

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

In the Matter of)	
)	
Allocation and Service Rules)	
For the 71-76 GHz, 81-86 GHz)	WT Docket No. 02-146
And 92-95 GHz Bands)	
81-86 GHz and 92-95 GHz Bands)	
)	
Loea Communications Corporation)	RM-10288
Petition for Rulemaking)	
_____)	

COMMENTS OF SPRINT CORPORATION

Sprint Corporation hereby files its comments in response to the Commission’s Notice of Proposed Rulemaking (“NPRM”)¹ to allocate spectrum and adopt service rules for the 71-76 GHz, 81-86 GHz and 92-95 GHz bands.

The Commission undertook this NPRM in an effort to develop a flexible and streamlined regulatory framework that will to promote commercial development and growth of the “millimeter wave” spectrum, encouraging innovative uses of the spectrum and accommodating future developments in technology.² Sprint believes that the proposed changes to the service rules go a long way toward furthering these goals and Sprint supports the Commission’s effort wholeheartedly. More specifically, Sprint encourages the proposed changes in spectrum allocation in accordance with WRC-2000

¹ *Allocations and Service Rules for the 71-76 GHz, 81-86 GHz and 92-95 GHz Bands; Loea Communications Corporation Petition for Rulemaking*, 17 FCC Rcd 12182 (2002).

and the adoption of Band Plan III to provide the largest unsegmented swath of spectrum. Sprint urges the Commission to adopt a site-by-site licensing scheme rather than geographic area licensing and encourages it to use its Universal Licensing System and licensing standards to coordinate licensing, rather than use a band manager.

I. Background

In the NPRM, the Commission examined methods to promote the commercial development and growth of the “millimeter wave” spectrum in the 71-76 GHz, 81-86 GHz and 92-95 GHz bands under Parts 15 and 101 of its Rules. It takes this action pursuant to its mandate under Sections 7(a) and 303(g) of the Communications Act of 1934, as amended, “to encourage the provision of new technologies and services to the public” and “encourage the larger and more effective use of radio in the public interest.” The Commission also seeks comment on the proposal by Loea Corporation to establish service rules for the licensed use of the 71-76 GHz and 81-86 GHz bands. It seeks to develop a flexible and streamlined regulatory framework that will encourage innovative uses of the spectrum; accommodate future developments in technology and equipment; promote competition in the communications services, equipment and related markets; and advance the potential sharing between non-Federal Government and Federal Government systems. The Commission anticipates that its proposals will encourage the use of technologies such as high-speed wireless local area networks and broadband access systems for the Internet. The Commission requests comment by the interested parties on the following issues:

² *Id.* at 2.

- Reallocating the 71-76 GHz, 81-86 GHz and 92-95 GHz bands to update the current allocations, which were established at the World Administration Radio Conference (Geneva, 1979) (WARC-79);
- Developing an appropriate band plan for the 71-76 GHz, 81-86 GHz and 92-95 GHz bands;
- Providing for unlicensed use of the 92-95 GHz band;
- Authorizing the new licensed services under Part 101 of our Rules and the new unlicensed devices under Part 15 of our Rules;
- The appropriate means of licensing spectrum for these bands (e.g., geographic service areas or site-based licenses);
- Whether to permit licensees to select licensing as a band manager or as a regular non-band manager licensee; and
- Developing an appropriate eligibility standard for potential licensees.

II. Sprint Comments

Sprint generally supports the Commission's proposed rules to facilitate and encourage the development of new technologies using the 71-76 GHz, 81-86 GHz and 92-95 GHz bands. Sprint offers the following comments to the specific issues posed by the Commission.

A. Reallocating the 71-76 GHz, 81-86 GHz and 92-95 GHz bands to update the current allocations, which were established at the World Administration Radio Conference (Geneva, 1979) (WARC-79)

Sprint agrees with the Commission's decision to allocate spectrum in accordance with the decisions reached at WRC-2000. As the Commission notes, many technological and scientific advances and discoveries pertaining to radio waves have occurred since the WRC-79 allocations and the WRC-2000 realignment of allocations between 71 and 275 GHz to reflect current and future requirements for passive

services makes sense.

