

- NBSY<sub>r</sub>. The number of times a mobile station attempts to seize a reverse control channel and finds the reverse control channel busy.
- NSZTR<sub>r</sub>. The number of times a mobile station attempts to seize a reverse control channel and fails.
- NXTREG<sub>r</sub>. Identifies when a mobile station must make its next registration to a system.
- PL<sub>r</sub>. The mobile station RF power level.
- R<sub>r</sub>. Indicates whether registration is enabled or not.
- RCF<sub>r</sub>. Identifies whether the mobile station must read a control-filler message before accessing a system on a reverse control channel.
- REGID<sub>r</sub>. The stored value of the last registration number (REGID<sub>f</sub>) received on a forward control channel.
- REGINCR<sub>r</sub>. Identifies increments between registrations by a mobile station.
- S<sub>r</sub>. Identifies whether the mobile station must send its serial number when accessing a system.
- SCC<sub>r</sub>. A digital number which is stored and used to identify which SAT frequency a mobile station should be receiving.
- SID<sub>r</sub>. The home system identification stored in the mobile station's permanent security and identification memory.
- SID<sub>1r</sub>. One of a number of system identifications stored in the mobile station's semi-permanent security and identification memory.
- SID<sub>f</sub>. The system identification received on a forward control channel.
- SID<sub>r</sub>. The stored system identification.
- WFOM<sub>r</sub>. Identifies whether a mobile station must wait for an overhead message train before accessing a system on a reverse control channel.

*Orders.* The following orders can be sent to a mobile station from a land station:

- Alert. The alert order is used to inform the user that a call is being received.
- Audit. The audit order is used by a land station to determine whether the mobile station is active in the system.
- Change Power. The change power order is used by a land station to change the RF power level of a mobile station.
- Intercept. The intercept order is used to inform the user of a procedural error made in placing the call.
- Maintenance. The maintenance order is used by a land station to check the operation of a mobile station. All functions are similar to alert but the alerting device is not activated.
- Release. The release order is used to disconnect a call that is being established or is already established.
- Reorder. The reorder order is used to inform the user that all facilities are in use and the call should be placed again.
- Send Called-Address. The send called-address order is used to inform the mobile station that it must send a message to the land station with dialed-digit information.
- Stop Alert. The stop alert order is used to inform a mobile station that it must discontinue alerting the user.

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*Paging.* The act of seeking a mobile station when an incoming call has been placed to it.

*Paging Channel.* A forward control channel which is used to page mobile stations and send orders.

*Registration.* The steps by which a mobile station identifies itself to a land station as being active in the system at the time the message is sent to the land station.

*Release Request.* A message sent from a mobile station to a land station indicating that the user desires to disconnect the call.

*Reverse control channel (RECC).* The control channel used from a mobile station to a land station.

*Reverse Voice Channel (RYC).* The voice channel used from a mobile station to a land station.

*Roamer.* A mobile station which operates in a cellular system other than the one from which service is subscribed.

*Scan of Channels.* The procedure by which a mobile station examines the signal strength of each forward control channel.

*Seizure Precursor.* The initial digital sequence transmitted by a mobile station to a land station on a reverse control channel.

*Signaling Tone.* A 10-kilohertz tone transmitted by a mobile station on a voice channel to: 1) confirm orders, 2) signal flash requests, and 3) signal release requests.

*Status Information.* The following status information is used in this section to describe mobile station operation:

- *Serving-System Status.* Indicates whether a mobile station is tuned to channels associated with System A or System B.
- *First Registration ID Status.* Indicates whether a mobile station has received a registration ID message since initialization.
- *Local Control Status.* Indicates whether a mobile station must respond to local control messages or not.
- *Roam Status.* Indicates whether a mobile station is in its home system or not.
- *Termination Status.* Indicates whether a mobile station must terminate the call when it is on a voice channel.

*Supervisory Audio Tone (SAT).* One of three tones in the 6-kilohertz region that are transmitted by a land station and transponded by a mobile station.

*System Identification (SID).* A digital identification associated with a cellular system; each system is assigned a unique number.

*Voice Channel.* A channel on which a voice conversation occurs and on which brief digital messages may be sent from a land station to a mobile station or from a mobile station to a land station.

**2. MOBILE STATION****2.1 TRANSMITTER****2.1.1 FREQUENCY PARAMETERS****2.1.1.1 CHANNEL SPACING AND DESIGNATION**

The mobile station transmit channel at 825.030 MHz (and the corresponding land station transmit channel at 870.030 MHz) shall be termed channel number 1. See Section 22.902 of the Commission's Rules.

**2.1.1.2 FREQUENCY TOLERANCE**

See Section 22.101(a) of the Commission's Rules.

**2.1.2 POWER OUTPUT CHARACTERISTICS****2.1.2.1 CARRIER ON/OFF CONDITIONS**

The carrier-off condition is defined as a power output at the transmitting antenna connector not exceeding -60 dBm. When commanded to the carrier-on condition on a reverse control channel, a mobile station transmitter must come to within 3 dB of the specified output power (see Section 2.1.2.2) and to within the required stability (see Section 2.1.1.2) within 2 ms. Conversely, when commanded to the carrier-off condition, the transmit power must fall to a level not exceeding -60 dBm within 2 ms.

Whenever a transmitter is more than 1 kHz from its initial or final value during channel switching, the transmitter carrier must be inhibited to a power output level not greater than -60 dBm.

**2.1.2.2 POWER OUTPUT AND POWER CONTROL**

The maximum effective radiated power with respect to a half-wave dipole (ERP) for any class mobile station transmitter is 8 dBW (6.3 Watts). An inoperative antenna assembly must not degrade the spurious emission levels as defined in Section 2.1.4.2. See Sections 22.107(b) and 22.904 of the Commission's Rules.

The nominal ERP for each class of mobile station transmitter is:

Class I      6 dBW (4.0 Watts)

Class II     2 dBW (1.6 Watts)

Class III    -2 dBW (0.6 Watts)

A mobile station transmitter must be capable of reducing power in steps of 4 dB on command from a land station (see Sections 2.6.3.3, 2.6.3.5, 3.7.1.1, 3.7.1.2.4, and 3.7.2) The nominal levels are given in Table 2.1.2-1. Each power level must be maintained within the range of +1 dB and -4 dB of its nominal level over the ambient temperature range of -30 degrees Celsius to +60 degrees Celsius, and over the supply voltage range of  $\pm 10$  percent from the nominal value, accumulative.

