REPORT AND ORDER AND FURTHER NOTICE OF PROPOSED RULE MAKING

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By the Commission: Commissioner Tristani issuing a statement.

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I. INTRODUCTION

1. In this Report and Order, we adopt rules and policies that provide incentives for wireless telecommunications carriers to serve individuals living on tribal lands.1 Pursuant to our authority under Section 309(j) of the Communications Act of 1934, as amended (Act),2 we will award bidding credits in future auctions to winning bidders who use licenses to deploy facilities and provide service to federally-recognized tribal areas that are either unserved by any telecommunications carrier or that have a telephone service penetration rate below 70 percent.3

2. In addition to implementing bidding credits as described above, we also seek comment below in a Further Notice of Proposed Rulemaking on other possible uses of bidding credits to encourage deployment of wireless services to tribal communities. Specifically, we seek comment on whether to: (1) award bidding credits to entities that commit to serve non-tribal areas and/or tribal areas with penetration levels above 70 percent, but significantly below the national penetration average; (2) expand the bidding credit program by awarding credits for use in future auctions to licensees in already-established wireless services who deploy facilities to unserved tribal communities; and (3) make credits available to licensees that enter into partitioning agreements with tribal authorities that allow the tribal government to provide service, either directly or through negotiation with a third-party carrier.

3. The Report and Order also addresses issues raised in the Notice of Proposed Rulemaking (Notice) in this proceeding concerning possible changes to technical and operational rules to promote deployment of wireless services on tribal lands.4 Although we generally conclude that our technical and operational rules do not require across-the-board changes to further these initiatives, we remain committed to working with tribal authorities and associated carriers in instances where waivers or other relief from regulatory requirements will assist their efforts.

4. In a companion order adopted today in the Universal Service docket, we have established universal service low income support mechanisms to increase the availability of all telecommunications services, both wireline and wireless, in tribal areas.5 We regard the actions taken in these two proceedings as complementary, and anticipate that the combination of regulatory incentives and low income support mechanisms will significantly speed the deployment of service to tribal communities. In

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1 In this Report and Order, the term “tribal lands” shall mean “reservation” as defined by the Bureau Of Indian Affairs (BIA):
"Reservation" means any federally recognized Indian tribe's reservation, Pueblo, or Colony, including former reservations in Oklahoma, Alaska Native regions established pursuant to the Alaska Native Claims Settlement Act (85 Stat. 688), and Indian allotments.
addition, we have adopted a policy statement establishing a government-to-government relationship with Indian tribes that should supplement the initiatives taken in these two proceedings.  

II. BACKGROUND

5. The Commission released the Notice in this proceeding on August 18, 1999. Recognizing the unusually low telephone service penetration rates on tribal lands, we sought comment on the potential of various wireless technologies to provide service to unserved tribal lands and those with low penetration rates. We noted that many tribal lands, particularly in the western United States, are geographically isolated, and that obtaining the lowest cost for providing basic telephone service to such areas may require use of a terrestrial wireless technology, a satellite technology, or a combination thereof.

6. The Notice sought comment on a number of potential regulatory initiatives to encourage existing wireless carriers to serve tribal lands, and the licensing of new terrestrial wireless and satellite entrants to provide service to tribal lands. These included: (1) relaxing antenna height and transmitter power limitations to facilitate system deployment in tribal lands; (2) establishing flexible buildout requirements for carriers providing service to tribal lands; (3) permitting licensees to expand coverage into adjacent licensing areas in order to provide full coverage to tribal communities; (4) allowing licensees in certain private (non-CMRS) services to provide commercial service to tribal lands; (5) lifting restrictions on transfer of wireless licenses awarded to designated entities (DEs) for carriers providing service to tribal lands; and (6) modifying regulations to promote the deployment of satellite technology to tribal lands. In general, we proposed that any grant of additional flexibility to carriers along these lines should be conditioned on the carrier having entered into a binding agreement with the relevant tribal authority to provide service.

7. In addition, the Notice sought comment on the potential for licensing new terrestrial wireless and satellite entrants to provide service to tribal lands. Specifically, we sought comment on: (1) using unallocated or unlicensed spectrum bands to serve the needs of individuals living on tribal lands; (2) licensing in spectrum bands allocated to other services; (3) drawing geographic boundaries for spectrum licenses that recognize the service needs of individuals living on tribal lands; (4) adopting technical/operational rules for new services; (5) using auction bidding credits as an incentive to serve tribal lands; and (6) adopting satellite licensing policies that could increase access to the telecommunications services on tribal lands. We also sought comment on applying the proposals enumerated above to non-tribal areas with low telephone penetration rates. In response to the Notice, the Commission received 45 comments, 19 reply comments and a number of ex parte submissions.

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7 Notice ¶ 4. Indian tribes live in some of the most isolated areas of the United States, locations that telecommunications carriers find especially expensive to serve. See U.S. Congress, Office of Technology Assessment, Telecommunications Technology and Native Americans: Opportunities and Challenges at 20 (1995).
8 Notice ¶ 16.
9 Id. ¶¶ 43-58.
10 Id. ¶ 1.
11 Comments, replies and ex parte submissions are listed in Appendix A.
III. DISCUSSION

A. Overview

8. The record in this proceeding demonstrates that there is a substantial need for specific incentives targeted to the deployment of service on tribal lands. By virtually any measure, communities on tribal lands have historically had less access to telecommunications services than any other segment of the population. According to the 1990 Census, 23 of the 48 largest tribal reservations (those with 500 or more households) had telephone penetration rates below 60 percent, and 16 of these reservations had penetration rates below 50 percent. Penetration rates at several of the largest reservations are lower still: 18.4 percent on the Navajo Reservation and Trust Lands in Arizona, New Mexico, and Utah and 22.2 percent on the Gila River Reservation in Arizona. Many smaller reservations also experience low telephone penetration rates. According to the 1990 Census, the Alamo Navajo Reservation, with 256 households, had a penetration rate of 33.6 percent, while the Torres Martinez Reservation, with 51 households, had a 49 percent rate. By contrast, the average telephone penetration rate for the nation as a whole is 94 percent. Moreover, tribal communities have less access to communications services than low-income communities generally: in 1998, the poorest U.S. households (those with incomes below $5,000) had a penetration rate of 78.7 percent in 1998, while the 48 largest reservations, including households at all income levels, had a 46.6 percent penetration rate.

9. Telephone service is a necessity in today’s world. The lack of basic telecommunications services puts affected tribal communities at a tremendous social and economic disadvantage. Individuals with serious health problems are subject to significant medical risks if they lack ready access to telephone service. Individuals seeking jobs cannot provide prospective employers telephone numbers through which they can be reached, nor can they make follow-up calls quickly and easily. Parents at home without a phone cannot be contacted by schools in emergencies. In addition, communities without telephone service often lack access to the Internet, which is fast becoming one of the most important tools not only for communication, but also to obtain invaluable educational, medical, political, and financial information.

10. Various factors contribute to the low penetration rates on tribal lands. Chief among these factors are geographic remoteness, sparse population clusters, low income levels and high unemployment rates. Moreover, tribal governments often lack the economic resources of the states to subsidize the provision of telephone service to economically disadvantaged areas with revenues derived from more affluent communities and business centers. Because access to basic telecommunications is essential to

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13 *Id.*

14 *Id.* See New Mexico State University Study at 17, Table 2.6.

15 Telephone Penetration Report, Table 1.


18 In 1990, the unemployment rate among individuals living on tribal lands was approximately 25.6 percent. 1990 Census, CP-2-1 at Tables 175 & 176.
effective participation in today’s rapidly changing economy, we have a duty to do all that we can to ensure that access to services on tribal lands is increased well beyond current levels.

11. Because many tribal lands, particularly those in the western United States, are geographically isolated, obtaining the lowest cost for providing basic telephone service may involve the use of a terrestrial wireless technology, a satellite technology, or a combination of these technologies. Terrestrial wireless technology includes both mobile services, such as cellular and Personal Communication Service (PCS), and fixed “wireless local loop” services (WLL). A hybrid terrestrial/satellite wireless model would involve a satellite providing the communications link between an isolated community and the nation’s public switched telephone network for long distance telephony, with a terrestrial wireless loop used to link the individual residents and businesses in a particular community for local telephony. Alternatively, satellites can be used alone for long distance and local telephony through the use of handheld phones that can communicate directly with the satellites.

12. Western Wireless has submitted data to the Commission suggesting that the forward-looking long-run cost of cellular service is less than the comparable cost for wireline technology for a number of wire centers, including those in rural areas of Montana and North Dakota. Terrestrial wireless technology also has the potential to extend service to remote tribal lands through fixed wireless systems that provide WLL. Fixed wireless operators state that their networks have a significantly lower cost structure than wireline systems for two primary reasons. First, aside from the expenses associated with tower siting, wireless networks are free of many of the installation and maintenance costs associated with extending wireline networks to widely dispersed populations over long distances. Second, unlike a wireline network in which an entire market must be wired before initiating service, the capital expenditures of a wireless network can be incrementally incurred as more customers are added. Thus, WLL could offer cost savings for the provision of services to tribal lands.

13. Satellite technology also represents a potentially cost-effective means to serve communities with low penetration rates, especially those in remote areas. For example, satellites may offer cost advantages over wireline access in rural and remote areas, where sparsely populated areas cannot provide the economies of scale to justify the deployment costs of wireline networks. Satellites have large coverage areas and, in many cases, can reach an entire nation, thereby spreading the costs of deployment across a number of communities. Satellites also provide communications opportunities for communities in geographically isolated areas, such as mountainous regions and deep valleys, where rugged and impassable terrain may make service via terrestrial wireless or wireline telephony economically impractical. Satellites can offer a variety of telecommunications services, from basic low-bandwidth services such as data messaging services and basic telephone service to more advanced, higher bandwidth services, such as voice dispatch, video, and high speed Internet access.

14. In this proceeding, we adopt initiatives to promote the deployment of wireless telecommunications services to tribal lands with little or no access to telecommunications services. We recognize that there are also non-tribal areas that have significant needs for telecommunications service. However, we believe our initial focus should be on incentives that target development to tribal lands.

20 See, e.g., the Dandin Group Comments at ii.
22 Id.
because these are the areas where the documented lack of service is most severe. As we gain experience with the initiatives we adopt here, we may consider extending their use to other areas as well.

**B. Bidding Credits**

15. In the Notice, we tentatively determined that bidding credits could be used as an incentive for auction winners to deploy wireless services to tribal lands and other unserved areas. We sought comment on the possibility of awarding bidding credits to any entity indicating that it would provide service to tribal lands and other unserved areas located in markets where it is the winning bidder, and the appropriate credit amount. We also sought comment on whether we should tie bidding credits for service to tribal lands or other unserved areas to a binding commitment by the winning bidder to (1) spend the credit amount on infrastructure, and (2) ensure that service is provided. Further, we asked whether a bidding credit conditioned on future investment in a tribal land or unserved area should be applied for and awarded at the long form stage, and whether winning bidders should be required to submit proof of a tribal agreement and/or proof of financial and technical arrangements as a condition for obtaining the credit. Finally, we sought comment on what measures would be necessary to ensure that a licensee has met the conditions that attach to the bidding credit and what consequences should ensue if a licensee fails to satisfy the required conditions.

1. **Overview**

16. We conclude that properly targeted bidding credits will encourage participation in auctions by carriers who are in a position to provide service to tribal lands, and will help to mitigate the economic risk associated with this type of service. Most parties commenting on the issue support the view that bidding credits could provide a significant incentive to deploy wireless services to tribal lands. Although Motorola argues that bidding credits will not be sufficient to compensate carriers for the underlying economic difficulties of serving, high-cost, low-income areas, we find that they can be an important tool in achieving our goal, particularly when combined with other measures, including those being adopted in the Universal Service docket. Therefore, we find that establishing bidding credits for carriers, regardless of size, who agree to extend coverage to tribal areas is in the public interest.

17. We also reject RTG’s argument that bidding credits will result in abuse by auction participants and will require significant regulatory oversight. The specific compliance measures we adopt in this proceeding, which are discussed in detail below, should minimize abuse. Moreover, as discussed below, a key element of our bidding credit mechanism is that to obtain the credit, a carrier must file a certification, executed by a federally-recognized tribal government, that the tribal government will allow the carrier to deploy wireless facilities in the tribal territory. We believe that the tribal governments are uniquely situated to monitor the deployment of service on their lands and ensure that carriers who obtain credits meet the requirements of the program. Although the Communications Act vests the

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23 Notice ¶ 21.
24 Id.
25 U.S. SBA Comments at 2-3; Salt River Pima-Maricopa Comments at 17; Titan Wireless Comments at 6; NTCA Comments at 12; Dr. Joseph Gitlin et al. Comments at 4; and Carl Artman Comments at 7.
26 Motorola et al. Comments at 8.
27 RTG Comments at 9.
28 We define “federally-recognized tribal government” as those Indian entities eligible to receive services from the Department of Interior, Bureau of Indian Affairs. See Indian Entities Recognized and Eligible to Receive Services from the United States Bureau of Indian Affairs, 65 Fed. Reg. 13298 (March 13, 2000).
Commission with exclusive jurisdiction over the management of spectrum (except spectrum allocated to the Federal government) and the licensing of wireless carriers, Indian tribes retain important sovereign powers over their territory under the plenary power vested in Congress by the U.S. Constitution. We have structured our rules to enable the tribes to be active participants in the bidding credit program because they are in the best position to negotiate terms and conditions with the carriers and to ensure that carriers will meet their commitments to deliver service to the tribal areas with the greatest need.

