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CONTROLLING MARKET POWER IN TELECOMMUNICATIONS: ANTITRUST VS. SECTOR- SPECIFIC REGULATION

An Assessment of the United States, New Zealand and Australian Experiences

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ABSTRACT

The authors set out a framework for evaluating different approaches to the economic regulation of telecommunications. They then evaluate the United States, New Zealand, and Australian experiences with telecommunications regulation through this framework. The United States uses a sector-specific approach to telecommunications regulation, while New Zealand uses a general antitrust approach. Australia melds these two contrasting approaches together, complementing general antitrust rules with telecommunications-specific rules within the same antitrust legislation. The authors conclude that, on balance, the Australian approach provides many features desirable in the economic regulation of telecommunications.

TABLE OF CONTENTS

I.	INTRODUCTION	921
II.	CONCEPTUAL FRAMEWORK	922
	A. Market Power and Telecommunications.....	922
	B. Rules	927
	1. <i>Antitrust Rules</i>	927
	2. <i>Telecommunications-Specific Rules</i>	928
	C. Institutions	928
	1. <i>Antitrust Authorities</i>	929
	2. <i>Telecommunications Regulatory Agencies</i>	930

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D.	Six Criteria to Evaluate Different Frameworks for the Economic Regulation of Telecommunications	932
III.	THE UNITED STATES EXPERIENCE	935
A.	Origins of the Present Regulatory Framework	935
B.	Main Rules.....	939
1.	<i>Telecommunications-Specific Rules</i>	939
a)	Local Competition Provisions.....	939
b)	BOCs Entry Into the Long-Distance Market	941
c)	End of the Ban on Competition Between Cable Television and Local Telephone Services Providers.....	942
d)	Universal Service Obligations	943
2.	<i>Antitrust Rules</i>	944
C.	Main Institutions.....	946
1.	<i>Federal Communications Commission</i>	946
2.	<i>State Utility Commissions</i>	947
3.	<i>The Department of Justice, Antitrust Division</i>	948
4.	<i>Federal Courts</i>	950
D.	Implementation of the Regulatory Framework.....	950
1.	<i>Adoption of the Local Competition Order</i>	951
2.	<i>Adoption of the Universal Service and Access Charge Reform Orders</i>	952
3.	<i>Rejection of BOCs' Section 271 Applications</i>	953
4.	<i>Mergers Between Operators</i>	954
E.	Critical Appraisal of the United States's Regulatory Framework.....	955
1.	<i>Promotion of a Competitive Market Structure</i>	955
2.	<i>Specificity vs. Coherence</i>	958
3.	<i>Flexibility vs. Certainty</i>	959
4.	<i>Autonomy, Technical Competence, and Stakeholder Participation</i>	960
5.	<i>Limitation of Regulatory Costs</i>	962
6.	<i>Efficiency of the Allocation of Responsibilities</i>	962
IV.	THE NEW ZEALAND EXPERIENCE	965
A.	Origins of the Present Regulatory Framework	965
B.	Regulatory Framework: Main Rules.....	966
C.	Regulatory Framework: Main Institutions.....	968
D.	Implementation of the Regulatory Framework.....	970
1.	<i>Telecom's Standard Interconnection Offer</i>	970
2.	<i>Clear-Telecom Long Distance Interconnection Agreement</i>	970
3.	<i>Cases on the Scope of the Commerce Commission's Competency</i>	971
4.	<i>Cellular Frequencies Cases</i>	972
5.	<i>BellSouth-Telecom Mobile Interconnection Agreement</i>	973
6.	<i>Access to the Local Loop Cases</i>	973
7.	<i>Recent Developments</i>	977
E.	A Critical Appraisal of the New Zealand Regulatory Framework.....	978
1.	<i>Promotion of a Competitive Market Structure</i>	979
2.	<i>Specificity vs. Coherence</i>	983
3.	<i>Flexibility vs. Certainty</i>	984
4.	<i>Autonomy, Technical Competence, and Stakeholder Participation</i>	985
5.	<i>Limitation of Regulatory Costs</i>	988
6.	<i>Efficiency of Allocation of Regulatory Responsibilities</i>	988
V.	THE AUSTRALIAN EXPERIENCE.....	989
A.	Origins of the Present Regulatory Framework	989

B.	Regulatory Framework: Main Rules.....	991
C.	Regulatory Framework: Main Institutions.....	996
D.	Implementation of the Regulatory Framework.....	1001
	1. <i>Declarations of Services</i>	1001
	2. <i>Controlling Telstra's Market Power</i>	1002
	3. <i>Recent Developments</i>	1003
E.	A Critical Appraisal of the Australian Regulatory Framework	1003
	1. <i>Promotion of a Competitive Market Structure</i>	1003
	2. <i>Specificity vs. Coherence</i>	1005
	3. <i>Flexibility vs. Certainty</i>	1006
	4. <i>Autonomy, Technical Competence, and Stakeholder Participation</i>	1007
	5. <i>Limitation of Regulatory Costs</i>	1009
	6. <i>Efficiency of Allocation of Regulatory Responsibilities</i>	1009
VI.	COMPARATIVE ANALYSIS	1010
A.	Promotion of a Competitive Market Structure.....	1010
B.	Specificity vs. Coherence	1013
C.	Flexibility vs. Certainty	1014
D.	Autonomy, Technical Competence, and Stakeholder Participation.....	1015
E.	Limitation of Regulatory Costs.....	1016
F.	Efficiency of the Allocation of Responsibilities	1016
VII.	CONCLUSION.....	1017

I. INTRODUCTION

Over the last two decades, and with rapid acceleration in recent years, a large number of countries have undertaken reforms aimed at establishing competitive telecommunications markets. One key component of such reforms is the removal of barriers to entry into the telecommunications sector, accompanied by supplementary mechanisms to ensure that telecommunications markets effectively become, and remain, competitive. Such mechanisms must, for example, prevent powerful incumbent telecommunications operators from abusing their market power to the detriment of their competitors and consumers. As competition develops, these mechanisms must also prevent collusion between telecommunications operators, as well as excessive market consolidation through mergers and acquisitions.

For several decades, most industrialized countries have employed antitrust rules and institutions to promote competition and to control market power across sectors. In addition, a growing number of countries have established infrastructure or sector-specific rules and institutions to promote competition and control market power in telecommunications. In this context, the relationship between the two sets of rules and institutions be-

comes an issue of growing importance. This Article seeks to shed light on how economy-wide and sector-specific components of the regulatory framework should be designed and on how the respective roles of such components should be defined to maximize the efficiency of economic regulation in telecommunications.

The approach chosen here is to rely on comparative analysis. We will seek to derive some lessons from the experiences of three countries—the United States, New Zealand and Australia—which have established very distinct models of economic regulation for telecommunications. The United States and New Zealand constitute opposite models. While the American model relies on detailed sector-specific regulatory requirements largely implemented by a sector-specific institution, the New Zealand model attempts to promote competition and control market power in telecommunications through the application of general antitrust laws by the courts. As will be seen, the Australian model achieves a form of compromise between the two previous models by incorporating some sector-specific rules within economy-wide antitrust legislation and by conferring responsibility for implementing such rules on the economy-wide antitrust authority.

This Article is divided into seven parts. Following this introduction, Part II presents a conceptual framework of the respective features of the various rules and institutions which can be relied upon to promote competition and control market power in telecommunications. It also lays out a series of criteria that will be used to assess the efficiency of the regulatory framework put in place in the United States, New Zealand, and Australia. Parts III, IV and V successively review the American, New Zealand and Australian regulatory models and evaluate them in light of the criteria developed in Part II. Part VI contains a comparative analysis of the three models. Finally, Part VII presents our conclusions. Of the three models, we believe that the Australian “compromise,” while far from being perfect in all respects, probably goes furthest in satisfying the efficiency criteria laid out in Part II.

II. CONCEPTUAL FRAMEWORK

A. Market Power and Telecommunications

In many countries, telecommunications sectors have until recently been organized around a dominant, or even a monopolistic, operator. This market organization was justified on the basis of four main rationales. First, it was argued that some segments of the sector, such as the fixed line local network—or “local loop”—constituted natural monopolies and that a

single enterprise would therefore be able to provide service in a given market at lower costs than would two or more different enterprises.¹ Second, some argued that network externalities justified organizing the telecommunications sector on a monopoly basis.² Third, monopolistic structures were deemed necessary to enable cross-subsidies between different services or users—i.e., to enable an enterprise to compensate for losses incurred with some activities or users (such as rural telephony for example) with the excess profits gained with some other activities or users (such as urban telephony or international services).³ Opening the market to competition would prompt entry into the segments where excess profits are made (the “cream-skimming” effect), therefore wiping out the revenues required to operate the cross-subsidies.⁴ A fourth argument was that strategic or security concerns dictated that the provision of telecommunications services be reserved to a particular enterprise often controlled by the state.

In many countries, those arguments justified the award of exclusive rights to dominant telecommunications operators. It was clear, however, that if those operators were left free to exploit their market power, well-

1. In the area of telecommunications, the fixed costs of establishing a fixed line local network are such that a single enterprise will generally be able to provide services to all users in a given area at lower costs than would two or more enterprises, each with its own network. For a discussion of the concept of natural monopoly, see generally WILLIAM W. SHARKEY, *THE THEORY OF NATURAL MONOPOLY* (1982).

2. A network externality is said to exist for a service if users of the service benefit when more people use it. Network externalities are present in the area of telecommunications since the value of a network increases, for each user, with the number of network subscribers. See Mark Amstrong, *Competition in Telecommunications*, 13 OXFORD REV. ECON. POL'Y 64-65, 67 (1997). As a result, for a given total number of subscribers, the value of a single network is much greater than the total value of several smaller unconnected networks. For a good discussion of the concept of network externalities, see Nicholas Economides, *The Economics of Networks*, 14 INT'L J. INDUS. ORG. 673 (1996) and Michael L. Katz & Carl Shapiro, *Network Externalities, Competition, and Compatibility*, 75 AM. ECON. REV. 424 (1985). A large list of published articles on network externalities can be found at <<http://raven.stern.nyu.edu/networks/bibiof.html>>.

3. See Alberto Heimler & Paolo Saba, *Role and Enforcement of Competition Policy in Regulated Sectors*, 1995 PROC. OF OECD/WORLD BANK CONF. ON COMPETITION & REG. IN NETWORK INDUS. (OECD 1995), 75, 78, available at <http://www.oecd.org/daf/clp/non-member_activities/bdpt102.htm>.

4. On the issue of cream-skimming, see Peter Smith, *Subscribing to Monopoly: The Telecom Monopolist's Lexicon—Revisited*, PUBLIC POL'Y FOR THE PRIVATE SECTOR, Note No. 53 (Sept. 1995), available at <<http://www.worldbank.org/html/fpd/notes/53/53smith.html>>.

known negative consequences would be likely to ensue.⁵ First, a monopolist can impose quality and price levels which deprive the users from much of the welfare gains associated with the provision of the goods or services. Those gains can be captured or transferred, in totality or in part, by the monopolist to others in exchange for obtaining the monopoly position. Second, if a monopolist does not have the ability to discriminate perfectly between users, it can also limit the amount of goods or services provided below socially optimal levels. Finally, the absence of competition can reduce the incentives of a monopolist to innovate and to operate efficiently. Consequently, regulatory controls were imposed upon the operators in an attempt to keep the volume, quality, and price of services at welfare-maximizing levels and to promote efficiency and innovation.⁶ Such controls often were imposed through direct ownership of telecommunications enterprises by the state.

In the last two decades, however, the wisdom of relying on public monopolies for the provision of telecommunications services was increasingly put into question.⁷ The first and arguably most important reason is that the performance of those operators proved disappointing. Various studies demonstrated that publicly-owned enterprises, in general, tended to be less efficient than private ones, and that telecommunications markets open to competition tended to perform much better than those which were not.⁸

In parallel, the arguments which had been advanced to justify the creation of telecommunications monopolies appeared relatively weak in the first place. Technological evolution, for example, reduces the scope of telecommunications activities which present natural monopoly features.⁹ For instance, as the price of mobile communications decreases, mobile

5. See N. GREGORY MANKIW, *PRINCIPLES OF ECONOMICS* 308 (1998); RICHARD A. POSNER, *ANTITRUST LAW: AN ECONOMIC PERSPECTIVE* 8 (1976).

6. See ALFRED E. KAHN, *THE ECONOMICS OF REGULATION: PRINCIPLES AND INSTITUTIONS* Vol. I, at 3 (1971).

7. See Colin Scott, *Institutional Competition and Coordination in the Process of Telecommunications Liberalization* in JOSEPH MCCAHERY ET AL., *INTERNATIONAL REGULATORY COMPETITION AND COORDINATION: PERSPECTIVES ON ECONOMIC REGULATION IN EUROPE AND THE UNITED STATES* 383-84 (1996).

8. See, e.g., AHMED GALAL ET AL., *WELFARE CONSEQUENCES OF SELLING PUBLIC ENTERPRISES—AN EMPIRICAL ANALYSIS* (1994); *IMPLEMENTING REFORMS IN THE TELECOMMUNICATIONS SECTOR—LESSONS FROM EXPERIENCE* (Bjorn Wellenius & Peter A. Stern eds., 1994).

9. See James Bond, *Telecommunications is Dead, Long Live Networking*, PUBLIC POL'Y FOR THE PRIVATE SECTOR, Note No. 119 (July 1997), available at <<http://www.worldbank.org/html/fpd/notes/119/119summary.html>>.

networks, which present few if any natural monopoly features, become cheaper to deploy than fixed networks in regions which are not very densely populated.¹⁰ In addition, a convergence process is progressively blurring the boundaries between telecommunications and other industries, such as computing, which do not present natural monopoly features.¹¹ Finally, while some telecommunications activities do retain natural monopoly characteristics, exclusive rights need not necessarily be granted for this reason. If a segment of the sector does indeed constitute a natural monopoly, a single provider should emerge in that sector whether it enjoys a legal monopoly or not. Only when the competitive process leading to the eventual selection of the single service provider would be considered too disruptive does a real rationale emerge for granting exclusive rights to a single firm from the start.¹² Even then, potential advantages must be weighed against the risk of selecting a monopoly provider which has not been tested by competition and might therefore not be the most efficient. If exclusive rights are granted, there are also serious risks that they might encompass some potentially competitive activities, thereby eliminating competition where it could have taken place. Relying on market forces rather than on administrative decisions to determine which activities constitute natural monopolies presents distinct advantages in a sector like the rapidly changing telecommunications sector.

Network externalities can be preserved in a market open to competition, provided that various networks can be interconnected. The social objectives pursued through cross-subsidy schemes can be achieved by means which do not require that a monopoly be maintained in the sector. For example, a fund can be set up through general taxation or through fees levied on all telecommunications operators, and can be used to subsidize

10. As mentioned above, it is the fixed line local network which presents natural monopoly features because of the high fixed costs of setting up the network and the low marginal cost of adding an extra consumer, which together entail decreasing average costs. Thus, a single firm will have lower unit costs than two or more smaller firms. *See supra* note 1.

11. *See Benjamin Lipschitz, Regulatory Treatment of Network Convergence: Opportunities and Challenges in the Digital Era*, 7 MEDIA & POL'Y L. 14 (1998).

12. Competition between different providers of infrastructure services, such as telecommunications, might, for example, lead to wide price fluctuations which could be seen as disruptive. In activities such as the provision of local loop services, which are characterized by high fixed costs and low marginal costs, prices might be driven down to marginal costs during periods of intense competition between different network operators and might rise above total average costs when a firm is able to exercise some degree of market power.

some particular services or users.¹³ Finally, a range of technical solutions exist to adequately address strategic or security concerns without having to rely on public ownership and to restrict market entry.

For these reasons, a large number of countries have now totally or partially privatized their dominant telecommunications operator, and have taken a wide range of measures to promote competition.¹⁴ Such measures seek to remove exclusive rights for the provision of telecommunications services, to facilitate interconnection between different networks, to prevent cross-subsidies which would distort competition in some market segments, to insure a pro-competition allocation of frequencies, and to prevent agreements or mergers which would stifle competition.

In spite of such measures, some segments of the telecommunications sector might remain, at least for some time, dominated by an operator with substantial market power. This will be the case in market segments which present natural monopoly characteristics and which are also non-contestable.¹⁵ Once again, the local loop is often mentioned as an example. Because establishing a fixed local network entails high sunk costs, while operating an existing network entails only relatively low operational costs, competitors might refrain from attempting to replace an incumbent. Thus, an incumbent has substantial market power as long as alternative modes of communications remain more expensive. Therefore, since effective competition cannot be relied upon to put competitive pressure on operators in all segments of the telecommunications sector, governments might still have to take adequate measures to control the price, quality, and volume of services provided by monopolistic operators to prevent those operators from abusing their market power.¹⁶

13. See Helmut Cox, *Problèmes du financement des services publics universels dans l'Union Européenne*, SERVICES PUBLICS ET POLITIQUE INDUSTRIELLE EN EUROPE - NOUVEAUX DÉFIS ET NOUVELLE MISSIONS D'INTÉRÊT PUBLIC 83 (1996); Werner Neu & Ulrich Stumpf, *Evaluating Compensation Requirements by Telecommunications Universal Service Providers: A New Challenge to Regulators*, 26 COMM. & STRATEGIES 165 (1997).

14. See generally LAURENCE BANCEL-CHARENSOL, *LA DÉRÉGLEMENTATION DES TÉLÉCOMMUNICATIONS DANS LES GRANDS PAYS INDUSTRIELS* (1996).

15. A market is perfectly contestable when entry into the market and exit from it, involves no cost (for example because the facilities which need to be deployed to operate in the market can be sold easily or transferred to other markets). In such a case, the incumbent—even if it is in a monopolistic situation—is unable to exercise market power because of the threat of entry by potential competitors. For an exposition of the contestability theory, see generally WILLIAM J. BAUMOL ET AL., *CONTESTABLE MARKETS AND THE THEORY OF INDUSTRY STRUCTURE* (1982).

16. See W. KIP VISCUSI ET AL., *ECONOMICS OF REGULATION AND ANTITRUST* 377 (2d ed. 1998).

Below we summarize the rules and institutions which can be used to facilitate competition and to control the behavior of operators where competition proves insufficient.

B. Rules

The rules which can be used to facilitate or maintain competition in the telecommunications sector or to prevent telecommunications operators from abusing their market power fall broadly into two categories: antitrust rules and telecommunications-specific rules.¹⁷

1. Antitrust Rules

A very large number of countries have adopted a set of rules which are applicable to most economic activities (including telecommunications) and are designed to prevent anti-competitive behavior.¹⁸ Given their wide scope of application, such rules tend to prohibit relatively broad categories of behavior and to leave a relatively wide range of discretion to enforcing authorities.

Three main types of antitrust rules can be identified.¹⁹ The first type prevents anti-competitive agreements between operators. Prohibited behavior usually includes agreements aimed at fixing prices, limiting production, or dividing up markets. Such rules usually recognize, however, that some agreements between operators might benefit consumers. This might be the case, for example, for agreements on industry-wide standards or on cost sharing for research and development activities. In some legal systems, a mechanism has been set up to enable operators to obtain authorizations from the antitrust authorities prior to concluding an agreement. In others, controls are only exercised a posteriori.

The second type deals with firms which enjoy substantial market power. The objective is to prevent those firms from abusing their dominant or monopoly position by restricting competition from other operators. Examples of prohibited behavior might include refusing to deal with particular buyers, imposing predatory prices, imposing discriminatory prices on different buyers for the provision of similar services under similar con-

17. For a discussion of the roles played by antitrust and telecommunications-specific rules in the telecommunications market, see Paul Nihoul, *Convergence in European Telecommunications — A Case Study on the Relationship Between Regulation and Competition (Law)*, 2 INT'L J. COMM. L. & POL'Y 1 (1998/99).

18. For a discussion of antitrust laws in the United States and other industrialized nations, see FREDERIC M. SCHERER, *COMPETITION POLICIES FOR AN INTEGRATED WORLD ECONOMY* 17-42 (1994). See also G. BRUCE DOERN & STEPHEN WILLIS, *COMPARATIVE COMPETITION POLICY: NATIONAL INSTITUTIONS IN A GLOBAL MARKET* (1996).

19. See SCHERER, *supra* note 18, at 43-88.

ditions, and conditioning the sale of a product on the purchase of another, unrelated one.

Lastly, the third type prohibits mergers and acquisitions which have a strong negative impact on competition. Most legal systems which contain rules in this regard provide for ex ante controls of proposed agreements.

2. *Telecommunications-Specific Rules*

In addition to general antitrust rules, most countries have also adopted laws or regulations dealing with market power in the telecommunications sector. Typically, such rules are relatively precise; they tend to leave less discretion to enforcing authorities than antitrust rules.

Some of these telecommunications-specific rules seek primarily to promote or preserve competition. Those rules might, for example: (i) identify the segments of the telecommunications sector where the entry of new operators is permitted; (ii) define the entry process to be followed by those new operators; (iii) set technical, procedural, and pricing conditions pertaining to interconnection agreements; (iv) determine conditions for number allocation and portability; and (v) determine how frequencies are to be allocated.

Other rules are aimed primarily at preventing abuses of market power by firms which possess a dominant position in some segments of the market. Some of those rules are designed to prevent abuses vis-à-vis operators which compete for activities with a firm which is dominant in other activities. The interconnection rules previously mentioned fall within this category because they can enable a long distance company to interconnect with the local network and thus compete in the long distance market against the incumbent who owns the local network and also provides long distance services. Rules which require accounting separation or creation of separate subsidiaries for different activities, in order to prevent cross-subsidies between monopolized and competitive markets, also fall within this category. Other rules are designed to prevent abuses vis-à-vis end-users. Such rules include for example: (i) tariff regulations; (ii) quality and technical requirements for various types of telecommunications services; and (iii) public service obligations (e.g., minimum coverage requirements, access to free emergency numbers and directory services).

C. **Institutions**

Institutions are needed to interpret, apply, and enforce the rules described above. Given the complexity of the issues to be addressed, an increasing number of countries have opted to establish specialized institutions to perform some or all of those functions. Such specialized institu-

tions come in two varieties: antitrust authorities²⁰ and telecommunications regulatory agencies.²¹ This Part presents a brief description of the main features of those institutions.

One should emphasize, however, that even when antitrust authorities or telecommunications regulators have been set up, other entities do generally retain important functions regarding the promotion of competition or the prevention of market power abuses in the telecommunications sector. Political authorities, for example, might retain final decision-making powers on some important matters, such the award and withdrawal of licenses, and the establishment of the price regime. The courts also will retain an important role. In some systems, for example, antitrust authorities gather evidence and present cases to the courts, and it is the courts which decide upon the merits of those cases.²² The courts will also usually be the final arbiters when parties contest the decisions taken by antitrust authorities or telecommunications regulators. In such cases, courts might retain the authority to judge both substantive and legal aspects of the issues, or they might be empowered to review decisions on legal grounds only and examine, for example, whether procedural requirements have been met or whether the institutions have exceeded their powers.

1. *Antitrust Authorities*

Antitrust authorities are generally entrusted with the task of promoting competition or controlling the use of monopoly power in all or most sectors of the economy. Given the number of firms which fall within their sphere of competency, antitrust authorities tend to act on a case-by-case basis when needed, rather than to closely regulate enterprises on a permanent basis.

Antitrust authorities tend to focus on implementing general antitrust rules presented in Part B.1 above, but they may also be in charge of implementing sector-specific rules, such as the telecommunications laws or regulations discussed in Part B.2.²³ They can be entrusted with various types of responsibilities including: (i) initiating investigations of potentially anti-competitive behaviors; (ii) prosecuting such behaviors; and (iii)

20. A list of the national antitrust authorities can be found on the OECD competition policy homepage. See Organization for Economic Co-operation and Development, *Links to Other Sites* (visited Oct. 13, 1999) <<http://www.oecd.org/daf/clp/LINKS.HTM>>.

21. A list of the national telecommunications regulatory authorities can be found on the OFTEL website. See Office of Telecommunications, *International Links Page* (visited Oct. 13, 1999) <<http://www.oftel.gov.uk/internat/links.htm>>.

22. See *infra* Part III (United States) and Part IV (New Zealand).

²³. This is true of Australia, as discussed *infra* in Part V.

in some cases, passing judgment and imposing sanctions upon parties convicted of having committed anti-competitive actions.

Because institutions must decide complex technical matters in the field of competition, antitrust authorities will usually seek to attract highly qualified professionals in the legal and economic spheres. In addition, antitrust authorities are often granted some degree of protection from political interventions in their day to day activities: they are usually set up by law as autonomous or independent entities; appointment processes might be designed to prevent partisan nominations at the top echelons of the entity; and measures may be adopted to prevent arbitrary removals. In addition, some measures are usually adopted to ensure the independence of the antitrust authority from the enterprises which come under its scrutiny. The most common measure requires antitrust regulators to refrain from intervening where intervention would raise a conflict of interest.

2. *Telecommunications Regulatory Agencies*

Whereas antitrust authorities have competence across different market sectors, telecommunications regulatory agencies are generally competent only in the telecommunications sector. In some cases, utility regulatory agencies might be set up with expertise across several infrastructure sectors, including telecommunications.²⁴ However, telecommunications regulatory agencies tend to regulate a small number of enterprises closely, on a quasi-permanent basis.

Implementing the types of telecommunications-specific rules discussed above typically constitutes a core part of the responsibilities of telecommunications regulatory agencies. Their functions might include: (i) selecting new operators; (ii) preparing and granting operating licenses; (iii) regulating tariffs; (iv) administering quality and technical standards; (v) administering the rules applicable to number portability and to the allocation of frequency; (vi) administering the interconnection regime; (vii) resolving disputes between operators and between operators and users; (viii) monitoring the activities of the operators to ensure that they comply with their obligations, including accounting separation requirements, price and quality requirements, and universal service obligations; and in some cases, (viii) imposing sanctions upon the operators when necessary. They might, in some cases, also have a role in implementing antitrust rules in the telecommunications sector.

24. This is, for instance, the case of state utility commissions in the United States which oversee several industries. *See infra* text accompanying notes 120-121.

As is the case for antitrust authorities, the objective of ensuring that an entity possesses the technical capacity necessary to perform complex regulatory tasks helps explain why many countries have now established telecommunications regulatory agencies. Some argue that a sector-specific regulator is better able to develop the expertise required to tackle difficult telecommunications issues than infrastructure-wide regulators and, a fortiori, than economy-wide bodies such as antitrust authorities. On the other hand, a cross-sector agency might benefit from the experience gained in a plurality of sectors, and could, for example, establish a telecommunications-specific department to give some staff the possibility to specialize in telecommunications-specific issues.²⁵

Telecommunications regulatory agencies, like antitrust authorities, will often enjoy some degree of autonomy from political authorities and are independent from the enterprises they regulate.²⁶ Those features tend, in fact, to be even more apparent for telecommunications regulatory agencies than for antitrust authorities. Telecommunications regulators will often benefit from strong legal protections against arbitrary removal; it is not rare to see telecommunications regulatory boards or commissions whose members have staggered terms in order to prevent a single government from presiding over the renewal of the whole regulatory body. In addition, telecommunications regulators are usually required to sever all their links to regulated enterprises, rather than simply refrain from intervening when a conflict of interest arises.

These greater efforts at protecting telecommunications regulators from undue pressure reflect the greater risks of capture they face.²⁷ Telecommunications is a public service, and the conditions under which telecommunications services are provided remain politically sensitive in many countries. This increases the temptation for governments to intervene with respect to tariffs or other aspects of the service.²⁸ In addition, a telecommunications regulatory agency often has a stronger impact than an anti-trust authority on the profitability of the operators it regulates. Exiting the telecommunications market might be costly, as some important invest-

25. See Warrick Smith, *Viewpoint 128: Utility Regulators—Roles and Responsibilities*, PUB. POL'Y FOR THE PRIVATE SECTOR (Oct. 1997), available at <<http://www.worldbank.org/html/fpd/notes/notelist.html>>.

26. See Warrick Smith, *Viewpoint 127: Utility Regulators—The Independence Debate*, PUB. POL'Y FOR THE PRIVATE SECTOR (Oct. 1997), available at <<http://www.worldbank.org/html/fpd/notes/notelist.html>>.

27. See WARRICK SMITH, PRIVATE SECTOR DEVELOPMENT, THE WORLD BANK, REGULATORY INSTITUTIONS FOR UTILITIES AND COMPETITION 3 (1998).

28. See OECD, *Relationship Between Regulators and Competition Authorities*, (June 1999), available at <<http://www.oecd.org/daf/clp/Roundtables/relations.pdf>>.

ments are sunk. Close regulation of tariffs or quality standards are therefore likely to have a substantial impact on the profitability of telecommunications operators and those operators are likely to put pressure on regulators.²⁹ Furthermore, sector-specific entities are likely to maintain closer contacts with the sector Ministry and a very small group of enterprises, as opposed to the contacts that infrastructure or economy-wide bodies would have.³⁰ Thus, telecommunications-specific regulators are arguably more at risk from industry or government capture.³¹ In those conditions, in order to attract private investment in the sector, it is extremely important to protect the regulator—particularly if it is sector-specific—from undue industry or government interventions.

