

landline network and capable of providing paging and/or radiotelephone service.
n60

n57 See proposed §§ 22.142, 22.144(b), 22.121(d), 22.167, and 22.507(a).

n58 Telocator Comments at 17.

n59 Pacific Bell and Nevada Bell Comments at 5.

n60 McCaw Comments at 12-13.

31. Discussion. First, we are maintaining the current requirement that Public Mobile Services stations must be constructed by the end of the applicable construction period. By "constructed," we mean the completion of the construction, installation, and testing of a functioning station that is interconnected with the public switched telephone network. We emphasize that to meet this requirement, licensees must actually be able to transmit from a constructed facility; reselling a competing carrier's service will not satisfy the construction requirement. n61 This requirement furthers our public interest goal of promoting facilities-based competition in the Public Mobile Services.

n61 See, e.g., Delray Cellular Associates, 4 FCC Rcd 2233 (Mobile Serv. Div. 1989). [*34]

32. We are also adopting, as proposed, the new requirement that Public Mobile Services stations must commence service to the public by the end of the construction period. This additional requirement will discourage a licensee from obtaining an authorization, and perhaps even constructing facilities, but not using them to offer service to the public. n62 Over the years, licensees have applied for channels that were not needed immediately in order to "warehouse" them; i.e., have them available for future use, while depriving any competitors of their present use. This practice clearly results in an inefficient utilization of the spectrum. We believe that our new requirement will effectively discourage such "warehousing" of channels.

n62 Currently, if a licensee does not construct a facility, the authorization for that facility automatically terminates. If a licensee does construct the facility, but overlooks notifying the Commission that construction has been completed, that licensee will generally receive a notification of apparent liability for a forfeiture (a monetary fine). Under the new rule, if a licensee does not provide service to subscribers (as we define them herein), the authorization will automatically terminate. The penalty for failing to file a required form will not change. [*35]

33. We have determined that in order to be considered as providing service to the public, a system must be providing service to at least one subscriber who is not affiliated or controlled by the licensee or in any other manner related to the licensee. Further, we shall define the foregoing service as "service to subscribers" in order to avoid confusion with the term "service to the public" that is used with respect to the Commercial Mobile Radio Service (CMRS). We have also included a definition of "service to subscribers" in Section 22.99 of the new Rules we adopt today. This term plays an integral role in new rule Sections 22.142, 22.144(b) and 22.121(d). We believe that this definition is consistent with the Act, which requires that a Commission license for all uses of radio, including use for common carrier purposes, can be obtained only upon a

showing that the "public interest, convenience and necessity" will be served, 47 U.S.C. §§ 301, 307-310. In determining the showing to be made, the Commission can properly consider that the "public interest" demands that those who are entrusted with the available channels shall make the fullest and most effective use of them. n63 [*36]

n63 See *Microwave Service to CATV Systems*, 1 FCC 2d 897 (1965) (the Commission interpreted Section 301 of the Act to require carriers to show public need or that at least 50 percent of the proposed usage in the public point-to-point service is to serve members of the public that are not related to the applicant. *Id.*, at 902-904). See also Section 21.700(c).

Conditional Licensing

34. Proposal. We proposed in the Notice to rely on the technical exhibits provided by applicants in the Paging and Radiotelephone Service and Rural Radio Service without verifying their accuracy prior to grant. We proposed that instead of verifying these technical exhibits, we would grant authorizations subject to the condition, throughout the license term, that the licensee would not be allowed to continue to operate if such operation caused interference to other licensed facilities as a result of errors or omissions in the technical exhibits submitted with the application. Specifically, if interference were to occur because of an error or omission in the technical exhibits to the application, the Commission could order the licensee to suspend operation of the facilities at the locations causing [*37] the interference, without affording an opportunity for a hearing, until such time that the facility is modified to resolve the interference. We pointed out that while applicants are currently required to certify that the statements made in the application, including the technical exhibits, are complete, we proposed to strengthen this certification to provide that the applicant has carefully reviewed the engineering of its proposal and certifies that it complies with the Commission's technical rules for operation on an interference-free basis. We also requested comment as to whether the condition should remain in effect throughout the license term.

35. Comments. The commenters generally opposed this proposal. Some of the parties are concerned that the license condition would be invoked in response to many different types of interference. Other commenters argue that our proposal to grant authorizations conditionally for the entire license term would (1) adversely affect the provision of service to the public; n64 (2) create uncertainty with respect to the validity of authorizations; n65 and (3) make it more difficult to finance and sell facilities. n66 Joyce and Jacobs, *Radiophone*, [*38] and *Southwestern Bell* contend that the proposal would deprive applicants of the statutory and other protections normally afforded them. n67 Finally, they contend that the conditional licensing proposal is unclear as to what procedures the Commission will follow when it receives a complaint of interference, i.e., whether the Commission would initiate a preliminary investigation after receiving such a complaint.

n64 *Telocator Comments* at 10.

n65 *BellSouth Comments* at 4-5; *U S WEST NewVector Group, Inc. (NewVector) Comments* at 5-6.

n66 *PageNet Comments* at 38-39; *Telocator Comments* at 11; *Joint Commenters*

Comments at 27; SMR Systems, Inc. (SSI) Comments at 6.

n67 Radiophone Comments at 6-10; Southwestern Bell Comments at 14-15; Joyce and Jacobs Comments at 3-4.

36. Several commenters, such as Telocator, Southwestern Bell, Radiophone, and SMR Systems, Inc. (SSI), recommend that if the Commission adopts this proposal, we should limit the conditional license period to one year from the date of commencement of service. Radiophone argues that any interference that would arise should become apparent during the first 12 months of operation. n68 Moreover, Telocator asserts that the [*39] 12 month period would afford affected co-channel licensees three opportunities to question another licensee's operation: (1) upon notice of the application as acceptable for filing; (2) upon notice of the grant of the application; and (3) upon notice of commencement of operation of the facilities. n69 SNET Paging, Inc. (SNET) concludes that limiting the length of the conditional license period avoids the drawbacks of this proposal while promoting the Commission's objectives. n70

n68 Radiophone Comments at 8-9.

n69 Telocator Comments at 11.

n70 SNET Paging, Inc. (SNET) Comments at 11-12.

37. Discussion. After having considered our proposal and the arguments advanced in the comments, we have decided not to adopt our conditional licensing proposal. We agree with the commenters that the conditional grant proposal would create uncertainty with respect to the validity of authorizations and also could make efforts to finance or sell facilities more difficult than is currently the case. Moreover, it is possible that the resources that would be required to enforce our conditional grant proposal could exceed the savings realized by not reviewing the technical exhibits in the first [*40] place. In brief, "unscrambling the egg" could be a very difficult, if not impossible, process if an applicant commences operation of a facility and interference problems develop that could have been foreseen if an engineering review of the technical exhibits in the application had been conducted. Thus, we will continue to verify the accuracy of technical engineering exhibits submitted with applications.