Table 2.1.2-1

## MOBILE STATION NOMINAL POWER LEVELS

| Mobile Station<br>Power Level<br>(PL) | Mobile<br>Attenuation<br>Code (MAC) | Nominal ERP (dBW)               |                                  |                                   |
|---------------------------------------|-------------------------------------|---------------------------------|----------------------------------|-----------------------------------|
|                                       |                                     | Mobile Station Power Class<br>I | Mobile Station Power Class<br>II | Mobile Station Power Class<br>III |
| 0                                     | 000                                 | 6                               | 2                                | -2                                |
| 1                                     | 001                                 | 2                               | 2                                | -2                                |
| 2                                     | 010                                 | -2                              | -2                               | -2                                |
| 3                                     | 011                                 | -6                              | -6                               | -6                                |
| 4                                     | 100                                 | -10                             | -10                              | -10                               |
| 5                                     | 101                                 | -14                             | -14                              | -14                               |
| 6                                     | 110                                 | -18                             | -18                              | -18                               |
| 7                                     | 111                                 | -22                             | -22                              | -22                               |

## 2.1.3 MODULATION CHARACTERISTICS

## 2.1.3.1 VOICE SIGNALS

The (FM) modulator is preceded by the following four voice-processing stages (in the order listed):

- Compressor
- Pre-Emphasis
- Deviation Limiter
- Post Deviation-Limiter Filter (See Section 22.907(a) of the Commission's Rules)

## 2.1.3.1.1 COMPRESSOR

This stage must include the compressor portion of a 2:1 syllabic compander. For every 2 dB change in input level to a 2:1 compressor within its operating range, the change in output level is a nominal 1 dB. The compressor must have a nominal attack time of 3 ms and a nominal recovery time of 13.5 ms as defined by the CCITT. (Reference: Recommendation G162, CCITT Plenary Assembly, Geneva, May-June 1964, Blue Book, Vol. 111, P. 52.)

The nominal reference input level to the compressor is that corresponding to a 1000 Hz acoustic tone at the expected nominal speech volume level. This level must produce a nominal  $\pm 2.9$  kHz peak frequency deviation of the transmitted carrier.

## 2.1.3.1.2 PRE-EMPHASIS

The pre-emphasis characteristic must have a nominal +6 dB/octave response between 300 and 3000 Hz.

## 2.1.3.1.3 DEVIATION LIMITER

For audio (voice) inputs applied to the transmitter voice-signal processing stages, a mobile station must limit the instantaneous frequency deviation to  $\pm 12$  kHz. This requirement excludes supervision signals (see Section 2.4) and wideband data signals (see Section 2.1.3.2). See Section 22.906 of the Commission's Rules.

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2.1.3.1.4 POST DEVIATION-LIMITER FILTER

See Section 22.907(a)(1) of the Commission's Rules

2.1.3.2 WIDEBAND DATA SIGNALS

2.1.3.2.1 ENCODING

The reverse control channel (RECC) and reverse voice channel (RVC) wideband data streams (see Section 2.7) must be further encoded such that each nonreturn-to-zero binary one is transformed to a zero-to-one transition, and each nonreturn-to-zero binary zero is transformed to a one-to-zero transition.

2.1.3.2.2 MODULATION AND POLARITY

The filtered wideband data stream must then be used to modulate the transmitter carrier using direct binary frequency shift keying. A one (i.e., high state) into the modulator must correspond to a nominal peak frequency deviation 3 kHz above the carrier frequency, and a zero into the modulator must correspond to a nominal peak frequency deviation 3 kHz below the carrier frequency. See Section 22.906 of the Commission's Rules.

2.1.4 LIMITATIONS ON EMISSIONS

See Section 22.907 of the Commission's Rules.

## 2.2 RECEIVER

## 2.2.1 FREQUENCY PARAMETERS

## 2.2.1.1 CHANNEL SPACING AND DESIGNATION

The mobile station receive channel at 170.030 MHz (and the corresponding land station receive channel at 225.030 MHz) shall be termed channel number 1. See Section 22.902 of the Commission's Rules.

## 2.2.2 DEMODULATION CHARACTERISTICS

## 2.2.2.1 VOICE SIGNALS

The demodulator is followed by the following two voice-signal processing stages:

- De-Emphasis
- Expander

## 2.2.2.1.1 DE-EMPHASIS

The de-emphasis characteristic must have a nominal  $-6$  dB per octave response between 300 and 3000 Hz.

## 2.2.2.1.2 EXPANDOR

This stage must include the expander portion of a 2:1 syllabic compander. For every 1 dB change in input level to a 1:2 expander, the change in output level is a nominal 2 dB. The signal expansion must follow all other demodulation signal processing (including the 6 dB/octave de-emphasis and filtering). The expander must have a nominal attack time of 3 ms and a nominal recovery time of 13.5 ms as defined by the CCITT. (Reference: Recommendation G162, CCITT Plenary Assembly, Geneva, May-June 1964, Blue Book, Vol. 111, P. 52.)

The nominal reference input level to the expander is that corresponding to a 1000 Hz tone from a carrier with a  $\pm 2.9$  kHz peak frequency deviation.

## 2.2.3 LIMITATIONS ON EMISSIONS

## 2.2.3.1 CONDUCTED SPURIOUS EMISSIONS

## 2.2.3.1.1 SUPPRESSION INSIDE CELLULAR BAND

Any RF signals emitted by the receiver and falling within the mobile station receive band must not exceed  $-80$  dBm, as measured at the antenna connector. Additionally, signals falling within the mobile station transmit band must not exceed  $-60$  dBm, as measured at the antenna connector.

## 2.2.3.1.2 SUPPRESSION OUTSIDE CELLULAR BAND

See Subpart C, Part 15 of the Commission's Rules.

## 2.2.3.2 RADIATED SPURIOUS EMISSIONS

See Subpart C, Part 15 of the Commission's Rules.

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2.2.4

System  
PN 1

2.3

2.3.1

A 34

digit

(1)

(2)

(3)

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2.2.4 OTHER RECEIVER PARAMETERS

System performance is predicated upon receivers meeting EIA minimum performance standard PN 1376 (Recommended Standards for 400 MHz Cellular Subscriber Units).

2.3 SECURITY AND IDENTIFICATION

2.3.1 MOBILE IDENTIFICATION NUMBER

A 34-bit binary mobile identification number (MIN) is derived from the mobile station's 10-digit directory telephone number by the following procedure (see also Section 2.7.1).

- (1) The first three digits are mapped into 10 bits (corresponding to  $MIN_2$ ) by the following coding algorithm:
  - (a) Represent the 3-digit field as  $D_1D_2D_3$  with the digit 0 having the value 10.
  - (b) Compute  $100D_1 + 10D_2 + D_3 - 111$ .
  - (c) Convert the result in step (b) to binary by a standard decimal-to-binary conversion (see table below).
- (2) The second three digits are mapped into the 10 most significant bits of  $MIN_1$ , by the coding algorithm described in (1).
- (3) The last four digits are mapped into the 14 least significant bits of  $MIN_1$ , as follows:
  - (a) The thousands digit should be mapped into four bits by a Binary-Coded-Decimal (BCD) conversion, as specified in the table below.
  - (b) The last three digits are mapped into 10 bits by the coding algorithm described in (1).