2. Legal Authority

18. As explained below, we find that the objectives and requirements of Section 309(j) of the Act, which the Commission must consider in designing competitive bidding systems, authorize the Commission to grant bidding credits targeted specifically to entities that commit to bringing much needed wireless telecommunications services to tribal lands. Section 309(j)(3) directs the Commission to design bidding systems that promote the objectives of Section 1 of the Act, which requires the Commission to ensure the rapid and efficient deployment of wire and radio communications “to all the people of the United States.” The bidding credits that we adopt herein further this essential purpose of the Act by promoting the deployment of service on tribal lands, which have some of the lowest U.S. telephone service penetration rates. In addition, by fostering the provision of service to such areas, which are often rural, the bidding credits further the objective of Section 309(j)(3)(A) to ensure “the development and rapid deployment of new technologies, products, and services for the benefit of the public, including those residing in rural areas . . . .” We also further the objective of Section 309(j)(3)(D) of promoting “efficient and intensive use of the electromagnetic spectrum,” because such bidding credits will encourage carriers to provide service on clearly underutilized spectrum on tribal lands. We find that the congressional objectives, noted above, will be served by the Commission awarding bidding credits designed to ensure that individuals residing on tribal lands are afforded access to wireless services. This is especially so in light of the substantial number of individuals residing on tribal lands that lack access to even basic communications services, let alone more advanced services such as PCS.

19. Section 309(j)(4) directs the Commission to prescribe regulations to further the objectives enumerated in Section 309(j)(3). Congress intended that Section 309(j)(4) would provide the Commission “flexibility to utilize any combination of techniques that would serve the public interest.”

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31 See also 47 U.S.C. § 154(i) (authorizing the Commission to "perform any and all acts, make such rules and regulations, and issue such orders, not inconsistent with this Act, as may be necessary in the execution of its functions") and 47 U.S.C. § 303(r) (authorizing the Commission to "[m]ake such rules and regulations and prescribe such restrictions and conditions, not inconsistent with law, as may be necessary to carry out the provisions of this Act").


33 Id. § 309(j)(3)(A).

34 Id. § 309(j)(3)(D).

We find that targeted bidding credits will serve the public interest because they will encourage participation in auctions by those businesses, both tribal and non-tribal, that are most likely to be interested in and capable of serving tribal lands. We note that Section 309(j)(4)(D) provides that the Commission may award bidding preferences to ensure that small businesses, rural telephone companies, and businesses owned by members of minority groups and women participate in spectrum auctions. There is no indication in Section 309(j)(4)(D) or in its legislative history, however, that the Commission’s authority to award bidding preferences is limited to such entities. To the contrary, Section 309(j)(4) provides examples of the mechanisms that the Commission may employ in serving the key objectives enumerated in Section 309(j)(3).

20. Further, we find that our mandate set forth in Section 706(A) of the Act, to “encourage the deployment on a reasonable and timely basis of advanced telecommunications capability to all Americans . . . by utilizing . . . regulating methods that remove barriers to infrastructure investment,”36 will be served by bidding credits designed to remove or reduce economic barriers to infrastructure investment on tribal lands. Our finding is confirmed by the legislative history of this provision, which provides that this mandate may be met by “ provid[ing] the proper incentives for infrastructure investment.”37

21. Finally, we note that Section 309(j)(4)(B) of the Act directs the Commission to “include performance requirements, such as appropriate deadlines and penalties for performance failures, to ensure prompt delivery of service to rural areas . . . and to promote investment in and rapid deployment of new technologies and services,”38 and provides the Commission authority to condition the bidding credits on certain performance requirements that we adopt below.

3. Qualifications to Obtain Bidding Credit

22. This bidding credit is available to any winning bidder in a future auction that commits to deploy facilities to serve qualifying tribal lands. We define “qualifying tribal land” as a federally-recognized tribal area that has a telephone penetration rate equal to or less than 70 percent, which is equivalent to 75 percent of the average nationwide telephone penetration rate (94 percent). We agree with NTCA that limiting the bidding credit in this manner will ensure that credits are targeted to those tribal communities with the greatest need for access to telecommunications service.39 Further, we conclude that targeting the initiatives adopted herein to these communities is most consistent with the public interest. We recognize that there are non-tribal areas with penetration rates below the national average. However, penetration rates for most non-tribal lands are significantly higher than those for most tribal lands, and virtually all non-tribal areas have a telephone penetration rate of 70 percent or higher.40 Therefore, we conclude that it is appropriate to limit our bidding credit program at this time to qualifying tribal lands. We seek comment, however, in the Further Notice on the possibility of expanding bidding

38 Id., § 309(j)(4)(B).
39 NTCA Comments at 11-12.
40 For example, in the two states with the lowest average statewide penetration rates, New Mexico (86.7%) and Mississippi (87.2%), only two of the states’ 115 counties, McKinley County, New Mexico (which is largely comprised of tribal land) and Tunica County, Mississippi, had penetration rates below 70%. See 1990 U.S. Census Data, Database C90STF3A State—County, Tenure by Telephone in Housing Unit <http.venus.census.gov/cdrom/100kup/959797808 and New Mexico, 1959881091>. 
credits to cover both tribal and non-tribal areas with higher penetration rates.41

4. Calculation Method and Credit Amount

23. Commenters differ on the appropriate method for calculating the bidding credit. The Small Business Administration (SBA) supports tying the credit amount to the applicant’s size and commitment to providing service.42 Salt River Pima-Maricopa (Salt River) supports basing the credit amount on the pro-rata share of the unserved population as compared to the population of the entire service area and, further, tying it to infrastructure investment.43 Other commenters, however, oppose tying bidding credits to infrastructure investment. RTG argues this approach would not significantly alter the economic realities of providing service to tribal areas.44 Motorola contends that it would result in the deployment of service only to heavily populated tribal lands.45 Titan Wireless avers it would constrain the use of funds and instead recommends that the bidding credit be a discount equal to the highest credit available to designated entities in the relevant auction.46

24. We agree with commenters that the bidding credit amount should be tied to the level of infrastructure investment in qualifying tribal lands.47 Tying the credit to infrastructure investment provides a correlation between the financial commitment made by the carrier to the deployment of facilities and the financial benefit derived in the auction. We also conclude that the approximate coverage area of a transmitter and size of the tribal area should be considered in determining the credit amount, because the cost of deploying wireless infrastructure is tied to the amount of area covered by the system.

25. Accordingly, based on the foregoing factors, we adopt the following methodology for calculating the credit amount. A winning bidder may receive a $300,000 credit for up to the first 200 square miles (518 square kilometers) of qualifying tribal land within its license area. In instances where qualifying tribal lands within a license area exceed 200 square miles (518 kilometers), a winning bidder may receive an additional $1500 per square mile (2.59 square kilometer), or $300,000 for each additional 200 square miles (518 square kilometers).48 All credits will be subject to a maximum limit based on the gross bid amount for the license for which the credit is sought. Where the gross bid amount is $1 million or less, the cap will be 50 percent of the gross bid. Where the gross bid amount is greater than $1 million and equal to or less than $2 million, the cap will be $500,000. Finally, where the gross bid amount exceeds $2 million, the cap will be 25 percent of the gross bid.49

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41 See Section IV.A., infra.
42 U.S. SBA Comments at 2-3.
44 RTG Comments at 9.
45 Motorola Comments at 8
46 Titan Wireless Comments at 6.
48 For example, if a winning bidder has a total of 300 square miles of qualifying tribal lands within its license area, it may receive a maximum tribal land bidding credit of $450,000 ($300,000 + ($1500 *100)).
49 For example, if a winning bidder has a total of 300 square miles of qualifying tribal land within its license area, and the gross bid amount for its license is $800,000, the winning bidder could receive a maximum credit of $400,000 (50% cap triggered). However, if the gross bid amount for the license is $1.5 million, the winning bidder could receive a credit of $450,000 ($500,000 cap is not triggered).
26. The $300,000 figure represents our rough estimate of the approximate infrastructure costs (including site acquisition, tower construction, and equipment costs) for a representative tower facility.\textsuperscript{50} We recognize that there may be instances where such costs are more or less than $300,000, particularly due to differences in tower height, topography and the wireless technology employed. We find, however, that for purposes of administrative simplicity, a single cost figure representing the approximate cost of a tower facility should be used as a proxy for infrastructure costs, and conclude that $300,000 is a reasonable estimate. The 200 square miles figure represents a rough estimate of the coverage area of a representative tower facility in a flat, rural area. We conclude that a tower facility operating at permissible power levels under our rules\textsuperscript{51} could cover 200 or more square miles in a relatively flat, sparsely populated area. We recognize that the coverage could vary significantly depending on antenna height, population density and topography. Nonetheless, we find that 200 square miles (518 square kilometers) is a reasonable estimate of a tower’s coverage area in a sparsely populated, relatively flat rural area.

27. We acknowledge that our bidding credit formula is inexact, and that carriers’ actual infrastructure costs may be higher or lower than the credit amount. We find, however, that a more precise formula that attempts to calculate infrastructure costs and coverage on a case-by-case basis would prove overly burdensome to the Commission and carriers alike. Our formula represents a simple, objective, and reliable method of calculating the credit. It allows carriers to recoup a significant portion of their infrastructure costs for serving tribal areas, prevents windfalls, and ensures administrative simplicity. Further, we believe the credit provides a financial incentive for carriers to deploy wireless facilities more efficiently. We reject Salt River’s proposal to base the credit on population coverage because, in most cases, the tribal population in comparison to the total population of the license area is very small. Thus a credit amount based on the pro-rata share of the unserved population compared to the total service area would be negligible, which would minimize the incentive to serve tribal areas.

28. In addition, we find that imposing a maximum limit on the credits a winning bidder may receive will ensure that bidding credits under this program will not rise to a level that causes distortion of the market mechanisms on which licensing by auction is based. The caps we impose are based on the gross amount of the license for which the credit is sought. For license areas where the gross bid amount exceeds $2 million, we impose a 25 percent cap, which will permit bidders to recover a substantial portion of their infrastructure costs, and provide a considerable incentive to serve tribal lands. We impose a higher cap, 50 percent, for license areas where the gross bid amount is $1 million or less. We are concerned that a 25 percent cap, in these instances, would significantly limit the infrastructure costs a winning bidder could recover, thus reducing the incentive to serve tribal areas in lesser-value markets. We find that a 50 percent cap would allow for a meaningful recovery of infrastructure costs, while precluding a level of recovery that would exceed or approximate the value of the license. For license areas where the gross bid is greater than $1 million and equal to or less than $2 million, we impose a cap of $500,000, which in effect produces a sliding percentage cap from 50 percent to 25 percent.

29. Pursuant to Section 1.925 of our rules, we will entertain waiver requests for a higher credit where an applicant demonstrates that its infrastructure costs exceed the available credit under the

\textsuperscript{50} Industry reports indicate that a 200-foot tower could cost $262,000 to construct. This figure includes land, zoning, utility, tower construction, personnel, enclosure construction, administrative and insurance costs. See Fryer’s Market Analysis ‘99, at 32 (1999). In addition, we estimate that average equipment costs, including receiving, transmitting, and locating antennas, coaxial cable and a microwave dish, would approximate $40,000.

\textsuperscript{51} See, for example, our effective radiated power limits for cellular, 47 C.F.R. §22.913, and power limits for broadband PCS, 47 C.F.R. §24.232.
Such waiver requests, however, will be subject to the percentage cap on credits described above, and we will not grant waivers in excess of the applicable cap. Applicants seeking such relief must also make a detailed showing of their projected infrastructure costs, including a certification by an independent auditor that the estimated costs are reasonable. Pending the disposition of the waiver request, we will not grant a license for any market for which a waiver is sought. Moreover, applicants granted the requested relief must comply with additional certification requirements, as set forth in Section III.B.6.

30. Applicants who qualify for the tribal lands bidding credit may obtain this credit in addition to any other generally available bidding credit for which they are eligible. For example, small business applicants who also qualify for the tribal lands bidding credit may receive both a small business bidding credit and a tribal lands bidding credit for a particular market. Thus, in some instances, the cumulative bidding credit available to a small business winning bidder in a particular market may exceed 50 percent.

5. Application Procedures To Obtain Bidding Credit

31. Tribal lands bidding credits will be awarded in accordance with the following procedures. First, a winning bidder that wishes to obtain the credit in a particular market must indicate on its long form application (Form 601) that it intends to serve qualifying tribal lands in that market. We will not allow bidders to provide such notice of intent at the short-form stage, because tribal authorities likely will be reluctant to negotiate with carriers until the winning bidder for the market is identified. The bidding credit will not affect the amount of the applicant’s down payment, which will continue to be based on the net high bid amount (gross bid less any small business bidding credit). After the down payment is made, the tribal land bidding credit will be subtracted from the net high bid amount to calculate a final net bid amount.

32. Following the long form filing date, the applicant will have 90 calendar days to amend its long-form application and provide certification from the tribal government(s) that: (1) it will allow the bidder to site facilities and provide service on its tribal land(s), in accordance with our rules; (2) it has not and will not enter into an exclusive contract with the applicant precluding entry by other carriers, and will not unreasonably discriminate against any carrier; and (3) its tribal land is a qualifying tribal land as defined in our rules, i.e., areas that have a telephone penetration rate at or below 70 percent. This certification requirement does not preclude tribal governments from negotiating additional reasonable terms and conditions with carriers, but rather establishes a commitment by the tribal government to allow multiple entry and to ensure that carriers meet their commitments to deliver service to the tribal area. In addition, at the conclusion of the 90-day period, the applicant must amend its long-form application to file a certification that it will comply with the bidding credit buildout requirements described in Section III.B.6, and that it will consult with the tribal government regarding the siting of facilities and deployment of service on the tribal land.

33. Upon Commission receipt of these certifications, the bidding credit will be awarded and the applicant will make payment of the final net adjusted bid amount. The final net adjusted bid amount will be calculated as follows: (1) For applicants who are not entitled to small business bidding credits, the final net adjusted bid amount will be the gross high bid, less the tribal land bidding credit; (2) For applicants who are entitled to a small business bidding credit, the final net adjusted bid amount will be

52 47 C.F.R. § 1.925.

53 This does not preclude bidders from entering into discussions with tribal authorities prior to the commencement of the auction. Such discussions are also permissible during the auction unless the parties are eligible to bid against one another and have not disclosed a pre-auction agreement in accordance with the auction anti-collusion rules. See 47 C.F.R. § 1.2105(c).
the net high bid (i.e. the gross high bid less the small business bidding credit) less the tribal land bidding credit.\textsuperscript{54} If the required certifications are not provided at the conclusion of the 90-day period, the bidding credit will be cancelled and the applicant will be required to pay the balance on the original gross bid amount (or net high bid amount) to obtain the license.