Electronic Filings

38. Section 1.743 of our Rules requires all common carrier applications to be "personally" signed by the applicant or, in certain circumstances, by the applicant's attorney. Thus, a handwritten signature is currently required for all common carrier applications. In October 1992, after release of the Notice in this proceeding, Congress amended the Communications Act to allow electronic filing of applications. n71 Specifically, Sections 308(b) and 319(a) of the Act were amended to allow applications to be signed "in any manner or form, including by electronic means, as the Commission may prescribe by regulation." Id., §§ 204(b), (c). A conforming amendment was also added to eliminate the requirement of a "signed" waiver under Section 304 of the Act. Id., § [*41] 204(a).

n71 Telecommunications Authorization Act of 1992, Pub. L. No. 102-538, 106 Stat. 3533 (1992), Section 204.

39. Pursuant to the authority expressly delegated by Congress, we have decided to modify the handwritten signature requirement as it applies to common carrier applications. Specifically, we amend Section 1.743(a) to delete the word "personally" from the application signature requirement. Further, the signature requirement is amended to give the Common Carrier Bureau discretion to establish filing procedures by public notice (to be published in the Federal Register) that would allow applications to be "signed" by computer-generated impulses. Modification of the handwritten signature requirement will allow us to move towards more efficient processing of common carrier applications. Our ultimate goal is to eliminate, to the extent possible, the filing of paper applications. Electronic filing will expedite the licensing process by eliminating the need for manual entry of application data into the Commission's data base. We also hope to develop the means to generate and transmit license information to licensees electronically with no intermediate paper documents. [*42]

40. We emphasize that under new Section 1.743 of the Rules, handwritten signatures will continue to be required on all common carrier applications unless and until the Common Carrier Bureau establishes specific procedures for electronic filing of such applications. Such procedures will be implemented by publication of Public Notices in the Federal Register, and the use of modified application forms.

41. The foregoing revisions to Section 1.743 of the rules relate to matters of practice and procedure only. Therefore, they are excepted from the notice and comment requirement of the Administrative Procedure Act, 5 U.S.C. § 553(a).

Multichannel Transmitters

42. Proposal. In the Notice, we proposed to require a separate transmitter for every assigned channel at each location. We stated that the proposed rule was intended to eliminate the practice whereby one multi-channel transmitter (MCT) is installed at a site where two or more channels are authorized. Because the MCT can transmit on only one channel at a time, all but one of the assigned channels at that site are unused at all times. Our rules concerning the assignment of additional channels are based on the assumption [*43] that all assigned channels could and would be used simultaneously. We stated our tentative view in the Notice that the use of MCTs to satisfy construction requirements constitutes inefficient use of the spectrum. We also stated that our proposal to require a separate dedicated transmitter for each assigned channel would discourage warehousing. We requested comments, however, as to whether there is a less stringent requirement that would also meet this objective. Finally, we proposed to require that all transmitters within a station must be operationally related in order to be authorized together as a station.

43. Comments. The commenters oppose the proposal to require a separate transmitter for every assigned channel at each location. n72 They argue that the Commission's rules should expressly allow licensees to use MCTs at sites with more than one assigned channel provided that they satisfy the construction and service requirements. They argue that the legitimate uses for MCTs include (1) facilitating the introduction of additional public mobile services, such as nationwide paging; n73 (2) enhancing the variety of services offered, such as voice or text paging; n74 and (3) [*44] facilitating the sharing of

channels under time-sharing agreements. n75 OASBA believes that these useful functions represent an effective mechanism for small paging systems to increase coverage, reduce inefficient use of transmitters, and lower costs to subscribers. McCaw avers that the cost to provide service using a second channel when incorporated into a MCT is significantly lower than if separate transmitters are used, thus benefitting the public interest. n76 Furthermore, McCaw argues that a prohibition against MCTs would not deter warehousing because any carrier wishing to warehouse can easily supply a single inexpensive low power transmitter to maintain traffic on the channel and thereby preclude other carriers from filing for that channel. In any event, SNET argues that the Commission's proposed rules regarding settlements, first come, first served, and repetitious filings serve best to deter warehousing. n77 Finally, Telocator contends that adoption of the proposal would further aggravate the asymmetrical regulation between private carriers, which are not restricted as to the type of transmitters they use, and Part 22 common carriers. n78

n72 See, e.g., Joint Commenters Reply Comments at 10-12.

n73 Telocator Comments at 35.

n74 OASBA Comments at 20.

n75 Telocator Comments at 35-36 and Reply Comments at 5-6.

n76 McCaw Comments at 31-32.

n77 SNET Comments at 4-5.

n78 Telocator Comments at 36. [*45]

44. Discussion. We have been persuaded by the commenters to alter our initial proposal and affirmatively allow the use of MCTs. While we remain concerned that the use of MCTs where two or more channels are authorized could result in inefficient use of the spectrum, we agree with the parties that many MCT uses serve legitimate public interest goals that on balance outweigh this risk. For example, as the parties have noted, use of MCTs has enhanced other service offerings, facilitated the introduction of mobile services, such as nationwide paging, and promoted the sharing of channels under time-sharing agreements. We also note that, with the elimination in this order of old Section 22.119 (see paras. 68-72) generally prohibited the use of a transmitter licensed under Part 22 for any non-common carrier purpose, it does not make sense to prohibit a commercial mobile radio provider from using a MCT to transmit on additional Part 22 channels while allowing that provider to use the MCT to transmit on Part 90 channels as well as its assigned Part 22 channel.

