.[97] Early entry into these services gave these companies an opportunity to expand their telecommunications networks and customer bases for stronger entry when subsequently authorized for full-service competition against MATAV.

Additionally, there were reports starting in July 1998, when a new Hungarian government took office, that the government sought to end MATAV's monopoly on long-distance and international calls one year

94. *See* MATAV PROSPECTUS, *supra* note 83, at 71-72, 79, 86-87; Lieven & Robinson, *supra* note 87, at 4; Bloomberg News, *Hungary's New Government May End MATAV'S Monopoly Before 2002* (July 10, 1998), *available at* LEXIS, News Library.

95. Nye, *supra* note 93.

96. INTERNATIONAL TELECOMMUNICATION UNION, ITU INTERNET REPORTS: IP TELEPHONY 29 (2000) (Hungarian regulatory agency "was willing also to look for ways of introducing 'soft competition' to Matav ahead of full competition in 2002;" more than 15 companies licensed to provide Internet protocol voice telephony services by December 2000); *Setting a Fast Pace for Hungary and Europe*, FIN. TIMES (London), Oct. 8, 1999, at 31 (Survey ed. 1); Emma McClune, *Profile - Keep an Open Mind In an Open Market*, COMM. WEEK INT'L ONLINE (Feb. 5, 2001), *at* http://www.totaltele.com; Carolyn Chapman, *Hungary: Eastern Promise*, CI-ONLINE, July 1, 2000.

97. *See Setting a Fast Pace for Hungary and Europe*, *supra* note 95, at 31; Bloomberg News, *MATAV Faces Competition From Second New Hungarian Phone Company*, (Nov. 10, 1998) *available at* LEXIS, News Library; *see also* 2000 MATAV 20-F, *supra* note 91, at 31; *Hungary: Eastern Promise*, *supra* note 96.

early.[98] These reports described talks between the government and MATAV in 1999 through which the government attempted to obtain agreement to this change in the concession agreement. No such agreement to amend was reached, and the government did not use its authority unilaterally to modify the concession. With the agreed date for ending MATAV's exclusivity unchanged, a new telecommunications law establishing the framework for competition was approved by the Hungarian Parliament in June 2001. The law became effective in December 2001, and the government passed all necessary decrees to implement it.[99]

The government's conduct indicates that, but for the 1993 concession agreement, the government probably would have authorized full competition for long-distance and international services earlier than December 2001. Moreover, the government's actions probably narrowed the scope of MATAV's exclusivity to less than what MATAV expected in 1993. For example, MATAV's initial public offering in November 1997, more than four years before the end of the exclusivity period, stated in the first risk factor that the "Hungarian Government is actively seeking to promote competition in the provision of public telephony services."[100]

Did the multiyear promise in Hungary promote efficiency when, midway through the term, the most fundamental provision regarding competitive entry was subject to uncertainties about duration and government actions to narrow? The analysis considers two perspectives: that of the carrier, and that of the regulator.

For MATAV, there appear to be efficiency benefits from the multiyear promise compared to piecemeal, ad hoc regulatory decisions and the absence of any government commitment on competition. The exclusivity period was an essential part of a comprehensive regulatory commitment by the carrier and government. Other related aspects involved: gradual rate rebalancing to eliminate cross-subsidies that would not be sustainable under competition and would sharply increase politically sensitive residential local service charges; expanding services to cover

98. *Hungary's New Government May End MATAV's Monopoly Before 2002*, *supra* note 94 (citing Kalman Katona, Minister of Transport, Water, and Telecommunications); Bloomberg News, *MATAV Monopoly May End Earlier Than Planned* (Jan. 15, 1999), *available at* LEXIS, News Library.

99. Reuters, *Hungary Gives Green Light to Deregulation* (Dec. 4, 2001), *available at* http://www.totaltele.com; 2000 MATAV 20-F, *supra* note 91, at 6; MAGYAR TÁVKÖZLÉSI RT., 2001 FORM 20-F 7 (May 9, 2002), *available at* http://www.matav.hu/english/world/investors/financial/matav20f2001.pdf. The Act on Communications, inter alia, introduced a new regime of price controls on retail fixed-line services, imposed a universal service obligation, and required MATAV to offer unbundled local loops, number portability, and carrier pre-selection and other interconnection features.

100. MATAV PROSPECTUS, *supra* note 83, at 11.

areas that may be unprofitable without cross-subsidies; and meeting targets for service-quality improvements, as well as network modernization, which may be inconsistent with the investment priorities of a carrier facing competition.

The concession provisions likely restrained the scope of competition that MATAV faced during the exclusivity period, giving it a more stable regulatory environment in which to plan and implement the other commitments in the concession agreement. While some of the government's actions to promote competition may have surprised MATAV, the carrier nevertheless did not face full competition until the date specified eight years earlier in the concession agreement. MATAV's investments and business operations were subject to less uncertainty under the concession agreement, even with the government's actions, than under an unmapped regulatory framework. Without the commitments, the government might have collected information and weighed various factors (when and according to the regulator's discretion) in determining whether to license competitors.

Now consider the regulator's perspective on this experience. At a point midway through the exclusivity period, the government determined that the public interest would be served by accelerating competition. Suppose that this conclusion was correct in that accelerating competition would have increased the efficiency of the telecommunications sector. If the concession agreement restrained implementation of this new policy, how efficient could the agreement have been?

The concession agreement did not prohibit the realization of efficiencies from advancing the date for competitive entry. In initially agreeing to the multiyear, comprehensive, regulatory promise, the regulator had to weigh any benefits of any date for competitive entry against the consequences of competition for other regulatory targets and requirements. The existence of the multiyear promise forced the regulator again to weigh any benefits from advancing the date for competitive entry against the comprehensive set of other regulatory targets and requirements set forth in the plan. In changing policies, the agreement required the regulator to allocate some benefits to some groups which otherwise would have been harmed by advancing the date for competitive entry compared to the plan.[101] The amount of such benefits which must be allocated to offset harms compared to the plan could be less than, equal to, or greater than the benefits from the policy change. As long as the political and private transaction costs are not so large as to make any change unreasonable,

101. *See* Kaplow, *supra* note 14, at 576-81.

requiring a reallocation of benefits is not contrary to the public interest and allows for new efficiencies to emerge.

Beginning in 1993, the regulator required the privatized MATAV to satisfy certain service and network targets, and abide by certain rate regulations through 2001. Each year of the market conditions associated with exclusivity provided part of the compensation to MATAV's strategic investors and other shareholders for accepting these requirements. In addition to the interests of MATAV's shareholders, these market conditions also formed the basis for the regulator to get the benefits from cross-subsidized rates and some service-quality and network targets to certain segments of the public. These service targets would not have been achieved under unregulated competition; competitive, unregulated telecommunications carriers focus on serving high-usage businesses in dense urban areas (the profitable cream of telecommunications customers), not rural areas or low-usage households.[102]

The regulator could have proposed several forms of compensation to MATAV's shareholders in connection with advancing the date for competition. As in the reported negotiations between CANTV and the Venezuelan regulator,[103] the Hungarian regulator could have proposed to relieve MATAV of various investment and performance requirements over the remaining term of the concession agreement. This change would have reduced MATAV's obligations to invest in rural areas (that would not be profitable and would remain a cost disadvantage for the national carrier as it faced selective competition for urban business customers) or to invest in service upgrades for residential customers (who would not have competitive alternatives for several years). A second form of compensation would be to accelerate the rate rebalancing and rate increases that had been scheduled to be gradually implemented over the exclusivity period. This step could allow MATAV to prepare for competition sooner, and could be combined with allowing higher short-term earnings for MATAV (until competition constrained the earnings). A third form of compensation would follow the surcharge applied to competitors' services in Mexico.[104] While such a surcharge would have attracted opposition from other carriers and possibly also from foreign regulators, it would have temporarily decreased the harm to MATAV of competitive entry prior to the completion of its rate rebalancing, as well as the burden on MATAV of unprofitable service and network obligations.

102. See Warren G. Lavey, *The Public Policies that Changed the Telephone Industry into Unregulated Monopolies: Lessons from Around 1915*, 39 FED. COMM. L.J. 171 (1987).

103. *See infra* Part III.A.2.

104. *See infra* Part III.A.1.

Some segments of the public would be worse off under the combination of early competition and changes in the concession, than under continuation with the obligations in the concession agreement. The concession agreement established not only a multiyear set of rights and obligations for the carrier, but also a multiyear set of rights for various segments of the public (which were important for political approval of the privatization).[105] While the beneficiaries of early competition were likely to be largely urban business users, the beneficiaries of the concession included residential and rural subscribers. The regulator could have compensated the residential and rural subscribers who would be harmed by the changes in the concession through a universal service fund or other mechanism. For example, all carriers could contribute a portion of their revenues to a fund to help support the rates that residential and rural subscribers would be charged under competition, or to help support the costs of expanding and upgrading rural networks.