D. Six Criteria to Evaluate Different Frameworks for the Economic Regulation of Telecommunications

Given the existence of these different types of rules and institutions, governments which seek to control market power in telecommunications have a range of options. They can choose to rely completely or mainly on general antitrust rules, or they may put a greater emphasis on more detailed sector-specific rules. They can entrust antitrust authorities with the task of administering all the rules controlling market power in telecommunications, they can entrust such responsibility exclusively to one or several telecommunications regulators, or they can split responsibilities between the two types of institutions. As discussed below, the United States, New Zealand, and Australia have each chosen very different options.

The relative efficiency of the various regulatory models can be evaluated with respect to many different possible criteria. We chose six of them, against which we will attempt to judge the relative performances of the U.S., New Zealand, and Australian regulatory models. These criteria cannot constitute an exhaustive list, but we believe they canvass what are, arguably, six of the most important features which regulatory models in telecommunications should present.

The first criterion is *whether the regulatory framework is adequately designed to promote a competitive market structure*. This would require the elimination of legal barriers to entry, such as exclusive rights or strict

29. See Antony Dnes, *Post-Privatization Performance—Regulating Telecommunications in the UK* (Oct. 1995), available at <<http://www.worldbank.org/html/fpd/notes/60/60dnes.html>>.

30. See OECD, *supra* note 28.

31. On the theory of regulatory capture, see Georges Stigler, *The Theory of Economic Regulation*, 2 BELL J. ECON. REG. 3 (1971), and Sam Peltzman, *Toward a More General Theory of Regulation*, 19 J. LAW & ECON. 211 (1976).

limits on the number of available licenses, into potentially competitive telecommunications markets. In some cases, imposing accounting separation, or even the establishment of separate companies, for the pursuit of different activities might be required to prevent various anti-competitive practices. Ensuring interconnection under reasonable conditions, number portability,³² dialing parity,³³ and an allocation of frequencies that puts competing mobile operators on a level playing field also contribute to the emergence of a competitive market structure. Finally, mechanisms to ensure that certain universal service obligations are designed and met in a manner that does not hinder competition are also important.

The second criterion is *whether the regulatory framework strikes the right balance between recognizing the specificity of the telecommunications sector and promoting the coherence of regulatory decisions across sectors*. The telecommunications sector exhibits certain characteristics that tend to differentiate it from other industries. For example, it exhibits both natural monopoly features for some activities and network externalities. It also presents some technical issues, such as numbering for example, which do not have an exact equivalent in other sectors. Such characteristics could arguably justify the adoption of telecommunications-specific rules and the establishment of telecommunications-specific regulatory authorities. However, ensuring that cross-sector rules and institutions are used to regulate telecommunications would also bring benefits, such as greater regulatory certainty (as operators could better forecast what to expect by observing how the regulatory framework is applied in other sectors) and lower risks of distortion between different activities.³⁴ Using cross-sector rules and institutions to regulate telecommunications is justified in light of the growing convergence between telecommunications and other sectors.³⁵ Once again, an adequate balance must be struck, and a number of choices are possible, including economy-wide, infrastructure-wide, communication-wide or purely telecommunications-specific rules and institutions. The choice will depend in part on the extent to which the telecommunications sector is similar to, or different from, other sectors of the economy in a particular country. For example, the greater the degree of openness and liberalization of the telecommunications sector, the larger the scope for the

32. Number portability means ensuring that users are able to keep the same telephone number when switching telecommunications operators.

33. Dialing parity means ensuring that users do not have to dial additional numbers when they choose certain telecommunications operators rather than others.

34. See Henry Ergas, *Competition Policy in Deregulated Industries*, INT'L BUS. LAW, Jul.-Aug. 1995, at 305.

35. See Lipschitz, *supra* note 11; see also OECD, *supra* note 28, at 32.

application of cross-sector rules that are applicable to competitive activities in general.

The third criterion is *whether the regulatory framework strikes the right balance between flexibility and certainty*. As mentioned above, anti-trust rules tend to be relatively general while telecommunications-specific rules tend to be more precise. The former therefore grant implementing authorities a wider degree of discretion, giving them more room to tailor individual decisions to particular circumstances. In a sector which evolves as fast as the telecommunications sector, this flexibility undoubtedly has some advantages. On the other hand, more precise rules provide for greater regulatory certainty; such certainty may be an advantage, for example, when it comes to convincing private operators to sink large investments in a politically-sensitive sector. Trade-offs between flexibility and certainty also exist at the institutional level. Thus, the type of authority which is competent and the processes for rule adoption will determine the ease with which the rule can be changed. An adequate balance must be struck between the need for flexibility and for certainty with respect to both rule adoption and implementation. The right balance will depend upon the confidence which the adopting and the implementing authorities enjoy. For example, authorities will have more discretion if they are trusted by stakeholders, and vice versa.

The fourth criterion is *whether the regulatory framework ensures a sufficient degree of autonomy for those in charge of applying the rules, promotes technical competence, and provides for adequate stakeholder participation in the regulatory process*. Given the technical complexity of regulatory issues in telecommunications and the scope of political as well as industry pressure on regulatory matters, adequate measures of the kind mentioned above in Part C are of the utmost importance. Sector-specific regulatory agencies for telecommunications may be subject to stronger pressures from politicians and operators, particularly when they operate in a single sector, rather than in infrastructure in general. In addition, in order to strengthen the legitimacy of the regulatory process and to ensure that regulatory authorities have access to as much information as possible, consumers and other stakeholders in the regulatory process should have the opportunity to present their views before important decisions are taken.

The fifth criterion is *whether the regulatory framework limits the costs of regulation*. The costs of regulation include, first and foremost, the costs of setting up regulatory agencies. Setting up a single cross-sector agency is usually more cost-effective than setting up several distinct sector-specific agencies, since it avoids duplication of a certain number of administrative

departments. In addition, there are compliance costs imposed upon industry participants. These costs tend to increase with the complexity of the rules. Finally, there are costs associated with potential inefficiencies of the regulatory regime. For example, when disputes are frequent and time-consuming, procedural costs might be high for the parties, and beneficial reforms might be postponed. Very important costs might also be incurred when regulatory mistakes are made. In telecommunications, where the costs of such mistakes can be very important for both investors and users, the stakes are particularly high. As regulation is imperfect and the risk of costly mistakes can never be completely eliminated, it is crucial to weigh the potential benefits of regulation against its potential costs. This trade-off needs to be fully taken into account, particularly when discussing the merits of establishing detailed regulatory rules and specialized regulatory institutions in the telecommunications sector.

The sixth criterion is *whether the regulatory framework provides for an efficient allocation of responsibilities*. Some pitfalls need to be avoided. When several institutions intervene in telecommunications regulation, their respective competencies should be defined clearly to avoid creating uncertainty. In order to avoid inconsistent decisions, different institutions should not be designed to tackle the same issues. It is also important to assess the respective capacities of these institutions so as to entrust each one with the functions which it is most apt to perform. Finally, one should not lose sight of the inter-relations which exist between different regulatory issues when allocating regulatory responsibilities. Setting performance standards for telecommunications operators, for example, will have a direct impact on their costs and will therefore determine the price at which operators expect to earn an adequate return. Failing to entrust a single entity with the task of administering performance and pricing rules, or at the least to provide for close coordination between the institutions in charge of those matters, would substantially increase uncertainty for investors.

III. THE UNITED STATES EXPERIENCE

A. Origins of the Present Regulatory Framework

In February 1996, Congress adopted the Telecommunications Act of 1996.³⁶ This Act provided the first major overhaul of the 1934 Communi-

36. Telecommunications Act of 1996, Pub. L. No 104-104, 110 Stat. 56, (codified as amended in scattered sections of 47 U.S.C.). Several books and a great number of articles detail the content of this law. See, e.g., PETER W. HUBER ET AL., THE TELECOMMUNICATIONS ACT OF 1996: SPECIAL REPORT (1996); TELECOMMUNICATIONS ACT HANDBOOK: A COMPLETE REFERENCE FOR BUSINESS (Leon T. Knauer et al. eds., 1996);

cations Act, which regulated the telecommunications industry for more than 60 years.³⁷ During these 60 years, changes in the political climate and the telecommunications industry necessitated a revision of the regulatory framework.

The Communications Act of 1934 ("1934 Act") was adopted during the great depression to protect American consumers against AT&T which, through an aggressive policy of consolidation, had gained a virtual monopoly over all segments of the telecommunications industry.³⁸ Telephone service as a whole was viewed as a natural monopoly which needed to be regulated for the benefit of all users.

With this objective in mind, the 1934 Act provided for the creation of the Federal Communications Commission ("FCC") whose mission was to regulate interstate telephone service. Specifically, the Commission controlled entry, regulated prices (through a system of "rate-of-return" regulation), and made other regulatory decisions that it considered in the public's interest. Pursuant to the 1934 Act, the FCC had sole authority to review mergers and acquisitions between telephone companies.³⁹ While the

Thomas G. Krattenmaker, *The Telecommunications Act of 1996*, 29 CONN. L. REV. 123 (1996); Michael I. Meyerson, *Ideas of the Marketplace: A Guide to The 1996 Telecommunications Act*, 49 FED. COMM. L. J. 251 (1997).

37. See generally Communications Act of 1934, ch. 652, 48 Stat. 1064 (amended 1996).

38. In the late part of the 19th century and the early part of the 20th century, competition between local exchange operators flourished. Many cities were served by two or more operators, usually a Bell company and one or several independent companies. However, many companies did not interconnect with each other. This gave an advantage to the local Bell companies, which usually had a larger customer base. In addition, AT&T, the company created by the Bell Company to connect local exchanges, used its control over the inter-city network as leverage to gain control over independent companies, by denying them the right to interconnect with that network for long-distance calls. See Jeffrey Blumenfeld & Christy C. Kunin, *United States, in TELECOMMUNICATIONS LAW AND PRACTICE* (Colin D. Long ed., 1995), at 649, 652. AT&T's consolidation policy based on leveraging market power led the Department of Justice to file a suit against the Bell system to prevent it from acquiring additional independent companies. This suit was settled in 1913 by a written commitment of AT&T Vice-President Nathan Kingsbury (known as the "Kingsbury Commitment") in which AT&T agreed to stop acquiring independent companies, as well as to offer interconnection with its inter city network to the remaining independent local operators. However, AT&T convinced Congress to override part of the Kingsbury commitment by adopting the Willis-Graham Act, which exempted AT&T from the antitrust laws when acquiring additional companies. See Willis-Graham Act of 1921, ch. 20, 42 Stat. 27 (repealed by the Communications Act of 1934, ch. 652, 48 Stat. 1064, 1102).

39. See Communications Act of 1934, ch. 652, 48 Stat. 1064, § 221(a) (amended 1996).

FCC had jurisdiction to regulate interstate services, intrastate telephone services continued to be regulated by the state utility commissions created at the turn of the century.⁴⁰ In many instances, states granted franchised monopolies to local exchange companies, most of them Bell Operating Companies ("BOCs").

As the telephone industry developed in the 1950s and 1960s, many began to challenge the basic premise that telephone service was a natural monopoly. Potential competitors sued the FCC and AT&T in order to loosen AT&T's monopoly grasp on the manufacture and distribution of telecommunications equipment⁴¹ and the provision of long-distance services.⁴² These competitors alleged unfair competition because AT&T was leveraging its monopoly power over local exchanges to maintain its market share in services that were increasingly open to competition.

In 1974, the Department of Justice ("DOJ") started an antitrust suit against AT&T. The core of the DOJ's case was that AT&T was granting competitors interconnection to its local exchange network only on discriminatory terms, and that AT&T was cross-subsidizing its own inter-city services with revenues from the monopoly local exchange services. In 1982, AT&T and the DOJ announced they had entered into a consent decree designed to end the litigation.⁴³ This consent decree, also known as

40. Section 1 of the 1934 Act gives the FCC authority over "interstate and foreign commerce by wire and radio." Section 2(b) limits the scope of FCC power by explicitly denying the FCC jurisdiction "with respect to (i) charges, classifications, practices, services, facilities, or regulation for or in connection with intrastate communication service of any carrier." Taken together, these provisions give the FCC authority over all interstate communications but reserve authority over intrastate communications to the states.

41. In 1956, the D.C. Circuit reversed an FCC decision prohibiting customers from attaching a "Hush-a-Phone" to their handset for increased privacy. *See Hush-a-Phone Corp.*, 20 F.C.C. 391 (1955), *rev'd*, 238 F.2d 266 (D.C. Cir. 1956). A decade later, the FCC ruled that a "Carterfone," a device permitting direct communication between a mobile radio and a landline network, would be permitted because the Bell System had failed to demonstrate "harm to the network." *See Use of the Carterfone Device in Message Toll Telephone Service*, 13 F.C.C.2d 420, 423 (1968).

42. *See In re Applications of Microwave Communications, Inc.*, 18 F.C.C.2d 953 (1969) (allowing, despite AT&T's protestations, MCI to provide microwave service in St. Louis, Chicago, and nine intermediate locations).

43. *See United States v. AT&T Co.*, 552 F. Supp. 131 (D.D.C. 1982), *aff'd sub nom. Maryland v. United States*, 460 U.S. 1001 (1983). *See also* Timothy J. Brennan, *Regulated Firms in Unregulated Markets: Understanding the Divestiture in US v. AT&T*, 32 ANTITRUST BULL. 741 (1987).

the Modified Final Judgment ("MFJ"),⁴⁴ was approved by Judge Harold Greene of the U.S. District Court for the District of Columbia.

Pursuant to the MFJ, AT&T agreed to divest its twenty-two BOCs into seven independent local exchange carriers,⁴⁵ in exchange for permission to enter into other lines of business and to compete with virtually no restrictions in long-distance services. The BOCs were restricted to provide only local telephone services. They were specifically prohibited from entering into certain lines of business, including long-distance services, information services and telecommunications equipment manufacturing.⁴⁶ In addition, they were bound to provide all competing long-distance carriers non-discriminatory access to their local exchange network.⁴⁷ A cumbersome waiver and triennial review process was set up, giving Judge Greene decision-making responsibility over whether or not to let the BOCs enter into new lines of business in the future.

By the 1990s, the burdensome character of the review process, as well as major shifts in technology and outlook,⁴⁸ forced Congress to reconsider the basic premises of the telecommunications regulatory framework.⁴⁹ First, the legally-sanctioned market division between the BOCs and long-distance operators was no longer tenable. On the one hand, the BOCs wanted to enter into the lucrative long-distance market, but they were prevented from doing so by the MFJ.⁵⁰ On the other hand, Congress consid-

44. This decree is known as the Modified Final Judgment because it modifies a previous decree, known as the Final Judgment, which settled an antitrust suit brought by the DOJ in 1949 against AT&T for an alleged conspiracy between AT&T and Western Electric to monopolize the manufacture and distribution of telecommunications equipment. Pursuant to the MFJ, AT&T continued ownership of Western Electric, in return for agreeing to grant nonexclusive licenses for all existing and future patents and to stay out of any business other than the furnishing of common carrier communications services.

45. These included Ameritech, Bell Atlantic, BellSouth, NYNEX, Pacific Telesis, SBC Communications, and US West. In recent years, some of these companies have merged. *See infra* text accompanying note 165.

46. *See United States v. AT&T*, 552 F. Supp. at 186-94; *see also* Mark C. Rosenblum, *The Antitrust Rationale for the MFJ's Line-of-Business Restrictions and a Policy Proposal for Removing Them*, 25 SW. U. L. REV. 605 (1996).

47. *See United States v. AT&T*, 552 F. Supp. at 197-200.

48. *See* Joseph A. Klein, *Antitrust Law as a Regulator of the Rapidly Transforming Telecommunications Market*, 23 COMM. & STRATEGIES 209, 212 (1998) (arguing that "the MFJ's key premise of divisible local exchange monopoly and competitive markets was being overtaken by technological, regulatory, and market developments").

49. *See* Daniel F. Spulber, *Deregulating Telecommunications*, 12 YALE J. ON REG. 25 (1995).

50. *See* ROBERT E. LITAN & ROGER G. NOLL, UNLEASHING TELECOMMUNICATIONS: THE CASE FOR TRUE COMPETITION 1 (The Brookings Institute Policy Brief No. 39, Nov. 1998) ("despite their state-regulated monopolies, the RBOCs were unhappy with the line-

ered that competition in local exchange services was largely insufficient. Moreover, the growing convergence between different segments of the communications sector rendered other forms of legally-imposed entry barriers⁵¹ increasingly unacceptable.

In that context, the main objective of the Telecommunications Act of 1996 ("1996 Act") was to bring down all barriers to competition in the telecommunications sector.⁵² Indeed, the 1996 Act was adopted to provide for "a competitive, deregulatory 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."⁵³

B. Main Rules

In this Part, we will successively review (1) the main aspects of the Telecommunications Act of 1996, which constitutes the bulk of the sector-specific framework for the economic regulation of telecommunications, and (2) general U.S. antitrust regulations.

1. *Telecommunications-Specific Rules*

Four aspects of the Telecommunications Act of 1996 will be examined hereafter: (a) the removal of all legal, economic and operational barriers to entry into the local telephone market; (b) the authorization granted to the BOCs to enter into the long-distance telephone market upon certain conditions; (c) the elimination of the ban imposed upon cable and telephone operators to enter each other's market; and (d) the new regime of universal service obligations.

a) Local Competition Provisions

Section 253 of the 1996 Act removes all legal and regulatory barriers to entry on the local markets by prohibiting all state statutes or regulations impeding the ability of "any entity to provide any interstate or intrastate

of-business restrictions, and persistently pushed courts, regulators, and elected officials to enter competitive markets").

51. Such as, for instance, the prohibition imposed upon cable television operators and local telephone companies from entering into each other's markets. *See* 47 U.S.C. § 533(b) (repealed 1996).

52. *See An Interview with William E. Kennard*, GLOBAL COMPETITION REV., Oct. 1998, at 11 ("The theory of the [1996] Act was that local companies would compete in long distance, long distance companies would compete in the local market, cable television would get into the telephone business, and there would be much more competitive activity on the part of existing players.").

53. *Id.* at 1.

telecommunications service.”⁵⁴ This provision strikes down all franchised monopolies that were given by the states to local exchange companies.

Congress considered, however, that competition could still be impeded by significant economic and operational barriers, such as refusal to interconnect or discriminatory interconnection conditions. In order to overcome such obstacles, section 251 of the 1996 Act imposes a series of duties on telecommunications carriers involved in local exchange. Section 251 requires each “telecommunications carrier” to interconnect with other carriers.⁵⁵ All Local Exchange Carriers (“LECs”) are barred from either prohibiting or imposing discriminatory conditions on the resale of telecommunications services.⁵⁶ They are also required to provide number portability and dialing parity,⁵⁷ as well as access to their poles, conduits and other rights of way to competing providers of telecommunications services.⁵⁸

Further obligations are imposed on Incumbent Local Exchange Carriers (“ILECs”).⁵⁹ In addition to the duties imposed upon all LECs, the ILECs are required to provide, at just and reasonable rates, interconnection “at any technically feasible point with the carrier’s network.”⁶⁰ They must also provide competitors unbundled network elements upon request.⁶¹ The 1996 Act requires ILECs to offer for resale “at wholesale rates any telecommunications service that the carrier provides at retail to subscribers.”⁶² Finally, the ILECs must permit firms seeking interconnection to locate their equipment on the ILEC’s premises.⁶³

54. 47 U.S.C. § 253(a) (Supp. II 1997).

55. Section 251 broadly defines “telecommunications carriers” to include incumbents and new local exchange carriers. *Id.* § 251(a)(1).

56. *See id.* § 251(b)(1).

57. *See id.* § 251(b)(2)-(3).

58. *See id.* § 251(b)(4).

59. “Incumbent local exchange carriers” denote the local carriers in existence when the 1996 Act was adopted.

60. 47 U.S.C. § 251(c)(2)(B) (Supp. II 1997). In practice, this means that incumbents must interconnect with all carriers upon request, at the locations they specify, while other carriers may interconnect with each other indirectly, i.e., by each carrier connecting to the incumbent. *See* Jeffrey S. Bork, *Telephony*, in *BEYOND THE TELECOMMUNICATIONS ACT 11*, 36 (Leon T. Knauer et al. eds. 1998).

61. *See* 47 U.S.C. § 251(c)(3) (Supp. II 1997). “Unbundled access” means the availability of access to distinct parts of the incumbent’s network, at an appropriately lower cost than access to all elements of the network. *See id.* Thus, a competitor can purchase only those network components and functions that it needs to offer its services.

62. *Id.* § 251(c)(4)(a).

63. *See id.* § 251(c)(6).

Section 252 of the Act establishes a three-step procedure for completing or litigating interconnection agreements.⁶⁴ Under this section, an ILEC receiving a request for interconnection, services, or network elements may negotiate and enter into a binding agreement with the requesting carrier without regard to the statutory duties assigned to it by section 251.⁶⁵ This agreement must be approved by the state utility commission. If the parties are unable to come to an agreement on their own, either party may request that the state utility commission participate in the negotiation and mediate any differences.⁶⁶ If an agreement has not been completed on the 135th day after the initial interconnection request, either party may ask the state commission to arbitrate any open issue.⁶⁷ If a state commission does not perform its responsibilities under section 252, the FCC may take over and preempt the state commission's powers under that section.⁶⁸ Finally, a carrier unhappy with the state commission's arbitration decision may appeal it, but only to a local federal district court, which will determine whether the decision meets the requirements of the 1996 Act.⁶⁹

b) BOCs Entry Into the Long-Distance Market

Sections 271 and 272 of the 1996 Act deal with the issue of the BOCs' entry into the long-distance market.⁷⁰ Section 271 allows the BOCs to provide long-distance services to their own customers provided three conditions are met.⁷¹ First, the BOC must have negotiated with one or more competitors interconnection agreements that satisfy the requirements of section 271(c)(2)(B), the so-called "competition checklist."⁷² The re-

64. *See id.* § 252. For a discussion of the practical implementation of this procedure see H.I.M. DE VLAAM ET AL., *INVENTORY OF PROCEDURES FOR INTERCONNECTION DISPUTES* 70 (1997).

65. The minimum requirements for the agreement are that it includes a "detailed schedule of itemized charges for interconnection and each service or network element included in the agreement." 47 U.S.C. § 252(a)(1) (Supp. II 1997).

66. *See id.* § 252(a)(2).

67. *See id.* § 252(b)(1).

68. *See id.* § 252(e)(5).

69. *See id.* § 252(e)(6).

70. For a discussion of this provision, see generally Tim Sloan, *Creating Better Incentives through Regulation: Section 271 of the Communications Act of 1934 and the Promotion of Local Exchange Competition*, 50 FED. COM. L.J. 312 (1998).

71. Because of the lack of a similar danger of unfair competition, BOCs are free to offer long-distance services to those customers not immediately within their local service areas. *See* 47 U.S.C. § 271(b)(2) (Supp. II 1997).

72. *Id.* § 271(c)(2)(B). The BOC can also satisfy this requirement by providing a statement of generally-available terms and conditions that complies with the competition checklist and that "has been approved or permitted to take effect by the (relevant) state commission." *Id.*

quirements contained in this list essentially relate to the interconnection obligations imposed in section 251. The BOCs' ability to offer long-distance services is thus conditioned on meeting its interconnection obligations, thereby giving them an incentive to open their local service areas to competitors. Second, section 271(d)(3)(C) states that the FCC may not approve a BOC's application unless it determines that "the requested authorization is consistent with the public interest, commerce, and necessity."⁷³ Third, even with the competitive checklist in place, section 272 requires that a BOC create a separate affiliate to provide long-distance services, which must operate independently from its BOC parent,⁷⁴ keeping separate books and records and having separate offices, directors and employees.⁷⁵ In order to prevent illegitimate subsidies, all transactions between an affiliate and its BOC parent must be "on an arm's length basis."⁷⁶

c) End of the Ban on Competition Between Cable Television and Local Telephone Services Providers

The 1996 Act also eliminates the regulatory barriers preventing cable television operators and local telephone companies from entering each other's markets. The 1996 Act repeals a 1984 statute prohibiting telephone companies from offering cable television services directly to subscribers in their service areas.⁷⁷ The 1996 Act provides for a system where telephone companies (or anyone else) are authorized to offer cable television and may choose from a menu of options as to how they will be regulated.⁷⁸ Likewise, the 1996 Act clears away the rules which kept cable operators from providing local telephone service.⁷⁹

The only major restriction maintained by the 1996 Act is the limitation on mergers and buy-outs between cable companies and local telephone companies within their respective areas. The 1996 Act contains parallel prohibitions: a local telephone company cannot acquire more than 10% of

73. *Id.* § 271(d)(3)(C). For a discussion of this relatively obscure standard, see David Turetsky, Bell Operating Company Interlata Entry Under Section 271 of the Telecommunications Act 1996: Some Thoughts, Remarks before the Communications Committee NARUC Summer Meeting (July 22, 1996), available at <http://www.usdoj.gov/atr/public_speeches/turetsky796.h>.

74. *See* 47 U.S.C. § 272(a)(1) (Supp. II 1997).

75. *See id.* § 272(b)(2)-(3).

76. *Id.* § 272(b)(5).

77. *See id.* § 533(b) (repealed 1996).

78. *See id.* § 571(a)(2)-(4).

79. *See id.* § 253(a).

a cable company offering services in its local area and vice versa.⁸⁰ Not only are direct mergers prohibited, but joint ventures between cable operators and telephone companies in the same market are also proscribed by the 1996 Act.⁸¹

d) Universal Service Obligations

Finally, section 254 of the 1996 Act provides for a new regime of universal service. Before the Act's passage, universal service was promoted through a patchwork quilt of indirect and hidden subsidies at both the state and federal level.⁸² Recognizing the vulnerability of these implicit subsidies,⁸³ the 1996 Act directs the FCC and the states to restructure their universal support mechanisms to ensure delivery of affordable telecommunications in an increasingly competitive marketplace.

Pursuant to the 1996 Act, universal service obligations are defined by a Federal-State Joint Board set up by the FCC.⁸⁴ The Joint Board must take into account a number of principles, including that rates be "just, reasonable, and affordable," that access to advanced telecommunications and information services be provided in all regions of the nation, and that such services be available to all consumers including low-income consumers and those in rural, insular, and high-cost areas.⁸⁵

The FCC decides the actual mechanism for ensuring the funding of universal service. However, the Act indicates that universal service support should be "explicit," and that all telecommunications carriers must contribute to this mechanism on an equitable and non-discriminatory basis.⁸⁶ These contributions will then go to "eligible telecommunications carrier[s]"—those carriers that offer and advertise the components of universal service throughout a designated area.⁸⁷ In order to encourage competition in non-rural areas state commissions must designate more than one

80. See 47 U.S.C. § 572(a)-(b) (Supp. II 1997).

81. See *id.* § 572(c).

82. See Eli M. Noam, *Will Universal Service and Common Carriage Survive the Telecommunications Act of 1996*, 97 COLUM. L. REV. 955, 960 (1997).

83. Because the most profitable services, such as business service, attract the most new entrants, competition decreases the profit margin on services typically used to subsidize universal service. As incumbents are forced to sell their previously profitable services at more competitive prices, their ability to cross-subsidize diminishes.

84. See 47 U.S.C. § 254(a)(1) (Supp. II 1997).

85. *Id.* § 254(b).

86. *Id.* § 254(d).

87. *Id.* § 254(e).

eligible carrier if multiple carriers request the designation and meet the statutory requirements.⁸⁸

In order to prevent anti-competitive forms of cross-subsidization, the 1996 Act states that eligible carriers may only use universal service support for the provision, maintenance, and upgrading of facilities and services related to the provision of universal service.⁸⁹ For interstate services, the FCC must establish whatever cost allocation rules and accounting safeguards are necessary to ensure that universal services bear no more than a reasonable share of the costs of the facilities providing all services.⁹⁰ The states have the same responsibility for intrastate services.⁹¹

2. *Antitrust Rules*

In addition to the above regulatory requirements, antitrust laws remain applicable to telecommunications operators.⁹² The two major federal antitrust laws in the United States are the Sherman Act⁹³ and the Clayton Act,⁹⁴ adopted in 1890 and 1914 respectively.⁹⁵

Section 1 of the Sherman Act outlaws all contracts, combinations, and conspiracies that unreasonably restrain interstate commerce.⁹⁶ Section 2 outlaws any attempt to monopolize or conspire to monopolize any part of interstate commerce. Pursuant to section 2, monopolies are not *per se* illegal. Unlawful monopolization exists when a firm has become the only supplier not because its product or service is superior to others, but by

88. *See id.* § 254(e)(2). For rural areas, the decision whether to designate more than one carrier is left to the discretion of the state utility commission. *See id.*

89. *See id.* § 254(e).

90. *See id.* § 254(k).

91. *See id.*

92. *See* Georges J. Alexander, *Antitrust and the Telephone Industry after the Telecommunications Act of 1996*, 12 SANTA CLARA COMPUTER & HIGH TECH. L.J. 227, 244 (1996) (arguing that the 1996 Act does not provide for antitrust immunity).

93. 15 U.S.C. §§ 1-2 (1994).

94. *Id.* § 12.

95. For a general discussion of U.S. antitrust law and policy, see generally HERBERT HOVENKAMP, *FEDERAL ANTITRUST POLICY: THE LAW OF COMPETITION AND ITS PRACTICE* (1994).

