



The Telecommunications Association

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May 31, 1995

Mr. William F. Caton  
Acting Secretary  
Federal Communications Commission  
1919 M Street, N.W. Room 222  
Washington, D.C. 20554

RECEIVED

MAY 31 1995

Ex Parte

FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF SECRETARY

Re: PR Docket No. 92-235

Dear Mr. Caton:

This is to notify you, pursuant to Section 1.1206(a) of the Commission's Rules, that Carl Greenway and Jeffrey Sheldon, representing UTC, The Telecommunications Association, made a presentation to the staff of Commissioner Barrett yesterday afternoon on the "refarming" of the Private Land Mobile bands below 512 MHz as proposed in the above-referenced docket.

UTC stressed the importance of private land mobile radio systems to electric, gas and water utilities and natural gas pipelines. UTC noted its support for the consensus plan developed by UTC and other organizations which collectively represent the vast majority of licensees in the affected bands. UTC objected to the adoption of any plan that does not allow sufficient time for amortization of existing equipment or which does not provide sufficient time for the development of a competitive marketplace in quality radio equipment with features needed by utilities and pipelines for their critical land mobile communications.

A copy of the handout used during UTC's presentation is attached for filing in this docket. Two copies of this notice are submitted pursuant to Section 1.1206(a).

If there are any questions concerning this matter, please let me know.

Very truly yours,

Jeffrey L. Sheldon  
General Counsel

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cc: Lisa Smith (w/o enc.)



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**SUMMARY OF UTC POSITION ON  
PRIVATE LAND MOBILE "REFARMING"  
PR Docket No. 92-235**

1. Introduction
2. Why Utilities/Pipelines Operate Private Systems
3. Summary of UTC's Position:
  - A. Transition Timing -- UTC supports industry consensus plan for graceful migration to new technologies.
  - B. Consolidation of Radio Services -- Some consolidation might be appropriate.
  - C. Public Service Mutual Aid Channels -- Channel pairs in the VHF and UHF bands should be designated for public service mutual aid use.
  - D. Power/Height Limits -- Use a "safe harbor" table of recommended power/height combinations.
  - E. Trunking -- Rules should encourage, but not mandate, trunking.
  - F. "Innovative Shared Use" channels -- channels created through refarming should be retained for primarily private land mobile operations.