Suppose that the regulator determined that the amount of benefits flowing from early competition would exceed the amount of benefits that would have to be allocated to MATAV and some segments of the public in changing from the concession agreement. Under this assumption, in a world of economically rational actors and low transaction costs, the regulator should have been able to achieve amendment of the concession agreement by mutual consent. If MATAV held out for a windfall gain, then the regulator could have invoked the provision allowing it to modify the concession agreement unilaterally for "consumer interest" and "economic development" reasons and pay MATAV compensation.[106]

In conclusion, this discussion of the Hungarian experience dealt with two points. First, penalties stated in a long-term plan were applied in some instances. Clear specification of the standards and penalties is helpful in avoiding disputes over enforcing a multiyear agreement. Second, even with the government's attempts to promote competition midway through the exclusivity period, the multiyear plan likely still yielded benefits. The plan stated some clear as well as some unclear commitments for an eight-year period. The provisions on competitive entry proved to be unclear; the government's actions on competition likely were inconsistent with the expectations of the national carrier and its investors about a key provision

105. *See* LEVY & SPILLER, *supra* note 16, at 37, 78, 141-43 (describing political aspects of distributional demands in telecom privatizations in Jamaica and Chile).

106. *See* MATAV PROSPECTUS, *supra* note 83, at 12. Without going into the details of the specific formula for compensation in the concession agreement and the Hungarian laws, common formulations for damages from breach of contract would have required the regulator to compensate MATAV for the harm caused to it from the lost exclusivity. *See* 5 ARTHUR LINTON CORBIN, CORBIN ON CONTRACTS § 1002 (1964).

in the plan. The usual alternative to stated, albeit unclear, commitments is preserving regulatory discretion to transform the telecommunications sector through short-term, piecemeal decisions. The plan likely created a better framework for investments, operations, and even discussing regulatory changes over time compared to the usual, unmapped alternative.

B. Restructuring United States Interstate Access Charges and Universal Service Funding

The next example of a multiyear promise comes from an order adopted by the FCC in May 2000.[107] Through a five-year plan, the order reforms the charges paid by long-distance carriers to local exchange carriers for originating and terminating calls, called "access charges," as well as the universal service support mechanism. While the scope of this FCC plan and its duration are less than those in the concession agreements for Mexico, Venezuela, and Hungary, this order was viewed by the FCC as a major achievement in taking an integrated, predictable approach to important pricing issues. The FCC found that the five-year plan would provide "relative certainty in the marketplace" and that the plan would give all parties "a much clearer blueprint for developing their business plans and attracting capital."[108]

The plan made four major changes in access charges and universal service funding.[109] It eliminated one element of access charges through which long-distance carriers paid part of the non-traffic-sensitive costs of local loops; increased the flat monthly charges imposed on residential lines in four annual steps, with the last two steps implemented only after the FCC conducted a study and made findings on the appropriateness of the charges; recharacterized and set a factor in the formula for price caps applicable to access charges; and established a transitional universal service fund to provide support for poor and rural customers.[110]

There are several reasons that the FCC adopted a multiyear plan addressing both access charge and universal service issues. There was a

107. Access Charge Reform, *Sixth Report and Order in CC Docket Numbers 96-262 and 94-1*, 15 F.C.C.R. 12962, 20 Comm. Reg. (P & F) 636 (2000) [hereinafter CALLS Plan], *aff'd in part and rev'd in part sub nom.* Tex. Office of Pub. Utils. Counsel v. FCC, 265 F.3d 313 (5th Cir. 2001), *cert. denied sub nom.* Nat'l Ass'n of State Util. Consumer Advocates v. FCC, 122 S. Ct. 1537 (2002).

108. CALLS Plan, *supra* note 107, at para. 37. The FCC quoted with approval the comments of the Massachusetts Department of Telecommunications and Energy: "Resolving so many contentious issues . . . as [this] plan does, reduces this uncertainty to the point that it should not be a significant factor in capital investment." *Id.*

109. Tex. Pub. Utils. Counsel v. FCC, 265 F.3d 313, 320 (5th Cir. 2001); CALLS Plan, *supra* note 107, para. 29-30, 70.

110. *Tex. Pub. Utils. Counsel*, 265 F.3d at 320.

confluence of issues pending at the FCC during this time. The Telecommunications Act of 1996 directed the FCC to take a wide variety of actions.[111] One of the main goals was to increase competition in local exchange services, including competition for access services. Another legislative priority was to continue the provision of affordable telephone service to all Americans, but to replace implicit subsidies with an explicit mechanism that was consistent with competition.[112]

The FCC conducted rulemaking proceedings on these and many other issues in the months and years following passage of the legislation. In May 1997, the FCC issued an order reforming access charges; this order was upheld on appeal in 1998.[113] The FCC viewed the rate mechanisms in that order as only transitional and subject to further proceedings; carriers had raised various issues to the FCC about implementing some charges, and in 2000 the FCC observed that a rate element introduced in that order created market inefficiencies.[114] Also in 1997, the FCC issued an order revising the productivity factor in the price cap formula for access charges; this order was overturned on court review as arbitrary and capricious, and remanded back to the FCC.[115] A third order, adopted in 1997, sought gradually to remove implicit subsidies from access charges and replace them with an explicit universal service fund; parts of this order were reversed and remanded in 1999.[116]

Aside from these related pending proceedings, the multiyear nature of the plan grew out of the FCC's desire to avoid sharp increases in some rates, referred to as "rate shock," especially in rates that would threaten the

111. *See* Draft FCC Implementation Schedule for the Telecommunications Act of 1996, *at* ftp://www.fcc.gov/pub/Reports/implsched.old (Jan. 13, 1997) [hereinafter Implementation Schedule]

112. CALLS Plan, *supra* note 107, para. 4; *see* Warren G. Lavey, *Some Legal Puzzles in the 1996 Statutory Provisions for Universal Telecommunications Services*, *in* MAKING UNIVERSAL SERVICE POLICY: ENHANCING THE PROCESS THROUGH MULTIDISCIPLINARY EVALUATION 179 (Barbara Cherry et al. eds., 1999).

113. Access Charge Reform, *First Report and Order*, 12 F.C.C.R. 15982, 7 Comm. Reg. (P & F) 1209 (1997), *aff'd sub nom.* S.W. Bell v. FCC, 153 F.3d 523 (8th Cir. 1998) [hereinafter *Access Charge Reform First Report and Order*].

114. CALLS Plan, *supra* note 107, paras. 19-20.

115. Price Cap Performance Review for Local Exch. Carriers, *Fourth Report and Order in CC Docket No. 94-1 and Second Report and Order in CC Docket No. 96-262*, 12 F.C.C.R. 16642, 8 Comm. Reg. (P & F) 119 (1997), *rev'd sub nom.* U.S. Tel. Ass'n v. FCC, 188 F.3d 521 (D.C. Cir. 1999) [hereinafter *Price Cap Performance Review Fourth Report and Order*].

116. Federal-State Joint Bd. on Universal Serv., *Report and Order*, 12 F.C.C.R. 8776, 7 Comm. Reg. (P & F) 109 (1997), *aff'd in part and rev'd in part sub nom. Tex. Pub. Utils. Counsel*, 183 F.3d, *appealed after remand and remanded in part by* 265 F.3d 313 (5th Cir. 2001) [hereinafter *Joint Bd. on Universal Serv. Report and Order*].

affordability of services to some residential users.[117] Another reason for committing to several reforms spread over several years was the FCC's recognition that the access charges at the time of the order, or even after implementing the first step of the reforms, created incentives for inefficient investments and other multiyear decisions.[118] Only by clearly committing to further reforms could the FCC hope to lessen the inefficiencies occurring during the gradual transition. Accordingly, the FCC sought to develop a clear but gradual "transition to a more economically rational approach to access charges and universal service."[119]

A final reason for the multiyear plan is that it developed through an agreement involving "four of the five largest local exchange companies and two of the three largest long-distance companies."[120] Typically, FCC orders evolve from a proposal developed by the FCC staff, or a request filed by a single carrier. Since the breakup of the local exchange and long-distance operations of AT&T in 1984,[121] the parties to the agreement had fought over access charges and universal service funding in proceedings at the FCC, judicial review of FCC orders, and lobbying for legislation. The plan reflected the desire by these carriers to have a comprehensive solution and certainty instead of piecemeal rulemakings and uncertainty. The FCC put out the plan for public comments, and the group modified its agreement several times after initially filing it with the FCC.[122] Ultimately the FCC adopted the proposal; the FCC said that it was exercising its independent judgment and found that the proposal "falls easily within the range of reasonable solutions to the problems it addresses."[123]

Three further points about this multiyear plan are interesting. First, the FCC's commitment to a five-year plan was never rock solid. The planned increases in the flat monthly charges for residential lines scheduled to be implemented in 2002 and 2003 were subject to findings of a proceeding to be commenced in late 2001.[124] This contingency allowed the

117. *See* CALLS Plan, *supra* note 107, paras. 26-27.

118. *See id.* paras. 76-79.

119. *Id.* para. 27.

120. *Id.* para. 1 n.1, para. 28.

121. United States v. Western Elec. Co., 569 F. Supp. 1057 (D.D.C. 1983), *aff'd sub nom.* California v. United States, 464 U.S. 1013 (1983).

