

**Before the
Federal Communications Commission
Washington, DC 20554**

In the Matter of

Interference Immunity Performance
Specifications for Radio Receivers

Review of the Commission's Rules and
Policies Affecting the Conversion to
Digital Television

ET Docket No. 03-65

MM Docket No. 00-39

**COMMENTS OF THE
CELLULAR TELECOMMUNICATIONS & INTERNET ASSOCIATION**

The Cellular Telecommunications & Internet Association ("CTIA")¹ respectfully submits these comments in response to the Notice of Inquiry ("NOI") in the above-referenced proceedings.² CTIA commends the Commission for swiftly following up on the Spectrum Policy Task Force's efforts by initiating this inquiry, which considers the role of receiver interference immunity performance specifications in the agency's spectrum management policy initiatives. Importantly, the FCC's NOI recognizes that, while receiver performance requirements can provide spectrum utilization efficiencies, such requirements can also undercut the effectiveness of competitive market forces. Because these competitive market forces have enabled the successful growth and rapid technological evolution of Commercial Mobile Radio Services

¹ CTIA is the international organization of the wireless communications industry for both wireless carriers and manufacturers. CTIA membership covers all Commercial Mobile Radio Service ("CMRS") providers and manufacturers, including cellular, broadband PCS, ESMR, as well as providers and manufacturers of wireless data services and products.

² FCC 03-54, rel. Mar. 24, 2003 ("NOI").

(“CMRS”),³ CTIA urges the Commission to move forward with caution. Specifically, CTIA urges the FCC to refrain from unnecessary regulation where competitive markets and industry cooperation have been successful in improving the interference immunity of certain classes of communications equipment, particularly wireless communications technologies used for CMRS.

I. The Commission Has Appropriately Recognized the Successful Impact of Market Forces and Industry Consensus on Receiver Interference Immunity.

CTIA strongly supports the FCC’s position that – particularly in the case of CMRS – it is preferable to rely primarily on “market incentives and voluntary industry programs” over a regulatory regime that would subject all receivers to a set of mandatory standards.⁴ Reliance on market incentives and cooperative industry efforts permits a greater degree of flexibility in the establishment of receiver interference immunity guidelines and permits manufacturers and service providers to create competitive differentiations that might otherwise not exist in a regime where all equipment must meet the same specifications. Indeed, intense competition and industry standardization processes have enabled CMRS equipment providers to innovate rapidly and introduce advanced services and products frequently.⁵ Many of the interference management mechanisms for receivers that are outlined in the NOI, in fact, have been successfully introduced and/or further refined by wireless equipment makers and service providers as a matter of course.⁶

³ See NOI at ¶ 1.

⁴ NOI at ¶ 2.

⁵ See NOI at ¶ 28 (“mobile systems, and handsets in particular, constitute one of the most demanding challenges in minimizing interference”).

⁶ See NOI at ¶¶ 12-13, 17.

In considering whether to impose interference immunity requirements for radio receivers, the FCC has properly recognized that a “one-size-fits-all” approach will not work.⁷ For example, in certain contexts where market forces do not necessarily result in an efficient use of spectrum, such as in public safety and broadcast bands, receiver requirements or standards may be appropriate.⁸ However, in those contexts where market forces result in the efficient use of spectrum, such as in the frequency bands used by CMRS, it is neither necessary nor appropriate for the Commission to impose receiver standards. In fact, as the FCC recognizes, the standards imposed by the PCS industry are more rigorous than those imposed by the Commission.⁹ The track record of the CMRS experience underscores that manufacturers and carriers operating in a competitive, spectrum-constrained environment must take every measure that is technically and economically possible to use spectrum efficiently if they hope to be successful in the marketplace.

CTIA submits in addition that it is neither necessary nor appropriate to impose regulations on receivers used by competitive licensed services as a vehicle for “shoehorning” disparate users into a band. For example, it would not be appropriate to impose additional requirements on receivers used by CMRS systems for the purpose of facilitating new unlicensed “underlay” uses, such as Ultra-Wideband (“UWB”) systems, in their licensed bands. CMRS industry participants have devoted enormous resources to acquiring adequate spectrum and developing spectrum-efficient equipment in order to serve their customers effectively, and it

⁷ See NOI at ¶¶ 2, 24. The Commission has suggested an approach of managing this proceeding by grouping similar services.

⁸ See NOI at ¶¶ 5,

⁹ NOI at ¶ 18.

would not be in consumers' interest to have those resources redirected to protect against potential interference from speculative new uses in these bands.

CTIA urges the Commission to proceed with caution where competitive market forces are continually motivating equipment makers to support more users and services within the same bandwidth. Unnecessary regulation will limit flexibility in design and also create disincentives for manufacturers to continue to innovate.

II. Any Receiver Standards Should Generally Be Voluntary, Performance-Based, and Industry Driven.

CTIA agrees with the Commission's recognition that controlling interference and improving spectrum efficiency requires consideration of both the transmit and receive side of the ledger.¹⁰ This is especially true in circumstances where market forces have not ensured that spectrum is used as efficiently as it should be in today's spectrum-constrained environment.

As a general matter, if and when certain receiver standards are implemented, they should be voluntary, performance-based and industry-driven. This is particularly appropriate in circumstances in which spectrum users are subject to competitive market forces, and have every incentive to use spectrum efficiently and protect their receivers against interference. Moreover, any consideration of receiver standards must afford significant flexibility to equipment makers to avoid impeding innovation. Performance standards, which define a desired outcome rather than mandate the method or design that must be implemented, are best suited to achieve the desired outcome without restricting the means of achieving it. Standards that meet these characteristics offer sufficient flexibility to remain relevant through multiple product cycles. Indeed, it is a policy of nearly every federal government agency – including the FCC – that prescriptive

¹⁰ See NOI at ¶ 2.

standards, such as design standards, should generally be avoided where performance standards can accomplish the same purpose.¹¹

Conclusion

CTIA commends the FCC for promptly following up on the Spectrum Policy Task Force Report recommendations and commencing this NOI to address an important spectrum policy issue. CTIA looks forward to working with the Commission in this proceeding as the agency moves toward implementation of more flexible and market-oriented approaches to encourage the development and evolution of technologically innovative and economically efficient uses of the spectrum.

Respectfully submitted,

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¹¹ See NOI at ¶ 20. In fact, the Regulatory Flexibility Act requires U.S. Government agencies promulgating new regulations to consider using performance-based rather than prescriptive, design-based standards. See 5 U.S.C. § 603(c) (federal agencies' rulemaking analysis must discuss "significant alternatives such as – ... the use of performance rather than design standards").

CERTIFICATE OF SERVICE

I, Christine Blomquist, hereby certify that on this 21st day of July, 2003, the foregoing Comments of the Cellular Telecommunications & Internet Association were filed electronically on the FCC's Electronic Comment Filing System and copies were served via email to the following:

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