DECIMAL-TO-BINARY CONVERSION

| decimal number | binary number |
|----------------|---------------|
| 1              | 000000001     |
| 2              | 000000010     |
| 3              | 000000011     |
| 4              | 000000100     |
| .              | .             |
| .              | .             |
| 998            | 1111100110    |
| 999            | 1111100111    |

THOUSANDS-DIGIT BCD MAPPING PROCEDURE

| Thousands Digit | Binary Sequence |
|-----------------|-----------------|
| 1               | 0001            |
| 2               | 0010            |
| 3               | 0011            |
| 4               | 0100            |
| 5               | 0101            |
| 6               | 0110            |
| 7               | 0111            |
| 8               | 1000            |
| 9               | 1001            |
| 0               | 1010            |

In the following example the 10-digit directory telephone number 321 456-7890 is encoded into MIN2 and MIN1 using the procedure described above:

• MIN2. The 10-bit MIN2 is derived from the first three digits of the telephone number (i.e., 321):

- i.  $D_1 = 3; D_2 = 2; D_3 = 1.$
- ii.  $100 D_1 + 10 D_2 + D_3 - 111 = 100(3) + 10(2) + (1) - 111 = 210.$
- iii. 210 in binary is "00 1101 0010".

Therefore MIN2 is "00 1101 0010".

• MIN1. The 10 most significant bits of MIN1 are derived from the second three digits of the telephone number (i.e., 456):

- i.  $D_1 = 4; D_2 = 5; D_3 = 6.$
- ii.  $100 D_1 + 10 D_2 + D_3 - 111 = 100(4) + 10(5) + (6) - 111 = 345.$
- iii. 345 in binary is "0101 0110 01".

The next four most significant bits of MIN1 are derived from the thousands digit of the telephone number (i.e., 7) by BCD conversion:  
7 in BCD is "01 11".

The 10 least significant bits of MIN1 are derived from the last three digits of the telephone number (i.e., 890):

- i.  $D_1 = 8; D_2 = 9; D_3 = 0.$
- ii.  $100 D_1 + 10 D_2 + D_3 - 111 = 100(8) + 10(9) + (0) - 111 = 789.$
- iii. 789 in binary is "11 0001 0101".

Therefore MIN1 is "0101 0110 0101 1111 0001 0101".

2  
1  
(  
s  
o  
ii  
11  
r  
  
2.  
A  
o'  
2.  
A  
13  
  
15

**2.3.2 SERIAL NUMBER**

The serial number is a 32-bit binary number that uniquely identifies a mobile station to any cellular system. It must be factory-set and not readily alterable in the field. The circuitry that provides the serial number must be isolated from fraudulent contact and tampering. Attempts to change the serial number circuitry should render the mobile station inoperative.

**2.3.3 STATION CLASS MARK**

Class-of-station information referred to as the station class mark (SCM<sub>s</sub>) must be stored in a mobile station. The digital representation of this class mark is specified in the table below.

| Station Class Marks               |                  |
|-----------------------------------|------------------|
| Power Class (See Section 2.1.2.2) | SCM <sub>s</sub> |
| class I                           | XX00             |
| class II                          | XX01             |
| class III                         | XX10             |
| reserved                          | XX11             |
| Station Types                     |                  |
| continuous transmission*          | 00XX             |
| discontinuous transmission*       | 01XX             |
| reserved                          | 10XX             |
| reserved                          | 11XX             |

\*When DTX<sub>s</sub> is set to '1', the mobile station may use the discontinuous transmission mode on the voice channel. Otherwise, the mobile station must use the continuous transmission mode.

**2.3.4 REGISTRATION MEMORY**

If the mobile station is equipped for autonomous registration, then a minimum of four 21-bit (20 data bits plus an overflow bit) next registration (NXTREG<sub>s</sub>) and corresponding 15-bit system identification (SID<sub>s</sub>) pairs must be retained when the mobile station power is turned off. The data retention time under power-off condition must be longer than 48 hours. If the integrity of the stored data can not be guaranteed after the mobile station is disconnected from the vehicle battery, then the memory must be set to zero when power is re-applied to the mobile station.

**2.3.5 ACCESS OVERLOAD CLASS**

A four-bit number (ACCOLC<sub>s</sub>) must be stored in the mobile station and used to identify which overload class field controls access attempts by the mobile station (see Section 2.6.3.4).

**2.3.6 ACCESS METHOD**

A one-bit access method (EX<sub>s</sub>) must be stored in the mobile station and used to determine if the extended address word must be included in all access attempts (see Section 2.6.3.7).

## 2.3.7 FIRST PAGING CHANNEL

An eleven-bit first paging channel (FIRSTCHP<sub>1</sub>) must be stored in the mobile station and used to identify the channel number of the first paging channel when the mobile station is 'home' (see Section 2.6.1.1.2).

## 2.3.8 HOME SYSTEM IDENTIFICATION

A 15-bit system identification (SID<sub>1</sub>) must be stored in the mobile station and used to identify the mobile station's home system (see Section 2.6.1.1.2).

## 2.3.9 LOCAL CONTROL OPTION

A means must be equipped within the mobile station to enable or disable the local control option (see Sections 2.6.2.1 and 2.6.2.5).

## 2.3.10 PREFERRED-SYSTEM SELECTION

A means must be provided within the mobile station to identify the preferred system as either System A or System B.

## 2.4 SUPERVISION

## 2.4.1 SUPERVISORY AUDIO TONE

The supervisory audio tone (SAT), will be one of the three frequencies, 5970, 6000, or 6030 Hz. The SAT is added to the voice transmission by a land station (see Section 3.4.1). A mobile station must detect, filter, and modulate the transmitted voice channel carrier with this tone. Transmission of the SAT by a mobile station must be suspended during transmission of wideband data on the reverse voice channel (see Section 2.7.2), but must not be suspended when signaling tone is sent (see Section 2.4.2).

While a valid SAT is detected and the measured SAT determination does not agree with the SAT color code (SCC) received in the mobile station control message (see Sections 3.7.1.1 and 3.7.2), the receiver audio must be muted. See Section 22.906(b) of the Commission's Rules.

