

**Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, DC 20554**

In the Matter of

Rules and Regulations Implementing the  
Telephone Consumer Protection Act of 1991

Junk Fax Prevention Act of 2005

CG Docket No. 02-278

CG Docket No. 05-338

**VERIZON'S<sup>1</sup> COMMENTS ON PROPOSED RULES IMPLEMENTING  
THE JUNK FAX PREVENTION ACT OF 2005**

One of Congress' objectives in enacting the Junk Fax Prevention Act of 2005 ("Junk Fax Prevention Act" or "Act")<sup>2</sup> was to ensure that recipients of facsimile transmissions are able to identify the sender of the fax and are able to contact the sender to request removal from the sender's fax list. *See* 47 U.S.C. § 227(b)(2)(D).<sup>3</sup> In crafting rules to implement the Junk Fax Prevention Act, the Commission should amend its current Caller ID rules to require that fax broadcasters transmit the same Caller ID information that is currently required of telemarketers.

Verizon submits these comments to alert the Commission to a growing trend in facsimile advertisements that the Commission should consider in order to meet this congressional

---

<sup>1</sup> The Verizon telephone companies ("Verizon") are the companies affiliated with Verizon Communications Inc. that are listed in Attachment A.

<sup>2</sup> The Junk Fax Prevention Act of 2005, Pub. L. No. 109-21, 119 Stat. 359 (2005).

<sup>3</sup> *See also, e.g.*, S. Rep. No. 109-76 (June 7, 2005) (purpose of legislation was to "[r]equire that senders of faxes with unsolicited advertisements (i.e., "junk faxes") provide notice of a recipient's ability to opt out of receiving any future faxes containing unsolicited advertisements and a cost-free mechanism for recipients to opt out pursuant to that notice."); 151 Cong Rec S3280 (Apr. 6, 2005) (one purpose of the legislation was to "allow consumers to opt out of receiving further unsolicited faxes.").

objective: Caller ID spoofing by fax broadcasters. “Caller ID spoofing” and “spoofing” are terms used to refer to the manipulation of Caller ID data by the originating caller to disguise the true telephone number from which the call has been placed. Spoofers may manipulate Caller ID information to mimic a valid telephone number belonging to another person, or may replace Caller ID information with a patently invalid telephone number, such as 000-000-0000.

Spoofers have used a variety of methods to disguise their Caller ID information. For example, information on how to spoof Caller ID is available on the Internet, on hacker websites, weblogs (“blogs”), and chat boards.<sup>4</sup> An end user that owns a private branch exchange (PBX) can also program the PBX to spoof Caller ID.

Some Voice over the Internet Protocol (VoIP) products also enable customers to spoof Caller ID. Some VoIP providers configure their service such that the same telephone number is transmitted in Caller ID for all of their customers’ calls, and market their service on that basis. For example, Skype promotes its “Skype Out” service with the claim that “We don’t show the person you are calling any number that relates to you.”<sup>5</sup> In addition, some VoIP services permit a customer to change their outgoing Caller ID number by changing a setting directly on the customer’s computer or IP phone.<sup>6</sup>

End users can use one of several third party dialing services on the Internet to spoof Caller ID as well. Examples of dialing services offering spoofing include US Tracers

---

<sup>4</sup> See, e.g., The Art of Hacking Caller ID forum, <http://artofhacking.com/aohbbs/viewforum.php?f=14> (last visited Jan. 18, 2006).

<sup>5</sup> See SkypeOut Help, [http://support.skype.com/index.php?\\_a=knowledgebase&\\_j=questiondetails&\\_i=273&nav=+%26gt%3B+%3Ca+href%3D%27index.php%3F\\_a%3Dknowledgebase%26\\_j%3Dsubcat%26\\_i%3D5%27%3ESkypeOut%3C%2Fa%3E](http://support.skype.com/index.php?_a=knowledgebase&_j=questiondetails&_i=273&nav=+%26gt%3B+%3Ca+href%3D%27index.php%3F_a%3Dknowledgebase%26_j%3Dsubcat%26_i%3D5%27%3ESkypeOut%3C%2Fa%3E) (last visited Jan. 18, 2006).