96. 15 U.S.C. § 1 (1994). Section 1 therefore prevents all forms of collusion between telecommunications operators. Agreements to set prices or divide markets or anti-competitive group boycotts are *per se* violations of section 1. Antitrust enforcers may also decide to examine under section 1 the numerous joint ventures or strategic alliances that are concluded on an almost daily basis between telecommunications operators. *See generally* Thomas A. Piraino, *A Proposed Antitrust Analysis of Telecommunications Joint Ventures*, 1997 WISCONSIN L. REV. 639 (1997). The examination would aim at ensuring that such ventures or alliances bring efficiency gains that exceed their restrictive impact on competition and are therefore in the interests of the consumers. *See id.*

suppressing competition through anti-competitive conduct. Similarly, the Clayton Act outlaws a number of business practices where the effect of the practice might be to reduce competition substantially or to create a monopoly.⁹⁷

The prohibitions contained in these statutes, as interpreted by federal courts,⁹⁸ are of central relevance in the telecommunications field. Section 2 of the Sherman Act can be used by the DOJ or private litigants to prevent dominant undertakings, typically ILECs, from adopting abusive behaviors vis-à-vis new entrants. Pursuant to the so-called "essential facilities" doctrine,⁹⁹ a dominant undertaking that controls an essential element of infrastructure must grant its competitors access to it under non-discriminatory terms.¹⁰⁰ The essential facilities doctrine could thus provide an alternative avenue for new entrants that seek to obtain access to the incumbents' networks and facilities.¹⁰¹

Finally, antitrust rules apply to mergers and acquisitions between telecommunications operators. Under section 221(a) of the 1934 Act, mergers and acquisitions between telephone companies were immune from the full application of antitrust laws if approved by the FCC. However, under section 601(b) of the 1996 Act, mergers and acquisitions are now subject to the full scope of section 7 of the Clayton Act, which prohibits the acquisition of stock or assets by any "person" where "the effect of such acquisi-

97. The most important sections of the Clayton Act are section 2, which deals with price discrimination (as amended by the Robinson-Patman Act of 1936); section 3, which deals with tying and exclusive dealing contracts; and section 7, which deals with mergers and joint ventures (as amended by the Celler-Kefauver Act of 1950).

98. One of the central characteristics of these statutes is that they are crafted in very broad terms, thereby giving federal judges a pivotal role in defining the scope of the statutes' prohibitions. See ERNEST GELLHORN & WILLIAM E. KOVACIC, *ANTITRUST LAW AND ECONOMICS* 31 (1994) (arguing that "[n]o scheme of federal economic regulation grants judges comparable discretion to determine litigation outcomes through their interpretations of legislative commands").

99. On this doctrine see, for example, Phillip E. Areeda, *Essential Facilities: An Epithet in Need of Limiting Principles*, 58 *ANTITRUST* 841, 851 (1990), and Allen Kezsbom & Alan Goldman, *No Shortcut to Antitrust Analysis: The Twisted Journey of the "Essential Facilities" Doctrine*, 1996 *COLUM. BUS. L. REV.* 1 (1996).

100. In *MCI Communications v. AT&T*, the Seventh Circuit found that AT&T's refusal to grant MCI access to its local telecommunications network constituted an "act of monopolization." The Seventh Circuit set the essential facilities test as follows: A plaintiff seeking access to a facility must establish: "(1) control of the essential facility by a monopolist; (2) a competitor's inability practicably or reasonably to duplicate the facility; (3) the denial of the use of the facility to a competitor; and (4) the feasibility of providing the facility." *MCI Communications v. AT&T*, 708 F.2d 1081, 1132 (7th Cir. 1982).

101. See Klein, *supra* note 48.

tion may be to substantially lessen competition, or to create a monopoly."¹⁰²

C. Main Institutions

The above regulatory framework is implemented by four separate bodies: the FCC, the various state utility commissions, the DOJ, and the federal courts.¹⁰³

1. Federal Communications Commission

The FCC, a large bureaucracy comprised of more than 2,100 employees,¹⁰⁴ is divided into several operational bureaus and offices organized by substantive areas.¹⁰⁵ The FCC is an "independent agency," meaning that it is not an executive branch agency headed by a cabinet officer but is rather a creation of Congress and is responsible to Congress.¹⁰⁶ Congress decides the size of the FCC budget each year. Decisions are made through the fiscal appropriation process and after hearings are held. The total budget for 1998 amounted to \$186,514,000.¹⁰⁷ The FCC is governed by five commissioners, no more than three of the same political party, nominated by the President and confirmed by the Senate.¹⁰⁸ The commissioners serve a five-year term, which is subject to renewal at the discretion of the President. The terms are staggered so that no more than one commissioner's term expires each year. The commissioners are usually highly qualified professionals, and none of the commissioners can have a financial interest in any Commission-related business.¹⁰⁹

The 1996 Act vests a significant amount of implementing authority upon the FCC. As we have seen, the 1996 Act calls upon the FCC to adopt the detailed rules and standards necessary to implement section 251,¹¹⁰ and to ensure compliance thereafter with the requirements of that provi-

102. 15 U.S.C. § 18 (1994).

103. See generally Blumenfeld & Kunin, *supra* note 38.

104. See *FCC Budget of \$212,977,000 Proposed for Fiscal Year 1999*, FEDERAL COMMUNICATIONS COMMISSION NEWS, (Feb. 6, 1998) <http://www.fcc.gov/Bureaus/Miscellaneous/News_Releases/1998/nrmc8011.html>.

105. A list of FCC bureaus and offices, as well as a description of their functions can be found at *FCC Bureaus & Offices* (visited Nov. 15, 1999) <<http://www.fcc.gov/bureaus.html>>.

106. See THOMAS G. KRATTENMAKER, TELECOMMUNICATIONS LAW AND POLICY 20 (2d ed. 1998).

107. See *FCC Budget*, *supra* note 104.

108. See 47 U.S.C. § 154(a) and 154(b)(5) (1994).

109. See *id.* § 154(b)(2)(A)(i)-(iv).

110. See 47 U.S.C. § 251(d) (Supp. II 1997).

sion.¹¹¹ In addition, the FCC has the final authority to rule on BOCs' section 271 applications.¹¹² Together with the DOJ, the FCC has the authority to review mergers and acquisitions between telecommunications operators pursuant to a "public interest" standard.¹¹³ Finally, it plays a key role in the implementation of the Act's new universal service provisions.¹¹⁴

The FCC is required to act in accordance with an elaborate process that ensures public participation in decision-making.¹¹⁵ The Administrative Procedures Act ("APA"),¹¹⁶ which governs this process, requires the FCC and other federal agencies to give the public notice of pending matters and an opportunity to comment. It also requires agencies to make reasoned decisions, explained in writing, based upon the evidence submitted to them.¹¹⁷ All final FCC actions are subject to review by the federal courts, which have jurisdiction to reverse FCC decisions that do not comply with the requirements of the APA.¹¹⁸ When reviewing FCC decisions, courts are not free to substitute their own judgment on substantive matters, but can overturn FCC actions that fail to meet the standards and practices of federal administrative law.¹¹⁹

2. *State Utility Commissions*

State utility commissions also play an important role in the implementation of the 1996 Act. These commissions are usually comprised of several commissioners appointed by the governor and confirmed by the state legislature.¹²⁰ Contrary to the FCC, which only deals with telecommunications, the state commissions commonly oversee other industries including the energy utilities and transport companies, and thus have cross-sector responsibilities. In the telecommunications field, state com-

111. *See id.* § 251(g).

112. *See supra* text accompanying note 73.

113. *See supra* Part III.B.

114. *See supra* text accompanying notes 82-91.

115. *See generally* Mark D. Director, The Annenberg Washington Program, *Restructuring and Expanding National Telecommunications Markets: A Primer on Competition, Regulation and Development for East and Central European Regulators* (visited Dec. 2, 1999) available at <<http://www.annenberg.nwu.edu/pubs/telmar/telmar02.htm>>.

116. 5 U.S.C. §§ 551-59 (1994).

117. *See id.* § 552(a) (1994).

118. *See* 47 U.S.C. § 402(b) (1994).

119. *See* KRATTENMAKER, *supra* note 106, at 20.

120. These commissioners are often state politicians who are influenced by local political considerations. State utility commissions offer thus less guarantee of independence than the FCC. *See* John A. K. Huntley, *Competition and the Provision of a Universal Telecommunications Service*, 17 *WORLD COMPETITION* 5, 7, 14 (1994).

missions have traditionally concentrated their efforts on rate regulation and consumer protection.¹²¹

While the 1996 Act requires state commissions to carry out various functions,¹²² they have particularly important duties in the area of interconnection. Under section 252, state commissions approve the interconnection agreements negotiated between ILECs and new entrants.¹²³ They also play the role of mediator and arbitrator when the operators are unable to reach an agreement.¹²⁴ Once a dispute reaches arbitration, state commissions may set the prices at which interconnection must be granted to the new entrants.¹²⁵

One of the most obscure parts of the 1996 Act relates to the division of responsibilities between the FCC and the state utility commissions with respect to the implementation of the local competition provisions.¹²⁶ To some extent, the 1996 Act alters the traditional jurisdictional separation between regulation of interstate and intrastate services by allowing the FCC to issue regulations designed to encourage competition in the *local* exchange market.¹²⁷ However, the 1996 Act does not clearly indicate whether the FCC has authority to mandate state commissions to follow its pricing guidelines when it arbitrates interconnection disputes. As will be seen below, this issue was litigated before the federal courts.¹²⁸

3. *The Department of Justice, Antitrust Division*

The third key institutional player with respect to the economic regulation of telecommunications is the Antitrust Division of the DOJ.¹²⁹ This Division is charged with implementing the antitrust laws.¹³⁰ As it is

121. See Blumenfeld & Kunin, *supra* note 38.

122. See, e.g., 47 U.S.C. §§ 214, 254 (universal service), § 271 (review of BOCs application to enter the long-distance market) (Supp. II 1997).

123. See *id.* § 252(a)(1).

124. See *id.* § 252(a)(2) & (b).

125. See *id.* § 252(c)(2).

126. See generally Duane McLaughlin, *FCC Jurisdiction Over Local Telephone Under the 1996 Act: Fenced Off?*, 97 COLUM. L. REV. 2210 (1997).

127. See *id.* at 2229.

128. See *infra* text accompanying notes 144-146.

129. For a description of the Division's structure, see ANTITRUST DIVISION MANUAL, CHAPTER I (B) (visited Nov. 29, 1999) available at <<http://www.usdoj.gov/atr/foia/divisionmanual/ch1.htm>>.

130. Antitrust laws are also implemented by the Federal Trade Commission ("FTC"), a body that was established in 1914 as a result of the passage of the Clayton Antitrust Act and its companion Federal Trade Commission Act. Since the FTC has played a less important role than the DOJ in the area of telecommunications, we will not discuss it in this Part.

headed by a politically-appointed Assistant Attorney General, the Antitrust Division of the DOJ is an integral part of the legal arm of the federal government, and does not, therefore, have the same degree of independence vis-à-vis the Executive as does the FCC. The Antitrust Division prosecutes antitrust law violations, such as restrictive practices between competitors or abuses of a dominant position, and it frequently files both civil and criminal actions simultaneously. Most civil antitrust actions initiated by the Division terminate in a settlement that is filed with the court and incorporated in a judicial order known as a "consent decree."¹³¹ Successful criminal actions may, on the other hand, lead to severe penalties such as substantial fines or imprisonment.¹³²

The Antitrust Division of the DOJ also investigates mergers and acquisitions for compliance with federal antitrust laws and has the authority to file suits to prevent a transaction. As we have seen, the 1996 Act repeals the FCC's authority to immunize telecommunications company mergers from antitrust scrutiny.¹³³ In practice, the FCC and the DOJ thus have concurrent jurisdiction to review mergers between carriers, but under different statutory provisions. While the FCC's jurisdiction is based on sections 214 and 310(d) of the 1934 Act (unamended by the 1996 Act), which grants the FCC authority to review mergers under a "public interest" standard, the DOJ's statutory authority is found in section 7 of the Clayton Act, which prohibits transactions which may "substantially lessen competition."¹³⁴

In addition to the above enforcement duties, there are also areas where the DOJ plays an important advisory role. As we have seen, section 271 gives ultimate authority for a BOC's application approval to the FCC.¹³⁵ As part of the approval process, the FCC, however, must consult with the DOJ and give the DOJ evaluation "substantial weight,"¹³⁶ even though the FCC is not actually bound by the DOJ assessment. Likewise, the DOJ is not bound to an evaluation of the competition checklist of section 271(c)(2)(B). Instead, the Act states that the DOJ may use any standard

131. See PHILLIP AREEDA, *ANTITRUST ANALYSIS PROBLEMS, TEXT AND CASES* 64 (1981).

132. The Sherman Act sets a maximum fine of \$10 million for corporate defendants, and antitrust felonies also can result in corporate fines equal to twice the company's pecuniary gain or twice the pecuniary loss by victims, whichever is the greatest. See 15 U.S.C. § 1 (1994). Individuals may be punished by fines of up to \$350,000 and by jail sentences as long as three years. See *id.*

133. See *supra* Part III.B.

134. 15 U.S.C. § 18 (1994).

135. See *supra* text accompanying note 73.

136. 47 U.S.C. § 271(d)(2)(A) (Supp. II 1997).

that it determines appropriate. The general standard that the DOJ actually uses to determine whether section 271 approval should be granted is whether the relevant local exchange market is "fully and irremediably open to competition."¹³⁷

4. *Federal Courts*

Finally, federal courts are expected and empowered to review the constitutionality of the telecommunications legislation. This review is crucial given the conflicts of competence that may occur between institutions. Courts routinely hear and decide antitrust cases brought by the DOJ or individuals, including those involving telecommunications carriers. Federal courts also enforce compliance with the terms of consent decrees adopted to settle civil antitrust actions.¹³⁸

Prior to the adoption of the 1996 Act, the degree to which federal courts should use their powers to influence national telecommunications policy was in controversy.¹³⁹ Some observers denounced the fact that Judge Greene had used his powers to administer the MFJ to shape U.S. telecommunications policy. According to these critics, it should not be the task of a federal judge to decide, for example, whether to prohibit RBOCs from entering various businesses.¹⁴⁰ Such a decision, which has a profound impact on the U.S. telecommunications market, should be made by the FCC and the Congress. More fundamentally, it is not clear that a federal judge will have the technical competence to deal with complex and fast evolving telecommunications issues.¹⁴¹ By striking down the MFJ and adopting regulatory requirements to be implemented by the FCC, the 1996 Act aimed at decreasing the influence played by the judiciary on telecommunications policy issues.

D. Implementation of the Regulatory Framework

The main developments which took place during the period which followed the adoption of the 1996 Act relate to the following: (1) the legal battles fought to determine whether the FCC was competent to adopt the regulations intended to facilitate competition in the local markets, (2) the

137. *The State of Competition in the Telecommunications Marketplace Three Years after Enactment of the Telecommunications Act of 1996: Before the Subcomm. on Antitrust, Business Rights, and Competition of the Senate Judiciary Comm.*, 106th Cong. (Feb. 25, 1999) (statement of Joel I. Klein, Asst. Attn'y Gen., U.S. Dept. of Just.), available at <<http://www.usdoj.gov/atr/public/testimony/2264.htm>>.

138. See *supra* text accompanying note 131.

139. See Director, *supra* note 115.

140. See *supra* text accompanying notes 70-76.

141. See *infra* text accompanying note 200.

completion by the FCC of the USO regime, (3) the BOC's applications to enter the long-distance market, and (4) the numerous mergers which took place between telecommunications operators.

1. *Adoption of the Local Competition Order*

The 1996 Act mandated the FCC to establish, within six months, the regulations necessary to implement section 251.¹⁴² On August 6, 1996, the FCC released the "First Report and Order" containing its findings with regard to the implementation of the policy principles contained in section 251.¹⁴³ This 600-page document addresses three paths of entry into the local telephone market: full facilities-based entry, purchase of unbundled network elements from the incumbent local exchange carriers, and resale of the incumbent's retail services. The FCC prescribed certain rules to permit competing carriers to choose efficient points at which to interconnect with the ILEC's network. In addition, the FCC set forth a methodology to be used by state utility commissions in establishing rates for interconnection and purchase of unbundled elements. The Order concludes that this pricing methodology must be based on the incumbent's Total Element Long-Run Incremental Cost ("TELRIC").

However, the FCC's First Report and Order was immediately challenged by a group of ILECs and state regulators. The plaintiffs' core argument was jurisdictional. They insisted that primary authority to implement the local competition provisions belonged to the states rather than the FCC. They argued that many of the local competition rules were invalid, most notably the one requiring that prices for interconnection and unbundled access be based on the TELRIC formula. In October 1996, the Court of Appeals for the Eighth Circuit granted a motion to stay the FCC's pricing rules for local competition, holding that there was sufficient likelihood that the FCC lacked authority to determine "just and reasonable fees for local services," including the prices for the use of elements of the incumbents' local exchange networks.¹⁴⁴ Later, the Eighth Circuit confirmed that the FCC lacked jurisdiction to issue pricing rules.¹⁴⁵ The FCC appealed, and on January 25, 1999, the Supreme Court overturned this judgment, ruling that the FCC had general jurisdiction to implement the

142. See 47 U.S.C. § 251(d)(1) (Supp. II 1997).

143. See *In re Implementation of the Local Competition Provisions in the Telecommunications Act of 1996; Interconnection between Local Exchange Carriers and Commercial Mobile Radio Service Providers*, 11 F.C.C.R. 15,499 (1996).

144. *Iowa Utils. Bd. v. FCC*, 109 F.3d 418, 425 (8th Cir. 1996).

145. See *Iowa Utils. Bd. v. FCC*, 120 F.3d 753 (8th Cir. 1997). On this case, see generally Jim Chen, *TELRIC in Turmoil, Telecommunications in Transition: A Note on The Iowa Board Litigation*, 33 WAKE FOREST L. REV. 51 (1998).

1996 Act's local competition provisions and that the FCC's rules governing unbundled access were consistent with the Act as well.¹⁴⁶

The Supreme Court ruling was generally perceived as a victory for the FCC because it confirmed the latter's broad authority to implement the 1996 Act's local competition provisions.¹⁴⁷ This three-year legal battle between the FCC, the state regulators, and the ILECs has nevertheless given rise to extremely costly judicial proceedings. In addition, it has seriously impeded the implementation of the 1996 Act during its first few years of existence. Some observers have traced the current lack of entry into the local exchange market—which is still largely dominated by ILECs¹⁴⁸—to the uncertainty created by the legal challenge mounted against the FCC's First Report and Order.¹⁴⁹

2. *Adoption of the Universal Service and Access Charge Reform Orders*

On May 7, 1997, the FCC adopted two additional orders designed to implement the 1996 Act's provisions.¹⁵⁰ The first order, called the "Universal Service Order," deals with a host of issues critical to the implementation of the new universal service provisions of the 1996 Act.¹⁵¹ This Order defines the services that will be supported by federal universal service support mechanisms.¹⁵² It also defines who contributes to such mechanisms, as well as the methodology for assessing the contributions.¹⁵³ Consistent with the principle that universal service must be competitively neutral, the FCC emphasized that all carriers—including, for instance,

146. See *AT&T Corp. v. Iowa Utils. Bd.*, 525 U.S. 366 (1999).

147. See Seth Schiesel, *High Court Says Local Phone Giants Don't Have to Sell Access*, N.Y. TIMES, Jan. 26, 1999, at C1.

148. For some recent figures, see The Council of Economic Advisers, *Progress Report: Growth and Competition in US Telecommunications 1993-98* (Feb. 8, 1999) <<http://www.ntia.doc.gov/ntiahome/press/ceafinalrpt.htm>>.

149. See ROBERT W. CRANDALL, ARE WE DEREGULATING TELEPHONE SERVICES? THINK AGAIN (The Brookings Institution Policy Brief No. 13, Mar. 1997). See also J. Gregory Sidak and Daniel F. Spulber, *Deregulation and Managed Competition in Network Industries*, 15 YALE J. ON REG. 117, 146 (1998).

150. In conformity with the 1996 Act, these orders seek to adapt existing universal service and access charges mechanisms to a competitive marketplace.

151. *In re Federal-State Joint Bd. on Universal Serv.*, 12 F.C.C.R. 8776 (1997). This report only provides for a federal universal service plan. States may also establish their own universal service support mechanisms. See Mark P. Trinchero and Holly Rachel Smith, *Federal Preemption of State Universal Service Regulations Under the Telecommunications Act of 1996*, 51 FED. COMM. L.J. 303 (1998).

152. See *In re Federal-State Joint Bd. on Universal Serv.*, 12 F.C.C.R. 8776, para. 61.

153. Contributions are to be made by all telecommunications providers. They are to be based on retail, end-user telecommunications revenue. See *id.* para. 843.

wireless providers—are entitled to universal service support irrespective of the specific technology used to serve end customers.¹⁵⁴ Finally, the Order sets a benchmark for determining the amount of universal service support needed, based on “forward-looking costs” as opposed to “historical” or “embedded” costs.¹⁵⁵

The second order, called the “Access Charge Reform Order,” seeks to adapt the existing system of access charges—the fees that LECs charge long distance carriers and end customers to recover the costs involved in using the local exchange network for long distance calling—to the new pro-competition philosophy of the 1996 Act.¹⁵⁶ The system put in place prior to the 1996 Act embodied implicit subsidies and support flows that are not sustainable in a competitive environment.¹⁵⁷ In response, the Order reforms the current rate structure to bring it into line with cost-causation principles, phasing out significant implicit subsidies.¹⁵⁸

3. *Rejection of BOCs’ Section 271 Applications*

Since the adoption of the 1996 Act, the BOCs have submitted several section 271 applications to the FCC.¹⁵⁹ So far, the FCC has rejected all these applications as failing to comply with section 271 requirements. In each of these cases, the DOJ had also rendered a negative opinion. Despite the fact that the DOJ is free to base its opinion on standards other than those comprised in section 271, the two bodies have adopted fairly similar criteria to review BOC applications, such as whether all entry strategies contemplated in the 1996 Act are available in the state.¹⁶⁰

154. *See id.* para 134.

155. *Id.* para. 222.

156. *See In re Access Charge Reform; Price Cap Performance Review for Local Exchange Carriers; Transport Rate Structure and Pricing End User Common Line Charges*, 12 F.C.C.R. 15,982.

157. *See id.* para. 32.

158. *Id.* para. 35.

159. So far, five petitions have been filed: one by SBC to provide in-region, interexchange services in Oklahoma, another by Ameritech to market such services in Michigan, two more by BellSouth to commence long-distance operations in Louisiana and State Carolina, and one by Bell Atlantic to provide services in New York. The text of these applications is available on the FCC website: <http://www.fcc.gov/Bureaus/Common_Carrier/in-region_applications>.

160. *See James F. Rill, Institutional Responsibilities Affecting Competition in the Telecommunications Industry* (1998) (unpublished paper, on file with the authors). It should be noted that the legality of section 271 has been challenged in court by SBC Communications, one of the BOCs. On December 31, 1997, a federal district court in Wichita Falls, Texas, ruled that section 271’s restrictions over BOCs’ access to the long-distance market were unconstitutional. *See SBC Communications, Inc. v. FCC*, 981 F.

As the result, compliance with section 271 remains the necessary condition for BOCs wishing to access the long-distance market. The question of *when* BOCs should be given the green light to enter the long-distance market is still hotly debated among experts.¹⁶¹

4. *Mergers Between Operators*

Perhaps the most spectacular development that occurred during the period following the adoption of the 1996 Act relates to the flurry of mergers between telecommunications operators.¹⁶² These mergers are encouraged not only by changes in the regulatory framework, but also by the advent of new technologies and other dramatic developments—e.g., increased globalization—taking place in the telecommunications market.¹⁶³

Though a series of these transactions has already been cleared, much difficult work remains to be done by the FCC and the DOJ. In the near future, these bodies will have to take position on a number of important issues. These issues include the following: (i) whether the FCC and the DOJ are prepared to accept further consolidation between local exchange carriers in accepting the SBC/Ameritech and Bell Atlantic/GTE merg-

Supp. 996 (N.D. Tex. 1997). Specifically, the court found that these restrictions, insofar as they apply only to certain named operators—the BOCs—constituted a “bill of attainder” prohibited by the U.S. Constitution. This judgment was, however, subsequently overturned by the Court of Appeals for the Fifth Circuit. *See SBC Communications v. FCC*, 154 F.3d 226 (5th Cir. 1998), *cert. denied*, 119 S. Ct. 889 (1999).

161. Compare Robert Litan, Remarks in the Panel “Unleashing True Competition in Telecommunications,” at the Brookings Institution’s National Issues Forum (Nov. 23, 1998), with Roger Noll, Remarks in the Panel “Unleashing True Competition in Telecommunications,” at the Brookings Institution’s National Issues Forum (Nov. 23, 1998), available at <<http://www.brook.edu/comm/transcripts/19981120.htm>>.

162. Joseph I. Klein, Statements before the House Committee on the Judiciary Concerning Consolidation in the Telecommunications Industry (June 24, 1998), available at <<http://www.usdoj.gov/atr/public/testimony/1806.htm>>.

163. They include mergers between: (i) BOCs (e.g., the mergers between Bell Atlantic and NYNEX, SBC and Pacific Telesis, and the proposed merger between SBC and Ameritech); (ii) BOCs and non-BOC local exchange carriers (e.g., the merger between SBC and SNET and the proposed merger between Bell Atlantic and GTE); (iii) long-distance and/or international operators (e.g., the mergers between Worldcom and MCI, AT&T and BT, and the proposed merger between MCI Worldcom and Sprint); (iv) long-distance operators and cable companies (e.g., the merger between AT&T and TCI, and the proposed merger between AT&T and MediaOne); (v) wireless carriers (e.g., the merger between AirTouch and Vodafone); and (vi) a BOC and a long-distance operator (e.g., the proposed merger between US West and Global Crossing). For a list of these mergers, see *No Sign of Let-up as Wannabes Follow in Worldcom’s Wake*, FINANCIAL TIMES, May 17, 1999, at 17.

ers,¹⁶⁴ (ii) whether the pro-competitive aspects of the acquisition of a further cable operator (MediaOne) by AT&T outweigh its anti-competitive effects, and (iii) whether they accept a merger between a BOC (US West) and a long-distance operator (Global Crossing).¹⁶⁵

E. Critical Appraisal of the United States's Regulatory Framework

The central feature of the American model for the economic regulation of telecommunications is that it relies, to an unusually high degree, upon the implementation of detailed regulatory requirements,¹⁶⁶ rather than general antitrust rules, to prevent incumbents from abusing their dominant position.¹⁶⁷ The American regulatory model thus offers a good benchmark of how the six criteria identified in Part II.D above can be met through the application of detailed, pro-competition regulatory requirements.

1. *Promotion of a Competitive Market Structure*

In order to achieve the objective of creating competition in the local market, the 1996 Act removed all legal and regulatory barriers preventing entry into the local exchange markets. The regulatory framework was also designed to remove all economic and operational obstacles to entry into these markets. Section 251, for instance, recognizes the right for new entrants to interconnect with the facilities of local incumbent providers, as well as the right to purchase unbundled network elements from them.¹⁶⁸ As we have seen, section 252 also contains a procedural mechanism designed to facilitate interconnection agreements.¹⁶⁹

Some commentators have argued, however, that it is wrong, in certain cases, to "mandate" that incumbents automatically grant interconnection to new entrants.¹⁷⁰ Their arguments are based on two main rationales. The

164. Thereby, the agencies would take the risk of creating a narrow oligopolistic market for local exchange.

165. Thus taking the risk of recreating a vertically integrated telecommunications operator.

166. As pointed out by Roger Noll, the 1996 Act, which forms the basis of the American model, is the "single most regulatory statute about an economic regulatory regime that has ever been passed." Noll, *supra* note 161.

167. It is also a major regulatory effort to promote the entry of new competitors in the local exchange market.

168. *See supra* text accompanying notes 55-61.

169. *See supra* text accompanying notes 64-69.

170. *See, e.g.*, Elizabeth A. Nowicki, *Competition in the Local Telecommunications Market: Legislate or Litigate?*, 9 HARV. J.L. & TECH. 353 (1996); John T. Soma et al., *The Essential Facilities Doctrine in the Deregulated Telecommunications Industry*, 13

first is that competition will be more intense if competitors are forced to build their own facilities. However, this argument incorrectly suggests that the government would know what makes an operator more competitive (*vis-à-vis* the incumbent) better than the operator itself. In reality, if building its own facilities does indeed make the new entrant more competitive than using the incumbent's facilities, one would expect the new entrant to choose the former solution on its own accord.

The second rationale is that it is necessary to protect incumbents' incentives to invest by preventing new entrants from "free-riding" on their facilities.¹⁷¹ However, it seems that the problem here is not that of granting access *per se*, but that of determining at what price access should be granted.¹⁷² This pricing problem can be difficult, and the risk that one might be unable to determine accurately what a "fair" price is cannot be discarded lightly.¹⁷³ In addition, the risk that regulatory capture might distort pricing decisions is real as well. Nevertheless, these risks must be weighed against the risk of hindering competition by enabling owners of bottleneck facilities to eliminate competition in downstream markets. Given the importance of competition to promote efficiency in telecommunications, and given the power with which incumbents usually have to thwart such competition, mandating interconnection might well be justified for some categories of facilities.

