



Texas Department of Transportation

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

In the Matter of)	
)	
Creation of a Low Power)	MM Docket No. 99-25
Radio Service)	FCC 99-6

COMMENTS OF THE TEXAS DEPARTMENT OF TRANSPORTATION

By

Traffic Operations Division Director

Carlos A. Lopez, P.E.

Texas Turnpike Authority Division Director

Phillip E. Russell, P.E.

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Introduction

The Texas Department of transportation (TxDOT) has thousands of FCC Part 90 Public Safety radio transceivers across the state to allow our employees to communicate in support of road building, maintenance and safety. We maintain Part 90 Traveler Information Station (TIS, under FCC Rules, .90.242) sites to communicate points of interest, convenience issues (such as waiting time to board one of our department ferryboats), and safety issues (such as road or ramp closings during maintenance). Some of our TIS equipment rebroadcasts weather information, also in support of traveler safety.

TxDOT and the other state and federal transportation agencies investigate, test, and operate experimental pilot programs to deploy new devices, systems, and operating procedures to improve the efficiency of and reduce delays for users of roadways, bridges and parking facilities. The successful deployment of user-friendly traffic flow enhancers frequently helps create a safer travel environment in congested travel corridors. Several federal government entities support the deployment of new devices and systems that make travel more efficient and safe while containing deterioration of the environment. Certainly, better communication between transportation corridor users and providers enhances travel conditions.

Comments and Discussion

We offer the following comments and discussion for your consideration:

We would like to register our support for proposal FCC 99-6 to bring new licensing structure and frequency uses for the FM broadcast band (88-108 MHz). In particular, our support is for the 100 watt and "micropower" (up to 10 watt) licensing for the use of activities similar to the TIS use on the 530-1700 kHz AM broadcast band. We believe this use of the new low power radio service proposed will offer superior and more dependable communication between the travel corridor user and the provider, and will compliment those currently offered on the AM broadcast band.

We do not support micropower service without licensing. We believe not licensing the stations will create problems for enforcement of interference complaints, since it will not be known where the stations are located or whom to contact when some technical problem or interference exists. We also believe that if this service is uncoordinated in its license structure, our efforts to communicate with the traveling public will be in jeopardy. We will have no way of knowing if our message is getting out to the public without continuous interference.

[Reference page 7578, paragraphs 6 and 7, of the *Federal Register*, Vol. 64, No. 30] We support the continued reservation of the 88-92 MHz portion of the band for educational or non-commercial use of these channels. However, we support the low power channel use for TIS purposes anywhere in the entire 88-108 MHz band.

[Reference page 7577, paragraph 1] We agree with the proposal that the LPFM stations not be subject to certain technical rules currently applied to other classes of broadcast radio service in regard to third and second adjacent channel interference.

[Reference page 7578, paragraph 5] We agree and support the proposal to not authorize similar low power stations in the AM broadcast band. We agree that to do so would increase the already high interference potential and congestion in that frequency band.

[Reference page 7578, paragraph 7] We wish to pursue TIS operation as a government entity, serving under the current restrictions of FCC rules, Part 90.242(a)(5-7), in the new LPFM service. We seek consideration of the following requests for this operation:

- 1.) Allow members of the Public Safety Pool to license and operate Travelers' Information Stations (TIS) under LPFM classes LP100 and microradio.
- 2.) Allow TIS operation in the entire band (or at least in the 88-92 MHz non-commercial portion of the band).

- 3.) Establish rules for licensing and operation of TIS similar to FCC Rules .90.242 with technical parameters tailored to reflect the propagation characteristics of the FM broadcast band.
- 4.) Under the new TIS operating rules, allow operation along any state or federal highway, as opposed to the more restrictive rule of .90.242(a)(5). The more restrictive rule only allows operation near “any intersection of a Federal Interstate Highway with any other Interstate, Federal, State, or local highway.”
- 5.) Allow these new TIS to transmit digital sub-carrier signals in support of the needs of future Intelligent Transportation Systems.
- 6.) Allow the use of Morse code automated station identification for TIS with 30-minute intervals in lieu of requiring verbal station identification.

