

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

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FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF SECRETARY

In the Matter of)
)
Amendment of Parts 74, 78, and 101)
of the Commission's Rules to)
Adopt More Flexible Standards for)
Directional Microwave Antennas)

ET Docket No. 96-35

To: The Commission

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COMMENTS

In the above-captioned Notice of Proposed Rule Making ("NPRM"), the Commission proposes modifying its fixed point-to-point microwave service rules.¹ Pursuant to Section 1.415 of the Commission's Rules,² the Fixed Point-to-Point Communications Section, Network Equipment Division of the Telecommunications Industry Association ("TIA"),³ hereby comments on the NPRM.

Under its current rules, the Commission limits the beamwidth of fixed point-to-point links in a given area. This limitation is accomplished "by specifying mandatory minimum acceptable antenna gain requirements."⁴ It is becoming increasingly difficult, however, for directional antennas incorporating new design technologies (e.g., planar arrays), to comply with the Commission's specific antenna gain requirements, even though these antennas "can achieve sufficiently narrow beamwidths to comply with the intent" of the rules.⁵

To accommodate these new antenna designs, the Commission, in the NPRM, proposes amending its rules to:

¹NPRM at para. 1.

²47 C.F.R. Section 1.415 (1996).

³TIA is the principal industry association representing fixed point-to-point microwave radio manufacturers. TIA members serve, among others, companies, including telephone carriers, utilities, railroads, state and local governments, and cellular carriers, licensed by the Commission to use private and common carrier bands for provision of important and essential telecommunications services.

⁴NPRM at para. 2.

⁵NPRM at para. 4.

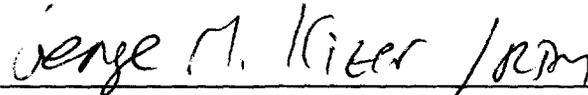
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allow directional antennas to comply with requirements for either minimum antenna gain or maximum beamwidth. We do not propose to change any of the existing requirements with respect to sidelobe suppression because we believe that these requirements, which are designed to reduce potential interference, can readily be met by both conventional and new antenna technologies. We propose to convert the present antenna gain requirements to the comparable requirements for antenna beamwidths based on two assumptions: (1) a parabolic ("dish") antenna with an efficiency of 55% is used as a reference; and (2) the illumination function taper value is 70.⁶

The Commission's proposed rules are appropriate to accommodate emerging technologies. It is critical, however, that the Commission maintain sidelobe suppression specifications at their current level to ensure that manufacturers and existing users would not be required to change their operations. Thus, provided that the sidelobe suppression requirements are not changed, TIA supports adoption of the rules proposed in the NPRM.

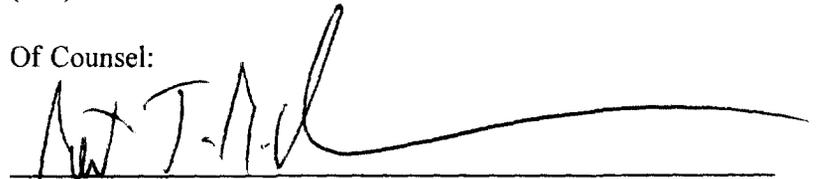
Respectfully submitted,

FIXED POINT-TO-POINT COMMUNICATIONS
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⁶NPRM at para. 6 (footnotes omitted). These values are depicted in Table I of the NPRM.