Additional Channel Policy

45. Proposal. We proposed to eliminate the currently required traffic loading studies for applications [*46] requesting more than one channel for a new station, or one or more additional channels for an existing station in the paired spectrum designated for one-way or two-way mobile operation. We explained that this proposal was based on the proliferation of competitive telecommunications services, our decisions in other proceedings affecting public mobile service n79 channel usage, and our concerns regarding the burden these

studies impose on licensees and our staff. Instead of requiring traffic loading studies to justify requests for additional channels, we proposed to allow applicants to apply for no more than two channels at one time. A licensee would be required to be providing service on those channels before applying for additional channels. The Notice further explained that this method would allow licensees that need additional channels the opportunity to obtain them, while continuing to provide an adequate safeguard against warehousing. n80

n79 See, e.g., Flexible Allocation of Frequencies in the Domestic Public Land Mobile Service for Paging and Other Services, CC Docket No. 87-120, First Report and Order, 4 FCC Rcd 1576 (1989), in which the Commission decided to allow market forces to determine which common carrier services are offered on two-way public mobile channels.

n80 The Commission has been using a similar procedure for several years to govern additional channel requests for one-way paging operations. The difference between that current procedure and our proposal is that a licensee now may file an application for an additional paging channel as soon as the previous application has been granted. [*47]

46. Comments. Most of the parties support elimination of the requirement for traffic loading studies. They believe that these studies are of questionable reliability n81 and are unnecessary in view of the increased competition to mobile telephone service offered by cellular systems. n82 They note that it will reduce the current burdens on both licensees and the Commission associated with the preparation and analysis of loading studies. n83 The commenters, however, are split in their support for our proposal to limit the number of channels that applicants may apply for at one time. Joint Commenters, who support our proposal generally, question the fairness of allowing a carrier intending to provide one-way paging service using the one-way and two-way mobile channels to request two channels at one time while limiting a carrier intending to provide one-way paging service using the one-way paging channels to requesting one channel at a time. n84 They suggest that either we should allow the same number of co-pending channel requests for both one-way and two-way channels, or applicants seeking the two-way channels should be required to provide two-way service.

n81 See Joint Commenters Comments at 8; Telocator Comments at 39.

n82 Joint Commenters Comments at 8-9.

n83 GTE Comments at 5; New Vector Comments at 8.

n84 Joint Commenters Comments at 9-10, 72-73. [*48]

47. Telocator and Metrocall oppose our proposal to require a licensee to provide service on its authorized channels before applying for additional channels. They believe that licensees should be allowed to apply for an additional channel as soon as the previous application is granted, and not have to wait until the station is actually constructed and providing service. n85 They argue that the proposed rule would delay service to the public, particularly in cases where a pending application requires international coordination, which can sometimes be a lengthy process. Expressing the opposite concern, Arthur K. Peters, Consulting Engineers (AK Peters) argues that the

"two channels at one time" policy will allow channel hoarders to acquire additional channels without having any significant traffic on the channels they already have. As a compromise, it suggests that applications only be allowed in increments of one channel for the same geographic area. n86

n85 See, e.g., Telocator Comments at 40; Metrocall Comments at 29.

n86 AK Peters Comments at 8.

48. Discussion. We will adopt our proposal to eliminate traffic loading studies. The commenters concurred in our finding [*49] that these studies are often of questionable reliability and are burdensome for both licensees and the Commission's staff. We agree, however, with the commenters who note that the proposed rule, in conjunction with our existing additional channel policy for one-way paging channels, would have the unintended result of allowing a carrier seeking to provide paging service using the one-way or two-way channels to obtain two such channels at one time while allowing a carrier seeking to provide paging service using the one-way paging channels to obtain only one channel at one time. To rectify this inconsistency, we amend the rules to allow carriers seeking to provide paging service to obtain only one channel at one time, regardless of whether the channels are designated exclusively for one-way paging or for one- and two-way mobile operation. For applications proposing a two-way mobile telephone service such as IMTS (but not a two-way paging service), we will allow applicants to obtain two channels at one time as we proposed.

49. We emphasize that, in either case, the carriers must receive the authorizations, construct the stations, provide service to subscribers as we have defined it [*50] supra, and notify the Commission of the commencement of that service before seeking additional channels in the same general service area. Our new rules provide that applications for additional channels in an area that are filed before the applicant notifies the Commission of commencement of service on channels already assigned to the same applicant in the same general service area may be dismissed. We disagree with Telocator and Metrocall that the Commission should accept an application for additional channels as soon as the previous application is granted. Although we currently allow this practice, we believe that continuing to allow it would encourage channel hoarding as described by AK Peters.

BETRS Channel Assignment Policy

50. Proposal. We proposed in the Notice to apply the additional channel policy proposed for the Paging and Radiotelephone Service to the Rural Radio Service as well because stations in both services use many of the same channels. Also, we noted that Part 22 does not currently contain any technical rules for assignment of channels to Basic Exchange Telephone Radio Systems (BETRS) in the Rural Radiotelephone Service. We requested comments as to what [*51] rules are necessary to govern channel assignments for BETRS, and the technical criteria that should be used.

51. Comments. The commenters oppose applying to BETRS the Paging and Radiotelephone Service rule limiting carriers to two channels per application cycle. For example, U S WEST New Vector Group, Inc. (New Vector) argues that the "two channel at a time" rule is inappropriate because it does not consider

how channels are used for BETRS in this service. n87 It explains that BETRS channels are used to provide a grade of service that is equivalent to landline telephone exchange service, and that the number of channels needed in each individual case is determined by a number of varying factors. n88 GTE, NewVector, and United States Telephone Association (USTA) suggest that the number of channels assigned in a BETRS authorization should be based on industry-developed technical criteria that take into consideration the number of subscribers to be served, the planned grade of service, n89 the terrain, and potential for interference. n90 They state that the existing rule (that allows assignment of no more than four channels per application cycle) in effect prevents carriers from using [*52] BETRS to provide rural subscribers with the necessary grade of service. The proposed rule, they argue, would further limit the quality of service and the usefulness of BETRS. GTE and New Vector propose that we adopt a rule that establishes a procedure for assigning channels for fixed rural service. USTA recommends that the Commission allow providers of rural radio service to submit projected traffic studies and other showings to justify the need for additional channels.

n87 New Vector Comments at Appendix I, p.36.

n88 Id.

n89 Requirements for a particular minimum grade of service for basic exchange telephone service are generally established by state public utility commissions.

n90 GTE Comments at 23; USTA Comments at 5-6.

52. Discussion. Although we proposed to apply the "two channels at a time" rule to Rural Radiotelephone Service generally, we agree with the commenters that it makes little sense when applied to BETRS specifically. BETRS technology is spectrum efficient in that it uses relatively low power and provides two or four full duplex audio channels per radio channel pair. Nevertheless, to provide 40 rural customers with private line grade service (meaning [*53] service with a negligible blocking level, as opposed to party line service) could require 10 channel pairs. Thus, we agree with the commenters that applying the two channel limit to BETRS would restrict the installation of such facilities and in certain situations could prevent using BETRS to provide telephone exchange service to customers in very remote rural areas. n91

n91 To provide private line grade service to customers in very remote areas, often the only alternative to BETRS is the installation of copper wire. The use of wire, however, is often infeasible because it is expensive to install and maintain, is vulnerable to damage and theft, requires right-of-way or easements through private property which may be expensive or difficult to obtain in some cases, and installation may harm environmentally sensitive areas.

