

# PUBLIC NOTICE

**Federal Communications Commission**  
**445 12th St., S.W.**  
**Washington, D.C. 20554**

News media information 202 / 418-0500  
Fax-On-Demand 202 / 418-2830  
Internet: <http://www.fcc.gov>  
TTY 202 / 418-2555

---

**DA 00-2921**  
**Released: December 29, 2000**

## **NETWORK SERVICES DIVISION SEEKS COMMENT ON PETITION BY ELASTIC NETWORKS FOR PART 68 WAIVER**

**NSD-L-00-254**

**Comments: January 22, 2001**

**Reply Comments: January 29, 2001**

On November 15, 2000, Elastic Networks filed a Petition with the Network Services Division for waiver of the out-of-band signal power limitations contained in section 68.308(e)(1) of the Commission's rules, so that it may register its EtherLoop Modem--trade name Stormport 400--under Part 68 of the rules.<sup>1</sup> Elastic Networks claims that the Etherloop/Stormport 400 Modem conforms to all applicable Part 68 requirements for loop-start and analog voiceband equipment, except for the signal power limitations of section 68.308(e)(1). We seek comment on the Petition.

Elastic Networks asserts that grant of this waiver would further the public interest by providing consumers with more choices in advanced telecommunications services, particularly in rural areas that are not supported by Asymmetric Digital Subscriber Line (ADSL) equipment. The company states that its equipment has been deployed in the outside plant by 28 incumbent carriers and 2 competitive carriers in the United States, as well as by 7 incumbent carriers in Canada. We seek comment on the public benefits of the waiver with respect to market choice, consumer value, and technological innovation.

Elastic Networks argues that the Etherloop/Stormport 400, although not compliant with section 68.308(e)(1), would not cause harm to the public switched telephone network (PSTN) because it satisfies the dpANS Spectrum Management for Loop Transmissions standard developed by Alliance for Telecommunications Industry Solutions (ATIS) subcommittee T1E1.4.<sup>2</sup> Elastic notes that the Commission established a streamlined waiver process for ADSL equipment in *Alcatel USA, Inc. Petition for Waiver of the Signal Power Limitations*

---

<sup>1</sup> 47 C.F.R. § 68.308(e)(1).

<sup>2</sup> T1E1.4 is an open industry body which includes all major carriers and telecommunications vendors and, pursuant to Commission directive in the *Third Advanced Services Report and Order*, 14 FCC Rcd 20,912 (1999), works to ensure spectral compatibility in the unbundled loop environment.

*Contained in Section 68.308(e)(1) of the Commission's Rules, Memorandum Opinion and Order, 15 FCC Rcd 4388 (2000) (Alcatel Waiver Order).* In the *Alcatel Waiver Order*, the Commission determined that if a petitioner shows that an ADSL device meets two performance conditions set out in ANSI standard T1.413, it is in the public interest to grant a waiver of rule 308(e)(1).<sup>3</sup> Elastic contends that compliance with the dpANS standard should be an alternative basis for the Commission to waive section 68.308(e)(1).

Although the dpANS standards document has not been finalized, Elastic Networks claims that industry consensus for it is high, and that industry expects T1E1.4 to issue the standards by the end of this year, without substantive changes to the draft recently approved by ballot. The document states that a new technology is spectrally compatible if that service: (A) fits within the power spectral density (PSD) mask of one of the 9 defined Spectrum Management (SM) Classes; or (B) is demonstrated by a standardized analysis -- "Method B" - - to cause interference to basis systems that is less than or equal to the reference cases.

As described by Elastic Networks, the EtherLoop/Stormport 400, a "burst mode" modem, listens in the quiet period between bursts, and uses these measurements both to maintain the best speed for itself and to automatically sense crosstalk coupling with any asymmetric service. Its Spectrum Management feature switches from "Native Mode" to "Safe Mode" upon detection of such crosstalk. If there is ambiguity, the Spectrum Manager takes the cautious step of switching to Safe Mode. When operating in Native Mode, the modem transmits up to a maximum of 14dBm of total power at each center frequency. In Safe Mode, it limits the power at each frequency so that the maximum PSD falls under the PSD mask specified in T1.413.

