

## A Comparison Between Spectrum Auctions in the United States and New Zealand

Ruth W. Pritchard-Kelly

Follow this and additional works at: <http://digitalcommons.law.umaryland.edu/mjil>



Part of the [International Law Commons](#)

---

### Recommended Citation

Ruth W. Pritchard-Kelly, *A Comparison Between Spectrum Auctions in the United States and New Zealand*, 20 Md. J. Int'l L. 155 (1996).  
Available at: <http://digitalcommons.law.umaryland.edu/mjil/vol20/iss1/5>

This Notes & Comments is brought to you for free and open access by DigitalCommons@UM Carey Law. It has been accepted for inclusion in Maryland Journal of International Law by an authorized administrator of DigitalCommons@UM Carey Law. For more information, please contact [smccarty@law.umaryland.edu](mailto:smccarty@law.umaryland.edu).

## COMMENT

### A COMPARISON BETWEEN SPECTRUM AUCTIONS IN THE UNITED STATES AND NEW ZEALAND

#### I. INTRODUCTION

After 50 years of communications law requiring the Federal Communications Commission to give away licenses for free, Congress in 1993 abruptly mandated the use of auctions for certain services. This change in policy was seen as the best way to get new telecommunications services to the public quickly, and also as a way to raise revenues. Congress and the Federal Communications Commission (FCC or Commission) looked to New Zealand, the only other country to have tried such auctions, for inspiration and guidance. But New Zealand offered an imperfect paradigm, as the auctions there seem not to have stemmed from the same motives as the U.S., but rather from the push to privatize what until recently had been a government monopoly of the airwaves. The U.S. seemed to learn from New Zealand's mistakes in auction procedure, but may have a still greater lesson to learn: that there may be no need for a regulatory agency such as the FCC at all. Unfortunately, both countries have been sidetracked from their pushes to allow market-driven control of the spectrum. Both countries must contend with the rights of minorities, which in New Zealand are guaranteed by treaty with the Maori, and in the U.S. by affirmative action. This paper will compare and contrast the goals behind each country's decision to auction and then examine the respective results.

#### II. THE UNITED STATES' DECISION TO AUCTION THE AIRWAVES

##### *A. History of the U.S. Licensing Process*

The FCC has three basic functions: to divide the radiofrequency spectrum into bands (or blocks) allocated to specific services, to set up technical parameters for the use of those bands, and to award licenses to operators to provide services in those bands. The last function - awarding licenses - has often proved difficult for the FCC. For most of its 60-year history, the FCC used comparative hearings, a painstaking

and time-consuming process by which each and every contender for any type of license was given its day in court before an administrative law judge, and only after this lengthy procedure was a license awarded. The Communications Act directs the FCC to consider the demands of "public interest, convenience and necessity" when granting or denying licenses to use the frequency spectrum.<sup>1</sup> Early on, the Supreme Court said that the FCC must accord bona fide competing applications a full hearing by comparative hearings.<sup>2</sup> As the number of technologies and applicants grew, this process became quite time-consuming. As a way to hasten the awarding of licenses, Congress in the early 1980s allowed the Commission to use lotteries to award licenses for certain services (most notably cellular radio).<sup>3</sup> Another licensing scheme was tried for a satellite service whose allocated spectrum could only support one provider: the FCC forced all interested parties to form a single entity, and awarded the sole license to that entity.<sup>4</sup> Congress and the Commission continued to be interested in improving the license-awarding process.

#### *B. Why the Current Licensing Procedures Weren't Working*

Comparative hearings and even lotteries take a long time to conduct, and this means a delay in delivery of service to the public. Furthermore, because these methods do not award the license to the party willing to pay the most, the recipient often resells the license to that most-willing party. The government gets none of the profits from that sale, and the public must wait even longer before the service is up and running.<sup>5</sup>

---

1. The Communications Act of 1934, 47 U.S.C. § 309(a) (1995).

2. *Ashbacker Radio Corp. v. FCC*, 326 U.S. 327 (1945).

3. 47 U.S.C. § 309(i) (1995), *amended by* the Omnibus Reconciliation Act of 1981.

4. *In re* Amendment of Parts 2, 22 and 25 of the Commission's Rules to Allocate Spectrum for and to Establish Other Rules and Policies Pertaining to the Use of Radio Frequencies in a Land Mobile Satellite Serv. for the Provision of Various Common Carrier Servs., Second Report and Order, 2 FCCR 485 (1987) (establishing procedure for forming a consortium of all interested and qualified applicants); *In re* Amendment of Parts 2, 22 and 25 of the Commission's Rules to Allocate Spectrum for and to Establish Other Rules and Policies Pertaining to the Use of Radio Frequencies in a Land Mobile Satellite Serv. for the Provision of Various Common Carrier Servs., Memorandum, Opinion, Order and Authorization, FCCR 6041 (1989) (awarding the sole license to the American Mobile Satellite Consortium).

5. For example, the lotteries to award cellular radio licenses were rife with stories of abuse. One investor group that won a license to provide service in Wisconsin sold the rights three months later to a major player in the cellular industry (McCaw Cellular) for about \$ 62.3 million. Jonathan Marshall, *Stakes High in Spectrum Auction; Gov-*

In 1991, the National Telecommunications and Information Agency (NTIA) issued a report calling for a complete revamping of the government's approach to licensing.<sup>6</sup> The report concluded that not only would auctions be a fairer and more rational way of assigning licenses (as opposed to an arbitrary system like a lottery), they would also be a good way to recover the worth of the licenses for the American taxpayer.<sup>7</sup> The NTIA had read and evaluated a report commissioned by New Zealand (see *THE NEW ZEALAND EXPERIENCE* below), and was influenced by that report to push for the same reforms here.<sup>8</sup>

### C. *The Decision to Auction*

The idea of selling the rights to use the spectrum came up almost as soon as the government began giving them away. In 1959, the Nobel-prize winning economist, Ronald Coase, wrote the seminal article describing the inherent value of market-based auctions of the spectrum.<sup>9</sup> During the Reagan and Bush administrations, the idea of auctions began to surface again, culminating in the NTIA study in 1991. When the Congressional Budget Office submitted a study to Congress in 1992 that projected revenues of from one to five billion dollars from such auctions, it was fairly easy for the Clinton administration to get auctions approved in the Omnibus Budget Reconciliation Act of 1993 (the Budget Act).<sup>10</sup>

In the Budget Act, Congress gave the FCC express authority to employ competitive bidding procedures (auctions) when awarding licenses to mutually exclusive applications for supplying commercial services.<sup>11</sup> Congress also charged the FCC with protecting the public interest, and more importantly,

promoting economic opportunity and competition and ensuring

---

*ernment Ends Giveaway of Broadcast Frequencies*, S.F. CHRON., April 11, 1994, at B1.

6. NATIONAL TELECOMM. AND INFO. AGENCY, U.S. DEP'T OF COMMERCE, U.S. SPECTRUM MANAGEMENT POLICY: AN AGENDA FOR THE FUTURE, (1991) (hereinafter NTIA STUDY).

7. *Id.* at 115.

8. *Id.* at 93

9. Ronald H. Coase, *The Federal Communications Commission*, 2 J. L. & ECON. 1 (1959). Coase won the Nobel Prize for economics in 1991.

10. CONGRESSIONAL BUDGET OFFICE, *Auction Licenses to Use the Radio Spectrum, in REDUCING THE DEFICIT: SPENDING AND REVENUE OPTIONS* at 213-14, 102d Cong., 2d Sess. (1992).