With regard to the 71-76 GHz band, Sprint supports the Commission's proposal to consolidate satellite downlink operations and eliminate the 72.77-72.91 GHz allocation for radio astronomy service (RAS) services. Sprint agrees with WCA, however, that the Commission should not adopt the proposed new footnote to the Table of Frequency Allocations stating that "stations in the fixed, mobile and broadcasting services shall not cause harmful interference to stations of the Federal Government fixed-satellite service," but should instead adopt technical standards that ensure non-governmental FSS and BSS services in the 74-76 GHz band provide interference protection to Government satellite operations.³

With regard to the 81-86 GHz band, Sprint supports the Commission's proposed changes to consolidate satellite uplink operations and encourages the Commission to adopt standards ensuring interference protection to satellite operations for this band also. Sprint supports the proposed co-primary allocation of 81-86 GHz for RAS and terrestrial services, but agrees with the WCA that the Commission should not adopt its proposed new secondary allocation for amateur and AMSAT services at 81-81.5 GHz as this will significantly complicate frequency coordination.⁴

With regard to the 92-95 GHz band, Sprint supports the

³ See Comments of the Wireless Communications Association International, Inc. filed Nov. 1, 2002 (WCA Comments) at 5-6.

⁴ See WCA Comments at 8.

Commission's proposed allocation of the 92-94 GHz and 94.1-95 GHz bands to the RAS on a primary basis and 94-94.1 GHz on a secondary basis.

B. Developing an appropriate band plan for the 71-76 GHz, 81-86 GHz and 92-95 GHz bands

92-95 GHz

The Commission requested comment on three band plans for the 92-95 GHz band. Of these Band Plans, Sprint sees Band Plan III as the most likely to support the widest range of new uses as it provides the largest unsegmented swath of spectrum.

71-76 GHz and 81-86 GHz

The Commission requested comment on the proposal by Loea that it authorize the entire 71-76 GHz and 81-86 GHz bands for fixed use. Sprint supports this authorization. Sprint believes that Loea's proposed band plan for the 71-76 GHz and 81-86 GHz bands, operating under the standards proposed by the WCA in its comments, will provide adequate protection for the adjacent bands, including the passive 86-92 GHz band.⁵

C. Providing for unlicensed use of the 92-95 GHz band

The Commission proposed to make the 92-95 GHz band available for unlicensed use and proposed rules for unlicensed operation based on unlicensed operations in the 57-64 GHz band. As the Commission notes, the power levels established for the 57-64 GHz unlicensed operation were

⁵ See WCA comments Appendix A, setting forth proposed standards for band-edge filtering, etc. consistent with Part 101 rules.

based primarily on safety issues with respect to power densities. While Sprint appreciates that the Commission intends to structure rules to be as flexible as possible, Sprint agrees with the WCA that for these bands, the coexistence of licensed and license-exempt services will greatly complicate coordination and would likely interfere significantly with the ability of licensed providers to offer service guarantees.⁶

D. Authorizing the new licensed services under Part 101 of our Rules and the new unlicensed devices under Part 15 of our Rules

Sprint supports regulating licensed services under Part 101 of the Commission's rules.

E. The appropriate means of licensing spectrum for these bands (e.g., geographic service areas or site-based licenses)

Sprint supports the use of a site-by-site licensing scheme rather than geographic area licensing. As Loea argued, a site-by-site licensing scheme would enable an infinite number of providers to be authorized in the spectrum and the likelihood of interference would be low because the point-to-point systems operating in these bands would use narrow "pencil beams" to transmit data. In contrast, a geographic area licensing scheme, based on the concept of relative exclusivity, would impede the free and efficient use of the band possible through a site-by-site scheme.

F. Whether to permit licensees to select licensing as a band manager or as a regular non-band manager licensee

⁶ See WCA Comments at 13.

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