## 2.4.1.1 SAT DETECTION

A mobile station must make the following decisions to determine which SAT, or none, is present:

| Measured Frequency of Incoming Signal | Measured SAT Determination | where                       |
|---------------------------------------|----------------------------|-----------------------------|
| $f < f_1$                             | No valid SAT               | $f_1 = 5955 \pm 5\text{Hz}$ |
| $f_1 \leq f < f_2$                    | SAT = 5970                 | $f_2 = 5985 \pm 5\text{Hz}$ |
| $f_2 \leq f < f_3$                    | SAT = 6000                 | $f_3 = 6015 \pm 5\text{Hz}$ |
| $f_3 \leq f < f_4$                    | SAT = 6030                 | $f_4 = 6045 \pm 5\text{Hz}$ |
| $f_4 \leq f$                          | No valid SAT               |                             |
| No SAT Received                       | No valid SAT               |                             |

The determination of SAT is not required to be made continuously, but should be performed at least every 250 ms.

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**Exhibit C**



LEVEL 1 - 2 OF 10 ITEMS

In the Matter of Revision of Part 22 of the Commission's Rules Governing the Public Mobile Services; 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 Service; Amendment of Part 22 of the Commission's Rules Pertaining to Power Limits for Paging Stations Operating in the 931 MHz Band in the Public Land Mobile Service  
PART 1 OF 9

CC Docket No. 92-115; CC Docket No. 94-46, RM 8367; CC Docket No. 93-116

FEDERAL COMMUNICATIONS COMMISSION

9 FCC Rcd 6513; 1994 FCC LEXIS 4549; 76 Rad. Reg. 2d (P & F)

1

RELEASE-NUMBER: FCC 94-201

September 9, 1994 Released; Adopted August 2, 1994; As Corrected September 21, 1994

ACTION: [\*1] REPORT AND ORDER

JUDGES:

By the Commission

OPINION:

INTRODUCTION

1. By this Report and Order, we revise in its entirety Part 22 of our Rules, which governs the Public Mobile Services. n1 The new Part 22 is considerably shorter than the existing Part 22 that it replaces, and we believe that Public Mobile Services applicants and licensees will find it better organized and easier to understand and use. In our proposal to rewrite Part 22, we identified rule and policy changes that could eliminate outdated and unnecessary information collection requirements, expedite authorization of service, and promote efficient use of the electromagnetic spectrum. We adopt many of these changes herein. These revisions serve the public interest by streamlining and improving the Commission's licensing procedures in ways that will benefit the providers and ultimately the users of mobile services. These changes will further our goals of stimulating economic growth and expanding access to mobile radio networks and services.

n1 The Public Mobile Services include the following services: Public Land Mobile Service, Rural Radio Service, Domestic Public Cellular Radio Telecommunications Service, Offshore Radio Telecommunications Service, and the 800 MHz Air-Ground Radiotelephone Service. [\*2]

BACKGROUND

9 FCC Rcd 6513; 1994 FCC LEXIS 4549, \*2,  
76 Rad. Reg. 2d (P & F) 1

2. In the Notice of Proposed Rulemaking (Notice), n2 we proposed a comprehensive review and revision of Part 22 of the Rules. We indicated that a revision and update of Part 22 was needed for the following reasons: (1) to ensure that the various rules adopted in individual proceedings since the last major overhaul of Part 22 (in 1983) are consistent with our overall policies; (2) to change some of our Part 22 rules that have become obsolete and unnecessary; n3 (3) to update some of the technical specifications in Part 22 because substantial changes in technology have rendered them outdated or unnecessary; and (4) because stating Part 22 heights and distances in rounded metric units in accordance with the Metric Conversion Act of 1976 could result in small but substantive changes that require public consideration in a notice and comment rulemaking proceeding. n4

n2 Revision of Part 22 of the Commission's Rules Governing the Public Mobile Services, CC Docket No. 92-115, Notice of Proposed Rule Making, 7 FCC Rcd 3658 (1992).

n3 For example, in the cellular radio service, almost all of the 306 Metropolitan Statistical Areas (MSAs) and New England County Metropolitan Areas for the New England States (NECMAs) and most of the 428 Rural Service Areas (RSAs) have been licensed to provide service. This near completion of our initial cellular licensing process has rendered many of our initial cellular licensing rules obsolete.

n4 In Metric Conversion of the Commission's Rules, 8 FCC Rcd 3720 (1993), the Commission completed the conversion of most of its Rules, including Part 22, to the metric system of measurement. [+3]

3. Numerous parties (listed in Appendix D) filed comments n5 and replies in response to the Notice. Generally, the parties support the Commission's efforts to revise Part 22, and they either agree with the proposed rules or offer alternative proposals. n6 As explained in more detail infra, some of the rules we are adopting have been modified from those proposed in order to address concerns of the parties or to better serve the public interest. Also, we found that additional notice and comment were desirable with respect to some of the proposals made in the comments. On May 20, 1994, we released a Further Notice of Proposed Rule Making, (Further Notice) seeking comments on those matters. n7 In addition, we have consolidated into this proceeding the rule making proceedings in CC Dockets No. 94-46 and 93-116 which have proposed certain technical amendments to Part 22.

n5 Comments were originally due on August 21, 1992. On August 7, 1992, Telocator and Cellular Telecommunications Industry Association (CTIA) requested an extension of time to file comments. The parties explained that the comprehensive scope and complexity of the Commission's proposed action made advisable an open Joint Industry Forum (Forum) on Part 22. On August 13, 1992, the Common Carrier Bureau extended the deadline for filing comments to October 5, 1992. See Order, 7 FCC Rcd 5319 (Com. Car. Bur. 1992). The Forum was held on September 18, 1992.

n6 We have analyzed all of the arguments contained in the comments before resolving this rulemaking proceeding. Not all of the points raised in the comments, however, are discussed in this Order for reasons of brevity.

n7 Revision of Part 22 of the Commission's Rules Governing the Public Mobile Services, CC Docket No. 92-115, Further Notice of Proposed Rulemaking, 9 FCC Rcd 2596 (1994). [\*4]

4. In the Notice, we proposed changes to almost every rule in Part 22. We address our action with respect to these changes to each rule section in the attached Appendix A. Although we dispose of most matters with only a brief mention, our decisions are based on careful consideration of the comments and arguments in the record. We also proposed in the Notice significant changes to our procedures for authorization of service and in the way we regulate the Public Mobile Services. In addition, several of our other proposals attracted significant comment. We address these major issues in greater detail below.