A clear weakness of the 1996 Act's local competition provisions, however, relates to the incentives devised to ensure the effective implementation of those provisions. The 1996 Act fails to contain any real penalties for a BOC's non-compliance with local competition provisions; it relies instead on the lure of long distance entry as the primary means of

BERKELEY TECH. L.J. 566 (1998). Note that a similar criticism has been made with respect to the 1996 Act's provisions mandating that ILECs provide new entrants with unbundled network elements upon request.

171. *See id.* at 354 ("By requiring local exchange powers to negotiate in good faith with those desiring interconnection, Congress is guaranteeing that the faster and cheaper route for potential local carriers is to free ride on the investment of established carriers.").

172. On the issue of access pricing, see Gene Cally, Mark Armstrong & Chris Doyle, *The Economics of Access Pricing*, in OECD, OECD CONFERENCE ON COMPETITION AND REGULATION IN NETWORK INFRASTRUCTURE INDUSTRIES 43 (1995), available at <http://www.oecd.org/daf/clp/non-member_activities/BDPT205.htm>.

173. For some illustrations of the debate, see William J. Baumol & Thomas W. Merrill, *Does the Constitution Require that We Kill the Competitive Goose? Pricing Local Phone Services to Rivals*, 73 N.Y.U. L. REV. 1122 (1998); J. Gregory Sidak & Daniel F. Spulber, *Givings, Takings, and the Fallacy of Forward-Looking Costs*, 72 N.Y.U. L. REV. 1068 (1997).

ensuring compliance.¹⁷⁴ Section 271 conditions the BOCs' ability to offer long-distance services on meeting their interconnection duties under section 251,¹⁷⁵ which was based on the prospect that entering the long-distance market was sufficient enticement for BOCs to open their local networks. Conversely, it was assumed that long distance companies would strive to enter the local market even if by doing so, they would effectively be helping the BOCs establish that competition had been introduced in their markets, and that the BOCs should therefore be authorized to provide long-distance services.

Some authors have argued that these assumptions were in fact mistaken.¹⁷⁶ On the one hand, despite several section 271 applications, it seems that generally the BOCs have chosen to forego long-distance entry in order to continue enjoying local monopoly profits.¹⁷⁷ On the other hand, it has been suggested that the long-distance providers have been reluctant to enter the local exchange market for fear that this may allow, in turn, the BOCs to enter the core of their business.¹⁷⁸ Linking BOC's entry to the long-distance market with compliance with the 1996 Act's market opening provisions was thus a risky strategy that might eventually have led telecommunications carriers to adopt a behavior which is the opposite of the one that was initially sought by Congress.

A less severe assessment should be made of the universal service and access charges reforms undertaken by the FCC under the 1996 Act. Al-

174. See Joel I. Klein, *The Race for Local Competition: A Long Distance Run, Not a Sprint*, address before the American Enterprise Institute, Washington D.C., November 5, 1997, available at <<http://www.usdoj.gov/atr/public/speeches/1268.htm>>.

175. See *supra* Part III.B.1.b.

176. See Trevor R. Roycroft, *Ma Bell's Legacy—Time for a Second Divestiture*, PUB. UTIL. FORTNIGHTLY, June 15, 1998, at 30.

177. See Nicholas Economides, *The Telecommunications Act of 1996 and its Impact*, Sept. 1998, available at <<http://www.stern.nyu.edu/networks/telco96.html>>. Commentators have argued that a key factor driving the recent mergers between BOCs was their desire to consolidate their position on the local market. See, e.g., Catherine Curran Butcher, *The Road Ahead: The Next Decade*, in TELECOMMUNICATIONS ACT HANDBOOK, *supra* note 36; Richard Waters, *SURVEY—FT TELECOMMUNICATIONS REVIEW: New Communications Industry Takes Shape*, FIN. TIMES, June 9, 1999, at C11 (arguing that few RBOCs were prepared to take the risk of opening their local market to gain access to the long-distance market, and that they chose instead "to extend their 'footprint' through merger, turning themselves into formidable giants"). Another factor may well have been to gain larger size to be competitive globally. These factors are not mutually exclusive.

178. See Catherine Curran Butcher, *The Road Ahead: The Next Decade*, in TELECOMMUNICATIONS ACT HANDBOOK, *supra* note 35, at 361.

though such reforms will not end all distortions of competition,¹⁷⁹ they will help to render subsidies more explicit, which is a first step toward a more competition-friendly regime. Some other pro-competitive measures have also been adopted. For instance, the FCC's Universal Service Order contributes to level the playing field between ILECs and new competitors by affirming that non-transitional providers of local exchange services are entitled to universal service funding.¹⁸⁰ The FCC's access charges reform should also encourage local exchange competition. By moving access charges toward costs, the access charge reform should trigger a general increase in the rates (previously heavily subsidized) ILECs charge to end users, thereby creating opportunities for new competitors using new technologies to price services below the levels imposed by the ILECs.

2. *Specificity vs. Coherence*

The 1996 Telecommunications Act contains a set of telecommunications-specific requirements that are to be implemented, for the most part, by a telecommunications-specific regulator. This regulatory model is clearly based on the view that the application of economy-wide antitrust principles may not be sufficient to control market power in telecommunications.

Sector-specific rules and institutions do have some advantages.¹⁸¹ However, in a market such as the American telecommunications market where the pace of evolution is particularly rapid and where the technological and operational barriers between telecommunications and other sectors tend to be disappearing faster than anywhere else,¹⁸² a particularly strong case can be made for rules and institutions designed to operate in more than one sector. There would thus seem to be good reasons for giving serious consideration to the possibility of replicating, at the federal level, the cross-utility regulatory agencies that exist at the state level.¹⁸³

To outline the advantages of economy-wide rules and regulatory institutions does not amount to deny, however, the importance of at least some specific rules to adequately tackle particular telecommunications

179. See ALFRED E. KAHN, LETTING GO: DEREGULATING THE PROCESS OF DEREGULATION, OR TEMPTATION OF THE KLEPTOCRATS AND THE POLITICAL ECONOMY OF REGULATORY DISINGENUOUSNESS 119 (1998).

180. See *supra* text accompanying note 154.

181. See *supra* Part II.B.2.

182. For instance, gas and electric utilities are installing fiber optic lines within their controlled public-rights-of-way (known as "teletric" companies), and then use or lease these fiber lines to provide competitive long-distance, high-speed data, and video services. See Lipschitz, *supra* note 11, at 18.

183. See *supra* text accompanying note 120-121.

issues. Paradoxically, it can be argued that while too many detailed regulations have been adopted in the U.S. telecommunications sector, there are instances where additional telecommunications or infrastructure-specific rules do in fact appear to be needed. For instance, the general antitrust rules under which the DOJ assesses mergers mandate the DOJ to base its decision on a criterion—whether or not the transaction lessens competition¹⁸⁴—that is inadequate in industry sectors that are suddenly opened to competition after having been dominated by monopolies.¹⁸⁵ Indeed, the merger between two BOCs does not lessen competition in either company's market because none existed in the first place. This problem could be solved, however, by authorizing the DOJ to use, in its review of telecommunications mergers, a more flexible criterion than the "impact on competition" standard it is currently bound to use.

3. *Flexibility vs. Certainty*

One clear advantage of the detailed regulatory framework put in place by the 1996 Act is that it clarifies the respective rights and duties of telecommunications operators, and thus tends to reduce uncertainty in the marketplace. For instance, the 1996 Act requires telecommunications carriers to provide number portability and dialing parity to new entrants.¹⁸⁶ This sends a positive signal to potential new entrants and reduces the risks of litigation between carriers over number portability and dialing parity questions.

Unfortunately, while the 1996 Act contains precise rules on some of the issues, it is extremely vague on some other key aspects. For instance, the 1996 Act fails to draw a clear line between the respective competencies of the FCC and the state utility commissions with respect to the implementation of the latter's local competition provisions.¹⁸⁷ As we have seen, this led to a three-year legal battle that considerably delayed the implementation of the 1996 Act.¹⁸⁸ Arguably, in a complex institutional system such as the one in the United States, a key component of any legislative scheme should be to delimit clearly the competencies of the institutions that will contribute to the implementation of its own provisions.¹⁸⁹

¹⁸⁴. See 15 U.S.C. § 18; see also U.S. Department of Justice & Federal Trade Commission, Horizontal Merger Guidelines 0.1 (Apr. 8, 1997), available at <http://www.usdoj.gov/atr/public/guidelines/horiz_book/hmg1.html>.

¹⁸⁵. See *William Kennard's Colosseum*, *ECONOMIST*, May 15, 1999, at 75.

¹⁸⁶. See *supra* text accompanying note 55.

¹⁸⁷. See *AT&T Corp. v. Iowa Util. Bd.*, 119 S. Ct. 721, *supra* note 145.

¹⁸⁸. See *supra* text accompanying notes 144-146.

¹⁸⁹. This is particularly true considering that constitutional challenges to regulation may be the most effective form of action for those wishing to contest the validity of a

The 1996 Act's detailed regulatory requirements over issues such as interconnection or the purchase of unbundled network elements may be excessively rigid and leave too little discretion to tailor appropriate solutions in a constantly evolving market place. This problem of rigidity is, however, mitigated in two ways. First, there remains a series of matters for which the FCC retains large discretionary powers through the application of the broad "public interest" criterion.¹⁹⁰ Second, section 160 of the 1996 Act, entitled "regulatory flexibility," enables the FCC to forbear from applying provisions of this Act if it determines that forbearance "will promote competitive market conditions."¹⁹¹ Application of section 160 is, however, restricted with respect to some of the provisions of the Act¹⁹² and it also requires that a series of strict conditions be met.¹⁹³

4. *Autonomy, Technical Competence, and Stakeholder Participation*

Although the 1996 Act imposes a number of duties on the state utility commissions and the DOJ, the FCC is the major institutional player as far as implementation of the Act is concerned.¹⁹⁴

The 1934 Act, which created the FCC, contains a series of requirements designed to ensure the independence of the commissioners vis-à-vis political authorities and market players.¹⁹⁵ For instance, no more than three of the five commissioners can belong to the same political party, none of the commissioners can have financial interests in any Commission-related business, and commissioners can only be removed for cause.

Another factor that reduces the risks of "agency capture" is the presence of detailed regulatory requirements in the 1996 Act. Indeed, the lower the discretion of the regulator, the less industry and political authorities may hope to influence the regulatory process. This line of reasoning is, however, subject to two caveats. First, as noted above, there are

regulatory act. See Joseph D. Kearney & Thomas W. Merrill, *The Great Transformation of Regulated Industries Law*, 98 COLUM. L. REV. 1323, 1373 (1998).

190. For a critique of this criterion, see William H. Read & Ronald Alan Weiner, *FCC Reform: Governing Requires a New Standard*, 49 FED. COM. L.J. 293 (1998).

191. 47 U.S.C. § 160(b) (Supp. II 1997). For a general discussion of section 160, see Thomas J. Hall, *The FCC and the Telecom Act of 1996: Necessary Steps to Achieve Substantial Deregulation*, 11 HARV. J.L. & TECH. 797 (1998).

192. The FCC may not forbear from applying the requirements of section 251(c) or 271(a) until it determines that those requirements have been fully implemented. See 47 U.S.C. § 160(d) (Supp. II 1997).

193. See *id.* § 160(a)-(c).

194. See *supra* text accompanying notes 110-114.

195. See *supra* text accompanying notes 108-109.

certain areas where the FCC does enjoy large discretionary powers.¹⁹⁶ Second, while the adoption of detailed regulatory requirements may contribute to reduce the risks of “agency capture,”¹⁹⁷ it may also contribute to “legislative capture.” Indeed, there is little doubt that armies of lobbyists funded by telecommunications operators influence Congressional debates over extremely complex and detailed provisions.¹⁹⁸ To some extent, legislative capture may succeed more easily than regulatory capture because politicians offer fewer guarantees of independence than regulators. Of course, this is not to say that regulatory agencies should be given a blank check, but one should be aware that the more detailed the legislative provisions, the greater the scope for influence of the legislative process.

During the period preceding the adoption of the 1996 Act, major regulatory duties were carried out by Judge Greene who was in charge of managing the MFJ.¹⁹⁹ In fact, this consent decree had stripped the FCC of most of its regulatory authority under the 1934 Act. Though Judge Greene was known to exercise these duties with care, relying on a single judge to regulate the telecommunications market was not an ideal solution.²⁰⁰ Subsequently, the 1996 Act gives the main responsibility for the economic regulation of telecommunications back to a specialized regulator responsible to Congress, and relegates to the federal courts the limited role of reviewing the legality of FCC decisions. To say that a specialized regulator should preferably make regulatory choices does not mean, however, that the FCC is the ideal regulator. As already indicated above, a solid argument can be made for entrusting regulatory responsibilities to a single cross-sector regulatory body rather than to several sector-specific regulators (such as the FCC or the Federal Energy Rate Commission, for example).

One should note that one of the advantages of relying on FCC proceedings is that they offer more room for public intervention than do anti-trust proceedings because the FCC has to give public notice of and op-

196. See *supra* text accompanying note 190.

197. See *supra* text accompanying note 31.

198. See Kearney & Merrill, *supra* note 189, at 1394.

199. See Fred H. Cate, *The National Information Infrastructure: Policymaking and Policymakers*, 6 STAN. L. & POL'Y REV. 43, 50 (1994) (noting that, although “Judge Greene rendered his decision approving the Modified Final Judgment in 1982,” he “retained jurisdiction under the consent decree to control the operations of both AT&T and the RBOCs” and “the breadth of that decree and the substantial discretion given judges to interpret antitrust laws, ‘probably makes him the single most powerful decision-maker in U.S. telecommunications policy today,’” a veritable “‘telecom czar’”)

200. See *infra* text accompanying notes 355-358.

portunity to comment on matters to be acted upon.²⁰¹ Further, FCC decisions cannot be arbitrary and are subject to review by the federal courts. A clear downside of some of these processes, however, is that they tend to be extremely burdensome; there is also the danger that certain actors will use the processes to slow down the implementation of reforms that go against their interests.²⁰²

5. *Limitation of Regulatory Costs*

One clear drawback of the American regulatory model is that it involves huge regulatory costs. The 1996 Act directs the FCC, with a budget that exceeds \$200 million,²⁰³ to make an impressive series of rulings, the elaboration and implementation of which absorb large administrative resources.²⁰⁴ Telecommunications carriers will also need to invest massive internal and external legal resources to ensure that their operations comply with the 1996 Act. In this regard, it seems obvious that law firms and telecommunications consultants have greatly benefited from the adoption of the 1996 Act.

Finally, one should not overlook the costs of regulatory inefficiencies. As mentioned above, uncertainty regarding the respective responsibilities of the FCC and state commissions has led to costly judicial proceedings,²⁰⁵ and has resulted in delaying the reform process. Another cause for concern is that the scope for regulatory mistakes tends to increase with the number and complexity of the rules. For instance, it could be argued that section 271 might constitute one such mistake, this provision has so far failed to achieve its intended objective and it even may have delayed the arrival of competition in the local exchange markets.²⁰⁶

6. *Efficiency of the Allocation of Responsibilities*

Besides the lack of clarity in the allocation of responsibilities between the FCC and the state utility commissions,²⁰⁷ other issues stem from the

201. See *supra* text accompanying notes 115-119.

202. For instance, by filing large comments or by systematically challenging FCC decisions.

203. See *supra* text accompanying note 104.

204. As pointed out by Thomas Krattenmaker, the Act's local competition provisions "impose so many restrictions, and direct the Commission to write so many rules, that one must fear that the regulatory costs of this open access regime will exceed its payoff in reduced rates or improved service quality." See Krattenmaker, *supra* note 36, at 159 (citation omitted).

205. See *supra* text accompanying notes 143-185.

206. See *supra* text accompanying notes 176.

207. See *supra* text accompanying note 126.

peculiar relationship between the FCC and the DOJ.²⁰⁸ Section 271 of the 1996 Act gives final authority to the FCC to rule on BOCs' applications to enter the long-distance market but, before making a decision, the Commission must consult with the DOJ and give "substantial weight" to the latter's evaluation.²⁰⁹ By contrast, in the area of mergers and acquisitions, both agencies have concurrent jurisdiction to review transactions between telecommunications operators where their review process is entirely separate and based on distinct statutory authority.²¹⁰

The above interactions between the FCC and the DOJ have been praised by a number of authors as a source of synergy between these institutions.²¹¹ It has been argued, for instance, that in the context of the application of section 271, the FCC has much to gain by taking into account the DOJ's opinion over whether a specific BOC has sufficiently opened its market to competition to be entitled to provide long distance services.²¹² Similarly, it has been observed that the FCC-DOJ's dual merger review process can yield some real benefits. Because of their different statutory authority, these institutions can examine transactions from different yet complementary angles. While the DOJ considers whether the effect of the acquisition may "substantially lessen competition," the FCC's test is much broader and includes "the effect on competition as well as other factors derived from the FCC's public interest obligations under the Communications Act."²¹³

However, the above assessment may be too enthusiastic. There are a number of good reasons to give the FCC final decision-making powers with respect to section 271. For instance, section 271 requires the BOCs to comply with their interconnection duties under section 251, a provision that the FCC is charged with implementing.²¹⁴ One could also argue that

208. Both are requested to cooperate in some areas and have concurrent jurisdiction in others.

209. See *supra* text accompanying note 136.

210. See *supra* text accompanying note 133.

211. See, e.g., Rill, *supra* note 160.

212. Determining whether a given market is (sufficiently) competitive is indeed one of the core competencies of the Antitrust Division.

213. See Gloria Tristani, Mergers, Consumers, and the FCC, Remarks before the National Association of Regulatory Utility Commissioners (Nov. 8, 1998), available at <<http://www.fcc.gov/Speeches/Tristani/spgt813.html>>. This view is not necessarily shared by all FCC commissioners. For instance, Commissioner Furchtgott-Roth has expressed the view that "for the FCC to conduct antitrust review is to duplicate the efforts of the Antitrust Division." Harold W. Furchtgott-Roth, Remarks before the National Association of Broadcasters (Oct. 15, 1998), available at <http://www.fcc.gov/Speeches/Furchtgott_Roth/sphfr815.html>.

214. See *supra* text accompanying notes 70-76.

section 271 review requires the making of policy choices which go beyond the traditional sphere of an enforcement agency, such as the DOJ.²¹⁵ On the other hand, it could be argued that in principle, it is a competition authority such as the DOJ, that should be entrusted with the task of determining whether the local competition market is sufficiently open to competition.²¹⁶

The FCC-DOJ's dual jurisdiction over mergers between telecommunications operators also presents a series of difficulties. An obvious problem is that the two bodies may adopt inconsistent positions. In the Bell Atlantic/NYNEX merger, for instance, the DOJ did not raise any objections,²¹⁷ while the FCC only allowed the merger after imposing several conditions.²¹⁸ This inconsistency raises uncertainty in the marketplace. Moreover, this dual review process is extremely slow (with parties having to wait sometimes for more than a year to have a transaction cleared by the two reviewing bodies),²¹⁹ and involves a great deal of duplication (with similar documents having to be sent to two different institutions). As such, the dual review process is unnecessarily costly.²²⁰

Some observers have suggested that a good way to overcome the above difficulties would be to set up a new merger procedure patterned on section 271.²²¹ Pursuant to that new system, the FCC would lead the inquiry and the DOJ would file comments on the merger. According to the authors of that proposal, this new system "would consolidate decision

215. See James R. Weiss & Martin L. Stern, *Serving Two Masters: The Dual Jurisdiction of the FCC and the Justice Department Over Telecommunications Transactions*, 6 COMMLAW CONSPECTUS (1998), at 198 ("In contrast to the FCC, the Justice Department generally acts as an enforcement agency rather than a policy-making body.").

216. That the DOJ has experience in assessing the degree of competitiveness of different markets across the economy was the position taken by the DOJ during the congressional debate over the 1996 Act. See *Hearing on Telecommunications Policy Reform Before the Senate Committee On Commerce, Science and Transportation*, S. REP. NO. 104-218, at 25 (1995) (statement of Anne K. Bingaman, Assistant Attorney General, Antitrust Division).

217. See U.S. Dep't of Justice, Antitrust Div. Statement Regarding Bell Atlantic/NYNEX Merger (1997).

218. See Federal Communications Comm'n, FCC Approves Bell Atlantic/NYNEX Merger Subject to Market Opening Conditions (1997).

219. Note, however, that some legislation has been proposed in the Senate that would place limits on the time taken by the FCC in reviewing mergers. See Antitrust Merger Review Act, S. 467, 106th Cong. (1999).

220. See *Hearings on S. 467 Before the Subcommittee on Antitrust, Bus. Rights And Competition of the Senate Committee On Judiciary*, 106th Cong. (1999) (Testimony of Roy Neel, President and CEO, U.S. Tel. Ass'n), available at <<http://www.usta.org/neelmergtest.html>>.

221. See Weiss & Stern, *supra* note 215, at 210.

making, allow the industry to reap the efficiency benefits of single rather than dual agency review, and promote consistency in merger evaluation."²²²

In our opinion, it would be preferable to concentrate merger review in the hands of the DOJ, which has the advantage of reviewing mergers across different fields of activity. As previously mentioned however, the DOJ would need authorization to assess mergers in telecommunications according to a criterion different from the present one, which focuses only upon whether or not the transaction "lessens competition."²²³

IV. THE NEW ZEALAND EXPERIENCE

A. Origins of the Present Regulatory Framework

During most of the 20th century, telecommunications services were provided in New Zealand by the Post Office. The Post Office operated as a government department with a single, centralized decisionmaking structure that oversaw all activities concerning postal and banking services, as well as telecommunications services.²²⁴

In the 1970s, the need for reform in the telecommunications sector started to be felt, as economic reverses prompted a questioning of the basic tenets of the New Zealand model.²²⁵ By the early 1980s, failed attempts by the government to alleviate difficulties prompted the need for widespread economic reform. A new Labour government ascended to power in 1984 and rapidly implemented new policies aimed at reducing the scope of government intervention in the economy.²²⁶

222. *Id.*

223. See *supra* text accompanying note 185.

224. See David Boles de Boer & Lewis Evans, *The Economic Efficiency of Telecommunications in a Deregulated Market: The Case of New Zealand*, 72 THE ECONOMIC RECORD, Mar. 1, 1996, at 24.

225. Following Britain's entry into the European Community in 1973 (which limited the access of New Zealand's agricultural products to the British market) and the two oil crisis of 1973-74 and 1979, the New Zealand authorities decided to increase the level of industry protection against international pressure, to launch ambitious public projects aimed at reducing the country's dependence on imported oil, to extend an already generous welfare system, and to combine lax monetary policy with direct controls on prices and wages. See Allan Bollard & Michael Pickford, *Utility Regulation in New Zealand*, Institute of Economic Affairs 4-7 (unpublished lectures, London, 1996, on file with authors).

226. The underlying rationale for the new policies was very much influenced by new microeconomic thinking derived in part from the work of the Chicago School. See *id.* at 7-10.

Following a review of the Post Office structure, on April 1, 1987, the Post Office was split into three autonomous state-owned enterprises: Telecom (in charge of telecommunications); New Zealand Post (in charge of postal services); and Postbank (in charge of banking services). The telecommunications sector was then quickly liberalized. The Telecommunications Act 1987 phased out all exclusive rights pertaining to users' equipment. The Telecommunications Amendment Act 1988 imposed a complete opening to competition of all segments of the market beginning April 1, 1989.²²⁷ Finally, in September 1990, Telecom was sold to a joint-venture between local investors and two large United States telecommunications companies, Bell Atlantic and Ameritech.²²⁸

B. Regulatory Framework: Main Rules

The government's position was that, in a completely liberalized telecommunications market, the general antitrust rules contained in the Commerce Act 1986 ("Commerce Act") should constitute the main form of economic regulation of the telecommunications industry. As such, Part II of the Commerce Act prohibits a range of restrictive trade practices which hinder competition.²²⁹ Part III of the Commerce Act prevents any business from becoming dominant in a market or from strengthening an existing dominant position through the acquisition of the shares or assets of another business.²³⁰ Finally, Part IV of the Commerce Act provides for the introduction of price controls by the government when competition is limited and when consumers' interests mandate the imposition of such controls,²³¹ up to now, though, these provisions have never been used.

In addition, the government has adopted a few telecommunications-specific regulations. The government retained a so-called Kiwi Share in

227. For an analysis of the liberalization process in New Zealand telecommunications from 1987 to 1989, see Richard A. Joseph, *The Politics of Telecommunications Reform: A Comparative Study of Australia and New Zealand* 20-27 (University of Wollongong, Science and Technology Analysis Research Program, Working Paper No. 12, 1993); Patrick G. McCabe, *Telecommunications in the Pacific Basin: an Evolutionary Approach*, in *COMPETITION REGULATION IN THE PACIFIC RIM* (Carl J. Green & Douglas E. Rosenthal eds., 1996).

228. On the privatization of Telecom, see Rex J. Ahdar, *Battles in New Zealand's Deregulated Telecommunications Industry*, 23 *AUS. BUS. L. REV.* 78 (1995).

229. Such practices include contracts, arrangements, and understandings between operators, such as price fixing arrangements for example, which substantially lessen competition in a market. They also include the use by a company of the dominant position which it possesses in a market for the purpose of restricting competition either in that market or in another one. See Commerce Act, 1986, §§ 27-36 (N.Z.).

230. See *id.* §§ 47-48.

231. See *id.* §§ 52-55.

Telecom in order to impose universal service obligations upon the company.²³² The Telecommunications Disclosure Regulations 1990, amended in 1993, requires Telecom to publish information on the prices, terms and conditions under which certain services are supplied.²³³ Under the terms of the Radio-Communications Act 1989, the Ministry of Commerce governs management of the radio spectrum, but the acquisition of frequencies is also subject to the provisions of Part III of the Commerce Act concerning the acquisition or strengthening of a dominant position.²³⁴

In New Zealand, telecommunications operators do not need to be licensed. The operators themselves decide numbering issues and set the standards for equipment that is connected to telecommunications networks.²³⁵ While Telecom has offered certain pro-competitive assurances to the government in two letters of undertakings in 1988 and 1989,²³⁶ the government retains the right to impose further telecommunications-specific regulations if existing rules prove insufficient. Threats to expand

232. Such obligations require Telecom to maintain a local free-calling option for all residential customers, to keep the price of a residential line rental at or below its November 1, 1989 level in real terms, to ensure that the line rental for residential users in rural areas is no higher than the standard residential line rental, and to continue to make ordinary residential telephone service as widely available as at the date of Telecom's privatization. See Colleen Flood, *Regulation of Telecommunications in New Zealand—Faith in Competition Law and the Kiwi Share*, 3 COMPETITION & CONSUMER L.J. (1995).

233. Telecom must, for example, disclose all interconnection agreements with other parties, including its own subsidiaries. See Ministry of Commerce and Communications, *Discussion Paper: Telecommunications Information Disclosure* (Nov. 1998), available at <<http://www.moc.govt.nz/pbt/telecom/teleinfodisc/index.html>>.

234. See RESOURCES AND NETWORKS BRANCH, MINISTRY OF COMMERCE AND COMMUNICATIONS, NEW ZEALAND TELECOM. INFO. PUBLICATION NO. 6, NEW ZEALAND TELECOMMUNICATIONS 1987-1998 § 1.4.5, at 7 (1998).

235. See *id.* at 6-7.

236. In a letter dated June 8, 1988, Telecom indicated its intention to restructure the company into a holding company, a finance company, and an operating company with distinct subsidiary companies including five separate local telephone companies, a long distance company and a company operating mobile services. Telecom stated that the subsidiary companies would not be permitted to offer preferential treatment to other Telecom companies and would deal with each other and with competitors on a total arms-length basis. Letter from Telecom to the Minister of State Owned Enterprises, (June, 8 1988) (on file with authors). In a second letter of July 6, 1989, Telecom committed, *inter alia*, to provide interconnection on a fair and reasonable basis, to avoid any discrimination against competitors, and to co-operate fully with the Commerce Commission to assist with the prompt resolution of any complaints. Letter from Telecom to the Minister of Commerce (July 6, 1989) (on file with authors).

governmental regulation thus constitute an additional element to the New Zealand regulatory framework.²³⁷

C. Regulatory Framework: Main Institutions

Under the Commerce Act, the Commerce Commission (“Commission”) is the main body responsible for ensuring that competition is preserved in the New Zealand economy. The Commission must have three to five members appointed by the Governor General on the recommendation of the Minister of Commerce. The Commission has an annual budget of about NZ\$6.5 million²³⁸ and a staff of about 70.²³⁹

The Commission is formally independent from the legislative and executive branches, and enjoys some protection against undue pressure from the government. Thus, for example, the Commission’s budget is directly determined by Parliament.²⁴⁰ The causes for which the appointment of a Commission member can be terminated are enumerated in the Commerce Act.²⁴¹ Also, the risk that the government might designate purely political appointees to the Commission is somewhat limited by the fact that Commission members must be chosen on the basis of their knowledge of, or experience in, industry, commerce, economics, law, accountancy, public administration, or consumer affairs.²⁴² The Commission must, however, “have regards to the economic policies of the government as transmitted in writing from time to time to the Commission by the Minister [of Commerce].”²⁴³ In practice, however, the government has communicated few statements of economic policies to the Commission. The process is also relatively transparent as such communications must be published and

237. For example, in a statement made December 9, 1991 regarding its policy toward the development of competition in telecommunications markets, the government indicated that if it proved necessary to bolster competition, it would consider the introduction of other statutory measures or regulations. The government issued further threats of that kind, indicating in particular, that it would consider adopting specific rules if operators were unable to conclude agreements with respect to interconnection or numbering issues. See Ministry of Commerce, *Regulation of Access to Vertically-Integrated Natural Monopolies*, (Aug. 1995), available at <http://www.moc.govt.nz/pbt/telecom/vertical/disap6c_03.html>.

