Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	)	
	)	
Commission Seeks Public Comment on	)	**ET Docket No. 02-135**
Spectrum Policy Task Force Report	)	
	)	
To: The Commission	)	

Via the ECFS:

REPLY COMMENTS OF IEEE 802.18 ON THE REPORT OF THE COMMISSION'S SPECTRUM POLICY TASK FORCE

IEEE 802.18, the Radio Regulatory Technical Advisory Group (the "802.18 RR-TAG") within IEEE 802[1] hereby submits its Reply Comments in the above-captioned Proceeding.[2]

The members of the 802.18 RR-TAG that participate in the IEEE 802 standards process are interested parties in this proceeding. IEEE 802, as a leading consensus-based industry standards body, produces IEEE 802 standards for wireless networking devices, including wireless local area networks ("WLANs"), wireless personal area networks ("WPANs"), and wireless metropolitan area networks ("Wireless MANs"), all of which require spectrum resources in order to provide the public with the benefits of wireless networking.[3]

After having reviewed the initial body of comment in this Proceeding, we appreciate the opportunity to provide these Reply Comments to the Commission.

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[1] The IEEE Local and Metropolitan Area Networks Standards Committee ("IEEE 802" or the "LMSC")

[2] This document represents the views of the IEEE 802.18 RR-TAG. It does not necessarily represent the views of the IEEE as a whole or the IEEE Standards Association as a whole.

[3] IEEE 802 wireless standards currently operate predominantly in unlicensed Part 15 spectrum. More spectrum will be required to meet future needs and we once again would like to commend the Commission for undertaking the SPTF inquiry and studies.

INTRODUCTION

1. Having reviewed all of the Comments filed in this Proceeding, the 802.18 RR-TAG notes that the sheer number and volume of comment in the record precludes addressing every point of every comment individually. We will, however, address some specific points in more detail later in these Reply Comments.

2. However, not to our surprise, we find that the Comments can be relatively easily grouped into a relatively small number of categories, based on the nature of the commenter:

- License-focused interests
  - Incumbent licensees
  - Manufacturers that primarily cater to incumbent licensees
  - Trade Associations that represent various groups of incumbent licensees
- License-exempt interests
  - Manufacturers of equipment that operates on a license-exempt basis
  - Users of equipment that operates on a license-exempt basis
  - Trade Associations representing various groups of license-exempt users
- Consumer advocacy and public policy groups

3. Obviously, as is to be expected, each of the groups listed above have their own vested interests in the progression and ultimate outcome(s) of this Proceeding.

4. Clearly, the difficult task facing the Commission is to balance the needs of all users of the spectrum in a way that maximizes public access to the spectrum, maximizes the efficient use of the spectrum, and promotes the public interest.

5. In the following sections of our Reply Comments, the 802.18 RR-TAG will attempt to address the general issues raised in the Comments of the various categories listed above.

LICENSE-FOCUSED INTERESTS

6. We observe from the comments of the various parties that fall into this category that they appear to have a variety of concerns and objectives:

- Protection of incumbent and future licensees from harmful interference
- Promotion of "flexible use" of spectrum by present and future licensees
- An extension of the rights of licensees to a "quasi-ownership" or "property rights-like" level of control over licensed spectrum, including the ability to sub-lease such rights through the use of "secondary markets" in spectrum access

7. While we agree that licensed services assuredly require adequate protection from harmful interference, we believe that this legitimate concern is frequently exaggerated into little more than a mantra to bolster incumbents' *inherent* resistance to *any* form of sharing of "*their*" spectrum with others … even if that sharing *could* be accomplished without any *reasonable* probability of harmful interference to the incumbent licensee's systems and/or services.

8. As stated in our original Comments in this Proceeding, the 802.18 RR-TAG believes that it is technically feasible, *in the near-term*, for the Commission to provide numerous, diverse opportunities for increased sharing by low-powered license-exempt applications of spectrum that is under-utilized by licensed services.