To satisfy dpANS "Method A" analysis, Elastic Networks explains that, in Safe Mode, the EtherLoop/Stormport 400 is a member of Spectrum Management (SM) Class 5--the same SM Class as T1.413 compliant ADSL equipment. In Native Mode, the lowest nine frequencies are all members of one or more SM Classes. Limiting the maximum power of the upper three frequencies, in a manner similar to Safe Mode, makes these frequencies members of an SM Class as well.

According to Elastic Networks, Method B analysis shows that the device in Native Mode is spectrally compatible, without deployment restrictions, with all symmetric basis systems. This analysis also shows that the device in Safe Mode is spectrally compatible, without deployment restrictions, with all basis systems, both symmetric and asymmetric.

In addition, Elastic Networks claims that the Etherloop/Stormport 400 complies with all the Short-Term Stationary (STS = Burst Mode) conformance criteria of the dpANS document, which ensure spectral compatibility. These multiple specifications, the company argues, are sufficient to protect the PSTN from crosstalk harm because they are industry-recognized criteria that control intentional and unintentional metallic signals and longitudinal symmetry to the degree necessary for preventing conversion of metallic signals into unwanted longitudinal signals. Elastic Networks claims, moreover, that actual experience has been consistent with the above calculations: no reports of network harm have been made during the deployment to date of the Etherloop/Storm 400 in the U.S. and Canada.

In support of its claims, Elastic Networks attaches the discussed Method A and B calculations to its waiver

---

<sup>3</sup> These conditions require that the ADSL device: (1) meet the transmitter spectral response requirements specified in Section 7.14 of ANSI T1.413- Issue Two (1998), and (2) operate with an aggregate power of less than 12.5 dBm over the range 25.875 to 138 kHz as specified in Section 7.15 of the same document.

petition. We seek comment on whether a waiver would result in a substantial risk of harm to the PSTN or its users, and on the particular types of harm that may arise. We also seek comment on the necessity and sufficiency of the technical data included with the petition. More broadly, we seek comment on what types of devices should be treated like the one in question for Part 68 purposes, and what conditions, if any, should apply if waivers are to be granted.

Public comments on this Petition for Waiver must be filed with the Commission by January 22, 2001, and reply comments by January 29, 2001. Such comments should refer to file number **NSD-L-00-254**. We request that paragraphs be numbered to facilitate reference.

*Ex parte* presentations in this proceeding will be governed by the procedures set forth in Section 1.1206 of the Commission's rules, covering "permit-but-disclose" proceedings. Interested parties should file an original and four copies of their comments with the Office of the Secretary, Federal Communications Commission, 445 12th Street, S.W., Suite TW-A325, Washington, D.C. 20554.

In addition, parties should send two copies to Carmell Weathers, Network Services Division, Common Carrier Bureau, FCC, 6th floor, 445 12th Street, S.W., Suite 6-B253, D.C. 20554, as well as one copy to International Transcription Service, 445 12th Street, S.W., Suite CY-B400, D.C. 20554. Lastly, we request that a courtesy copy be sent via email to Jamal Mazrui of the Network Services Division, [jmazrui@fcc.gov](mailto:jmazrui@fcc.gov).

Comments and reply comments will be available for public inspection and copying during regular business hours in the Commission's Public Reference Center, 445 12th Street, S.W., Suite CY-A257, Washington, D.C. 20554, (202) 418-0270. Copies will also be available from International Transcription Service, 445 12th Street, S.W., Suite CY-B400, D.C. 20554, or by calling (202) 314-3070.

For more information, contact Bill Howden of the Network Services Division at phone (202) 418-2343, email [Whowden@FCC.GOV](mailto:Whowden@FCC.GOV), fax (202) 418 7220, or TTY (202) 418-0484.

**-FEDERAL COMMUNICATIONS COMMISSION-**