11. 47 U.S.C. § 309(j)(1) (1995).

that new and innovative technologies are readily accessible to the American people by avoiding excessive concentration of licenses and by disseminating licenses among a wide variety of applicants, including small businesses, rural telephone companies, and businesses owned by members of minority groups and women.<sup>12</sup>

Of course, another major goal of the Budget Act was to raise revenues for the government from the auctions.<sup>13</sup>

### 1. Major Concerns

The FCC was burdened by numerous fears and concerns surrounding its task of implementing auctions. Aside from the concern about obvious abuses (such as fraud and cheating), there were concerns about unjust enrichment, prompt delivery of service, warehousing of spectrum, and collusion.<sup>14</sup> The Budget Act cautioned the FCC to formulate the auctions so that speculation, or trafficking, in licenses and unjust enrichment could not happen;<sup>15</sup> the Commission itself wished to prohibit collusion among bidders.<sup>16</sup>

“Unjust enrichment” occurs if a bidder wins a license with a bid that falls short of the true fair market value,<sup>17</sup> because the licensee could then resell the license at market value and make a profit. Not only would the government not realize the fair market value of the license, but there would be a delay in offering the service to the public while this trafficking went on.<sup>18</sup> “Warehousing” happens when a licen-

12. 47 U.S.C. § 309(j)(3)(B) (1995). However, the inclusion of women and minorities in this section has come under fire in the wake of the 1995 Supreme Court decision requiring strict scrutiny of any government classification based explicitly on race. (*Adarand Constructors v. Peña*, 115 S.Ct 2097, 2117. For a deeper discussion of how *Adarand* has affected the auctions, see *Legal Ramifications, infra*).

13. Omnibus Budget Reconciliation Act of 1993, § 6002, amending 47 U.S.C. § 309(j)(3)(C) (1993).

14. *In re* Implementation of § 309(j) of the Communications Act, Competitive Bidding, Notice of Proposed Rule Making, 8 FCCR 7635, ¶ 10 (1993) (hereinafter NPRM).

15. 47 U.S.C. § 309(j)(4)(E) (Law. Co-op. 1995).

16. NPRM *supra* note 14, ¶ 93.

17. H.R. REP. NO. 111, 103d Cong., 1st Sess. 257 (1993) *reprinted in* 1993 U.S.C.C.A.N. 2833.

18. On the other hand, competitive bidding strategies could also cause applicants to pay more per license than the real market value. This would be bad because the winning licensee might not be able to make the system profitable, and the public would suffer from either slow start-up or failure of the company entirely. The amended Com-

see does not actually build a system or provide service, but holds on to the license so that no one else can use it. This “warehousing” would keep the spectrum out of the market, forcing prices up on other pieces of the spectrum.<sup>19</sup>

Another concern was that frivolous or unqualified bidders would skew the market value by bidding and then defaulting.<sup>20</sup> A frivolous bidder might only be bidding to drive the price up and beat down competition, with no intention of actually winning or building the system.<sup>21</sup> (See THE AFTERMATH discussion below regarding the results and repercussions of the auctions.) Therefore, the FCC required a licensee to show its financial qualifications, which helped the FCC screen out bidders that obviously did not have the funds to compete in the bidding.<sup>22</sup> Penalties were also put in place for performance failures, to ensure prompt delivery of service to rural areas, to prevent stockpiling or warehousing of spectrum, and to promote investment in and rapid deployment of new technologies and services.<sup>23</sup>

The biggest fear of those who opposed auctions was that auctions would make small innovative entrepreneurs “part of the U.S.’s history, not part of its future.”<sup>24</sup> Congress addressed this concern from the beginning, stressing that the FCC was to come up with flexible payment schedules and techniques to afford smaller entities the wherewithal to compete in the auction against those with “deep pockets.”<sup>25</sup> Others were more concerned that money shouldn’t be the overriding criterion for granting licenses; the government should keep in mind social poli-

---

munications Act now requires the FCC to use penalties to try to prevent these abuses. 47 U.S.C. § 309(j)(4)(B) (1995).

19. *PCS Industry Speaks Out on Auctions*, PCS News, Apr. 29, 1993, at 1.

20. “Insincere bidding, whether purely frivolous or strategic, distorts the price information generated by the auction process and reduces its efficiency.” *In re Implementation of § 309(j) of the Communications Act, Competitive Bidding*, Second Report and Order, 9 FCCR 2941, ¶ 147 (1994).

21. Barry E. Goodstadt, *Narrowband Auctions Provided Lessons for Future PCS Bidders*, RCR, Nov. 21, 1994, at 23, 25.

22. Australia faced a parallel fiasco last year when it auctioned two separate licenses for direct-broadcast satellite television, only to discover that neither winner had any intention of paying the full price. Each had made dozens of bids at sequentially lower figures, with the plan of defaulting on all but the lowest figure needed to win. Since the Government had made no provision for penalties for defaults on bids, this strategy worked like a charm. Peter Passell, *Economic Scene; Auctioning Off the Airwaves Will be a Formidable Undertaking*, N.Y. TIMES, Apr. 7, 1994, at D2.

23. *Id.*

24. *Id.*

25. H.R. REP. NO. 111, 103d Cong., 1st Sess. at 152 (1993), *reprinted in* 1993 U.S.C.C.A.N. at 2748.

cies, too.<sup>26</sup> In fact, Congress was not only concerned with raising money for the treasury; Congress was also concerned that competitive bidding would result in excluding small businesses, women, and minorities from the telecommunications industry.<sup>27</sup> Accordingly, Congress mandated the FCC accommodate these "designated entities" (DEs) as a kind of affirmative action. There was concern that merely selling the spectrum to the highest bidder did not necessarily encourage technical innovation.<sup>28</sup> The concern was that the emphasis on price would leave the brilliant but poor entrepreneur out of the running.<sup>29</sup>

While there was no indication traditional methods of disbursing licenses really avoided these problems, proponents pointed to the money auctions would make.<sup>30</sup> Detractors from the auction mania pointed out that auctions would not necessarily reap as much cash for the treasury as proponents thought.<sup>31</sup> The detractors suggested that licensees that did not pay for their spectrum were more likely to be profitable, and would therefore be eligible for a higher level of taxation.<sup>32</sup> Such a company was also likely to charge lower prices, thus generating more customers and traffic — and tax revenues. A company which had to pay for spectrum would pass the cost on to customers.<sup>33</sup> Similarly, detractors were afraid that large auction payments as a start-up cost of doing business would affect the profitability of companies.<sup>34</sup> Reduced profitability might lead to a reduction in taxes paid by the company.<sup>35</sup>

26. *Spectrum Auctions*, MOBILE COMM., Nov. 7, 1991, at E1; see also Russell Gold, *Fire Sale: Auctioning the Nation's Airwaves*, THE VILLAGE VOICE, Dec. 27, 1993 at 46 (fearing that the government is so desperate for cash it will forget about social responsibility).

27. H.R. REP. NO. 111, 103d Cong., 1st Sess. at 254-55 (1993), reprinted in 1993 U.S.C.C.A.N. at 2831. As noted *infra*, the special treatment of women and minorities has been struck down by the recent Supreme Court ruling requiring such classifications to meet the strictest scrutiny. (*Adarand Constructors, Inc. v. Peña*, 115 S.Ct. 2097, 2117 (1995)) See *Legal Ramifications infra* regarding the FCC's reaction to *Adarand*.

28. *PCS Industry Speaks Out on Auctions*, PCS NEWS, Apr. 29, 1993, at 1.

29. *Id.*

30. See, for example, NTIA STUDY at 115; Paul Farhi, *Clinton Proposes Spectrum Auction; Benefits for Deficit, New Communications Technologies Seen*, THE WASHINGTON POST, Feb. 18, 1993, at B12; Omnibus Budget Reconciliation Act of 1993, § 6002, amending 47 U.S.C. § 309(j)(3)(C) (1995).

31. *Spectrum Auctions*, MOBILE COMM., Nov. 7, 1991, at E1.

32. *Id.*

33. *Id.*

34. *Id.* See also *PCS Industry Speaks Out on Auctions*, PCS NEWS, Apr. 29, 1993, at 1.

35. *PCS Industry Speaks Out on Auctions*, PCS NEWS, Apr. 29, 1993, at 1.

## 2. Perceived Advantages

Overshadowing all the concerns were two major reasons in support of auctions: economic efficiency and revenue for the government. Economic efficiency would not only get services to the consumer faster, but would encourage the introduction of spectrum-saving technologies (which is highly important as the radiofrequency spectrum is finite). Other related advantages included a quicker allocation process (as there would be no lengthy evaluation of license applications) and the transfer of the "monopoly (or operator) surplus" to the public via the taxation and Treasury systems.<sup>36</sup> The projections of revenue were seductive, and projections increased as time went on (from five billion dollars in 1992 to twelve billion dollars in 1995).<sup>37</sup> The FCC addressed the concerns raised in its proceedings, and developed procedures for preventing and dealing with all of them (see THE AUCTIONS below).

