

Microsoft Corporation	Microsoft
Minnesota Public Utilities Commission	Minnesota Commission
Montana Public Service Commission	Montana Commission
Motorola, Inc.	Motorola
National Association of Regulatory Utility Commission	NARUC
National Association of State Utility Consumer Advocates	NASUCA
National Association of Telecommunications Officers and Advisors National League of Cities National Association of Counties U.S. Conference of Mayors National Association of Towns and Townships Texas Coalition of Cities for Utility Issues Washington Association of Telecommunications Officers and Advisors Greater Metro Telecommunications Consortium Mr. Hood Cable Regulatory Commission Metropolitan Washington Council of Governments Rainier Communications Commission City of Philadelphia City of Tacoma, Washington Montgomery County, Maryland	NATOA <i>et al.</i>
National Cable & Telecommunications Association	NCTA
National Consumers League	NCL
National Emergency Number Association	NENA
National Exchange Carrier Association, Inc.	NECA
National Governors Association	NGA
National Grange	National Grange
National Telecommunications Cooperative Association	NTCA
Nebraska Public Service Commission	Nebraska Commission
Nebraska Rural Independent Companies	Nebraska Rural Independent Companies
Net2Phone, Inc.	Net2Phone
New Jersey Board of Public Utilities	New Jersey Commission
New Jersey Division of the Ratepayer Advocate	New Jersey Ratepayer Advocate
New York State Department of Public Service	New York Commission
NexVortex, Inc.	nexVortex
Nortel Networks	Nortel
Nuvio Corporation	Nuvio
Office of Advocacy, U.S. Small Business Administration	SBA
Office of the Attorney General of Texas	Texas Attorney General
Office of the People's Counsel for the District of Columbia	D.C. Counsel
Ohio Public Utilities Commission	Ohio Commission
Omnitor	Omnitor
Organization for the Promotion and Advancement of Small Telecommunications Companies	OPASTCO
Pac-West Telecomm, Inc.	Pac-West
People of the State of California and the California Public Utilities Commission	California Commission
Public Service Commission of the State of Missouri	Missouri Commission
Pulver.com	Pulver.com

Qwest Communications International Inc.	Qwest
Rehabilitation Engineering Research Center on Telecommunications Access	RERCTA
Rural Independent Competitive Alliance	RICA
SBC Communications, Inc.	SBC
Self Help for Hard of Hearing People	SHHHP
Skype, Inc.	Skype
Sonic.net, Inc.	Sonic.net
SPI Solutions, Inc.	SPI Solutions
Spokane County 911 Communications	Spokane County 911
Sprint Corporation	Sprint
TCA, Inc. – Telecom Consulting Associates	TCA
Telecommunications for the Deaf, Inc	TDI
Telecommunications Industry Association	TIA
Tellme Networks, Inc	Tellme Networks
Tennessee Regulatory Authority	TRA
Texas Coalition of Cities for Utility Issues	TCCFUI
Texas Commission on State Emergency Communications.	TCSEC
Texas Department of Information Resources	Texas DIR
Time Warner Inc.	Time Warner
Time Warner Telecom	TWTC
TracFone Wireless, Inc.	TracFone
UniPoint Enhanced Services Inc. d/b/a PointOne	PointOne
United States Conference of Catholic Bishops Alliance for Community Media Appalachian People's Actions Coalition Center for Digital Democracy Consumer Action Edgemont Neighborhood Coalition Migrant Legal Action Program	USCCB <i>et al.</i>
United States Department of Justice	DOJ
United States Telecom Association	USTA
United Telecom Council The United Power Line Council	UTC <i>et al.</i>
USA Datanet Corporation	USAD Datanet
Utah Division of Public Utilities	Utah Commission
Valor Telecommunications of Texas, L.P. and Iowa Telecommunications Services, Inc.	Valor <i>et al.</i>
VeriSign, Inc.	VeriSign
Verizon Telephone Company	Verizon
Vermont Public Service Board	Vermont
Virgin Mobile USA, LLC	Virgin Mobile
Virginia State Corporation Commission	Virginia Commission
Voice on the Net Coalition	VON Coalition
Vonage Holdings Corp	Vonage
Western Telecommunications Alliance	WTA
WiTel Communications, LLC	WiTel
Wisconsin Electric Power Company Wisconsin Gas	Wisconsin Electric <i>et al.</i>
Yellow Pages Integrated Media Association	YPIMA

Z-Tel Communications, Inc.

Z-Tel

Reply Commenters in WC Docket No. 04-36

Reply Comments	Abbreviation
8X8, Inc.	8X8
Ad Hoc Telecom Manufacturer Coalition	Ad Hoc Telecom Manufacturers Coalition
Ad Hoc Telecommunications Users Committee	Ad Hoc
Adam D. Thierer, Director of Telecommunications Studies, Cato Institute	Thierer
Alcatel North America	Alcatel
Alliance for Public Technology et al.	APT <i>et al.</i>
American Cable Association	ACA
American Electric Power Service Corporation Duke Energy Corporation Xcel Energy Inc.	American Electric Power <i>et al.</i>
Association for Local Telecommunications Services	ALTS
AT&T Corp.	AT&T
Avaya Inc.	Avaya
BellSouth Corporation	BellSouth
Broadband Service Providers Association	BSPA
Cablevision Systems Corp.	Cablevision
Callipso Corporation	Callipso
Central Station Alarm Association	CSAA
Cingular Wireless LLC	Cingular
Cisco Systems, Inc.	Cisco
City and County of San Francisco	San Francisco
Comcast Corporation	Comcast
CompTel/Ascent	CompTel
Consumer Electronics Association	CEA
Consumer Federation of America Consumers Union	CFA <i>et al.</i>
Covad Communications	Covad
CTC Communications Corp.	CTS
CTIA-The Wireless Association	CTIA
Department of Defense	DoD
Donald Clark Jackson	Jackson
EarthLink, Inc.	EarthLink
Educause	Educause
Enterprise Communications Association	ECA
Ericsson Inc.	Ericsson
Florida Public Service Commission	Florida Commission
Francois D. Menard	Menard
General Communication, Inc.	GCI
Global Crossing North America, Inc.	Global Crossing
Independent Telephone & Telecommunications Alliance	ITTA
Information Technology Association of America	Information Technology Association of America
Intergovernmental Advisory Committee	IAC
Intrado Inc.	Intrado
Knology, Inc.	Knology

Level 3 Communications LLC	Level 3
Massachusetts Office of the Attorney General	Massachusetts Attorney General
<i>MCI</i>	<i>MCI</i>
Montana Public Service Commission	Montana Commission
Motorola, Inc.	Motorola
National Association of State Utility Consumer Advocates	NASUCA
National Association of Telecommunications Officers and Advisors National League of Cities National Association of Counties U.S. Conference of Mayors National Association of Towns and Townships Texas Coalition of Cities for Utility Issues Washington Association of Telecommunications Officers and Advisors Greater Metro Telecommunications Consortium Mr. Hood Cable Regulatory Commission Metropolitan Washington Council of Governments Rainier Communications Commission City of Philadelphia City of Tacoma, Washington Montgomery County, Maryland	NATOA <i>et al.</i>
National Cable & Telecommunications Association	NCTA
National Emergency Number Association	NENA
National Exchange Carrier Association, Inc.	NECA
Nebraska Public Service Commission	Nebraska Commission
Nebraska Rural Independent Companies	Nebraska Rural Independent Companies
Net2Phone, Inc.	Net2Phone
New Jersey Division of the Ratepayer Advocate	New Jersey Ratepayer Advocate
New York State Department of Public Service	New York Commission
Nextel Communications, Inc.	Nextel
Nuvio Corporation	Nuvio
Office of the People's Counsel for the District of Columbia	D.C. Counsel
Organization for the Promotion and Advancement of Small Telecommunications Companies	OPASTCO
Pac-West Telecomm, Inc.	Pac-West
Pennsylvania Public Utility Commission	Pennsylvania Commission
Public Service Commission of Wisconsin	Wisconsin Commission
Qwest Communications International Inc.	Qwest
Regulatory Studies Program (RSP) of the Mercatus Center at George Mason University	Mercatus Center
Rehabilitation Engineering Research Center on Telecommunications Access	RERCTA
RNKL, Inc. d/b/a RNK Telecom	RNK
Rural Independent Competitive Alliance	RICA
SBC Communications Inc.	SBC
Skype, Inc.	Skype
Southern Communications Services, Inc. d/b/a Southern LINC	Southern LINC
Sprint Corporation	Sprint

Telecommunications Industry Association	TIA
Tellme Networks, Inc	Tellme Networks
Texas Statewide Telephone Cooperative, Inc.	Texas Statewide Telephone Cooperative
Time Warner Telecom, Inc.	Time Warner Telecom
T-Mobile USA, Inc.	T-Mobile
TracFone Wireless, Inc.	TracFone
United States Conference of Catholic Bishops Alliance for Community Media Appalachian Peoples' Action Coalition Center for Digital Democracy Consumer Action Edgemont Neighborhood Coalition Migrant Legal Action Program	USCCB <i>et al.</i>
United States Department of Justice	DOJ
United States Telecom Association	USTA
USA Datanet Corporation	USA Datanet
Utah Division of Public Utilities	Utah Commission
VeriSign, Inc.	VeriSign
Verizon Telephone Companies	Verizon
Voice on the Net Coalition	VON Coalition
Wisconsin Department of Public Instruction	Wisconsin Department of Public Instruction