238. See ANNUAL PLAN 31, COMMERCE COMMISSION (Mar. 1999), available at <<http://www.comcom.govt.nz/about/annual.cfm>>.

239. See *id.* at 9.

240. See Commerce Act, 1986, § 20 (N.Z.).

241. See *id.* § 13.

242. See Commerce Act, 1986, § 9(4) (N.Z.).

243. *Id.* § 26(1).

communicated to Parliament.²⁴⁴ In addition, section 14 of the Commerce Act guarantees that the Commission be independent from industry.²⁴⁵

The Commission determines issues covered by the Commerce Act, which range from authorizing or restricting contracts and business acquisitions depending on their contribution to competition and benefit to the public to determining the prices for goods or services identified by the government as requiring price controls under Part IV of the Commerce Act.²⁴⁶ For enforcement purposes, the Commission takes a prosecuting role before the courts when it believes that some provisions of the Commerce Act have been violated.

Only the courts have the power to impose pecuniary penalties.²⁴⁷ Actions introduced on the basis of the Commerce Act are presented before the High Court. Decisions of the High Court can then be appealed before the Court of Appeal, and finally before the Privy Council in Britain, which is the court of last resort in New Zealand. The determinations made by the Commission can be appealed first before the High Court and then before the Court of Appeal.²⁴⁸ The Commerce Act provides for an expert lay member to sit in the High Court on antitrust matters.²⁴⁹

The last main regulatory institution is the New Zealand Telecommunications Numbering Advisory Group ("NZTNAG"), which discusses numbering issues and advises the Minister of Communications on those issues. All significant carriers and representatives from the New Zealand Consumers' Institute and from the Telecommunications Users Association of New Zealand are entitled to join the NZTNAG, which operates by way of consensus.²⁵⁰

244. See Kerrin M. Vautier & Allan E. Bollard, *Competition Policy in New Zealand*, in COMPETITION REGULATION IN THE PACIFIC RIM 390, *supra* note 227.

245. Section 14 of the Commerce Act requires Commission members to disclose their financial interests in businesses which are the objects of regulatory proceedings before the Commission and to discontinue their participation in such proceedings. See Commerce Act, 1986, § 14 (N.Z.).

246. See *id.* §§ 58, 66-67, 70. For a fuller discussion of the role of the Commerce Commission, see Peter Allport, *Natural Monopoly Regulation in New Zealand*, (July 24, 1998) (unpublished manuscript from the Institute of Public Affairs Deregulation Conference in Melbourne, on file with authors).

247. See Commerce Act, 1986, §§ 80-87 (N.Z.).

248. See *id.* §§ 91-97.

249. See *id.* §§ 77-78.

250. See Ministry of Commerce, *supra* note 234, at 6-7; Malcolm Webb & Martyn Taylor, *Light-Handed Regulation of Telecommunications in New Zealand: Is Generic Competition Law Sufficient?*, 2 INT'L J. OF COMM. L. AND POL'Y 11 (Winter 1998/99).

D. Implementation of the Regulatory Framework

Numerous developments have taken place in New Zealand telecommunications over the last ten years. Many of the most important developments concerned interconnection issues, as described in detail below.

1. *Telecom's Standard Interconnection Offer*

In July 1989, Telecom published a standardized interconnection offer²⁵¹ which contained a range of conditions that were unfavorable to new entrants. The proposed regime required Telecom's competitors to pay an interconnection price equivalent to the price paid by Telecom's regular business users. Telecom charged new operators for access to information such as the Automatic Number Identification ("ANI"), which enables operators to bill their subscribers. Telecom's interconnection offer also required customers of the new telecommunications operators to dial a three- or four-digit access code.²⁵²

2. *Clear-Telecom Long Distance Interconnection Agreement*

In March 1991, Clear Communications,²⁵³ whose negotiating position was probably somewhat strengthened by the government's indication that it would not approve Telecom's privatization until an interconnection agreement had been reached,²⁵⁴ signed a final interconnection agreement with Telecom. The agreement constituted an improvement over Telecom's standard offer. For example, interconnection charges were six percent lower than standard business rates; Clear was not required to pay for ANI; and Telecom agreed to eliminate the access code once Clear's share of the long distance market exceeded nine percent.²⁵⁵

However, in 1993, disputes over several interconnection issues brought the parties to arbitration before a retired Court of Appeal judge.²⁵⁶ Clear's main arguments were that Telecom had been late in providing

251. See TELECOM CORP. OF NEW ZEALAND LTD., INTERCONNECTION GUIDEBOOK, (1989).

252. See Milton Mueller, *On the Frontier of Deregulation: New Zealand Telecommunications and the Problem of Interconnecting Competing Networks*, in OPENING NETWORKS TO COMPETITION—THE REGULATION AND PRICING OF ACCESS 114 (David Gabel & David F. Weiman eds., 1998).

253. Clear Communications Ltd. is a telecommunications consortium made up of Bell Canada, Television New Zealand, MCI, Todd Corporation, and New Zealand Rail Group.

254. See Mueller, *supra* note 252, at 115.

255. See *id.* at 115-16.

256. See *Clear Comm. Ltd. v. Telecom Corp. of New Zealand Ltd.* [1992] 5 T.C.L.R. 166 (N.Z.).

non-code access after the nine-percent threshold had been reached, and that Telecom had charged an unreasonable price for granting non-code access. With respect to the last point, Clear sought an order from the arbitrator setting a fair price. After a protracted hearing, Clear obtained satisfaction on both counts:²⁵⁷ the arbitrator ruled that Telecom had been four months late in granting Clear non-code access,²⁵⁸ and he set Clear's charges for non-code access at a level much lower than that originally fixed by Telecom.²⁵⁹

3. *Cases on the Scope of the Commerce Commission's Competency*

As a result of challenges to the Commerce Commission's authority, the Commission's role has been limited to enforcing specific provisions of the Commerce Act and adjudicating authorization applications. In June 1992, the Commission issued a report on the telecommunications sector which analyzed the obstacles to competition in telecommunications and determined the effectiveness of the disclosure regime in removing those obstacles.²⁶⁰ Following publication of the report, Telecom challenged before the High Court the Commission's authority to conduct such a broad inquiry.²⁶¹ The High Court concluded that the Commission's role was limited to functions specified in the Commerce Act. The Commission did not have authority to conduct a formal inquiry and publish a public report unless there were particular complaints or transactions related to the Commission's functions under the Commerce Act.²⁶² In dismissing the Commission's appeal, the Court of Appeal added that the government, and not the Commission, had authority to decide whether there should be a review of the telecommunications regulatory regime and what form it should take.²⁶³

257. See Ahdar, *supra* note 228, at 110-11.

258. See *Clear Comm. Ltd. v. Telecom Corp. of New Zealand Ltd.* [1992] 5 T.C.L.R. 166 (N.Z.).

259. See *id.*

260. See COMMERCE COMM'N, TELECOMMUNICATIONS INDUSTRY INQUIRY REPORT, (1992).

261. See *Telecom Corp. of New Zealand Ltd. v. Commerce Comm'n* [1991] 4 N.Z.B.L.C. 103,057.

262. See *id.* at 103,067.

263. See *Commerce Comm'n v. Telecom Corp. of New Zealand Ltd.* [1994] 2 N.Z.L.R. 421, 437 (N.Z.).

4. Cellular Frequencies Cases

In 1990, the government put up for tender three radio frequency bands suitable for cellular telephony: AMPS-A, TACS-A and TACS-B. Telecom won AMPS-A and TACS-B, while BellSouth won TACS-A. At that time, however, Telecom already provided cellular services on AMPS-B bands and owned the public network. Thus, in order to acquire both bands, Telecom needed to convince the Commerce Commission that the acquisitions would not enable the company either to become dominant in the relevant market or to strengthen a dominant position. Failing that, Telecom had to convince the Commission that it should nonetheless be allowed to acquire the two frequencies because public benefits resulting from the acquisitions outweighed the risks created by the creation or strengthening of a dominant position.²⁶⁴

The acquisition of the AMPS-A band proved most controversial. The Commission concluded that Telecom's ownership of the fixed network and its de facto monopoly of mobile service provision gave it a dominant position in the mobile telephony market and that acquisition of the AMPS-A band would strengthen that position. The Commission also rejected Telecom's argument that public benefits resulting from Telecom's acquisition would outweigh the risks generated by strengthened dominance. Rather, the Commission concluded that strengthened dominance might actually increase Telecom's internal inefficiency, and thus have a negative impact on the public's benefit.²⁶⁵ Following an appeal by Telecom, the Commission's decision was confirmed by the High Court on similar grounds.²⁶⁶

Telecom then lodged an appeal before the Court of Appeal.²⁶⁷ However, by the time the Court rendered its judgment, two years had elapsed since the original bidding, and the passage of time proved beneficial to Telecom. The Court of Appeal also concluded that Telecom's acquisition of the AMPS-A band would enable it to strengthen its dominant position in the mobile market. Yet BellSouth's entry into the mobile market was by then imminent. The Court of Appeal found that the risk that Telecom's increased dominance would lead to internal inefficiency would be minimized by competition, and that efficiency gains resulting from acquisition

264. See Ahdar, *supra* note 228, at 86.

265. See Telecom Corp. of New Zealand Ltd./The Crown, Commerce Comm'n Decision No. 254, (Oct. 17, 1990) (N.Z.).

266. See Telecom Corp. of New Zealand Ltd. v. Commerce Comm'n [1991] 3 N.Z.B.L.C. 102, 340 (N.Z.).

267. See Telecom Corp. of New Zealand Ltd. v. Commerce Comm'n [1992] 3 N.Z.L.R. 429 (N.Z.).

of the AMPS-A band could enable Telecom to pass on substantial cost savings to its customers.²⁶⁸ Consequently, the Court of Appeal authorized Telecom's acquisition of the AMPS-A band.²⁶⁹

5. *BellSouth-Telecom Mobile Interconnection Agreement*

BellSouth intended to use the cellular frequencies that it had obtained to provide GSM services. In 1993, BellSouth and Telecom entered into an interconnection agreement. However, the agreement was less advantageous for BellSouth than the one that Clear had previously secured for long distance services. Although some provisions of the agreement were later dropped because of their obviously anti-competitive nature,²⁷⁰ the agreement still required BellSouth to pay slightly more than the standard charge for business users, as well as to pay for ANI information. BellSouth has indicated that it was dissatisfied with the agreement.²⁷¹

6. *Access to the Local Loop Cases*

Thus far, the cases which have constituted the main test of New Zealand's regulatory model are the cases that opposed Clear Communications and Telecom between 1991 and 1995.²⁷² Clear, already competing with

268. See Ahdar, *supra* note 228, at 89-92.

269. See *Telecom Corp. of New Zealand Ltd. v. Commerce Comm'n*, [1992] 3 N.Z.L.R. 429, 439 (N.Z.).

270. Examples of their anti-competitive nature are the provisions requiring that BellSouth obtain Telecom's authorization prior to concluding interconnection agreements with third parties. See Mueller, *supra* note 252, at 118-19.

271. BellSouth's Managing Director wrote "(the government) believed that monopoly minus regulation would equal competition. In fact, monopoly minus regulation equals regulation by monopoly." Carl Blanchard, *Telecommunications Regulation in New Zealand—How Effective is Light-Handed Regulation?*, 18 TELECOM. POL'Y 154, 159 (1994).

272. Numerous articles have been devoted to the analysis of these cases. See, e.g., Flood, *supra* note 232; Adhar, *supra* note 228; Mueller, *supra* note 252; William B. Tye and Carlos Lapuerta, *The Economics of Pricing Network Interconnection: Theory and Application to the Market for Telecommunications in New Zealand*, 13 YALE J. ON REG. 419 (1996); Carl Blanchard, *Telecommunications Regulation in New Zealand—The Court of Appeal's Decision in Clear Communications v. Telecom Corporation*, 18 TELECOM. POL'Y 725 (1994); Carl Blanchard, *Telecommunications Regulation in New Zealand—Light-Handed Regulation and the Privy Council's Judgment*, 19 TELECOM. POL'Y 465 (1995); Valentine Korah, *Charges for Inter-Connection to a Telecommunications Network*, 2 COMPETITION & CONSUMER L.J. 213 (1995); George A. Hay, *Reflections on Clear*, 3 COMPETITION & CONSUMER L.J. 231 (1995); Warren Pengilley, *The Privy Council Speaks on Essential Facilities Access in New Zealand: What are the Australasian Lessons?*, 3 COMPETITION & CONSUMER L.J. 28 (1995); Michael Carter and Julian Wright, *Bargaining over Interconnection: The Clear-Telecom Dispute*, Center for Research in Network Economics and Communications, University of Auckland, Working

Telecom in the long distance market, also wished to compete with Telecom in the local services market. The two companies failed to reach an agreement regarding the conditions of Clear's access to the local market, and Clear went before the courts in order to secure satisfactory conditions.

Two issues did not raise much controversy. The judges unanimously agreed that Telecom was in breach of section 36 of the Commerce Act in so far as it sought to impose upon Clear restrictions requiring its customers to dial an access code.²⁷³ Telecom's initial position that Clear should pay the same interconnection charges as any of Telecom's large customers with their own switchboards was also considered clearly anticompetitive.²⁷⁴ The most controversial issue emerged during the course of the proceedings before the High Court when Telecom, having modified its position on interconnection, argued that the Efficient Component Pricing Rule (ECPR), better known in New Zealand as the Baumol-Willig rule, should be used to determine the interconnection price.²⁷⁵ In opposition, Clear argued that the ECPR was contrary to section 36 of the Commerce Act because it would force Clear to underwrite Telecom's monopoly profits.

The ECPR states that an incumbent may charge competitors a price that includes not only the costs of providing a particular service to those competitors,²⁷⁶ but also the profits—possibly including monopoly profits—which the incumbent would forgo by doing so.²⁷⁷

The High Court recognized that application of the ECPR would enable Telecom to recover its economic costs as well as monopoly profits.²⁷⁸ However, the Court indicated that the rule would compensate Telecom for having to meet its universal service obligations, while still enabling Clear

Paper 13, 1997; Dr. Ross Patterson, *Light-Handed Regulation in New Zealand Ten Years On*, 6 COMPETITION & CONSUMER L.J. (1998).

273. See *Clear Comm. Ltd. v. Telecom Corp. of New Zealand Ltd.*, [1992] 5 T.C.L.R. 166 (N.Z.).

274. See *id.* at 188.

275. On the ECPR, see the seminal article of William J. Baumol & J. Gregory Sidak, *The Pricing of Inputs Sold To Competitors*, 11 YALE J. ON REG. 171, 189 (1994), and Alfred E. Kahn and William E. Taylor, *The Pricing of Inputs Sold To Competitors: A Comment*, 11 YALE J. ON REG. 225 (1994). See also Mark Armstrong, Chris Doyle & John Vickers, *The Access Pricing Problem: A Synthesis*, 44 J. OF INDUST. ECON. 131-50 (1996).

276. For example, the costs of completing a call which originates on a competitor's network and ends on the incumbent's network.

277. For example, the profits the incumbent made by providing telephone services to users who were connected to its network and who are now being served by a competitor benefiting from the interconnection.

278. See *Clear*, 5 T.C.L.R. at 212.

to enter the market if it were more efficient than Telecom.²⁷⁹ According to the court, Clear would be able to attract users by charging them less than Telecom; Telecom in turn would need to lower its prices, and as a result, the profits for which it would have to be compensated under the ECPR would decrease. Applying the rule would thus result in the progressive disappearance of monopoly profits if they existed.²⁸⁰ In those conditions, application of the rule would not reveal an anti-competitive purpose and would therefore not violate section 36 of the Commerce Act.²⁸¹ In its conclusions, the High Court did not impose any specific interconnection price to the parties but urged them to resume negotiations and to resolve their differences within the framework provided by the court.²⁸²

Clear then lodged an appeal against the decision of the High Court.²⁸³ Overturning the High Court's ruling, the Court of Appeal concluded that application of the ECPR would amount to requiring a new entrant to indemnify the monopolist for any loss of profits.²⁸⁴ As such a requirement would put the new entrant at a competitive disadvantage, an anti-

279. *See id.* at 217. To understand why application of the ECPR would enable more efficient competitors to enter the market, consider the following highly simplified example. Assume that, for each call: (i) the cost for the incumbent of enabling a call (originating on a competitor's network) to terminate on its own network is \$2, the cost of enabling a call (ending on its own network or on a competitor's network) to originate on its own network is \$3, the cost of providing telecommunications services to callers who are both connected to its network is \$5, and the price charged to its subscribers is \$10 (thereby yielding a monopoly profit of \$5 to the incumbent when the call is between two of its own subscribers). Assume further that granting interconnection to the new entrant turns a call which would—or could—otherwise have taken place between two of the incumbent's subscribers into a call originating on the new entrant's network and terminating on the incumbent's network. The ECPR would require that a new entrant be charged \$2 (cost for the incumbent of terminating a call) + \$5 (foregone profits) for interconnection = \$7. With a final price of \$10, the new entrant would find it profitable to enter the telecommunications market only if it can enable a call to originate on its network for a cost lower than \$3, i.e., if it is more efficient than the incumbent.

280. *See id.* at 253. The reasoning of the High Court can be illustrated by going back to the example of note 279 above. Imagine that the cost for Clear of enabling a call to originate on its network is \$2. Clear could charge its subscribers \$9 (\$7 for interconnection + \$2 to cover the cost of enabling a call to originate on its network). If Telecom then matches Clear's price of \$9 by reducing its profits from \$5 to \$4, interconnection charges can be re-calculated as \$2 (to cover Telecom's costs of enabling a call to terminate on its network) + \$4 (foregone profits) = \$6 (instead of \$7), thus opening the possibility of a further round of price reductions.

281. *See Clear*, 5 T.C.L.R. at 255.

282. *See id.* at 220.

283. *See Clear Comm. Ltd. v. Telecom Corp. of New Zealand Ltd.* [1993] 4 N.Z.B.L.C. 103,340 (N.Z.).

284. *Id.* at 103,343.

competitive purpose could be assumed.²⁸⁵ The court added that the regular reviews, which would be required to re-assess the value of the interconnection charge under the ECPR in order to enable the progressive disappearance of monopoly profits would give rise to continual disputes between the parties and would be incompatible with the Commerce Act.²⁸⁶ The court indicated that the interconnection price should be based on the incremental costs involved in providing interconnection services and a reasonable return on capital.²⁸⁷ It stated, however, that it could not go so far as to determine a specific interconnection price, as it was not a price-fixing authority.²⁸⁸

Telecom then contested the judgment of the Court of Appeal before the Privy Council.²⁸⁹ The Privy Council, in turn, rejected the decision of the Court of Appeal and ruled, as the High Court had originally done, that application of the ECPR would not violate section 36 of the Commerce Act. However, while the High Court had focused on Telecom's purported purpose, the Privy Council focused instead on the concept of use of a dominant position. It considered that by charging Clear its opportunity cost for interconnection with the local loop, Telecom would not be abusing its dominant position. The Privy Council reasoned that in doing so, Telecom would be acting the same way that firms do in a competitive market, where they also seek to recover the opportunity costs of providing goods or services to competitors.²⁹⁰ The Privy Council rejected the Court of Appeal's argument that the need for continuing price reviews would infringe the Commerce Act.²⁹¹ The Privy Council added that, in any case, section 36 could only deal with monopoly pricing in an indirect way, by ensuring that competition was introduced in the market. Other provisions existed within the Commerce Act, such as those on price control in Part IV, which the government could use if it wanted to control pricing directly.²⁹²

In the end, the parties were once again left with the task of trying to reach a specific agreement that would conform to the court's judgment. Various offers and counter-offers were made by Clear and Telecom in the

285. *See id.* at 103,360-61.

286. *See id.* at 103,343.

287. *See id.* at 103,363-64.

288. *See id.* at 103,364.

289. *See Telecom Corp. of New Zealand Ltd. v. Clear Comm. Ltd.* [1994] 4 T.C.L.R. 138 (N.Z.).

290. *See id.* at 159.

291. *See id.* at 160.

292. *See id.* at 160-61.

following months. In July 1995, the government indicated to the parties that it would consider intervening directly if an agreement was not reached within a limited period of time.²⁹³ An agreement was finally signed in March 1996, with interconnection prices well below ECPR levels.²⁹⁴

7. *Recent Developments*

The Privy Council decision led the government to undertake an analysis of the issues associated with access to vertically-integrated natural monopolies. In an Officials' Report published in 1996, the government stated that it would continue for the time being with the present regulatory regime based on the Commerce Act, coupled with the threat of imposing further regulation.²⁹⁵ The government also issued a press release that stated that in its view, the ECPR had the potential to restrict competition and that the government would be concerned to see the rule being applied in the future.²⁹⁶ The government did not, however, translate that statement into law.

In the last two years, various potential improvements of the regulatory regime have been considered by the Ministry of Commerce. The options envisaged include developing arbitration and other disputes resolution mechanisms as well as adopting specific rules on interconnection.²⁹⁷ In January 1998, the Ministry also issued a discussion paper on how to strengthen enforcement of the Commerce Act.²⁹⁸ The paper, which received favorable reviews from the Commerce Commission²⁹⁹ and the Telecommunications Users Associations of New Zealand,³⁰⁰ recommended that tougher penalties be imposed to punish violations of the Commerce Act.³⁰¹ The paper also casts doubt about whether more than

293. See Webb & Taylor, *supra* note 250, at 3.

294. See OECD, *supra* note 28, at 214.

295. See OFFICE OF THE MINISTERS OF COMMERCE AND COMMUNICATIONS, REGULATION OF ACCESS TO NATURAL MONOPOLIES—OFFICIALS' REPORT, (1996).

296. See *government signals future directions for regulation of telecommunications, electricity and gas*, Press Release, June 26, 1996 (on file with authors).

297. See Webb & Taylor, *supra* note 250, at 14.

298. MINISTRY OF COMMERCE AND COMMUNICATIONS, PENALTIES, REMEDIES AND COURT PROCESSES UNDER THE COMMERCE ACT 1986: A DISCUSSION DOCUMENT (1998).

299. See Commerce Commission, *Commission Welcomes Further Strengthening of Commerce Act* (visited Oct. 1, 1999) available at <http://www.comcom.govt.nz/publications/display_mr.cfm?mr_id=492>.

300. See TUANZ, Penalties, Remedies & Court Processes—Ministry of Commerce Discussion Document (Mar. 18, 1998) (unpublished manuscript submitted to Ministry of Commerce Discussion Document regarding the 1986 Commerce Act, on file with authors).

301. See MINISTRY OF COMMERCE AND COMMUNICATIONS, *supra* note 298, at 31.

one level of appeal was justified.³⁰² To date, however, no decision has been made concerning the implementation of any of the proposed changes.

One issue that has resurfaced recently concerns Telecom's undertakings. The company has, in fact, proceeded to amalgamate its different businesses—the regional local telephone companies and the long distance and mobile companies—contrary to the commitments it had made in its 1988 letter. Telecom argues that its 1988 letter provided information on intended restructuring and other matters relating to Telecom's shareholders, but did not, and was not intended to constitute legally enforceable commitments.³⁰³

Number portability has also come to the fore recently as an important competition issue. The NZTNAG has agreed that commercial and technical terms relating to number portability are to be determined through negotiated agreements between operators.³⁰⁴ The Commerce Commission has warned that adopting "unreasonable positions" on number portability might be in violation of section 36 of the Commerce Act.³⁰⁵ In August 1998, as little progress had been made, the Minister of Communications set a deadline of November 30 for the industry to reach agreement on number administration and portability issues.³⁰⁶ In May 1999, the Commission finally authorized an agreement among five operators, which sets out principles for the independent administration of numbers and a process to determine the preferred number portability solution.³⁰⁷

E. A Critical Appraisal of the New Zealand Regulatory Framework

Unlike in the United States, economic regulation of telecommunications in New Zealand relies to an unusually high degree upon the enforcement of general antitrust law by antitrust authorities, rather than on

302. *See id.* at 51.

303. *See* Ross Patterson, *Light-Handed Regulation in New Zealand Ten Years On: Stimulus to Competition or Monopolist's Charter* 27 (Apr. 7-8, 1998) (unpublished manuscript distributed at the TUANZ Competition Symposium, Wellington, New Zealand, on file with authors).

304. *See* Webb & Taylor, *supra* note 250, at 11.

305. *See* Dr. Alan Bollard & Rae Ellingham, *Regulation in New Zealand Telecommunications: The Regulatory Body's Perspective* 8 (unpublished manuscript from the AIC Conference, Competition, Customer Care and Retention in New Zealand Telecommunications, Stamford Plaza, Auckland, Oct. 28, 1997, on file with authors).

306. *See* RESOURCES & NETWORK BRANCH, *supra* note 234, at 10.

307. The five companies which signed the agreement are Newcall Communications Ltd., Teamtalk Ltd., Telecom New Zealand Ltd., Telstra New Zealand Ltd., and Vodafone New Zealand Ltd. Other companies will be able to become signatories under the same terms and conditions. *See* Commerce Commission, Media Release 1999/64, *available at* <http://www.comcom.govt.nz/publications/display_mr.cfm?mr_id=544>.

telecommunications-specific rules and institutions. This is why the term "light-handed regulation" has been used to designate the New Zealand regulatory model.³⁰⁸ As the main features of the New Zealand model presented above have been in existence for the past ten years, observers may derive some useful lessons of experience. As such, the New Zealand model provides a particularly valuable test of the extent to which the six criteria identified in Part II.D can be met through an application of general rather than sector-specific rules and institutions.

1. Promotion of a Competitive Market Structure

As explained in Parts A and B above, formal legal barriers to entry have been removed in all segments of the telecommunications sector in New Zealand. In fact, New Zealand is one of the rare countries that enables telecommunications operators to provide any types of services without having to obtain licenses.³⁰⁹

It is also noteworthy that a number of issues concerning the promotion of a competitive market structure seem to have been dealt with relatively easily in New Zealand. For example, even in the difficult local access cases, the courts unanimously pronounced that Telecom's attempts to impose an access code upon Clear's customers were anti-competitive.³¹⁰

Interconnection issues, however, proved extremely hard to solve in New Zealand. Although the Commerce Act was seen as the main instrument to maintain competition in the telecommunications sector, additional elements of the regulatory framework were intended to facilitate freely-negotiated commercial agreements between parties, particularly with respect to interconnection. The 1990 Disclosure Regulations aimed to help Telecom's competitors negotiate more effectively with the incumbent by forcing Telecom to publish certain information.³¹¹ Telecom's undertakings to deal with its own subsidiaries and with competitors on an arms-length basis and to provide interconnection on fair and reasonable terms were also supposed to help new operators reach satisfactory agreements with Telecom.³¹² Finally, the government's threat to adopt additional regulation if the operators failed to reach pro-competitive agreements pursued the same objective.³¹³

308. See, e.g., Patterson, *supra* note 272; Webb & Taylor, *supra* note 250.

309. See *supra* text accompanying note 235.

310. See *supra* text accompanying notes 273-274.

311. See *supra* text accompanying note 233.

312. See *supra* text accompanying note 236.

313. See *supra* text accompanying note 237.

Experience has revealed, however, that parties remained unable to agree on particularly contentious issues such as conditions of interconnection. In many cases, the parties were unable to come to an agreement without first going to court.³¹⁴ In other situations, agreements previously made were later contested and modified.³¹⁵ Even where parties did reach agreements, it was only after lengthy, time-consuming negotiations, and Telecom's competitors often expressed dissatisfaction with the results.³¹⁶

In fact, the Commerce Commission's inquiry about the telecommunications sector in 1991-92 concluded that the Disclosure Regulations "did not provide significant assistance in removing any of the obstacles to the development of competition."³¹⁷ Telecom failed to implement the restructuring measures to which it had subscribed, and as a result, the usefulness of the Disclosure Regulations was reduced.³¹⁸ Furthermore, the regulations failed to prevent Telecom from trying to impose anti-competitive conditions of interconnection on its competitors.³¹⁹

In the absence of negotiated agreements, interconnection disputes went to court, and the judicial proceedings were both lengthy and costly.³²⁰ Furthermore, the judicial decisions failed to be specific enough to put an end to the disputes. For example, none of the three courts that decided the local access cases succeeded in imposing a specific interconnection

314. See, e.g., discussion *supra* Part IV.D.6.

315. This was the case in the Clear-Telecom long distance interconnection agreement, where an agreement over interconnection charges was reached between Clear and Telecom in 1990, but subsequently modified in 1993 after new disputes were settled before a retired Court of Appeal judge. See Mueller, *supra* note 252 at 114-16; Clear Comm. Ltd. v. Telecom Corp. of New Zealand Ltd., interim award, at 76, 107 (Mar. 26, 1994).