## 3. The Final Step Towards Auctions

The FCC adopted a Notice of Proposed Rule Making (NPRM) to implement the Budget Act in late 1993.<sup>38</sup> In its NPRM, the FCC advanced the view that auctions should award licenses to the parties that value them the most.<sup>39</sup> Those parties are most likely to deploy new technologies and services rapidly, promoting the development of competition, and thus fostering economic growth.<sup>40</sup> Following the NPRM, the FCC received several rounds of comments, and issued its First Report and Order in February, 1994.<sup>41</sup>

# III. THE NEW ZEALAND EXPERIENCE

## A. History of the New Zealand Licensing Process

The history that led to the adoption of auction by New Zealand

---

36. *Spectrum Auctions*, MOBILE COMM., Nov. 7, 1991, at E1.

37. In 1992, the Office of Management and Budget projected \$4.5 billion in revenues from auctioning the PCS bands. *Auctions Loom Again, Study Calls Them Lucrative Money Maker*, SPECTRUM REPORT, May 13, 1992, at 1. In 1995, the industry estimates were nearing \$12 billion. *Wireless Story of 1994: Broadband, Narrowband PCS Auctions*, ADVANCED WIRELESS COMM., Jan. 4, 1995, at 1.

38. NPRM *supra* note 14.

39. NPRM *supra* note 14, ¶ 34.

40. Second Report and Order *supra* note 4, ¶ 70.

41. *In re* Implementation of Section 309(j) of the Communications Act, Competitive Bidding, First Report and Order in PP Docket No. 93-253, FCC 94-32, released Feb. 4, 1994 (hereinafter "First Report and Order").



was a bit different. Prior to 1987, the New Zealand government maintained a virtual monopoly in the provision and regulation of telecommunication services.<sup>42</sup> This kind of national monopoly was repeated in many areas, including the railroads, mines, utilities, ports, and hospitals.<sup>43</sup> By the mid-1980s, the New Zealand economy was suffering from persistent inflation and rising unemployment directly related to the pervasive government regulation of industry.<sup>44</sup> The heavy-handed regulation, along with cross-subsidies and protectionism, had led to misallocation of resources, thereby restricting private initiative and economic growth, and creating great fiscal risk for the government.<sup>45</sup> It was at this time that New Zealand began an ambitious series of maneuvers to privatize most of the services hitherto provided by the government.<sup>46</sup>

The management of the radio spectrum up until 1987 was handled by the Post Office.<sup>47</sup> Then in 1987, New Zealand passed the Telecommunications Act, which opened up New Zealand's telecommunications markets, with the goal of improving the efficiency with which new services were provided to the public.<sup>48</sup> Both structural and legislative changes were implemented. Structurally, New Zealand ceded the provision of services to the newly-formed Telecom Corporation of New Zealand, and transferred the spectrum management functions of the old Post Office to the Ministry of Commerce (then called the Department of Trade and Industry).<sup>49</sup> Legislatively, New Zealand repealed

42. COMMUNICATIONS DIVISION, MINISTRY OF COMMERCE, RADIOCOMMUNICATIONS ACT REVIEW DISCUSSION PAPER 5 (1994) (hereinafter NZ DISCUSSION PAPER).

43. NEW ZEALAND GOVERNMENT, PRIVATISATION: THE NEW ZEALAND EXPERIENCE 5 (1992)(hereinafter NZ PRIVITISATION).

44. *Id.*

45. *Id.*

46. *Id.* at 6.

47. Post Office Act of 1959. It is not unusual that the Post Office handled the telecommunications in New Zealand; in almost every country except the United States, it was the post office that also handled other forms of communication, such as telegraph and telecommunications. These ministries were commonly referred to as "PTTs," for post, telegraph & telecommunications. These PTTs controlled the government's monopoly on the provision of these services.

48. NZ DISCUSSION PAPER, *supra* note 42, at 5; see also Telecommunications Act of 1987.

49. NZ DISCUSSION PAPER, *supra* note 42, at 6. Interestingly, in September, 1990, the New Zealand government sold Telecom to a consortium that included two American telecommunications companies, Bell Atlantic and Ameritech. J. Gregory Sidak, *Telecommunications: The Big Picture; AEI's Gregory Sidak Explains the Ins and Outs of Where the Industry Is Headed, How Other Countries Are Doing a Better Job of Encouraging Competition, and What Reforms Will Really Work in the United States*, ROLL CALL, June 27, 1994, at 1.

the old Post Office Act and enacted the Telecommunications Act 1987, followed by the Telecommunications Amendment Act 1988. The Telecommunications Amendment Act 1988 opened up telecommunications services to full competition starting in 1989.<sup>50</sup>

### B. *The Decision to Auction*

In 1989, New Zealand revolutionized the provision of its telecommunications services by passing the Radiocommunications Act, which facilitated a market-based system for allocating spectrum.<sup>51</sup> This move to a market-driven allocation was the recommendation of National Economic Research Associates (NERA), which had been commissioned in 1988 to report on the deregulation of New Zealand's telecommunications industry.<sup>52</sup> The NERA report had pinpointed several areas for improvement. For example, the nontransferability of licenses meant there were few incentives for existing users to economize on spectrum use.<sup>53</sup> Also, specifying which services could use which frequency bands meant that some frequencies went unused, while other bands were congested.<sup>54</sup> And importantly, the low fees charged gave incumbent users little incentive to economize on spectrum use or to seek spectrum efficient technologies.<sup>55</sup>

The Radiocommunications Act of 1989 established two kinds of "property rights" in the radio spectrum: management rights and licenses.<sup>56</sup> Essentially, a "management right" in a frequency band gives the manager the right to determine the use to which the band is to be put, and to grant "licenses" to use those frequencies.<sup>57</sup> Any license may be traded or mortgaged in a normal commercial manner without further permission from the manager, but any such transaction must be registered with the government.<sup>58</sup> For the most part, management

50. Telecommunications Amendment Act of 1988.

51. Radiocommunications Act of 1989. While the Act facilitated the adoption of spectrum auctions, there is no specific section within the Act so authorizing the government. New Zealand is currently considering amending the act to include such authority. NZ DISCUSSION PAPER, *supra* note 42, § 6.1.

52. NATIONAL ECONOMIC RESEARCH ASSOCIATES, MANAGEMENT OF THE RADIO FREQUENCY SPECTRUM IN NEW ZEALAND (1988) (hereinafter the NERA REPORT).

53. NERA REPORT, *supra* note 52, at 71,72.

54. NERA REPORT, *supra* note 52, at 72.

55. *Id.*

56. Radiocommunications Act of 1989, Part XI, §§ 98 -104 (Rights and Duties of Managers and Rightholders).

57. NZ DISCUSSION PAPER, *supra* note 42, § 4.3.2.

58. Specifically, with the Registrar of Radio Frequencies. COMMUNICATIONS DIVISION, MINISTRY OF COMMERCE, RADIO SPECTRUM TENDERS GENERAL INFORMATION 7

rights are owned by the Crown, although at the time of privatization some management rights were owned by incumbent license holders, who would continue to hold management rights until the expiration of their licenses. Property rights are considered created by the Crown (specifically the Secretary of Commerce),<sup>59</sup> and are brought into commercial circulation through public tenders, or auctions.<sup>60</sup> Property rights last for a period of 20 years and on expiry automatically revert to the Crown;<sup>61</sup> there is no right of renewal.<sup>62</sup> In effect, there are three tiers of management: the government at the top, the band managers at the second tier, and the rightholders (or license holders) at the third tier.<sup>63</sup>

A major problem when dealing with radio frequencies is that the use of one frequency may well interfere with anyone trying to use another frequency.<sup>64</sup> New Zealand has dealt with the interference problem by regulating the equipment used,<sup>65</sup> and by defining operating limits such as output power and adjacent frequencies emissions.<sup>66</sup> There are internationally-defined uses for certain bands, administered by the International Telecommunications Union, to which most countries (including the U.S. and New Zealand) belong. So New Zealand is not completely free to use the bands for whatever service it wants; there is a need to be consistent with international band allocations, and to accommodate the equipment available to provide services (often the equipment is designed only to be used in a certain band).<sup>67</sup> New Zealand has left the resolution of interference problems to the court system.<sup>68</sup> New Zealand has left the control of the market to its Commerce

---

(1994) (hereinafter NZ GEN. INFO.). See also Radiocommunications Act § 26 (mortgages), § 42 (transfer of management rights).