Commenters in WT Docket No. 96-198 (Further NOD)

Comments	Abbreviation
American Foundation for the Blind	AFB
AT&T Corp.	AT&T
Bell Atlantic	
Commercial Internet eXchange Association	CIX
Dana Mulvany	
GTE	
iBasis, Inc.	iBasis, Inc.
Inclusive Technologies	
James R. Fruchterman	
Level 3 Communications, LLC	Level 3
MCI WorldCom, Inc.	MCI WorldCom
Microsoft Corporation	Microsoft
Multi-Media Telecommunications Association	MMTA
National Association of the Deaf	NAD
Ronald Vickery	
Self Help for Hard of Hearing People	SHHH
Telecommunications for the Deaf, Inc.	TDI
Teleglobe Communications Corporation	TCC
TRACE/Gallaudet	TRACE
Voice On the Net Coalition	VON Coalition

Reply Commenters in WT Docket No. 96-198 (Further NOI)

<i>Reply Comments</i>	<i>Abbreviation</i>
American Foundation for the Blind	AFB
AT&T Corp.	AT&T
Bell Atlantic	
Competitive Telecommunications Association	CTA
Information Technology Industry Council	ITI
Level 3 Communications, LLC	Level 3
MCI WorldCom, Inc.	MCI WorldCom
Motorola, Inc.	Motorola
National Association of the Deaf	NAD
Net2Phone, Inc.	Net2Phone
Telecommunications Industry Association	TIA
Voice On the Net Coalition	VON Coalition

APPENDIX B**Final Rule Changes****Part 6 of Title 47 of the Code of Federal Regulations is amended as follows:**

1. The authority citation for Part 6 is amended to read as follows:

47 U.S.C. 151-154, 251, 255, and 303(r).

2. Section 6.1 of Subpart A is amended by revising paragraph (c) and adding paragraphs (d) and (e) to read as follows:

Subpart A. Scope--Who Must Comply with These Rules?**§ 6.1 Applicability.**

The rules in this part apply to:

(d) Any provider of interconnected Voice over Internet Protocol (VoIP) service, as that term is defined in section 9.3 of these rules; and

(e) Any manufacturer of equipment or customer premises equipment that is specially designed to provide interconnected VoIP service and that is needed for the effective use of an interconnected VoIP service.

3. Section 6.3 of Subpart B is amended by revising paragraph (c); redesignating paragraphs (e)-(k) as paragraphs (f)-(l), respectively; adding a new paragraph (e); and revising redesignated paragraphs (j) and (k) to read as follows:

Subpart B. Definitions**§ 6.3 Definitions.**

(c) The term customer premises equipment shall mean equipment employed on the premises of a person (other than a carrier) to originate, route, or terminate telecommunications. For purposes of this Part, the term customer premises equipment shall include equipment employed on the premises of a person (other than a carrier) that is specially designed to provide interconnected VoIP service and that is needed for the effective use of an interconnected VoIP service.

(e) The term interconnected VoIP service shall have the same meaning as in section 9.3 of this chapter.

(j) The term telecommunications equipment shall mean equipment, other than customer premises equipment, used by a carrier to provide telecommunications services, and includes software integral to

such equipment (including upgrades). For purposes of this Part, the term telecommunications equipment shall include equipment that is specially designed to provide interconnected VoIP service and that is needed for the effective use of an interconnected VoIP service as that term is defined in section 9.3 of this chapter.

(k) The term telecommunications service shall mean the offering of telecommunications for a fee directly to the public, or to such classes of users as to be effectively available directly to the public, regardless of the facilities used. For purposes of this Part, the term telecommunications service shall include "interconnected VoIP service" as that term is defined in section 9.3 of this chapter.

Subpart F of Part 64 of Title 47 of the Code of Federal Regulations is amended as follows:

6. An authority citation for Subpart F is added to read as follows:

47 U.S.C. 151-154, 225, 255, and 303(r).

7. Section 64.601 of Subpart F is amended by revising the section heading; redesignating the definitional section as paragraph (a); redesignating the definitions in subparagraphs (9)-(18) as subparagraphs (10)-(19), respectively; adding a new definition in subparagraph (9); and adding a new paragraph (b) to read as follows:

§ 64.601 Definitions and Provisions of General Applicability.

(a) As used in this subpart, the following definitions apply:

(9) Interconnected VoIP service. An interconnected Voice over Internet protocol (VoIP) service is a service that: (i) Enables real-time, two-way voice communications; (ii) Requires a broadband connection from the user's location; (iii) Requires Internet protocol-compatible customer premises equipment (CPE); and (iv) Permits users generally to receive calls that originate on the public switched telephone network and to terminate calls to the public switched telephone network.

(b) For purposes of this subpart, all regulations and requirements applicable to common carriers shall also be applicable to providers of interconnected VoIP service.

APPENDIX C

Final Regulatory Flexibility Analysis

1. As required by the Regulatory Flexibility Act of 1980, as amended (RFA),¹ an Initial Regulatory Flexibility Analysis (IRFA) was included in the *IP-Enabled Services NPRM* in WC Docket 04-36.² The Commission sought written public comment on the proposals in the notice, including comment on the IRFA.³ The Commission received three comments on the IRFA, which are discussed below. This Final Regulatory Flexibility Analysis (FRFA) conforms to the RFA.⁴

A. Need for, and Objectives of, the Rules

2. Today's *Order* strengthens the Commission's disability access rules. Section 255 of the Communications Act of 1934, as amended (the Act), requires telecommunications service providers and equipment manufacturers to render their services or equipment accessible to persons with disabilities, if readily achievable. This *Order* extends the disability access requirements that currently apply to telecommunications service providers and equipment manufacturers under section 255, to providers of interconnected VoIP services and to manufacturers of specially designed equipment used to provide those services. In addition, the *Order* extends the TRS requirements contained in the Commission's regulations, 47 C.F.R. §§ 64.601 *et seq.*, to providers of interconnected VoIP services. Among the TRS requirements extended to interconnected VoIP providers, the Commission requires such providers to contribute to the Interstate TRS Fund under the Commission's existing contribution rules,⁵ and to offer 711 abbreviated dialing for access to relay services.⁶ Together, these measures will ensure that, as more consumers migrate from traditional phone service to interconnected VoIP services, the disability access provisions mandated by Congress under sections 255 and 225 will apply to, and benefit users of, interconnected VoIP services and equipment.

B. Summary of Significant Issues Raised by Public Comments in Response to the IRFA

3. *Comments Received in Response to the IP-Enabled Services NPRM.* In this section, we respond to comments filed in response to the IRFA.⁷ To the extent we received comments raising general small business concerns during this proceeding, those comments have been addressed in the *Order*. We disagree with SBA and Menard that the Commission should postpone acting in this proceeding -- thereby postponing extending the application of the disability access and TRS contribution rules to interconnected VoIP providers -- and instead should reevaluate the economic impact and the compliance burdens on small entities and issue a further notice of proposed rulemaking in conjunction with a supplemental IRFA identifying and analyzing the economic impacts on small entities and less burdensome alternatives.⁸ We believe the additional steps suggested by SBA and Menard are unnecessary because small entities already

¹ See 5 U.S.C. § 603. The RFA, *see* 5 U.S.C. §§ 601-12, has been amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA), Pub. L. No. 104-121, Title II, 110 Stat. 857 (1996).

² *IP-Enabled Services NPRM*, 19 FCC Rcd at 4917, para. 91 & Appendix A.

³ *Id.*

⁴ See 5 U.S.C. § 604.

⁵ 47 C.F.R. § 64.604(c)(5)(iii)(A), (B).

⁶ See 47 C.F.R. § 64.603.

⁷ See Comments of SBA (May 28, 2004); Comments of Menard (May 28, 2004); Reply of Menard (July 15, 2004).