122. CALLS Plan, *supra* note 107, n.1; Tex. Pub. Utils. Counsel v. FCC, 265 F.3d 313, 325-27 (5th Cir. 2001).

123. CALLS Plan, *supra* note 107, para. 49.

124. *Id.* at para. 83. On September 17, 2001, the FCC commenced this proceeding and requested that carriers submit cost information. Initiation of Cost Review Proceeding for Residential and Single-Line Bus. Subscriber Line Charge (SLC) Caps, *Public Notice*, 16 F.C.C.R. 16705 (2001). In June 2002, the FCC adopted an order finding that the further increases in flat monthly charges anticipated in the CALLS Plan were necessary to fulfill the

FCC to demonstrate its commitment to keeping residential local service affordable.[125] In addition, the FCC stated the following reservation about all aspects of the plan: "[T]he Commission has the authority to modify the rules we adopt today before the end of the five-year term . . . . This Order addresses a marketplace that is dynamic and evolving, and the Commission may exercise its authority should the need arise."[126] Perhaps the FCC thought that this reservation was important to shield the plan from judicial reversal because there is little precedent for a comprehensive five-year plan in court reviews of FCC orders.[127] Alternatively, the FCC may have been reluctant to give up its discretion to adjust access charges and universal service funding, which had been subject to so many adjustments over the preceding years, especially in light of the opposition—by some carriers, state commissions, and consumer groups—to some aspects of the plan. In any case, the FCC did not discuss how these contingencies would likely affect the degree of regulatory certainty produced by the plan for business investment and operations decisions.

Next, the uncertainties embedded in the FCC order were compounded by judicial review. About fifteen months after the FCC adopted its order, the Fifth Circuit Court of Appeals affirmed the parts of the order involving the structure of access charges and the increased flat monthly charges for residential lines, but reversed the parts changing the price cap formula and establishing a transitional universal service fund.[128] The court held that the FCC lacked a rational basis for determining the amounts of the latter factors, and remanded these matters to the FCC. As FCC Chairman Powell observed in November 2001, a decision that fails to withstand judicial scrutiny is "of no use at all."[129] When the order was adopted, carriers had to develop business plans in light of: the uncertainties about the timing of judicial review; its outcome; when the FCC would issue an order on remand if parts of the original order were reversed; how any such subsequent order would differ from the first; and then again the shadow of judicial review for the subsequent order. While the standard for judicial

FCC's access charge reform objectives. Cost Review Proceeding for Residential and Single-Line Bus. Subscriber Line (SLC) Caps, *Order*, 17 F.C.C.R. 10868, 26 Comm. Reg. (P & F) 1379 (2002).

125. *Tex. Pub. Utils. Counsel*, 265 F.3d at 323, 325.

126. CALLS Plan, *supra* note 107, para. 36 n.45.

127. *See Tex. Pub. Utils. Counsel*, 265 F.3d at 325 ("The FCC has reasonably exercised its predictive judgment . . . . If, in light of the actual market developments, the Commission determines that competition is not having the anticipated effect on access charges, the agency presumably will revisit the issue.") (quoting Southwestern Bell v. FCC, 153 F.3d 523, 547 (8th Cir. 1998)).

128. *Tex. Pub. Utils. Counsel*, 265 F.3d at 329.

129. Powell, *supra* note 19, at 2.

review gives general presumptions in favor of orders adopted by regulatory commissions,[130] the legal standard for vacating and remanding an agency's order does not explicitly weigh the costs of uncertainties that would result from overturning a plan intended to provide long-term predictability in a marketplace.

Finally, the FCC followed the example of this plan, which was applicable to large local exchange carriers, with another five-year plan applicable to small local exchange carriers. The second plan, adopted in October 2001, again addressed both access charge and universal service issues, and again evolved from a proposal developed by a group of carriers.[131] The FCC noted that it would continue to refine its policies and was committed to investigating alternative regulatory methods that would benefit both these carriers and their customers.[132] In adopting the order, the FCC also began a proceeding on other proposed changes to increase the efficiency and competitiveness of these carriers' access services.[133] Thus, this plan was intended to provide only a limited degree of regulatory certainty for these services over the five-year period.

C. Implementing Automatic Location Identification Capabilities for United States Wireless Services

The last example of a multiyear promise deals with the FCC's efforts to cause cellular and personal communications services ("PCS") carriers to implement automatic location identification capabilities for calls to emergency services ("E911"). The proceeding illustrates the difficulties regulators encounter in trying to decrease the uncertainty of deploying new communications technologies.[134] While regulators control access charges and universal funding mechanisms, they do not control, and often have

130. Chevron U.S.A. v. Natural Res. Def. Council, 467 U.S. 837, 842-44 (1984) (allowing for reversal of an agency's decision only if it is "arbitrary, capricious, or manifestly contrary to the statute"); MCI Telecomm. Corp. v. FCC, 675 F.2d 408, 413 (D.C. Cir. 1982); Nat'l Ass'n of Regulatory Util. Comm'rs v. FCC, 737 F.2d 1095, 1134 (D.C. Cir. 1984) (noting the "breadth of the Commission's statutory discretion to balance the multiple goals in the Communications Act").

131. Multi-Ass'n Group (MAG) Plan for Regulation of Interstate Servs. of Non-Price Cap Incumbent Local Exchange Carriers and Interexchange Carriers, *Second Report and Order and Further Notice of Proposed Rulemaking in CC Docket Number 00-256*, 16 F.C.C.R. 19613, para. 1, 25 Comm. Reg. (P & F) 1 (2001) [hereinafter *MAG*].

132. *Id.* para. 13.

133. *Id.* para. 212.

134. *See also* Comms. Assistance for Law Enforcement Act, *Third Report and Order*, 14 F.C.C.R. 16794, 17 Comm. Reg. (P & F) 470 (1999) (explaining schedule and cost-recovery procedures for deploying technologies to facilitate electronic surveillance), *vacated and remanded sub nom.* U.S. Telecomm. Ass'n v. FCC, 227 F.3d 450 (D.C. Cir. 2000).

poor visibility into, technological developments for some new services for a group of licensed carriers also involving equipment suppliers, interconnected carriers, and other non-carrier entities that play roles in provisioning the services. Repeated rule changes and recent waivers in this proceeding point to the fine line between enforceable commitments and nonenforceable statements of intentions.

In 1996, the FCC adopted rules to stimulate the improvement in handling calls to emergency services by wireless carriers.[135] The order recognized the benefits of providing automatic identification of the caller's location to emergency services providers. The order established two sets of requirements. Phase I requires the carrier to deliver to the emergency service the location of the cell site or base station receiving the emergency call. These capabilities were to be initiated within twelve months and completed within eighteen months after issuance of the rules. Phase II requires the carrier to deliver to the emergency services providers more specific latitude and longitude location information on the caller. These more advanced capabilities were to be achieved within five years after issuance of the rules.

The FCC's five-year implementation schedule for Phase II evolved from a proposal developed by the FCC's staff two years earlier.[136] Initially, the wireless carriers opposed a fixed, mandatory schedule while the public safety organizations supported it.[137] The carriers stated that the systems to achieve the Phase II accuracy objectives had not been manufactured, standardized, or field-tested. More than a year after the FCC issued its proposal, the five-year schedule gained the support of a consensus agreement by the leading association of wireless carriers and representatives of public safety organizations.[138] Some suppliers of location systems filed comments stating that the systems could be developed to meet the five-year schedule.[139]

Some comments favored allowing the location identification capabilities to develop based on the demands in the marketplace at a market-driven pace. Others urged the FCC to limit its role to encouraging

135. *E911 Order*, *supra* note 28, para. 10. *See also* Hatfield, *supra* note 28, at 6-11.

136. Revision to the Comm'n's Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Sys., *Notice of Proposed Rulemaking*, 9 F.C.C.R. 6170, 3 Comm. Reg. (P & F) 2193 (1994).

137. *E911 Order*, *supra* note 28, paras. 23, 55-57.

138. *Id.* para. 57.

139. *Id.* paras. 55-56. As for costs, the FCC noted a huge range of estimates in the record, from $510 million to $7.5 billion depending on the technology, and found that it was reasonable to conclude that these costs were "likely to decline in the future." *Id.* para. 62.

voluntary development of the capabilities.[140] Instead, the FCC found that a mandatory implementation schedule was necessary to ensure expeditious deployment of technologies to enhance public safety communications. The FCC sought to impose a schedule that was "rigorous without being impossible or commercially self-defeating."[141]

The FCC modified its rules several times over the years following adoption of the initial schedule, including allowance for a handset-based technology that was not anticipated in the initial order.[142] If a carrier chose to implement location identification capabilities through handsets, it could phase in the availability on an initial schedule from March 2001 through December 2005. The FCC also required carriers to file implementation reports detailing their progress and plans. In an order adopted in August 2000, the FCC found that "much progress has been made in developing technologies to make wireless E911 a reality, although much still remains to be done."[143] That order extended the initiation date for handset-based technologies by seven months, modified the phase-in schedule and granted a further waiver to one carrier. Finding that location technologies "are already, or will soon be, available that provide a reasonable prospect for carriers to comply with the E911 Phase II requirements," the FCC stated that any waiver request must be "specific, focused and limited in scope, and with a clear path to full compliance."[144]

The schedule came under strong fire from many wireless carriers in the final year of the five-year period. While the leading wireless carriers had engaged in field test and/or development work with manufacturers, none of the carriers was implementing the capabilities according to the schedule. The carriers pointed to the failure of their vendors (who they claimed were beyond their control) to supply equipment necessary to satisfy the accuracy requirements in the rules. In October 2001, the FCC conditionally approved, with certain modifications, the compliance plans of five nationwide carriers and initiated enforcement investigations regarding

140. *Id.* para. 61.