59. Radiocommunications Act of 1989, Part II, §§ 9, 10.

60. NZ GEN. INFO., *supra* note 58, at 4, 7; see also Radiocommunications Act of 1989.

61. Radiocommunications Act of 1989, Part III, § 33.

62. NZ GEN. INFO., *supra* note 58, at 6.

63. NZ DISCUSSION PAPER, *supra* note 42, § 4.3.1.

64. This is because of the technical problem of building equipment to receive the frequencies; it is almost impossible to make equipment so sensitive that it picks up a single frequency and completely blocks out the frequency next to it. Accordingly, regulators assign non-contiguous frequencies to users in geographic closeness to avoid interference problems.

65. Radiocommunications Act of 1989, Part XIII.

66. Radiocommunications Act of 1989, Part XII.

67. NZ DISCUSSION PAPER, *supra* note 42, § 2.4.4.

68. Radiocommunications Act of 1989, Part XIV. See also NZ DISCUSSION PAPER, *supra* note 42, at 11, and NERA REPORT app. V, *supra* note 52, p. 144.

Act 1986, but this is currently being reviewed.<sup>69</sup>

New Zealand differs from the United States in how it allocates spectrum. In the U.S., specific pieces of the spectrum are allocated to rather specific uses and services. However, in New Zealand, instead of delineating the specific services allowed to use a particular frequency band, New Zealand has merely defined the technical parameters for the band, so that users of different bands will not interfere with each other.<sup>70</sup> While this may provide a de facto list of services that can use the band, in many cases it allows a licensee substantially more flexibility in deciding what service and technology to provide.

### 1. Major Concerns

Like the United States, New Zealand had concerns about fraud and anti-competitive behavior during the auction process.<sup>71</sup> The two countries also shared concerns that purely economic goals were not smart government policy; the NERA Report was careful to point out that "the highest private value use of spectrum might not necessarily reveal the uses of highest social value."<sup>72</sup> In addition, industry players were concerned about market dominance by non-New Zealand companies.<sup>73</sup> The native New Zealand Maori people were concerned that the auctions would violate treaty obligations under which the Maori had been guaranteed access to the airwaves as a way to perpetuate and protect their language and culture.<sup>74</sup> In fact, a recent challenge to the

---

69. NZ DISCUSSION PAPER, *supra* note 42, Ch. 7. See also Commerce Act of 1986 § 66(8) (balancing public interest against restrictions on "dominant" carriers).

70. NZ GEN. INFO., *supra* note 58, at 7. For example, New Zealand has defined the strength of the signal put out (the "output power"), the modulation technique to be used, and the specific bands the licensee may use. *Id.*

Such specifications may implicitly define a service that is best suited for the band in question, but the licensee is not limited to that service. For example, television needs a very broad piece of the frequency spectrum, but paging services need very little. Thus, while a television broadcaster could not offer her service in a narrow band, the paging company could not only use a narrow band, but even a band wide enough for television. However, it is unlikely a paging company would do that, as the economics of the situation would call for the most efficient use of the spectrum, which in this case would be television broadcasting.

71. See generally NERA REPORT, *supra* note 52, at 126, 128 and 160, 161.

72. NERA REPORT, *supra* note 52, at 79 (emphasis added).

73. *New Zealand Government Proposes Sale of Frequency Spectrum*, FINTECH 7 - MOBILE COMMUNICATIONS, Nov. 23, 1989, available in LEXIS, News library, FTMCOM File.

74. The Treaty of Waitangi Act of 1975 obliged the New Zealand government to "recognize and protect the Maori language."

awards of licenses (claiming that the government had not set aside enough spectrum for the Maoris to use) held that the New Zealand government had to allow the Maori council to comment on the process.<sup>75</sup>

The NERA Report highlighted concerns about how to deal with the rights of existing users (i.e. operators currently using the spectrum to be auctioned)<sup>76</sup> and how to prevent technical interference among the users.<sup>77</sup> Existing users were given the right to bid along with others, to match the highest bid, and to continue using the spectrum for three years (by renting it from the new licensee) even if the license were awarded to another entity.<sup>78</sup>

## 2. Perceived Advantages

Clearly, the arguments for economic efficiency and revenue-for-the-government were persuasive in New Zealand as they were in the United States. Furthermore, New Zealand accomplished another goal: To avoid setting up a whole regulatory agency (like the U.S.'s FCC) to handle spectrum issues. Instead, New Zealand's auctions were handled by its Ministry of Commerce.

## IV. THE AUCTIONS

### A. *In the U.S.*

In its NPRM, the FCC indicated its intention to auction two services: personal communications services (PCS - a technology similar to cellular telephone services), and interactive video and data services (IVDS - a service whereby a television viewer can interact with the TV set to place orders, answer questions, etc.).<sup>79</sup> After the NPRM, five reports followed within the year, addressing many of the issues sur-

---

75. *Att'y Gen. v. N.Z. Maori Council*, 2 N.Z.L.R. 129 (1990), *aff'd* 1 A.C. 466 (P.C. 1994). The Court found that the New Zealand government had ignored the Maori tribunal's rights under the Waitangi Treaty to recommend actions affecting Maori culture and language. (The Maori council's underlying objection was that no FM radio stations in the major cities were being reserved for Maori ownership. *Id.*)

76. NERA REPORT, *supra* note 52, at 160-165.

77. NERA REPORT, *supra* note 52, at 84.

78. NERA REPORT, *supra* note 52, at 161, 165.

79. NPRM, *supra* note 14, ¶¶ 115, 142. It should be noted that the FCC was not to use auctions for broadcasting. 47 U.S.C. § 309(j)(2)(A) (specifying that auctions should only be used for services "reasonably likely to involve the licensee receiving compensation from subscribers," which broadcasting does not.)

rounding auctions for those services.<sup>80</sup> The first auctions took place in late July, 1994.

There was considerable discussion about the mechanics of auctioning. The fair market value of the licenses was unknown, and would depend on whether a company wanted a single license or several contiguous licenses. For example, if you were bidding for the rights to offer PCS in the District of Columbia, you might be willing to pay more for that license if you could also get the licenses for Maryland and Virginia.<sup>81</sup> After a great deal of discussion and comment from economists well-versed in game theory, the FCC decided to use "simultaneous multiple-round bidding," where all the licenses of a particular type go on sale together and bidders may, with some limitations, bid for any collection of licenses until bidding stops.<sup>82</sup> In theory, this would help the bidders arrive at the right prices, award the licenses to the companies that would use them efficiently, and produce the most revenue.<sup>83</sup>

Bidding was to continue until there were no new bids for any of the licenses being auctioned at that time.<sup>84</sup> The FCC reserved the right to set the time interval that it would wait for a new bid, so that the auctions might come to an end more quickly.<sup>85</sup> The FCC set up activity

---

80. First Report and Order; *In re* Implementation of § 309(j) of the Communications Act, Competitive Bidding, Second Report and Order, 9 FCCR 2941 (1994) (hereinafter Second Report and Order); *In re* Implementation of § 309(j) of the Communications Act, Competitive Bidding, Third Report and Order, 59 FR 26741 (released May 10, 1994) (hereinafter Third Report and Order); *In re* Implementation of § 309(j) of the Communications Act, Competitive Bidding, Fourth Report and Order, 59 FR 24947 (released May 10, 1994) (hereinafter Fourth Report and Order); *In re* Implementation of § 309(j) of the Communications Act, Competitive Bidding, Fifth Report and Order, 59 FR 37566 (released July 15, 1994) (hereinafter Fifth Report and Order).

81. First, common ownership of licenses would make it easier for customers to roam from D.C. to Maryland or Virginia without changing service providers. Second, the service provider could enjoy economies of scale by spreading out the costs of the system over a larger number of customers. Third, the service provider would have fewer interference problems at the border of the license area. These three things would translate to lower costs for the service provider, and lower charges to the customer. (Second Report and Order, *supra* note 4, ¶ 91.)

82. Bidding rounds would continue until no new bids were offered during a round. Thus, as soon as one bidding round opened and closed with no new bids, the licenses were awarded to the highest bidders from the previous round. (Second Report and Order, *supra* note 4, ¶ 132.)