⁸ See Comments of SBA at 2, 4, 6 (May 28, 2004); Comments of Menard at 2-5 (May 28, 2004); Reply of Menard at 4 (July 15, 2004).

have received sufficient notice of the issues addressed in today's *Order*.⁹ We note that a number of small entities submitted comments in this proceeding. The Commission has considered the economic impact on small entities as well as ways to minimize the burdens imposed on those entities, and, to the extent feasible, has implemented those less burdensome alternatives.¹⁰

C. Description and Estimate of the Number of Small Entities to Which Rules Will Apply

4. The RFA directs agencies to provide a description of and, where feasible, an estimate of the number of small entities that may be affected by the rules adopted herein.¹¹ The RFA generally defines the term "small entity" as having the same meaning as the terms "small business," "small organization," and "small governmental jurisdiction."¹² In addition, the term "small business" has the same meaning as the term "small business concern" under the Small Business Act.¹³ A small business concern is one which: (1) is independently owned and operated; (2) is not dominant in its field of operation; and (3) satisfies any additional criteria established by the Small Business Administration (SBA).¹⁴

5. *Small Businesses*. Nationwide, there are a total of approximately 22.4 million small businesses, according to SBA data.¹⁵

6. *Small Organizations*. Nationwide, there are approximately 1.6 million small organizations.¹⁶

7. *Small Governmental Jurisdictions*. The term "small governmental jurisdiction" is defined generally as "governments of cities, towns, townships, villages, school districts, or special districts, with a population of less than fifty thousand."¹⁷ Census Bureau data for 2002 indicate that there were 87,525 local governmental jurisdictions in the United States.¹⁸ We estimate that, of this total, 84,377 entities were "small governmental jurisdictions."¹⁹ Thus, we estimate that most governmental jurisdictions are

⁹ The *IP-Enabled Services NPRM* specifically sought comment on whether the disability access requirements should apply to providers of IP-enabled services, including VoIP services, and on whether the Commission should amend its TRS rules in light of increasing use of IP-enabled services. See *IP-Enabled Services NPRM*, 19 FCC Rcd at 4901-03, paras. 58-60. The Commission published a summary of the *NPRM* in the Federal Register. See *Regulatory Requirements for IP-Enabled Services*, WC Docket No. 04-36, Notice of Proposed Rulemaking, 69 Fed. Reg. 16193-01 (Mar. 29, 2004). In addition, as noted above, the *Section 255 NOI* sought comment on applying accessibility requirements to "IP telephony" and "computer-based equipment that replicates telecommunications functionality." *Section 255 NOI*, 16 FCC Rcd at 6483-84, paras. 173-76.

¹⁰ See section E of this Appendix.

¹¹ 5 U.S.C. §§ 603(b)(3), 604(a)(3).

¹² 5 U.S.C. § 601(6).

¹³ 5 U.S.C. § 601(3) (incorporating by reference the definition of "small business concern" in the Small Business Act, 15 U.S.C. § 632). Pursuant to 5 U.S.C. § 601(3), the statutory definition of a small business applies "unless an agency, after consultation with the Office of Advocacy of the Small Business Administration and after opportunity for public comment, establishes one or more definitions of such terms which are appropriate to the activities of the agency and publishes such definitions(s) in the Federal Register."

¹⁴ 15 U.S.C. § 632.

¹⁵ See SBA, Programs and Services, SBA Pamphlet No. CO-0028, at page 40 (July 2002).

¹⁶ Independent Sector, *The New Nonprofit Almanac & Desk Reference* (2002).

¹⁷ 5 U.S.C. § 601(5).

¹⁸ U.S. Census Bureau, *Statistical Abstract of the United States: 2006*, Section 8, page 272, Table 415.

¹⁹ We assume that the villages, school districts, and special districts are small, and total 48,558. See U.S. Census Bureau, *Statistical Abstract of the United States: 2006*, section 8, page 273, Table 417. For 2002, Census Bureau (continued....)

small.

1. **Telecommunications Service Entities**

a. **Wireline Carriers and Service Providers**

8. We have included small incumbent local exchange carriers in this present RFA analysis. As noted above, a "small business" under the RFA is one that, *inter alia*, meets the pertinent small business size standard (e.g., a telephone communications business having 1,500 or fewer employees), and "is not dominant in its field of operation."²⁰ The SBA's Office of Advocacy contends that, for RFA purposes, small incumbent local exchange carriers are not dominant in their field of operation because any such dominance is not "national" in scope.²¹ We have therefore included small incumbent local exchange carriers in this RFA analysis, although we emphasize that this RFA action has no effect on Commission analyses and determinations in other, non-RFA contexts.

9. *Wired Telecommunications Carriers*. The SBA has developed a small business size standard for wireline firms within the broad economic census category, "Wired Telecommunications Carriers."²² Under this category, the SBA deems a wireline business to be small if it has 1,500 or fewer employees. Census Bureau data for 2002 show that there were 2,432 firms in this category that operated for the entire year.²³ Of this total, 2,395 firms had employment of 999 or fewer employees, and 37 firms had employment of 1,000 employees or more.²⁴ Thus, under this category and associated small business size standard, the majority of firms can be considered small.

10. *Incumbent Local Exchange Carriers (LECs)*. Neither the Commission nor the SBA has developed a small business size standard specifically for incumbent local exchange services. The appropriate size standard under SBA rules is for the category Wired Telecommunications Carriers. Under that size standard, such a business is small if it has 1,500 or fewer employees.²⁵ According to Commission data,²⁶ 1,307 carriers have reported that they are engaged in the provision of incumbent local exchange services. Of these 1,307 carriers, an estimated 1,019 have 1,500 or fewer employees and 283 have more than 1,500 employees. Consequently, the Commission estimates that most providers of incumbent local exchange service are small businesses that may be affected by our action.

11. *Competitive Local Exchange Carriers, Competitive Access Providers (CAPs), "Shared-Tenant Service Providers," and "Other Local Service Providers."* Neither the Commission nor the SBA

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data indicate that the total number of county, municipal, and township governments nationwide was 38,967, of which 35,819 were small. *Id.*

²⁰ 15 U.S.C. § 632.

²¹ Letter from Jere W. Glover, Chief Counsel for Advocacy, SBA, to William E. Kennard, Chairman, FCC (May 27, 1999). The Small Business Act contains a definition of "small-business concern," which the RFA incorporates into its own definition of "small business." See 15 U.S.C. § 632(a) (Small Business Act); 5 U.S.C. § 601(3) (RFA). SBA regulations interpret "small business concern" to include the concept of dominance on a national basis. See 13 C.F.R. § 121.102(b).

²² 13 C.F.R. § 121.201, NAICS code 517110.

²³ U.S. Census Bureau, 2002 Economic Census, Subject Series: Information, "Establishment and Firm Size (Including Legal Form of Organization)," Table 5, NAICS code 517110 (issued Nov. 2005).

²⁴ *Id.* The census data do not provide a more precise estimate of the number of firms that have employment of 1,500 or fewer employees; the largest category provided is for firms with "1000 employees or more."

²⁵ 13 C.F.R. § 121.201, NAICS code 517110.

²⁶ FCC, Wireline Competition Bureau, Industry Analysis and Technology Division, "Trends in Telephone Service" at Table 5.3, page 5-5 (Feb. 2007) ("Trends in Telephone Service"). This source uses data that are current as of October 20, 2005.

has developed a small business size standard specifically for these service providers. The appropriate size standard under SBA rules is for the category Wired Telecommunications Carriers. Under that size standard, such a business is small if it has 1,500 or fewer employees.²⁷ According to Commission data,²⁸ 859 carriers have reported that they are engaged in the provision of either competitive access provider services or competitive local exchange carrier services. Of these 859 carriers, an estimated 741 have 1,500 or fewer employees and 118 have more than 1,500 employees. In addition, 16 carriers have reported that they are "Shared-Tenant Service Providers," and all 16 are estimated to have 1,500 or fewer employees. In addition, 44 carriers have reported that they are "Other Local Service Providers." Of the 44, an estimated 43 have 1,500 or fewer employees and one has more than 1,500 employees. Consequently, the Commission estimates that most providers of competitive local exchange service, competitive access providers, "Shared-Tenant Service Providers," and "Other Local Service Providers" are small entities that may be affected by our action.

12. *Local Resellers.* The SBA has developed a small business size standard for the category of Telecommunications Resellers. Under that size standard, such a business is small if it has 1,500 or fewer employees.²⁹ According to Commission data,³⁰ 184 carriers have reported that they are engaged in the provision of local resale services. Of these, an estimated 181 have 1,500 or fewer employees and three have more than 1,500 employees. Consequently, the Commission estimates that the majority of local resellers are small entities that may be affected by our action.

13. *Toll Resellers.* The SBA has developed a small business size standard for the category of Telecommunications Resellers. Under that size standard, such a business is small if it has 1,500 or fewer employees.³¹ According to Commission data,³² 881 carriers have reported that they are engaged in the provision of toll resale services. Of these, an estimated 853 have 1,500 or fewer employees and 28 have more than 1,500 employees. Consequently, the Commission estimates that the majority of toll resellers are small entities that may be affected by our action.

14. *Payphone Service Providers (PSPs).* Neither the Commission nor the SBA has developed a small business size standard specifically for payphone services providers. The appropriate size standard under SBA rules is for the category Wired Telecommunications Carriers. Under that size standard, such a business is small if it has 1,500 or fewer employees.³³ According to Commission data,³⁴ 657 carriers have reported that they are engaged in the provision of payphone services. Of these, an estimated 653 have 1,500 or fewer employees and four have more than 1,500 employees. Consequently, the Commission estimates that the majority of payphone service providers are small entities that may be affected by our action.

15. *Interexchange Carriers (IXCs).* Neither the Commission nor the SBA has developed a small business size standard specifically for providers of interexchange services. The appropriate size standard under SBA rules is for the category Wired Telecommunications Carriers. Under that size standard, such a business is small if it has 1,500 or fewer employees.³⁵ According to Commission data,³⁶ 330 carriers have

²⁷ 13 C.F.R. § 121.201, NAICS code 517110 (changed from 513310 in Oct. 2002).

²⁸ "Trends in Telephone Service" at Table 5.3.

²⁹ 13 C.F.R. § 121.201, NAICS code 517310.

³⁰ "Trends in Telephone Service" at Table 5.3.

³¹ 13 C.F.R. § 121.201, NAICS code 517310.