316. For example, the BellSouth-Telecom mobile interconnection agreement, which required that BellSouth pay higher-than-standard charges for long-distance services and that BellSouth pay for ANI services. See Blanchard, *supra* note 271, at 159; Mueller, *supra* note 252, at 118-19.

317. NEW ZEALAND COMMERCE COMM'N, *supra* note 260, at 83.

318. For example, the interconnection agreement between Telecom and its mobile subsidiary originally was a public document. However, since the amalgamation of Telecom's various businesses, it is no longer publicly disclosed. See Patterson, *supra* note 303, at 27.

319. This is evidenced by Telecom's attempt to impose a dial access code on Clear's subscribers and to treat Clear as just another one of Telecom's large customers. See *supra* text accompanying notes 273-274.

320. See Darryl Biggar, Legislative Principles Governing Access to Vertically Integrated Natural Monopolies in New Zealand 20 (Apr. 7-8, 1998) (unpublished manuscript distributed at the TUANZ Competition Symposium, Wellington, New Zealand).

price.³²¹ Many observers argue that these situations create uncertainty. This uncertainty, in turn, constitutes a barrier to entry and further hinders negotiated agreements, as the parties lack the judicial benchmarks which would focus negotiations upon a narrow set of possible outcomes.³²²

Number portability issues also proved very difficult to tackle in New Zealand. Although an agreement has finally been reached between some operators, it was only after government intervention. In addition, the agreement does not set specific number portability rules, but only a process to eventually determine such rules.³²³

Another criticism of the New Zealand model is that the system adopted to ensure that universal service obligations are met is arguably inefficient and anti-competitive. Through the Kiwi Share, Telecom is chosen, a priori, as the party responsible for meeting universal service obligations.³²⁴ Yet no market mechanisms are used to determine the true costs of universal service obligations,³²⁵ or to identify the service providers best able to meet those obligations. Therefore, there is no guarantee that the compensation Telecom receives exactly covers its costs, or that Telecom is the party able to perform that task most efficiently. To the extent that Telecom's competitors contribute to the cost of universal service obligations (through the access price), there is a risk that they might be overcharged and thus be put at a competitive disadvantage vis-à-vis Telecom.

Finally, some authors consider another flaw of the New Zealand model to be the lack of structural reforms in the telecommunications sector, with the result that Telecom has not been subjected to sufficient competitive pressures. These authors recognize that telecommunications performance has markedly improved over the past decade in New Zealand. However, they conclude that such results are not that impressive when compared with those of other OECD countries. For example, in a study comparing the prices of business telephone services and of cellular services, New Zealand ranked twelfth most expensive (out of 26) in business telephone

321. The High Court expressly stated that it was not a regulatory agency and that it could not pursue investigations as to whether Telecom earned monopoly rents, possessed excess capacity, or was inefficient. *See Clear Comm. Ltd v. Telecom Corp. of New Zealand Ltd.* [1992] 5 T.C.L.R. 166, 217 (N.Z.).

322. *See Biggar, supra* note 320, at 9.

323. *See supra* text accompanying notes 307-310.

324. *See supra* text accompanying note 231.

325. Todd Telecommunications Consortium argues that, in fact, the provision of residential local services is not a loss-making activity in New Zealand and that, on the contrary, it generates monopoly profits. *See generally* TODD TELECOMMUNICATIONS CONSORTIUM, NEW ZEALAND TELECOMMUNICATIONS: THE STATE OF COMPETITION 46 (1998).

services, and only eighth most expensive (out of 24) in cellular services.³²⁶ Todd Telecommunications Consortium estimated that Telecom was earning substantial monopoly profits, on the order of NZ\$382 million per year.³²⁷

Commentators argue that in order to accelerate the introduction of competition in the New Zealand telecommunications market, structural reforms need to be imposed on Telecom.³²⁸ Separating cellular from wire-line operations, for example, would increase the number of interconnection agreements. A separation would yield information on interconnection costs, and thus facilitate negotiations between access seekers and access providers. It would also give new entrants a wider choice of companies with which to pursue interconnection agreements, thereby raising the likelihood that they could negotiate acceptable conditions. Appropriate disclosure requirements, combined with such strictly enforced structural solutions, would further increase the information available to new operators to conduct the negotiations. Such measures could be complemented by adoption of a non-discrimination rule, whereby conditions offered to one operator would have to be made available to others.³²⁹ This would not only facilitate agreements between parties, it would also help judges by enabling them to apply existing specific solutions to new cases. Indeed, the essential facilities doctrine developed in the United States³³⁰ has shown that judges applying general antitrust rules to solve issues of access are able to devise specific solutions only in three circumstances: when the remedy is to grant access under the same conditions as those already granted to others, to grant access to the plaintiff under conditions that the plaintiff itself has already enjoyed before, or to refer to conditions established by a specialized regulator.³³¹ Judges are unable to come up with specific solutions when access has to be granted for the first time in the absence of a specialized regulator.

Some structural reforms of this type have in fact been recently adopted in the New Zealand electricity sector.³³² Any decision regarding imple-

326. The study was conducted in 1997, and used OECD power purchasing parity methodology. See RESOURCES AND NETWORKS BRANCH, *supra* note 234, at 32.

327. See *id.* at 44.

328. See, e.g., Mueller, *supra* note 252, at 126-129.

329. See *id.* at 129.

330. See *supra* notes 99-100.

331. See Hay, *supra* note 272, at 240; Pengilly, *supra* note 272, at 29.

332. In order to promote effective competition in the sector, the Electricity Industry Reform Act adopted in July 1998 mandates, inter alia, structural reforms such as a separation of natural monopoly components from competitive activities (transmission and distribution on the one hand and generation and trading on the other), as well as substan-

mentation of structural reforms should, however, only be taken after careful analysis. The telecommunications market is indeed in a state of very rapid evolution, and the progressive erosion of the technical and operational differences which exist between different telecommunications services might weigh against decisions to impose separation between some activities.

2. *Specificity vs. Coherence*

The New Zealand model of economic regulation in the telecommunications industry is clearly forward-looking. Reliance on economy-wide rules and institutions to regulate the sector certainly promotes a coherent treatment between telecommunications and other sectors, and reflects the growing similarities progressively emerging between the telecommunications sector and other parts of the economy.

On the other hand it could be argued that the absence of specific rules on interconnection is the main reason for the long delays accompanying the resolution of many interconnection disputes in New Zealand. As mentioned above, the uncertainty generated by the absence of more specific rules on this topic hindered the conclusion of agreements between parties as well as the adoption of precise solutions by the judges.³³³ More specific provisions on number portability issues might also have facilitated and accelerated the conclusion of agreements between operators.³³⁴

In addition, antitrust rules such as section 36, pertaining to the use of a dominant position, are generally designed to prevent restrictions on competition.³³⁵ As mentioned with respect to the United States, they might therefore be ill-adapted when it comes to introducing competition in markets which were previously monopolized.³³⁶ They might also lead to economically inefficient results when applied to vertically integrated industries. For example, under section 36, a monopolist operating a bottleneck facility might be forced to lower its prices when it competes in a downstream market. However, when it does not compete in that market, it might be free to price as it wishes. Indeed, in the latter case, when it imposes high prices, there is a risk that the monopolist distorts competition in the downstream market in its favor. By contrast, in the former case, all competitors in the downstream market are treated in the same way. As a

tially increased information disclosure requirements. *See generally* Electricity Industry Reform Act, 1998, pts. 2-5 (N.Z.).

333. *See supra* text accompanying notes 320-322.

334. *See supra* text accompanying note 323.

335. *See supra* text accompanying note 19.

336. *See supra* text accompanying note 185.

result of the application of section 36, in order to be able to keep charging high prices, the monopolist might decide to operate only in the bottleneck market and not in the downstream competitive market even if economies of scales or scope would dictate vertical integration.³³⁷

Finally, antitrust law does not adequately distinguish between rules which are easy to apply and rules which are very difficult to apply in practice. For example, as explained above, the ECPR can lead to the progressive elimination of monopoly profits only if regular reviews are performed to re-assess the value of the interconnection price.³³⁸ However, assessing the value of the interconnection price under the ECPR is likely to be very difficult in practice as it would require very detailed information on the incumbent's costs.³³⁹ And yet the Privy Council nevertheless considered such practical difficulties irrelevant to a determination of the legality of an ECPR-based interconnection price under section 36.³⁴⁰ Ensuring adoption of a more practical rule—based, for example, on international benchmarks derived from the observation of interconnection prices in countries with competitive telecommunications sectors—would have required more specific regulations than section 36.

3. *Flexibility vs. Certainty*

The New Zealand model, with its heavy reliance on general antitrust rules, leaves a wide degree of discretion to judges in charge of applying the rules. Given the length of time necessary to establish precedents and the variation among cases, the scope of judicial discretion is likely to remain for a long period of time. Moreover, even when a precedent has been set, it can be changed by the court which set it or by another court of equal or superior rank. As mentioned above, this has the advantage of allowing for a high degree of flexibility in tailoring appropriate solutions.³⁴¹ However, it introduces a high degree of uncertainty for operators and subscribers alike.³⁴² For example, two concepts mentioned in section 36—the concepts of use of a dominant position and use of a purpose—have been the objects of conflicting court decisions. More generally, uncertainty is well

337. See Hay, *supra* note 272, at 242-43.

338. See *supra* note 283.

339. See Mueller, *supra* note 252, at 124-25.

340. See *supra* text accompanying notes 290 and 291.

341. See *supra* text accompanying note 18.

342. See discussion *supra* Part II.D.3.

illustrated by the several instances where courts have ruled differently on the same facts.³⁴³

In addition, although the price control regime envisaged under Part IV of the Commerce Act has never been used up to now, it nevertheless leaves a large degree of discretion to political authorities and the Commerce Commission.³⁴⁴ The criteria used by the government to identify the goods or services subject to price controls are vague. As mentioned in Part IV.B, price controls can be imposed when competition is limited and when such controls would be in the interest of users or consumers.³⁴⁵ In addition, no guidance is provided to the Commission as to how such price controls should be designed and administered.³⁴⁶ Investors may thus have legitimate concerns that such broad powers could be misused, thereby preventing them from receiving adequate returns on their investments.

As for the government's threat of imposing more regulations upon the industry, it does appear to have facilitated the conclusion of some agreements. Government intervention might have had such an effect, for example, with respect to the interconnection agreements concluded between Clear and Telecom for both long distance and local services,³⁴⁷ and with respect to the agreement concluded by some operators on number portability.³⁴⁸ In many cases, however, such agreements were reached only after a great length of time, and in some instances only after conclusion of a difficult judicial process.³⁴⁹ Perhaps more importantly, the government's threats constitute a very informal and rather uncertain regulatory instrument. The willingness of the government to act upon such threats is difficult to estimate and is likely to differ from one government to the next.

4. *Autonomy, Technical Competence, and Stakeholder Participation*

The Commerce Act designates the Commerce Commission as the main body responsible for maintaining competition. However, the Com-

343. This was the case in the "Cellular Frequency Cases." See Ahdar, *supra* note 228, at 86; Telecom Corp. of New Zealand Ltd./The Crown, Commerce Comm'n Decision No. 254 (Oct. 17, 1990); Telecom Corp. of New Zealand Ltd. v. Commerce Comm'n [1991] 3 N.Z.B.L.C. 102, 340 (N.Z.); Telecom Corp. of New Zealand Ltd. v. Commerce Comm'n [1992] 3 N.Z.L.R. 429 (N.Z.). This was also the case in the "Access to local loop cases" described in Part IV.D, *supra*.

344. See *supra* Part IV.B.

345. See *supra* text accompanying note 231.

346. See Commerce Act, § 70.

347. See *supra* text accompanying notes 273 and 304.

348. See *supra* text accompanying note 316.

349. See, e.g., *supra* text accompanying notes 294 and 307.

mission lacks the power to set conditions of interconnection or to impose penalties. It operates on a limited budget and with very few analysts specialized in network industries.³⁵⁰ Furthermore, the Commission's competency has been interpreted very narrowly by the courts,³⁵¹ and its decisions can be overturned by the courts on a legal as well as factual basis. In New Zealand, it is the judges who are ultimately in charge of enforcing economic regulation in the telecommunications sector.

This scheme offers strong guarantees regarding the autonomy of the regulatory process. Indeed, judges enjoy protection against undue pressures from the government and are independent from industry, so that the risks of regulatory capture are limited. Members of the Commission also enjoy protection against government pressure, albeit to a more limited extent,³⁵² and they are independent from industry as well.³⁵³ Both the Commission and the courts are competent across the whole economy and intervene on a case-by-case basis without getting involved in constant regulatory oversight. Such a system limits the contacts which those institutions have with any particular sector minister or operator, and thus further reduces the risks of regulatory capture by the government or by the industry.³⁵⁴ However, there remains some risk of politically-motivated intervention under Part IV of the Commerce Act.

Serious doubts have also been raised about the capacity of non-specialized judges to fully understand complex technical and regulatory matters in spite of the presence of an expert lay member in the High

350. See John P. Small, *Light Handed Regulation of Network Industries in New Zealand* 9 (Apr. 7-8, 1998) (unpublished manuscript distributed at the TUANZ Competition Symposium, Wellington, New Zealand, on file with authors).

351. See *supra* text accompanying notes 260-263.

352. The Commission's budget is determined by Parliament, its members must possess minimum competencies and experience, and they can only be dismissed on grounds restrictively enumerated in the Commerce Act, three elements which somewhat protect the Commission's autonomy vis-à-vis the Executive. On the other hand, other factors might, at times, constitute a threat to the Commission's autonomy: for example, the Executive alone is responsible for designating the commissioners and the Commission must have regards to the economic policies of the government.

353. See *supra* note 246.

354. See Roger Kerr and Bryce Wilkinson, *The Regulation of Monopoly in New Zealand* 36-39 (Apr. 7-8, 1998) (unpublished manuscript distributed at the TUANZ Competition Symposium, Wellington, New Zealand, on file with authors); see also John Belgrave, *The Regulatory Environment* 8 (Mar. 14, 1965) (unpublished manuscript distributed at the Economist Conference, on file with authors).

Court.³⁵⁵ A review of the case law of the courts does indeed provide some examples of insufficient economic analysis. One example is the Privy Council's statement in the local loop cases, explaining that when Telecom charges Clear according to the ECPR, Telecom does not use its dominant position because it acts in the same way that firms do in a competitive markets since they also seek to recover the opportunity costs of providing goods or services to competitors.³⁵⁶ The Privy Council apparently failed to realize that the comparison was invalid: the opportunity costs of a firm in a dominant position that enjoys monopoly profits would be much higher than the opportunity costs of a firm forced to price at marginal cost because it is operating in a competitive environment.³⁵⁷ Another example is found in the level of penalties imposed by the courts for violations of the Commerce Act. In some cases, those penalties are insufficient to compensate for the unlawful gains by the violators, and therefore fail to deliver the intended deterrence effect.³⁵⁸

Courts are also ill-equipped to provide the continuous oversight which certain regulatory mechanisms require. Once again, the access to the local loop cases provide much insight. In those cases, the High Court and the Privy Council were probably correct to maintain that application of the ECPR could result in the progressive elimination of Telecom's monopoly profits, if such profits existed.³⁵⁹ However, in order to eliminate monopoly profits completely, the interconnection charge would have to be revised at regular intervals,³⁶⁰ and courts appear to lack the capacity to proceed with these regular reviews.

Finally, several commentators have argued that users' opinions on issues of telecommunications regulation have not been sufficiently heard in New Zealand.³⁶¹ Both the Commerce Commission and private parties may

355. See SUSAN LOJKINE, COMPETITION LAW AND POLICY INSTITUTE OF NEW ZEALAND, COMPETITION LITIGATION IN THE HIGH COURT, VOL. II, 10 (1991). See also Webb & Taylor, *supra* note 250, at 6-7.

356. See *Telecom Corp. of New Zealand Ltd. v. Commerce Comm'n*, [1992] 3 N.Z.L.R. 429, 439.

357. See Ahdar, *supra* note 272, at 102; Hay, *supra* note 272, at 243-44, .

358. See Bollard & Pickford, Institute of Economic Affairs, Utility Regulation in New Zealand 52 (unpublished lectures, London, 1996, on file with authors); see also David Harmer & Grant Hannis, *The Commerce Act—What Must Change?* 3 (Apr. 7-8, 1998) (unpublished manuscript distributed at the TUANZ Competition Symposium, Wellington, New Zealand, on file with authors).

359. See *supra* text accompanying notes 280 and 290.

360. See *supra* note 283.

361. See MINISTRY OF COMMERCE AND COMMUNICATIONS, *supra* note 298, at 44; see also Joseph, *supra* note 227, at 32.

bring actions before the courts for breaches of the Commerce Act, but no mechanisms are provided to ensure that consumer representatives, if they are not parties to the dispute, can intervene in the proceedings to present their views.

5. *Limitation of Regulatory Costs*

One obvious benefit of the New Zealand regulatory model is that its regulatory institutions are not expensive to establish and maintain. The budget of the Commission, which enforces the Commerce Act across the whole economy, is very modest.³⁶² In addition, as there are few sector-specific rules, compliance costs for the industry remain low,³⁶³ and incentives to spend large sums on lobbying activity are reduced.³⁶⁴

However, parties incur substantial legal expenses during protracted litigation.³⁶⁵ Although difficult to estimate, other costs are likely to be substantial in New Zealand. First, there are the costs that result from delays incurred in reaching final decisions, particularly with respect to interconnection issues. For example, the Clear-Telecom access dispute in the local loop cases postponed competition in the local markets by several years, undoubtedly imposing a cost on the New Zealand economy. Second, costs will also be incurred if, as argued above, there is insufficient protection against regulatory mistakes in New Zealand.

6. *Efficiency of Allocation of Regulatory Responsibilities*

In comparison to other countries, New Zealand's economic regulation of the telecommunications sector is relatively simple, and its allocation of regulatory responsibilities appears to be quite clear. The main criticism of the New Zealand model is that it does not allocate regulatory responsibilities to the institutions best equipped to handle them. It is somewhat paradoxical that decisions taken by the Commerce Commission—a body comprised of experts on telecommunications regulatory matters—can be appealed before the High Court, where there is only one economic expert, while decisions of the High Court can then be appealed before the Court of Appeal, where there are no economic experts at all.³⁶⁶

362. See *supra* text accompanying note 239.

363. See Belgrave, *supra* note 354, at 6.

364. See Biggar, *supra* note 320, at 20.

365. Clear estimated that it had spent \$NZ 8 to 10 million for the High Court trial alone of the Clear v. Telecom local access case. See Ahdar, *supra* note 272, at 106.

366. See *supra* text accompanying notes 248 and 249.

V. THE AUSTRALIAN EXPERIENCE

A. Origins of the Present Regulatory Framework

Prior to 1975, in Australia, as in many other OECD countries, infrastructure industries were in public hands. In the telecommunications sector, the Post-Master General's Department provided domestic services, while the Overseas Telecommunications Commission ("OTC") provided international services.

In 1975, however, the government separated domestic telecommunications from postal services and set up Telecom Australia as a distinct entity. In 1984, the government established a new publicly-owned operator, Aussat, to operate a domestic satellite system. During the 1980s, the three telecommunications operators—Telecom Australia, OTC, and Aussat—were progressively run in a manner more similar to that of private firms. However, there was almost no competition in the telecommunications sector. Telecom Australia continued to assume important regulatory duties in addition to operational responsibilities, and users—particularly business users—were dissatisfied with the speed at which new services were being introduced.³⁶⁷

Following a review of the telecommunications sector, the Minister for Transport and Communications issued a statement in May 1988 recognizing the need to separate regulatory and operational functions and to introduce additional competition in the sector.³⁶⁸ Shortly thereafter, Australia adopted the Telecommunications Act 1989, which liberalized the markets for value-added services and established a new sector-specific agency—AUSTEL—to implement the regulatory aspects of the new regime.³⁶⁹

367. The only market segments open to competition were the marketing of some terminal equipment and the provision of some services, such as radio paging, unrelated to traditional voice telephony. In addition, the scope for effective competition was limited by Telecom's regulatory functions which gave it the right to approve all equipment attaching to the network. See Department for Communications and the Arts, *Liberalization of the Telecommunications Sector: Australia's Experience* 3-4 (1997), available at <http://www.dca.gov.au/nsapi-graphics/?Mlval=dca_dispdo>.

368. See STEPHEN KING & RODNEY MADDOCK, *UNLOCKING THE INFRASTRUCTURE—THE REFORM OF PUBLIC UTILITIES IN AUSTRALIA* 137 (1996).

369. See Henry Ergas, *Telecommunications Across the Tasman: A Comparison of Economic Approaches and Economic Outcomes in Australia and New Zealand* 4 (unpublished manuscript prepared for the International Institute of Communications, May 1996, on file with authors).

Financial problems with Aussat led to a second wave of telecommunications reforms implemented shortly thereafter.³⁷⁰ Australia Telecom and OTC merged to form the Australian and Overseas Telecommunications Corporation ("AOTC") which was later renamed Telstra Corporation Ltd. Telstra was a 100 percent public operator which provided the whole range of telecommunications services. A second general license was awarded to a private competitor, Optus,³⁷¹ which provided fixed as well as mobile services. A third mobile license was issued to Arena GSM (now Vodafone) in 1992.³⁷² The basic policy premise underlying the reforms was that competition for the provision of fixed infrastructure should be limited to a duopoly until June 30, 1997, in order for Optus to develop into an effective rival for Telstra.³⁷³ For similar reasons, the government limited, over the same period, the number of competing mobile services providers to three firms including Telstra.³⁷⁴ The provision of other telecommunications services was fully opened to competition. The Telecommunications Act 1991 contained the regulatory principles applicable to the new regime. A telecommunications-specific access regime was established whereby conditions of access to another operator's network were to be determined either through negotiation or through arbitration by AUSTEL.³⁷⁵

From 1991 to 1997, a certain number of factors helped shape the government's views about the form that the post-1997 telecommunications sector should take. First, there was a gradual realization that the duopoly regime might not be the most effective vehicle to induce vigorous competition because it facilitated coordination between the two competitors.³⁷⁶

Second, at the request of the Prime Minister, the government conducted an independent inquiry on competition policy issues. Published in 1993, the Himler Report recommended that the government promote competition and remove existing barriers to entry in infrastructure sectors.³⁷⁷

370. Marina C. van der Vlies, *The Transition from Monopoly to Competition in Australian Telecommunications*, 20 TELECOM. POL'Y 323 (1996).

371. Optus also bought Aussat.

372. See OECD, *supra* note 28, at 7.

373. See Peter G. Leonard, *Australia*, in TELECOMMUNICATIONS LAW AND PRACTICE 300 (Colin D. Long ed., 1995).

374. See *id.*

375. See Telecommunications Act, 1991, § 137(3)(b) (Austl.).

376. See Ergas, *supra* note 369, at 6, 23. Some argued that a regime of administered competition such as the one established in 1991 carried the risk that regulatory authorities would focus too much on the protection of competitors rather than on the promotion of competition itself. See van der Vlies, *supra* note 370, at 323.

377. See FREDERICK G. HIMLER ET AL., NATIONAL COMPETITION POLICY—REPORT BY THE INDEPENDENT COMMITTEE ON INQUIRY (1993).

Specifically, the report proposed that an economy-wide regulator should regulate infrastructure sectors rather than various sector-specific agencies such as AUSTEL.³⁷⁸ Additionally, the report recommended the adoption of a cross-sector access regime enabling firms to gain access to certain essential facilities on fair and reasonable terms.³⁷⁹ Such a regime was adopted in 1995, basically along the lines of what was proposed in the Himler Report.

The third major influence on the post-1997 regime stems from the New Zealand experience in telecommunications, which was closely studied in Australia.³⁸⁰ An analysis of the dispute between Clear and Telecom on conditions of interconnection convinced most Australian observers that courts applying general antitrust rules were unable to come to specific decisions on technically complex telecommunications matters, and that courts were ill-suited to exercise the continual supervision of regulatory arrangements.³⁸¹

One third of Telstra's capital was privatized in 1997,³⁸² and that same year, full competition was introduced in the provision of all telecommunications infrastructure and services.

B. Regulatory Framework: Main Rules

The main antitrust rules, applicable to the Australian economy as a whole, are included in Part IV of the Trade Practices Act.³⁸³ Part IV prohibits contracts, arrangements or undertakings that have the purpose or the effect of substantially lessening competition.³⁸⁴ Part IV also prohibits ex-

378. *See id.* at 325-28.

379. *See id.* at 242-49. For a description of the access regime proposed in the Himler Report, see Warren Pengilley, *Himler and Essential Facilities*, 17 UNIV. NEW S. WALES L.J. 1 (1994).

380. The Himler Report, for example, bases its recommendations for the regulation of infrastructure sectors partly on an analysis of the New Zealand experience in telecommunications. *See* HIMLER ET AL., *supra* note 377, at 245.

381. *See* Pengilley, *supra* note 379, at 525.

382. The privatization took place in accordance with the Telstra (Dilution of Public Ownership) Act 1996 which allowed for the sale of one third of the State's equity in Telstra in 1997. *See* OECD, COMMUNICATIONS OUTLOOK 1999—TELECOMMUNICATIONS REGULATORY ISSUES: AUSTRALIA (1998).

383. DEPARTMENT OF COMMUNICATIONS AND THE ARTS, AUSTRALIA'S OPEN TELECOMMUNICATIONS MARKET: THE NEW FRAMEWORK 25 (1998). *See also* Trade Practices Act, 1974, Part IV (Austl.).

384. Such arrangements include contracts which contain exclusionary provisions, fix price, or limit the supply or acquisition of goods or services. *See* Trade Practices Act, 1974, § 45(1)(b) (Austl.).

clusive dealings,³⁸⁵ retail price maintenance,³⁸⁶ and price discrimination.³⁸⁷ Additional provisions prohibit a corporation which has a substantial degree of market power from taking advantage of that power for the purpose of eliminating a competitor or preventing the emergence of a competitor.³⁸⁸ Finally, other provisions prohibit a corporation from purchasing shares or assets of another business if, as a result, the corporation would be in a position to dominate a market for goods or services, or to substantially strengthen its power to dominate a market.³⁸⁹

The cross-sector access regime adopted in 1995 is contained in Part IIIA of the Trade Practices Act. Under Part IIIA, the relevant minister may mandate access to bottleneck facilities required to provide a service deemed to be of national significance.³⁹⁰ Terms of access are determined either through commercial agreement between access provider and access seeker or through arbitration by the antitrust regulator, the Australian Competition and Consumer Commission ("ACCC").³⁹¹

The authorities believed that Parts IV and IIIA of the Trade Practices Act would be insufficient alone to foster competition in the telecommunications market. Therefore, telecommunications-specific provisions were introduced in the Trade Practices Act to regulate anti-competitive conduct in the telecommunications industry (Part XIB), as well as to provide access to bottleneck facilities in the telecommunications sector (Part XIC).³⁹²

385. *See id.* § 47. Exclusive dealing is defined by reference to specific vertical restraint practices such as supplying goods or services on condition that the purchaser does not acquire goods or services from a competitor of the supplier. *See* RUSSELL V. MILLER, ANNOTATED TRADE PRACTICES ACT 141 (13th ed. 1992).

386. *See* Trade Practices Act, 1974, § 48 (Austl.). Retail price maintenance refers to practices such as attempting to induce a person not to sell a supplier's products at less than a price specified by the supplier. *See* MILLER, *supra* note 385, at 150.

387. *See* Trade Practices Act, 1974, § 49 (Austl.).

388. *See id.* § 46.

389. *See id.* § 50.

390. *See id.* §§ 44G(2)(c) and 44H(4)(c).

391. For an excellent description of the workings of Part IIIA provisions, see Warren Pengilley, *Access to Essential Facilities: A Unique Antitrust Experiment in Australia*, 43 ANTITRUST BULL. 528-36 (1998).

392. *See* Trade Practices Amendment (Telecommunications) Act, 1997, Part XIB & XIC (Austl.). The explanatory memorandum to the draft text states:

Telecommunications is an extremely complex, horizontally and vertically integrated industry and competition is not established in some telecommunications markets. There is considerable scope for incumbents to engage in anti-competitive conduct because competitors in downstream markets depend on access to network facilities controlled by the incumbent. ... Anti-competitive behavior in telecommunications could cause particularly rapid damage to competition because of the

Two types of behavior are deemed anti-competitive under Part XIB. First, section 151AJ(2) prohibits a telecommunications operator which holds a substantial degree of power in a telecommunications market from taking advantage of that power with the effect, or likely effect, of substantially lessening competition in that or any other telecommunications market. Second, section 151AJ(3) prohibits a telecommunications operator from engaging in conduct which violates some of the provisions of Part IV, such as: concluding contracts, arrangements or understandings that affect competition;³⁹³ misusing market power;³⁹⁴ engaging in exclusive dealings;³⁹⁵ or engaging into resale price maintenance.³⁹⁶

Section 151AJ provides for a stricter antitrust regime in the telecommunications sector than would be possible under Part IV. For example, misusing market power is prohibited under Part IV only when an anti-competitive purpose can be established.³⁹⁷ However, section 151AJ(2) prohibits conduct irrespective of purpose, so long as it has the effect, or likely effect, of substantially lessening competition in telecommunications.³⁹⁸ The Minister for Communications and the Arts must arrange for a review of the operation of Part XIB of the Trade Practices Act before July 1, 2000. The objective of the review is to determine whether any or all of the provisions of Part XIB should be repealed or amended.³⁹⁹

Part XIC establishes a regulatory regime derived from Part IIIA of the Trade Practices Act. It is aimed at facilitating the access of all competitors to bottleneck facilities in the telecommunications sector. Its primary object is to promote the long-term interests of end-users as defined in section 152AB. Section 152AL states that the ACCC can "declare" certain telecommunications services which constitute bottlenecks, meaning that the

volatile state of the industry during the early stages of competition.

