

Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of)
)
Part 68 Waiver Request of) NSD-L-98-154
Alameda Engineering, *et al.*)
)

ORDER ON RECONSIDERATION

Adopted: August 9, 1999

Released: August 9, 1999

By the Deputy Chief, Common Carrier Bureau:

I. INTRODUCTION

1. On September 28, 1995, the Common Carrier Bureau (Bureau) released an order granting the petitions of Alameda Engineering, Inc. (Alameda), and seven other manufacturers of telecommunications equipment, to waive Section 68.312(i) of the Commission's rules for these manufacturers' stutter dial tone detection devices (SDTDDs) (*Alameda Order*).¹ The waivers were granted subject to the SDTDD's ability to meet eight performance conditions.² In the *Alameda Order*, the Bureau indicated that other manufacturers of SDTDDs that met the same eight performance conditions could also obtain waivers of Section 68.312(i) for their SDTDDs.³

2. On October 30, 1995, VoiceWaves, Inc. (VoiceWaves) and Southwestern Bell Telephone Company (SBC) filed Petitions for Reconsideration of the *Alameda Order*.⁴ Since the

¹ Part 68 Waiver Request of Alameda Engineering, Inc., et al., *Order*, 10 FCC Rcd 12135 (Com. Car. Bur. 1995) (*Alameda Order*).

² See para. 8, *infra*.

³ *Alameda Order*, 10 FCC Rcd at n.73.

⁴ See Commission Seeks Comment on Petitions for Reconsideration of Order Granting Part 68 Waiver for Stutter Dial Tone Detection Devices, *Public Notice*, DA 95-2443 (Com. Car. Bur. Dec. 8, 1995). BellSouth, Colonial Data Technologies Corp. (Colonial), Sprint, and TT Systems, Inc. filed comments to the VoiceWaves petition; NYNEX, Sprint, and VoiceWaves filed reply comments. BellSouth, Sprint and VoiceWaves filed comments to the SWB petition; VoiceWaves filed reply comments.

Alameda Order was released, we have granted waivers to numerous Petitioners,⁵ subject to whatever action is taken in this proceeding.⁶ In this order, we deny SBC's petition, grant one portion of VoiceWaves' petition, and deny the other portion. On our own motion, we also modify one of the eight performance conditions set forth in the *Alameda Order*.

II. BACKGROUND

3. Manufacturers of customer premises equipment (CPE) must comply with Part 68 of the Commission's rules before their equipment can be attached to the public switched telephone network (PSTN). Compliance with Part 68's technical and procedural requirements assures telecommunications carriers that connection of CPE will not cause harm to the network.⁷ Part 68's registration process requires all manufacturers of telecommunications equipment to submit their CPE to an independent laboratory for