#### MAJOR ISSUES

##### Application Processing Procedures

5. Proposals. Traditionally, to select from among mutually exclusive applicants for initial or modified facilities in the Public Mobile Services, we have used random selection. Under this procedure, if the selected application satisfies the requirements of our Rules, it is granted and the other applications are dismissed. n8 In the Notice we proposed to process applications in the Public Mobile Services using a "first-come, first-served" procedure. n9 Under the proposal, the first-filed application would be granted unless [\*5] other mutually exclusive applications were filed on the same day. Later-filed mutually exclusive applications would be dismissed. If two or more of the mutually exclusive applications were filed on the same day, we would conduct a random selection process. We noted that if we adopted this procedure, we would eliminate the 60- day filing period currently allowed for the filing of competitive applications n10 and might avoid most lottery situations. We felt that the first-come, first-served procedure would also expedite the processing of applications, and discourage applicants from filing applications simply to delay action on a competitor's applications.

n8 Pursuant to old § 22.33(c) of the Rules, a licensee applying for expansion of an existing system may request that its application and those that are mutually exclusive with it be designated for a comparative hearing.

n9 The Notice indicated that the "first-come, first-served" procedure would be used to resolve mutually exclusive situations. Actually, the procedure we envisioned was a one-day cut-off procedure for accepting applications. Thus, if application "X" was filed on a given day and no applications that were mutually exclusive were filed on that day or were already pending, then application "X" would be granted, assuming it had no fatal defect.

n10 Under the first-come, first-served proposal, as under the current system, the Commission could not grant major filings until 30 days after public notice of their acceptance, allowing ample opportunity for parties with standing to file petitions to deny. Section 309(b) of the Communications Act of 1934, as amended (47 U.S.C. § 309(b)) requires public notice and a 30 day period before the Commission may grant certain applications. [\*6]

6. After the Notice was released, Congress added a new Section 309(j) to the Communications Act of 1934, as amended, which authorizes the Commission to employ competitive bidding procedures to choose from among two or more mutually

exclusive applications for initial licenses. n11 On March 8, 1994, we implemented this authority by adopting rules to use auctions to choose from among two or more mutually exclusive initial applications in numerous radio services, including most of the Public Mobile Services, in the Second Report and Order in PP Docket No. 93-253 (Second Report). n12 Nevertheless, in the Second Report, we determined that we would not conduct auctions to resolve mutual exclusivity between initial Basic Exchange Telephone Radio Service (BETRS) or rural radio applications and common carrier mobile service applications. n13 The Second Report also concluded that renewal and modification applications generally should not be subject to competitive bidding procedures. n14 In the Further Notice in this proceeding, we proposed inter alia to use competitive bidding procedures to award 931 MHz paging station authorizations for which mutually exclusive applications have been filed. [\*7]

n11 Omnibus Budget Reconciliation Act of 1993, Pub. L. No. 103-66, 107 Stat. 312.

n12 See Implementation of Section 309(j) of the Communications Act -- Competitive Bidding, PP Docket No. 93-253, Second Report and Order, 9 FCC Rcd 2348 (1994).

n13 Id., at paragraph 46. We also observed that because local exchange carriers generally operate under exclusive franchises, we did not anticipate mutual exclusivity between BETRS applicants. See Second Report at n.35. The Rural Radio Service, including the BETRS, is a fixed service regulated under Subpart H of Part 22 of our current Rules.

n14 Id. at paragraph 39.

7. Comments. Most of the comments in response to the Notice oppose the first-come, first-served proposal. Radiophone questions whether the Commission has the statutory authority to adopt this licensing procedure. Citing *Ashbacker Radio Corp. v. FCC*, 326 U.S. 327 (1945), it argues that the procedure appears to unreasonably restrict the statutory right to file a competing application. n15 Many of the parties predict that use of the proposed first-come, first-served licensing process would impede the development of wide area systems, n16 increase incentives for speculation [\*8] and abuse by so-called "application mills" n17 and encourage licensees to file petitions to deny and other pleadings that could embroil the Commission in legal disputes. n18 The parties further allege that use of the proposed procedure would upset existing carriers' carefully planned expansion strategies by forcing them to apply immediately for facilities in areas they might want to serve in the future, rather than allowing them to apply at a later time when sound business reasons justify the expansion costs. n19 Further, several of the commenters claim that adoption of the proposed first-come, first-served procedure would adversely impact small businesses that do not possess the capital to expand immediately. n20

n15 Radiophone Comments at 2-3.

n16 See, e.g., *Southwestern Bell Corp.* (Southwestern Bell) Comments at 13; *ALLTEL Mobile Communications, Inc.* (ALLTEL) Comments at 2; *McCaw Cellular Communications, Inc.* (McCaw) Comments at 26; *Metrocall of Delaware, Inc.* (Metrocall) Comments at 7.

n17 See Office of Advocacy of the Small Business Administration (OASBA) Comments at 9; NYNEX Mobile Communications Company (NYNEX) Comments at 3.

n18 See Comments filed on behalf of Pactel Paging and 20 other Part 22 licensees (collectively referred to as the Joint Commenters) at 21.

n19 Telocator Comments at 6.

n20 Telocator Comments at 7; Metrocall Comments at 8; Radiophone Comments at 4. [\*9]

8. As a modification to the proposed first-come, first-served licensing procedure, several parties recommend that we include mutually exclusive applications to expand existing systems in a random selection process with a first-filed application, rather than being dismissed. Specifically, these commenters suggest that applications be included in a random selection process if they are filed within 60 days after public notice of the first-filed application by licensees of co-channel facilities located within 250 kilometers (140 miles) of facilities requested in the first-filed application. n21 Several other parties suggest that we should retain the comparative hearing process as an option for any mutually exclusive applications filed by the licensees of existing co-channel facilities. n22 This compromise, they argue, would expedite the Commission's licensing process while, at the same time, reducing the negative impact on existing licensees.

n21 See, e.g., BellSouth Corp. and BellSouth Enterprises, Inc. (BellSouth) Comments at 3; Southwestern Bell Comments at 14.

n22 See, e.g., Radiophone Comments at 5-6; Telocator Comments at 9; OASBA Comments at 12.

9. As an alternative [\*10] to first come, first served licensing, several parties suggest that the Commission adopt a market area licensing procedure (similar to that used for cellular systems) for stations in the Paging and Radiotelephone Service, instead of continuing to license paging systems on a transmitter-by-transmitter basis. These parties contend that using a market area approach would expedite the licensing process, reduce regulatory delays and encourage wide-area service. n23 They argue that market area licensing would achieve substantial administrative savings through economies of scale, reflect the realities of the marketplace, and be responsive to the needs of the public. A market area procedure, they note, would also be consistent with the Commission's approach to licensing the Personal Communications Services. n24

n23 See, e.g., Telocator Comments at 8 and Reply Comments at 2-3; Paging Network, Inc. Comments at 5-10; OASBA Comments at 12.

n24 See, e.g., Amendment of the Commission's Rules to Establish New Personal Communications Services, GN Docket No. 90-314, Second Report and Order, 8 FCC Rcd 7700 (1993); modified, Memorandum Opinion and Order, FCC 94-144, released June 13, 1994; further recon. pending. [\*11]

10. OASBA expresses concern that the proposed combination of first come, first served and random selection procedures would encourage application mills to file numerous applications for facilities near existing systems, with the

intention of seeking a buyout from those systems. OASBA suggests that we adopt a prohibition on resale or other changes in the ownership of licensed facilities for a set period of time. In addition, they argue, we should require that licensees commence construction of their systems within a specified period of time. n25 OASBA asserts that adoption of these provisions would deter application mills because their customers would have little hope of a quick pay off if they win the lottery.

n25 OASBA Comments at 10-11.

