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

In the Matter of	)	
	)	
Processing of Microwave Applications	)	WT Docket No. 00-19
In the Wireless Telecommunications Services	)	

COMMENTS OF TRITON NETWORK SYSTEMS, INC.

Triton Network Systems, Inc. ("TNS"), by its attorneys and pursuant to the provisions of Section 1.415 of the Rules and Regulations of the Federal Communications Commission ("FCC" or "Commission"), 47 C.F.R. § 1.415 (1999), hereby submits its comments responsive to the above-captioned Notice of Proposed Rule Making ("Notice"). The Notice considers, among other things, means by which the agency may "streamline" its Part 101 regulations to eliminate unnecessary regulations and more effectively regulate the microwave industry. In particular, the Notice solicits public comment on the request of Digital Microwave Corporation ("DMC") that the Commission amend its equipment approval policies for certain Part 101 radio services. Further, the agency questions whether certain of its Part 101 technical regulations are consistent with the types of services envisioned by the FCC's policies for the Local Multipoint Distribution Services ("LMDS").

In support of its comments, TNS offers the following:

1. Formed in 1997, TNS (www.triton-networks.com) employs monolithic millimeter wave integrated circuit ("MMIC") technology originally developed by Lockheed Martin Electronics and Missiles Company. TNS specializes in the development of millimeter

wave wireless transmission equipment that is built to meet fiber-optic specifications (high availability, low bit error rate), including FCC-approved radios that transmit at data at speeds up to 100 megabits per second and higher. The FCC has certified TNS's radios for use in the LMDS. TNS has also developed radios for the 39 GHz radio service and is actively developing radios for export. Accordingly, TNS is greatly affected by the FCC's consideration of its Part 101 regulations and is therefore pleased to offer its comments on the Commission's proposals.

2. In the Notice, the Commission questions whether it should permit the self-approval (under the "verification" procedure) of microwave radio equipment developed for the LMDS and the 24 GHz Digital Electronic Message Service ("DEMS"). Notice at ¶ 57. TNS strongly supports DMC's proposal; the Commission should amend its rules to permit all LMDS and DEMS equipment to be self-approved by the manufacturer or importer. As an initial matter, such a change merely recognizes that LMDS and DEMS licenses are generally issued on an exclusive basis, resulting in limited FCC interference concerns. Further, the FCC already permits verification for point-to-point transmitters in the 39 GHz radio service[1] and similar Part 101 radio services.

3. In the ET Docket No. 97-94 proceeding, in which the Commission initially specified the verification self-approval procedure for most Part 101 microwave devices, the

---

[1] The Commission's Notice contains a vagary that should be clarified in the context of this proceeding. It is TNS's understanding, based on the plain-text of rule 101.139 and guidance from the agency's staff, that point-to-point microwave equipment for the 39 GHz band may be self-approved under the verification procedure. Further, because LMDS was never regulated under Subpart H or I of the FCC's rules (it has always been regulated under Subpart L), TNS understood (and the FCC's staff previously confirmed) that all LMDS equipment - whether point-to-point or point-to-multipoint - was subject to the certification procedure. In any case, on a going forward basis, the FCC should permit self-approval for all millimeter wave devices.

agency cited, among other things, three factors it considered important in determining to move the Part 101 devices to a self-approval procedure: (i) the device is used in a licensed radio service where the licensee can be easily located to resolve interference problems; (ii) the manufacturers are capable of performing the necessary measurements to ensure compliance; and (iii) there is an excellent record of compliance for the devices. Report and Order, 13 FCC Rcd 11415, ¶ 25 (1998). Applying those same factors here compels the same result: the Commission should amend rule 101.139 to provide that all Part 101 39 GHz, LMDS and DEMS devices are subject to the verification self-approval procedure.

4. Further, the Commission should clarify that those FCC rules and policies designed to separate operations and protect licensees from adjacent channel interference are inapplicable to LMDS licensees holding both the A and B spectrum blocks in a particular market (in particular, the 31-31.3 GHz frequency bands). For example, a licensee holding both the 31.0-31.075 (B1) and the 31.075-31.225 (A3) GHz blocks should be permitted to aggregate those channels and operate on wider bandwidths than otherwise permitted if different licensees held those same adjacent channel licenses. See 47 C.F.R. § 101.109 (1999). Similarly when different A and B block licensees consent to an adjacent channel arrangement other than that specified in the rules, such an arrangement should be based on a rule-based exception, rather than on an administratively burdensome waiver request. TNS suggests that the agency clarify its policies in this regard.

5. The Commission's clarification of its rules and policies would make the agency's regulations of LMDS systems similar to its regulation of mobile wireless systems where the Commission permits the aggregation of different channel blocks, and interprets or amends its technical regulations to make the ability to engage in such aggregation meaningful

to licensees. See e.g., Third Report and Order, 12 FCC Rcd 10943, ¶ 122 (1997) (amending emissions mask requirements for 220 MHz licensees that aggregate contiguous channels). The Commission should also take this marketplace aspect of LMDS operations into account as it considers revisions to its LMDS emissions mask. Notice at ¶ 54.

6. In any case, the Notice appropriately recognizes that millimeter wave radio systems are in many ways unique and there is a real danger that the FCC's regulations may not encompass innovative technologies or arrangements that serve the public interest. The Commission should therefore consider *ad hoc* waivers of its LMDS technical rules for manufacturers and service providers on more favorable terms than typically considered by the Commission under its existing precedent, where waivers are rarely granted. 47 C.F.R. § 1.925 (1999). The Commission has signaled an increased willingness to consider waivers in cases where the future is difficult to predict and the agency's rules - perhaps by design - do not cover every possibility. See Memorandum Opinion and Order, 15 FCC Rcd 3129, ¶ 21 (2000) (FCC "will look favorably upon requests for rule waivers in order to accommodate" Part 101 licensee disrupted by retuning to accommodate emerging technologies licensees in the 2 GHz frequency band).

Based on the foregoing, TNS urges the Commission to consider these comments and act in a manner consistent with the views expressed herein.

Respectfully submitted,

Triton Network Systems, Inc.

By: 

Russell H. Fox
Russ Taylor
GARDNER, CARTON & DOUGLAS
1301 K Street, N.W.
Suite 900, East Tower
Washington, D.C. 2000
(202) 408-7100

Its Attorneys

July 12, 2000

DC01/336155.1