³² "Trends in Telephone Service" at Table 5.3.

³³ 13 C.F.R. § 121.201, NAICS code 517110.

³⁴ "Trends in Telephone Service" at Table 5.3.

³⁵ 13 C.F.R. § 121.201, NAICS code 517110.

reported that they are engaged in the provision of interexchange service. Of these, an estimated 309 have 1,500 or fewer employees and 21 have more than 1,500 employees. Consequently, the Commission estimates that the majority of IXC's are small entities that may be affected by our action.

16. *Operator Service Providers (OSPs)*. Neither the Commission nor the SBA has developed a small business size standard specifically for operator service providers. The appropriate size standard under SBA rules is for the category Wired Telecommunications Carriers. Under that size standard, such a business is small if it has 1,500 or fewer employees.³⁷ According to Commission data,³⁸ 23 carriers have reported that they are engaged in the provision of operator services. Of these, an estimated 22 have 1,500 or fewer employees and one has more than 1,500 employees. Consequently, the Commission estimates that the majority of OSPs are small entities that may be affected by our action.

17. *Prepaid Calling Card Providers*. Neither the Commission nor the SBA has developed a small business size standard specifically for prepaid calling card providers. The appropriate size standard under SBA rules is for the category Telecommunications Resellers. Under that size standard, such a business is small if it has 1,500 or fewer employees.³⁹ According to Commission data,⁴⁰ 104 carriers have reported that they are engaged in the provision of prepaid calling cards. Of these, 102 are estimated to have 1,500 or fewer employees and two have more than 1,500 employees. Consequently, the Commission estimates that all or the majority of prepaid calling card providers are small entities that may be affected by our action.

18. *800 and 800-Like Service Subscribers*.⁴¹ Neither the Commission nor the SBA has developed a small business size standard specifically for 800 and 800-like service ("toll free") subscribers. The appropriate size standard under SBA rules is for the category Telecommunications Resellers. Under that size standard, such a business is small if it has 1,500 or fewer employees.⁴² The most reliable source of information regarding the number of these service subscribers appears to be data the Commission collects on the 800, 888, and 877 numbers in use.⁴³ According to this source, as of the end of June, 2006, the number of 800 numbers assigned was 7,647,941, the number of 888 numbers assigned was 5,318,667, the number of 877 numbers assigned was 4,431,162, and the number of 866 numbers assigned was 6,008,976. We do not have data specifying the number of these subscribers that are not independently owned and operated or have more than 1,500 employees, and thus are unable at this time to estimate with greater precision the number of toll free subscribers that would qualify as small businesses under the SBA size standard. Consequently, we estimate that there are approximately 7,647,941 small entity 800 subscribers, approximately 5,318,667 small entity 888 subscribers, approximately 4,431,162 small entity 877 subscribers, and approximately 6,008,976 small entity 866 subscribers.

b. International Service Providers

19. The Commission has not developed a small business size standard specifically for providers of international service. The appropriate size standards under SBA rules are for the two broad census categories of "Satellite Telecommunications" and "Other Telecommunications." Under both categories,

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³⁶ "Trends in Telephone Service" at Table 5.3.

³⁷ 13 C.F.R. § 121.201, NAICS code 517110.

³⁸ "Trends in Telephone Service" at Table 5.3.

³⁹ 13 C.F.R. § 121.201, NAICS code 517310.

⁴⁰ "Trends in Telephone Service" at Table 5.3.

⁴¹ We include all toll-free number subscribers in this category, including those for 888 numbers.

⁴² 13 C.F.R. § 121.201, NAICS code 517310.

⁴³ "Trends in Telephone Service" at Tables 18.4-18.7.

such a business is small if it has \$12.5 million or less in average annual receipts.⁴⁴

20. The first category of Satellite Telecommunications “comprises establishments primarily engaged in providing point-to-point telecommunications services to other establishments in the telecommunications and broadcasting industries by forwarding and receiving communications signals via a system of satellites or reselling satellite telecommunications.”⁴⁵ For this category, Census Bureau data for 2002 show that there were a total of 371 firms that operated for the entire year.⁴⁶ Of this total, 307 firms had annual receipts of under \$10 million, and 26 firms had receipts of \$10 million to \$24,999,999.⁴⁷ Consequently, we estimate that the majority of Satellite Telecommunications firms are small entities that might be affected by our action.

21. The second category of Other Telecommunications “comprises establishments primarily engaged in (1) providing specialized telecommunications applications, such as satellite tracking, communications telemetry, and radar station operations; or (2) providing satellite terminal stations and associated facilities operationally connected with one or more terrestrial communications systems and capable of transmitting telecommunications to or receiving telecommunications from satellite systems.”⁴⁸ For this category, Census Bureau data for 2002 show that there were a total of 332 firms that operated for the entire year.⁴⁹ Of this total, 259 firms had annual receipts of under \$10 million and 15 firms had annual receipts of \$10 million to \$24,999,999.⁵⁰ Consequently, we estimate that the majority of Other Telecommunications firms are small entities that might be affected by our action.

c. Wireless Telecommunications Service Providers

22. Below, for those services subject to auctions, we note that, as a general matter, the number of winning bidders that qualify as small businesses at the close of an auction does not necessarily represent the number of small businesses currently in service. Also, the Commission does not generally track subsequent business size unless, in the context of assignments or transfers, unjust enrichment issues are implicated.

23. *Wireless Service Providers.* The SBA has developed a small business size standard for wireless firms within the two broad economic census categories of “Paging”⁵¹ and “Cellular and Other Wireless Telecommunications.”⁵² Under both SBA categories, a wireless business is small if it has 1,500 or fewer employees. For the census category of Paging, Census Bureau data for 2002 show that there were 807 firms in this category that operated for the entire year.⁵³ Of this total, 804 firms had

⁴⁴ 13 C.F.R. § 121.201, NAICS codes 517410 and 517910.

⁴⁵ U.S. Census Bureau, “2002 NAICS Definitions: 517410 Satellite Telecommunications” (www.census.gov, visited Feb. 2006).

⁴⁶ U.S. Census Bureau, 2002 Economic Census, Subject Series: Information, “Establishment and Firm Size (Including Legal Form of Organization),” Table 4, NAICS code 517410 (issued Nov. 2005).

⁴⁷ *Id.* An additional 38 firms had annual receipts of \$25 million or more.

⁴⁸ U.S. Census Bureau, “2002 NAICS Definitions: 517910 Other Telecommunications” (www.census.gov, visited Feb. 2006).

⁴⁹ U.S. Census Bureau, 2002 Economic Census, Subject Series: Information, “Establishment and Firm Size (Including Legal Form of Organization),” Table 4, NAICS code 517910 (issued Nov. 2005).

⁵⁰ *Id.* An additional 14 firms had annual receipts of \$25 million or more.

⁵¹ 13 C.F.R. § 121.201, NAICS code 517211.

⁵² 13 C.F.R. § 121.201, NAICS code 517212.

⁵³ U.S. Census Bureau, 2002 Economic Census, Subject Series: “Information,” Table 5, Employment Size of Firms for the United States: 2002, NAICS code 517211 (issued November 2005).

employment of 999 or fewer employees, and three firms had employment of 1,000 employees or more.⁵⁴ Thus, under this category and associated small business size standard, the majority of firms can be considered small. For the census category of Cellular and Other Wireless Telecommunications, Census Bureau data for 2002 show that there were 1,397 firms in this category that operated for the entire year.⁵⁵ Of this total, 1,378 firms had employment of 999 or fewer employees, and 19 firms had employment of 1,000 employees or more.⁵⁶ Thus, under this second category and size standard, the majority of firms can, again, be considered small.

24. *Cellular Licensees.* The SBA has developed a small business size standard for wireless firms within the broad economic census category "Cellular and Other Wireless Telecommunications."⁵⁷ Under this SBA category, a wireless business is small if it has 1,500 or fewer employees. For the census category of Cellular and Other Wireless Telecommunications, Census Bureau data for 2002 show that there were 1,397 firms in this category that operated for the entire year.⁵⁸ Of this total, 1,378 firms had employment of 999 or fewer employees, and 19 firms had employment of 1,000 employees or more.⁵⁹ Thus, under this category and size standard, the great majority of firms can be considered small. Also, according to Commission data, 432 carriers reported that they were engaged in the provision of cellular service, Personal Communications Service (PCS), or Specialized Mobile Radio (SMR) Telephony services, which are placed together in the data.⁶⁰ We have estimated that 221 of these are small, under the SBA small business size standard.⁶¹

25. *Common Carrier Paging.* The SBA has developed a small business size standard for wireless firms within the broad economic census category, "Cellular and Other Wireless Telecommunications."⁶² Under this SBA category, a wireless business is small if it has 1,500 or fewer employees. For the census category of Paging, Census Bureau data for 2002 show that there were 807 firms in this category that operated for the entire year.⁶³ Of this total, 804 firms had employment of 999 or fewer employees, and three firms had employment of 1,000 employees or more.⁶⁴ Thus, under this category and associated small business size standard, the majority of firms can be considered small. In the *Paging Third Report and Order*, we developed a small business size standard for "small businesses" and "very small businesses" for purposes of determining their eligibility for special provisions such as

⁵⁴ *Id.* The census data do not provide a more precise estimate of the number of firms that have employment of 1,500 or fewer employees; the largest category provided is firms with "1000 employees or more."