141. *Id.* One party argued for an "evolutionary path for the E911 rules because the timing of implementation is affected by 'economic, operational and technological feasibility'" (quoting comments filed by a public safety organization). *Id.*

142. Revision of the Comm'n's Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Sys., *Memorandum Opinion and Order*, 12 F.C.C.R. 22665, 10 Comm. Reg. (P & F) 1090 (1997); Revision of the Comm'n's Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Sys., *Second Report and Order*, 14 F.C.C.R. 10954, 16 Comm. Reg. (P & F) 1 (1999); Revision of the Comm'n's Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Sys., *Fourth Memorandum Opinion and Order*, 15 F.C.C.R. 17442, 22 Comm. Reg. (P & F) 310 (2000) [hereinafter *2000 E911 Order*].

143. *2000 E911 Order*, *supra* note 142, para. 3.

144. *Id.* para. 44.

some carriers.[145] These orders extended the initial deployment milestone; preserved the 2005 milestone for completing deployment; warned of strong enforcement of the revised milestones; required the carriers to file quarterly progress reports; and opened an inquiry into technical issues, including technology standards, development of hardware and software, and supply conditions. Three carriers quickly filed petitions for reconsideration, claiming that the waivers were too harsh in holding the carriers to the milestones, which they had proposed,[146] regardless of the availability of compliant technology from suppliers and predetermining that enforcement actions would be invoked against carriers in cases of noncompliance.

In May and October 2002, the FCC and two major carriers entered into consent decrees that included a $100,000 and a $2 million "voluntary contribution" to the U.S. Treasury and further payment obligations if the carrier misses deployment benchmarks.[147] Also, about a year after adopting the revised deployment and reporting requirements in its October 2001 order, the FCC received a consultant's report on technical and operational issues with wireless E911 deployment, and requested comments in order to assess deployment issues and to consider methods to overcome deployment issues.[148] The report pointed to various issues not addressed in the FCC's

145. *See Fact Sheet: E911 Phase II Decisions*, FCC Wireless Bureau, *available at* http://ftp.fcc.gov/Bureaus/Wireless/News_Releases/2001/nw/01279.pdf (Oct. 2001). *See also* Revision of the Comm'n's Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Systems (AT&T Wireless Svcs., Inc.), *Order*, 16 F.C.C.R. 18253 (2001); Revision of the Comm'n's Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Systems (Nextel Comm., Inc.), *Order*, 16 F.C.C.R. 18277 (2001); Revision of the Comm'n's Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Systems (Cingular Wireless), *Order*, 16 F.C.C.R. 18305 (2001); Revision of the Comm'n's Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Systems (Sprint PCS), *Order*, 16 F.C.C.R. 18330 (2001); Revision of the Comm'n's Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Systems (Verizon Wireless), *Order*, 16 F.C.C.R. 18364 (2001) [hereinafter collectively *2001 E911 Order*]; *Wireless Communications and Public Safety Act: Oversight Hearing on Wireless E-911 Compliance (P.L. 106-81) Before the Senate Subcomm. on Communications of the Commerce, Science, and Transp. Comm.*, 107th Cong. (Oct. 16, 2001) (Testimony of Thomas J. Sugrue, Chief, Wireless Telecommunications Bureau, FCC) [hereinafter Sugrue Testimony].

146. Cingular, Nextel, and Verizon File Petitions For Reconsideration of Comm'n Orders on Wireless E911 Phase II Waiver Requests, *Public Notice*, 16 F.C.C.R. 20438 (2001); *2001 E911 Order*, *supra* note 145, at 18272 (statement of Comm'r Michael Copps).

147. Press Release, FCC, FCC and Cingular Wireless LLC Enter into $100,000 Consent Decree Regarding E911 Rules (May 9, 2002) *at* http://www.fcc.gov/Daily_Releases/Daily_Business/2002/db0509/DOC-222264A1.pdf; AT&T Wireless Svcs., Inc., 2002 FCC LEXIS 5087 (Oct. 9, 2002).

148. Wireless Telecommunications Bureau Seeks Comment on Report on Technical and Operational Wireless E911 Issues, *Public Notice*, DA 02-266 (Oct. 16, 2002), *available at* http://hraunfoss.fcc.gov/edocs_public/attachmatch/DA-02-2666A1.doc; Hatfield, *supra* note 28, at iii.

prior orders, including the responsibilities of, and recovery of costs for, landline carriers in upgrading their existing wireline E911 systems to support wireless E911, and the complexities in working with approximately 8,000 public safety agencies having a wide range of capabilities and funding.

Two questions arise from this experience. First, in light of the failure by carriers to meet the initial implementation milestone and the FCC's numerous modifications and waivers of its rules, how did the "mandatory" schedule affect the conduct of the industry and the regulator? Second, does the record support the view that the commitment to a deployment schedule promoted efficiency?

On the effects of the schedule on the industry and the regulator, this proceeding illustrates the "holding their feet to the fire" approach to regulation. The FCC does not have jurisdiction over telecommunications equipment manufacturers and system suppliers, and was not in a position to dictate development and production of this technology by them. While the FCC has jurisdiction over the carriers, the regulator lacked the technical capability and willingness to micromanage the carriers' relationships with their suppliers. Nor was the regulator willing to require the carriers to spend billions of dollars on one technology when the carriers claimed that an effective, lower-cost technology would be available "soon." What the FCC could and did do was to establish the schedule as mandatory for the carriers, repeatedly speak out on its commitment to bringing about the public interest benefits of the technology, and show only limited willingness to vary from these rules in light of emerging technology and market conditions. Compared to letting the market evolve without regulatory intervention, the schedule had the effect of creating stronger incentives for equipment manufacturers and system suppliers to develop new technologies, and for carriers to devote resources to product development with suppliers, field tests, and deployment planning.

How strong were the effects of the schedule on the industry? The schedule, together with threats of enforcement actions, filings of implementation plans and only limited waivers, gave some push to the industry.[149] On the other hand, the carriers no doubt anticipated some flexibility from the regulator, especially when the carriers could place the blame on their suppliers and the FCC repeatedly had modified the schedule and technical requirements. The FCC's orders described general progress

149. *See* Hatfield, *supra* note 28, at 12 (in a report dated Oct. 15, 2002, the consultant finds that "with the pressure of the Commission deadlines" the "initial discovery, development and evaluation phase seems largely completed" and "the focus has shifted increasingly to actual implementation").

by the carriers and their suppliers. Perhaps more would have been accomplished by the carriers and their suppliers if the FCC had earlier signaled a tougher enforcement posture. In a statement accompanying the October 2001 waivers, Chairman Powell stated his determination to achieve complete availability of wireless location capability:

> Given that this service can save lives, I trust that the carriers, the manufacturers and public safety authorities will work tirelessly to get this service to people as soon before that deadline as possible. It is not good enough to go for a gentleman's "C." This test requires an "A+" effort.[150]

It is not clear whether the chairman was critical of prior orders for binding the industry only to a "C"-level push for deployment.

The schedule adopted in 1996 influenced subsequent actions by the FCC. The schedule created a promise by the FCC to public safety organizations and Congress. Through legislation and hearings,[151] Congress embraced the rapid deployment of wireless location capabilities. With the strong growth of wireless usage and wireless calls to emergency services during the five-year period, changing market conditions increased the political pressure on the FCC to turn its promise into reality. In each order that allowed for slippage of milestones, the FCC had to demonstrate that it had lost none of its commitment to this goal.

We can now analyze whether the FCC's multiyear commitments in its 1996 order promoted productive efficiency. The FCC's order decreased the uncertainty about when carriers would implement location technologies and the performance standards. Even though the possibility of waivers hung over this process, carriers at least had to create a record of attempted compliance on which to seek waivers. The leading wireless carriers and some of their suppliers took the schedule seriously enough to engage in product development, field testing, and implementation planning. The waivers disrupted some business plans for the initial milestone but preserved much of the rollout schedule for the subsequent years. Absent the FCC's orders, carriers and their suppliers would have done even more guessing about when market demands would have resulted in orders for this technology, or the possibility of the FCC, Congress, or state and local authorities mandating a deployment schedule and technical standards.

150. *2001 E911 Order*, *supra* note 145, at 18265 (separate statement of Chairman Michael Powell).

151. *See* Wireless Communications and Public Safety Act of 1999, Pub. L. No. 106-81, 113 Stat. 1286 (1999); Sugrue Testimony, *supra* note 145; Oral Testimony of Thomas J. Sugrue before the Subcommittee on Telecommunications, Trade and Consumer Protection, *at* http://ftp.fcc.gov/Bureaus/Wireless/Notices/2001/sugrue101.doc (June 14, 2001); Peter P. Ten Eyck, *Dial 911 and Report a Congressional Empty Promise: The Wireless Communications and Public Safety Act of 1999*, 54 FED. COMM. L.J. 53 (2001).