6. Performance Requirements

34. Only a few entities commented on measures we should take to ensure that applicants awarded bidding credits actually deploy facilities and provide service to tribal lands. Salt River suggests that we (1) require service terms and conditions to be included in the agreement between the tribal government and the applicant, and (2) condition the license on the bidder complying with the terms and conditions in the agreement. Licensees that fail to comply with the terms of the agreement, Salt River argues, should forfeit the credit pursuant to our unjust enrichment rules, and the portion of the license area covering the tribal lands should be involuntarily partitioned to the tribal government.\textsuperscript{55} Titan Wireless suggests that imposing a buildout schedule is the best way to ensure deployment of service to tribal lands, and recommends that we use the same mechanism and criteria we employ in determining whether a DE has provided sufficient service in the case of DE-to-non-DE license transfers.\textsuperscript{56}

35. We agree with commenters that performance requirements are necessary to ensure that carriers satisfy the conditions attached to the bidding credit. We also note that Section 309(j)(4)(B) of the Act directs the Commission to “include performance requirements, such as appropriate deadlines and penalties for performance failures, to ensure prompt delivery of service to rural areas . . . and to promote investment in and rapid deployment of new technologies and services.”\textsuperscript{57} Therefore, we will condition award of the credit on the licensee constructing and operating its system to cover 75 percent of the population\textsuperscript{58} of the qualifying tribal land within three years of the grant of the license.\textsuperscript{59} We recognize that this buildout requirement is more stringent than those imposed under current rules. However, the requirement is imposed only on carriers that choose to obtain the bidding credit. We find that the public interest will be served by this accelerated buildout requirement for tribal lands, because it ensures that:

\textsuperscript{54} The following examples demonstrate how the tribal land bidding credits are calculated and applied. In both instances, assume the gross high bid at the auction was $3 million and that the applicant was granted a 25% tribal land bidding credit. Example 1: Applicant is not entitled to a small business bidding credit. The down payment due after the close of the auction would be $600,000 (20% of the $3 million gross high bid.) The final net adjusted bid amount payment, prior to the application of the tribal land bidding credit, would be $2,400,000. The actual final net adjusted bid payment is $1,650,000 calculated as follows: the gross high bid of $3 million, less the down payment of $600,000 and less the tribal bidding credit of $750,000 (25% times the gross high bid of $3 million). Example 2: Applicant is entitled to a small business bidding credit of 25% and a tribal land bidding credit of 25%. The gross high bid is $3 million and the net high bid after the 25% small business bidding credit is $2,250,000. The down payment due after the close of the auction is $450,000 (20% of the $2,250,000 net high bid.) The final net adjusted bid amount, prior to the application of the tribal land bidding credit, would be $1,800,000. The actual final net adjusted bid amount is $1,050,000 calculated as follows: the net high bid of $2,250,000, less the down payment of $450,000 and less the tribal bidding credit of $750,000 (25% times the gross high bid of $3 million).

\textsuperscript{55} Salt River Pima-Maricopa Comments at 18.

\textsuperscript{56} Titan Wireless Comments at 7.


\textsuperscript{58} Population figures should be based on the most recent available United States Census Data.

\textsuperscript{59} We note that tribal authorities may negotiate with licensees for a higher coverage requirement and/or a more expedited buildout period. Any such agreement will not alter the buildout and coverage conditions applicable to the bidding credit, however.
(1) only entities making a serious commitment to serving tribal lands will receive bidding credits; and (2) telecommunications services will be rapidly deployed to unserved tribal areas. Moreover, buildout of tribal areas to meet the credit requirements may also be counted towards compliance with construction or coverage requirements generally applicable to the license for which the credit is received.

36. We recognize that requiring buildout on qualifying tribal lands as a condition of the bidding credit does not guarantee that individuals in those areas will actually use the service that is offered. Thus, award of the credit alone may not immediately result in increased telephone penetration. Nevertheless, we believe that the bidding credits we adopt here, coupled with the Lifeline Assistance and Lifeline Connection Assistance measures we adopt in the companion Universal Service Order, should prove a powerful tool for increasing penetration levels in the neediest tribal areas.

37. In order to verify compliance with the tribal buildout requirement, we will require licensees to file a notification of construction (FCC Form 601, Schedule K) at the conclusion of the three-year buildout period that they have met the 75 percent buildout requirement on the tribal lands for which the credit was awarded.\textsuperscript{60} If the licensee fails to comply with these conditions, it will be required to repay the bidding credit plus interest\textsuperscript{61} thirty (30) days after the conclusion of the buildout period. Failure to repay this amount will result in automatic cancellation of the licensee’s license. Licensees granted a higher credit pursuant to a waiver must also file a certification that the credit amount was spent on infrastructure to provide wireless coverage to qualifying tribal lands. This certification should include a final report prepared by an independent auditor retained by the licensee,\textsuperscript{62} verifying that the infrastructure costs are reasonable to comply with our buildout requirements.\textsuperscript{63} If the credit amount obtained by waiver exceeds the infrastructure costs of providing service to a qualifying tribal land, the licensee must pay the difference between the credit amount and the infrastructure costs.

38. We do not agree with Salt River that a licensee who fails to meet its buildout obligations should also be required to involuntarily partition the portion of their license area covering the qualifying tribal lands to the tribal authority. We find that the penalties we impose for failure to comply with our performance requirements are adequate to ensure that carriers satisfy our conditions. Further, as discussed more fully in Section III.D.3, infra, we do not favor creating licensing areas comprised solely of tribal areas.

C. Operational and Licensing Rules

39. In the Notice, we sought comment on amending certain operational and licensing rules to encourage extension of service to tribal lands. Specifically, we sought comment on: (1) establishing flexible buildout requirements for carriers serving tribal lands; (2) relaxing antenna height, transmitter power limitations, and other operational rules for carriers serving tribal lands; (3) allowing licensees in

\textsuperscript{60} In the event a licensee transfers or assigns the license pursuant to Section 1.2111 of our rules, the transferee or assignee must satisfy the foregoing performance requirements. 47 C.F.R. § 1.2112.

\textsuperscript{61} The interest will be based on the rate for ten year U.S. treasury obligations applicable on the date the license is granted.

\textsuperscript{62} The auditor is required to conduct a “compliance attestation” for this certification. The Commission’s rules already require independent auditors to use generally accepted auditing standards (GAAS) for conducting audits of an incumbent LEC’s compliance with our accounting safeguards. 47 C.F.R. § 64.904(a).

\textsuperscript{63} The independent auditor will conduct this examination using the “examination engagement” method. See American Inst. Of Certified Pub. Accountants, COMPLIANCE ATTESTATION, AT § 500.27; ATTESTATION ENGAGEMENTS, AT § 100.53 (noting that an examination engagement is used to reduce the attestation risk to a low level).
certain private (non-CMRS) services to provide basic telephone service to tribal lands; and (4) waiving regulations to promote the deployment of satellite technology to tribal lands. As discussed below, we generally conclude that across-the-board changes to these rules are unnecessary to further the goals of this proceeding. Instead, we believe that parties should seek waivers of specific rules or file other requests for regulatory relief in instances where greater flexibility than the rules allow would facilitate the provision of service to tribal lands. We strongly encourage parties to file such requests where needed, and delegate authority to the Wireless Telecommunications Bureau and the International Bureau to consider these waivers as they apply to terrestrial wireless and satellite-based services, respectively. Parties seeking a waiver are encouraged to provide evidence of an agreement with tribal authorities that includes a commitment to serve the tribal lands.

1. **Buildout Requirements**

40. **Background.** The Commission has developed a variety of rules in wireless services that govern the obligation of licensees to construct and operate their facilities to serve an area. These buildout rules reflect several approaches that match a type of license to a specific buildout requirement. In certain services (e.g., broadband PCS), carriers must meet specific population coverage requirements. In other services (e.g., LMDS), licensees have the alternative of meeting such coverage requirements or providing “substantial service,” which gives licensees an added degree of flexibility in determining the most efficient use of their spectrum. Because most carriers meet these buildout requirements by initially building out urban and suburban markets, rather than more sparsely populated areas, we sought comment in the Notice on whether to relax buildout requirements for licensees who focus their early buildout efforts on tribal lands and other unserved areas.

41. **Discussion.** The Commission’s buildout requirements generally provide licensees with flexibility to determine the nature and scope of their system deployment and do not require licensees to provide coverage to tribal areas. Some commenters contend that relaxing buildout requirements will create an incentive for licensees to focus their early buildout efforts on tribal lands. We are not persuaded, however, that across-the-board relaxation of our buildout requirements would be an effective means of promoting such service. The record suggests that in most instances, the lack of service to tribal lands results from technical obstacles, economic factors, or other problems, not from overly restrictive

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64 Notice ¶¶ 17-40. We also sought comment on whether to lift transfer restrictions on designated entities. We do not address this issue in this Order.

65 Site-based licenses typically come with a requirement to construct and commence operations by a date certain. For example, maritime public fixed stations must begin providing service within one year. See 47 C.F.R. § 80.49(b).

Geographic area licenses for mobile services require that service be provided to a certain percentage of the population or of the geographic area encompassed by the license within a specified time. For example, 30 MHz PCS licensees must make service available to one-third of the population in their licensed area within five years and two-thirds of the population in their licensed areas within ten years. See 47 C.F.R. § 24.203.

Some services have a requirement that “substantial service” be provided by a date certain. For example, LMDS carriers must offer substantial service within 10 years. See 47 C.F.R. § 101.1011(a). Substantial service is defined as “service which is sound, favorable and substantially above a level of mediocre service which might just minimally warrant renewal.” Id.

66 Notice ¶ 24.

buildout requirements. In addition, tribal lands vary significantly from one another in terms of population density, terrain, and other factors that can affect the feasibility of building out facilities in those areas. However, we are willing to consider relaxing our buildout requirements in cases where parties can demonstrate that doing so will expedite deployment of service to tribal lands. We therefore encourage parties to file specific waiver requests if need be, and commit to consider such requests expeditiously.

2. Modifications to Height/Power and Other Operational Requirements

42. **Background.** In the Notice, we stated that transmitting power limits and other factors affect the maximum distance from a transmitting antenna that communications may be reliably transmitted, and also the potential for interference with other systems. We further noted that for tribal areas that are located in remote or sparsely populated areas, increasing these limits may increase the viability of providing basic services by expanding the reach of existing systems and by reducing the number of transmitting facilities required to provide service in a certain area. We sought comment on possible modifications to our height/power limits for wireless services generally, and specifically for Basic Exchange Telephone Radio Systems (BETRS) in the Rural Radiotelephone Service, because these systems serve rural areas. Alternatively, we asked parties to comment on whether to exempt BETRS from height/power limits where it is used to serve tribal lands or other unserved areas. In addition, we sought comment on whether height/power modifications would encourage service to tribal lands and other unserved areas by providers of services, such as PCS, LMDS, MDS, WCS, 39 GHz services, and 24 GHz services.

43. **Discussion.** We find that, in view of the many and varied technical circumstances that may impede service to tribal lands, the public interest would best be served through the judicious use of waivers of our rules governing factors such as antenna height and power limits, as well as other operational rules. We generally agree with commenters that there are instances where the potential for service to tribal lands could be improved if we modified antenna height and power restrictions for wireless providers serving these areas, provided safeguards are retained to protect against interference to neighboring systems. However, we believe that such modifications are best implemented on a case-by-case basis rather than through sweeping rule changes. Tribal lands vary in size and some may be too small to accommodate relaxation of antenna height and power rules without increasing the likelihood of interference to neighboring systems. Even in larger tribal lands, propagation characteristics vary depending on the terrain, so that system planning and tower siting must be carefully tailored to local conditions to prevent interference. Moreover, increasing the base-to-mobile range of wireless base

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68 Notice ¶ 17.

69 BETRS is a two-way channel wireless service used to provide basic exchange service to remote rural areas of the country. Basic Exchange Telecommunications Radio Service, Report and Order, CC Docket No. 86-495, 3 FCC Rcd 214 (1988). See also 47 C.F.R. §§ 22.99, 22.725 & 22.727.

70 Notice ¶ 17.

71 Id. ¶ 20.

72 Id. ¶ 17.


74 See, e.g., SDITC Reply Comments at 8.

75 Id. at 8-9. SDITC further suggests several measures the Commission could adopt to protect adjacent systems from interference: (1) establish a “safe harbor” or clear technical operating parameters within which systems could (continued….)
stations through height and power increases does not necessarily facilitate the provision of service, because this may require a corresponding increase in power (and therefore the cost) of mobile units to achieve the same mobile-to-base signal range.  

44. In sum, we believe that these issues are best handled on a case-by-case basis through consideration of individual waiver requests. Parties seeking such waivers should provide evidence of an agreement with tribal authorities that includes a commitment to serve the tribal lands. In addition, parties must demonstrate that granting the request will not cause harmful interference to any existing licensee, to previously authorized but not yet operating systems, or to neighboring countries. We also agree with the Satellite Industry Association that, in considering modifications of height and power rules, the Commission should consider the potential for preclusive impact on future satellite services, as well as the impact on current or planned satellite services.

45. With respect to BETRS, some commenters assert that the Commission’s rules preclude the construction and operation of new BETRS stations in tribal areas, and propose that the Commission reevaluate its decision to decline to adopt rules that would have permitted site-by-site licensing of BETRS on a co-primary basis with geographic area paging licenses. Although we have made site-based licensing of BETRS secondary to geographic licensing of paging on channels shared by the two services, we disagree that this precludes BETRS licensees from providing service in tribal areas, and see no need to revisit our rules in this respect. This does not preclude us, however, from considering waiver requests by BETRS licensees with specific proposals to deploy service to tribal lands, or granting such waivers if circumstances warrant.