⁵⁵ U.S. Census Bureau, 2002 Economic Census, Subject Series: "Information," Table 5, Employment Size of Firms for the United States: 2002, NAICS code 517212 (issued November 2005).

⁵⁶ *Id.* The census data do not provide a more precise estimate of the number of firms that have employment of 1,500 or fewer employees; the largest category provided is firms with "1000 employees or more."

⁵⁷ 13 C.F.R. § 121.201, NAICS code 517212.

⁵⁸ U.S. Census Bureau, 2002 Economic Census, Subject Series: "Information," Table 5, Employment Size of Firms for the United States: 2002, NAICS code 517212 (issued November 2005).

⁵⁹ *Id.* The census data do not provide a more precise estimate of the number of firms that have employment of 1,500 or fewer employees; the largest category provided is firms with "1000 employees or more."

⁶⁰ "Trends in Telephone Service" at Table 5.3.

⁶¹ *Id.*

⁶² 13 C.F.R. § 121.201, NAICS code 517212.

⁶³ U.S. Census Bureau, 2002 Economic Census, Subject Series: "Information," Table 5, Employment Size of Firms for the United States: 2002, NAICS code 517211 (issued November 2005).

⁶⁴ *Id.* The census data do not provide a more precise estimate of the number of firms that have employment of 1,500 or fewer employees; the largest category provided is firms with "1000 employees or more."

bidding credits and installment payments.⁶⁵ A "small business" is an entity that, together with its affiliates and controlling principals, has average gross revenues not exceeding \$15 million for the preceding three years. Additionally, a "very small business" is an entity that, together with its affiliates and controlling principals, has average gross revenues that are not more than \$3 million for the preceding three years.⁶⁶ The SBA has approved these small business size standards.⁶⁷ An auction of Metropolitan Economic Area licenses commenced on February 24, 2000, and closed on March 2, 2000.⁶⁸ Of the 985 licenses auctioned, 440 were sold. Fifty-seven companies claiming small business status won. Also, according to Commission data, 375 carriers reported that they were engaged in the provision of paging and messaging services.⁶⁹ Of those, we estimate that 370 are small, under the SBA-approved small business size standard.⁷⁰

26. *Wireless Communications Services.* This service can be used for fixed, mobile, radiolocation, and digital audio broadcasting satellite uses. The Commission established small business size standards for the wireless communications services (WCS) auction. A "small business" is an entity with average gross revenues of \$40 million for each of the three preceding years, and a "very small business" is an entity with average gross revenues of \$15 million for each of the three preceding years. The SBA has approved these small business size standards.⁷¹ The Commission auctioned geographic area licenses in the WCS service. In the auction, there were seven winning bidders that qualified as "very small business" entities, and one that qualified as a "small business" entity.

27. *Wireless Telephony.* Wireless telephony includes cellular, personal communications services (PCS), and specialized mobile radio (SMR) telephony carriers. As noted earlier, the SBA has developed a small business size standard for "Cellular and Other Wireless Telecommunications" services.⁷² Under that SBA small business size standard, a business is small if it has 1,500 or fewer employees.⁷³ According to Commission data, 432 carriers reported that they were engaged in the provision of cellular service, Personal Communications Service (PCS), or Specialized Mobile Radio (SMR) Telephony services, which are placed together in the data.⁷⁴ We have estimated that 221 of these are small, under the SBA small business size standard.⁷⁵

28. *Broadband Personal Communications Service.* The broadband Personal Communications Service (PCS) spectrum is divided into six frequency blocks designated A through F, and the Commission

⁶⁵ *Amendment of Part 90 of the Commission's Rules to Provide for the Use of the 220-222 MHz Band by the Private Land Mobile Radio Service*, PR Docket No. 89-552, Third Report and Order and Fifth Notice of Proposed Rulemaking, 12 FCC Rcd 10943, 11068-70, paras. 291-295, 62 FR 16004 (Apr. 3, 1997).

⁶⁶ See Letter to Amy Zoslov, Chief, Auctions and Industry Analysis Division, Wireless Telecommunications Bureau, FCC, from A. Alvarez, Administrator, SBA (Dec. 2, 1998) (SBA Dec. 2, 1998 Letter).

⁶⁷ *Revision of Part 22 and Part 90 of the Commission's Rules to Facilitate Future Development of Paging Systems*, Memorandum Opinion and Order on Reconsideration and Third Report and Order, 14 FCC Rcd 10030, 10085-87, paras. 98-107 (1999).

⁶⁸ *Id.* at 10085, para. 98.

⁶⁹ "Trends in Telephone Service" at Table 5.3.

⁷⁰ *Id.*

⁷¹ SBA Dec. 2, 1998 letter.

⁷² 13 C.F.R. § 121.201, NAICS code 517212.

⁷³ *Id.*

⁷⁴ "Trends in Telephone Service" at Table 5.3.

⁷⁵ *Id.*

has held auctions for each block. The Commission defined "small entity" for Blocks C and F as an entity that has average gross revenues of \$40 million or less in the three previous calendar years.⁷⁶ For Block F, an additional classification for "very small business" was added and is defined as an entity that, together with its affiliates, has average gross revenues of not more than \$15 million for the preceding three calendar years.⁷⁷ These standards defining "small entity" in the context of broadband PCS auctions have been approved by the SBA.⁷⁸ No small businesses, within the SBA-approved small business size standards bid successfully for licenses in Blocks A and B. There were 90 winning bidders that qualified as small entities in the Block C auctions. A total of 93 small and very small business bidders won approximately 40 percent of the 1,479 licenses for Blocks D, E, and F.⁷⁹ On March 23, 1999, the Commission re-auctioned 347 C, D, E, and F Block licenses. There were 48 small business winning bidders. On January 26, 2001, the Commission completed the auction of 422 C and F Broadband PCS licenses in Auction No. 35. Of the 35 winning bidders in this auction, 29 qualified as "small" or "very small" businesses. Subsequent events, concerning Auction 35, including judicial and agency determinations, resulted in a total of 163 C and F Block licenses being available for grant.

29. *Narrowband Personal Communications Services.* To date, two auctions of narrowband personal communications services (PCS) licenses have been conducted. For purposes of the two auctions that have already been held, "small businesses" were entities with average gross revenues for the prior three calendar years of \$40 million or less. Through these auctions, the Commission has awarded a total of 41 licenses, out of which 11 were obtained by small businesses. To ensure meaningful participation of small business entities in future auctions, the Commission has adopted a two-tiered small business size standard in the *Narrowband PCS Second Report and Order*.⁸⁰ A "small business" is an entity that, together with affiliates and controlling interests, has average gross revenues for the three preceding years of not more than \$40 million. A "very small business" is an entity that, together with affiliates and controlling interests, has average gross revenues for the three preceding years of not more than \$15 million. The SBA has approved these small business size standards.⁸¹ In the future, the Commission will auction 459 licenses to serve Metropolitan Trading Areas (MTAs) and 408 response channel licenses. There is also one megahertz of narrowband PCS spectrum that has been held in reserve and that the Commission has not yet decided to release for licensing. The Commission cannot predict accurately the number of licenses that will be awarded to small entities in future auctions. However, four of the 16 winning bidders in the two previous narrowband PCS auctions were small businesses, as that term was defined. The Commission assumes, for purposes of this analysis that a large portion of the remaining narrowband PCS licenses will be awarded to small entities. The Commission also assumes that at least some small businesses will acquire narrowband PCS licenses by means of the Commission's partitioning and disaggregation rules.

⁷⁶ See *Amendment of Parts 20 and 24 of the Commission's Rules - Broadband PCS Competitive Bidding and the Commercial Mobile Radio Service Spectrum Cap*, WT Docket No. 96-59, Report and Order, 11 FCC Rcd 7824, 61 FR 33859 (July 1, 1996) (*PCS Order*); see also 47 C.F.R. § 24.720(b).

⁷⁷ See *PCS Order*, 11 FCC Rcd 7824.

⁷⁸ See, e.g., *Implementation of Section 309(j) of the Communications Act - Competitive Bidding*, PP Docket No. 93-253, Fifth Report and Order, 9 FCC Rcd 5332, 59 FR 37566 (July 22, 1994).

⁷⁹ FCC News, *Broadband PCS, D, E and F Block Auction Closes*, No. 71744 (rel. Jan. 14, 1997); see also *Amendment of the Commission's Rules Regarding Installment Payment Financing for Personal Communications Services (PCS) Licenses*, WT Docket No. 97-82, Second Report and Order, 12 FCC Rcd 16436, 62 FR 55348 (Oct. 24, 1997).

⁸⁰ *Amendment of the Commission's Rules to Establish New Personal Communications Services, Narrowband PCS*, Docket No. ET 92-100, Docket No. PP 93-253, Second Report and Order and Second Further Notice of Proposed Rulemaking, 15 FCC Rcd 10456, 65 FR 35875 (June 6, 2000).

⁸¹ See SBA Dec. 2, 1998 Letter.