The five-year commitment was not just the FCC's shot in the darkness of distant future wireless technologies. Rather, the carriers had agreed to this schedule and some vendors went on record supporting the availability of systems in that time frame.[152] The carriers may have perceived opportunities for productive efficiencies from not facing a shorter implementation deadline, or from less uncertainty about when location requirements would be imposed on them. The vendors may have perceived that the FCC would expand the market opportunity for these new technologies.

Given that the FCC could not control the technology development by equipment manufacturers or public safety agencies, there were some types of inefficiencies from locking carriers into an implementation schedule and performance standards. Carriers had to expend resources for testing technologies and convincing the FCC to grant waivers. The mandatory schedule caused the regulator to make formal adjustments to the rules several times in light of technology and market developments.[153] Each petition and order required more resources from carriers and the regulator than would have been employed with a less firm commitment, such as an ongoing panel to study and encourage location technology deployment. Also, some potential suppliers might have invested heavily in product development, field testing with carriers, and manufacturing capacity in anticipation of substantial orders for the October 2001 implementation date. The waivers changed the competitive landscape for suppliers, perhaps depriving rewards from those suppliers that came closest to meeting the technical and availability requirements established in the prior orders. If these suppliers had operated in a market without a regulatory schedule for deployment, they could have avoided some costs.

In summary, the FCC's commitment to a deployment schedule and technical standards was built on guesses about technology developments that neither the regulator, nor the carriers, could control. The five-year promise was never written in stone. It was subject to both interim modifications in response to technological changes and last-minute waivers. While the FCC's approach likely fostered some efficiencies as well as some inefficiencies compared to ad hoc, short-term regulatory decisions, the balance probably weighs in favor of the efficiencies. The FCC's attempts to bring clarity to this area for a five-year planning horizon helped guide the carriers, their suppliers, and public safety agencies.

Technology developments on this politically hot issue faced inherent uncertainties. The FCC's commitment involved many adjustments over

152. *See 2000 E911 Order*, *supra* note 142.

153. *See* sources cited *supra* note 142.

time, but its intent is admirable. It may have been easier for the FCC to limit its role to issuing annual reports on developments in this area or addressing certain deployment-related issues, such as how carriers could recover their costs from deploying this capability. Instead, the FCC recognized that some uncertainty facing carriers, their suppliers, and public safety agencies needed to be removed in order to accomplish the policy goal of rapid development and deployment of this capability. The multiyear promise, while unstable and imperfect as to timing and technical standards, did remove some uncertainty, and thereby promoted productive efficiency.

IV. LESSONS ON MULTIYEAR REGULATORY PROMISES

This Section draws two lessons from the analysis of various multiyear regulatory promises in the preceding Section. First, under some conditions regulators have departed from a step-by-step approach to adopt multiyear plans. Regulators could make more use of atypical procedures to achieve predictable multiyear plans for other issues. Second, such plans can produce efficiency gains compared to piecemeal, ad hoc, or short-term regulatory decisions. Through analysis of a U.S. plan intended to promote local telecommunications competition which has been plagued by uncertainties, this point also explains that clear standards and a fixed schedule can promote efficiency gains.

A. Regulators Do, Under Some Conditions, Make and Keep Multiyear Promises

The five multiyear promises analyzed in Section II developed from diverse conditions and do not reflect "ordinary" regulatory decisions or decision-making processes. Each of these examples involves an agreement with major industry actors, not just a regulatory evaluation of a record and creation of rules. Such atypical approaches could be used by regulators more frequently, by encouraging or mediating industry negotiations aimed at long-term solutions. When diverse carriers and other interested parties are polarized and litigious, regulators have difficulty establishing a stable, multiyear regulatory framework. A review of the conditions and processes underlying these ambitious regulatory plans may be helpful in guiding future orders and processes.

The lesson here is that multiyear regulatory promises develop when regulators and the telecommunications industry focus on the benefits of reducing uncertainties over time, not just resolving a dispute or establishing an immediately applicable rate or obligation of uncertain duration. Under these conditions, regulators can and have made complex, politically sensitive multiyear promises.

1. Privatizations

The three examples of regulatory plans made in connection with sales of strategic interests in national telephone carriers were ambitious. The plans were intended to provide predictability for long periods (six to ten years) and address major changes in the full scope of national regulatory issues, including rates, network expansion and modernization, service-quality improvements and competition. The plans are especially impressive when compared to the preceding governmental actions in the telecommunications sectors of these countries, typically limited to isolated rate and network construction decisions to comply with general governmental political priorities as to economic and social policies.

The plans were intended to sell the privatization transaction to two audiences. Both audiences were very focused on having a clear long-term picture of regulation as well as definite milestones.

On one hand, potential buyers for the strategic interest included major foreign telecommunications operators. In developing business plans for investing billions of dollars for the initial stock purchase and network improvements, the potential buyers needed to develop annual forecasts of revenues and expenses extending over many years. The buyers wanted rate rebalancing before competitive entry, and were willing to commit to gradual rate rebalancing only when the regulator gave assurance that competitive entry would be sufficiently delayed. Similarly, the buyers were willing to commit to network expansion and service quality improvements, including in unprofitable rural areas. The buyers, however, wanted a reasonable schedule and clear standards so that they would not be exposed to unexpected penalties or expenditures. With little or no precedent for telecommunications regulation by an independent agency in these countries, the buyers wanted many issues applicable to future years addressed in the concession agreements. Additionally, the buyers recognized the unique conditions surrounding the transaction, which perhaps gave them greater influence over regulatory decisions than they would have in the future.

On the other hand, the business plans needed to be accepted by the domestic political audience. Politicians wanted to see commitments to expanding the networks in order to serve the many people waiting for service. They also wanted to see service-quality improvements, network modernization to support economic development, and rate changes which protected subscribers from sharp rate increases. With the global move to telecommunications competition, domestic politicians wanted to make sure that their countries would introduce competition without unreasonable delay.

Along with the multiyear focus of the audiences for the plans, the transactions brought together unusual teams to craft the multiyear regulatory promises. The governments were advised by teams of investment bankers, international telecommunications consultants, and international lawyers, all with expertise on telecommunications regulations. Instead of relying solely on the staff of the regulatory agency, the plans were developed with advisors having a more long-term orientation to the carrier's business and telecommunications regulations.

Now consider the conditions influencing regulators to keep these multiyear promises. Part of what tied the regulators to their plans in the following years was related to the transaction. The buyers paid serious money to the government, and had contractual remedies for violations of the concession agreements which are not normally available to carriers when regulators change their rules.[154] These transactions also preceded the national carriers' initial public offerings, which involved further sales of shares held by the governments. These subsequent sales gave the governments incentives to abide by the multiyear promises and not to impose new onerous requirements or restrictions on the carriers. Similarly, telecommunications privatizations in those countries were often followed by privatizations in other sectors, giving the government further reason to establish a reputation as an honest player that keeps its promises.

Aside from the context of the transactions, these multiyear, multifaceted plans reflect a balancing of many interests. Not adhering to these promises would require addressing the expectations of various interest groups. Most changes would benefit some interest groups while harming others. While the examples show that it is possible to work through some modifications, such as altering some service-quality standards, it is much more difficult to make other changes, such as early competitive entry. Early competitive entry would make it harder for the regulator to obtain network expansion in rural areas and gradual increases in residential local service rates. The carriers would have a stronger expectation of regulators keeping their promises with regard to a plan's aspects that are tied to the interests of some politically influential groups.

2. FCC Access Charges and Universal Service Plan

The conditions related to the FCC's multiyear plan for reforming access charges and universal service funding were quite different from those pertaining to the three privatizations. The plan emerged out of several

154. *See* TELMEX PROSPECTUS, *supra* note 38, at Exhibit: Concession Granted to the State-Owned Company Teléfonos de México, S.A., Clauses First, Twenty-Fourth; CANTV PROSPECTUS, *supra* note 60, at 61; MATAV PROSPECTUS, *supra* note 83, at 12.

sources of uncertainty. During the preceding three years, there had been numerous separate orders which addressed parts of these interrelated issues. Some of those orders were reversed and remanded, in whole or in part, by the appellate courts.[155] Portions of the regulations that were adopted in those orders pointed to the temporary nature of the charges, anticipating further revisions by the FCC. Also, carriers were requesting reconsideration of at least one element which was proving difficult to implement, and argued that the FCC's decisions had not gone far enough in reforming these charges.[156]

While the FCC was continuing to analyze options and develop factual records on these issues through rulemaking proceedings, some major local exchange and long-distance carriers worked on a consensus plan. The plan reflects the participating carriers' desire to remove some of the uncertainty surrounding these charges via a predictable, five-year framework. Greater certainty about moving to lower access charges, even if phased in, would help these carriers compete (including against carriers that did not have to impose or pay these charges), plan services and network facilities, and forecast demand. Without the agreement of these carriers, the FCC would not likely have committed to this five-year regulatory plan.