46. Other commenters have proposed to make tribal lands a “testing ground” for the implementation of broadband architectures that would utilize a combination of licensed spectrum and Part 15 devices certified for unlicensed use. These parties argue for creation of a “tribal lands exception” in the Part 15 rules to facilitate the deployment of broadband radio systems in tribal lands by allowing more powerful transmission devices and removing restrictions pertaining to antennas in such areas. We are encouraged by these proposals, and have recently initiated a proceeding to consider

76 CTIA, for instance, cautions that relaxing height/power restrictions would not reduce the costs of implementing broadband PCS because PCS handsets operate only at power levels of .6W or lower, and hence are unable to communicate with base stations over longer distances. CTIA Comments, at 6-7.

77 SIA Comments at 4.

78 NTCA Comments at 12-13; Tohono O’Odham Utility Authority Comments at 2-5; RTG Comments at 4-5; San Carlos Apache Telecom Utility Inc. Comments at 4; SDITC Reply Comments at 6.


80 SDITC Reply Comments at 7.

81 Education Parties Comments at 11. See also Dandin Group Comments at 12.
possible changes to our Part 15 rules that could facilitate the development of such unlicensed systems.\textsuperscript{82} Therefore, we will defer consideration of this issue to that proceeding.\textsuperscript{83} In the meantime, we encourage these parties to work with tribal authorities on specific broadband proposals. As we expressed in our \textit{Section 706 Report}, we intend to ensure that advanced telecommunications capabilities are available to all Americans, which include Native Americans.\textsuperscript{84} Thus, to the extent that proposals are presented to us, we are prepared to grant relief expeditiously on a case-by-case basis for wireless data and voice over Internet protocol radios not only with respect to power and antenna characteristics, but also tower placement, width of spectrum bands and self-regulating software control of radios for devices deployed on tribal lands,\textsuperscript{85} provided that such relief facilitates improved service to tribal lands without causing interference to adjacent or co-channel licensees.

### 3. Expansion of Permissible Service Definitions

47. \textbf{Background.} In the \textit{Notice}, we stated that, in some private wireless services, our rules preclude use of the spectrum for the provision of commercial service, including basic telephony, to the public. Some of these services are dedicated to private, internal use by businesses or limited classes of eligible users, while others are intended for government or public safety use. These service categories include both fixed services, \textit{e.g.}, private point-to-point microwave, and private land mobile radio (PLMR) services.\textsuperscript{86} We solicited comment on whether the prospects for extending wireless telephony to tribal lands would be enhanced by relaxing restrictions on commercial use of spectrum in tribal lands by some categories of private radio licensees.\textsuperscript{87} We also requested comment on whether to relax permissible use limitations on certain services to allow expanded service offerings, \textit{e.g.}, allowing data messaging services on private services otherwise limited to voice traffic.\textsuperscript{88}

48. \textbf{Discussion.} PLMRS operators have already been granted considerable flexibility under existing service definitions.\textsuperscript{89} Because service definitions for PLMRS are designed to allow interference-free operation of private radio systems and adjoining common carrier systems, it is not clear that rule changes would create additional incentives for carriers to buildout tribal areas. Nevertheless, if carriers believe that relaxation of our rules in particular cases may facilitate a higher level of service to tribal lands, we strongly encourage the filing of waiver requests. We find that granting flexible use of spectrum on a case-by-case basis would be in the public interest because such requests would set forth the particular technical parameters of the proposed operations along with assurances that such operations would be restricted to tribal areas and would not compromise any existing public safety services or interfere with other adjacent or co-channel licensees.


\textsuperscript{83} Comments in this proceeding will be incorporated into ET Docket No. 98-153 for this purpose.

\textsuperscript{84} Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, and Possible Steps to Accelerate Such Deployment Pursuant to Section 706 of the Telecommunications Act of 1996, \textit{Report}, CC Docket No. 98-146, 14 FCC Rcd 2398 (February 2, 1999) (\textit{Section 706 Report}).

\textsuperscript{85} David R. Hughes Comments at 2.

\textsuperscript{86} \textit{Notice} ¶ 28.

\textsuperscript{87} \textit{Id.} ¶ 29.

\textsuperscript{88} \textit{Id.} ¶ 33.

\textsuperscript{89} \textit{See, e.g.}, 47 C.F.R. §§ 90.201-90.219.
4. Satellite Policies for Existing/Future Satellite Licensees

49. **Background.** In the *Notice*, we sought comment on the effectiveness of satellite technologies as a means of deploying communications services to tribal lands. In particular, we sought comment on any satellite policies that we can adopt, or regulations that we should eliminate or streamline to promote the deployment of satellite services in tribal lands.

50. **Discussion.** The Commission recently observed that “satellites are an excellent technology for delivering both basic and advanced telecommunication services to unserved, rural, insular or economically isolated areas, including Native American communities, Alaska, Hawaii, and Puerto Rico...” In the 1994 *Big LEO Report & Order*, the Commission explained that the “new mobile satellite service [Big LEO] will offer Americans in rural areas that are not otherwise linked to the communications infrastructure immediate access to a feature-rich communications network.” We also note that ICO has recently made a commitment to provide telephone and Internet service to noncommercial locations on tribal lands at a discount of up to 50 percent from applicable retail rates.

51. We conclude that existing satellite services may offer a means of providing service to tribal lands. Such services could not only be used for telecommunications services but could also provide a platform for telemedicine and other services to remote areas. However, while there are certain common factors that apply to each technical situation in the provision of service to tribal lands, it appears that there is no one solution or solutions that would necessarily assure that each area would receive thorough coverage. We conclude that technical and administrative hurdles to the provision of satellite service to these areas are best considered on a case-by-case basis, and will entertain waiver requests as necessary to facilitate such deployment. We anticipate that grant of such waivers would be contingent upon each provider’s agreement to serve tribal areas and otherwise adhere to rules governing interference with existing services. Additionally, the grant of such a waiver would be based on the existence of a binding agreement between the provider and relevant tribal authority.

52. Several commenters have advocated or opposed spectrum licensing incentives to encourage the provision of satellite services to tribal lands. Policies or rules that might be implemented to encourage the provision of 2 GHz mobile satellite services [MSS] will be addressed in that proceeding.

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90 *Notice* ¶ 54.
95 Celsat Comments at 5-7 (supports conditioning assignment or reassignment of 2 GHz MSS spectrum on service to tribal areas); Boeing Comments at 2, 6-8 (additional incentives are unnecessary and could hamper or delay new satellite services); Air Touch Comments at 3-4 (new incentives could distort spectrum policy), CCI International Comments at 3-4 (existing incentives are sufficient).
53. We note that in this proceeding, Onsat has proposed to operate a system using VSAT technology with existing 3.7 meter C-Band antennas to provide low-cost Internet access primarily to institutional users in rural areas. This proposal would require that we waive section 25.212(d) of our rules to allow blanket licensing of 3.7-meter C-Band dishes rather than requiring the VSAT operator to apply for a license for each transmit and receive site individually. Onsat asserts that C-Band systems using 3.7 meter dishes are functionally equivalent or superior to Ku-Band dishes that are already permitted to operate under blanket VSAT licenses. Onsat has petitioned for a waiver of satellite earth station processing rules and the petition is being considered in a separate proceeding.

54. Other commenters urge the implementation of satellite systems, such as Spaceway and Skybridge, in order to serve tribal areas along with the rest of their proposed service areas. The Spaceway Ka band satellite system has been licensed and broadband communications service to the entire United States is planned for 2002. In its comments, Hughes maintains that it will be able to reach a larger number of total customers, including a larger number of customers in tribal and rural areas, if it received more Ka band downlink spectrum. Its request for additional spectrum is pending. SkyBridge is an applicant for a license for authority to launch and operate a global nongeostationary [NGSO] satellite system. Broadband services would be accessed through a small satellite dish. Titan Wireless recommends that we foster service to tribal lands by lifting the freeze on acceptance of FSS earth station applications in the extended C-Band at 3650-3700 MHz. We defer any decisions concerning these systems to ongoing proceedings that deal specifically with those systems.

97 47 C.F.R. § 25.212(d).
98 Onsat Comments at 10-14.
100 Panamsat is doubtful that such services can be made affordable to reservation residents. Panamsat Corp. Comments at 2-3.
101 Hughes Comments at 3-5.
103 Kira A. Mirski Comments at 2-4.
D. Licensing of New Services/Spectrum

1. Unallocated or Unlicensed Spectrum

55. **Background.** In the Notice, we sought comment on identifying frequency bands that are not currently allocated for telecommunications service, or that are allocated for telecommunications service but not assigned to any licensee that could potentially be used to provide basic telephone service on tribal lands/unserved areas. We specifically sought comment on identifying any unlicensed or unallocated bands on which WLL or similar technologies could be used to facilitate efforts to provide low-cost service in unserved communities such as tribal lands.\(^{106}\)

56. **Discussion.** We conclude that, while frequency bands that meet these criteria may exist, it is premature for us to address spectrum allocation issues in this proceeding. We agree with commenters who oppose the allocation of new spectrum for tribal lands alone, arguing instead that spectrum policy should be set on a national basis, in a proceeding that enables us and interested parties to consider competing needs and spectrum demands and develop the most appropriate national policies for licensing spectrum.\(^{107}\) Furthermore, we are not convinced that lack of spectrum is a dispositive factor in the provision of service to tribal lands and other unserved areas.\(^{108}\)

57. We further agree with commenters who contend that allocating frequencies to provide new wireless services would not necessarily be effective in promoting the provision of cellular service to tribal lands and that more allocations do not guarantee more service.\(^{109}\) We believe that the actions that we take in this order will effectively afford access to telecommunications for tribal lands and other unserved areas without allocating additional spectrum for this purpose. We may, however, revisit the spectrum issue for tribal lands at a later time if it becomes necessary.

2. Licensing in Spectrum Bands Allocated to Other Services and Extensions into Adjacent Licensing Areas

58. **Background.** In the Notice, we also sought comment on identifying unused channels in otherwise allocated and licensed spectrum and whether to allow “drop-in” licensing of such channels to provide service to tribal lands/unserved areas.\(^{110}\) We also sought comment on whether licensees should be allowed to expand their coverage into adjacent licensing areas to provide full coverage to a tribal land, provided that such coverage does not cause interference to the adjacent licensee’s actual operations.\(^{111}\)

59. **Discussion.** We find that at the present time and in view of the mechanisms that we have outlined in this Order to encourage provision of telecommunications services to tribal lands, “drop-in” licensing is unnecessary to accomplish our goals. Additionally, as several commenters attest, existing technical practices utilized by cellular licensees to maximize efficiency and deal with potential

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\(^{106}\) Notice ¶ 43.

\(^{107}\) Bell Atlantic Mobile Comments at 9-10. Bell Atlantic Mobile adds that attempting to find discrete blocks of spectrum that would be available for use only on Indian lands could seriously complicate successful action in the future proceeding to identify new frequencies for third-generation mobile services.

\(^{108}\) U.S. Cellular Corp. Comments at 6-7, Western Wireless Comments at 8-9 and Dobson Comm. Corp. at 12-13.

\(^{109}\) U.S. Cellular Corp. Comments at 6-7.

\(^{110}\) Notice ¶ 44.

\(^{111}\) Id. ¶ 25.
interference may preclude “drop-in” licensees from operating on cellular frequencies in the same markets as the cellular licensees because such operation could create technical and other practical problems.  

60. NTIA objects specifically to the sharing of spectrum between Government and non-Government entities in such a way that the drop-in licensee is designated as having an allocation making it the primary or co-primary user of the band. NTIA contends that the first approach could detrimentally affect critical Government operations, including safety of life, national security and defense, law enforcement and radio astronomy. NTIA further contends that affording co-primary status to the drop-licensee might result in these Government operations having to be eliminated, significantly curtailed or relocated at a substantial cost to taxpayers. NTIA accordingly recommends that drop-in licenses should be considered only on a secondary basis to existing Government operations.  

61. As in our discussion of spectrum allocation above, we are not convinced that a spectrum shortage is the reason tribal lands are not being adequately served, although we recognize that new technologies are on the horizon that might cause us to revisit whether to allow wireless communications service providers in tribal areas to access spectrum already allocated for other purposes. We also note that we have adopted partitioning and disaggregation rules for wireless licensees in order to provide them with the flexibility to use their spectrum more efficiently. Therefore, although we choose not to adopt drop-in licensing at this time, our partitioning and disaggregation policies provide a mechanism for licensees and other interested parties to make use of already-licensed unused spectrum to serve tribal lands.

62. In addition, we decline to amend our rules to allow licensees to expand coverage into adjacent licensing areas to provide full coverage to a tribal land. We however encourage parties seeking to expand coverage into adjacent licensing areas to file waivers where such relief would facilitate the provision of service to tribal lands.

3. Drawing Geographic Boundaries

63. Background. In the Notice, we sought comment on how best to establish licensing area boundaries for new services that will not splinter tribal lands among multiple licensees.

64. Discussion. We agree with commenters that we should consider tribal land boundaries in establishing license areas for future services and endeavor to avoid splitting tribal lands into multiple licensing areas. However, we do not favor creating small license areas comprised exclusively or primarily of tribal lands. We find that tribal lands should generally be included in a larger licensing area to enable licensees to use profits derived from serving lower cost areas to provide service to typically high cost, tribal areas. While we recognize that it is difficult for small carriers seeking to serve rural areas

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112 U.S. Cellular Corp. Comments at 5, Western Wireless Comments at 9, NTIA Reply Comments at 3-4.
113 NTIA Reply Comments at 3-4.
115 Dandin Group Reply Comments at 5.
117 Notice ¶ 47.
118 Salt River Pima-Maricopa Comments at 17, Carl Artman Comments at 7, Linda Riley Ex Parte, October 6, 1999.
to afford to compete in spectrum auctions with large carriers seeking to serve urban areas,\textsuperscript{119} this concern is mitigated by the availability of small business credits which are designed to level the playing field for competing carriers. We therefore will take tribal land boundaries into account when drawing geographic licensing areas for new services.

IV. FURTHER NOTICE OF PROPOSED RULEMAKING

65. In this Further Notice of Proposed Rulemaking, we seek comment on other possible uses of bidding credits to encourage deployment of wireless services to tribal communities. Specifically, we seek comment on: (1) whether we should award bidding credits to carriers who commit to serve non-tribal areas and/or tribal areas with penetration levels above 70 percent, but significantly below the national average; (2) whether to expand the bidding credit program by awarding transferable credits for use in future auctions to existing licensees in already-established wireless services who deploy facilities and provide service to unserved tribal communities; and (3) whether to make credits available to licensees that enter into partitioning agreements with tribal authorities that allow the tribal government to provide service, either directly or through negotiation with a third-party carrier.