83. Second Report and Order, *supra* note 4, ¶ 106.

84. Second Report and Order, *supra* note 4, ¶ 132. Minimum bid increments are now the greater of two cents per megahertz per pop, or 10 percent of the standing high bid.

85. Second Report and Order, *supra* note 4, ¶ 132.

rules that divided each auction into three stages.<sup>86</sup> The decision to advance from one stage to another was left to the FCC, which would base the decision on the amount of activity and the percent change in the bids.<sup>87</sup>

The rules were different for each service, with yet another set of rules for spectrum set aside for DEs (the affirmative-action-like program originally set up by the FCC)<sup>88</sup> and for "pioneers" (technological entrepreneurs who were rewarded for their ingenuity by being guaranteed a license).<sup>89</sup> For all the auctions, an interested bidder needed to submit a short, one-page application along with an upfront payment; if that bidder won, a second and more detailed application was required, along with a 20% downpayment on the winning price.<sup>90</sup> The final lump sum payment was due to the FCC within five days of the license being awarded.<sup>91</sup>

The FCC implemented a series of regulatory safeguards against trafficking and unjust enrichment as required by the Budget Act. The safeguards applied mostly to DEs that received financial help (in the form of bidding credits) or were eligible for the set-aside spectrum.<sup>92</sup> The FCC imposed a requirement that licensees notify the FCC of any transfer of the license.<sup>93</sup> In response to Congress' concerns about the warehousing of spectrum, the FCC decided it's existing performance requirements were enough.<sup>94</sup> There was also a requirement to build the system within a certain period of time — the "build-out" requirement.<sup>95</sup>

Addressing the concerns about frivolous bids or unqualified bidders, the FCC set up several kinds of penalties.<sup>96</sup> For example, bidders

86. Second Report and Order, *supra* note 4, ¶ 144.

87. Second Report and Order, *supra* note 4, ¶ 140, n.109.

88. Fifth Report and Order, *supra* note 80, ¶ 2.

89. See generally ET Docket No. 93-266 (regarding Pioneer's Preferences in general). See also Third Report and Order, Gen. Docket No. 90-314, 9 FCCR 1337 (1994) (granting PCS licenses to "pioneers").

90. Second Report and Order, *supra* note 4, ¶¶ 192, 194.

91. *Id.*

92. Second Report and Order, *supra* note 4, Part V, ¶¶ 210-226.

93. Second Report and Order, *supra* note 4, ¶ 214. The FCC intends to monitor transfers to determine if any "unforeseen problems" relating to unjust enrichment develop. *Id.*

94. Second Report and Order, *supra* note 4, ¶ 219. For example, the FCC requires some cellular-like service providers to utilize their existing allotment fully before additional frequencies may be requested. *Id.*

95. Second Report and Order, *supra* note 4, ¶¶ 240, 244.

96. Second Report and Order, *supra* note 4, § IV, "Procedural, Payment and Penalty Issues." See also ¶¶ 134, 147, 197. *Id.*

were penalized for falling below their minimum participation level.<sup>97</sup> That minimum level was set by the bidder itself when it applied to enter the auction: by applying to enter the auction, bidders made a promise to the FCC to bid for a certain amount of spectrum; if they reneged on that promise, they were penalized.<sup>98</sup> The minimum participation level was measured in terms of the amount of frequency the bidder wanted (measured in megaHertz — MHz) and the size of the population in the area covered by the license (measured in “pops”).<sup>99</sup> During the first stage of the auction, the bidders were required to be active on licenses encompassing one-third of the MHz-pops for which the bidder was eligible.<sup>100</sup> The penalty for falling below that activity level was a reduction in eligibility, i.e. a reduction in the amount of spectrum for which the bidder could bid.<sup>101</sup> In the second stage, bidders were required to be active on two-thirds of the MHz-pops for which they were eligible.<sup>102</sup> Again, the penalty for falling below that level was a reduction in eligibility.<sup>103</sup> In the third and final stage, bidders were required to be active on ALL the licenses for which they were eligible, or lose one MHz-pop in eligibility for each MHz-pop below the minimum required activity level.<sup>104</sup>

Another form of penalty was instituted if the high bid were withdrawn before the end of the auction. The withdrawing bidder had to pay the difference between the withdrawn bid and the amount of the winning bid that the Commission eventually accepted.<sup>105</sup> In the event a winning bidder defaulted, the license would be reauctioned rather than merely granted to the second-highest bidder.<sup>106</sup> The Commission felt that “changing market and even technological developments since the initial auction may change the amounts that bidders are willing to pay for a license, especially if the intervening period is relatively long.”<sup>107</sup> The FCC feared that otherwise, the second-highest bidder might be forced to take a license it no longer wanted. In the worst case, where a

---

97. Second Report and Order, *supra* note 4, ¶¶ 144, 137.

98. Second Report and Order, *supra* note 4, ¶¶ 151, 166, 172.

99. Second Report and Order, *supra* note 4, ¶¶ 144, 137.

100. *Id.*

101. Second Report and Order, *supra* note 4, ¶ 137. However, the Commission allowed each bidder five waivers during the course of an auction for failure to meet the minimum activity requirement. *Id.* at ¶ 145.

102. Second Report and Order, *supra* note 4, ¶ 138.

103. *Id.*

104. Second Report and Order, *supra* note 4, ¶ 139.

105. Second Report and Order, *supra* note 4, ¶¶ 150, 151.

106. Fifth Report and Order, *supra* note 80, ¶ 79.

107. Fifth Report and Order, *supra* note 80, ¶ 78.



winning bidder defaulted after the auction is over, not only is the defaulter required to reimburse the Commission for the difference between its high bid and the amount of the winning bid the next time the license is offered by the Commission, but the defaulter was also assessed a penalty of three percent of the subsequent winning bid.<sup>108</sup> This additional penalty was added to encourage those who wanted to back out to do so while the auction was ongoing.<sup>109</sup>

### 1. Auctions for Interactive Video and Data Services

The IVDS auctions were somewhat different from the PCS auctions in that they used the open outcry method of bidding, rather than simultaneous bidding.<sup>110</sup> Further, only businesses owned by women or minorities were offered bidding credits.<sup>111</sup> The auction took place in June, 1994, and the FCC awarded 594 licenses and garnered \$3,270,000.<sup>112</sup> The FCC addressed Congress's concerns about unjust enrichment by controlling trafficking in licenses: any license-holder interested in transferring their licenses within the first five years of getting the license must submit an application to the FCC to be scrutinized closely for evidence of unjust enrichment.<sup>113</sup>

Congress's concerns about collusion proved to be well-founded: an FCC investigation immediately after the auction turned up evidence that a bidder which defaulted on its required downpayment had colluded with other bidders to get them to renege on the downpayments due to the FCC.<sup>114</sup> The FCC penalized the company in question by dismissing its application and assessing a \$390,000 fine.<sup>115</sup>

108. Second Report and Order, *supra* note 4, ¶ 197.

109. *Id.*

110. Fourth Report and Order, *supra* note 80, ¶ 2.

111. Fourth Report and Order, *supra* note 80, ¶ 39.

112. Erratum to Aug. 2, 1994 Pub. Notice Announcing High Bidders for 594 Interactive Video and Data Service (IVDS) Licenses, 1994 FCC LEXIS 3907, ERRATUM (44265), Aug. 9, 1994.

113. Fourth Report and Order, *supra* note 80, ¶ 30.

114. Notice of Apparent Liability for Forfeiture, 10 FCCR 4277, ¶ 1 (1995). The FCC found evidence that the company in question, Commercial Realty St. Pete, Inc., had made a phone call to another bidder and sent faxes to all the other winners in the IVDS auction to encourage them to delay sending in the required downpayment (which would result in defaults). *Id.* ¶¶ 14, 15.