53. We have added a rule to govern BETRS channel assignments along the lines suggested by the parties, but which also contains safeguards to prevent BETRS from using the entire 454 MHz spectrum in urban or populated areas where there is presently substantial demand for paging and radiotelephone service. n92 Under this rule, the number of additional channels [*54] assigned to BETRS in the Rural Radiotelephone Service will be determined on a case-by-case basis, taking into account all relevant factors, including the grade of service required, the equipment utilized, the amount and type of service for which demand is

projected, the clustering of the customer locations, the terrain, and the potential for interference between systems. In addition, BETRS applicants will be required to demonstrate that ample spectrum would remain, after grant of their application, to meet present and projected future demand for mobile service in the area involved. We also are adding rules governing the technical characteristics of BETRS equipment as suggested by the commenters. n93 We believe that these new rules will permit us to assign an adequate number of channels for BETRS in rural areas while, at the same time, ensuring that sufficient 454 MHz public mobile spectrum remains available to meet present and future mobile service needs.

n92 See discussion of new § 22.719 in Appendix A.

n93 See discussion of new §§ 22.567 and 22.759 in Appendix A.

Cellular Electronic Serial Numbers

54. Proposal. We proposed in the Notice a new rule (Section 22.919) intended [*55] to help reduce the fraudulent use of cellular equipment caused by tampering with the unique Electronic Serial Numbers (ESN) that identify mobile equipment to cellular systems. The purposes of the ESN in a cellular telephone are similar to the Vehicle Identification Numbers in automobiles. That is, it uniquely identifies the equipment in order to assist in recovery if it is stolen. More importantly, in the case of cellular telephones, the ESN enables the carriers to bill properly for calls made from the telephone. Any alteration of the ESN renders it useless for this purpose. The proposed rule explicitly establishes anti-fraud design specifications that require, among other things, that the ESN must be programmed into the equipment at the factory and must not be alterable, removable, or in any way able to be manipulated in the field. In addition, the proposed rules require that the ESN component be permanently attached to a main circuit board of the mobile transmitter and that the integrity of the unit's operating software not be alterable.

55. Comments. The commenters generally support our proposal, n94 but they suggest some modifications. For example, BellSouth, Southwestern [*56] Bell, GTE, and CTIA suggest that our proposal should be modified to provide that equipment already manufactured, is exempt from the rule. n95 They argue that subjecting existing phones to this rule would be very expensive and difficult, if not impossible, to implement. Therefore, they recommend that the rule apply only to phones manufactured after a particular date. n96 NYNEX recommends that we not require the ESN chip to be secured to the main circuit board of the mobile transmitter as proposed. Rather, NYNEX suggests that the ESN chip be attached to the frame of the radio and attached to the logic board by cable. n97 In addition, it recommends that operating software be encoded or scattered over different memory chips. n98 Motorola, Inc. (Motorola) and Ericsson Corp. (Ericsson), two manufacturers of cellular mobile equipment, suggest that the proposal be modified to allow authorized service centers or representatives to make necessary and required changes to ESNs in mobile and portable units in the field. n99

n94 See, e.g., PacTel Comments at 2; CTIA Comments at 7-8.

n95 BellSouth Comments at Appendix 2, p.36; Southwestern Bell Comments at 28-29; GTE Comments at 30; CTIA Comments at 8.

n96 For example, BellSouth suggests that the anti-fraud measures should not apply to equipment type-accepted before January 1, 1993.

n97 NYNEX Comments at 8.

n98 Id. at 8-9.

n99 Ericsson Reply Comments at 2-5; Motorola Reply Comments at 3. [*57]

56. Southwestern Bell recommends that the rule also apply to mobile equipment associated with a wireless private branch exchange (PBX). n100 CTIA suggests that the proposal be modified in several respects. First, it states that we should clarify that requiring a mobile transmitter to have a "unique" ESN, means that any particular ESN will not exist in more than one mobile unit. Second, CTIA suggests that ESN manipulation not be permitted "outside a manufacturer's authorized facility." Third, it requests that cellular mobile units be required to be designed to comply with the "applicable industry standard for authentication." n101 New Vector supports the proposed rule, but emphasizes that the ESN criteria should be incorporated into the type-acceptance rules to clarify that manufacturers will be subject to the Commission's enforcement procedures if they do not comply with the ESN requirements. n102

n100 Southwestern Bell Comments at 29.

n101 CTIA Comments at 8.

n102 New Vector Comments at Appendix I, p.44.

57. C2+ Technology (C2+) requests that we allow companies to market ancillary cellular equipment that emulates ESNs for the purpose of allowing more than one cellular [*58] phone to have the same telephone number. It argues that emulating ESNs in the way it describes benefits the public, does not involve fraud, and retains the security and integrity of the cellular phones. n103 In opposition, Ericsson asserts that the rules should include procedures to ensure that ESNs are not easily transferable through the use of an encrypted data transfer device. n104 Similarly, New Par suggests that the proposed rule proscribe activity that does not physically alter the chip yet affects the radiated ESN by translating the ESN signal that the mobile unit transmits. n105

n103 C2+ Comments at 1-2.

n104 Ericsson Reply Comments at 3-4.

n105 New Par Comments at 21-22.

58. Discussion. The record before us demonstrates the need for measures that will help reduce the fraudulent use of cellular equipment caused by tampering with the ESN. We therefore adopt the proposed rule for the reasons set forth below.

59. Contrary to the suggestion of one commenter, the ESN rule will not prevent a consumer from having two cellular telephones with the same telephone number. Changing the ESN emitted by a cellular telephone to be the same as that emitted by another cellular [*59] telephone does not create an "extension"

cellular telephone. Rather, it merely makes it impossible for the cellular system to distinguish between the two telephones. We note that Commission rules do not prohibit assignment of the same telephone number to two or more cellular telephones. n106 It is technically possible to have the same telephone number for two or more cellular telephones, each having a unique ESN. n107 If a cellular carrier wishes to provide this service, it may. In this connection, we will not require that use of cellular telephones comply with an industry authentication procedure as requested by CTIA, as this could have the unintended effect of precluding multiple cellular telephones (each with a unique ESN) from having the same telephone number.

n106 The telephone number is referred to in the cellular compatibility specification as the Mobile Identification Number or "MIN".

n107 It is not technically necessary to have the same ESN in order to have the same telephone number. Nevertheless, the authentication software used by some cellular systems does not permit two cellular telephones with the same telephone number. In such cases, cellular carriers should explain to consumers who request this service that their system is not yet capable of providing it. [*60]

60. Further, we conclude that the practice of altering cellular phones to "emulate" ESNs without receiving the permission of the relevant cellular licensee should not be allowed because (1) simultaneous use of cellular telephones fraudulently emitting the same ESN without the licensee's permission could cause problems in some cellular systems such as erroneous tracking or billing; (2) fraudulent use of such phones without the licensee's permission could deprive cellular carriers of monthly per telephone revenues to which they are entitled; and (3) such altered phones not authorized by the carrier, would therefore not fall within the licensee's blanket license, and thus would be unlicensed transmitters in violation of Section 301 of the Act. Therefore, we agree with New Par and Ericsson that the ESN rule should proscribe activity that does not physically alter the ESN, but affects the radiated ESN, including activities that transfer ESNs through the use of an encrypted data transfer device.