30. *220 MHz Radio Service – Phase I Licensees.* The 220 MHz service has both Phase I and Phase II licenses. Phase I licensing was conducted by lotteries in 1992 and 1993. There are approximately 1,515 such non-nationwide licensees and four nationwide licensees currently authorized to operate in the 220 MHz band. The Commission has not developed a small business size standard for small entities specifically applicable to such incumbent 220 MHz Phase I licensees. To estimate the number of such licensees that are small businesses, we apply the small business size standard under the SBA rules applicable to “Cellular and Other Wireless Telecommunications” companies. This category provides that a small business is a wireless company employing no more than 1,500 persons.⁸² For the census category of Cellular and Other Wireless Telecommunications, Census Bureau data for 2002 show that there were 1,397 firms in this category that operated for the entire year.⁸³ Of this total, 1,378 firms had employment of 999 or fewer employees, and 19 firms had employment of 1,000 employees or more.⁸⁴ Thus, under this second category and size standard, the majority of firms can, again, be considered small. Assuming this general ratio continues in the context of Phase I 220 MHz licensees, the Commission estimates that nearly all such licensees are small businesses under the SBA’s small business size standard.

31. *220 MHz Radio Service – Phase II Licensees.* The 220 MHz service has both Phase I and Phase II licenses. The Phase II 220 MHz service is a new service, and is subject to spectrum auctions. In the *220 MHz Third Report and Order*, we adopted a small business size standard for “small” and “very small” businesses for purposes of determining their eligibility for special provisions such as bidding credits and installment payments.⁸⁵ This small business size standard indicates that a “small business” is an entity that, together with its affiliates and controlling principals, has average gross revenues not exceeding \$15 million for the preceding three years.⁸⁶ A “very small business” is an entity that, together with its affiliates and controlling principals, has average gross revenues that do not exceed \$3 million for the preceding three years. The SBA has approved these small business size standards.⁸⁷ Auctions of Phase II licenses commenced on September 15, 1998, and closed on October 22, 1998.⁸⁸ In the first auction, 908 licenses were auctioned in three different-sized geographic areas: three nationwide licenses, 30 Regional Economic Area Group (EAG) Licenses, and 875 Economic Area (EA) Licenses. Of the 908 licenses auctioned, 693 were sold.⁸⁹ Thirty-nine small businesses won licenses in the first 220 MHz auction. The second auction included 225 licenses: 216 EA licenses and 9 EAG licenses. Fourteen companies claiming small business status won 158 licenses.⁹⁰

32. *800 MHz and 900 MHz Specialized Mobile Radio Licenses.* The Commission awards “small entity” and “very small entity” bidding credits in auctions for Specialized Mobile Radio (SMR) geographic area licenses in the 800 MHz and 900 MHz bands to firms that had revenues of no more than \$15 million in each of the three previous calendar years, or that had revenues of no more than \$3 million

⁸² 13 C.F.R. § 121.201, NAICS code 513322 (changed to 517212 in October 2002).

⁸³ U.S. Census Bureau, 2002 Economic Census, Subject Series: “Information,” Table 5, Employment Size of Firms for the United States: 2002, NAICS code 517212 (issued November 2005).

⁸⁴ *Id.* The census data do not provide a more precise estimate of the number of firms that have employment of 1,500 or fewer employees; the largest category provided is firms with “1000 employees or more.”

⁸⁵ *220 MHz Third Report and Order*, 12 FCC Rcd 10943, 11068-70, paras. 291-295 (1997).

⁸⁶ *Id.* at 11068, para. 291.

⁸⁷ See Letter to D. Phythyon, Chief, Wireless Telecommunications Bureau, Federal Communications Commission, from A. Alvarez, Administrator, Small Business Administration (Jan. 6, 1998).

⁸⁸ See generally Public Notice, “220 MHz Service Auction Closes,” 14 FCC Rcd 605 (1998).

⁸⁹ See, e.g., Public Notice, “FCC Announces It is Prepared to Grant 654 Phase II 220 MHz Licenses After Final Payment is Made,” 14 FCC Rcd 1085 (1999).

⁹⁰ Public Notice, “Phase II 220 MHz Service Spectrum Auction Closes,” 14 FCC Rcd 11218 (1999).

in each of the previous calendar years, respectively.⁹¹ These bidding credits apply to SMR providers in the 800 MHz and 900 MHz bands that either hold geographic area licenses or have obtained extended implementation authorizations. The Commission does not know how many firms provide 800 MHz or 900 MHz geographic area SMR service pursuant to extended implementation authorizations, nor how many of these providers have annual revenues of no more than \$15 million. One firm has over \$15 million in revenues. The Commission assumes, for purposes here, that all of the remaining existing extended implementation authorizations are held by small entities, as that term is defined by the SBA. The Commission has held auctions for geographic area licenses in the 800 MHz and 900 MHz SMR bands. There were 60 winning bidders that qualified as small or very small entities in the 900 MHz SMR auctions. Of the 1,020 licenses won in the 900 MHz auction, bidders qualifying as small or very small entities won 263 licenses. In the 800 MHz auction, 38 of the 524 licenses won were won by small and very small entities.

33. *700 MHz Guard Band Licensees.* In the *700 MHz Guard Band Order*, we adopted a small business size standard for "small businesses" and "very small businesses" for purposes of determining their eligibility for special provisions such as bidding credits and installment payments.⁹² A "small business" as an entity that, together with its affiliates and controlling principals, has average gross revenues not exceeding \$15 million for the preceding three years. Additionally, a "very small business" is an entity that, together with its affiliates and controlling principals, has average gross revenues that are not more than \$3 million for the preceding three years. An auction of 52 Major Economic Area (MEA) licenses commenced on September 6, 2000, and closed on September 21, 2000.⁹³ Of the 104 licenses auctioned, 96 licenses were sold to nine bidders. Five of these bidders were small businesses that won a total of 26 licenses. A second auction of 700 MHz Guard Band licenses commenced on February 13, 2001 and closed on February 21, 2001. All eight of the licenses auctioned were sold to three bidders. One of these bidders was a small business that won a total of two licenses.⁹⁴

34. *Rural Radiotelephone Service.* The Commission has not adopted a size standard for small businesses specific to the Rural Radiotelephone Service.⁹⁵ A significant subset of the Rural Radiotelephone Service is the Basic Exchange Telephone Radio System (BETRS).⁹⁶ The Commission uses the SBA's small business size standard applicable to "Cellular and Other Wireless Telecommunications," *i.e.*, an entity employing no more than 1,500 persons.⁹⁷ There are approximately 1,000 licensees in the Rural Radiotelephone Service, and the Commission estimates that there are 1,000 or fewer small entity licensees in the Rural Radiotelephone Service that may be affected by the rules and policies adopted herein.

35. *Air-Ground Radiotelephone Service.* The Commission has not adopted a small business size standard specific to the Air-Ground Radiotelephone Service.⁹⁸ We will use SBA's small business size standard applicable to "Cellular and Other Wireless Telecommunications," *i.e.*, an entity employing no

⁹¹ 47 C.F.R. § 90.814(b)(1).

⁹² See *Service Rules for the 746-764 MHz Bands, and Revisions to Part 27 of the Commission's Rules*, WT Docket No. 99-168, Second Report and Order, 65 FR 17599 (Apr. 4, 2000).

⁹³ See generally Public Notice, "220 MHz Service Auction Closes," Report No. WT 98-36 (Oct. 23, 1998).

⁹⁴ Public Notice, "700 MHz Guard Band Auction Closes," DA 01-478 (rel. Feb. 22, 2001).

⁹⁵ The service is defined in section 22.99 of the Commission's Rules, 47 C.F.R. § 22.99.

⁹⁶ BETRS is defined in sections 22.757 and 22.759 of the Commission's Rules, 47 C.F.R. §§ 22.757 and 22.759.

⁹⁷ 13 C.F.R. § 121.201, NAICS code 517212.

⁹⁸ The service is defined in section 22.99 of the Commission's Rules, 47 C.F.R. § 22.99.

more than 1,500 persons.⁹⁹ There are approximately 100 licensees in the Air-Ground Radiotelephone Service, and we estimate that almost all of them qualify as small under the SBA small business size standard.

36. *Aviation and Marine Radio Services.* Small businesses in the aviation and marine radio services use a very high frequency (VHF) marine or aircraft radio and, as appropriate, an emergency position-indicating radio beacon (and/or radar) or an emergency locator transmitter. The Commission has not developed a small business size standard specifically applicable to these small businesses. For purposes of this analysis, the Commission uses the SBA small business size standard for the category "Cellular and Other Telecommunications," which is 1,500 or fewer employees.¹⁰⁰ Most applicants for recreational licenses are individuals. Approximately 581,000 ship station licensees and 131,000 aircraft station licensees operate domestically and are not subject to the radio carriage requirements of any statute or treaty. For purposes of our evaluations in this analysis, we estimate that there are up to approximately 712,000 licensees that are small businesses (or individuals) under the SBA standard. In addition, between December 3, 1998 and December 14, 1998, the Commission held an auction of 42 VHF Public Coast licenses in the 157.1875-157.4500 MHz (ship transmit) and 161.775-162.0125 MHz (coast transmit) bands. For purposes of the auction, the Commission defined a "small" business as an entity that, together with controlling interests and affiliates, has average gross revenues for the preceding three years not to exceed \$15 million dollars. In addition, a "very small" business is one that, together with controlling interests and affiliates, has average gross revenues for the preceding three years not to exceed \$3 million dollars.¹⁰¹ There are approximately 10,672 licensees in the Marine Coast Service, and the Commission estimates that almost all of them qualify as "small" businesses under the above special small business size standards.