115. *Id.* ¶¶ 1, 2. The default penalty was based on:

- a) \$20,000 (\$10,000 for two violations of the anti-collusion rules (*Id.* ¶ 20)); plus
- b) \$170,000 (\$10,000 for each market in which the company improperly claimed a discount for being a woman-owned business (17 markets) (*Id.* ¶ 24)); plus
- c) \$200,000 (\$10,000 for each market in which the company won a license but failed to

## 2. Auctions for Personal Communications Services

The PCS auctions were divided into two groups: narrowband PCS and broadband PCS, based upon different allocations of spectrum and slightly different technology.<sup>116</sup> Under the narrowband PCS regime, some applicants were granted "pioneers' preference" licenses off the top (there was no auction),<sup>117</sup> and designated entities were given bidding credits.<sup>118</sup> The United States was divided into four different service areas for narrowband PCS: there were 492 basic trading areas (BTAs), 51 major trading areas (MTAs), five regional areas (made up of MTAs) which together comprise the nation, and a nationwide service area. Within those areas, there were a total of 3,554 licenses to be won: 2,952 BTA licenses, 561 MTA licenses, 30 regional licenses, and 11 nationwide licenses.<sup>119</sup> When no DEs won licenses in the national narrowband PCS auctions, the rules were revamped to help attract designated entities to the regional auction. The new rules gave those bidders larger credits than in the nationwide auction.<sup>120</sup> Remote bidding and disclosure of bidders' identities during the auction were also among the new procedures used during the regional auction.<sup>121</sup> The auctions for the nationwide narrowband PCS licenses lasted 105 rounds.<sup>122</sup>

The broadband PCS licenses were to "constitute the largest auction of public assets in American history."<sup>123</sup> The Commission divided the spectrum into six "blocks" (labelled A through E) comprising

---

submit the required downpayment (20 markets) (Id. ¶ 22)).

In addition, the company will be liable for penalties of not less than \$1,237,500. This is based on a calculation of the difference between the amount of the defaulted bid (\$41,250,000) and the amount the government receives when the license is reauctioned, plus an additional 3 per cent of the defaulted bid amount or the subsequent winning bid amount, whichever is less. In any event, even if the subsequent winning bids are higher than the original company's defaulted bids, the minimum default penalty will be 3 per cent of the company's defaulted bids, which is \$1,237,500. (Id. n.17).

116. See generally Third Report and Order (regarding narrowband PCS) and Fifth Report and Order (regarding broadband PCS).

117. *In the Matter of Amendment of the Comm'n's Rules to Establish New Personal Comm. Serv's*, Third Report and Order, 9 FCCR 1337, ¶¶ 1-2 (1993).

118. Second Report and Order, *supra* note 4, ¶ 3.

119. Third Report and Order, *supra* note 80, ¶ 10.

120. *Wireless Story of 1994: Broadband, Narrowband PCS Auctions*, ADVANCED WIRELESS COMM., Jan. 4, 1995, at 1.

121. *Id.*

122. Mark Bykowsky, *The FCC's 'Fat Lady' is Singing About Successful PCS Auctions*, RCR, Nov. 21, 1994, at 28. The local narrowband PCS auctions had not occurred as of this writing.

123. Fifth Report and Order, *supra* note 80, ¶ 1.

2,074 licenses.<sup>124</sup> Blocks A, B, and C comprised licenses for bigger geographic areas, and blocks D, E, and F comprised licenses for smaller geographic areas.<sup>125</sup> Additionally, blocks C and F (one large and one small block) were set aside to be bid upon only by DEs.<sup>126</sup> The Commission granted pioneer's preference to three broadband PCS applicants.<sup>127</sup>

### 3. Licenses Granted Without Auctions: Pioneer's Preference

Some time ago, the FCC decided that it was appropriate to reward technological ingenuity by guaranteeing that the inventor/entrepreneur of a new service would get a license, in addition to any other licenses that might be awarded.<sup>128</sup> When Congress amended the 1934 Communications Act in 1993, it allowed the FCC leeway to award some licenses without going through competitive bidding. Exempted from auctioning were licenses awarded "to those persons who make significant contributions to the development of a new telecommunications service or technology," otherwise known as "pioneer's preference" licenses.<sup>129</sup> Later, pioneers were required to pay roughly 85 cents on the dollar for their licenses.<sup>130</sup>

#### B. In New Zealand

While the U.S. Congress and the FCC decided for the public which services would be available through auctions, the New Zealand government left that choice up to the public. Any member of the public

124. Fifth Report and Order, *supra* note 80, ¶ 6. The A, B, and C blocks were bigger (30 MHz each), and the D, E, and F blocks were smaller (10 MHz each). *Id.*

125. *Id.* Further complicating things, the Commission also defined two kinds of service areas within each block: basic trading areas (BTAs) and major trading areas (MTAs). There were 493 BTAs and 51 MTAs established for broadband PCS. *Id.*

126. Fifth Report and Order, *supra* note 80, at ¶ 7, 12-13.

127. Fifth Report and Order, *supra* note 80, at n.4. Pioneers got licenses in Los Angeles, Washington/Baltimore, and New York City. *Id.*

128. The pioneer's preference rules currently award innovation by providing a means by which an applicant that demonstrates having developed a new communications service or technology may obtain a license without being subject to mutually exclusive applications. See 47 C.F.R. § 1.402. However, the FCC is currently reviewing its pioneer's preference rules in light of the new competitive bidding authority. See Notice of Proposed Rule Making in ET Docket No. 93-253, 8 FCCR 7692 (1993).

129. 47 U.S.C. § 309(j)(6)(G) (1995).

130. Included in legislation implementing the General Agreement on Tariffs and Trade. *Post Bails Out of PCS, Ends Pioneer's Preference Nightmare by Selling APC Stake to Spring/Cable Company Venture*, *PCS News*, Jan. 19, 1995, available in LEXIS, FedCom Library, ComPub File.

could issue an "expression of interest" for the tendering of any piece of the radio spectrum currently managed by the Crown.<sup>131</sup> This expression of interest did not guarantee the issuer a license, but merely got the process rolling.<sup>132</sup> When the Ministry of Commerce decided to tender some spectrum, it issued a "Tender Document" containing the conditions of sale and the technical description of the lots being offered.<sup>133</sup> To date, tenders have been made for UHF television, cellular radio, microwave and AM/FM broadcast service.<sup>134</sup> Interested bidders were invited into a competitive "bid tender," with equal information available to all bidders at each stage. A short list of bidders eligible to make a final bid for the spectrum was made on the basis of the initial bids.<sup>135</sup> Spectrum was auctioned only if there were more than one expression of interest: if there were only one, the spectrum was allocated for free. The first auctions were for 70 licenses in the UHF band, primarily for television broadcasting.<sup>136</sup>

Anyone applying for a tendered lot was required to submit a bid form containing, among other things, certifications that the new service would not interfere either with already registered services, or with essential services such as radio navigation or services protecting life and property.<sup>137</sup> New Zealand's auctions followed the sealed bid, "second-price" method, in which the high bidder wins the auction but pays the second-highest bid. This reputable method reassures bidders for new and untested goods that they will not end up paying a wildly inflated price through miscalculation.<sup>138</sup> Furthermore, if there were an incumbent licensee in the frequency block being tendered, the incumbent enjoyed a "preemptive right," through which the incumbent had the right to win the block by matching the highest bid.<sup>139</sup>

A successful tender did not guarantee licensing; the tenderer still

---

131. NZ GEN. INFO., *supra* note 58, at 8.

132. *Id.*

133. *Id.* at 9.

134. Jonathan Marshall, *Stakes High in Spectrum Auction - Government Ends Giveaway of Broadcast Frequencies*, S.F. CHRON., Apr. 11, 1994, at B1.