Against this background, Part IV alone may prove insufficient to deal with anti-competitive behavior in telecommunications at this time.

Trade Practices Amendment (Telecommunications) Bill, 1996, memo. at 6.

393. See Trade Practices Act, 1974 § 151AJ(3) (Austl.) (citing § 45).

394. See *id.* (citing § 46).

395. See *id.* (citing § 47).

396. See *id.* (citing § 48).

397. See *id.* § 46(1) (a)-(c).

398. See *id.* § 151AJ(2). In addition, under Part XIB, the onus of proof might in some cases be reversed with the telecommunications operator having to prove that it did not engage in an anti-competitive conduct. Finally, the penalties which can be imposed for violations of Part XIB provisions are more severe than those which can be imposed for violations of Part IV provisions. See Stephen Corones, *Anti-competitive Conduct in Telecommunications*, 26 AUSTL. BUS. L. REV. 151, 153 (1998).

399. See Trade Practices Act, 1974, § 151CN (Austl.).

ACCC can mandate access to those services.⁴⁰⁰ Providers of such services are then subjected to standard access obligations.⁴⁰¹ Such obligations include the following: the obligation to supply the declared services and permit interconnection of their facilities under conditions equivalent to those which they reserve for themselves, to provide billing information associated with the declared services, and to supply the services which might be required to enable an access seeker to use the customer equipment necessary to use the bottleneck facilities (such equipment could, for example, be the set-top boxes used for the supply of pay television).⁴⁰²

The specific terms and conditions under which access providers must comply with standard access obligations may be determined in three ways: (i) through commercial agreements between access providers and access seekers; (ii) through arbitration if the parties cannot agree; and (iii) through implementation of "access undertakings," which constitute commitments on the part of access providers regarding the conditions under which they are to provide access.⁴⁰³

Following a request from the Treasurer in early 1997, the antitrust regulator developed access pricing principles. Those principles are used when deciding to approve or reject access undertakings or when arbitrating access disputes.⁴⁰⁴ Access prices are supposed to embody four main characteristics: (i) they should be cost based; (ii) they should be non-discriminatory; (iii) they should not be inflated to reduce competition in dependent markets; and (iv) they should not be predatory (i.e. they should cover at least incremental costs). The model used to calculate access prices is the total service long run incremental cost model ("TSLRIC").⁴⁰⁵

⁴⁰⁰. See *id.* § 152AL(2)-(3).

⁴⁰¹. See *id.* § 152AR.

⁴⁰². See DEPARTMENT OF COMMUNICATIONS AND THE ARTS, *supra* note 383, at 37.

⁴⁰³. See Trade Practices Act, 1974, § 152AY (Austl.). Access undertakings themselves are of two types: code undertakings, which adopt model terms and conditions, and individual undertakings, in which individual access providers specify particular terms and conditions applying to one or more declared services. See *id.* § 152BV. Undertakings need not address all the terms and conditions of access. It is possible to combine up to one code undertaking and one individual undertaking in relation to any declared services and, in practice, it is expected that in some cases a combination of commercial agreement, arbitration, and undertakings might be used to determine the conditions of access to a particular declared service. See DEPARTMENT OF COMMUNICATIONS AND THE ARTS, *supra* note 383, at 38.

⁴⁰⁴. See AUSTRALIAN COMPETITION AND CONSUMER COMMISSION, ACCESS PRICING PRINCIPLES—TELECOMMUNICATIONS (1997).

⁴⁰⁵. For a discussion of the access pricing principles, see Peter Waters, *LRICal Access: The ACCC's Pricing Principles* (Oct. 1997) available at <<http://www.gtlaw.com.au/gt/pricingprinciples.html>>.

Licenses are required from persons wishing to use telecommunications infrastructures to provide services to the public.⁴⁰⁶ Licenses are available on application with no technical or financial entry hurdles, and no limit on the number of infrastructure providers.⁴⁰⁷ Standard license conditions with which licensed operators must comply include an obligation for these operators to comply with the Act,⁴⁰⁸ to publish a development plan,⁴⁰⁹ and to enable other infrastructure providers to gain access to their facilities and to obtain information on their networks.⁴¹⁰ These access rights and obligations complement the access regime set out in Part XIC of the Trade Practices Act.⁴¹¹

The Telecommunications (Consumer Protection and Service Standards) Act 1999 defines the concept of universal service obligation.⁴¹² It requires that standard telephone services and payphones as well as digital data services be reasonably accessible to all people in Australia on an equitable basis.⁴¹³ Different universal service providers can be designated in different areas or for the provision of different services in the same area⁴¹⁴ and competitive tendering processes can be used to select universal services providers.⁴¹⁵ Telecommunications operators must contribute to the cost of universal service in proportion to their share of total telecommunications revenues.⁴¹⁶

The Telecommunications (Consumer Protection and Service Standards) Act 1999 also enables performance standards to be designed and made compulsory in relation to the connection of customers, rectification of service faults, and keeping of appointment.⁴¹⁷ Damages, which would be paid to individual customers, can be set for violation of the standards.⁴¹⁸ Technical standards are established by the industry itself.⁴¹⁹

406. See Telecommunications Act, 1997, § 42 (Austl.).

407. See DEPARTMENT OF COMMUNICATIONS AND THE ARTS, *supra* note 383, at 12.

408. See Telecommunications Act, 1997, sched. 1 pt. 1 (Austl.)

409. See *id.* pt. 2.

410. See *id.* pts. 3-4.

411. See DEPARTMENT OF COMMUNICATIONS AND THE ARTS, *supra* note 383.

412. See Telecommunications (Consumer Protection and Service Standards) Act, 1999, § 19 (Austl.).

413. See *id.* §§ 19(1)(a)-(b), 19A(1).

414. See *id.* §§ 25-26A.

415. See *id.* §§ 22, 23, 26C, 26D.

416. See *id.* § 67.

417. See *id.* § 115.

418. See *id.* § 116.

419. See DEPARTMENT OF COMMUNICATIONS AND THE ARTS, *supra* note 383, at 82.

However, regulatory intervention by the authorities remains possible where self-regulation is inappropriate.⁴²⁰

Telecommunications-specific rules have also been adopted with respect to numbering and to international activities in the telecommunications industry. The Telecommunications Act 1997 provides for the preparation of a numbering plan which may set out rules on the portability of numbers.⁴²¹ The Act also provides for the elaboration of Rules of Conduct to govern dealings between telecommunications operators providing international services in Australia and their partners outside Australia.⁴²² These Rules of Conduct would address concerns that foreign operators, with monopoly positions in their home countries, might distort the Australian telecommunications market either through direct intervention in that market or through alliances with Australian operators, who would then derive an unfair advantage from such alliances.⁴²³

Lastly, the Prices Surveillance Act 1983 provides for the monitoring of the prices of selected goods and services in the Australian economy. The government has indicated that price surveillance would be applied in markets where competitive pressures fail to achieve efficient prices and fail to protect consumers.⁴²⁴

C. Regulatory Framework: Main Institutions

As telecommunications-specific rules were adopted, the institutional regulatory framework for telecommunications was streamlined. The main industry-specific regulator—AUSTEL—was eliminated.⁴²⁵ In line with the recommendations of the Himler Report, an economy-wide antitrust authority, the ACCC, took over the former AUSTEL's competition policy function.⁴²⁶ A new regulatory body, the Australian Communications Authority ("ACA") assumed AUSTEL's technical functions.⁴²⁷ The ACA

420. See Telecommunications Act, 1997, §§ 376-79 (Austl.).

421. See *id.* § 455.

422. See *id.* § 367.

423. See DEPARTMENT OF COMMUNICATIONS AND THE ARTS, *supra* note 383, at 80.

424. See Australian Competition and Consumer Commission, *Telecommunications Industry—ACCC Role: An Outline* 51, 56 (1997), available at <<http://www.accc.gov.au/telco/fs-telecom.htm>>.

425. See Department of Communication and the Arts, *Overview of Australia's Open Telecommunications Market* 11 (1997), available at <http://www.dca.gov.au/nsapi-text/?MIval=dca_ftp&path=%2fpub%2fpolicy%2fnewframe%2edoc>.

426. See *id.*

427. See *id.*

also took over the responsibilities of the Spectrum Management Agency, which was eliminated as well.⁴²⁸

The ACCC was formed in 1995 by a merger of the Trade Practices Commission and the Price Surveillance Authority.⁴²⁹ In addition to administering the antitrust and consumer protection provisions of the Trade Practices Act, in 1997 it assumed responsibility for administering the new telecommunications-specific antitrust rules introduced under Parts XIB and XIC of the Act by the Trade Practices Amendment (Telecommunications) Act 1997.⁴³⁰

The ACCC is currently comprised of seven commissioners. They are appointed by the Governor-General. They must be chosen among people whom the minister responsible for trade practices recognizes as being qualified by virtue of their knowledge of industry, commerce, economics, law, public administration, or consumer protection.⁴³¹ The ACCC has recently established a Telecommunications Group comprising around 30 staff and one of the commissioners has been appointed to assist in managing the ACCC's telecommunications responsibilities.

Grounds for terminating the appointment of a commissioner are precisely specified and enumerated.⁴³² Conflicts of interest rules are in place to force commissioners to disclose interests which could conflict with the proper performance of their functions and to prevent commissioners from participating in the determination of specific cases when such conflicts arise.⁴³³ As in New Zealand, the government may give directions to the Commission; however, the government may not direct the Commission on any issues related to Parts IIIA, IV, XIB, or XIC of the Trade Practices Act.⁴³⁴

The ACCC may authorize contracts, arrangements, and understandings, as well as acquisition of shares or assets, which fall within the scope of restrictive trade practices (Part IV of the Trade Practices Act, or section 151AJ(3) of Part XIB) or when the ACCC considers that they would be beneficial to the public.⁴³⁵ Businesses engaging or proposing to engage in exclusive dealing conducts which would otherwise breach Part IV of the

428. *See id.*

429. *See* Australian Competition and Consumer Commission, *About the ACCC*, available at <<http://www.accc.gov.au/about/fs-about.htm>>.

430. *See* DEPARTMENT FOR COMMUNICATION AND THE ARTS, *supra* note 383, at 10.

431. *See* Trade Practices Act, 1974, § 7 (Austl.).

432. *See id.* § 13.

433. *See id.* § 17.

434. *See id.* § 29.

435. *See id.* §§ 88-91.

Act (or section 151AJ(3)) can also notify the ACCC, which then determines whether they are entitled to benefit from statutory protection.⁴³⁶

In addition, the new telecommunications-specific provisions of the Trade Practices Act give supplementary powers to the ACCC. When it believes that a telecommunications operator is engaging in anti-competitive conduct, the Commission can issue a competition notice setting out the particulars of the violation.⁴³⁷ Telecommunications operators proposing to engage in a given conduct can also apply to the ACCC to obtain an order exempting that conduct from the prohibitions of the Trade Practices Act.⁴³⁸ The ACCC may grant an exemption order once it is satisfied that the conduct is not anti-competitive or that it will result in a net benefit to the public.⁴³⁹ The ACCC is also in charge of administering the price control regime which can be imposed upon universal service providers⁴⁴⁰ and of monitoring prices under the Price Surveillance Act 1983.⁴⁴¹

The ACCC also plays a major role with respect to the access regime established under Part XIC. For example, it is the ACCC which "declares" the services to which standard access obligations apply.⁴⁴² When access terms and conditions are determined through arbitration, it is the ACCC which is the arbitrator.⁴⁴³ Finally, when access terms and conditions are determined through implementation of an "access undertaking," the ACCC is called upon to determine whether the undertaking is acceptable.⁴⁴⁴ The ACCC also developed the access pricing principles mentioned in Part V.B. above, and it produced a discussion paper on the way it would assess the long-term interests of end users.⁴⁴⁵

A certain number of the ACCC's decisions can be appealed to the Australian Competition Tribunal ("ACT"), which is a non-judicial body presided by a Federal Court judge and comprised of two other members, an economist and a business person.⁴⁴⁶ The ACT "stands in the shoes of

436. *See id.* § 93.

437. *See id.* § 151AL.

438. *See* Trade Practices Act, 1974, § 151AJ (Austl.).

439. *See id.* § 151BC.

440. *See* DEPARTMENT OF COMMUNICATIONS AND THE ARTS, *supra* note 383, at 61.

441. *See* Australian Competition and Consumer Commission, *supra* note 424, at 56.

442. *See* Trade Practices Act, 1974, § 152AL (Austl.).

443. *See id.* Part XIC, Div. 8.

444. *See id.* Part XIC, Div. 5.

445. *See* Ann Peters, *Competition in Telecommunications: Promoting the Long-term Interests of End-users*, 5 COMPETITION & CONSUMER L.J. 272-92 (1998).

446. *See* Trade Practices Act, 1974, Parts III & IX (Austl.). *See also* Pengilly, *supra* note 379, at 523.

the ACCC” and can review all aspects of the ACCC’s decisions.⁴⁴⁷ Decisions of the ACT can be appealed to the Federal Court but only on questions of law.⁴⁴⁸ The ACCC or ACT’s decisions are enforced by the Federal Court through injunctions to stop anticompetitive conducts or through substantial pecuniary penalties of up to AU\$10 million plus AU\$1 million for each day during which the contravention continues.⁴⁴⁹

The Australian Communications Authority (“ACA”) was established in 1997 by the Australian Telecommunications Authority Act.⁴⁵⁰ The ACA has around 470 staff and a budget of about AU\$50 million, covered for the most part by license fees and other charges.⁴⁵¹ It is responsible for technical aspects of telecommunications regulation. Under the Telecommunications Act 1997, the ACA is responsible for issuing licenses.⁴⁵² Once directed to do so by the Minister for Communications and the Arts, the ACA must develop and monitor performance standards for telecommunications operators,⁴⁵³ and must design a schedule of damages for operators who fail to meet those standards.⁴⁵⁴ The ACA is also responsible for registering codes of technical standards developed by associations of telecommunications industry representatives.⁴⁵⁵ The ACA may request an association to develop such a code,⁴⁵⁶ and if the industry fails to develop a code, it can make standards itself.⁴⁵⁷ The ACA also prepares the numbering plan.⁴⁵⁸

Because of the close links which exist between antitrust and technical regulations, the Australian legislation provides for a degree of coordination between the ACCC and the ACA. For example, the ACCC may direct the ACA to make technical standards for interconnection⁴⁵⁹ and to include rules for number portability in its numbering plan.⁴⁶⁰ The ACA must also consult the ACCC on a number of matters including variations of techni-

447. DEPARTMENT OF COMMUNICATIONS AND THE ARTS, *supra* note 383, at 35.

448. *See* Trade Practices Act, 1974, § 152DQ (Austl.).

449. *See id.* Part VI.

450. *See* Australian Telecommunications Authority Act (1997), § 14 (Austl.).

451. *See* DEPARTMENT OF COMMUNICATIONS AND THE ARTS, *supra* note 383, at 9.

452. *See* Telecommunications Act, 1997, § 56 (Austl.).

453. *See* Telecommunications (Consumer Protection and Service Standards) Act, 1999, § 115(3) (Austl.).

454. *See id.* § 117.

455. *See* Telecommunications Act, 1997, § 117 (Austl.).

456. *See id.* § 118.

457. *See id.* §§ 123-25.

458. *See id.* § 455.

459. *See id.* § 384.

460. *See id.* §§ 460-61.

cal standards,⁴⁶¹ pre-selection of long distance or international operators, and override dial codes.⁴⁶² In addition, to further reduce the risks of conflicts between the two institutions, the Chairperson of the ACA is currently an associate member of the ACCC, while a member of the ACCC is an associate member of the ACA.⁴⁶³

The Minister for Communications and the Arts is responsible for selecting universal providers, determining the method of selection, and for approving the universal service plans that are developed by universal service providers.⁴⁶⁴ It is also responsible for identifying the universal service charges subject to price controls,⁴⁶⁵ determining the type of controls to be applied and the prices at which particular services are to be supplied.⁴⁶⁶ The Minister can also set out principles regarding the pricing of standard access obligations.⁴⁶⁷ The Minister has the power to issue the Rules of Conduct which are supposed to protect the Australian telecommunications market from distortions caused by international operators.⁴⁶⁸ Finally, the Treasurer can direct the ACCC to monitor prices, costs, and profits relating to the supply of goods or services in a specified industry or by a specified person.⁴⁶⁹

Lastly, there are also several industry-based regulatory bodies in Australia. Three of the most important are the Telecommunications Access Forum ("TAF"), the Australian Communications Industry Forum ("ACIF"), and the Telecommunications Industry Ombudsman ("TIO"). The TAF is an association designated by the ACCC which must be open to all telecommunications infrastructure providers.⁴⁷⁰ It has two main roles under the access regime of Part XIC. First, it recommends to the ACCC

461. See Australian Competition and Consumer Commission, *supra* note 383, at 46.

462. See *id.* at 48.

463. See OECD, *supra* note 28, at 110.

464. See Telecommunications (Consumer Protection and Service Standards) Act, 1999, Div. 3, 3A, 4, and 4A (Austl.).

465. See *id.* § 42.

466. See *id.* §§ 43-44.

467. See Australian Competition and Consumer Commission, *supra* note 383, at 35.

468. See Telecommunications Act, 1997, pt. 20 (Austl.).

469. See Australian Competition and Consumer Commission, *supra* note 383, at 56.

470. The ACCC designated the Australian Communications Access Forum, Inc., an association of telecommunications operators, as the TAF in May 1997 in accordance with section 152AI of the Trade Practices Act 1974. See Australian Competition and Consumer Commission, *The Telecommunications Access Forum* (visited Oct. 30, 1999) <<http://www.accc.gov.au/telco/teleinf/telewo19.htm>>

the declaration of services.⁴⁷¹ Second, it may submit an access code to be approved as a code undertaking by the ACCC.⁴⁷²

The ACIF is the main communications industry body. It has primary responsibility for developing technical and operational standards. Any organization or individual can become a member of the ACIF, including telecommunications operators, equipment vendors, industry associations and consumer groups.⁴⁷³

The TIO is an industry-funded body set up to settle unresolved complaints made by residential and small business customers about telecommunications services. All telecommunications operators who provide telephone services or Internet access to residential and small business users must be registered as members of the TIO scheme and they must comply with any TIO determinations or directions. The TIO scheme is comprised of a Council, a Board of Directors, and the Ombudsman. The Council, which is responsible, *inter alia*, for maintaining the independence of the Ombudsman, is composed of equal representation of industry representatives and of consumer and community interests. The Board of Directors, composed of industry representatives, is responsible for the formal administration of the scheme and supervises its financial affairs. The Ombudsman, who must be an independent personality not associated with the industry, is appointed by the Board upon recommendation of the Council.⁴⁷⁴

D. Implementation of the Regulatory Framework

Since July 1997, the main developments which have taken place in Australia concern the following: (i) decisions by the ACCC on whether or not to declare certain services; (ii) attempts by the ACCC to prevent Telstra from abusing its market power; and (iii) miscellaneous recent decisions relating in particular to technical issues.

1. Declarations of Services

From July 1, 1997, the ACCC declared the services previously supplied under an AUSTEL-registered inter-operator access agreement. Be-

471. See Trade Practices Act, 1974, § 152AL(2) (Austl.). The ACCC may also declare a service on its own initiative after having held a public inquiry on the matter. See *id.* § 152AL(3).

472. See *id.* §§ 152BH and 152BF. The ACCC is also empowered to design an access code if the TAF fails to deliver. See *id.* § 152BJ.

473. See Australian Communications Authority, *The Australian Telecommunications Regulatory Environment*, at 7, available at <<http://www.aca.gov.au/authority/overview.htm>>.

474. See Australian Competition and Consumer Commission, *supra* note 424, at 39.

cause the TAF was not able to reach a consensus on which additional services it should recommend the ACCC to declare, the ACCC held a series of public inquiries. The first inquiry was on roaming services. Given the fact that new entrants can enter into negotiations with any one of the three incumbents (Telstra, Optus, and Vodafone), the ACCC decided not to declare roaming.⁴⁷⁵ In July 1999, however, the ACCC decided to declare fixed local services, thereby mandating access to Telstra's fixed local network.⁴⁷⁶ The ACCC is currently debating whether to declare Integrated Services Digital Network ("ISDN")⁴⁷⁷ services.⁴⁷⁸

2. *Controlling Telstra's Market Power*

The ACCC has initiated or completed arbitration processes with respect to a number of access disputes, mainly between new entrants and Telstra. They relate, for example, to the price of access to Telstra's fixed long-distance network as well as to the price and conditions for access to Telstra's GSM mobile network.⁴⁷⁹ In the first half of 1999, the ACCC rejected Telstra's undertakings for interconnection with its fixed long-distance as well as with its mobile network.⁴⁸⁰ The ACCC also issued several competition notices against Telstra on the grounds that Telstra was too slow in complying with consumers' requests to select a new long distance operator. The ACCC initiated proceedings in the Federal Court with respect to some of these notices.⁴⁸¹

475. See Rod Shogren, *How Light-Handed Can You Get?—A Report on Telecommunications Regulation in Australia* (Apr. 7-8, 1998) (unpublished manuscript distributed at the TUANZ Competition Symposium, Wellington, New Zealand, at 10).

476. See Australian Competition and Consumer Commission, *ACCC Opens Up Telstra's Local Network: Lower Prices and New High-Speed Services* (visited Dec. 10, 1999) <<http://www.accc.gov.au/media/mediar.htm>>.

477. Integrated Services Digital Network is a switched network providing digital connectivity for simultaneous transmission of voice and/or data.

478. See OECD, *supra* note 28, at 110.

479. See, e.g., Australian Competition and Consumer Commission, *Telecommunications Access Disputes* (Feb. 22, 1999) <<http://www.accc.gov.au/media/mr015-99.html>>.

480. The ACCC concluded that proposed non-price conditions for both fixed and mobile interconnection were unacceptable and that the proposed interconnection prices for fixed services should be halved. See Australian Competition and Consumer Commission, *ACCC Rejects Telstra's Interconnect Proposal: Concludes Prices Should be Halved* (Jan. 19, 1999) <<http://www.accc.gov.au/media/mr4-99.html>>; *ACCC Rejects Telstra's Undertakings For Mobile Service* (Feb. 22, 1999) <<http://www.accc.gov.au/media/mr016-99.html>>.

481. See Australian Competition and Consumer Commission, *More Action on Telstra Commercial Churn* (visited Dec. 1, 1999) <<http://www.accc.gov.au/media/mr-037-99.html>>.

3. *Recent Developments*

The ACCC is currently working with industry on the development of a model for vertical accounting separation.⁴⁸² It has directed the ACA to develop rules and provide technical advice on number portability.⁴⁸³ The ACCC has also launched a series of inquiries on topics including the state of competition in the mobile and local call markets,⁴⁸⁴ and comparisons between telecommunications prices in Australia and in other countries.⁴⁸⁵ Finally, the government has announced in 1998 that it proposed to sell its remaining two-third stake in Telstra.⁴⁸⁶

E. A Critical Appraisal of the Australian Regulatory Framework

The interesting aspect of the new Australian framework is that it applies solutions which constitute compromises between the more “radical” and sharply contrasted approaches of the United States and New Zealand. While the United States relies on highly sector-specific rules and New Zealand on economy-wide antitrust law to regulate economic issues in telecommunications, Australia relies on general antitrust rules complemented by telecommunications-specific rules integrated within the same antitrust legislation. Also, while the United States relies to a large extent on a sector-specific regulator and New Zealand mainly on non-specialized judges to administer the telecommunications regulatory framework, Australia confers that responsibility to a specialized body responsible for administering economic regulation in the whole economy. However, as the Australian framework has only been in place for a very limited period, the following discussion of how well the Australian model is designed to meet our six criteria has to be based more on a study of how the model is likely to work than on how it has actually worked in practice.

1. *Promotion of a Competitive Market Structure*

As mentioned in Part V.A, the government decided to open all segments of the telecommunications sector to full competition in 1997. Licenses, for example, are supposed to be available without restrictions (and in fact, it is not clear in that context why new entrants should be forced to

482. See OECD, *supra* note 382, at 10.

483. See *id.* at 9.

484. Australian Competition and Consumer Commission, *Telecommunications Charges in Australia 1* (1999), available at <<http://www.accc.gov.au/media/mr-030-99.html>>.

485. See *id.*

486. See OECD, *supra* note 28, at 4.

publish a development plan in order to obtain a license).⁴⁸⁷ To complement the removal of barriers to entry, a sophisticated set of access rules was adopted. Those rules, contained in Part XIC of the Trade Practices Act, mandate access to some facilities,⁴⁸⁸ give priority to negotiated solutions,⁴⁸⁹ and provide for regulatory intervention when such solutions cannot be found.⁴⁹⁰ This should facilitate the resolution of interconnection issues which are typically among the most frequent and difficult regulatory problems in telecommunications. The number of disputes which have required ACCC's intervention in this area since July 1997 clearly indicates that Australia is no exception in that regard.

As is the case in the United States, some commentators have argued that mandating access for whole categories of services—even only when negotiated solutions seem very unlikely—is a mistake because it would reduce facilities-based competition.⁴⁹¹ The arguments presented on this issue under Part III.E above apply here as well. As mentioned above, specific rules on number portability are also being developed.⁴⁹²

The Telecommunications Act 1997 also provides for mechanisms which should make it possible to meet universal service obligations efficiently and to avoid distorting competition in the sector. Competitive selection of universal service providers on the basis of the lowest subsidies required to provide universal service can be used to determine whether subsidies are truly required to ensure that universal service obligations are met, and at the lowest possible cost.⁴⁹³ In addition, Australian legislation provides for entrusting different providers with the task of providing various services in various areas.⁴⁹⁴ Such legislation also helps to ensure that universal services are provided at the lowest possible costs, as it creates the possibility of yardstick competition—i.e., competition through comparison of performances—between the different operators.⁴⁹⁵ The obligation imposed upon all telecommunications operators to contribute to those costs in proportion to their share of total telecommunications revenues

487. See *supra* text accompanying note 407.

488. See *supra* text accompanying note 402.

489. See *supra* text accompanying note 403.

490. See *id.*

491. See, e.g., Rodney Maddock & Anthony Marshall, *Access Regulation: The New Australian Model*, 6 UTIL. POL'Y 67, 73 (1997).

492. See *supra* text accompanying note 483.

493. See *supra* text accompanying note 415.

494. See *supra* text accompanying note 413.

495. DEPARTMENT OF COMMUNICATIONS AND THE ARTS, *supra* note 383, at 59.

should avoid distortions of competition between those who take on responsibility for universal services and those who do not.⁴⁹⁶

Finally, some authors also argue that insufficient attention was paid to the need for structural reforms, as was the case in New Zealand.⁴⁹⁷ Some of them consider that the merger of Australia Telecom and OTC reinforced the market power of the dominant player, thus making the telecommunications market less competitive and complicating the task of the regulator.⁴⁹⁸ International comparisons would in fact tend to indicate that the performance of the incumbent could be further improved.⁴⁹⁹ In that context, as discussed in Part IV.E, it might be advisable to consider whether some structural reforms of the telecommunications sector could help introduce more competition and generate more information.

2. *Specificity vs. Coherence*

While establishing some telecommunications-specific rules, the Australian government has tried to take into account the growing similarities between telecommunications and other economic activities. Thus, in Australia, general antitrust rules (such as Part IV of the Trade Practices Act on anti-competitive conduct) are applicable in telecommunications.⁵⁰⁰ In addition, many sector-specific rules have been integrated in the Trade Practices Act to reflect a general policy of bringing the regulation of competition in telecommunications more closely in line with the general antitrust regime.⁵⁰¹ Some telecommunications-specific rules must also be reviewed at regular intervals to determine whether they are still justified.⁵⁰² Finally, telecommunications-specific antitrust rules are administered by an econ-

496. See *supra* text accompanying note 415.

497. See, e.g., Peter Waters, *The Mystery of the Missing Ring Fence—Regulation of Vertically Integrated Telecommunications Operators* (Apr. 1998) <<http://www.gtlaw.com.au/gt/pubs/missingringfence.html>>; see also Ergas, *supra* note 369, at 3.

498. Ergas, *supra* note 369, at 5.

499. For example, in early 1999, the ACCC benchmarked Australian telecommunications charges against those of other industrial countries. Telstra ranked in general in the middle of the sample. Fixed international telephone service was however among the most expensive, as well as national cellular long distance services during peak periods. See Australian Competition and Consumer Commission, *supra* note 402. Also, it has apparently been difficult, for the regulator, to obtain accurate information on Telstra's costs. See Peter Leonard, *Footprints Down a Narrow Path #2: Lessons of Australian Telecommunications Regulation, 1991 to 1997* (Jul. 1997) <<http://www.gtlaw.com.au/gt/pubs/footprints.html>>.