⁵ Part 68 Waiver Requests of ConsumerWare, Inc., Fans Telecom, Inc., Marstech Limited, and Viking Electronics, Inc., *Order*, 11 FCC Rcd 3040 (Com. Car. Bur. 1996); Part 68 Waiver Request of Practical Telephony Corporation, *Order*, 11 FCC Rcd 5365 (Com. Car. Bur. 1996); Part 68 Waiver Requests of SNI Innovation and Xinex Networks, *Order*, 11 FCC Rcd 13824 (Com. Car. Bur. 1996); Part 68 Waiver Requests of Big Island Communications, Inc., Maxon America Inc., Mitel Corporation, Morco Enterprises, SoloPoint, Inc., and TT Systems Corporation, *Order*, 12 FCC Rcd 950 (Com. Car. Bur. 1997); Part 68 Waiver Request of Northern Telecom, *Order*, 12 FCC Rcd 1831 (Com. Car. Bur. 1997); Part 68 Waiver Request of Ameriphone, Inc., *Order*, 12 FCC Rcd 4941 (Com. Car. Bur. 1997); Part 68 Waiver Request of Lucent Technologies, Inc., *Order*, 12 FCC Rcd 6015 (Com. Car. Bur. 1997); Part 68 Waiver Request of Casio Phonemate, Inc., *Order*, 13 FCC Rcd 7864 (Com. Car. Bur. 1998); Part 68 Waiver Request of Aastra Technologies, Inc., Cybiotronics, Ltd., Matsushita Electric Corp. of America, and Northern Telecom, Inc., *Order*, 13 FCC Rcd 9053 (Com. Car. Bur. 1998); Part 68 Waiver Request of Ampac Telecom, Inc., Northern Telecom, Inc., and Unical Enterprises, Inc., *Order*, 13 FCC Rcd 2912 (Com. Car. Bur. 1998), Part 68 Waiver Request of IntelliData Technologies Corporation and Thomson Consumer Electronics, Inc., *Order*, 13 FCC Rcd 10940 (Com. Car. Bur. 1998); Part 68 Waiver Request of Ampac Telecom, Inc., Northern Telecom, Thomson Consumer Electronics, Inc., and Tottori Sanyo Electric Co., Ltd., *Order*, 13 FCC Rcd 16830 (Com. Car. Bur. 1998); Part 68 Waiver Request of Thomson Consumer Electronics, Inc., *Order*, 13 FCC Rcd 19611 (Com. Car. Bur. 1998); Part 68 Waiver Request of Home Wireless Networks, Inc., Matsushita Electric Corp. of America, Nor Pac Group, Thomson Consumer Electronics, Inc., and Tottori Sanyo Electric Co., Ltd., *Order*, DA 99-176 (Com. Car. Bur. January 19, 1999); Part 68 Waiver Request of Cybiotronics, Ltd., Integrated Display Technologies, Ltd., Nortel Networks, RadioShack, Sprint Products Group, Inc., and Thomson Consumer Electronics, Inc., *Order*, DA 99-352 (Com. Car. Bur. February 19, 1999); Part 68 Waiver Request of Cybiotronics, Ltd., Matsushita Electric Corporation of America, Nor Pac Group, Inc., RadioShack, Thompson Consumer Electronics, Inc., VTECH Communications Ltd. and VTECH Engineering Canada, Ltd., *Order*, DA 99-1003 (Com. Car. Bur. May 27, 1999); and Part 68 Waiver Requests of Long Well Electronics Corp., Matsushita Electric Corporation of America, Nortel Networks, Uniden Engineering Services, and VTECH Communications Limited, *Order*, DA 99-1489 (Com. Car. Bur. July 29, 1999).

⁶ See, e.g., Part 68 Waiver Request of Casio Phonemate, Inc., *Order*, 13 FCC Rcd 7864, 7866 (Com. Car. Bur. 1998).

⁷ 47 C.F.R. § 68.1.

testing.⁸ If the CPE passes laboratory testing and the manufacturer completes the remainder of the Part 68 registration process, the Commission issues the manufacturer a registration number that the manufacturer must attach to the exterior of each CPE unit.⁹ Upon successful completion of the Commission's Part 68 registration process, the manufacturer may sell its registered CPE for connection to the PSTN.

4. Section 68.312(i) of the Commission's rules states that CPE may not take a subscriber's telephone line off-hook for any purpose other than making or receiving a telephone call.¹⁰ CPE that takes the line off hook for a purpose other than making or receiving a telephone call will fail the Part 68 registration process, unless the manufacturer obtains a waiver prior to filing a Part 68 registration application.¹¹

5. Stutter dial tone (SDT) is a series of short separate tones produced in the telephone company's central office that alerts a voice messaging service (VMS) subscriber that he or she has voice mail. VMS is a central office-based service that offers advanced voicemail features not found on most residential answering machines, making VMS a popular alternative to answering machines. Picking up the handset and hearing the SDT tells a VMS subscriber that the VMS contains a voicemail message. The VMS subscriber may then dial the VMS telephone number, enter a personal identification number, and listen to the voicemail. Some local exchange carriers (LECs) that provide VMS service have found that VMS subscribers prefer a visual indication that they have voicemail messages waiting, in addition to SDT's audible signal.¹² As a result, manufacturers developed a CPE device, the SDTDD, that automatically checks for the presence of stutter dial tone by taking the subscriber's line off-hook and, if a stutter dial tone

⁸ *Id.* §§ 68.100, 68.102.

⁹ *Id.* § 68.300.