61. With respect to the proposal to allow alteration of ESNs by manufacturers' authorized service centers or representatives, we note that computer software to change ESNs, which is intended [*61] to be used only by authorized service personnel, might become available to unauthorized persons through privately operated computer "bulletin boards". We have no knowledge that it is now possible to prevent unauthorized use of such software for fraudulent purposes. Accordingly, we decline to make the exception requested by Motorola and Ericsson.

62. We further agree with the commenters that it would be impractical to apply the new rule to existing equipment. Accordingly, we are not requiring that cellular equipment that is currently in use or has received a grant of type-acceptance be modified or retrofitted to comply with the requirements of this rule. Thus, the ESN rule will apply only to cellular equipment for which initial type-acceptance is sought after the date that our rules become effective. Nevertheless, with regard to existing equipment, we conclude that cellular telephones with altered ESNs do not comply with the cellular system compatibility specification n108 and thus may not be considered authorized

equipment under the original type acceptance. Accordingly, a consumer's knowing use of such altered equipment would violate our rules. We further believe that any [*62] individual or company that knowingly alters cellular telephones to cause them to transmit an ESN other than the one originally installed by the manufacturer is aiding in the violation of our rules. Thus, we advise all cellular licensees and subscribers that the use of the C2+ altered cellular telephones constitutes a violation of the Act and our rules.

n108 See old § 22.915, which becomes new § 22.933 in Appendices A and B.

63. With respect to NYNEX's proposed modifications for securing the ESN chip to the mobile transmitter, the record does not convince us that these modifications will make the ESN rule more effective. Therefore, we do not adopt NYNEX's proposal. We agree with Southwestern Bell that the ESN rule should apply to mobile equipment associated with wireless PBX if the equipment can also be used on cellular systems. We also clarify that the new ESN rule prohibits the installation of an ESN in more than one mobile transmitter. Finally, as suggested by New Vector, we amend the type-acceptance rule to refer to the newly adopted ESN rule. n109

n109 See discussion of new § 22.377 in Appendix A.

Use of Part 22 Transmitters in Non-Common Carrier Services

64. [*63] Proposal. Section 22.119 of the Rules currently prohibits the concurrent licensing and use of transmitters authorized to provide common carrier service under Part 22 of the Rules for non-common carrier communications purposes. n110 Although the regulatory history is silent on the purpose of this rule, we believe that it was adopted to assure that radio common carrier transmitters would be used exclusively for common carrier service in order to prevent delays and interruptions in service to subscribers.

n110 Section 22.119 currently states:

Transmitters licensed for operation in services governed by this part may not be concurrently licensed or used for non-common carrier communication purposes. However, mobile units may be concurrently licensed or used for non-common carrier purposes provided that the transmitter is type-accepted for use in each service.

65. In the Notice of Proposed Rulemaking and Order (NPRM and Order), n111 we stated that several factors make it appropriate to reevaluate the Section 22.119 prohibition and to propose deleting or modifying the rule. First, advances in technology, such as improved digital transmission techniques and store-and-forward technology, [*64] n112 have resulted in dramatically increased capacity, thus reducing the need for a transmitter to be devoted on a full-time basis to common carrier uses. Second, licensees providing wide-area service could achieve substantial economies of scale by sharing transmitters when building a regional or nationwide system without diminishing the licensee's quality of service. Third, the 1993 Budget Act amends Sections 3(n) and 332 of the Communications Act to create a comprehensive framework for all mobile services, including Part 22 common carrier services, private land mobile services, and future services such as Personal Communications Services (PCS). The 1993 Budget Act also amends the Communications Act to specify a single

"commercial mobile radio service." n113 Lastly, increased competition in the industry provides an assurance that service to existing customers will not suffer from joint use of transmitters when the carriers are offering distinct services on different channels.

n111 Amendment of Part 22 of the Commission's Rules to Delete Section 22.119 and Permit the Concurrent Use of Transmitters in Common Carrier and Non-Common Carrier Services, CC Docket No. 94-46, Notice of Proposed Rulemaking and Order, 9 FCC Rcd 2578 (1994).

n112 Under store and forward technology, pages are batched and then sent as a group. The transmission time is the same regardless of the number of paging messages in the group.

n113 47 U.S.C. § 332(c)(1) (1993). [*65]

66. Because of these factors, the NPRM and Order tentatively concluded that permitting a single transmitter to operate on both common carrier and private channels would not cause any disruption or impairment of service to existing Part 22 subscribers. Nevertheless, the NPRM and Order sought comment on whether the proposed rules should be limited to circumstances where the joint use will facilitate the provision of national or regional service as an overlay to local paging service or where the Part 22 licensee is utilizing batched paging. In addition, we sought comment on whether there were any other circumstances where we should not permit the shared use of transmitters licensed under Part 22. In the event that we decided to modify or eliminate Section 22.119, we solicited comment on whether safeguards should be adopted to prevent warehousing of exclusively assigned channels. Finally, we sought comment on whether we should allow two different licensees to share the same transmitter.

67. Comments and Discussion. All of the commenters are in favor of permitting the joint licensing and use of transmitters in the common carrier and private carrier services. n114 We agree with [*66] the parties that elimination of Section 22.119 will serve the public interest. As the parties have indicated, radio common carriers (RCCs) providing wide-area service continue to expand their paging service throughout the United States. In an effort to meet subscriber demands for service that extends beyond their existing RCC coverage areas, Part 22 licensees have begun to offer nationwide or regional service on private carrier paging channels as an overlay to their common carrier service. Under the existing rule, carriers are required to construct private carrier paging facilities at locations where they already have Part 22 transmitters with additional capacity. The parties argue that elimination of the prohibition will promote economic efficiencies by reducing their costs of constructing and operating facilities dedicated to both private and common carrier paging when air time is available for both private carrier paging and common carrier paging on the existing common carrier transmitters. The parties note that the savings resulting from utilizing existing transmitters will allow them to offer lower prices to their subscribers.