500. See *supra* text accompanying note 383.

501. See Trade Practices Act, 1974, § 5.2 (Austl.).

502. See *supra* text accompanying note 399.

omy-wide regulator to ensure a consistency of approach to the administration of antitrust laws across all industry sectors.⁵⁰³

In spite of the government's efforts to align the antitrust regime applicable in telecommunications with the regime applicable to the rest of the economy, one could argue that there are still too many telecommunications-specific rules. The existence of those rules creates uncertainty when both telecommunications-specific rules and other rules are applicable to the same issues. Problems of interconnection could be tackled through an application of section 46, of the cross-sector access rules of Part IIIA, or of the telecommunications-specific access regime of Part XIC. This could potentially lead to incompatible decisions being rendered on interconnection, thereby introducing uncertainty which would hinder the entry of new operators into some segments of the market.⁵⁰⁴

The need for some of these sector-specific rules appears to have been exaggerated in Australia.⁵⁰⁵ For example, it is not clear why there should be two slightly different definitions of the concept of misuse of market power, one for telecommunications under section 151AJ(2) and one for all other economic activities under section 46.⁵⁰⁶ Similar arguments could be made with respect to Part IIIA and Part XIC. If the access regime under Part XIC improves upon the one established under Part IIIA—for example because services are declared by a specialized entity rather than by a minister, or because it leaves a larger role for the industry through the possibility of presenting code undertakings—why not adopt a unique access regime for all sectors based upon Part XIC rules?

3. *Flexibility vs. Certainty*

The Australian approach constitutes an interesting attempt to combine flexibility and certainty. Flexibility is pursued by leaving the ACCC broad discretionary powers when assessing access matters on the basis of the rather vague long-term interest of end users test.⁵⁰⁷ On the other hand, the existence of telecommunications-specific rules on anti-competitive con-

503. DEPARTMENT OF COMMUNICATIONS AND THE ARTS, *supra* note 383, at 10.

504. See Warren Pengilly, *The National Competition Policy Draft Legislative Package: The Proposed Access Regime*, 2 COMPETITION & CONSUMER L. J. 251 (1995) (arguing that increased access would promote competition and be in the public interest).

505. See generally G. Q. Taperell & R. J. E. Dammary, *Anti-Competitive Conduct in Telecommunications: Are Supplementary Rules Required?*, 4 COMPETITION & CONSUMER L. J. (1996).

506. The need for two definitions is questionable especially given that section 46 also applies to telecommunications since Part XIB rules do not replace Part IV rules, and when section 151AJ(3) refers explicitly to section 46.

507. See *supra* note 468.

duct and on access is aimed at increasing certainty. The guidelines which the ACCC has issued on competition notices and on access pricing also increase certainty,⁵⁰⁸ as does the Commission's discussion paper on its general approach to the long-term interest of end users test.⁵⁰⁹

However, one aspect of the Australian regime is likely to draw criticism. The Minister for Communications and the Arts can exercise broad powers particularly with respect to the pricing of universal service,⁵¹⁰ the pricing of standard access obligations,⁵¹¹ the design of rules aimed at preventing market distortions caused by international operators,⁵¹² and the adoption of performance standards in telecommunications.⁵¹³ Such rules permit a political authority to have considerable discretionary power on issues which can have an enormous impact on the profitability of telecommunications operators, and are likely to raise private investors' concerns. To the extent that the government remains one of Telstra's shareholders, these concerns will be even greater as there are clear conflicts of interests between the ownership and the regulatory functions exercised by the government.⁵¹⁴

4. *Autonomy, Technical Competence, and Stakeholder Participation*

In the telecommunications sector Australia has adopted an administrative, rather than a judicial, regime.⁵¹⁵ The ACCC, and to some extent the ACT, makes many of the important regulatory decisions, while the Federal Court is limited to a reviewing those decisions on legal, rather than on substantive grounds.⁵¹⁶ As mentioned above, certain measures have been taken to ensure the independence of the ACCC from industry players and to ensure some degree of autonomy vis-à-vis political authorities. In addition, as the ACCC operates across all sectors of the economy, commissioners are therefore likely to have only limited contacts with particular operators or sector ministries, which decreases the risks of regulatory capture. However, as it leaves some important powers to a minister, the regulatory model therefore allows some room for political intervention in the design and administration of some regulations.

508. See DEPARTMENT OF COMMUNICATIONS AND THE ARTS, *supra* note 383, at 29.

509. See Peters, *supra* note 445, at 292.

510. See *supra* text accompanying note 465.

511. See *supra* text accompanying note 467.

512. See *supra* text accompanying note 468.

513. See *supra* text accompanying note 452.

514. See generally Leonard, *supra* note 499.

515. See Pengilley, *supra* note 379.

516. See *supra* text accompanying note 448.

Some commentators also recommend that particular characteristics of the TIO scheme should be modified to strengthen its independence vis-à-vis the industry. Some have argued that because several members of the Council are industry representatives, it is in fact unable to ensure the independence of the Ombudsman.⁵¹⁷ Another problem in that respect is that the TIO scheme is funded by the industry that it monitors.⁵¹⁸

The ACCC and the ACT are staffed with specialists in matters of economic regulation.⁵¹⁹ In addition, the cross-sector nature of these two institutions enables their staff to gain expertise from their work in other sectors, while the establishment of a Telecommunications Group within the ACCC should help to ensure that in-depth knowledge of the telecommunications sector is developed within the institution.⁵²⁰

The Australian regulatory model is also characterized by the scope which it leaves for stakeholder consultation. The industry plays a large role in shaping regulations. Thus, the TAF can recommend services that the ACCC may declare⁵²¹ as well as develop access codes specifying terms and conditions of access;⁵²² the ACIF is responsible for developing codes of technical standards to be registered by the ACA.⁵²³ Individual operators have an important role as well, as they can submit individual access undertakings⁵²⁴ while regulatory intervention in interconnection disputes takes place only when the parties are unable to come to an agreement on their own.⁵²⁵ In addition, unlike the New Zealand Commerce Commission, the ACCC is free to launch public inquiries or reviews aimed at facilitating the exercise of its regulatory functions in telecommunications. In fact, it must hold public inquiries before it can declare a service on its own initiative, and it must also invite public submissions before it can accept an individual undertaking on access terms and conditions.⁵²⁶ Finally, the existence of the TIO scheme—whatever its possible

517. See Anita Stuhmcke, *The Corporatisation and Privatisation of the Australian Telecommunications Industry: The Role of the Telecommunications Industry Ombudsman*, UNIV. NEW S. WALES L.J. 807, 823-825 (1998).

518. See *id.*

519. See *supra* text accompanying notes 431 and 446.

520. See Peter Leonard, *Australian Communications after 1997* (Feb. 1996) <<http://www.gtlaw.com.au/gt/pubs>>.

521. See *supra* text accompanying note 455.

522. See *supra* text accompanying note 472.

523. See *supra* text accompanying note 473.

524. See *supra* text accompanying note 403.

525. See *supra* note 403.

526. See Trade Practices Act, 1974, § 152AH (Austl.).

flaws—should also help to ensure that users' complaints are heard and taken into account.⁵²⁷

While giving industry or individual operators a role in designing regulations certainly has its advantages, some backstop measures must also be taken to ensure that the required set of rules will be adopted, even if operators are unable to come to an agreement. For example, the ACCC has the mandate to intervene to ensure that access codes will be developed even if industry does not develop such codes and that interconnection disputes will be arbitrated if parties fail to come to a negotiated solution.⁵²⁸

5. *Limitation of Regulatory Costs*

In Australia, efforts have been deployed to limit regulatory costs in telecommunications. For example, conferring the main regulatory responsibilities to an economy-wide body such as the ACCC is generally more cost-efficient than setting up a variety of distinct sector-specific regulatory agencies.⁵²⁹ Measures have also been adopted to avoid long and costly litigation on interconnection issues by promoting industry-designed solutions (e.g. possibility to present code or individual undertakings)⁵³⁰ and by granting the ACCC the power to arbitrate when a negotiated agreement cannot be reached.⁵³¹

On the other hand, the financial resources allocated for the technical regulation of telecommunications appear relatively high. As mentioned above, the ACA has about 470 staff and a budget of about AU\$50 million, far more resources than those spent on economic regulation of telecommunications by the ACCC.

6. *Efficiency of Allocation of Regulatory Responsibilities*

As in New Zealand, the allocation of responsibilities in the Australian telecommunications regulatory regime appears clear. One source of concern, however, stems from the way responsibilities are shared between the ACCC and the ACA. For example, the ACCC administers the price control regime which applies to the provision of universal service⁵³² or to access charges,⁵³³ while the ACA, on the other hand, is in charge of developing performance standards and monitoring the performance of tele-

527. *See supra* text accompanying note 474.

528. *See supra* text accompanying note 403.

529. *See* discussion *supra* Part II.D.5.

530. *See supra* note 403.

531. *See supra* text accompanying note 403.

532. *See* Department of Communication and the Arts, *supra* note 425, at 58.

533. *See supra* text accompanying notes 444 and 445.

communications operators.⁵³⁴ The ACCC's and ACA's responsibilities are closely interrelated, since a modification of performance standards will affect the operators' costs and therefore the prices at which they can maintain the same level of profitability. The close links between the ACCC's and the ACA's responsibilities with respect to interconnection standards and number portability raise similar issues. It remains to be seen whether the coordination mechanisms which exist between the ACCC and the ACA as well as cross-membership of some staff between the two institutions will be sufficient to prevent slow or incoherent decision-making processes.

VI. COMPARATIVE ANALYSIS

Parts III, IV, and V describe three very different types of frameworks for economic regulation in the telecommunications sector. The objective of this Part is to compare the experiences of the United States, New Zealand, and Australia in an attempt to shed some light on how general anti-trust and telecommunications-specific rules and institutions can be designed and on what role they can play to ensure that the six criteria identified in Part II.D are met to the largest possible extent.

A. Promotion of a Competitive Market Structure

All three countries have now established what are some of the most competitive telecommunications markets in the world. In each case, all explicit legal barriers to entry into any segment of the telecommunications market have been removed. In addition, general antitrust rules are fully applicable to the telecommunications sector. Beyond that, the options chosen to ensure the emergence of a competitive telecommunications sector differ in substantial ways among the three countries.

New Zealand constitutes a good benchmark of what can be achieved with few additional rules. In New Zealand, general antitrust rules constitute the main component of the framework for the economic regulation of telecommunications. Implementation of those rules has yielded satisfactory results with respect to some issues such as the imposition of dial parity for example.⁵³⁵ The New Zealand authorities' objective to impose as light a regulatory burden as possible upon operators appears well-founded as it has led to the elimination of licensing requirements.⁵³⁶ However, with respect to interconnection and number portability, New Zealand's

534. See *supra* text accompanying notes 453 and 454.

535. See *supra* text accompanying note 310.

536. See *supra* text accompanying note 309.

light-handed approach has left much to be desired. Particularly with respect to interconnection issues, disclosure regulations, Telecom's undertakings, and the government's threats proved insufficient to complement antitrust law and to ensure the conclusion of negotiated agreements or the speedy resolution of disputes by the courts.⁵³⁷

Interconnection with local networks has also proven to be a particularly contentious issue in the United States and Australia. The options adopted in these two countries—rules aimed at ensuring number portability and at imposing specific terms and conditions of interconnection for certain categories of services upon incumbent operators, and rules which confer responsibility for dispute resolution to specialized regulatory entities—appears to be justified in light of the New Zealand experience. Yet in the United States, the incentives given to operators to open local markets to competition might not be the most optimal: by conditioning the entry of the ILECs into the long distance market to the effective opening of local markets to competition, the 1996 Act might have delayed, rather than accelerated, competition in local services.⁵³⁸ On the whole, relying on tough penalties to impose precise terms and conditions of interconnection for certain pre-specified bottleneck facilities, as the Australians have done, might well yield the best results.

All three countries have imposed universal service obligations on telecommunications operators. In the United States and in Australia, mechanisms to ensure that universal service obligations are met are established by law, while in New Zealand, such obligations are imposed through the Kiwi Share. In each case, the cost of universal service obligations is supposed to be covered through fees levied on all operators. Such a system eliminates the need for cross-subsidies among the activities of a single operator and for the exclusive rights required to maintain such cross-subsidies; it is therefore fully compatible with the introduction of competition on all market segments. However, distortions of competition remain possible in New Zealand, since a single operator is chosen, *ex ante*, to provide universal service and there does not seem to be any guarantee that the fees levied upon all operators are adequately calibrated to cover the true costs of the service.⁵³⁹ Once again, the Australian model seems better designed, as it provides for a more precise estimate of the costs of universal service by providing for the competitive selection of universal service providers on the basis of the level of subsidies required, and by enabling

537. *See supra* text accompanying notes 311-324.

538. *See supra* text accompanying notes 176-181.

539. *See supra* text accompanying notes 334-335.

comparisons of performance between different providers operating in different geographic or service markets.⁵⁴⁰ The U.S. system, for its part, appears to be superior to the New Zealand system because it leaves open the possibility of having several universal service providers within a designated area and also because it provides for mechanisms designed to tailor universal service support to the real costs of providing the service. However, the U.S. system is inferior to the Australian system since it contains no mechanism for the competitive selection of universal service providers on the basis of the level of subsidies required.⁵⁴¹

Both in New Zealand and Australia, the authors have argued that structural reforms of the telecommunications market should have been implemented to ensure the emergence of a more competitive market structure.⁵⁴² The objective of such structural reforms is to multiply the number of competitors and therefore facilitate negotiated agreements—since there are more operators with which to negotiate—and regulation—since more information is generated thanks to the multiplication of transactions between different operators. In those authors' view, structural measures are necessary because of the strength of the incumbent (in New Zealand and in Australia), the lack of detailed rules—(on interconnection, for example) to ensure that the incumbent does not misuse its market power (in New Zealand), and the lack of specialized regulatory bodies (in New Zealand). However, in the United States, the same conditions do not exist,—e.g., there is no operator which dominates both the local and long distance markets—and this probably explains why relatively few commentators seem alarmed by the possibility for BOCs and long distance operators to vertically re-integrate under the 1996 Act.⁵⁴³ As mentioned in Part IV.E above, the strength of the arguments in favor of structural reforms in a particular market must be weighed against the risks that an imposed separation between different types of services might become artificial and unduly costly because of rapid technical evolution.⁵⁴⁴

540. *See supra* text accompanying notes 493-496.

541. *See supra* text accompanying notes 86-88.

542. *See supra* notes 328 and 497.

543. In fact, some commentators consider that integration of local and long-distance service provision should have been allowed much earlier in the United States and should not be subjected to the conditions imposed by section 251. Arguments in favor of imposing some structural separation measures could be heard, even in the U.S. however, if the number of major telecommunications operators drastically decreased in the future following a wave of mergers and acquisitions among BOCs, long distance operators and cable TV companies.

544. *See supra* text accompanying notes 182-183.

B. Specificity vs. Coherence

The United States model, with its emphasis on detailed sector-specific rules applied by a sector-specific regulator, could be criticized for losing sight of the growing similarities which are developing between telecommunications and other sectors of the economy, especially in a market as liberalized and evolving as the American telecommunications market. The New Zealand model, on the other hand, with its heavy reliance on general antitrust rules implemented by judges, seems to be lacking some telecommunications-specific rules—on interconnection and number portability for example—and specialized institutions to implement them.

However, both the United States and the New Zealand experiences point to similar conclusions with respect to the shortcomings of general antitrust law to solve some specific telecommunications issues. First, economy-wide antitrust rules are too general to provide specific solutions to access disputes when access has to be granted to a particular facility for the first time.⁵⁴⁵ Second, to the extent that they are aimed at preventing restrictions of competition, antitrust rules—such as section 7 of the U.S.'s Clayton Act on mergers, and section 36 of New Zealand's Commerce Act on the use of a dominant position—are ill-suited to introduce competition in markets where none existed before.⁵⁴⁶ Third, for the same reason, they might also induce incumbents to restrict themselves to the operation of bottleneck facilities where no competition exists in the first place, rather than also to provide services in downstream competitive markets where they would be subjected to the application of antitrust law, even where vertical integration would be economically justified.⁵⁴⁷ Fourth, antitrust law might not be specific enough in some cases to ensure that regulations not only do not have clear anti-competitive effects, but that they can also be effectively applied in practice.⁵⁴⁸

The Australian model attempts to strike a balance between the more extreme approaches adopted in the United States and in New Zealand. Efforts have been deployed to ensure the overall coherence of the regulatory framework by incorporating sector-specific rules within the economy-wide antitrust legislation, and by conferring responsibility for implementing those rules to a single economy-wide antitrust authority. Another particularly interesting feature of the Australian model is that the need for some sector-specific rules is to be reassessed at regular intervals. How-

545. See *supra* text accompanying note 331.

546. See *supra* text accompanying notes 184 and 336.

547. See *supra* text accompanying note 337.

548. See *supra* text accompanying notes 338-340.

ever, arguably still more could be done to align the regime applicable to the economic regulation of telecommunications with the one adopted in other sectors of the economy. Some sector-specific rules (such as section 151AJ(2) on the misuse of market power, or Part XIC rules) either do not seem to add much to economy-wide or infrastructure-wide rules, or could be used as the basis for establishing a single set of rules better designed to apply to the whole economy, or at least to multiple sectors.⁵⁴⁹

C. Flexibility vs. Certainty

The United States has established what is probably the most detailed regulatory framework of the three countries. Risks of excess rigidity are reduced, however, through the use of a broad public interest test which leaves relatively wide discretion to the FCC,⁵⁵⁰ and through the power which is given to the FCC not to apply some provisions of the 1996 Act when certain conditions are met.⁵⁵¹ In fact, implementation of the 1996 Act has so far been hindered less by the rigidity normally associated with detailed regulations than by the uncertainty created by the absence of clear rules on some issues, such as the allocation of competencies between federal and state regulators.⁵⁵²

New Zealand, on the other hand, has opted for the most flexible of the three regulatory models, and has arguably introduced too much uncertainty in the regulatory process. For example, different courts have rendered contradictory decisions on the same issues.⁵⁵³ Also, reliance on government intervention to secure certain agreements between operators and on a price-control regime which—although it has not been used so far—gives broad powers to the government could certainly cause concern among investors as it opens the door to politically-motivated and unstable regulatory decisions.⁵⁵⁴

As mentioned above, the Australian model constitutes an interesting attempt at combining flexibility and certainty of the regulatory process. As in the United States, the flexibility comes from the discretion which is given to the ACCC through the application of the broad long-term interest of end users test.⁵⁵⁵ Yet a range of measures have been adopted to maintain a sufficient degree of certainty thanks to the guidelines and discussion

549. See *supra* text accompanying notes 504-525.

550. See *supra* text accompanying note 190.

551. See *supra* text accompanying notes 191-193.

552. See *supra* text accompanying notes 187-189.

553. See, e.g., discussion *supra* Part IV.D (local loop cases).

554. See *supra* text accompanying notes 344-358.

555. See *supra* text accompanying note 507.

papers published by the ACCC on the way it would perform its functions.⁵⁵⁶ However, as in New Zealand, it can be argued that too much discretion has been left to the Executive in certain areas.⁵⁵⁷

D. Autonomy, Technical Competence, and Stakeholder Participation

In all three countries, the importance of striving to ensure a sufficient degree of autonomy for those entrusted with the task of implementing economic regulation in telecommunications has been clearly recognized. While ministers might retain too much power on some issues in New Zealand and Australia, measures have been taken in all three countries to protect the regulators themselves against undue pressures, both from political authorities and from the regulated industry.

With respect to competence, the picture is slightly different. All three specialized regulatory bodies (the FCC, the Commerce Commission, and the ACCC) strive to recruit high-caliber specialists and are generally recognized as very competent institutions. The ACCC, in particular, has both economy-wide competencies, which favor cross-fertilization of experiences across sectors, and a department specializing in telecommunications, which should facilitate the acquisition of in-depth sector-specific knowledge. This combination appears well suited to provide a high level of expertise.⁵⁵⁸ However, judges, who play an important regulatory role in New Zealand, appear to be lacking in regulatory expertise, and the presence of a single expert lay member in the High Court is insufficient to correct the problem.⁵⁵⁹

Finally, a series of measures—such as the promotion of industry-designed rules, the launch of public inquiries on a variety of regulatory topics, and the establishment of the TIO scheme—have been adopted in Australia to promote stakeholder participation in the regulatory process.⁵⁶⁰ In the United States, stakeholder participation is also ensured in FCC proceedings through the application of the APA requirements.⁵⁶¹ In New Zealand, on the other hand, reliance on traditional court proceedings to solve regulatory disputes in telecommunications might not provide the best vehicle to ensure that the opinions of stakeholders such as end-users for example are heard and taken into account.⁵⁶²

556. *See supra* text accompanying notes 508-529.

557. *See supra* text accompanying notes 510-514.

558. *See supra* text accompanying notes 515-536.

559. *See supra* text accompanying notes 355-370.

560. *See supra* text accompanying notes 521-528.

561. *See supra* text accompanying notes 115-119.

562. *See supra* text accompanying note 361.

E. Limitation of Regulatory Costs

Given the existence of a large sector-specific regulatory institution and the very detailed nature of the regulations themselves, the direct costs of establishing the regulator and compliance costs for operators are much higher in the United States than in New Zealand or Australia. With very few telecommunications specialists within the economy-wide Commerce Commission and very few detailed rules, New Zealand has kept such costs to a minimum. In Australia, which has an economy-wide regulator with much more responsibility and more detailed rules than in New Zealand, regulatory costs remain limited (except with respect to technical regulation), at a level higher than New Zealand, but much lower than in the United States.

Yet when the costs of judicial proceedings, delays, and possible regulatory mistakes are taken into account, comparisons between the three models might yield different results. The United States model certainly remains by far the most expensive, in part because of the long and costly judicial procedures which were necessary to define the roles of the FCC and state utility commissions. Because of the costly judicial processes and risks of regulatory mistakes associated with the New Zealand model, the costs in New Zealand might rise in relative terms with respect to those of the Australian model. However, because the Australian model is still at the early stages of implementation, more time is needed to determine which model is, on the whole, more economical.

F. Efficiency of the Allocation of Responsibilities

Potential problems appear to exist in each of the three countries with respect to the allocation of responsibilities for economic regulation in the telecommunications sector. In the United States and Australia, where different regulatory institutions have been entrusted with important responsibilities, the way those responsibilities are shared raises some issues. This is particularly true in the United States where the allocation of responsibilities between the FCC and the state utility commissions is unclear, and where the allocation of concurrent responsibilities to the FCC and the DOJ with respect to mergers increases costs, delays, and uncertainty.⁵⁶³ Under section 271, the allocation of responsibilities between the FCC and DOJ has positive features since one institution (the FCC) is clearly in charge but can benefit from the expertise of the other (the DOJ). However, one can wonder whether in principle the DOJ should have been given the lead role, since section 271 calls for an assessment of the degree of openness of

563. See *supra* text accompanying notes 219-220.

the market, a task which an economy-wide competition regulator should be well-equipped to perform.⁵⁶⁴

In Australia, problems might arise because two different bodies have been given primary responsibility on closely interrelated topics, such as price and performance regulation, or interconnection and number portability regulation. The different measures put in place to ensure coordination between the activities of the ACCC and ACA constitute a positive element of the arrangement, but it is not clear whether this will be enough to prevent inconsistent decisions or delays, or whether it would not in fact have been wiser to confer such responsibilities to a single entity.

In New Zealand, where ultimate regulatory responsibility lies with the courts, the issue is whether the respective strength of the various institutions which could have been conferred regulatory responsibilities have been properly assessed before choosing the arrangements currently in place. Indeed, it could be argued that the technical competence of the specialized regulator (the Commerce Commission)—which could have been further strengthened through the hiring of additional specialists in the economic regulation of network industries in general or of telecommunications in particular—would have been put to better use if the Commerce Commission had been granted more regulatory responsibilities.

VII. CONCLUSION

Analysis of the United States, New Zealand, and Australian experiences with respect to the economic regulation of telecommunications yield some tentative lessons on how to design the regulatory framework—in particular, how to design the sector-specific, infrastructure-wide, or economy-wide components of that framework and how to organize the relationships between these components—in order to obtain the most efficient system possible.

In all three countries, strong emphasis has been put on fully liberalizing the telecommunications market. While the elimination of legal barriers to entry and application of antitrust law to all telecommunications activities have helped improve the performance of the sector, as demonstrated in New Zealand, the New Zealand experience also demonstrates that additional rules are required—on interconnection and number portability issues, for example—to maximize the benefits to be derived from competition. In particular, the policies adopted in the United States and in Australia—of mandating access to some facilities, such as the local loop—appear

564. *See supra* text accompanying note 216.

justified given the power that incumbents have to thwart competition in some segments of the market. On the whole, simply imposing precise terms and conditions for access to those facilities, as the Australians have done, appears to be a safer strategy than the one adopted in the United States to achieve the same objective, as that strategy presupposes that the legislator be able to assess correctly the way in which telecommunications operators will react to the complex set of incentives presented to them. As discussed above, the Australian model also appears to be the best designed to ensure that universal service requirements will not introduce distortions of competition into the telecommunications market. Finally, of the three countries discussed here, New Zealand, with its dominant incumbent operator, its lack of specific pro-competition rules, and its absence of specialized regulator, is the country in which the strongest case could be made that a need exists for some pro-competition structural reforms.

The above conclusions point to the need for some telecommunications-specific rules, for example, to eliminate sector-specific barriers to entry, to solve interconnection or number portability issues, to impose specific universal service obligations, and to implement structural reforms in the sector when they are deemed necessary. The Australian decision to incorporate the main telecommunications-specific rules within the general antitrust law, and to entrust a single economy-wide antitrust body with the task of implementing those rules, seems to reconcile the need to take the particular features of the telecommunications sector into account and to ensure the coherence of regulatory decisions across sectors. Mandating a regular review of the need for sector-specific rules in economic regulation is positive, since many of these rules are likely to be needed only during a transition period. Indeed, while general antitrust rules might be ill-suited to deal with markets where no competition exists or to provide specific solutions to new technical issues, they might suffice when competition has developed in all market segments and when a track record has been established on how to tackle such technical issues. In countries which have chosen to set up both a telecommunications-specific regulator and an economy-wide competition regulator, the task of reviewing whether telecommunications-specific rules are still needed might be entrusted to the economy-wide regulator. An economy-wide regulator can bring its cross-sector expertise to bear on determining the extent to which competitive pressures already exist in the sector. Also, unlike sector-specific regulators, competition regulators can decide whether specific rules are no longer required, without putting their own jobs at risk.

An adequate balance must be struck between flexibility and certainty both with respect to the content of the rules and with respect to the proc-

esses devised to modify the rules. As for the content of the rules, the Australian approach is interesting, as it leaves relatively broad discretion to a competent regulator, while mandating that the regulator publish guidelines and discussion papers on the way it will exercise this discretion. Perhaps an even better solution would have been to give less discretion to the regulator at the beginning, but allow additional discretionary powers to the regulator after it exercises its functions during a period sufficient to fully establish its credibility. As for modifying rules, it is indispensable to reassure private investors that rules which directly impact upon their profitability will be stable, and that they will be administered by entities protected from undue political pressures. In both New Zealand and Australia, individual ministers seem to retain too much power to modify or administer directly some rules in that respect.

The importance of protecting the regulatory process from undue political and industry pressures cannot be over-emphasized. Many appropriate measures have been taken in all three countries in that domain. In addition, economy-wide regulators, such as the Commerce Commission or the ACCC, would tend to have an advantage over sector-specific entities such as the FCC in that respect. Given the technical difficulty of the regulatory issues which need to be tackled, specialized regulators seem necessary. Cross-sector agencies with a specialized department focussing on telecommunications, such as the ACCC, constitute an attractive formula. Finally, the measures adopted in Australia—such as the promotion of industry-designed rules and the conduct of public inquiries for example—combined with appropriate backstops to ensure that the required decisions are taken even when operators fail to come up with adequate proposals, would seem to go some way in meeting the objective of fostering stakeholder participation in the regulatory process.

With respect to the objective of limiting regulatory costs, the Australian model once again presents some attractive features. The combination of an economy-wide regulator, of detailed rules to reduce uncertainty on some contentious issues, and of mandatory arbitration by the regulator to resolve unavoidable disputes on topics such as interconnection, offers good prospects of limiting not only the direct costs of establishing and maintaining regulatory institutions, but also compliance costs for operators, as well as the costs of delays and regulatory mistakes.

Finally, in order to prevent overlaps or gaps in the allocation of regulatory responsibilities, and in order to ensure that regulatory responsibilities are entrusted to those best able to carry them out, an attractive option is to confer the power to exercise economic regulation in the telecommunications sector to a single, specialized cross-sector institution in charge of

ensuring the application of competition rules in the whole economy. This is the option chosen in Australia. However, it might have been more rational to give to the ACCC a lead role in administering performance standards and in devising number portability rules (with the support of a specialist, technical, body such as the ACA), due to the impact that such issues have on pricing and interconnection issues for which the ACCC is already primarily responsible.

In conclusion, one word of caution: while the United States, New Zealand, and Australia have chosen very different models of economic regulation in telecommunications, the three countries are broadly similar in a number of ways, including institutional endowments and level of economic development for example. Therefore, great care should be taken when attempting to transpose some of the lessons derived here to other country settings.