¹⁰ *Id.*, § 68.312(i) states:

Registered terminal equipment and registered protective circuitry shall not by design leave the on-hook state by operations performed on tip and ring leads for any other purpose than to request service or answer an incoming call, except that terminal equipment which the user places in the off-hook state for the purpose of manually placing telephone numbers in internal memory for subsequent automatic or repertory dialing shall be registrable. Make-busy indications shall be transmitted by the use of make-busy leads only as defined in §§ 68.3 and 68.200(j).

¹¹ *See id.* *See also* 47 C.F.R. § 1.3 for the general rule concerning waivers.

¹² *See, e.g., Ex parte* letter from Alan Cort, NYNEX, to Acting Secretary, FCC, May 29, 1997.

is detected, causes a light to blink to alert the subscriber of the waiting voice mail message.¹³ Because SDTDDs take a subscriber's line off hook for a purpose other than making or receiving a telephone call, they violate Section 68.312(i).

6. In the *Alameda Order*, the Bureau granted waivers to allow equipment manufacturers to apply for Part 68 registration of SDTDDs. In granting such waivers, the Bureau balanced two different Commission policies: protecting the PSTN and promoting the introduction of innovative telecommunications products and services.¹⁴ Although SDTDDs would increase LEC VMS sales,¹⁵ LECs opposed Alameda's petition for waiver of Section 68.312(i) because an increase in off-hook occurrences caused by Alameda's SDTDDs would increase the load on LEC switches and degrade PSTN performance. In response to that opposition, both LECs and manufacturers proposed performance conditions for SDTDDs that would reduce the number and duration of off-hook occurrences.¹⁶

7. In the *Alameda Order*, the Bureau adopted eight performance conditions for SDTDDs designed to limit the number and duration, of off-hook checks by SDTDDs.¹⁷ The performance conditions require that SDTDDs: (1) perform no periodic testing for stutter dial tone; (2) make an off-hook stutter dial tone check no more than once after a subscriber completes a call, and complete the check no earlier than 4 seconds and no later than 30 seconds after the subscriber hangs up; (3) make an off-hook stutter dial tone check after an unanswered call no more than once and do so within 4 minutes after the call; (4) perform no off-hook stutter dial tone checks after an unanswered incoming call if the visual message indicator is already lit; (5) take the line off-hook for no more than 2.1 seconds per stutter dial tone check; (6) synchronize off-hook checks when multiple stutter dial tone detection and visual signalling devices are attached to the same line so that only one check is made per calling event for a single line; (7) do not block dial tone to a subscriber attempting to initiate a call as an off-hook stutter dial tone detection check is occurring; and (8) do not use more than 8 micro-amps of direct current (DC) from subscriber line loop, except that the devices may draw loop DC sufficient to make authorized off-hook checks.¹⁸

¹³ The light that blinks when SDT is detected is called the voice message waiting indicator (VMWI).

¹⁴ *Alameda Order*, 10 FCC Rcd at 12139.

¹⁵ *Id.* at 12137.

¹⁶ *Id.* at 12137-8.

¹⁷ *Id.* at 12139-40.

¹⁸ *Id.* at 12141.

8. Although the Bureau in the *Alameda Order* adopted performance conditions to ensure that SDTDDs would not overburden the PSTN, the Bureau recognized that modification of the conditions might be warranted if the demand for VMS and SDTDDs were larger, or smaller, than predicted, or if the Bureau had more conclusive information about the burden that such devices actually placed upon the PSTN.¹⁹ Accordingly, the Bureau asked carriers and manufacturers to monitor the load that SDTDDs place on the PSTN, and to supply technical information on this load in conjunction with future SDTDD waiver petitions seeking less restrictive conditions.²⁰

III. ANALYSIS AND DISCUSSION

9. VoiceWaves' petition for reconsideration first requests that the Bureau eliminate the 30-second maximum contained in the second of the eight performance conditions. That condition allows the SDTDD to make an automatic check for SDT no earlier than 4 seconds and no later than 30 seconds after a voice mail subscriber terminates a call.²¹ VoiceWaves claims that the change is necessary to conserve network resources, permit fewer missed calls, and allow device manufacturers to meet different customer satisfaction levels.²²

10. All parties that commented on VoiceWaves' first proposal agreed that VMS and SDTDD providers should be allowed to determine how long after termination of a call the stutter dial tone check

¹⁹ *Id.* at 12140.