A. Bidding Credits for Non-Tribal Areas

66. We seek comment on whether to award bidding credits to entities that provide service to non-tribal areas on the same terms and conditions that we have established for entities that serve tribal areas. As noted above, in contrast to tribal areas, there are very few non-tribal areas where telephone penetration levels are at 70 percent or below. Thus, extending bidding credits to these non-tribal areas may have relatively little impact. However, if we were to increase the penetration threshold for the bidding credit to a level higher than 70 percent at some point in the future, it could benefit non-tribal as well as tribal areas that have penetration levels above 70 percent, but still significantly below the national average.\textsuperscript{120} We therefore seek comment on whether we should extend the bidding credit to areas with penetration levels above 70 percent, and if so, whether it should apply equally to non-tribal as well as to tribal areas. Commenters should address whether the use of bidding credits to encourage deployment of wireless services is likely to affect access to telecommunications services in these areas.

67. In addition, if we extend the credit to non-tribal areas, we seek comment how to define the geographic areas triggering eligibility for the credit and the penetration threshold. Specifically, should we use penetration rates on a county-by-county basis in defining areas that qualify for the credit? We also seek comment on what provisions should be made for certification and administrative oversight of the buildout process in the non-tribal context. Commenters should address safeguards or conditions necessary to ensure that the credits further the goals of enhanced access to telecommunications for all Americans, such as buildout and other performance requirements.

B. Transferable Bidding Credits for Existing Licensees that Commence Service in Tribal Areas

68. The bidding credit mechanism adopted in the Report and Order will provide significant incentives to auction applicants to serve tribal lands. However, by their nature, these bidding credits can only be applied in the auction in which they are obtained. Thus, they are not available as an incentive to carriers that may wish to provide service to tribal lands using licenses obtained in prior auctions or through assignment or transfer. Because bidding credits have limited applicability in this respect, we

\textsuperscript{119} NTCA Comments at 13, Tohono O’Odham Utility Authority Comments at 3-5, RTG Comments at 5-7.

\textsuperscript{120} For example, according to 1990 U.S. Census Data, four counties in New Mexico, Cibola County, Guadalupe County, Rio Arriba County, and San Juan County, have penetration levels between 70 and 78 percent.
seek comment on whether to establish additional bidding credit incentives that will encourage both existing and prospective carriers to deploy facilities and serve tribal communities.

69. Specifically, we seek comment on whether, in addition to bidding credits awarded in particular auctions, a more flexible form of credit could be made available to existing licensees who deploy facilities and offer service to qualifying tribal lands using already-licensed spectrum. Under this alternative, existing carriers who in the future use their existing spectrum to buildout qualifying tribal areas could obtain bidding credits usable in future auctions. Because of the high costs generally associated with providing service to tribal lands, offering this type of credit could provide a significant incentive for licensees to use their existing spectrum to provide service to these areas. Moreover, in contrast to the auction-specific bidding credit established in the Report and Order, it would be unnecessary to impose future conditions on the credit, because this form of credit would only be awarded where a licensee has already deployed facilities to tribal lands. We seek comment on this proposal.

70. We seek comment on our legal authority under Section 309(j) to adopt this form of bidding credit. We tentatively believe that we have the necessary flexibility under Section 309(j) to adopt this initiative and that this type of bidding credit serves the important Congressional objectives set forth in Section 309(j)(3), including: (1) facilitating the rapid and efficient deployment of wire and radio communications “to all the people of the United States;”(122) (2) fostering “the development and rapid deployment of new technologies, products, and services for the benefit of the public, including those residing in rural areas;”(123) and (3) promoting “efficient and intensive use of the electromagnetic spectrum.”(124) We also note that Section 706(A) of the Act provides the Commission authority to remove barriers to infrastructure investment on tribal lands. We seek comment on this analysis. We also seek comment on the possibility of making this type of bidding credit transferable to third parties for use in future auctions. Presumably, transfer of a credit under these circumstances would not affect the transferor’s provision of service to tribal lands. Moreover, transferability could heighten the attractiveness of such credits, particularly to licensees that may be disinclined to participate in future auctions, but that could negotiate to transfer the credit to a more likely future bidder. We seek comment on this view.

71. We also seek comment on mechanisms for implementing this type of credit. Should we use the same formula adopted in this order to calculate the credit? Should we apply the same coverage criteria? Should we permit carriers to combine this bidding credit with other tribal lands bidding credits and DE bidding credits in the same auction, where a bidder proposes to serve additional qualifying tribal lands? Do we need additional compliance measures to prevent abuse of our auctions process? We also seek comment on whether we could use a competitive bidding mechanism to award the bidding credit to the carrier willing to deploy facilities for the smallest credit amount. Other issues on which we seek comment include: (1) should we limit the number of licensees, between or within the same services, eligible to receive bidding credits for serving tribal lands in the same geographic area (for example,  

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121 To prevent a double recovery, licensees who obtained a bidding credit under the procedures established in the Report & Order could not obtain a second credit for the same deployment under the alternative proposed here.


125 See 47 U.S.C. § 157 (directing the Commission to “encourage the deployment on a reasonable and timely basis of advanced telecommunications capability to all Americans . . . by utilizing . . . regulating methods that remove barriers to infrastructure investment.”).
should a 700 MHz licensee and 39 GHz licensee providing similar services in the same geographic area each be eligible for a credit?; (2) is it realistic to think that the tribal lands could support more than one provider?; and (3) how would our various license area determinations (i.e. MTA, BTA, EA) affect who receives a bidding credit and the amount?

C. Transferable Bidding Credits for Licensees that Partition Tribal Areas

72. Finally, we seek comment on whether bidding credits should be made available to carriers that enter into certain types of partitioning arrangements that facilitate deployment of service to tribal areas. Under this alternative, we would award a credit to any geographic area licensee that partitioned that portion of its license area covering tribal lands to a tribal government. We seek comment on what terms and conditions should apply to such partitioning agreements to make them eligible for the credit, and what sanctions should be applied in the event of non-compliance with those terms and conditions.

V. PROCEDURAL MATTERS

A. Ex Parte Rules – Permit-But-Disclose Proceeding

73. This proceeding is a permit-but-disclose notice and comment rulemaking proceeding. Ex parte presentations are permitted, except during the Sunshine Agenda period, provided they are disclosed as provided in Commission rules. See generally 47 C.F.R. §§ 1.1202, 1.1203, and 1.1206.

B. Final Regulatory Flexibility Analysis

74. The Commission has prepared a Final Regulatory Flexibility Analysis for the Report and Order, as required by the Regulatory Flexibility Act. See Appendix C.

C. Initial Regulatory Flexibility Analysis

75. The Commission has prepared an Initial Regulatory Flexibility Analysis for the Further Notice of Proposed Rulemaking, as required by the Regulatory Flexibility Act. See Appendix D.

D. Comment Dates

76. Pursuant to Sections 1.415 and 1.419 of the Commission’s rules, 47 C.F.R. §§ 1.415, 1.419, interested parties may file comments on or before the date that is 30 days after publication of the Further Notice in the Federal Register, and reply comments on or before the date that is 45 days after publications of the Further Notice in the Federal Register. Comments may be filed using the Commission’s Electronic Comment Filing System (ECFS) or by filing paper copies. See Electronic Filing of Documents in Rulemaking Proceedings, 63 Fed. Reg. 24121 (1998).

77. Comments filed through ECFS can be sent as an electronic file via the Internet to http://www.fcc.gov/e-file/ecfs.html. Only one copy of an electronic submission must be filed. In completing the transmittal screen, commenters should include their full name, Postal Service mailing address, and the applicable docket or rulemaking number. Parties may also submit an electronic comment by Internet e-mail. To get filing instructions for e-mail comments, commenters should send an e-mail to ecfs@fcc.gov, and should include the following words in the body of the message, “get from <your e-mail address>.” A sample form and directions will be sent in reply.

78. Parties who choose to file by paper must file an original and four copies of each filing. If participants would like each Commissioner to receive a personal copy of their comments, an original plus nine copies must be filed. All filings must be sent to the Commission’s Secretary, Magalie Roman Salas,

79. All relevant and timely comments will be considered by the Commission before final action is taken in this proceeding. Comments and reply comments will be available for public inspection during regular business hours in the FCC Reference Center, The Portals, 445 Twelfth Street, S.W., Room CY-A257, Washington, D.C. 20554.

VI. ORDERING CLAUSES

80. Accordingly, pursuant to Sections 1, 4(i), 303(r), and 309(j) of the Communications Act of 1934, as amended, 47 U.S.C. §§ 151, 154(i), 303(r), and 309(j), IT IS ORDERED that the REPORT AND ORDER is hereby ADOPTED.

81. IT IS FURTHER ORDERED, pursuant to Sections 1, 4(i), 303(r), 309(j) and 706 of the Communications Act of 1934, as amended, 47 U.S.C. §§ 151, 154(i), 303(r), 309(j), and 706, that the FURTHER NOTICE OF PROPOSED RULEMAKING is hereby ADOPTED.

82. IT IS FURTHER ORDERED that the Commission’s rules ARE AMENDED as set forth in Appendix B. IT IS FURTHER ORDERED that the provisions of the Report and Order and the Commission’s rules, as amended in Appendix B, shall become effective 60 days after publication of the Report and Order in the Federal Register.

83. IT IS FURTHER ORDERED that the Commission’s Consumer Information Bureau, Reference Information Center, SHALL SEND a copy of this Report and Order and Further Notice of Proposed Rulemaking, including the Final Regulatory Flexibility Analysis and Initial Regulatory Flexibility Analysis, to the Chief Counsel for Advocacy of the Small Business Administration.

FEDERAL COMMUNICATIONS COMMISSION

Magalie Roman Salas
Secretary
APPENDIX A

Comments

1. Advocacy Office of, US Small Business Administration
2. AirTouch Communications and Globalstar USA, Inc.
3. All Indian Pueblo Council
5. AMSC Subsidiary Corporation
7. Boeing Company (The)
8. CCI International NV
9. Cellular Telecommunications Industry Association
10. Celsat America, Inc.
11. Cheyenne River Sioux Tribe Telephone Authority
12. Chickasaw Nation
13. Convey, LLC
14. Cook Inlet Region, Inc.
15. Dandin Group
16. Dobson Communications Corporation
17. ECI TeleCom
18. Dr. Joseph Gitlin of Johns Hopkins Medical Institutions, Dr. Ray Kilcoyne of the University of Colorado School of Medicine, De. Sero Manson of the University of Colorado School of Medicine
19. Gila River Telecommunications, Inc.
21. Hughes Communications Galaxy, Inc.
22. Innowave ECI Wireless Systems, Ltd.
23. Miami Tribe of Oklahoma
24. Mohegan Tribe
25. Montana Telecommunications Association
26. Motorola, Iridium North America, and Iridium LLC
27. National Science Foundation Wireless Field Tests for Education Project
28. National Telephone Cooperative Association
29. Nortel Networks
30. Oglala Sioux Tribe
31. Oneida Nation of Wisconsin
32. Onsat Network Communications, Inc.
33. Personal Communications Industry Association
34. Picuris Pueblo
35. Rural Telecommunications Group
36. San Carlos Apache Telecommunications
37. Salt River Pima-Maricopa Indian Community and the National Tribal Telecommunications Alliance
38. Satellite Industry Association
39. SkyBridge, LLC
40. State of Alaska
41. Titan Wireless
42. Tohono O’Odham Utility Authority
43. Tribal Nations Link-up, Inc.
44. US Cellular Corporation
45. Western Wireless Corporation

Reply Comments

1. Advocacy Office, U.S. Small Business Administration
2. Celsat America, Inc.
3. Cheyenne River Sioux Tribe Telephone Authority
4. Dandin Group
5. Educause & AIHEC
6. FreeSpace Communications
7. Dr. Joseph Gitlin of Johns Hopkins Medical Institutions, Dr. Ray Kilcoyne of the University of Colorado School of Medicine, Dr. Sero Manson of the University of Colorado School of Medicine
8. Hughes Communications Galaxy, Inc.
9. Montana Public Service Commission
10. Motorola, Inc, Iridium North America, and Iridium LLC
11. National Telecommunications and Information Administration
12. Nez Perce Tribe
13. PanAmSat Corporation
14. Personal Communications Industry Association
15. Roger L. Scheer
16. Seaconke Wampanoag Tribe
17. South Dakota Independent Telephone Coalition, Inc.
18. Turtle Island Communications, Inc.
19. Walker River Paiute Tribe

Ex Parte Submissions

1. Innowave ECI Wireless Systems LTD.
2. Stephen Nacci
3. Linda Riley
4. Rural Telephone Coalition
5. Rural Telecommunications Group
7. Roger L. Scheer
8. Smith Bagley, Inc.
9. Transacomm Inc.
10. Turtle Island Communications, Inc.
11. Western Wireless Corporation
APPENDIX B

Subpart Q of Part 1 of Title 47 of the Code of Federal Regulations is amended as follows:

1. Section 1.2107 is amended by renumbering existing paragraph (e) to become new paragraph (f), and by adding new paragraph (e) as follows:

   (e) A winning bidder that seeks a bidding credit to serve a qualifying tribal land, as defined in section 1.2110(e)(3)(1) of our rules, within a particular market must indicate on the long-form application (FCC From 601) that it intends to serve a qualifying tribal land within that market.

2. Section 1.2110(e) is amended by adding new paragraph (3) as follows:

   (3) Bidding credit for serving qualifying tribal land: A winning bidder for a market will be eligible to receive a bidding credit for serving a qualifying tribal land within that market, provided that it complies with section 1.2107(e). The following definition, terms, and conditions shall apply for the purposes of this section and section 1.2107(e):

   (i) Qualifying tribal land “means any federally recognized Indian tribe’s reservation, Pueblo, or Colony, including former reservations in Oklahoma, Alaska Native regions established pursuant to the Alaska Native Claims Settlement Act (85 Stat. 688), and Indian allotments,” (see 25 C.F.R. § 20.1(v)), that has a wireline telephone subscription rate equal to or less than seventy (70) percent based on the most recently available U.S. Census Data.

