

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

In the Matter of

Revision of Parts 2 and 15 of the Commission's
Rules to Permit Unlicensed National
Information Infrastructure (U-NII) Devices in
the 5 GHz Band

ET Docket No. 03-122
RM - 10371

REPLY COMMENTS OF MICROSOFT CORPORATION

With the close of the formal comment cycle in this proceeding, the Commission is poised to complete U.S. implementation of the allocation changes to the 5 GHz band adopted at the World Radiocommunication Conference (WRC-03) just three months ago. The record establishes a broad consensus on the value of and need for opening the 5.470-5.725 GHz band for use by Part 15 U-NII devices. While commenters have raised some subsidiary issues for clarification, the proposed changes to both the table of allocations and the Part 15 rules are not really at issue. In keeping with the U.S. Government's leadership on this issue at WRC-03, the Commission can, and should, complete this rulemaking before year's end.

Based on the record, Microsoft wishes to highlight three matters: the development of test procedures, the transition period for compliance with the new rules, and commenters' general concern that the Commission not unnecessarily (and without a proper record) prejudge whether additional spectrum for higher power U-NII operations will be needed in the future.

I. THE COMMISSION SHOULD TAKE COGNIZANCE OF THE ONGOING, OPEN PROCESS TO DEVELOP TEST PROCEDURES AND SHOULD BASE A COMPLIANCE DEADLINE FOR THE 5.25-5.35 GHz BAND ON THE FINAL ADOPTION OF THOSE PROCEDURES

This entire proceeding has been notable for the cooperation between industry and government that allowed the U.S. to advocate successfully for the global allocation for wireless access systems at 5 GHz. That cooperation continues today in the informal working group – headed by NTIA (“NTIA working group”), with participation from the Department of Defense, the Commission, and the industry – that has taken up the task of developing bench and field tests to verify compliance with the Commission’s proposed dynamic frequency selection (“DFS”) rules.

Like many other commenters, Microsoft believes that this group, which encompasses the interested parties and the experts, must be allowed to complete its work and submit its recommendations to the Commission *before* the Commission adopts any required test procedures. This group of potentially adverse parties has already agreed to the need for the DFS and transmit power control (“TPC”) requirements; as the group continues to make progress, it is in the Commission’s and the public’s best interest to allow it to fashion a test procedure that accomplishes the diverse objectives of its participants. Moreover, the group has received input on the DFS and TPC conformance test procedures adopted by the ETSI standards committee. Harmonization of the U.S. and international test procedures and standards will greatly benefit manufacturers and consumers alike.

It is only logical, as well, to base a prospective date for compliance with the new rules *in the existing 5.250-5.350 band* upon the completion and adoption of a test procedure for establishing such compliance. The significant majority of commenters

agree. As IEEE explains in its comments, making the DFS requirement for new equipment certified for the 5.250-5.350 GHz band effective one year from publication of the *Report and Order*, may present an “insurmountable hurdle” for manufacturers¹ because finalization and full implementation of the test procedures could extend beyond that date. If this were the case, manufacturers, service providers, and ultimately consumers would be subject to serious disruption in access to the 5.250-5.350 GHz band.

The Commission can easily bifurcate the testing procedure and compliance dates from the bulk of the issues in the *NPRM*, adopting rules on these two matters once it has input from the NTIA working group and the public on the group’s recommended procedures. Because operations already exist in this band absent DFS, and there is no existing log of complaints about interference, preservation of the status quo for this brief period will not harm protected operations.

II. THE ISSUE OF SPECTRUM FOR HIGHER POWER OPERATIONS IS NOT PRESENTLY BEFORE THE COMMISSION

What may have simply been an aside in the *NPRM* – the statement that “We expect that the 100 MHz of spectrum that is already available at 5.725-5.825 GHz will remain sufficient for higher power operations”² – has created an unnecessary maelstrom of concern among those who support the use of unlicensed wireless services to facilitate the deployment of broadband services.³ To the extent that the Commission intended to announce a new policy determination, Microsoft must emphasize that not only is the

¹ Comments of IEEE 802 at 19.

² *Revision of Parts 2 and 15 of the Commission’s Rules to Permit Unlicensed National Information Infrastructure Devices in the 5 GHz Band*, Notice of Proposed Rulemaking, 18 FCC Rcd. 11581 (rel. June 4, 2003) at ¶18 (“*NPRM*”).

³ *See, e.g.*, Comments of IEEE 802 at 7; Comments of the License-Exempt Alliance at 2, 5-6; Comments of Motorola, Inc., at 4; Comments of Proxim Corporation at 2-3; Comments of Alvarion, Inc., at 2.

issue not presently before the Commission for determination, but also no record of evidence has been developed that could support such a conclusion. It is more likely that the Commission's comment was unintentionally broad, contained, as it was, within the Commission's discussion of the proposal to apply a 1-watt e.i.r.p. limitation in the 5.470-5.725 GHz band.

Nearly all commenters support the 1-watt power restriction for the 5.470-5.725 GHz band due to the particular need within that band to protect existing services, but *none* would support a conclusion that the existing 100 MHz (at 5.725-5.825 GHz) allowing operations up to 4 watts will remain sufficient for higher power. Fortunately, the two propositions are not linked, and no such conclusion is necessary in order to complete this rulemaking. As some commenters suggest, the Commission may eventually need to address a demand for additional spectrum for higher-power operations supporting outdoor, last-mile connectivity,⁴ but this should be done in a separate proceeding or further notice.

⁴ See, e.g., Comments of Proxim Corporation at 4 (“Proxim believes that additional unlicensed spectrum for use by high power outdoor operations will be required in the next few years”); Comments of Motorola at 4 (noting that the 5.725-5.825 GHz band is becoming congested because of increasing use for high power applications to provide broadband services in rural areas).

III. CONCLUSION

With prompt adoption of a final order implementing the WRC-03 agreements, the Commission will continue its international leadership in the development of the 5GHz spectrum and the promotion of broadband access for all.

Respectfully submitted,

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