n114 Comments were filed by AirTouch Paging (AirTouch) and Arch Communications Group, Inc. (Arch); Celpage, Inc.; GTE; McCaw; Metrocall, Inc.; Message Center Beepers, Inc. and Beepage, Inc.; Metropolitan Houston Paging Services, Inc.; Personal Communications Industry Association (PCIA); PageNet; Paging Partners Corporation; PageMart II, Inc.; the Association for Private

Carrier Paging Section of the National Association of Business and Educational Radio, Inc.; Southwestern Bell; and TeleComm Systems, Inc. PCIA filed Reply Comments while AirTouch and Arch filed Joint Reply Comments. [*67]

68. Furthermore, we agree with the parties that eliminating Section 22.119 is consistent with the 1993 Budget Act's amendment of the Communications Act and the Commission's recent rulemakings to implement these amendments. The new regulatory structure in the Second Report and Order in GN Docket No. 93-252 (Second Report and Order), was designed to ensure symmetrical regulatory treatment of competing service providers, to promote further competition and economic growth in the mobile service marketplace, and to establish an appropriate level of regulation to protect mobile service customers. n115 Elimination of Section 22.119 will remove the existing rule requiring separate dedicated transmitters for private carrier paging (PCP) and RCC paging services. Thus, licensees that already operate RCC transmitters will be able to institute competitive PCP service at those locations earlier than they otherwise could. Moreover, elimination of Section 22.119 is consistent with the Commission's determination in the Second Report and Order to classify PCP services and common carrier paging services as CMRS because it promotes symmetrical regulatory treatment of PCP and RCC services.

n115 See Implementation of Sections 3(n) and 332 of the Communications Act, GN Docket No. 93-252, Second Report and Order, 9 FCC Rcd 1411 (1994). [*68]

69. We also agree with the parties that the competitiveness of the paging industry provides assurance that service to existing paging customers will not suffer. For example, in the Second Report and Order the Commission concluded that the paging industry is highly competitive, n116 based on a recent study finding that, on average, a paging carrier competes with five carriers, and may compete with as many as 19 other carriers in a given market. n117 Paging companies compete on the basis of geographic coverage, customer service, enhanced service, and price. This highly competitive environment encourages paging carriers to provide high quality service or risk losing customers to other carriers.

n116 See Second Report and Order, 9 FCC Rcd at 1468.

n117 Id., citing R. Ridley, 1993 Survey of Mobile Radio Paging Operators, Communications, Sept. 1993 at 20.

70. We agree with the majority of commenters that Section 22.119 should be deleted in its entirety, and should not be retained based on the service being offered or the technology used by the carrier. Furthermore, we do not believe that elimination of Section 22.119 will encourage warehousing. As the parties have noted, the [*69] elimination of Section 22.119 will not allow licensees to duplicate interchangeable channels at common sites, but will only allow them to add channels capable of providing a distinct service. Hence, it appears unlikely that licensees will be capable of reserving channels for future use or hoarding channels to block competition. Therefore, we do not believe that it is necessary to impose safeguards to deter warehousing.

71. Finally, we do not believe that it is in the public interest to allow two different licensees to share the same transmitter. We are concerned that the shared use of the same transmitter by two different licensees may raise

questions regarding the control and responsibility for the transmitter. We are also concerned about the broader service disruptions that outages of shared transmitters would cause.

Power Limits for 931 MHz Paging Stations

72. Proposal. In *Height Power Increases in the Public Mobile Service*, 4 FCC Rcd 5303 (1989), modified, 5 FCC Rcd 4604 (1990), the Commission increased the maximum power limit for transmitters operating in the 931 MHz band to 3500 Watts effective radiated power (ERP), and also adopted geographic separation requirements [*70] for higher power transmitters to prevent co-channel interference. Nationwide network paging licensees may operate transmitters on the three nationwide paging channels (931.8875, 931.9125, and 931.9375 MHz), n118 with power up to, but not exceeding, 3500 Watts ERP, regardless of whether they have any co-channel transmitters in the vicinity. Because the nationwide licensees have been assigned a particular channel for exclusive use throughout the nation, co-channel interference to other licensees is not possible.

n118 These three channels are reserved for use by nationwide paging operators. See *Allocation of Spectrum in the 928-941 Band*, 89 FCC 2d 1337 (1982), recon. (Part 2), 93 FCC 2d 908 (1983), aff'd sub nom., *NARUC v. FCC*, No. 83-1485 (D.C. Cir. Jan. 17, 1984); *Third Report and Order*, 97 FCC 2d 900 (1984), recon., 57 RR 2d 1416 (1984). Thirty-seven other channels were made available for regional and local one-way paging service. Id.

73. Licensees of paging transmitters on the other 931 MHz channels may operate transmitters with ERP exceeding 1000 Watts, up to a maximum of 3500 Watts, but only when the interfering contour of these transmitters is totally encompassed by [*71] the composite interference contour of existing co-channel transmitters of the same licensee. n119 This encompassment requirement limits the geographic area a single stand-alone transmitter can cover, allowing for a larger number of independent co-channel stations in any given area. The rule's reliance on surrounding transmitters, however, essentially limits the use of high power transmitters to interior locations in existing wide area 931 MHz paging systems. Carriers desiring to operate only a single 3500 Watt paging transmitter must first apply, receive authorization for, and construct several 1000 Watt transmitters covering the same area. This is impractical because of the delay and expense of constructing the unwanted surrounding transmitters.

n119 The Commission adopted the encompassment requirement as a method of limiting co-channel interference because our computer software at that time would not accommodate the additional transmitter classes. This shortcoming has been corrected.

74. In the *Notice of Proposed Rulemaking and Order in CC Docket No. 93-116, (Paging Power Limits NPRM and Order)*, n120 we proposed to remove the encompassment requirement and allow licensees [*72] to operate 931 MHz paging stations with any ERP up to the maximum of 3500 Watts, provided that the applicable geographic separation requirements (which are designed to prevent co-channel interference) are satisfied. We pointed out that although operations in the 931 MHz band continues to increase rapidly, licensing activity consists in large part of applications for expansion of existing systems. Thus, the role of the encompassment rule in allowing more independent co-channel stations is

less important than previously thought. In the Paging Power Limits NPRM and Order, we tentatively concluded that it would be in the public interest to allow operation of 931 MHz paging transmitters without the current requirement that such transmitters be surrounded by existing co-channel transmitters of the same licensee. n121 We suggested that this change would afford the benefits of higher power operation without unduly increasing the risk of interference. These benefits arise from the flexibility for paging licensees to use fewer transmitters to cover the same geographic area, resulting in efficiencies of scale, reductions in costs, and benefits to consumers. We indicated that any increased [*73] potential for interference resulting from high power operation would be balanced by reduction in the number of transmitters (each representing a possible source of interference).

n120 Amendment of Part 22 of the Commission's Rules Pertaining to Power Limits for Paging in the 931 MHz Band in the Public Mobile Services, CC Docket No. 93-116, Notice of Proposed Rulemaking and Order Granting Petition for Waiver, 8 FCC Rcd 2796 (1993).

n121 See § 22.505(c)(2), 47 CFR § 22.505(c)(2).