[Reference page 7579, paragraph 16] We would like to comment on the technical proposals concerning LP100 stations selecting their frequencies. We recommend the prospective licensees be required to do a study before choosing a channel, and to follow the recommendations that 10 percent or less of their 60 dBu listening coverage area would be predicted to receive interference.

[Reference page 7579, paragraph 17] We agree on the prohibition of translating or boosting of LP100 station signals, EXCEPT WHERE THEY ARE USED IN AN AREA-WIDE TIS SERVICE BY GOVERNMENT ENTITIES. It would be very difficult to avoid taking up very many channels in a large urban area for TIS operations without allowing simultaneous, phase-locked transmissions for reporting road conditions, closings and other safety related broadcasts.

[Reference page 7579, paragraph 20] We recommend adopting the micropower radio class of station. We recommend protection of the TIS operation stations in this classification, whether or not there is a requirement to protect other LPFM stations' 60 dBu coverage areas.

[Reference page 7581, paragraph 28] We recommend modulation monitors be optional on the LPFM stations and the transmitters be certified with built-in modulation limits to avoid interference to other stations.

[Reference page 7581, paragraph 32] We recommend the removal of prohibition against an entity owning more than one station in the same community only for government entity TIS operation.

[Reference page 7582, paragraph 43] We recommend the micropower station licensees be exempted from the main studio file rule, the public file rule and the periodic ownership reporting requirements.

[Reference page 7582, paragraph 44] We recommend the treatment of LPFM stations like full power stations where protection against exposure to radio frequency radiation is concerned. This should also extend to micropower stations. The low power output and simple antennas should allow standard calculations to be performed and warning signs posted if required.

[Reference page 7582, paragraph 46] We agree with the proposed construction permit periods.

[Reference page 7582, paragraph 48] We request renewal ability be granted to governmental entity TIS operators in the LP100 and micropower classes of LPFM station. We state the inherent, long-term service to the public of such stations warrants their license renewal to serve the community at large.

[Reference page 7582, paragraph 49] We recommend micropower and LP100 stations be relieved of any requirement to participate in the Emergency Alert System operations. We agree with the comments that these stations will not have the coverage area, audience or finances to comply with this operation. Also, they will likely not be the station serving the whole community of listeners, thus may be excused by other, more powerful stations taking on the role of emergency alerting in the community.

[Reference page 7583, paragraph 50] We recommend assigning LPFM station call signs that identify them as being LPFM class transmitters. We believe listeners would benefit from knowing the station

class, since the listener would identify the station as a non-commercial low power "town crier" operation as opposed to the station having to frequently identify itself as such. We believe knowing the station call sign will always help identify malfunctioning or interfering stations, thus easing FCC efforts at helping control such errant transmitter behavior.

[Reference page 7583, paragraph 51] We believe that LPFM stations should be made available for inspection, similar to the requirements for full-power stations. We also believe it is reasonable for the Commission to require stations in LPFM class operation to immediately shut down operations if these stations broadcast impermissible interference and the operator is notified of the problem.

[Reference page 7583, paragraphs 52 and 53] We agree that, due to the likely number of applicants, the Commission allow and require electronic filing of LPFM station license applications. TxDOT has been using the FCC electronic renewal and address correction for some time. We find the operation to be reasonable in its accessibility and ease of use. We have not used the Web site to apply for a license, but we would welcome a similar complexity form to complete on the current site for LPFM station licenses.

[Reference page 7583, paragraph 55] The first flood of applicants will likely overload the FCC system when the LPFM licensing doors are opened. For applicants like TxDOT, who have a whole state to serve, a very short filing window would be a hardship and handicap to achieving our operations goals for TIS applications.

[Reference page 7583, paragraph 58] Since the application that TxDOT sees for this license class is to directly serve the public, we hope the FCC finds a way to allow licensing without auction. We believe auctioning these low-cost, local, non-commercial station licenses would be directly and unequivocally opposed to the intent of creating this LPFM service.

Conclusion

TxDOT supports the LPFM licensing of LP100 and micropower stations, especially when used by government entities as TIS transmitters. We support interconnected TIS operations in areas with freeways and turnpikes to facilitate communications to the traveling public over the served areas, notifying the public of road construction and repair as well as some weather-related topics.