37. *Offshore Radiotelephone Service.* This service operates on several UHF television broadcast channels that are not used for television broadcasting in the coastal areas of states bordering the Gulf of Mexico.¹⁰² There are presently approximately 55 licensees in this service. We are unable to estimate at this time the number of licensees that would qualify as small under the SBA's small business size standard for "Cellular and Other Wireless Telecommunications" services.¹⁰³ Under that SBA small business size standard, a business is small if it has 1,500 or fewer employees.¹⁰⁴

38. *39 GHz Service.* The Commission created a special small business size standard for 39 GHz licenses – an entity that has average gross revenues of \$40 million or less in the three previous calendar years.¹⁰⁵ An additional size standard for "very small business" is: an entity that, together with affiliates, has average gross revenues of not more than \$15 million for the preceding three calendar years.¹⁰⁶ The SBA has approved these small business size standards.¹⁰⁷ The auction of the 2,173 39 GHz licenses

⁹⁹ 13 C.F.R. § 121.201, NAICS code 517212.

¹⁰⁰ 13 C.F.R. § 121.201, NAICS code 517212.

¹⁰¹ *Amendment of the Commission's Rules Concerning Maritime Communications*, PR Docket No. 92-257, Third Report and Order and Memorandum Opinion and Order, 13 FCC Rcd 19853 (1998).

¹⁰² This service is governed by Subpart I of Part 22 of the Commission's rules. See 47 C.F.R. §§ 22.1001-22.1037.

¹⁰³ 13 C.F.R. § 121.201, NAICS code 517212.

¹⁰⁴ *Id.*

¹⁰⁵ See *Amendment of the Commission's Rules Regarding the 37.0-38.6 GHz and 38.6-40.0 GHz Bands*, ET Docket No. 95-183, Report and Order, 63 Fed. Reg. 6079 (Feb. 6, 1998).

¹⁰⁶ *Id.*

¹⁰⁷ See Letter to Kathleen O'Brien Ham, Chief, Auctions and Industry Analysis Division, Wireless Telecommunications Bureau, FCC, from Aida Alvarez, Administrator, SBA (Feb. 4, 1998).

began on April 12, 2000 and closed on May 8, 2000. The 18 bidders who claimed small business status won 849 licenses.

39. *Wireless Cable Systems.* Wireless cable systems use 2 GHz band frequencies of the Broadband Radio Service ("BRS"), formerly Multipoint Distribution Service ("MDS"),¹⁰⁸ and the Educational Broadband Service ("EBS"), formerly Instructional Television Fixed Service ("ITFS"),¹⁰⁹ to transmit video programming and provide broadband services to residential subscribers.¹¹⁰ These services were originally designed for the delivery of multichannel video programming, similar to that of traditional cable systems, but over the past several years licensees have focused their operations instead on providing two-way high-speed Internet access services.¹¹¹ We estimate that the number of wireless cable subscribers is approximately 100,000, as of March 2005. Local Multipoint Distribution Service ("LMDS") is a fixed broadband point-to-multipoint microwave service that provides for two-way video telecommunications.¹¹² As described below, the SBA small business size standard for the broad census category of Cable and Other Program Distribution, which consists of such entities generating \$13.5 million or less in annual receipts, appears applicable to MDS, ITFS and LMDS.¹¹³ Other standards also apply, as described.

40. The Commission has defined small MDS (now BRS) and LMDS entities in the context of Commission license auctions. In the 1996 MDS auction,¹¹⁴ the Commission defined a small business as an entity that had annual average gross revenues of less than \$40 million in the previous three calendar years.¹¹⁵ This definition of a small entity in the context of MDS auctions has been approved by the SBA.¹¹⁶ In the MDS auction, 67 bidders won 493 licenses. Of the 67 auction winners, 61 claimed status as a small business. At this time, the Commission estimates that of the 61 small business MDS auction winners, 48 remain small business licensees. In addition to the 48 small businesses that hold BTA authorizations, there are approximately 392 incumbent MDS licensees that have gross revenues that are

¹⁰⁸ MDS, also known as Multichannel Multipoint Distribution Service ("MMDS"), is regulated by Part 21 of the Commission's rules; see 47 C.F.R. Part 21, subpart K; and has been renamed the Broadband Radio Service (BRS); see *Amendment of Parts 1, 21, 73, 74 and 101 of the Commission's Rules to Facilitate the Provision of Fixed and Mobile Broadband Access, Educational and Other Advanced Services in the 2150-2162 and 2500-2690 MHz Bands; Part 1 of the Commission's Rules - Further Competitive Bidding Procedures; Amendment of Parts 21 and 74 to Enable Multipoint Distribution Service and the Instructional Television Fixed Service Amendment of Parts 21 and 74 to Engage in Fixed Two-Way Transmissions; Amendment of Parts 21 and 74 of the Commission's Rules With Regard to Licensing in the Multipoint Distribution Service and in the Instructional Television Fixed Service for the Gulf of Mexico*, 19 FCC Rcd 14165 (2004) (*MDS/ITFS Order*).

¹⁰⁹ ITFS systems are regulated by Part 74 of the Commission's rules; see 47 C.F.R. Part 74, subpart I. ITFS, an educational service, has been renamed the Educational Broadband Service (EBS); see *MDS/ITFS Order*, 19 FCC Rcd 14165. ITFS licensees, however, are permitted to lease spectrum for MDS operation.

¹¹⁰ See *Annual Assessment of the Status of Competition in the Market for the Delivery of Video Programming, Eleventh Annual Report*, 20 FCC Rcd 2507, 2565, para. 131 (2006) ("*2006 Cable Competition Report*").

¹¹¹ *Id.*

¹¹² See *Local Multipoint Distribution Service*, 12 FCC Rcd 12545 (1997).

¹¹³ 13 C.F.R. § 121.201, NAICS code 517510.

¹¹⁴ MDS Auction No. 6 began on November 13, 1995, and closed on March 28, 1996 (67 bidders won 493 licenses).

¹¹⁵ 47 C.F.R. § 21.961(b)(1).

¹¹⁶ See *ITFS Order*, 10 FCC Rcd at 9589.

not more than \$40 million and are thus considered small entities.¹¹⁷ MDS licensees and wireless cable operators that did not receive their licenses as a result of the MDS auction fall under the SBA small business size standard for Cable and Other Program Distribution. Information available to us indicates that there are approximately 850 of these licensees and operators that do not generate revenue in excess of \$13.5 million annually. Therefore, we estimate that there are approximately 850 small entity MDS (or BRS) providers, as defined by the SBA and the Commission's auction rules.

41. Educational institutions are included in this analysis as small entities; however, the Commission has not created a specific small business size standard for ITFS (now EBS).¹¹⁸ We estimate that there are currently 2,032 ITFS (or EBS) licensees, and all but 100 of the licenses are held by educational institutions. Thus, we estimate that at least 1,932 ITFS licensees are small entities.

42. In the 1998 and 1999 LMDS auctions,¹¹⁹ the Commission defined a small business as an entity that has annual average gross revenues of less than \$40 million in the previous three calendar years.¹²⁰ Moreover, the Commission added an additional classification for a "very small business," which was defined as an entity that had annual average gross revenues of less than \$15 million in the previous three calendar years.¹²¹ These definitions of "small business" and "very small business" in the context of the LMDS auctions have been approved by the SBA.¹²² In the first LMDS auction, 104 bidders won 864 licenses. Of the 104 auction winners, 93 claimed status as small or very small businesses. In the LMDS re-auction, 40 bidders won 161 licenses. Based on this information, we believe that the number of small LMDS licenses will include the 93 winning bidders in the first auction and the 40 winning bidders in the re-auction, for a total of 133 small entity LMDS providers as defined by the SBA and the Commission's auction rules.

43. *Local Multipoint Distribution Service.* Local Multipoint Distribution Service (LMDS) is a fixed broadband point-to-multipoint microwave service that provides for two-way video telecommunications.¹²³ The auction of the 1,030 Local Multipoint Distribution Service (LMDS) licenses began on February 18, 1998 and closed on March 25, 1998. The Commission established a small business size standard for LMDS licenses as an entity that has average gross revenues of less than \$40 million in the three previous calendar years.¹²⁴ An additional small business size standard for "very small business" was added as an entity that, together with its affiliates, has average gross revenues of not more than \$15 million for the preceding three calendar years.¹²⁵ The SBA has approved these small business

¹¹⁷ 47 U.S.C. § 309(j). Hundreds of stations were licensed to incumbent MDS licensees prior to implementation of Section 309(j) of the Communications Act of 1934, 47 U.S.C. § 309(j). For these pre-auction licenses, the applicable standard is SBA's small business size standards for "other telecommunications" (annual receipts of \$13.5 million or less). See 13 C.F.R. § 121.201, NAICS code 517910.