   (ii) Certification. Within ninety (90) days after the filing deadline for long-form applications, the winning bidder must amend its long-form application and attach a certification from the tribal government stating the following: (1) the tribal government authorizes the winning bidder to site facilities and provide service on its tribal land, (2) the tribal area to be served by the winning bidder constitutes qualifying tribal land; and (3) the tribal government has not and will not enter into an exclusive contract with the applicant precluding entry by other carriers, and will not unreasonably discriminate among wireless carriers seeking to provide service on the qualifying tribal land. In addition, within ninety (90) days after the filing deadline for long-form applications, the winning bidder must amend its long-form application and file a certification that it will consult with the tribal government regarding the siting of facilities and deployment of service on the tribal land.

   (iii) Bidding credit formula. Subject to the applicable bidding credit limit set forth in section 1.2110(e)(3)(iv), the bidding credit shall equal three hundred thousand (300,000) dollars for the first two-hundred (200) square miles (518 square kilometers) of qualifying tribal land, and fifteen hundred (1500) dollars for each additional square mile (2.590 square kilometer) of qualifying tribal land above two-hundred (200) square miles (518 square kilometers).

   (iv) Bidding Credit Limit. If the high bid is equal to or less than one million (1,000,000) dollars, the maximum bidding credit calculated pursuant to section 1.2110(e)(3)(iii) shall not exceed fifty (50) percent of the high bid. If the high bid is greater than one million
(1,000,000) dollars, but equal to or less than two million (2,000,000) dollars, the maximum bidding credit calculated pursuant to section 1.2110(e)(3)(iii) shall not exceed five hundred thousand (500,000) dollars. If the high bid is greater than two million (2,000,000) dollars, the maximum bidding credit calculated pursuant to section 1.2110(e)(3)(iii) shall not exceed twenty five (25) percent of the high bid.

(v) **Application of credit.** The bidding credit amount, if approved by the Commission, will be subtracted from the final net bid amount. The bidding credit will not affect calculation of the down payment.

(vi) **Post-construction certification.** Within fifteen (15) days of the third anniversary of the initial grant of its license, a recipient of a bidding credit under this section shall file a certification that the recipient has constructed and is operating a system capable of serving seventy-five (75) percent of the population of the qualifying tribal land for which the credit was awarded.

(vii) **Performance penalties.** If a recipient of a bidding credit under this section fails to provide the post-construction certification required by section 1.2110(e)(3)(vi), then it shall repay the bidding credit amount in its entirety, plus interest. The interest will be based on the rate for ten year U.S. Treasury obligations applicable on the date the license is granted. Such payment shall be made within thirty (30) days of the third anniversary of the initial grant of its license.
APPENDIX C
FINAL REGULATORY FLEXIBILITY ANALYSIS

As required by Section 603 of the Regulatory Flexibility Act (RFA), an Initial Regulatory Flexibility Analysis (IRFA) was incorporated in the Notice of Proposed Rulemaking (Notice) in WT Docket No. 99-266. The Commission sought written comment on the policies and rules proposed in the Notice, including comment on the IRFA. The comment received is discussed below. This Final Regulatory Flexibility Analysis (FRFA) for the Report and Order conforms to the RFA.

A. Need for, and Objectives of, the Report and Order

The record in this proceeding demonstrates that there is a substantial need for specific incentives targeted to the deployment of service on tribal lands. By virtually any measure, communities on tribal lands have historically had less access to telecommunications services than any other segment of the population. As set forth in Section III.A of the Report and Order, 1990 Census data indicates that 23 of the 48 largest tribal reservations (those with 500 or more households) had telephone penetration rates below 60 percent, and 16 of these reservations had a penetration rate below 50 percent. By contrast, the current nationwide telephone penetration rate is 94 percent. We believe telephone service is a necessity in today’s world. The lack of basic telecommunications services puts affected tribal communities at a social and economic disadvantage.

The Report and Order adopts rules and policies that provide incentives for wireless telecommunications carriers to serve individuals living on tribal lands. We make bidding credits available in future auctions to winning bidders who commit to deploy facilities to tribal areas that have a telephone service penetration rate at or below 70 percent. We also express our commitment to work with carriers seeking flexibility under our technical and operational rules to promote deployment of wireless services on tribal lands.

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

The U.S. Small Business Administration, Office of Advocacy (SBA), submitted a response to the IRFA. SBA argues that the Commission’s IRFA was insufficient because it did not assess the significant economic impact certain proposals may have on small businesses nor did it propose alternatives that might minimize any impact. SBA also argues more specifically that the Commission’s proposal to lift designated entity (DE) transfer restrictions may disadvantage small businesses. Further, SBA claims that the proposal to award bidding credits to any entity, regardless of size, that commits to serve tribal lands may provide big businesses an unfair advantage.

We disagree with SBA’s argument that we did not consider alternatives to minimize any

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4 SBA Comments at 7-8.
5 Id. at 7.
6 Id. at 2, 3-6.
significant economic impact on small entities. We discussed in the IRFA the alternative of using unallocated or unlicensed spectrum by telecommunications providers, including small entities, to serve the needs of tribal lands. Similarly, we discussed the use of channels within licensed spectrum to achieve a similar result, and sought comment on these alternatives. SBA also argues against lifting the DE transfer restrictions, which was an alternative we set forth in the Notice. This argument is moot, however, because we do not adopt this proposal in the Report and Order. Last, SBA states that we proposed to “offer bidding credits in future auctions regardless of business size.” However, in this proceeding we have not changed the generally available bidding credit that is offered to small businesses, and our new tribal lands bidding credit is offered in addition to the small business bidding credit. This additional, targeted incentive for tribal areas does not detract from our separate effort to assist small businesses through the small business bidding credit. For small businesses, the two credits may be combined.

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

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 proposed rules, if adopted. The RFA generally defines the term "small entity" as having the same meaning as the terms "small business," "small organization," and "small governmental jurisdiction." In addition, the term "small business" has the same meaning as the term "small business concern" under the Small Business Act. A small business concern is one that: (1) is independently owned and operated; (2) is not dominant in its field of operation; and (3) satisfies any additional criteria established by the SBA. A small organization is generally "any not-for-profit enterprise which is independently owned and operated and is not dominant in its field." Nationwide, as of 1992, there were approximately 275,801 small organizations. And finally, "Small governmental jurisdiction" generally means "governments of cities, counties, towns, townships, villages, school districts, or special districts, with a population of less than 50,000." As of 1992, there were approximately 85,006 such jurisdictions in the United States. This number includes 38,978 counties, cities, and towns; of these, 37,566, or 96 percent, have populations of fewer than

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7 SBA Comments at 7.
8 See Report and Order ¶ 30.
10 Id. § 601(6).
11 5 U.S.C. § 601(3) (incorporating by reference the definition of "small business concern" in 15 U.S.C. § 632). Pursuant to the RFA, 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 term which are appropriate to the activities of the agency and publishes such definition(s) in the Federal Register." 5 U.S.C. § 601(3).
The Census Bureau estimates that this ratio is approximately accurate for all governmental entities. Thus, of the 85,006 governmental entities, we estimate that 81,600 (91 percent) are small entities.

SBA has developed a definition of small entities for radiotelephone (wireless) companies. The Census Bureau reports that there were 1,176 such companies in operation for at least one year at the end of 1992. According to SBA's definition, a small business radiotelephone company is one employing no more than 1,500 persons. The Census Bureau also reported that 1,164 of those radiotelephone companies had fewer than 1,000 employees. Thus, even if all of the remaining 12 companies had more than 1,500 employees, there would still be 1,164 radiotelephone companies that might qualify as small entities if they are independently owned and operated. Although it seems certain that some of these carriers are not independently owned and operated, we are unable at this time to estimate with greater precision the number of radiotelephone carriers and service providers that would qualify as small business concerns under SBA's definition. Consequently, we estimate that there are fewer than 1,164 small entity radiotelephone companies that may be affected by the policies and rules adopted in the Report and Order.

Below, we further describe and estimate the number of wireless small business concerns that may be affected by the rules we adopt in the Report and Order.

**Cellular Providers.** Neither the Commission nor the SBA has developed a definition of small entities applicable to cellular licensees. Therefore, the applicable definition of small entity is the definition under the SBA rules applicable to radiotelephone (wireless) companies. This provides that a small entity is a radiotelephone company employing no more than 1,500 persons. According to the Bureau of the Census, only twelve radiotelephone firms from a total of 1,178 such firms which operated during 1992 had 1,000 or more employees. Therefore, even if all twelve of these firms were cellular telephone companies, nearly all cellular carriers were small businesses under the SBA's definition. In addition, we note that there are 1,758 cellular licenses; however, a cellular licensee may own several licenses. In addition, according to the most recent Telecommunications Industry Revenue data, 808 carriers reported that they were engaged in the provision of either cellular service or Personal Communications Service (PCS) services, which are placed together in the data. We do not have data specifying the number of these carriers 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 cellular service carriers that would qualify as small business concerns under the SBA's definition. Consequently, we estimate that there are fewer than 808 small cellular service carriers that may be affected by the rules adopted herein.

**Broadband PCS Licensees.** The broadband PCS spectrum is divided into six frequency blocks designated A through F, and the Commission 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 less than $40 million in

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17 Id.
19 13 C.F.R. § 121.201, SIC Code 4812.
20 13 CFR 121.201, SIC code 4812.
21 1992 Census, Series UC92-S-1, at Table 5, SIC code 4812.
22 Trends in Telephone Service, Table 19.3 (March 2000).
the three previous calendar years.\textsuperscript{23} For Block F, an additional classification for "very small business" was added and is defined as an entity that, together with their affiliates, has average gross revenues of not more than $15 million for the preceding three calendar years.\textsuperscript{24} These regulations defining "small entity" in the context of broadband PCS auctions have been approved by the SBA.\textsuperscript{25} No small businesses within the SBA-approved definition 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% of the 1,479 licenses for Blocks D, E, and F.\textsuperscript{26} Based on this information, we conclude that the number of small broadband PCS licensees will include the 90 winning C Block bidders and the 93 qualifying bidders in the D, E, and F blocks, for a total of 183 small entity PCS providers as defined by the SBA and the Commission's auction rules.

SMR Licensees. The Commission awards bidding credits in auctions for geographic area 800 MHz and 900 MHz SMR licenses to firms that had revenues of no more than $15 million in each of the three previous calendar years.\textsuperscript{27} In the context of 900 MHz SMR, this regulation defining "small entity" has been approved by the SBA; approval concerning 800 MHz SMR is being sought. We do 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. We assume, for purposes of this FRFA, that all of the remaining existing extended implementation authorizations are held by small entities, as that term is defined by the SBA. For geographic area licenses in the 900 MHZ SMR band, there are 60 who qualified as small entities. For the 800 MHz SMR's, 38 are small or very small entities.

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 definition of 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 definition under the SBA rules applicable to Radiotelephone Communications companies. This definition provides that a small entity is a radiotelephone company employing no more than 1,500 persons.\textsuperscript{28} According to the Bureau of the Census, only 12 radiotelephone firms out of a total of 1,178 such firms which operated during 1992 had 1,000 or more employees.\textsuperscript{29} Therefore, if this general ratio continues in 2000 in the context of Phase I 220 MHz licensees, we estimate that nearly all such licensees are small businesses under the SBA's definition.

\textsuperscript{23} See Amendment of Parts 20 and 24 of the Commission's Rules -- Broadband PCS Competitive Bidding and the Commercial Mobile Radio Service Spectrum Cap, Report and Order, FCC 96-278, WT Docket No. 96-59, paras. 57-60 (released Jun. 24, 1996), 61 FR 33859 (Jul. 1, 1996); see also 47 CFR 24.720(b).


\textsuperscript{25} 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 5532, 5581-84 (1994).

\textsuperscript{26} FCC News, Broadband PCS, D, E and F Block Auction Closes, No. 71744 (released Jan. 14, 1997).

\textsuperscript{27} 47 CFR 90.814(b)(1).

\textsuperscript{28} 13 CFR 121.201, Standard Industrial Classification (SIC) code 4812.

220 MHz Radio Service -- Phase II Licensees. 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 criteria for defining small businesses and very small businesses for purposes of determining their eligibility for special provisions such as bidding credits and installment payments. We have defined 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 defined as 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. The SBA has approved these definitions. An auction of Phase II licenses commenced on September 15, 1998, and closed on October 22, 1998. Nine hundred and eight (908) licenses were auctioned in 3 different-sized geographic areas: three nationwide licenses, 30 Regional Economic Area Group Licenses, and 875 Economic Area (EA) Licenses. Of the 908 licenses auctioned, 693 were sold. Companies claiming small business status won: one of the Nationwide licenses, 67% of the Regional licenses, and 54% of the EA licenses. As of January 22, 1999, the Commission announced that it was prepared to grant 654 of the Phase II licenses won at auction.

Paging Licensees. The Commission has adopted a two-tier definition of small businesses in the context of auctioning licenses in the Common Carrier Paging and exclusive Private Carrier Paging services. A small business will be defined as either (1) an entity that, together with its affiliates and controlling principals, has average gross revenues for the three preceding years of not more than $3 million, or (2) an entity that, together with affiliates and controlling principals, has average gross revenues for the three preceding calendar years of not more than $15 million. Because the SBA has not yet approved this definition for paging services, we will utilize the SBA’s definition applicable to radiotelephone companies, i.e., an entity employing no more than 1,500 persons. At present, there are approximately 24,000 Private Paging licenses and 74,000 Common Carrier Paging licenses. According to the most recent Telecommunications Industry Revenue data, 172 carriers reported that they were engaged in the provision of either paging or "other mobile" services, which are placed together in the data. We do not have data specifying the number of these carriers 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 paging carriers that would qualify as small business concerns under the SBA’s definition. Consequently, we estimate that there are fewer than 172 small paging carriers that may be affected by the proposed rules, herein adopted. We estimate that the majority of private and common carrier paging providers would qualify as small entities under the SBA definition.