²⁰ *Id.*

²¹ VoiceWaves Petition at 2-6.

²² *Id.* at 6-7.

is performed, based on what works best for their customers.²³ On the basis of its own analysis of VMS subscriber behavior, Sprint recommended that the SDT check ceiling be moved from thirty seconds to five minutes, to achieve maximum efficiency.²⁴ VoiceWaves opposed this recommendation, arguing instead that the vendor should be able to set the maximum time for the test to occur on the basis of each subscriber's requirement.²⁵

11. In response to VoiceWaves' proposal to lift the 30-second maximum contained in the second SDTDD waiver condition, Colonial and TT Systems recommended that SDTDDs be allowed to perform a second off-hook check after the VMS subscriber terminates a call.²⁶ On reply, Sprint modified its position that the 30-second maximum should be changed to a five-minute maximum, and recommended a different type of two-test scheme. Under Sprint's proposal, the first SDT test would occur at approximately ten seconds after a subscriber terminates a call and hangs up, and the second test should occur at approximately six minutes after a subscriber terminates a call and hangs up.²⁷ VoiceWaves opposed a two-test scheme, arguing, based upon a Bellcore study, that a second test would require significant switching resources.²⁸

12. We find that VoiceWaves' proposal to eliminate the 30-second maximum for SDT checks following termination of a VMS subscriber's call is in the public interest. Eliminating the 30-second maximum will afford SDTDD manufacturers and VMS providers greater flexibility to tailor SDTDD performance to the needs of individual subscribers without placing any greater burden on the PSTN, as the

²³ BellSouth Corporation (BellSouth), Colonial Data Technologies Corp. (Colonial), Sprint Local Telephone Companies (Sprint), and TT Systems, Inc. (TT Systems) filed comments to the VoiceWaves Petition; NYNEX Corporation (NYNEX), Sprint, and VoiceWaves filed reply comments.

²⁴ Sprint Comments at 3.

²⁵ VoiceWaves Reply Comments at 3-4.

²⁶ Colonial Comments at 1 (the SDTDD should be allowed to test the line another time within four minutes after the VMS subscriber terminates a call and hangs up); TT Systems Comments at 2 ("this test pattern will more closely resemble the actions of users, should drastically reduce the potential for missed messages and will improve the utility of the device for consumers."); *accord* NYNEX Reply Comments at 2.

²⁷ Sprint Reply Comments at 2.

²⁸ VoiceWaves Reply Comments at p. 2 n.2 (citing a one-page analysis summary prepared by Leonard J. Forys, Bellcore, August 28, 1993); *see* VoiceWaves Further Comments and Request for Waiver of Section 312(k), DA93-1124 (March 23, 1995), attachment 4.

total number of off-hook checks that each device performs will not change.²⁹ As such, VoiceWaves' proposal does not disturb the *Alameda Order's* balance of two objectives, to protect the PSTN and allow the introduction of new equipment and services, because it does not increase the number and duration of off-hook checks over that prescribed in the *Alameda Order*. Accordingly, we will change the second performance condition set forth in the *Alameda Order* to conform with VoiceWaves' first proposal.

13. Moreover, based on the same logic, on our own motion we also eliminate the four-minute maximum incorporated into the third performance condition established by the *Alameda Order*.³⁰ A time limitation on the performance of the SDT, whether 30 seconds following termination of a subscriber's call (as in the second performance condition), or four minutes following the receipt of an unanswered call (as in the third performance condition), restricts neither the number nor the duration of the off-hook checks performed by an SDTDD but only the timing of such off-hook tests, and therefore a timing limitation on off-hook tests does not alter the load on LEC switches or impose any additional burden on the PSTN. Therefore, we believe that elimination of the four-minute maximum in the third performance condition will give SDTDD manufacturers and VMS providers greater flexibility to respond to the demands of their customers, without causing harm to the PSTN.