11. Discussion. Initially, we note that we believe the commenters' suggestion that we use market area licensing procedures may be feasible, at least for 931 MHz paging stations. It is not clear, however, whether a market area procedure would be workable for other Paging and Radiotelephone Service stations. Furthermore, we conclude that any decision to use a market area licensing approach would be more appropriately considered in a proceeding [\*12] encompassing not only affected Part 22 systems, but also any other substantially similar commercial mobile radio systems. That is beyond the scope of this proceeding, which addresses Part 22 only.

12. Our objective in proposing first-come, first-served application processing was to expedite authorization of service in the Public Mobile Services. We thought that the proposed procedure would minimize the filing of mutually exclusive applications for initial or modified facilities and virtually eliminate the need to use random selection to choose among mutually exclusive applications. Nevertheless, upon further consideration we now conclude that the first-come, first-served procedure could have negative effects upon our processing procedures and the logical development of the Paging and Radiotelephone Service. The first-come, first-served procedure could encourage licensees to file for channels before they really need them in an attempt to pre-empt their competitors, increase incentives for speculation and abuse by "application mills," impede the development of wide area systems, and make it difficult for small businesses to compete effectively because those businesses frequently [\*13] lack the capital to expand their systems immediately. See the arguments summarized in paragraph 7, supra. In this light, we conclude that we should have a filing period sufficiently long to allow serious and qualified potential competitors to file and be considered. We believe that a 30-day cut-off period is sufficient to allow all qualified applicants to file. Further, given our new authority to conduct auctions, it would appear that auctions would provide the most efficient way to determine which of several mutually exclusive applicants should prevail. Thus, the party that most highly values the spectrum would acquire that spectrum in a competitive bidding situation. n26

n26 We are mindful of our obligation under Section 309(j)(6) of the Act, 47 U.S.C. § 309(j)(6)(e), to "continue to use engineering solutions, negotiation, threshold qualifications, service regulations, and other means in order to avoid mutual exclusivity in our application and licensing proceedings," and we will do so.

13. On May 20, 1994, we released a Further Notice of Proposed Rule Making in GN Docket No. 93-252 (Transition Notice), n27 in which we proposed to adopt licensing procedures similar to [\*14] those utilized in Part 22 of our Rules for those formerly private radio services which had been reclassified as

"commercial mobile" radio services (CMRS) in the Second Report and Order in GN Docket No. 93-252. n28 In the Transition Notice, we tentatively concluded that competitive bidding procedures (auctions) should generally be used to pick the winner among mutually exclusive CMRS applications in Part 90 services subject to reclassification as well as Part 22 CMRS applications where we have the authority to do so. n29 We also tentatively concluded that initial applicants and certain major modification applications in Part 22 services (except cellular unserved area Phase I applications) as well as CMRS applications in Part 90 services subject to reclassification should be subject to 30-day filing windows in which competing applications may be filed. n30

n27 Implementation of Sections 3(n) and 332 of the Communications Act, GN Docket No. 93-252, Further Notice of Proposed Rule Making, FCC 94-100, released May 20, 1994.

n28 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); erratum, Mimeo No. 92486 (released March 30, 1994).

n29 Transition Notice at 53-54.

n30 Id. at 55. [\*15]

14. Under existing licensing procedures for Public Mobile Services other than cellular radio, such as paging, however, we have historically required carriers to apply for authority to operate each individual transmitter in a station, and, with certain exceptions, the Public Mobile Services authorizations we issue do not confer geographic exclusivity on the licensee beyond the station's actual reliable service area. Consequently, for these services it is not clear which types of mutually exclusive applications should be considered initial applications, and thus subject to competitive bidding procedures.

15. In the Further Notice in this docket, we proposed to subject 931 MHz paging applications to a 30-day filing window and to classify applications for 931 MHz paging stations as initial or modification applications for the purpose of determining whether competitive bidding procedures could be used. Specifically, we proposed that 931 MHz applications be considered applications for an initial authorization if they request a new facility, a new channel for an existing facility, or a new or relocated transmitter site more than 2 kilometers (1.2 miles) from an existing site of the [\*16] same station on the same channel. In the Transition Notice, we proposed to apply the foregoing test to all commercial mobile radio services, including all Part 22 services. n31 Since the Further Notice in this docket concerns only 931 MHz paging applications, whereas the Transition Notice concerns all applications in the CMRS, including all Part 22 services, except for the Rural Radiotelephone Service (including BETRS) which is a fixed service, n32 we shall adopt appropriate processing and licensing rules for Part 22 CMRS services other than 931 MHz paging pursuant to the Transition Notice in the Report and Order concluding that proceeding. Thus, the rules we adopt in this docket relate solely to 931 MHz paging and Rural Radiotelephone Service (including BETRS) applications.

n31 Id. at 58-59.

n32 In the Second Report and Order in GN Docket No. 93-252, supra, we stated that the Rural Radio Service, which includes BETRS, is a fixed service and is not affected by the proceeding in GN Docket No. 93-252. 9 FCC Rcd at 1456. That docket deals with defining the Commercial Mobile Radio Service (CMRS) and rules pertaining thereto.

16. In view of the foregoing considerations, and [\*17] after consideration of the comments in this proceeding and the effect of the recent amendments to the Act on our proposal, we are adopting a new rule to govern the processing of 931 MHz applications. n33 The new rule provides generally that (1) initial applications will be subject to a 30-day filing window for competing applications, n34 and (2) competitive bidding procedures will be used for processing filing groups comprised entirely of mutually exclusive applications for initial authorizations filed during the 30-day window. n35 In the new rule, we define the term "application for initial authorization" as we proposed, to include any application for a new station, any application for an additional channel) and any application to relocate a transmitter more than 2 kilometers (1.2 miles) from all authorized transmitters of the applicant licensee on the requested channel.

n33 See new § 22.541 in Appendix B.

n34 This is similar to the current "notice and cut-off" procedure, except that 30 days will be allowed for filing competing applications rather than 60 days.

n35 If one of a group of mutually exclusive applications is a timely application for renewal of an expiring authorization, special rules for contested renewal proceedings will be used (generally involving comparative hearings). [\*18]