¹¹⁸ In addition, the term "small entity" under SBREFA applies to small organizations (nonprofits) and to small governmental jurisdictions (cities, counties, towns, townships, villages, school districts, and special districts with populations of less than 50,000). 5 U.S.C. §§ 601(4)-(6). We do not collect annual revenue data on ITFS licensees.

¹¹⁹ The Commission has held two LMDS auctions: Auction 17 and Auction 23. Auction No. 17, the first LMDS auction, began on February 18, 1998, and closed on March 25, 1998. (104 bidders won 864 licenses.) Auction No. 23, the LMDS re-auction, began on April 27, 1999, and closed on May 12, 1999. (40 bidders won 161 licenses.)

¹²⁰ See *LMDS Order*, 12 FCC Rcd at 12545.

¹²¹ *Id.*

¹²² See Letter to Daniel Phythyon, Chief, Wireless Telecommunications Bureau (FCC) from A. Alvarez, Administrator, SBA (January 6, 1998).

¹²³ See *Local Multipoint Distribution Service*, Second Report and Order, 12 FCC Rcd 12545 (1997).

¹²⁴ *Id.*

¹²⁵ See *id.*

size standards in the context of LMDS auctions.¹²⁶ There were 93 winning bidders that qualified as small entities in the LMDS auctions. A total of 93 small and very small business bidders won approximately 277 A Block licenses and 387 B Block licenses. On March 27, 1999, the Commission re-auctioned 161 licenses; there were 40 winning bidders. Based on this information, we conclude that the maximum number of small LMDS licensees consists of the 93 winning bidders in the first auction and the 40 winning bidders in the re-auction, for a total of 133 small entity LMDS providers.

44. *218-219 MHz Service.* The first auction of 218-219 MHz spectrum resulted in 170 entities winning licenses for 594 Metropolitan Statistical Area (MSA) licenses. Of the 594 licenses, 557 were won by entities qualifying as a small business. For that auction, the small business size standard was an entity that, together with its affiliates, has no more than a \$6 million net worth and, after federal income taxes (excluding any carry over losses), has no more than \$2 million in annual profits each year for the previous two years.¹²⁷ In the *218-219 MHz Report and Order and Memorandum Opinion and Order*, we established a small business size standard for a "small business" as an entity that, together with its affiliates and persons or entities that hold interests in such an entity and their affiliates, has average annual gross revenues not to exceed \$15 million for the preceding three years.¹²⁸ A "very small business" is defined as an entity that, together with its affiliates and persons or entities that hold interests in such an entity and its affiliates, has average annual gross revenues not to exceed \$3 million for the preceding three years.¹²⁹ These special small business size standards will be used, as appropriate, in future auctions of 218-219 MHz spectrum.

45. *24 GHz – Incumbent Licensees.* This analysis may affect incumbent licensees who were relocated to the 24 GHz band from the 18 GHz band, and applicants who wish to provide services in the 24 GHz band. The applicable SBA small business size standard is that of "Cellular and Other Wireless Telecommunications" companies. This category provides that such a company is small if it employs no more than 1,500 persons.¹³⁰ For the census category of Cellular and Other Wireless Telecommunications, Census Bureau data for 2002 show that there were 1,397 firms in this category that operated for the entire year.¹³¹ Of this total, 1,378 firms had employment of 999 or fewer employees, and 19 firms had employment of 1,000 employees or more.¹³² Thus, under this second category and size standard, the majority of firms can, again, be considered small. These broader census data notwithstanding, we believe that there are only two licensees in the 24 GHz band that were relocated from the 18 GHz band, Teligent¹³³ and TRW, Inc. It is our understanding that Teligent and its related companies have less than

¹²⁶ See Letter to Dan Phythyon, Chief, Wireless Telecommunications Bureau, FCC, from Aida Alvarez, Administrator, SBA (Jan. 6, 1998).

¹²⁷ *Implementation of Section 309(j) of the Communications Act – Competitive Bidding*, PP Docket No. 93-253, Fourth Report and Order, 59 Fed. Reg. 24947 (May 13, 1994).

¹²⁸ *Amendment of Part 95 of the Commission's Rules to Provide Regulatory Flexibility in the 218-219 MHz Service*, WT Docket No. 98-169, Report and Order and Memorandum Opinion and Order, 64 Fed. Reg. 59656 (Nov. 3, 1999).

¹²⁹ *Amendment of Part 95 of the Commission's Rules to Provide Regulatory Flexibility in the 218-219 MHz Service*, WT Docket No. 98-169, Report and Order and Memorandum Opinion and Order, 64 Fed. Reg. 59656 (Nov. 3, 1999).

¹³⁰ 13 C.F.R. § 121.201, NAICS code 513322 (changed to 517212 in October 2002).

¹³¹ U.S. Census Bureau, 2002 Economic Census, Subject Series: "Information," Table 5, Employment Size of Firms for the United States: 2002, NAICS code 517212 (issued November 2005).

¹³² *Id.* The census data do not provide a more precise estimate of the number of firms that have employment of 1,500 or fewer employees; the largest category provided is firms with "1000 employees or more."

¹³³ Teligent acquired the DEMS licenses of FirstMark, the only licensee other than TRW in the 24 GHz band whose license has been modified to require relocation to the 24 GHz band.

1,500 employees, though this may change in the future. TRW is not a small entity. Thus, only one incumbent licensee in the 24 GHz band is a small business entity.

46. *24 GHz – Future Licensees.* With respect to new applicants in the 24 GHz band, the small business size standard for “small business” is an entity that, together with controlling interests and affiliates, has average annual gross revenues for the three preceding years not in excess of \$15 million.¹³⁴ “Very small business” in the 24 GHz band is an entity that, together with controlling interests and affiliates, has average gross revenues not exceeding \$3 million for the preceding three years.¹³⁵ The SBA has approved these small business size standards.¹³⁶ These size standards will apply to the future auction, if held.

2. Cable and OVS Operators

47. *Cable and Other Program Distribution.* The Census Bureau defines this category as follows: “This industry comprises establishments primarily engaged as third-party distribution systems for broadcast programming. The establishments of this industry deliver visual, aural, or textual programming received from cable networks, local television stations, or radio networks to consumers via cable or direct-to-home satellite systems on a subscription or fee basis. These establishments do not generally originate programming material.”¹³⁷ The SBA has developed a small business size standard for Cable and Other Program Distribution, which is: all such firms having \$13.5 million or less in annual receipts.¹³⁸ According to Census Bureau data for 2002, there were a total of 1,191 firms in this category that operated for the entire year.¹³⁹ Of this total, 1,087 firms had annual receipts of under \$10 million, and 43 firms had receipts of \$10 million or more but less than \$25 million.¹⁴⁰ Thus, under this size standard, the majority of firms can be considered small.

48. *Cable Companies and Systems.* The Commission has also developed its own small business size standards, for the purpose of cable rate regulation. Under the Commission’s rules, a “small cable company” is one serving 400,000 or fewer subscribers, nationwide.¹⁴¹ Industry data indicate that, of 1,076 cable operators nationwide, all but eleven are small under this size standard.¹⁴² In addition, under the Commission’s rules, a “small system” is a cable system serving 15,000 or fewer subscribers.¹⁴³

¹³⁴ *Amendments to Parts 1,2, 87 and 101 of the Commission’s Rules to License Fixed Services at 24 GHz*, Report and Order, 15 FCC Rcd 16934, 16967 (2000); see also 47 C.F.R. § 101.538(a)(2).

¹³⁵ *Amendments to Parts 1,2, 87 and 101 of the Commission’s Rules to License Fixed Services at 24 GHz*, Report and Order, 15 FCC Rcd 16934, 16967 (2000); see also 47 C.F.R. § 101.538(a)(1).

¹³⁶ See Letter to Margaret W. Wiener, Deputy Chief, Auctions and Industry Analysis Division, Wireless Telecommunications Bureau, FCC, from Gary M. Jackson, Assistant Administrator, SBA (July 28, 2000).

¹³⁷ U.S. Census Bureau, 2002 NAICS Definitions, “517510 Cable and Other Program Distribution”; <http://www.census.gov/epcd/naics02/def/NDEF517.HTM>.

¹³⁸ 13 C.F.R. § 121.201, NAICS code 517510.

¹³⁹ U.S. Census Bureau, 2002 Economic Census, Subject Series: Information, Table 4, Receipts Size of Firms for the United States: 2002, NAICS code 517510 (issued November 2005).

¹⁴⁰ *Id.* An additional 61 firms had annual receipts of \$25 million or more.

¹⁴¹ 47 C.F.R. § 76.901(e). The Commission determined that this size standard equates approximately to a size standard of \$100 million or less in annual revenues. *Implementation of Sections of the 1992 Cable Act: Rate Regulation*, Sixth Report and Order and Eleventh Order on Reconsideration, 10 FCC Rcd 7393, 7408 (1995).

¹⁴² These data are derived from: R.R. Bowker, *Broadcasting & Cable Yearbook 2006*, “Top 25 Cable/Satellite Operators,” pages A-8 & C-2 (data current as of June 30, 2005); Warren Communications News, *Television & Cable Factbook 2006*, “Ownership of Cable Systems in the United States,” pages D-1805 to D-1857.

¹⁴³ 47 C.F.R. § 76.901(c).