9. While we support the general notion of "flexible use" of spectrum by licensed services, we do *not* believe that that should be used as a *roadblock* to increased sharing opportunities that would increase public access to (*publicly-owned*) spectrum, where such sharing is technically feasible.

10. We also believe that, when presented with a credible opportunity for such increased sharing, the Commission should diligently explore the possibility and that incumbent licensees should not effectively hold a "veto power" in such matters.

11. The 802.18 RR-TAG also firmly believes that the conveyance of permanent (or quasi-permanent) and exclusive property rights in the frequencies of incumbent, or prospective, licensees is generally contrary to the public interest and furthermore contrary to Sections 301 and 304 of the Communications Act.[4] Thus, we believe that requests by incumbent, or prospective, licensees for such rights, or recommendations from elements of the Commission's staff in this direction, *must* be rejected by the Commission.

12. While it is within the Commission's authority to promulgate rules promoting flexibility in the *use* of spectrum (*but not ownership, or quasi-ownership thereof*) it is nevertheless still the Commission's duty to manage the *publicly-owned* resource that the radio spectrum represents in the overall public interest. To quote from the Comments of the New America Foundation, et al, "*The Commission must ensure that its new spectrum policy does not become an invitation for private interests to feast at the public trough and leave unlicensed uses and other public users the spectrum leftovers*."

13. The 802.18 RR-TAG believes that the notion of licensees being permitted to lease access to spectrum for which they hold licenses through "secondary markets" may have some merit and utility *in licensed-to-licensed arrangements*, but we assert that *the concept does not scale to licensed-to-licence-exempt arrangements*, due to the totally decentralized nature of the usage, market, and business models for license-exempt applications and devices.

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[4] Section 301 of the Communications Act explicitly states that:
*"It is the purpose of this Act to maintain the control of the United States over all the channels of radio transmissio*n; and to provide for the use of such channels, but not the ownership thereof, by persons for limited periods of time, under licenses granted by Federal authority, and *no such license shall be construed to create any right, beyond the terms, conditions and period of the licens*e." (emphasis added)
Section 304 of the Communications Act reads:
"No station license shall be granted by the Commission until the applicant therefore shall have waived any claim to the use of any particular frequency or of the electromagnetic spectrum as against the regulatory power of the United States because of the previous use of the same, whether by license or otherwise."

14. It is totally unfeasible for millions of individual businesses and consumers to negotiate with licensees for access to spectrum in a "secondary market."

15. Thus, where the Commission determines that sharing of under-utilized licensed spectrum is technically feasible without the risk of harmful interference to licensed operations, the concept referred to by the Report as an "easement" for such use should be employed. However, the Commission should avoid using the term "easement," in this context, as it implies that shared access to the airwaves is an exception carved from some pre-existing property right of licensees to exert complete control over *any* potential use of a band.

16. In summary, with respect to the apparent interests and goals of license-focused interests, while we *fully* agree that licensed services deserve reasonable protection from harmful interference, we also *strongly* believe that the Commission should *not* adopt policies that would award sweeping, windfall property rights, or quasi-property rights, to incumbent and prospective licensees.[5]

17. To do so would have an unnecessary, chilling effect on the potential for future, technology-based approaches to providing greater public access to spectrum, services, and applications that might best be served in a license-exempt "commons," either on an exclusive basis or as a non-interfering "underlay" to licensed services.

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[5] And we would again observe that to do so would fly in the face of Sections 301 and 304 of the Communications Act

LICENSE-EXEMPT INTERESTS

18. Just as license-focused interests have legitimate concerns regarding potential changes in the Commission's spectrum allocation policies, so do license-exempt interests.

19. The 802.18 RR-TAG believes that the concerns of license-exempt interests are just as legitimate and compelling as those of the license-focused interests.

20. Our major concern is that license-focused interests not be permitted, by Commission policy, to assert property rights, or quasi-property rights, over the *publicly-owned* resource that the radio spectrum represents in ways that prevent reasonable and technically feasible use of spectrum by license-exempt applications and devices, either now or in the future.