17. Modification applications that are not mutually exclusive with any application filed on the same or on a previous day will be accepted for filing and granted on a first-come, first-served basis. n36 Under the first-come, first-served procedure, mutually exclusive modification applications received on the same day will be given comparative consideration. Consistent with the Omnibus Budget Reconciliation Act, such applications will be designated for comparative hearing to determine which modification application should be granted, unless the parties negotiate a legal settlement on this issue. See paragraph 102, infra. Further, a filing group comprised of at least one modification application as defined by Section 22.541 of our Rules and at least one initial application will, absent a settlement, be designated for comparative hearing because the Omnibus Budget Reconciliation Act does not allow the use of auctions to determine whether a modification application should be granted.

n36 Our new rules do not use the term "first-come, first served." Rather, applications processed pursuant to first-come, first-served procedures are defined as being members of a "same day filing group." [\*19]

18. We shall also adopt first-come, first-served filing procedures for the Rural Radiotelephone Service, including BETRS. We do this for two reasons. First, the only procedures for processing Rural Radiotelephone Service (including BETRS) applications that have been properly noticed in this proceeding are the first-come, first-served procedures. See new Section 22.717

of our Rules. Second, we believe that these procedures are suitable for this service. It is very unusual for a rural radio application to be mutually exclusive with any other application, even though applicants in the Rural Radiotelephone Service and the Paging and Radiotelephone Service can file for many of the same channels. Further, we do not anticipate mutual exclusivity between BETRS applicants because local exchange carriers generally operate under exclusive franchises. See note 12 at page 5, supra. The first-come, first-served procedures would allow an application to be granted if it is not mutually exclusive with another application filed on the same or on a previous day and if the applicant in question is qualified to be a Commission licensee. Further, under these procedures, mutually exclusive applications [\*20] received on the same day would, absent a negotiated settlement among the parties, be designated for a comparative hearing to determine which application should be granted. Lastly, if a rural radio application is filed during a filing period which commenced with the issuance of a public notice that an application for the Paging and Radiotelephone Service had been filed, then all applications filed during this period would, absent a negotiated settlement among the parties, be designated for a comparative hearing to determine which application should be granted.

19. We will no longer allow licensees whose applications for expansion of their existing systems are mutually exclusive to request that a comparative hearing be held. n37 Contrary to the view expressed by some of the parties, we have not determined that regional and wide-area paging services always serve the public interest better than local paging services. Thus, even if we were to retain the option of requesting a comparative hearing, we have no basis for concluding that system expansion applications would necessarily prevail in a comparative hearing over applications for new stations. n38 Moreover, the record of this proceeding [\*21] does not demonstrate that the public interest would be better served by awarding licenses by comparative hearings rather than the type of procedures we adopt today. Although we have provided spectrum for and encouraged the establishment of regional and national paging networks, both in the Public Mobile Services and more recently in the private radio services, our position remains that the marketplace should determine the proper mix of wide-area and local paging service. Our new competitive bidding procedures will ensure that authorizations will be issued to the applicant that places the highest value on the spectrum rather than whether the applicant seeks expansion of an existing system or establishment of a new station.

n37 This option is currently available pursuant to Section 22.33(c) of our Rules.

n38 No applications have ever been designated for a hearing under Section 22.33(c) of our Rules.

#### Finders' Applications

20. Proposal. The Notice proposed to provide an incentive for identifying unused spectrum by enabling applicants to file "finders' applications" requesting licensing of channels that have been assigned, but are unused. n39 Although such an application would [\*22] ordinarily be considered defective for failing to meet the technical protection requirements with respect to the existing assignment, under the proposed rules it would be accepted for filing pending the outcome of a staff investigation to determine whether the station

Appendix A). In addition, while we agree that new Sections 22.123 and 22.163 are related, we are keeping them separate because they address two different purposes: the former explains the basis for classifying applications and amendments, and the latter allows licensees to make minor changes to existing facilities without seeking or obtaining prior approval. We cannot adopt Joint Commenters' suggestion that paragraphs (d) and (g) of Section 22.165 be concerned only with interfering contours rather than both service and interfering contours, because our Notice did not propose to base those paragraphs only on interference service contours and we do not have a sufficient record on this issue. The idea may have some merit, however, and we may propose it in a further notice at some future point. In view of our adoption of fixed distance technical channel assignment criteria for BETRS transmitters (new Section 22.759) and the fact that BETRS transmitters [\*31] do not operate in a simulcast mode, we have added a sentence to paragraph (g) indicating that this section does not apply to BETRS.

#### Definition of "Service to Subscribers"

29. Proposal. Currently, our rules require that Public Mobile Services stations must be constructed and ready for operation prior to the end of the construction period, that licensees must file a notification form when construction is completed, and that service to the public may commence upon filing of that notification. n55 In the Notice, we proposed that stations must actually commence providing service to the public by the end of the construction period. n56 Failure to provide service by the date of required commencement of service would automatically terminate the authorization without any further notice or other action by the Commission. The proposal would require that licensees notify the Commission of commencement of service to the public (as opposed to merely completion of construction and readiness for operation) by filing a notification (FCC Form 489) not later than 15 days after service to the public begins. We stated in the Notice that the proposed rule is intended to encourage licensees to provide [\*32] service to the public as expeditiously as possible.

n55 See old §§ 22.9 and 22.43.

n56 The end of the construction period, which is printed on all Public Mobile Services authorizations as the "date of required completion of construction," would be called the "date of required commencement of service."

30. Comments. Many of the commenters argue that the Commission's definition of "service to the public" would play a significant role in the new Part 22 rules n57 and that further clarification of that phrase is needed. They disagree, however, on the appropriate definitions for the term. For example, Telocator argues that service to the public should entail only the construction and installation of functioning equipment that could be used to provide such service. Telocator states that this would include a transmitter, antenna, transmission line, and a terminal that is connected to the transmitter and the public telephone network. n58 Pacific and Nevada Bell suggest that "service to the public" should be defined as to require systems to have a specified minimum number of non-affiliated, revenue-producing customers. n59 McCaw recommends that the Commission include a definition [\*33] of "service to the public" in proposed Section 22.99. It suggests that this term be defined as construction of a paging or conventional two-way system that is interconnected to the

modifications and that our doing so will save substantial industry and Commission resources.

26. Many commenters are concerned that facilities for which no notification was submitted n51 would not receive direct protection from interference. This means, for instance, that we would not dismiss an application (e.g. pursuant to a petition to dismiss or deny) solely on the grounds that the application does not include an interference study for an existing facility if there is no current FCC public record of that facility. In such a case, the applicant would have had no way of knowing the current technical parameters of that facility (or perhaps even that it exists). n52 As a practical matter, we believe that facilities added or modified [\*28] without prior approval or subsequent notification under these new sections will not receive interference because they will be indirectly protected by the presence of surrounding stations of the same licensee on the same channel or channel block. n53 We also note that the new rules we are adopting do not prohibit licensees from filing notifications. Thus, if a licensee desires that a new transmitter or other modification appear in the Commission's public records and thus be directly protected from interference, it can notify the Commission of that new transmitter or modification by filing FCC Form 489.

n51 See new § 22.352(b) (6).

n52 The rules requiring interference studies, new §§ 22.559 and 22.589, refer to "protected" transmitters. We reworded §§ 22.537(b) and 22.567(b) to clarify that there must be a current public record of transmitters in order for them to be considered protected.

n53 This assumes, of course, that the surrounding stations are correctly represented in FCC public records.