135. NZ PRIVATIZATION, *supra* note 43, at 8.

136. NTIA STUDY, *supra* note 6, at 94.

137. Radiocommunications Act of 1989, Part III, § 25(2).

138. Marshall, *supra* note 134.

139. NZ GEN. INFO., *supra* note 58, at 10. Note that incumbent licensees were not in danger of having their frequencies sold out from under them; currently-held blocks were only tendered at the request of the licensee, usually to enable an increase in power or to change the location of a transmitter. *Id.* Only in this situation did the "preemptive right" pertain. *Id.*

had to get approval under the Commerce Act 1986.<sup>140</sup> Once cleared by the Ministry of Commerce, a licensee had 10 days in which to pay the tendered amount in full (less the deposit paid when applying to participate in the tender/auction).<sup>141</sup> The final step was to register the license with the "Register of Radio Frequencies," an independent office within the Ministry of Commerce.<sup>142</sup> There is also a fee payable annually for all registered licenses, which depends on the service offered and the maximum power permitted by the license.<sup>143</sup>

## V. THE AFTERMATH

### A. Results of the Auctions

The results in the United States were heady: bidders were willing to pay money far in excess of that anticipated by either the government or industry observers.<sup>144</sup> Four auctions have been held as of this writing: one for nationwide narrowband PCS, one for regional narrowband PCS, one for IVDS, and one for blocks A and B of broadband PCS. (The controversial auction of block C — set aside for DEs — was underway as of this writing.)<sup>145</sup> There were 11 nationwide narrowband licenses granted, raising over six million dollars.<sup>146</sup> Of the 30 regional narrowband PCS licenses, one went to a pioneer, 11 were won by designated entities, and nearly 500 million dollars were raised.<sup>147</sup>

The results in New Zealand were less successful financially, but also far less controversial legally. New Zealand's "second price" auction strategy caused the government to lose hundreds of thousands of dollars in a handful of cases where the second-highest bids were frivo-

140. NZ GEN. INFO., *supra* note 58, at 12. This is where Telecom New Zealand ran into trouble trying to get a license to provide cellular radio. *Id.* Despite having won the tender, the Court of Appeals found Telecom to have violated the market-dominance restrictions in the Commerce Act. *Telecom Corp. of N.Z. Ltd. v. Commerce Comm'n*, 3 N.Z.L.R. 429 (C.A. 1992).

141. NZ GEN. INFO., *supra* note 58, at 12.

142. Radiocommunications Act of 1989, Part I, §§ 4-6.

143. NZ GEN. INFO., *supra* note 58, at 15, referring to fee schedules in the Radiocommunications Regulations, as authorized by the Radiocommunications Act 1989, Part XV, § 135.

144. Bykowsky, *supra* note 122.

145. *More Than 370 Entities Apply for C-Block Auction; Applications Show Tangled Web of Partnerships*, PCS WEEK, Dec. 6, 1995.

146. Narrowband PCS Nationwide Auction Winners, Report No. PCS-NB-94-1, Aug. 17, 1994. One of the 11 licenses was not auctioned, as it was awarded to a pioneer. Third Report and Order ¶ 10.

147. FCC Announces Results of PCS Regional Narrowband License Auction, 1994 FCC Lexis 5617, Nov. 8, 1994.

lously low — as little as a few dollars.<sup>148</sup> This distortion in prices for similar property rights moved New Zealand to switch to a simple highest-bidder system.<sup>149</sup> Evidence mounted that the precise sequencing of privatizations was not critical.<sup>150</sup> Concerns about foreign ownership ended up enhancing the competitive nature of the bidding and the transparency of pricing.<sup>151</sup>

In New Zealand, actual revenues ended up around 16 per cent of the pre-auction estimates.<sup>152</sup> The auctions raised about NZ\$ 36 billion. But perhaps more important than the absolute dollars they garnered, the New Zealand auctions proved the merit of auctions as a simple, cheap and fair way to open up the spectrum to new providers and services.<sup>153</sup> On the other hand, the auctions took New Zealand more than two years to complete, which belies the arguments favoring auctioning as a faster way to get technology to the public.

In the U.S., the nationwide, narrowband PCS auctions raised \$617 million.<sup>154</sup> The 30 regional narrowband PCS licenses brought in \$395 million (\$488 million, excluding discounts applied on behalf of designated entities).<sup>155</sup> Of interest is that while only ten licenses were entitled to bidding credits for DEs, there were actually 11 licenses bought by minority or female-owned firms.<sup>156</sup> Even with the bidding credits, though, women and minority applicants paid about the same or more than others for identical licenses.<sup>157</sup> While the broadband PCS auctions were still going on as of this writing, by the end of 1995 the auctions

---

148. Rob Norton, *Winning the Game of Business*, TIME, Feb. 6, 1995, at 36. A company that had bid 100,000 New Zealand dollars for a license walked away with it for \$6.

149. NZ DISCUSSION PAPER, *supra* note 42, at 80.

150. Stephen Franks, *Rigorous Privatization: The New Zealand Experience*, 28 COLUMBIA JOURNAL OF WORLD BUSINESS 84, 94 (1993).

151. *Id.*

152. Russell Gold, *Auctioning the Nation's Airwaves*, THE VILLAGE VOICE, Dec. 27, 1994, at 46.

153. Jonathan Marshall, *Stakes High in Spectrum Auction: Government Ends Giveaway of Broadcast Frequencies*, S.F. CHRON., Apr. 11, 1994, at B1.

154. It was interesting to note that the ten licenses went to only 6 different entities: Air Touch Communications, BellSouth Corp., McCaw, Mobile Telecommunication Technologies Corp., Paging Network Inc. and PageMart Inc. Jeffrey Silva, *Regional Auctions Give Licenses to the Established and the New*, RCR, Nov. 21, 1994, at 20.

155. *Id.*

156. *Id.* All ten of the licenses for which the 40 percent bidding credit was available in the regional PCS auction went to such designated entities. FCC Announces Results of PCS Regional Narrowband License Auction, NEWS RELEASE, Nov. 8, 1994.

157. *Id.*

had already raised over \$7 billion, making it the "largest auction of government assets in history."<sup>158</sup> The IVDS auctions that took place in July, 1994 raised \$214 million dollars, but there were defaults by some high bidders.<sup>159</sup>

### B. Legal Ramifications

In amending the 1934 Communications Act, Congress made it clear that making money for the government was not the only reason to auction licenses, and that a major goal for the FCC was to "ensure that small businesses, rural telephone companies, and businesses owned by members of minority groups and women are given the opportunity to participate in the provision of spectrum-based services."<sup>160</sup> Industry observers were particularly worried that entities bidding under DE preferences might not really be DEs; the entity was more likely to be a partnership between a true DE and a "deep pocket," controlling the DE through its purse strings.<sup>161</sup> The FCC spent a great deal of effort to define exactly what entities were entitled to this preferential treatment, and on how to accord preferential treatment without leaving loopholes susceptible to abuse.<sup>162</sup>

---

158. *Auction for Broadband Personal Communications Services (PCS) Licenses, 1995 FCC Lexis 1703, Mar. 13, 1995. See also Broadband PCS Auction Still Going Strong; Bids Pass \$3B Mark, ADVANCED WIRELESS COMM.*, Jan. 18, 1995, at 1. As of the end of January, 1996, the net high bids for the Federal Communications Commission (FCC) broadband Personal Communication Services (PCS) auction for the "C Block" totalled \$ 2,184,111,438 as the ninth round of bidding closed. *FED. COMM. COMM'N, Daily Digest*, Jan. 22, 1996.

159. Patrice Apodaca and Jube Shiver, Jr., *Southland Firm Spotlights FCC Auction Woes; Telecom: Failure of Sun Valley Company and Others to Ante Up Money for Interactive TV Licenses Casts Cloud on Bidding Process*, *LOS ANGELES TIMES*, Aug. 20, 1994, at D1.

160. 47 U.S.C. §§ 309(j)(7), 309(j)(4)(D) (1995).

161. Jeffrey Silva, *Designated Entities Taking Part in Auctions Gets Mixed Reviews*, *RCR*, Nov. 21, 1994, at 26.

162. For example, instead of having to pay the final payment in a lump sum, some DEs (specifically small businesses) were allowed to pay in installments. *Second Report and Order, supra* note 4, ¶¶ 233, 234. Another measure adopted by the FCC was to give bidding credits to DEs that allowed eligible applicants to receive a discount on their winning bid. *Id.* ¶ 242. In other auctions, some spectrum was actually set aside to be bid on only by DEs. *Id.* ¶ 247. A reduction in the upfront payment was deemed appropriate to encourage participation by eligible DEs. *Id.* ¶ 248. To prevent unjust enrichment of DEs bidding on the spectrum set aside just for them, the Commission imposed a recapture provision designed to recoup for the government a portion of the value of the benefit received by the DE in the bidding. Such a recapture provision would require that licensees seeking to transfer their licenses for profit must remit to

However, the best-laid plans of Congress and the FCC were thrown into disarray in June, 1994, when the Supreme Court decided that any government plan based explicitly on race must be analyzed under strict scrutiny.<sup>163</sup> In *Adarand Constructors, Inc. v. Pena*, the Court held that such classifications are only constitutional if they are narrowly tailored measures that further compelling governmental interests.<sup>164</sup> This affected the broadband PCS auction because the FCC had designated one block of licenses to be auctioned only to minorities, women and small businesses.<sup>165</sup> After *Adarand*, the FCC eliminated the preferences being offered to minorities and women, leaving only small businesses qualified for special bidding and payment plans.<sup>166</sup> The FCC was immediately attacked by groups on all sides complaining about the latest rules. A suit was filed in the U.S. Court of Appeals for the D.C. Circuit against the FCC asking the Court to impose an injunction on the auctions.<sup>167</sup> In October the Court rejected the request,

---

the government a penalty equal to a portion of the total value of the benefit conferred by the government. The penalty was to be reduced as time passed, and would be zero after five years. *Id.* ¶¶ 260, 261, 262. If a license were transferred to another DE, no recapture penalty would be assessed. *Id.* ¶ 262. To prevent unjust enrichment of DEs entitled to pay in installments, the FCC required payment of the full amount of the remaining principle balance should the DE transfer the license. *Id.* ¶ 263. To prevent unjust enrichment of DEs entitled to bidding credits, the FCC required the DE to repay the credit before transferring the license. *Id.* ¶ 264.