21. We would reiterate the point that we, and others, have made in previous comments in this Proceeding that license-exempt applications and devices have a long and compelling history of technical innovation, advancement, and the provision of increasingly important and valuable services to the public … and that they tend to do so in a more timely, flexible, and cost-effective manner than licensed services, which are burdened with the heavy up-front costs of obtaining spectrum at auction, building extensive, expensive infrastructure, etc.

22. We would also point out again, that license-exempt applications and devices have, in recent years, been *the* bright spot of innovation and economic growth in a telecom industry that has been stricken by a severe downturn.

23. We encourage the Commission to take this into consideration and to make every effort to enact policies that, consistent with reasonable protection of licensed services, make available every possible opportunity for increased sharing of spectrum by license-exempt applications and devices.

24. Clearly, more spectrum is needed *now* for license-exempt applications and devices, *and yet more will be needed in the foreseeable future*. We therefore encourage the Commission to additionally take all possible steps to expeditiously allocate significant "commons" spectrum dedicated *exclusively* for the use of license-exempt applications and devices, in addition to enacting policies that maximize opportunities for sharing spectrum on a non-interference basis.

25. To fail to provide both increased sharing opportunities and dedicated spectrum for license-exempt applications and devices will ultimately stifle the continued innovation in technology, applications, and services that license-exempt devices are uniquely able to provide, adversely impacting both economic growth and the availability of services that the public increasingly depends upon.

CONSUMER ADVOCACY AND PUBLIC POLICY GROUPS

26. From our study of the Comments of consumer advocacy and public policy groups, it is the observation of the 802.18 RR-TAG that, without exception, they advocate for greater public access to spectrum through increased sharing opportunities and additional allocations of spectrum, including some exclusive allocations, for license-exempt applications and devices.

27. Consumer advocacy and public policy groups also … again without exception … appear to caution the Commission with respect to the problems, pitfalls, and adverse effect on future spectrum policy decisions that would derive from the granting of exclusive property rights, or quasi-property rights to Commission licensees.

28. Additionally, some (consumer advocacy and public policy groups) voice the belief that to grant such rights to licensees would be a step beyond the provisions of the Communications Act, and we agree.

29. Like the consumer advocacy and public policy groups, the 802.18 RR-TAG is not "anti-licensed use" or "anti-licensee" … on the contrary, we fully recognize the necessity for licensing in many situations, as well as the rights and expectations of licensees to be able to exercise the rights conveyed by their licenses with reasonable protection from harmful interference from other users of the spectrum, whether they be other licensees or license-exempt applications and devices.

30. However, we share the concern voiced by consumer advocacy and public policy groups that the Commission not abandon its mandate to act as the trustee of the publicly-owned radio spectrum under pressure from incumbent licensees, many of whom appear to be intent on changing the nature of licensing from what is outlined in the Communications Act into some virtually perpetual property right which would permit them to do with the spectrum as they please and to exclude all others from any reasonable use thereof.

SUMMARY AND CONCLUSION

31. To summarize the major points addressed in more detail above, the 802.18 RR-TAG believes that the Commission should:

- when considering or authorizing "flexible use" in licensed spectrum, not adopt policies that effectively grant licensees property rights or quasi-property rights that convey to such licensees an effective "veto power" over the Commission's ability to authorize, where technically feasible, sharing opportunities for license-exempt applications and devices on a non-interference basis;
- recognize that the concept of "secondary markets" is economically infeasible as a means of allowing license-exempt applications and devices to share spectrum with licensed services on a non-interference basis;
- make every effort to enact policies that make available every possible opportunity for increased sharing of spectrum by license-exempt applications and devices;
- take all possible steps to expeditiously allocate significant dedicated "commons" spectrum for use by license-exempt applications and devices that is unencumbered with licensed users.

32. Once again, the 802.18 RR-TAG appreciates the opportunity to offer these Reply Comments to the Commission.

Respectfully submitted,

/s/
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