Perhaps it was too good to be true. The carriers' ability to remove uncertainty through a multiyear regulatory commitment was limited. A midterm review by the FCC had to be built into the plan to address political concerns about increasing charges on residential customers. On top of this, the FCC explicitly reserved its options to change the rules over time, possibly out of concern that a court would reverse its surrender of discretion, and possibly out of concern that it would need this discretion to address changing market conditions. The group supporting the plan did not include all interested parties; thus, as with most proposals filed with the FCC, the uncertainty persisted through the FCC's rulemaking process and court review. These parties outside of the group which agreed to the consensus plan preferred the possibility of other regulations, along with the uncertainty of what the FCC would adopt and when, over the certainty of the plan's commitments. Then came court reversal of some elements of the plan as not supported by the record, leading to more FCC proceedings and uncertainty.[157]

155. *See Access Charge Reform First Report and Order*, *supra* note 113; *Price Cap Performance Review Fourth Report and Order*, *supra* note 115; *Joint Bd. on Universal Serv. Report and Order*, *supra* note 116.

156. CALLS Plan, *supra* note 107, paras. 19, 78-79, 86, 106.

157. Tex. Pub. Utils. Counsel v. FCC, 265 F.3d 313, 329 (5th Cir. 2001).

3. FCC Schedule for Wireless E911 Capability

Finally, the main driver behind the five-year plan for wireless E911 capability was political support for the public safety benefits. When the FCC commenced its rulemaking proceeding, automatic location identification for landline calls was widely available in the United States, and the number of wireless calls to public safety agencies was already large and growing rapidly. Public safety agencies were clamoring for governmental action to save lives, with widely accepted assumptions that the technologies could be readily developed and that the benefits would outweigh any costs imposed on the burgeoning wireless industry. The FCC needed to show Congress that the regulators were promoting wireless carriers' deployment of this capability. It was not enough to point to the possibility that an unregulated market would produce this capability eventually, nor to show that the FCC was studying the issue and would take action at some unspecified future time if deemed warranted based on further information about the technologies.[158]

From the industry perspective, there was substantial uncertainty about what would be required and when. The wireless industry had succeeded in avoiding most of the types of regulatory burdens imposed on landline carriers, such as rate regulation and unbundled interconnections. Although wireless carriers could point to an increasingly competitive marketplace that would drive advances in their service offerings, they also were aware of the active role of governmental authorities in implementing landline E911 capability and the political support for wireless E911 capability. Following the FCC's notice of proposed rulemaking, the carriers argued that the timing should be determined by the marketplace; the carriers preferred to control the planning without regulatory intervention.[159] When the industry recognized that this position appeared unacceptable to the FCC, representatives of the carriers and public safety agencies agreed to a five-year schedule and filed that consensus agreement with the FCC.[160] The carriers probably viewed this agreement as helping them avoid a more

158. In several other proceedings involving the deployment of new telecommunications technologies, the FCC took a different approach, combining some rules with monitoring and with the potential for additional rules if warranted by market conditions. Promotion of Competitive Networks in Local Telecomm. Mkts., *First Report and Order and Further Notice of Proposed Rulemaking in WT Docket Number 99-217*, 15 F.C.C.R. 22983, 22 Comm. Reg. (P & F) 1 (2000). *See also* Wireless Telecomm. Bureau Requests Comment on Current State of the Market for Local and Advanced Telecomm. Services in Multitenant Environments, *Public Notice*, 16 F.C.C.R. 20971 (2001).

159. *E911 Order*, *supra* note 28, paras. 23, 55-57.

160. *Id*. para. 57.

aggressive deployment schedule or set of technical standards than the FCC, Congress, or state and local authorities might have mandated.

The consensus agreement was important for adoption and enforcement of the five-year plan. Instead of having the FCC adopt the schedule as its own best guess of what could be reasonably accomplished, the carriers committed to complying with this schedule. This made it harder for all parties to justify slippage. The promises by all parties were made in the context of the FCC's ongoing review of its technology standards and readiness to make adjustment for technology developments. Nevertheless, the mutual promises established a marker in the sands of the uncertain future of wireless technologies.

B. Multiyear Regulatory Promises Can Produce Efficiency Gains

The analysis in Section III identified certain efficiency gains from the five multiyear regulatory plans. Two points emerge from this analysis—that the promises can produce efficiency gains and that efficiency-enhancing changes can be implemented with benefits redistributed according to the earlier promises. After explaining these points, this Section concludes with a discussion of the structure of a U.S. multiyear promise covering local competition which has yielded some inefficiencies resulting from continued uncertainties.

1. Gains from Decreasing Uncertainty

A predictable regulatory framework can promote productive efficiency by carriers as well as the ability of regulators to obtain their objectives. Put differently, regulatory decisions setting only interim rules of indefinite duration and open-ended uses of regulatory discretion to modify rules can have an opportunity cost for the industry, consumers, and public policy goals.

Businesses use multiyear plans to guide investments, operations, and product development. Along with assumptions typical of unregulated markets regarding technology, demand, costs, competition, and other market factors, the business plans of telecommunications businesses include assumptions about regulated rates, network and service requirements, regulatory rules for competition, and other terms by which regulators heavily influence the industries. Uncertainties regarding these regulatory-influenced factors create costs in business decisions, such as: underutilized facilities when regulators delay authorization for services; failure to enforce interconnection standards or impose costs which decrease demand; retroactive upgrades of hardware and software to meet new regulatory requirements when economies were available if these standards

were known before some deployments; opportunity costs from not developing capabilities to offer services because regulators would not commit to authorizing an offering or pricing it in line with its costs; and so on.

In some cases, such as the privatization transactions, major investments would not have been made in the absence of commitments by the regulators to a detailed, comprehensive plan extending over six- to ten-year periods. In the case of the FCC plan for access charges and universal service funding, some leading carriers worked hard to reach agreement on a five-year plan for rates from which they could develop plans for facilities, interconnection arrangements, and service offerings. The example of the wireless E911 technology dealt with a multiyear program of development by manufacturers and field testing by carriers, where knowledge of the regulators' performance standards and implementation milestones saved costs by guiding the technology choices and implementation planning.

From the perspective of regulators trying to implement new regulations, a multiyear plan can decrease implementation costs which ultimately are borne by consumers. Also, the industry may be able to implement a regulatory change earlier if the regulator makes an advanced commitment to the change. For example, the wireless E911 plan adopted in 1996 likely accelerated the development and deployment of this technology.

2. Promises to Redistribute Gains in the Event of Changes

This Author has analyzed several instances in which regulators sought, or explicitly reserved the right, to change multiyear plans midterm, including fundamental commitments. The shadow of uncertainty about such changes can decrease the efficiency gains from a multiyear plan. Nevertheless, a second point about efficiency benefits is that multiyear plans can function to redistribute the gains of regulatory changes without barring changes which would enhance efficiency.

Part of regulators' reluctance to adopt multiyear plans may be their concerns about subsequently developing different conclusions which would enhance efficiency. Such changes may develop from new market conditions or analyses of options, and could involve different rate structures, standards for network and service performance, timing and conditions for competition, or other rule changes. Just as a panel of regulators would not want to be entirely bound by the decisions of its predecessors, so too, would a panel of regulators be reluctant to bind its successors entirely.

As discussed in connection with the analysis of attempts to accelerate competition under the privatization plans in Venezuela and Hungary, multiyear commitments can influence the process and beneficiaries of regulatory changes, but should not bar regulatory changes which would enhance efficiency. A plan makes commitments to various interest groups; a regulatory change which would adversely affect some groups may require that those groups be compensated for the loss compared to proceeding with the plan. As long as the change represents a net gain to the country, it should be possible to arrange such compensation and still proceed with the change. In other words, a plan which balanced various interests through one set of regulations can be replaced by another plan which rebalances these interests through a second set of regulations as long as there is a net gain to distribute.

In effect, a plan establishes a multiyear baseline set of expectations. Greater benefits in terms of reduced uncertainty arise from clear, predictable regulatory commitments. Yet a plan can also produce efficiency gains by structuring the regulatory commitments as follows: one, the regulator specifies the future regulations over a term as clearly as possible at that time; and two, the regulator does not promise that such regulations will remain unchanged but does promise to give serious consideration to the conditions specified therein, and compensation for the related expectations in making any changes. Such compensation can take the form of agreed remedies according to contractual provisions, trading off against other regulatory restrictions or obligations in bilateral negotiations, or otherwise addressing the interests of groups harmed by the change compared to the baseline conditions. The commitment to engage in this process of recognizing expectations and redistributing gains results in less uncertainty than an open-ended characterization of a regulatory decision as merely interim with no setting of baseline conditions.

3. A Multiyear Promise with Too Much Uncertainty About Carriers' Obligations and Regulatory Criteria

The final point is that clarity in commitments and restricting carriers' and regulators' discretion decreases uncertainty and promotes efficiency. This point is illustrated by an area of particularly strong regulatory turbulence and industry uncertainty involving local exchange competition in the United States.