75. Accordingly, in the Paging Power Limits NPRM and Order we proposed to eliminate the encompassment requirement and several related rules. n122 We stated, however, that we would continue to classify 931 MHz transmitters and require that locations of these transmitters be in compliance with current rules for the class-by-class distance separation criteria for co-channel 931 MHz transmitters. n123 We also noted that we were not proposing to change the existing reliable service area and interfering contour radii in the Rules. n124

n122 Specifically, we proposed to delete old Sections 22.505(b), 22.505(c)(2), and 22.505(f)(2) of the Rules.

n123 We believed then, as we do now, that these measures alone are sufficient to guard against co-channel interference.

n124 47 CFR § 22.504(b). [*74]

76. We requested comment on these proposals generally, and on the potential for interference that might result from increased use of high power transmitters. In addition, we sought comment on whether the separation distances in our rules are adequate to protect future and existing stations from interference, including co-channel interference to and from stations operating in Canada and Mexico.

77. Comments. The commenters generally favor our proposal to eliminate the encompassment requirement and related rules. n125 They agree that the proposed changes would serve the public interest by allowing increased flexibility in system design and lower system infrastructure cost. They note that 931 MHz paging systems would be able to serve larger geographic areas with fewer transmitters, thus decreasing both equipment costs and associated recurring costs such as site rental and equipment maintenance.

n125 See, e.g., Telocator Comments at 2-3; Metromedia Paging Reply Comments at 2-3; SkyTel Reply Comments at 2; PacTel Paging Comments at 2-4; and PagePrompt USA Comments 2-3.

78. The Utilities Telecommunications Council (UTC), the only commenter opposing our proposal, argues that [*75] high power paging facilities in the 931 MHz band are more likely to cause interference to adjacent channel multiple address systems (MAS) operating at 928 and 932 MHz. n126 UTC maintains that high power paging operations often reduce the range of MAS stations due to "receiver desensitization, transmitter noise, and intermodulation interference." n127 In this regard, UTC contends that, in GEN Docket 82-243, n128 the Commission acknowledged the potential for interference to MAS operations from paging systems in the 931-932 MHz band. UTC argues that the Commission should adopt procedures whereby applicants for higher power paging systems are required to remedy interference to MAS systems. For example, it suggests that applicants for higher power paging systems could be required to identify all MAS master stations within one mile of the proposed site, contact each of these MAS licensees, advise them of their pending applications, and correct at their own expense all interference to MAS systems. n129

n126 UTC Comments at 4.

n127 Id.

n128 UTC cites Amendment of Parts 1, 21, 22, 74, and 94 of the Commission's Rules to Establish Service and Technical Rules for Government and Non-Government Fixed Service Usage of the Frequency Bands 932-935 MHz and 941-944 MHz, GN Docket No. 82-243, Memorandum Opinion and Order, 5 FCC Rcd 1624, 1627 (1990) (Memorandum Opinion and Order in GN Docket No. 82-243).

n129 UTC Comments at 6. [*76]

79. Although Pagenet supports the basic purpose of our proposal, it is concerned that elimination of the antenna height-power limits for 931 MHz would limit flexibility in modifying facilities that were established prior to the transmitter classification table. Pagenet argues that, so long as a 931 MHz transmitter has parameters that comply with the antenna height-power limits, the station operation should be treated as if it is Class L n130 and not have to meet the larger distance separation requirements of its actual class, if different from Class L. Although Pagenet agrees that all such transmitters should be reclassified (giving them a larger protected service area), it recommends that the Commission grandfather them insofar as the required minimum separation distances are concerned. Pagenet further recommends that the old height-power table be retained as a guideline for modification of those licensee classes, to avoid "stair-step" reductions in transmitter power resulting from small, unavoidable changes in antenna height.

n130 Class L is the smallest class of 931 MHz paging transmitter, and is considered to have a 32.2 kilometer (20 mile) service radius and a 80.5 kilometer (50 mile) interfering contour radius. In the revision of the Paging and Radiotelephone Service rules, we are eliminating these class labels and simply specifying the service and interfering contour radii directly. See new § 22.537, Tables E-1 and E-2, in Appendix B. [*77]

80. Discussion. We conclude that it is in the public interest to adopt our proposal to remove the encompassment requirement and related rules. As the parties have noted, providing paging licensees with the flexibility to use fewer

transmitters to cover a given geographic area will not only result in efficiencies in scale and reductions in equipment, construction, and operational costs, but also will conserve Commission resources, n131 improve the quality and cost of service to customers, and permit carriers to integrate new equipment and provide new services that otherwise might not be offered. n132 For example, PacTel states that facilitating the use of high power transmitters will enable licensees to use Telocator's proposed high speed data protocol to transmit large data files to subscribers over existing one-way paging channels. n133 As Telocator notes, adoption of our proposal conforms the 931-932 MHz band rules with the rules for national network paging systems and the rules for narrowband personal communications services (PCS): n134

n131 Metromedia Comments at 1.

n132 See, e.g., PagePrompt Comments at 2-3; PacTel Comments at 3.

n133 PacTel Comments at 3.

n134 Telocator Comments at 3. [*78]

81. We do not expect that removing the encompassment requirement and related rules will cause interference to MAS operating on 928 and 932 MHz, as UTC predicts. n135 The encompassment rule does not and was never intended to protect MAS systems; the only measure of protection it provides is to independent 931 MHz co-channel paging operations. Moreover, PacTel and PageNet state that, based on their experience as licensees of both 931 MHz paging stations and control stations in the 928 MHz band, UTC's concerns about MAS interference are unwarranted. n136 We believe that proper site management and proper engineering in designing systems are the appropriate mechanisms for avoiding interference. n137 We do, however, require licensees to cooperate in resolving interference situations if they arise.

n135 UTC cites the Commission's 1990 Memorandum Opinion and Order in GN Docket No. 82-243. That Memorandum Opinion and Order does not specifically address the potential for interference to MAS operations from paging operations in the 931-932 MHz frequency range.

n136 PageNet Reply Comments at 3; PacTel Reply Comments at 2.

n137 See Memorandum Opinion and Order in GN Docket No. 82-243, supra, at footnote 128. [*79]