Narrowband PCS Licensees. The Commission has auctioned nationwide and regional licenses for narrowband PCS. There are 11 nationwide and 30 regional licensees for narrowband PCS. The Commission does not have sufficient information to determine whether any of these licensees are small

31 220 MHz Third Report and Order, 12 FCC Rcd at 11068-69, para. 291.
35 13 CFR 121.201, SIC code 4812.
36 Trends in Telephone Service, Table 19.3 (February 19, 1999).
businesses within the SBA-approved definition for radiotelephone companies. Given that nearly all radiotelephone companies have no more than 1,500 employees and that no reliable estimate of the number of prospective narrowband licensees can be made, we assume, for purposes of this FRFA, that all of the licenses will be awarded to small entities, as that term is defined by the SBA.

**Rural Radiotelephone Service.** The Commission has not adopted a definition of small entity specific to the Rural Radiotelephone Service. A significant subset of the Rural Radiotelephone Service is the Basic Exchange Telephone Radio Systems (BETRS). We will use the SBA's definition applicable to radiotelephone companies, i.e., an entity employing no more than 1,500 persons. There are approximately 1,000 licensees in the Rural Radiotelephone Service, and we estimate that almost all of them qualify as small entities under the SBA's definition.

**Air-Ground Radiotelephone Service.** The Commission has not adopted a definition of small entity specific to the Air-Ground Radiotelephone Service. Accordingly, we will use the SBA's definition applicable to radiotelephone companies, i.e., an entity employing no more than 1,500 persons. 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 definition.

**Fixed Microwave Services.** Microwave services include common carrier, private-operational fixed, and broadcast auxiliary radio services. At present, there are approximately 22,015 common carrier fixed licensees and 61,670 private operational-fixed licensees and broadcast auxiliary radio licensees in the microwave services. The Commission has not yet defined a small business with respect to microwave services. For purposes of this IRFA, we will utilize the SBA's definition applicable to radiotelephone companies -- i.e., an entity with no more than 1,500 persons. We estimate, for this purpose, that all of the Fixed Microwave licensees (excluding broadcast auxiliary licensees) would qualify as small entities under the SBA definition for radiotelephone companies.

**Offshore Radiotelephone Service.** This service operates on several UHF TV broadcast channels that are not used for TV broadcasting in the coastal area of the states bordering the Gulf of Mexico. At

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37 The service is defined in § 22.99 of the Commission's Rules, 47 CFR 22.99.

38 BETRS is defined in §§ 22.757 and 22.759 of the Commission's Rules, 47 CFR 22.757 and 22.759.

39 13 CFR 121.201, SIC code 4812.

40 The service is defined in § 22.99 of the Commission's Rules, 47 CFR 22.99.

41 13 CFR 121.201, SIC code 4812.


43 Persons eligible under parts 80 and 90 of the Commission's rules can use Private Operational-Fixed Microwave services. See 47 CFR parts 80 and 90. Stations in this service are called operational-fixed to distinguish them from common carrier and public fixed stations. Only the licensee may use the operational-fixed station, and only for communications related to the licensee's commercial, industrial, or safety operations.

44 Auxiliary Microwave Service is governed by part 74 of Title 47 of the Commission's Rules. See 47 CFR 74 et seq. Available to licensees of broadcast stations and to broadcast and cable network entities, broadcast auxiliary microwave stations are used for relaying broadcast television signals from the studio to the transmitter, or between two points such as a main studio and an auxiliary studio. The service also includes mobile TV pickups, which relay signals from a remote location back to the studio.

45 13 CFR 121.201, SIC 4812.

46 This service is governed by subpart I of part 22 of the Commission's Rules. See 47 CFR 22.1001 through 22.1037.
present, there are approximately 55 licensees in this service. We are unable at this time to estimate the number of licensees that would qualify as small under the SBA's definition for radiotelephone communications.

Wireless Communications Services. This service can be used for fixed, mobile, radiolocation and digital audio broadcasting satellite uses. The Commission defined "small business" for the wireless communications services (WCS) auction as an entity with average gross revenues of $40 million for each of the three preceding years, and a "very small business" as an entity with average gross revenues of $15 million for each of the three preceding years. 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. We conclude that the number of geographic area WCS licensees affected includes these eight entities.

Multipoint Distribution Systems (MDS). This service involves a variety of transmitters, which are used to relay programming to the home or office, similar to that provided by cable television systems.47 In connection with the 1996 MDS auction, the Commission defined small businesses as entities that had annual average gross revenues for the three preceding years not in excess of $40 million.48 This definition of a small entity in the context of MDS auctions has been approved by the SBA.49 These stations were licensed prior to implementation of Section 309(j) of the Communications Act of 1934, as amended.50 Licenses for new MDS facilities are now awarded to auction winners in Basic Trading Areas (BTAs) and BTA-like areas.51 The MDS auctions resulted in 67 successful bidders obtaining licensing opportunities for 493 BTAs. Of the 67 auction winners, 61 meet the definition of a small business. There are 2,050 MDS stations currently licensed. Thus, we conclude that there are 1,634 MDS providers that are small businesses as deemed by the SBA and the Commission's auction rules.

D. Description of Projected Reporting, Recordkeeping, and Other Compliance Requirements

This Report and Order requires entities taking advantage of the tribal lands bidding credit to satisfy several reporting and compliance requirements. Section III.B.5 requires an applicant to indicate on its long-form application that it intends to serve qualifying tribal lands in its license area(s). Also, the applicant will have 90 days after filing the long-form application to obtain a certification by the affected tribal government providing: (a) its consent to allow the bidder to deploy facilities on its tribal land(s), in accordance with our rules, (b) a statement that the tribal government has not and will not enter into an exclusive contract with the applicant precluding entry by other carriers and will not unreasonably discriminate against any carrier, and (c) confirmation that the tribal lands are qualifying tribal lands as defined in our rules. In addition, an applicant must certify that it will comply with certain coverage requirements and consult with the tribal government regarding the siting of facilities and deployment of

47 For purposes of this item, MDS includes both the single channel Multipoint Distribution Service (MDS) and the Multichannel Multipoint Distribution Service (MMDS).
48 47 CFR 1.2110 (a)(1).
service on the tribal land. Further, at the end of the three-year build-out period, licensees that receive the tribal lands bidding credit must file a certification that they have satisfied the build-out requirements. To the extent that licensees choose to take advantage of any additional flexibility that we adopt, they may be required to comply with other reporting requirements.

The rules we adopt allow entities 90 days from the filing deadline of the long-form application to obtain the consent of a tribal government to serve its tribal land. Negotiation periods will vary tremendously within this timeframe. We anticipate that some entities will employ an attorney (average of $200.00 per hour) to assist with negotiations. It is difficult to approximate how long it may take to obtain the consent of a tribal government, nevertheless, we estimate that the cost of obtaining tribal consent should not exceed $50,000.

Preparation of the requisite certifications should be relatively straightforward, particularly since technical analyses are not required. We estimate that it will take two (2) hours to prepare the certifications and that entities will use in-house staff (average $50.00 per hour), which should minimize costs. Since long-form applications are already required, we conclude that it should not take additional time to indicate an intention to take advantage of the tribal lands bidding credit.

E. Steps Taken to Minimize Significant Economic Impact on Small Entities, and Significant Alternatives Considered

SBA claims that we did not sufficiently assess in the IRFA how small businesses could be affected by our decisions to seek comment on eliminating designated entity (“DE”) transfer restrictions and awarding bidding credits in future auctions to entities that commit to deploy facilities to tribal lands. We disagree. The Notice sought comment on an array of alternatives, including the aforementioned, that the Commission could adopt to encourage the provision of wireless services to tribal areas. The RFA requires that the Commission ensure that regulations we adopt do not inhibit the ability of small entities to compete. The Notice did not propose to eliminate DE transfer restrictions, but rather sought comment on this alternative. In any event, the Report and Order does not address DE transfer restrictions.

Likewise, we sought comment on whether to award bidding credits in future auctions to any entity, regardless of size, that commits to serve tribal lands. SBA claims that such a proposal would unfairly advantage large businesses. We disagree. The Notice sought comment on whether to combine any credit for serving tribal lands with the small business credits available under our rules. Thus, small entities could potentially receive two credits for a license area. We did not propose a specific implementation program, but rather sought comment from the industry as to how to structure the program, including whether to limit the credit to designated entities, the appropriate credit amount, and any necessary safeguards. In addition, we sought comment on how to minimize any economic impact on small entities.

The Report and Order expands our bidding credit policy to facilitate the provision of wireless telecommunications services to tribal lands. Entities taking advantage of the credit must comply with certain reporting and compliance requirements. Expected costs include: (1) negotiating with and obtaining consent from tribal governments, (2) preparing the requisite certifications, and (3) deploying facilities to tribal areas. We conclude that obtaining tribal consent and deploying facilities to tribal areas may have a significant economic impact on small entities. Below, we discuss our efforts to minimize the economic impact on small entities in both of these areas.

Obtaining Tribal Consent
As discussed in Section III.B.1 of the Report and Order, we find that tribal governments are uniquely situated to ensure that carriers who obtain credits will meet their commitments to deploy facilities to the tribal areas with the greatest need. Therefore, tribal consent is key to meeting the objectives of our bidding credit initiative. We recognize that negotiations with a tribal government could prove lengthy and costly, particularly where an entity seeks the consent of multiple tribal governments. To minimize the economic impact on successful bidders, we rejected our proposal to require entities taking advantage of the credit to file an executed agreement with tribal governments setting forth all the terms and conditions for deploying facilities and initiating service on tribal lands. We concluded that this approach would expand the negotiations process and prove overly burdensome. Instead, entities need only obtain the consent of the tribal authority and file two certifications, as set forth in Section III.B.5 of the Report and Order.

Deployment of Facilities

Compliance with the coverage requirements may have a significant economic impact on small entities, particularly in instances where infrastructure costs for serving tribal lands exceed the available credit. The rules we adopt, however, should minimize the infrastructure costs for serving tribal areas. As set forth in Section III.B.4 of the Report and Order, we adopt several caps for the tribal lands bidding credit, depending on the gross bid amount of a license, which takes into account the potential recovery level for infrastructure costs. For example, for licenses with a gross bid amount up to $1 million, carriers may receive a bidding credit up to 50 percent of the value of the license.\footnote{The total size of the qualifying tribal lands, however, is a significant factor in determining the amount of the available credit. \textit{See} Section III.B.4.} Further, in instances where a carrier’s infrastructure costs exceed the available credit, the carrier may seek a waiver to obtain additional credit, subject to the applicable caps. This should allow for substantial recovery of infrastructure costs, thus minimizing the economic impact on small entities.

Report to Congress: The Commission will send a copy of the Report and Order, including this FRFA, in a report to be sent to Congress pursuant to SBREFA, \textit{see} 5 U.S.C. § 801(a)(1)(A). In addition, the Commission will send a copy of the Report and Order, including FRFA, to the Chief Counsel for Advocacy of the SBA. A copy of the Report and Order and FRFA (or summaries thereof) also will be published in the Federal Register. \textit{See} 5 U.S.C. § 604(b).
APPENDIX D
INITIAL REGULATORY FLEXIBILITY ANALYSIS

As required by the Regulatory Flexibility Act (RFA), the Commission has prepared this Initial Regulatory Flexibility Analysis (IRFA) of the possible significant economic impact on small entities of the policies and rules proposed in the Further Notice of Proposed Rulemaking (Further Notice). Written public comments are requested on this IRFA. These comments must be filed in accordance with the filing deadlines for comments on the rest of the Further Notice, provided in Section V.D, and they must have a separate and distinct heading designating them as responses to the IRFA. The Commission will send a copy of the Further Notice, including the IRFA, to the Chief Counsel for Advocacy of the Small Business Administration, in accordance with the RFA. In addition, the Further Notice and IRFA (or summaries thereof) will be published in the Federal Register.

A. Need for, and Objectives of, the Proposed Rules

The initiatives we adopt in the Report and Order should facilitate the deployment of facilities, and ultimately service, to the most underserved tribal communities. We recognize however, that there are other areas, both tribal and non-tribal, that have penetration levels above 70 percent, but still significantly below the nationwide average of 94 percent. It is our goal to ensure that all Americans have access to telecommunications service. In the Further Notice, we seek comment on other possible uses of bidding credits to encourage deployment of wireless facilities, and ultimately service, to these areas.

B. Legal Basis

We have authority under Sections 4(i), 303(r), 309(j) and 706 of the Communications Act of 1934, as amended, 47 U.S.C. §§ 154(i), 303(r), 309(j) and 706, to adopt the proposals set forth in the Further Notice.

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

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 proposed rules, if adopted. The RFA generally defines the term "small entity" as having the same meaning as the terms "small business," "small organization," and "small governmental jurisdiction." In addition, the term "small business" has the same meaning as the term "small business concern" under the Small Business Act. A small business

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3 See 5 U.S.C. § 603(a).

4 See id.

5 5 U.S.C. § 603(b)(3).

6 Id. at § 601(6).

7 5 U.S.C. § 601(3) (incorporating by reference the definition of "small business concern" in 15 U.S.C. § 632). Pursuant to the RFA, the statutory definition of a small business applies "unless an agency, after consultation with (continued….)
concern is one that: (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).  

A small organization is generally "any not-for-profit enterprise which is independently owned and operated and is not dominant in its field."9 Nationwide, as of 1992, there were approximately 275,801 small organizations.10 And finally, "small governmental jurisdiction" generally means "governments of cities, counties, towns, townships, villages, school districts, or special districts, with a population of less than 50,000."11 As of 1992, there were approximately 85,006 such jurisdictions in the United States.12 This number includes 38,978 counties, cities, and towns; of these, 37,566, or 96 percent, have populations of fewer than 50,000.13 The Census Bureau estimates that this ratio is approximately accurate for all governmental entities. Thus, of the 85,006 governmental entities, we estimate that 81,600 (91 percent) are small entities.