14. Using the same reasoning, we decline to allow an additional SDT test as recommended by Colonial, NYNEX, Sprint, and TT Systems. As noted by VoiceWaves in its reply comments, a Bellcore study that was a part of the record considered by the Bureau in the *Alameda Order* showed that a second SDT test would substantially increase the load on the PSTN.³¹ The proponents for an additional test neither dispute the findings of the Bellcore study, nor provide any updated or additional information. We therefore conclude, on the record before us, that SDTDDs programmed to make an additional automatic SDT test would create too great a burden on the PSTN.³²

15. VoiceWaves' petition for reconsideration also asks the Bureau to add another performance condition that would require SDTDDs not to interfere with other registered devices, such as facsimile

²⁹ VoiceWaves Petition at 2-6; Sprint Comments at 3; Colonial Comments at 1-2; TT Systems Comments at 1-3.

³⁰ See *Central Florida Enterprises, Inc., v. FCC*, 598 F.2d 37, 48 n.51 (D.C. Cir. 1978), cert. dismissed, 441 U.S. 957 (1979).

³¹ VoiceWaves Reply Comments at 2.

³² See *Alameda Order*, 10 FCC Rcd at 12141.

machines and modems, attached to the same line.³³ Sprint was the only party that filed comments in support of this proposal.³⁴ We note that during the *Alameda* proceeding, VoiceWaves recommended a performance condition that the SDTDD should not interfere with the operation of other equipment such as facsimiles or modems on the same telephone line, and that other equipment should not interfere with the SDTDD.³⁵ In response to this recommendation, the Bureau adopted performance condition seven in the *Alameda Order*: "[the SDTDD] does not block dial tone to a subscriber attempting to initiate a call as an off-hook stutter dial tone detection check is occurring."³⁶ When a subscriber lifts a handset, pushes the "send" button on a facsimile machine, or clicks the mouse on a computer-generated icon to send an e-mail over a modem, the subscriber is attempting to initiate a call, and if the SDTDD performs in accordance with the *Alameda Order's* seventh performance condition, it will not interfere with any other equipment through which the subscriber attempts to initiate a call. Because VoiceWaves and Sprint have not provided any new information that indicates performance condition seven is not preventing interference between SDTDDs and other equipment on the same line, we deny VoiceWaves' second proposal.

16. In its comments on VoiceWaves' petition for reconsideration, Sprint recommended that manufacturers advise subscribers of alternative technologies that offer VMS and visual alerting devices, and asked the Bureau to require that manufacturers place a conspicuous label on the surface of all SDTDDs, "stating the technology used and circumstances under which it works most efficiently."³⁷ In a competitive marketplace such as that which exists for CPE, customers may learn more about alternative VMS technologies through marketing initiatives conducted by carriers and vendors, as well as manufacturers. In this light, we see no basis for imposing a labelling requirement on SDTDD manufacturers of the type suggested by Sprint, and we therefore reject Sprint's recommendation.

17. SBC's petition for reconsideration requests that we require any party that applies for an SDTDD waiver to submit its device to an impartial testing agency for certification that the device complies

³³ VoiceWaves Petition at 6-7.

³⁴ Sprint Comments at 2.

³⁵ *Alameda Order*, 10 FCC Rcd at 12136.

³⁶ *Id.*

³⁷ Sprint Comments at 4. VoiceWaves opposed Sprint's recommendation, asserting that local exchange carriers should educate consumers through less obtrusive means, such as billing inserts. VoiceWaves Reply Comments at 6-7.

with the conditions imposed by the *Alameda Order* before granting the waiver request.³⁸ SBC states that the eight performance conditions contained in the *Alameda Order* for SDTDDs are so essential to protecting the PSTN, that compliance testing should be a prerequisite to apply for a waiver of 47 C.F.R. § 68.312(i).³⁹

18. Sprint and BellSouth supported SBC's petition.⁴⁰ BellSouth added that the pre-waiver compliance testing should include an interpretation of the sixth performance condition, that SDTDDs on the same line must be synchronous not only with other SDTDDs from the same manufacturer, but from all other manufacturers, as well.⁴¹ VoiceWaves filed the only opposition to SBC's petition, arguing that granting SBC's petition: (1) is tantamount to a rule change and would require a rulemaking proceeding, which is beyond the scope of the instant proceeding; (2) unjustifiably singles out SDTDDs for testing beyond what is required for other CPE; (3) duplicates existing Part 68 testing requirements that provide "more than adequate" guarantees that the SDTDD equipment will comply with the eight conditions after the waiver is granted; and (4) would be unnecessarily burdensome to both the Commission and the industry.⁴² VoiceWaves argued against BellSouth's recommendation that the sixth performance condition requires SDTDDs attached to the same line to be synchronized regardless of SDTDD manufacturer, on the ground that it is impossible for manufacturers to know precisely how other SDTDDs operate.⁴³ VoiceWaves contends that the *Alameda Order's* requirement for synchronous testing by SDTDDs on the same line applies to SDTDDs from the same manufacturer.⁴⁴

