

**Before the
Federal Communications Commission
Washington, D.C. 20554**

In the Matter of)
)
The technical and operational feasibility of) PS Docket No. 06-229
enabling flexible use of the 700 MHz Public)
Safety Narrowband allocation and guard band)
for broadband services)
)

**COMMENTS OF THE JOINT COUNCIL ON TRANSIT WIRELESS
COMMUNICATIONS**

The Joint Council On Transit Wireless Communications (the “Joint Council”), pursuant to Section 1.415 of the Federal Communication Commission (“FCC” or “Commission”) Rules and Regulations, 47 C.F.R. § 1.415, respectfully submits these comments regarding Public Notice DA 10-1877.¹

1. INTRODUCTION

1.1 The Joint Council commends the FCC for opening a comment period to consider current and emerging technology issues relative to the portion of the 700 MHz band² allocated for public safety narrowband voice applications. There are various passenger transportation service operators who have already implemented, are currently implementing or are planning to implement voice radio systems using 700 MHz narrowband spectrum. As such, our initial concern is that if the FCC orders any changes to its rules for the 700 MHz narrowband allocation, those changes could affect current

¹ *Public safety and Homeland Security Bureau seeks comment on the technical and operational feasibility of enabling flexible use of the 700 MHz public safety narrowband allocation and guard band for broadband services, Public Notice, Doc. No. 10-1877 (released September 28, 2010 “Public Notice”).*

² CFR 47 Part 90, Section 337(a).

narrowband channel plans that have been approved thru several years of effort by each Regional Planning Committee (RPC) in all 50 states, could potentially impede voice radio systems under construction, or could interfere with plans to develop and deploy future voice radio systems.

2. THE JOINT COUNCIL ON TRANSIT WIRELESS COMMUNICATIONS

2.1 The Joint Council is an alliance of professionals and transportation organizations created to represent surface land passenger transportation service operators nationwide within the United States on matters of wireless voice and data communications. The Council membership is drawn from public agencies, private providers and industry serving road, water, and rail transit. The council seeks to educate and inform public and private transportation agencies and providers on issues relating to their use of wireless communications. For additional detail regarding the Joint Council, please refer to our website – www.transitwireless.org

COMMENTS

3. What is the current and anticipated use of 700 MHz narrowband networks?

We have polled our industry and have developed a list of passenger transport operators indicated in the following table that are either currently licensed to use 700 MHz narrowband voice channels (as approved via their applicable regional plans), or have made requests for 700 MHz channels of their applicable state RPC's, but have yet to file license applications with the FCC. This list is preliminary and not a definitive, but represents the information available as of the date of this filing. We will continue to update this list as more information becomes available. It also does not include transit

operators who are users on a regional radio system that includes 700 MHz channels licensed to an entity other than the transit operator.

Table 1 - Transit use of 700 MHz NB Channels – Preliminary

Item	Passenger Operator/Location	QTY. of 700 MHz Channels	Approx. service area (mi ²)	Status
1.	TriMet, Portland OR region	19	450	Design/implementation began in 2010.
2.	Miami-Dade Transit, Miami-Dade County, FL	9	2000	Design/implementation planned to begin in 2011.
3.	SFMTA, San Francisco county, CA.	17	9	Design/implementation began in 2010.
4.	Golden Gate Transit District, San Francisco Metro Region	12	54	Design/implementation began in 2010.
5.	King County Metro Transit, Seattle WA Metro Region	16	2000	On the air.
6.	Pierce Transit, Tacoma WA Metro Region	11	1400	On the air.
7.	Community Transit, Everett WA Metro Region	4	2000	On the air.

When we inquired as to why 700 MHz channels were selected versus using channels in other bands for the above listed radio systems, the primary answer was related to the FCC’s order regarding Narrowbanding below 512 MHz. When an agency considers the various approaches to implementing and making the transition to narrowband operations, the following key factors are typically considered:

- Age of existing system. Does equipment need to be replaced anyway?
- Change in operational requirements, functional requirements or increase service levels resulting in the need for more capacity, new functions or

more coverage area.

- Continuity of function. How will the new narrowband systems be turned up without disrupting operations and radio service?
- Capital funding cycle and availability of funding.

When making the transition to narrowband mode operations, the approach with the lowest risk is to build a new radio system while maintaining the operation of the existing system. Once the new system is fully tested and commissioned, the cut-over from the existing to the new radio system can be accomplished quickly and with minimal disruption.

4. Flexible Use of NB 700 MHz channels for broadband applications

It is well known that the capital planning process takes many years for most governmental, municipal or quasi governmental public entities that own or otherwise fund radio systems. In some cases 10 to 15 years are needed for very large radio projects. Most passenger transport providers are in this category and are subject to public capital funding cycles and limited resources. While it is understood the FCC is not proposing any changes to its rules at this time, we wish to point out our concerns. If the FCC were to make an order directly effecting 700 MHz regional plans already approved but not yet licensed or ones that have yet to be approved but are in process, it could take several years to react to those changes which could in some cases potentially jeopardize directly the viability of a radio system project.

Currently the narrowband portion of the 700 MHz band (769-775/799-805 MHz) is channelized to support voice radio communications in 25 kHz, 12.5 kHz or 6.25 kHz bandwidth channels and categorized into various purposes such as interoperability, general use and low speed data (defined generally as less than about 20 kbps). As digital voice radio technology continues evolve, the distinction between voice and data is less obvious as voice becomes just another application along with others on a digital radio system. To date all digital voice radio systems type accepted for the US market conform to the FCC's emission mask requirements for the respective channel bandwidth and no issue is taken with this procedure as this enables frequency coordination, reuse and reduces destructive co-channel or adjacent channel interference. Our observation is that OEM manufactures proposing product to operate in bandwidths greater than 25 KHz (or multiples of 25 kHz for example) would require modification of the FCC's Frequency Coordination rules to maintain the ability to obtain protected frequencies for mission critical use. We therefore urge the commission to carefully consider any proposed changes to the 700 MHz narrowband allocation to make sure the mission critical nature of this band is not degraded in any way.

The Joint Council is pleased to have the opportunity to present its comments to the Commission's Public Notice and urges consideration of our suggestions and welcomes further discussion on these issues to the benefit of our industry and others.

Respectfully submitted,

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