# **WHY DO UTILITIES THINK THEY NEED PRIVATE SYSTEMS?**

## **PAST HISTORY**

**NORTHEAST BLACKOUT**

**HINSDALE FIRE**

**TELEPHONE CENTRAL OFFICE OUTAGES**

**SOFTWARE PROBLEMS TYING UP NETWORKS**

**SAN FRANCISCO EARTHQUAKE**

## **CUMULATIVE EXPERIENCE**

**BELL OPERATING COMPANIES**

**SMRs**

**AT&T**

**CELLULAR TELEPHONE COMPANIES**

**CABLE CUTS**

**NATURAL DISASTERS**

## **WHAT DO WE USE OUR PRIVATE SYSTEMS FOR?**

**BLACK START EMERGENCIES**

**LOCOMOTIVE CONTROL**

**CRANE CONTROL**

**CABLE PULLING**

**TRANSMISSION LINE CONSTRUCTION**

**POWER PLANT OPERATION & MAINTENANCE**

**CIRCUIT SWITCHING**

**CONNECTS/DISCONNECTS**

**CREW COORDINATION**

**NUCLEAR PLANT SECURITY**

**EMERGENCY RESTORATION OF POWER**

**RETRIEVING DATA FROM SUB-STATIONS**

**DATA FROM VEHICLES**

**AUTOMATED METER READING**

**AUTOMATED VEHICLE LOCATION**

**SYSTEM CONTROL**

**POWER FACTOR CORRECTION**

**RECOVERY FROM NATURAL DISASTERS**

**WITHOUT TWO-WAY MOBILE RADIO, PRODUCTIVITY FOR AN ELECTRICAL UTILITY  
WOULD DROP BY 50-80%!!!!!!!**

**THERE IS A CONSTANT GROWING NEED FOR MORE CHANNELS!**

**RECOVERY FROM NATURAL DISASTERS  
MUTUAL AID CONCEPT**

**EARTHQUAKES  
HURRICANES  
TORNADOS  
FLOODS  
WALL WINDS  
ICE STORMS  
HIGH WINDS  
ELECTRICAL STORMS**

PROPOSED PART 88 TRANSITION PLAN

	Year 2 (e.g., 1/1/1987) [Example dates assume 1/1/1985 effective date of new rules]	Year 12 (e.g., 1/1/2007)	Year 16 (e.g., 1/1/2011)	Year 26 (e.g., 1/1/2021)
MANUFACTURERS	All new equipment which is sold must be maximum 12.5 kHz* or 12.5 kHz compatible (e.g., dual-mode 25/12.5 kHz; but not single-mode 25 kHz equipment)		All newly type accepted equipment must be maximum 6.25 kHz* or 6.25 kHz compatible. (e.g., dual-mode 12.5/6.25 kHz, but not single-mode 25 kHz or 12.5 kHz equipment)	All new equipment which is sold must be maximum 6.25 kHz* or maximum 12.5 kHz if convertible to 6.25 kHz.
URBAN** SYSTEMS Existing Systems		All urban systems must operate at no more than 12.5 kHz* bandwidth to retain primary status.		Must operate at no more than 6.25 kHz* bandwidth to retain primary status.
New Systems***	Must operate at no more than 12.5 kHz* bandwidth to obtain primary status.		Must operate at no more than 6.25 kHz* bandwidth to obtain primary status.	
RURAL** SYSTEMS Existing Systems				Must operate at no more than 6.25 kHz* bandwidth to retain primary status.
New Systems***	Must operate at no more than 12.5 kHz* bandwidth to obtain primary status.		Must operate at no more than 6.25 kHz* bandwidth to obtain primary status.	
SECONDARY OFFSET USERS AT 460-470 MHz (AM Maritima)	May attain co-primary status with other new systems if operations are limited to no greater than 12.5 kHz bandwidth.			Must operate at no more than 6.25 kHz* to obtain primary status as against all users

Bandwidth limitations may be exceeded if the system will operate with efficiency equivalent to or better than the stated bandwidth. For purposes of type acceptance, the radio must be capable of net data throughput of at least of 4.8 kbps.

\*\* "Urban Systems" are those located within 100 miles of any of the top 80 urban areas listed at Section 90.741. All other areas would be considered "Rural." Upon request by a petitioning party, other areas of the country may be declared "Urban" upon a showing of increased frequency congestion necessitating early introduction of spectrum efficient technologies.

\*\*\* A "new system" is one which is not functionally integrated with an earlier-installed land mobile radio system. To be considered an "existing system," the facilities must be in operation prior to the relevant deadline or must be functionally integrated with such a system. For example, a new repeater site which will be used to extend coverage of an existing system and will relay traffic of mobiles currently operating with an existing system would not be considered a "new system." (See definition of "Land Mobile Radio System" at Section 90.7).

Submitted  
By  
AAASHFIO  
AAA  
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AAR  
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NABER  
LTC  
FTT  
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TTLPAC

## PROPOSED PART 88 TRANSITION PLAN

	January 1, 1997	January 1, 2005	January 1, 2015
<b>MANUFACTURERS</b>	All new equipment which is manufactured, imported or sold must be maximum 12.5 kHz* or 12.5 kHz compatible (e.g., dual-mode 25/12.5 kHz; but not single-mode 25 kHz equipment)	All <u>newly</u> type accepted equipment must be maximum 6.25 kHz* or 6.25 kHz compatible. (e.g., dual-mode 12.5/6.25 kHz, but not single-mode 25 kHz or 12.5 kHz equipment)	All new equipment which is manufactured, imported or sold must be maximum 6.25 kHz* or maximum 12.5 kHz if convertible to 6.25 kHz.
<b>URBAN** SYSTEMS</b> Existing Systems		All urban systems must operate at no more than 12.5 kHz* bandwidth to retain primary status.	Must operate at no more than 6.25 kHz* bandwidth to retain primary status.
New Systems***	Must operate at no more than 12.5 kHz* bandwidth to attain primary status.	Must operate at no more than 6.25 kHz* bandwidth to attain primary status.	
<b>RURAL** SYSTEMS</b> Existing Systems			Must operate at no more than 6.25 kHz* bandwidth to retain primary status
New Systems***	Must operate at no more than 12.5 kHz* bandwidth to attain primary status.	Must operate at no more than 6.25 kHz* bandwidth to attain primary status.	
<b>SECONDARY OFFSET USERS AT 450-470 MHZ (All Markets)</b>	May attain co-primary status with other new systems if operations are limited to no greater than 12.5 kHz bandwidth.		Must operate at no more than 6.25 kHz* to attain primary status as against all users

Bandwidth limitations may be exceeded if the system will operate with efficiency equivalent to or better than the stated bandwidth. For purposes of type acceptance, the radio must be capable of net data throughput of at least of 4.8 kbps.

\*\* "Urban Systems" are those located within 100 miles of any of the top 60 urban areas listed at Section 90.741. All other areas would be considered "Rural." Upon request by a petitioning party, other areas of the country may be declared "Urban" upon a showing of increased frequency congestion necessitating early introduction of spectrum efficient technologies.

\*\*\* A "new system" is one which is not functionally integrated with an earlier-installed land mobile radio system. To be considered an "existing system," the facilities must be in operation prior to the relevant deadline or must be functionally integrated with such a system. For example, a new repeater site which will be used to extend coverage of an existing system and will relay traffic of mobiles currently operating with an existing system would not be considered a "new system." (See definition of "Land Mobile Radio System" at Section 90.7).