One of the main goals of the Telecommunications Act of 1996 is to open local markets to competition.[161] The legislation removed legal barriers to competition (such as some state protections of monopolies in local switched services),[162] as well as some economic and technical barriers to competition (such as requiring that incumbent carriers interconnect with competitors by offering unbundled network elements, collocation of network facilities, and number portability).[163] The statutory provisions spawned a long series of FCC rulemaking proceedings, which in time spawned numerous court reviews and remands, reconsideration proceedings, and complaints.[164] Uncertainty persisted, especially where rules were adopted as "interim" or "transitional."

An important multiyear promise in the legislation relied on an incentive approach to easing some economic and technical barriers to competition.[165] There was much uncertainty surrounding whether carriers would respond to the incentive and when, as well as how regulators would judge compliance with the standard. Some market-opening measures were specified in the legislation as requirements for most incumbent local exchange carriers, and the FCC adopted detailed performance standards and implementation schedules for such requirements within a few months or years after enactment of the legislation.[166] The statute also allowed the

161. Congress sought "to provide for a pro-competitive, de-regulatory national policy framework designed to accelerate rapidly private sector deployment of advanced telecommunications and information technologies and services to all Americans by opening all telecommunications markets to competition." S. CONF. REP. NO. 104-230, at 1 (1996).

162. 47 U.S.C. § 253(a) (Supp. V 2000).

163. § 251.

164. *See* Implementation Schedule, *supra* note 111; Implementation of the Local Competition Provisions in the Telecomms. Act of 1996, *First Report and Order*, 11 F.C.C.R. 15499, 4 Comm. Reg. (P & F) 1 (1996), *aff'd in part and vacated in part sub nom.* Competitive Telecomms. Ass'n v. FCC, 117 F.3d 1068 (8th Cir. 1997), *aff'd in part and vacated in part sub nom.* Iowa Utils. Bd. v. FCC, 120 F.3d 753 (8th Cir. 1997), *aff'd in part, rev'd in part and remanded sub nom.* AT&T Corp. v. Iowa Utils. Bd., 525 U.S. 366 (1999); Implementation of the Local Competition Provisions of the Telecomms. Act of 1996, *Third Report and Order and Fourth Further Notice of Proposed Rulemaking*, 15 F.C.C.R. 3696, 18 Comm. Reg. (P & F) 888 (1999) [hereinafter *UNE Remand Order*]; Deployment of Wireline Services Offering Advanced Telecomms. Capability, *Third Report and Order in CC Docket Number 98-147*, 14 F.C.C.R. 20912, 18 Comm. Reg. (P & F) 758 (1999); Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers, *Notice of Proposed Rulemaking*, 16 F.C.C.R. 22781 (2001); Verizon Comm. v. FCC, 122 S. Ct. 1646 (2002); U.S. Telecom Ass'n v. FCC, 290 F.3d 415 (D.C. Cir. 2002); Rebecca Beynon, *The FCC's Implementation of the 1996 Act: Agency Litigation Strategies and Delay*, 53 FED. COMM. L.J. 27 (2000); David M. Mandy, *Progress and Regress on InterLATA Competition*, 52 FED. COMM. L.J. 321 (2000).

165. 47 U.S.C. § 271 (Supp. V 2000).

166. *See generally* Implementation Schedule, *supra* note 111. For example, the legislation explicitly required local number portability, and the FCC adopted detailed rules

FCC to identify other market-opening measures not specified in the law (such as access to operational support systems to speed the processing of interconnection requests).[167] The FCC could order that such measures be implemented generally, and also review such implementation in the context of applications by Bell regional operating companies (the local exchange carriers created by the divestitures of local exchange carriers from AT&T in 1984) to obtain authority to provide long-distance services.[168] For

for local number portability, including an implementation schedule. § 251(b)(2) requires all local exchange carriers "to provide, to the extent technically feasible, number portability in accordance with requirements prescribed by the Commission." 47 U.S.C. § 251(b)(2) (Supp. V 2000). The legislation defined number portability in 47 U.S.C. § 153(30), and addressed how the cost would be recovered in order to prevent such cost from thwarting competition in 47 U.S.C. § 251(e)(2). The FCC adopted a series of orders requiring local exchange carriers to offer interim number portability "to the extent technically feasible" and to implement gradually permanent number portability. Telephone Number Portability, *First Report and Order*, 11 F.C.C.R. 8352, 3 Comm. Reg. (P & F) 600 (1996) (quoting § 251(b)(2)); Telephone Number Portability, *Second Report and Order*, 12 F.C.C.R. 12281, 8 Comm. Reg. (P & F) 1377 (1997); Telephone Number Portability, *Third Report and Order*, 13 F.C.C.R. 11701, 12 Comm. Reg. (P & F) 1377 (1998); Telephone Number Portability, *Fourth Memorandum Opinion and Order on Reconsideration*, 14 F.C.C.R. 16459, 16 Comm. Reg. (P & F) 757 (1999). Compliance with the number portability regulations is also specified in the legislation as an item on the checklist for Bell operating company entry into long-distance services. 47 U.S.C. § 271(c)(2)(B)(xi) (Supp. V 2000).

167. 47 U.S.C. § 271(c)(2)(B)(ii) (Supp. V 2000). "Under checklist item 2, a BOC [Bell Operating Company] must demonstrate that it provides non-discriminatory access to the five operational support systems (OSS) functions: (1) pre-ordering; (2) ordering; (3) provisioning; (4) maintenance and repair; and (5) billing." Joint Application of SBC Comm. Inc., Southwestern Bell Tel. Co., and Southwestern Bell Comm. Svcs., Inc., d/b/a/ Southwestern Bell Long Distance Pursuant to Sec. 271 of the Telecomm. Act of 1996 to Provide In-Region, InterLATA Services in Ark. and Mo., *Memorandum Opinion and Order*, 16 F.C.C.R. 20719, 25 Comm. Reg. (P & F) 183 para. 15 (2001) [hereinafter *SBC AK-MO Order*]. *See also* Application by Bell Atl. N.Y. for Authorization Under Sec. 271 of the Comm. Act to Provide In-Region, InterLATA Service in the State of N.Y., *Memorandum Opinion and Order*, 15 F.C.C.R. 3953, paras. 17-20, 19 Comm. Reg. (P & F) 1, 6-8 (1999) [hereinafter *Bell Atl. N.Y. Order*], *aff'd sub nom.* AT&T Corp. v. FCC, 220 F.3d 607 (D.C. Cir. 2000); Sprint Comm. Co. v. FCC, 274 F.3d 549 (D.C. Cir. 2001).

The FCC determined in 1999 that requesting carriers are impaired without nondiscriminatory access to incumbent local exchange carriers' OSS functions, and mandated that these functions be made available as unbundled network elements under 47 U.S.C. § 251(c)(3). *See UNE Remand Order*, *supra* note 164, para. 433; *Bell Atl. N.Y. Order*, *supra*, para. 84. The FCC, however, decided not to adopt quantitative and qualitative performance measurement rules for this unbundled network element and instead to rely on state commission review and its review of § 271 applications. *UNE Remand Order*, *supra* note 164, at para. 437 (rejecting request of one competitive carrier to adopt performance standards so that failure to satisfy these standards would "automatically trigger a process to identify and correct the root cause of the OSS problem"). *See also SBC AK-MO Order*, *supra*, para. 26.

168. The legislation specified a fourteen-point checklist which had to be satisfied for a Bell company to be authorized to provide long-distance services in a state, a time limit for FCC consideration of any application, and a procedure involving review by the applicable

operational support systems, the FCC decided to interpret this standard and judge a company's compliance with it through case-by-case determinations over time in response to applications for long-distance authority.[169]

The Bell companies had sought a clear path to long-distance service authority in the legislation. Congress viewed the incentive of this authority as a very tempting carrot to get these companies to implement the measures which the FCC would review in the context of such applications.[170] Although the legislation had not provided a schedule for implementing some of these measures, many legislators, regulators, and carriers assumed that this incentive was sufficiently strong that they could count on widespread implementation within at most a few years.

The multiyear promise took the following form: if a Bell company demonstrated that it had implemented all the market-opening measures in a state, and the FCC determined that such standard was satisfied, then the Bell company would be authorized to provide long-distance services to users in that state. In the months and years following enactment of the legislation, billions of dollars were spent based on these expectations. Competitive carriers collected billions of dollars from investors, negotiated interconnection agreements with the Bell companies, developed networks and/or resale strategies, marketed services, and submitted interconnection orders on the belief that this incentive would quickly drive the Bell companies to implement measures to satisfy the standard.[171] On the Bell

state commission and the U.S. Department of Justice. 47 U.S.C. § 271(c)(2)(B), (d)(2)(A)-(B), (d)(3) (Supp. V 2000); *SBC AK-MO Order*, *supra* note 167, app. D, paras. 1-14.

169. Even after more than five and one-half years, and experience with many applications, the FCC chose to continue with case-by-case determinations:

> The determination of whether the statutory standard is met is ultimately a judgment the Commission must make based on its expertise in promoting competition in local markets and in telecommunications regulation generally. The Commission has not established, nor does it believe it appropriate to establish, specific objective criteria for what constitutes "substantially the same time and manner" or a "meaningful opportunity to compete." Whether this legal standard is met can only be decided based on an analysis of specific facts and circumstances.

SBC AK-MO Order, *supra* note 165, para. 6 (citations omitted).