163. *Adarand Constructors, Inc. v. Pena*, 115 S. Ct. 2097, 2117 (1995).

164. *Id.*

165. 47 U.S.C. § 309(j)(4)(C) (Law. Co-op. 1995).

166. *See generally* In the Matter of Implementation of Section 309(j) of the Communications Act - Competitive Bidding, Sixth Report and Order, FCC 95-301 (1995) (hereinafter Sixth Report and Order). Such preferences had been held to be constitutional in an earlier case, *Metro Broadcasting v. Federal Communications Comm'n*, 497 U.S. 547 (1990). *Metro Broadcasting* held that benign race-conscious measures approved by Congress did not violate the equal protection clause if they served important governmental objectives within the power of Congress and were substantially related to achievement of those objectives. *Metro Broadcasting* went on to hold that the congressionally-mandated, narrowly-tailored, race-conscious programs designed to promote diversity of media ownership were subject only to intermediate scrutiny, and further, the administrative agency which faithfully implements a congressional mandate is due the same degree of deference as that afforded to Congress. (Brief Amicus Curiae of the Minority Media and Telecommunications Council, et al. in Support of Respondents at 5, *Adarand Constructors, Inc. v. Pena*, 16 F.3d 1537 (10th Cir. 1994) (No. 93-1841) (referring to *Metro Broadcasting, Inc. v. FCC*, 497 U.S. 547 (1990))). However after *Adarand*, *Metro Broadcasting* is effectively overturned.

167. The ten companies were consolidated into one suit, *Omnipoint Corp. v. Federal Communications Commission*, No. 95-1374 (D.C. Cir. 1995). The companies involved were: Central Alabama Partnership L.P.; Cook Inlet Region Inc.; Go Communications Corp.; Mobile Tri-States L.P.; National Association for the Advancement of



and the FCC was allowed to proceed with the C block auction.<sup>168</sup>

New Zealand is currently undergoing a review of the 1989 Radiocommunications Act, with the intention of developing draft legislation for introduction into Parliament as an amending bill.<sup>169</sup> Like New Zealand, the FCC continues to modify the rules for future auctions as it learns lessons from auctions just held. Under consideration already are possible changes to the rules for both the entrepreneur's blocks and the designated entities' set-asides.<sup>170</sup>

In the U.S., the auctions may raise the issue of property rights in spectrum once again. Long ago, the U.S. decided not to recognize spectrum property rights in licensees.<sup>171</sup> Both legislative and case law histories suggest that spectrum is not something to be "owned" by licensees.<sup>172</sup> However, for all practical purposes, licensees have quasi-property rights since the rights are exclusive in terms of authorization to use specific frequencies and protection from harmful interference. Licensees also may receive income from the use of the license, and have the de facto right to transfer the license as part of a sale of assets, even though FCC approval is required.<sup>173</sup> Furthermore, there has developed over the years a body of law surrounding the licensee's reasonable expectation of renewal of its license. With licenses now being sold for market value, the question is raised whether the new license procedure somehow broadens the scope, or alters the quality, of the property rights held by the licensee. The NTIA study concluded that there need not be any change in the quality or scope of the rights conferred,<sup>174</sup> although case law may develop differently.

## VI. CONCLUSION

New Zealand's overall experience with privatization was nearly "textbook," leaving only the concern that the gains may not be sustain-

---

Colored People; National Association of Black Owned Broadcasters; New Wave LLC; Omnipoint Corp.; Qtel Wireless Inc.; and Radiofone Inc. *Id.* See also Jeffrey Silva, *Hundt: FCC Auction is Stymied by Court*, RCR, Sep. 4, 1995, at 1,6.

168. *Omnipoint Corp. v. Federal Communications Commission*, order vacating stay (No. 95-1374) (Sep. 28, 1995).

169. NZ DISCUSSION PAPER, *supra* note 42, at 1.

170. Additional Comment Sought on the Commission's Narrowband PCS Entrepreneur's Block Proposals, PUBLIC NOTICE DA 94-1560, Oct. 19, 1994.

171. 47 U.S.C. §§ 301, 304 (1994).

172. NTIA STUDY, *supra* note 6, at 113.

173. *Id.*

174. *Id.* at 113, 114.

able.<sup>175</sup> Isolation from much of the world enabled New Zealand to strike out into new frontiers in a way that the United States could not. In fact, while the FCC learned much from New Zealand about the mechanics of auctions, it was unable to avoid the peculiarly American minefield of affirmative action. It appears likely that the FCC will continue to use auctions for many services,<sup>176</sup> but the designated entity program is likely to be revised down to nothing, along with all other Congressional affirmative action plans.

Current authority under the Communications Act to award licenses by auction terminates in 1998.<sup>177</sup> The FCC is required to evaluate the auction method and report to Congress by 1997 so that Congress can consider further statutory changes to improve the competitive bidding process.<sup>178</sup>

There are those who think the FCC should be abolished entirely; spectrum could be auctioned off by the Department of the Interior (which already auctions off other government-owned commodities); the Department of Justice could police trusts; the states could regulate rights-of-way to power lines, etc.; a licensee could take trespassers to court, and let competition and the market take care of the rest.<sup>179</sup> However, the less-than-rosy results in New Zealand and the enormous bureaucracy entrenched in the current system make this appealing but simplistic scenario unlikely.

*Ruth W. Pritchard-Kelly*

---

175. Stephen Franks, *Rigorous Privatization: The New Zealand Experience*, 28 COLUMBIA JOURNAL OF WORLD BUSINESS 84, 84-85 (1993).

176. In fact, the FCC has already auctioned licenses for such services as direct broadcast satellites (DBS), specialized mobile radio (SMR), and multipoint distribution systems (MDS). See *Qualified Bidders for DBS Auction to be Held January 24, 1996*, Public Notice, 1996 FCC LEXIS 200, Jan. 22, 1996; *FCC Announces Auction of 900 MHz Specialized Mobile Radio Service*, Public Notice, 1995 FCC LEXIS 6159, Sep. 15, 1995; *FCC Announces the Status of Applications to Participate in Auction of Multipoint Distribution Service 493 BTA Authorizations for Multipoint Distribution Service in the 2 GHz Band, Scheduled for Nov. 13, 1995*, Public Notice, 1995 FCC LEXIS 6721, Oct. 16, 1995. The MDS and SMR auctions net over \$ 267 million. *Daily Digest*, 1996 FCC LEXIS 191, Jan. 22, 1996.

177. 47 U.S.C. § 309(j)(11) (1995).

178. 47 U.S.C. § 309(j)(12) (1995).

179. Peter Huber, *Abolish the FCC*, FORBES, Feb. 13, 1995, at 184; see also J. Gregory Sidak, *Telecommunications: The Big Picture; AEI's Gregory Sidak Explains the Ins and Outs of Where the Industry Is Headed, How Other Countries Are Doing a Better Job of Encouraging Competition, and What Reforms Will Really Work in the United States*, ROLL CALL, June 27, 1994, at 1 (eight reforms to "unleash" the American telecom industry's potential, starting with removing regulatory barriers).