82. In regard to Pagenet's concern for existing 931 MHz paging transmitters at locations that meet required minimum separations for a Class L but not their actual class, we agree that disrupting these existing paging operations unnecessarily (by requiring them to operate at reduced parameters upon modification) would not serve the public interest. n138 Accordingly, we will allow licensees to continue to operate these facilities at the equivalent of their currently authorized parameters, while considering them to have a 32.2 kilometer (20 mile) service radius and a 80.5 kilometer (50 mile) interfering contour radius. We disagree, however, with Pagenet's request that we retain the old height-power table as a guide for modifications. This table was based on an earlier propagation model that differs from the model used for the service and interfering contour radii tables that we are adopting today. n139 We believe

that market area licensing, as suggested by several of the commenters, may be the best solution to the problem of allowing modifications to these grandfathered stations. As stated supra, however, we are not adopting such procedures herein. In the meantime, we will allow [+80] modifications to the affected 931 MHz paging facilities, using the same antenna height and power, or a higher antenna height with the effective radiated power reduced by a factor of 10 for every doubling of antenna height. This reduction is consistent with the interfering contour radii table and use of it will eliminate the "stair-step" problem that Pagenet cites.

n138 We are not aware of any co-channel interference problems resulting from the existence of these "short-spaced" stations.

n139 In fact, it was the poor correlation between the old height power limit table and the old station classification tables that led to the discrepancy between these stations' operating parameters and the separations under which they were authorized.

THE STATE OF NEW YORK)

COUNTY OF ROCKLAND)

AFFIDAVIT OF GARRY SUTCLIFFE

KNOW ALL MEN BY THESE PRESENTS:

BEFORE ME, the undersigned authority, personally appeared Mr. Garry Sutcliffe, who after being duly sworn, did state under oath as follows:

"My name is Garry Sutcliffe. I am over the age of eighteen (18) and I am fully competent to make this affidavit in all respects. The facts and opinions contained herein are true, correct, and based upon my personal knowledge.

I am Project Manager - Technology at NYNEX Mobile Communications Corporation, with offices at 2000 Corporate Drive, Orangeburg, New York, ('NYNEX Mobile'). I am familiar with the technical aspects of the cellular business, including the process known as 'ESN emulation.' In the cellular business, an Electronic Serial Number ('ESN') is the factory-installed 32 bit binary number that uniquely identifies the cellular telephone to cellular systems, much like a motor vehicle has a vehicle identification number or VIN which uniquely identifies the vehicle. ESNs enable cellular licensees, like NYNEX Mobile, to identify the transmissions of each cellular telephone, authorize system usage and bill properly for calls.

ESN emulation involves a variety of techniques to alter, bypass or encrypt a cellular telephone's ESN to cause the cellular telephone to transmit a different ESN than that which was factory-installed. Using ESN emulation, a person can simulate the ESN of another cellular telephone -- in effect, make a 'counterfeit' cellular telephone.

ESN emulation facilitates fraudulent calls and unauthorized usage from counterfeit telephones which are not registered with cellular licensees. In many instances, users of counterfeit telephones make local, long distance and in some cases overseas calls which are then billed to unsuspecting cellular subscribers whose telephones were counterfeited. This type of fraud has resulted in many millions of dollars of expenses and lost revenues to NYNEX Mobile. Alternatively, ESN emulation is used to enable cellular subscribers to operate more than one telephone using the same telephone number, thereby avoiding monthly per telephone service charges assessed by NYNEX Mobile.

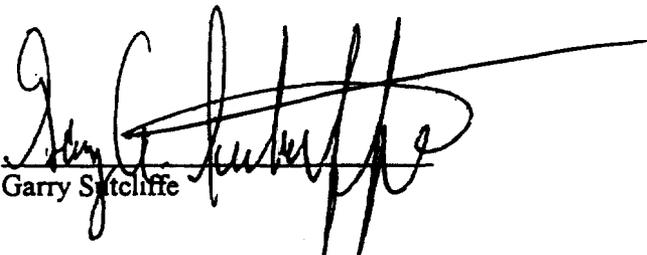
In its efforts to combat fraudulent use of its system, NYNEX Mobile has invested millions of dollars in fraud detection technologies. These technologies can occasionally detect when counterfeit telephones are in use (e.g., when two telephones with the same ESN are using the system at the same time or using the system from very distant locations within a very short time of each other). These technologies cannot, however, determine which cellular telephone is the authorized phone and which is the counterfeit. Furthermore, these technologies cannot determine whether the counterfeit phone is being used for purposes of toll fraud or by a subscriber as a second phone on the same telephone number. NYNEX Mobile expends considerable resources to protect itself and its subscribers from fraud, including automatically shutting off service and contacting the subscriber, whenever use of a counterfeit telephone is detected. Thus, regardless of whether the purported use of the counterfeit telephone is fraud or a second telephone, the counterfeit telephones impose considerable expenses on NYNEX Mobile, as well as denying NYNEX Mobile its lawful service charges.

The only way that NYNEX Mobile can find subscribers using counterfeit telephones with any degree of certainty is to review the sales records of the emulator. Destruction of the emulator's records will leave NYNEX Mobile without any recourse against its subscribers using counterfeit telephones.

I have reviewed the advertisements published by Cellular Emulation Systems, Inc., ('CES') which offers ESN emulation services. These advertisements claim that CES can provide multiple cellular telephones using the same telephone number. Based upon my experience and knowledge, there is no method of providing multiple cellular telephones on the same telephone number which has been approved by NYNEX Mobile as the cellular licensee.

On May 16, 1995, I went to Argus's offices at 10 West 66th Street, New York, New York and examined a Motorola cellular telephone which was in the possession of Mr. John F. Talt. On the inside of the phone were affixed two tags. The uppermost tag bore the following information: 'FCC ID: 1HDT5RD1,' 'MOTOROLA, INC. MADE IN USA,' 'F09HLD8416AG' and '674GSUV236.' The lower tag bore the following numerical information and bar codes: '82641CB8,' 'SUF1228A' and '4227D630QUM0.' Using standard cellular test equipment, I determined that the Motorola phone was transmitting a HEX Format ESN 8A0F239B -- the same factory-installed HEX Format ESN belonging to an Audiovox Prestige Model 100 cellular telephone registered with NYNEX Mobile under the account name 'McCann Enterprises.' Both the Audiovox and the Motorola phones were programmed with the same NYNEX cellular telephone number 212-273-3534, and both were able to complete calls.

Further affiant sayeth not."


Garry Sitchliffe

SUBSCRIBED AND SWORN TO BEFORE ME, the undersigned authority, on this 26 day of May, 1995.


Notary Public

RAQUEL CARTAMIL
Notary Public, State of New York
No. 4806612
Qualified in Rockland County
Commission Expires May 31, 1996