170. *See, e.g.*, Statement by President William J. Clinton Upon Signing the Telecommunications Act of 1996, P.L. 104-104, 1996 U.S.C.C.A.N., Vol. 4 at 228-2; Additional Views of Rep. John D. Dingell et al., Telecommunications Act of 1996, P.L. 104-104, 1996 U.S.C.C.A.N., Vol. 4 at 100-03.

171. *See Internet Hearing*, *supra* note 8 (Prepared Statement of James H. Henry) ("[Competitive local exchange] carriers deployed approximately $55 billion in capital to build alternative local networks."). For contrasting views of the market experience of competitive local exchange carriers in the United States and related regulatory actions, see ASS'N FOR LOCAL TELECOM. SVCS., PROGRESS REPORT ON THE CLEC INDUSTRY (Oct. 17, 2002), *available at* http://www.alts.org/Filings/101702CLECProgressReport.pdf; Larry

companies' side, some companies deployed facilities and implemented systems which they believed would satisfy the standard for authorization to provide long-distance services and devoted resources to preparing for providing these services.

The lack of a clear commitment by the regulators and carriers to a schedule and standards for some market-opening measures cost both the competitive carriers and the Bell companies dearly. Some Bell companies did not go after the carrot aggressively in some states.[172] For these carriers, the opportunity to provide long-distance service did not offset the costs of implementing these measures and losing market share in local services. This left the competitors in many states befuddled by local markets which were less open than they expected. As the market results of new entrants fell below expectations, investors lost interest in many competitive carriers.

Moreover, the criteria applied by regulators in determining whether a Bell company successfully implemented some of these measures was not clear in the legislation and remained unclear for many years.[173] Court decisions remanding FCC orders approving two applications added an element to the regulatory analysis, the possibility of a price squeeze contrary to the public interest, and further uncertainty to the process.[174] No application was found to satisfy the standard for more than three and one-half years after enactment of the legislation,[175] and as October 25, 2002 (over six and one-half years after enactment), approvals were granted for only twenty-two states and thirteen applications covering twenty-one states had been denied or withdrawn.[176]

Darby et al., *The CLEC Experiment: Anatomy of a Meltdown*, 9.23 PROGRESS & FREEDOM FOUND. PROGRESS ON POINT (Sept. 2002), *available at* http://www.pff.org/publications/POP9.23CLEC.pdf.

172. For example, one Bell regional holding company, US WEST (now a subsidiary of Qwest Communications Inc.), did not apply to the FCC for long-distance service authority for any of the fourteen states where it provides local exchange services until June 13, 2002. *See* Comments Requested on the Application by Quest Communications International, Inc. for Authorization Under Section 271 of the Communications Act to Provide In-Region, Interlata Service in the States of Colorado, Idaho, Iowa, Nebraska, and North Dakota, *Public Notice*, 17 F.C.C.R. 11041 (2002).

173. *See SBC AK-MO Order*, *supra* note 167, app. D.

174. Sprint Comm. Co. v. FCC, 274 F.3d 549, 554-56 (D.C. Cir. 2001); WorldCom, Inc. v. FCC, No. 01-1198 (D.C. Cir. Oct. 22, 2002), *at* http://www.fcc.gov/ogc/documents/opinions/2002/01-1198.html.

175. *Bell Atl. N.Y. Order*, *supra* note 167.

176. *RBOC Applications to Provide In-Region, InterLATA Services Under § 271*, *at* http://www.fcc.gov/Bureaus/Common_Carrier/in-region_applications/. Applications were pending for thirteen states as of October 24, 2002. The FCC observed in 1999: "Unfortunately, implementation of this congressional vision of increased telecommunications competition has, in many instances, not proceeded swiftly or smoothly. For example, some of the Section 271 applications that we have reviewed to date have fallen

Even after some Bell companies had implemented these measures in some states and gained FCC approval, the FCC did not establish a schedule or uniform standards for the deployment of these capabilities in other states[177] and found that some applications for long-distance authority failed to demonstrate adequate compliance.[178] Uncertainty continues in these states as to when the Bell companies would choose to implement the market-opening measures and how the FCC and courts will review particular applications; this uncertainty about the quality and prices of interconnection services and the timing of Bell company entry into long-distance services creates costs for the competitive carriers and the Bell companies.

The legislation created a multiyear promise relying on an incentive approach to achieving market-opening changes which were important for the policy goal of local competition. The carriers, however, did not promise (nor were required) to implement the measures on a fixed schedule. Nor did the legislation together with the FCC's regulations give clarity to the standards for judging implementation of those measures for at least several years. This approach did not achieve rapid implementation of these changes and caused costs from the uncertainties related to the timing and scope of such measures.

far short of the statutory requirements." *Bell Atl. N.Y. Order*, *supra* note 167, para. 4. *See also* Application of Ameritech Mich. Pursuant to Sec. 271 of the Comms. Act of 1934, as amended, to Provide In-Region, InterLATA Services in Mich., *Memorandum Opinion and Order*, 12 F.C.C.R. 20543, 9 Comm. Reg. (P & F) 267 (1997); Application of BellSouth Corp., et al. Pursuant to Section 271 of the Comms. Act of 1934, as amended, To Provide In-Region, InterLATA Services in S.C., *Memorandum Opinion and Order*, 13 F.C.C.R. 539, 10 Comm. Reg. (P & F) 870 (1997); Application of BellSouth Corp., BellSouth Telecomms., Inc. and BellSouth Long Distance, Inc., for Provision of In-Region, InterLATA Services in La., *Memorandum Opinion and Order*, 13 F.C.C.R. 20599, 13 Comm. Reg. (P & F) 1082 (1998); *SBC AK-MO Order*, *supra* note 167; Statement, Michael Powell, Chairman, FCC, Withdrawal of BellSouth 271 Application (Dec. 20, 2001), *at* http://ftp.fcc.gov/Speeches/Powell/Statements/2001/stmkp146.html.

177. *See Internet Hearing*, *supra* note 8 (Prepared statement of Clark McLeod, Chairman and Co-CEO, McLeodUSA Inc.) ("What I propose here is adding a 'stick' to our policy scheme, in addition to the 'carrot.' . . . So the key is for Congress to amend [§] 271 to require the Mega-Bells to meet those requirements to the satisfaction of the FCC by a date certain.").

178. *RBOC Applications to Provide In-Region, InterLATA Services Under § 271*, http://www.fcc.gov/Bureaus/Common_Carrier/in-region_applications/ (listing, for the period before the first approved application, five applications which were denied and one application which was withdrawn in light of probable denial; for the period after the first approved application until October 25, 2002, listing seven applications which were withdrawn in light of probable denial). *See* Statement of FCC Chairman Michael Powell on Withdrawal of Qwest's Multi-State 271 Applications (Sept. 10, 2002), *available at* http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-226127A1.pdf.

V. CONCLUSION

Under some conditions, regulators have boldly broken out of the piecemeal, ad hoc approaches to regulations as short-term fixes to be revised when and how the regulators subsequently decide. Multiyear promises have been adopted in some instances to address complex interrelated issues, and establish a predictable framework for investments, operations, and technological development.

The industries and consumers affected by regulations make decisions on investments and other actions which are inherently multiyear, forcing them to make assumptions about future regulatory conditions, and to adopt strategies with some losses in effective uses of productive resources. Markets reflect regulatory uncertainties even if regulators do not weigh these consequences. Regulatory uncertainties can harm consumers and be contrary to the public interest. Regulators should more frequently recognize the large efficiency enhancements of decreasing the uncertainty surrounding future regulations and strive to adopt well-defined sequences of regulatory changes with clear timing.

In some circumstances, addressing an issue with an interim marker is as well as regulators can do. The delays from formulating a multiyear plan would be costly, and the broad contingencies that would have to be addressed may substantially diminish the benefits from a longer-term framework. On the other hand, legislators, regulators, and courts should weigh the opportunity costs to businesses and consumers of the uncertainties surrounding future regulatory actions and seek to provide more predictable future regulatory rules.

Specifically, there should be an increase in:

- *Legislators* (a) adopting statutes in which a well-defined sequence of regulatory changes is timed based on clear, readily observed market conditions, as opposed to commission findings regarding the occurrence of broad, ambiguous criteria; (b) refraining from adding to regulatory uncertainty by the frequent introduction of bills to amend statutes, including legislation to reverse regulatory decisions; and (c) encouraging regulators to adopt multiyear commitments for regulatory stability or well-defined regulatory changes.
- *Regulators* (a) adopting multiyear commitments for regulatory stability or well-defined regulatory changes, with narrow criteria for waivers or mid-term adjustments; (b) making comprehensive decisions on interrelated regulatory changes; (c) refraining from substantially modifying rules on reconsideration soon after adoption or granting broad waivers; (d) adopting rules with well-

defined criteria based on clear, readily observed market conditions as opposed to case-by-case analysis of broad, complex factors; and (e) encouraging industry and consumer groups to work out multiyear agreements on regulatory stability or changes.

- *Judges* giving weight to the benefits of regulatory certainty when reviewing the record evidence or cost/benefit analysis supporting a multiyear or comprehensive agency decision, or a denial of a request for reconsideration or waiver.