SBA has developed a definition of small entities for radiotelephone (wireless) companies. The Census Bureau reports that there were 1,176 such companies in operation for at least one year at the end of 1992.14 According to SBA's definition, a small business radiotelephone company is one employing no more than 1,500 persons.15 The Census Bureau also reported that 1,164 of those radiotelephone companies had fewer than 1,000 employees. Thus, even if all of the remaining 12 companies had more than 1,500 employees, there would still be 1,164 radiotelephone companies that might qualify as small entities if they are independently owned and operated. Although it seems certain that some of these carriers are not independently owned and operated, we are unable at this time to estimate with greater precision the number of radiotelephone carriers and service providers that would qualify as small business concerns under SBA's definition. Consequently, we estimate that there are fewer than 1,164 small entity radiotelephone companies that may be affected by the policies and rules proposed in this Further Notice.

Below, we further describe and estimate the number of wireless small business concerns that may be affected by the rules we propose in the Further Notice.

**Cellular Providers.** Neither the Commission nor the SBA has developed a definition of small entities applicable to cellular licensees. Therefore, the applicable definition of small entity is the definition under the SBA rules applicable to radiotelephone (wireless) companies. This provides that a

(Continued from previous page) 

13 Id.
15 13 C.F.R. § 121.201, SIC Code 4812.
small entity is a radiotelephone company employing no more than 1,500 persons.\textsuperscript{16} According to the Bureau of the Census, only twelve radiotelephone firms from a total of 1,178 such firms which operated during 1992 had 1,000 or more employees.\textsuperscript{17} Therefore, even if all twelve of these firms were cellular telephone companies, nearly all cellular carriers were small businesses under the SBA’s definition. In addition, we note that there are 1,758 cellular licenses; however, a cellular licensee may own several licenses. In addition, according to the most recent \textit{Telecommunications Industry Revenue} data, 808 carriers reported that they were engaged in the provision of either cellular service or Personal Communications Service (PCS) services, which are placed together in the data.\textsuperscript{18} We do not have data specifying the number of these carriers 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 cellular service carriers that would qualify as small business concerns under the SBA’s definition. Consequently, we estimate that there are fewer than 808 small cellular service carriers that may be affected by the rules adopted herein.

\textit{Broadband PCS Licensees.} The broadband PCS spectrum is divided into six frequency blocks designated A through F, and the Commission 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 less than $40 million in the three previous calendar years.\textsuperscript{19} For Block F, an additional classification for "very small business" was added and is defined as an entity that, together with their affiliates, has average gross revenues of not more than $15 million for the preceding three calendar years.\textsuperscript{20} These regulations defining "small entity" in the context of broadband PCS auctions have been approved by the SBA.\textsuperscript{21} No small businesses within the SBA-approved definition 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% of the 1,479 licenses for Blocks D, E, and F.\textsuperscript{22} Based on this information, we conclude that the number of small broadband PCS licensees will include the 90 winning C Block bidders and the 93 qualifying bidders in the D, E, and F blocks, for a total of 183 small entity PCS providers as defined by the SBA and the Commission’s auction rules.

\textit{SMR Licensees.} The Commission awards bidding credits in auctions for geographic area 800 MHz and 900 MHz SMR licenses to firms that had revenues of no more than $15 million in each of the three previous calendar years.\textsuperscript{23} In the context of 900 MHz SMR, this regulation defining "small entity" has been approved by the SBA; approval concerning 800 MHz SMR is being sought. We do 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

\textsuperscript{16} 13 CFR 121.201, SIC code 4812.
\textsuperscript{17} 1992 Census, Series UC92-S-1, at Table 5, SIC code 4812.
\textsuperscript{18} \textit{Trends in Telephone Service}, Table 19.3 (March 2000).
\textsuperscript{19} See Amendment of Parts 20 and 24 of the Commission's Rules -- Broadband PCS Competitive Bidding and the Commercial Mobile Radio Service Spectrum Cap, Report and Order, FCC 96-278, WT Docket No. 96-59, paras. 57-60 (released Jun. 24, 1996), 61 FR 33859 (Jul. 1, 1996); see also 47 CFR 24.720(b).
\textsuperscript{22} FCC News, \textit{Broadband PCS, D, E and F Block Auction Closes}, No. 71744 (released Jan. 14, 1997).
\textsuperscript{23} 47 CFR 90.814(b)(1).
$15 million. One firm has over $15 million in revenues. We assume, for purposes of this IRFA, that all of the remaining existing extended implementation authorizations are held by small entities, as that term is defined by the SBA. For geographic area licenses in the 900 MHz SMR band, there are 60 who qualified as small entities. For the 800 MHz SMR's, 38 are small or very small entities.

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 definition of 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 definition under the SBA rules applicable to Radiotelephone Communications companies. This definition provides that a small entity is a radiotelephone company employing no more than 1,500 persons. According to the Bureau of the Census, only 12 radiotelephone firms out of a total of 1,178 such firms which operated during 1992 had 1,000 or more employees. Therefore, if this general ratio continues in 1999 in the context of Phase I 220 MHz licensees, we estimate that nearly all such licensees are small businesses under the SBA's definition.

220 MHz Radio Service -- Phase II Licensees. 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 criteria for defining small businesses and very small businesses for purposes of determining their eligibility for special provisions such as bidding credits and installment payments. We have defined 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 defined as 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. The SBA has approved these definitions. An auction of Phase II licenses commenced on September 15, 1998, and closed on October 22, 1998. Nine hundred and eight (908) licenses were auctioned in 3 different-sized geographic areas: three nationwide licenses, 30 Regional Economic Area Group Licenses, and 875 Economic Area (EA) Licenses. Of the 908 licenses auctioned, 693 were sold. Companies claiming small business status won: one of the Nationwide licenses, 67% of the Regional licenses, and 54% of the EA licenses. As of January 22, 1999, the Commission announced that it was prepared to grant 654 of the Phase II licenses won at auction.

Paging Licensees. The Commission has adopted a two-tier definition of small businesses in the context of auctioning licenses in the Common Carrier Paging and exclusive Private Carrier Paging

24 13 CFR 121.201, Standard Industrial Classification (SIC) code 4812.
27 220 MHz Third Report and Order, 12 FCC Rcd at 11068-69, para. 291.
services. A small business will be defined as either (1) an entity that, together with its affiliates and controlling principals, has average gross revenues for the three preceding years of not more than $3 million, or (2) an entity that, together with affiliates and controlling principals, has average gross revenues for the three preceding calendar years of not more than $15 million. Because the SBA has not yet approved this definition for paging services, we will utilize the SBA's definition applicable to radiotelephone companies, i.e., an entity employing no more than 1,500 persons. At present, there are approximately 24,000 Private Paging licenses and 74,000 Common Carrier Paging licenses. According to the most recent Telecommunications Industry Revenue data, 172 carriers reported that they were engaged in the provision of either paging or "other mobile" services, which are placed together in the data. We do not have data specifying the number of these carriers 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 paging carriers that would qualify as small business concerns under the SBA's definition. Consequently, we estimate that there are fewer than 172 small paging carriers that may be affected by the rules adopted herein. We estimate that the majority of private and common carrier paging providers would qualify as small entities under the SBA definition.

Narrowband PCS Licensees. The Commission has auctioned nationwide and regional licenses for narrowband PCS. There are 11 nationwide and 30 regional licensees for narrowband PCS. The Commission does not have sufficient information to determine whether any of these licensees are small businesses within the SBA-approved definition for radiotelephone companies. Given that nearly all radiotelephone companies have no more than 1,500 employees and that no reliable estimate of the number of prospective narrowband licensees can be made, we assume, for purposes of this IRFA, that all of the licenses will be awarded to small entities, as that term is defined by the SBA.

Rural Radiotelephone Service. The Commission has not adopted a definition of small entity specific to the Rural Radiotelephone Service. A significant subset of the Rural Radiotelephone Service is the Basic Exchange Telephone Radio Systems (BETRS). We will use the SBA's definition applicable to radiotelephone companies, i.e., an entity employing no more than 1,500 persons. There are approximately 1,000 licensees in the Rural Radiotelephone Service, and we estimate that almost all of them qualify as small entities under the SBA's definition.

Air-Ground Radiotelephone Service. The Commission has not adopted a definition of small entity specific to the Air-Ground Radiotelephone Service. Accordingly, we will use the SBA's definition applicable to radiotelephone companies, i.e., an entity employing no more than 1,500 persons. 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 definition.

Fixed Microwave Services. Microwave services include common carrier, private-operational fixed, and broadcast auxiliary radio services. At present, there are approximately 22,015 common

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31 13 CFR 121.201, SIC code 4812.
32 Trends in Telephone Service, Table 19.3 (February 19, 1999).
33 The service is defined in § 22.99 of the Commission’s Rules, 47 CFR 22.99.
34 BETRS is defined in §§ 22.757 and 22.759 of the Commission’s Rules, 47 CFR 22.757 and 22.759.
35 13 CFR 121.201, SIC code 4812.
36 The service is defined in § 22.99 of the Commission’s Rules, 47 CFR 22.99.
37 13 CFR 121.201, SIC code 4812.
carrier fixed licensees and 61,670 private operational-fixed licensees and broadcast auxiliary radio licensees in the microwave services. The Commission has not yet defined a small business with respect to microwave services. For purposes of this IRFA, we will utilize the SBA's definition applicable to radiotelephone companies -- i.e., an entity with no more than 1,500 persons. 41 We estimate, for this purpose, that all of the Fixed Microwave licensees (excluding broadcast auxiliary licensees) would qualify as small entities under the SBA definition for radiotelephone companies.

Offshore Radiotelephone Service. This service operates on several UHF TV broadcast channels that are not used for TV broadcasting in the coastal area of the states bordering the Gulf of Mexico. 42 At present, there are approximately 55 licensees in this service. We are unable at this time to estimate the number of licensees that would qualify as small under the SBA's definition for radiotelephone communications.

Wireless Communications Services. This service can be used for fixed, mobile, radiolocation and digital audio broadcasting satellite uses. The Commission defined "small business" for the wireless communications services (WCS) auction as an entity with average gross revenues of $40 million for each of the three preceding years, and a "very small business" as an entity with average gross revenues of $15 million for each of the three preceding years. 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. We conclude that the number of geographic area WCS licensees affected includes these eight entities.

Multipoint Distribution Systems (MDS). This service involves a variety of transmitters, which are used to relay programming to the home or office, similar to that provided by cable television systems. 43 In connection with the 1996 MDS auction, the Commission defined small businesses as entities that had annual average gross revenues for the three preceding years not in excess of $40 million. 44 This definition of a small entity in the context of MDS auctions has been approved by the SBA. 45 These stations were licensed prior to implementation of Section 309(j) of the Communications Act of 1934, as amended. 46 Licenses for new MDS facilities are now awarded to auction winners in

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Basic Trading Areas (BTAs) and BTA-like areas. The MDS auctions resulted in 67 successful bidders obtaining licensing opportunities for 493 BTAs. Of the 67 auction winners, 61 meet the definition of a small business. There are 2,050 MDS stations currently licensed. Thus, we conclude that there are 1,634 MDS providers that are small businesses as deemed by the SBA and the Commission's auction rules.

D. Description of Projected Reporting, Recordkeeping, and Other Compliance Requirements

The Further Notice does not propose any specific reporting, recordkeeping or compliance requirements. However, we seek comment on what, if any, such requirements we should impose if we adopt the proposals set forth in the Further Notice.

E. Steps Taken to Minimize Significant Economic Impact on Small Entities, and Significant Alternatives Considered

The RFA requires an agency to describe any significant alternatives that it has considered in reaching its proposed approach, which may include the following four alternatives: (1) the establishment of differing compliance or reporting requirements or timetables that take into account the resources available to small entities; (2) the clarification, consolidation, or simplification of compliance or reporting requirements under the rule for small entities; (3) the use of performance, rather than design, standards; and (4) an exemption from coverage of the rule, or any part thereof, for small entities.

The Further Notice seeks broad comment on additional uses of bidding credits to facilitate the provision of service to tribal and non-tribal areas. The Further Notice does not make specific implementation proposals, but rather seeks guidance from the industry on how to further expand our bidding policies. We tentatively conclude that these initiatives should not have a significant economic impact on small carriers. Importantly, small business many combine any additional tribal lands bidding credits with the small business bidding credits available under our existing rules. Commenters are encouraged to discuss the alternatives proposed in the Further Notice, and specifically how to minimize any significant economic impact on small entities.

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48 See Further Notice ¶ 23-25.
F. Federal Rules that May Duplicate, Overlap, or Conflict with the Proposed Rules

None.
Separate Statement of
Commissioner Gloria Tristani


I am proud to cast my vote in support of these items. Our decisions here reflect this agency’s commitment to improving access to telephone service on tribal lands and, in turn, to opening the door to the Information Age.

Section 254 of the Communications Act requires the Commission to assure that all Americans have access to telecommunications services. While 94 percent of Americans enjoy phone service today, just 47 percent of Indian tribal households on tribal lands have telephones. The policies we adopt today, including expanded Lifeline and Link Up coverage, should boost subscribership on tribal lands and create incentives for new infrastructure investment. We appropriately recognize that wireless-based services offer unique solutions to increasing telephone access in often-isolated and remote tribal lands. I strongly support the decision to award bidding credits in upcoming auctions to wireless carriers that commit to deploy facilities and offer service to tribal areas that have telephone subscription rates below 70 percent.

I am also pleased that the Commission has established an expedited process for handling petitions by carriers seeking designations as Eligible Telecommunications Carriers on tribal lands. Excessive delay in the designation of competing providers may hinder the development of competition and the availability of service in many high-cost areas. By committing to prompt resolution of pending petitions, we should speed deployment of telecommunications infrastructure.

Finally, I am pleased that the Commission is reaffirming its commitment to promote a government-to-government relationship with tribal nations and to recognize that tribal nations have rights to set their own communications priorities and goals. To that end, I look forward to the training session the Commission will hold this September to assist tribal nations in making decisions about telecommunications.

Our actions today, and our commitment to continue to act in the future, will help fulfill the mandate of Congress and, I believe, our moral obligation to ensure that all Americans enjoy the benefits of the Information Age.

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