27. We see no public benefit that would result from adopting Telocator's recommendation to establish a "buffer zone" around cellular system CGSAs. Doing so would frustrate the purposes [\*29] of our rules that establish a five year build-out period and provide for the filing of unserved area applications. In effect, this proposal would allow carriers to expand their CGSAs by modifying facilities after their exclusive right to expand within the market had ended. Therefore, we reject this suggestion. We likewise reject Telocator's second recommendation, because the rule as proposed allows cellular carriers to make modifications anywhere (not just in the "core" of the systems) provided that an application requesting the modifications would be classified as minor under new Section 22.123. n54 On the other hand, consistent with Telocator's third recommendation, the rules we are adopting today will continue the current requirement that cellular licensees notify us if they change or replace the cells that constitute a portion of their systems' CGSA boundaries. Further, as proposed in the Further Notice, we are requiring all cellular licensees to submit specific information for each of their external cell sites as a one time filing that will assist the staff in updating the Commission's database of cellular systems. See paragraph 87, *infra*.

n54 See Appendix A at 11-14 for a discussion of this rule. [\*30]

28. We reject Joint Commenters' suggestion concerning changes that alter the service contour by less than 2 kilometers, because applications for such changes would not be classified as minor (see discussion of new Section 22.123 in

requests that we require licensees to file engineering information whenever any technical changes are made to a perimeter cell of a cellular system. n44 McCaw and PacTel Cellular (PacTel) also argue that notification should be required for new cell sites that affect the CGSA boundary. Further, they recommend that cellular licensees be required to notify the Commission if formerly internal cell sites (for which no notification was originally submitted) become a part of the CGSA boundary, due to discontinuance of other cells. n45

n41 See also PacTel Cellular (Pactel) Reply Comments at 5.

n42 Telocator Comments at 50-51.

n43 McCaw Comments at 34-35.

n44 Comp Comm Comments at 37-38.

n45 McCaw Comments at 34-35; PacTel Reply Comments at 4.

24. Metrocall of Delaware, Inc. (Metrocall) suggests that we incorporate a general principle that notification is required for any minor change that would require a change in our computer database. n46 MetroCall argues that licensees should be allowed to notify the Commission in order to obtain interference protection [\*26] for a modified facility. n47 PacTel suggests that licensees should be allowed to file notifications once each year on a consolidated basis for each system in order to obtain interference protection for modified facilities. n48 Joint Commenters recommend that the proposed rule be revised to provide that licensees are not required to file applications or notifications reflecting system changes that do not alter the service contour by more than two kilometers in any direction. n49 Joint Commenters suggest that we locate proposed Section 22.123 (classification of filings under Section 309 of the Act) closer in the rules to proposed Section 22.163 (minor modifications not needing prior Commission approval) or combine the two, because they are related. n50 Joint Commenters also suggest limiting the encompassment criterion for Paging and Radiotelephone Service stations to interfering contours, rather than both service and interfering contours.

n46 Metrocall Comments at 30.

n47 Id.

n48 PacTel Comments at 4.

n49 Joint Commenters Comments at 36-37.

n50 Id. at 65.

25. Discussion. We adopt new Sections 22.163 and 22.165 essentially as proposed. For reasons discussed below, however, [\*27] we accept the suggestion made by many of the commenters and retain the notification requirement for the addition or modification (under these new rule sections) of cell sites that form a CGSA boundary in order that licensees of adjacent cellular systems will be able to assess interference potential correctly when designing or modifying their systems. We note that generally the record supports eliminating the notification requirement for most additions and

was never constructed or had been abandoned. In the Notice, we proposed specific information that a finder's application would include. Under this proposal, if our investigation revealed that the authorization assigning the requested channel had in fact automatically terminated, we could recover and reassign the affected channel. The finder's application submitted by the applicant would then be either the sole or the first-filed initial application for the recovered channel.

n39 This concept was originally suggested to the Commission in 1988 and 1989 by the Special Industrial Radio Service Association, Inc., and the National Association of Business and Educational Radio, Inc. It is codified in Section 90.173(k) of our Rules governing Private Radio Services.

21. Discussion. We defer any decision on the finders' applications proposal at this time because we need to examine the proposal in more detail pursuant [\*23] to a future Notice of Proposed Rule Making for all Commercial Mobile Radio Services, including Part 90 reclassified services. Currently, finders' preferences are available under Part 90. In the Transition Notice in GN Docket No. 93-252, we proposed to use the same filing and processing rules for all substantially similar CMRS applications in both Part 22 and Part 90. We will evaluate the function of finders' preferences in light of our decision in that docket.

#### Relaxation of Notification Requirements

22. Proposals. In the Notice, we proposed to remove the requirement that licensees notify the Commission when they make "permissive" minor modifications to their stations or add new "internal" transmitters to existing systems. n40 We believe that most of the notifications filed simply to satisfy this requirement are unnecessary because the information is not needed by the Commission staff, other licensees or the public. Adoption of this proposal would reduce the number of notifications filed and thus conserve Commission and industry resources. We noted however, that, because there would not be any public record of modifications made or transmitters added without subsequent notification, [\*24] either in the station files or computer data bases, those modifications or additional transmitters would not be directly protected from interference.

n40 See new §§ 22.163 and 22.165.

23. Comments. Telocator recommends four revisions to our proposal to eliminate our notification requirements: (1) establish a five-mile "buffer zone" around the CGSA of each cellular system at the expiration of its five year build-out period and allow carriers to make modifications within the buffer zone without prior approval, provided that no extensions into adjacent markets result; n41 (2) clarify that cellular carriers may modify transmitters "within the core of their systems" without notifying the Commission; (3) require cellular carriers to notify the Commission after modifying cells that constitute a portion of their system's CGSA boundary; and (4) specify that interference protection will be afforded to facilities operating within the aggregate contour of a cellular system. n42 McCaw Cellular Communications, Inc. (McCaw) agrees that cellular licensees should be required to notify the Commission of minor changes to cells constituting the CGSA boundary, so that licensees of adjacent cellular [\*25] systems will be able to assess interference potential correctly when designing their own systems. n43 Comp Comm, Inc. (Comp Comm)