19. We agree with VoiceWaves that granting SBC's petition will duplicate the testing that already occurs as part of the Part 68 registration process, and we therefore deny SBC's petition. The waivers granted pursuant to the *Alameda Order* do not excuse manufacturers from the Part 68 registration process, which includes testing for conformance with the eight performance conditions set forth by the *Alameda Order* and modified by this *Order on Reconsideration*. SBC's petition for a requirement that

³⁸ SBC Petition at 2-3.

³⁹ *Id.*

⁴⁰ BellSouth Comments at 3; Sprint Comments at 4.

⁴¹ BellSouth Comments at 3.

⁴² VoiceWaves Comments at 2-6.

⁴³ *Id.* at 5.

⁴⁴ *Id.*

equipment be tested once before a waiver is granted, and again before Part 68 registration is granted, is an unnecessary duplication of the existing Part 68 process and therefore not in the public interest. Furthermore, we find that BellSouth's interpretation of the sixth performance condition is not correct, and contradicts the plain language of the *Alameda Order*. Paragraph 31 of the *Alameda Order* states, in part: "[w]e condition the grant of a waiver to Alameda upon its ensuring that *multiple Alameda devices attached to extensions of the same line* synchronize their off-hook checks."⁴⁵ Thus, the *Alameda Order* required only that multiple SDTDDs and visual signalling devices made by the same manufacturer and attached to the same line be synchronized, and does not require manufacturers to design SDTDDs that are synchronized with the SDTDDs of all other manufacturers, as BellSouth suggests.

IV. ORDERING CLAUSES

20. Accordingly, IT IS ORDERED, pursuant to the authority delegated in Section 0.291 of the Commission's Rules, 47 C.F.R. § 0.291, and pursuant to Section 1.429 of the Commission's Rules, 47 C.F.R. § 1.429, the VoiceWaves Petition for Reconsideration IS GRANTED in part and IS DENIED in part, as stated herein.

21. IT IS FURTHER ORDERED, pursuant to the authority delegated in Section 0.291 of the Commission's Rules, 47 C.F.R. § 0.291, and pursuant to Section 1.429 of the Commission's Rules, 47 C.F.R. § 1.429, that the Southwestern Bell Telephone Company Petition for Reconsideration IS DENIED.

22. IT IS FURTHER ORDERED, for the reasons set forth in this order, the second performance condition contained in the *Alameda Order* that manufacturers of stutter dial tone detection devices must meet in order to receive a petition for waiver of 47 C.F.R. § 68.312(i) to apply for Part 68 registration of their stutter dial tone detection devices, is changed to read as follows: (2) make an off-hook stutter dial tone check no more than once after a subscriber completes a call, and complete the check no earlier than 4 seconds after the subscriber hangs-up.

23. IT IS FURTHER ORDERED, for reasons set forth in this order, the third performance condition contained in the *Alameda Order* that manufacturers of stutter dial tone detection devices must meet in order to receive a waiver of 47 C.F.R. § 68.312(i) to apply follows: (3) makes an off-hook stutter dial tone check after an unanswered incoming call no more than once.

⁴⁵ *Alameda Order*, 10 FCC Rcd at 12140-41.

24. IT IS FURTHER ORDERED, pursuant to the authority delegated in Section 0.291 of the Commission's Rules, 47 C.F.R. § 0.291, and pursuant to Section 68.214 of the Commission's Rules, 47 C.F.R. § 68.214, the parties listed in footnote 5, *supra*, that were granted waivers to 47 C.F.R. § 68.312(i) and issued Part 68 registration numbers for SDTDDs, are not required to file a new Part 68 Registration for equipment covered by those waivers as a consequence of this Order on Reconsideration.

FEDERAL COMMUNICATIONS COMMISSION

Yog R. Varma
Deputy Chief, Common Carrier Bureau