<sup>6</sup> See, e.g., Ex Parte Email from Jim Paulick to [fccinfo@fcc.gov](mailto:fccinfo@fcc.gov), titled VoIP Technology Allows Easy Caller ID Spoofing, CC Dockets No. 04-36 and 01-92 (filed Jan. 9, 2005).

(<http://www.ustracers.com/outbounddial/overview.aspx>); Telespoof ([www.telespoof.com](http://www.telespoof.com)); and SpoofTel ([www.spoofTel.com](http://www.spoofTel.com)). A customer can go to a spoofing website, enter the customer's telephone number, the telephone number of the person to be called, and the telephone number that the customer would like displayed on the called party's Caller ID. An operator from the spoofing company will call the "originating" customer using one interexchange carrier. The operator will then place a separate call to the called party using a different interexchange carrier, passing the Caller ID information requested by the originating customer, and connect the two calls.

Spoofing becomes a concern with fax solicitations because fax broadcasters often broadcast facsimile transmissions to dialing lists including large numbers of primary residential telephone numbers, rather than fax numbers, while at the same time "spoofing" the sender's Caller ID information. Of course, when fax broadcasters' solicitations are sent to telephones rather than to fax machines, the recipient receives only a phone call transmitting a high-pitched beep. The recipient does not receive the actual fax – and therefore cannot see any opt-out disclosure or contact information that the sender may print on the fax, or even any clues that the advertisement might give as to the sender. Instead, the only information that the recipient has is what appears on the recipient's Caller ID. When fax broadcasters spoof their Caller ID, such recipients have no way of identifying the sender or opting out of future facsimile transmissions.

Over the past year, Verizon has received an increasing number of calls from Verizon customers seeking assistance in stopping unsolicited faxes with spoofed Caller ID numbers. Verizon handles complaints from its customers about unsolicited faxes through its Unlawful Call Centers. The Unlawful Call Centers assist Verizon customers who have received unlawful or harassing telephone calls and faxes. The Unlawful Call Centers also interface with law

enforcement agencies investigating such calls and faxes and assist law enforcement agencies in responding to bomb threats, kidnapping, and other life-threatening situations. *See Horeis et al. Decl.* ¶ 5.<sup>7</sup>

Verizon's Unlawful Call Centers have long been familiar with the practice of "fax blasting." "Fax blasting" is a term used to refer to fax broadcasters' practice of sending large numbers of unsolicited faxes in a short period of time. Fax blasters generally employ automatic dialers on outbound facsimile servers in order to send large volumes of faxes in a short time, often in the middle of the night. The Unlawful Call Centers have been able to identify fax blasting by using Signaling System 7 (SS7) data to detect instances where a single telephone number (whether accurate or spoofed) originates thousands of outgoing facsimile messages that traverse Verizon's network in only a matter of minutes. *See Horeis et al. Decl.* ¶ 7.

In the last year, Verizon has seen an increase in fax blasters using "spoofing" to hide the origination of unsolicited faxes. *See Horeis et al. Decl.* ¶ 9. For example, in mid-September 2005, the Unlawful Call Centers received thousands of complaints that unsolicited facsimile transmissions had been sent in the middle of the night to residential phone numbers -- and hundreds of those complaints involved faxes from the same Caller ID number. On September 19, 2005, the Unlawful Call Centers requested a log of all traffic delivered to Verizon's network with that Caller ID number in the SS7 stream during a ten minute period. Verizon recorded over 10,600 separate transmissions with the same Caller ID number in SS7 in a ten minute span. Periodic monitoring of the SS7 signaling stream has demonstrated that such volumes are not unusual for fax broadcasters. *See Horeis et al. Decl.* ¶ 12. Moreover, Verizon's Unlawful Call

---

<sup>7</sup> Declaration of Paul Horeis, John Lewandowski, James Matteo, and Helen Tarpey, CG Docket No. 05-338 (Jan. 17, 2006), attached hereto as Attachment B ("*Horeis et al. Decl.*").

Centers have found that in the case of fax blasting to telephone numbers, the number that appears in the recipient's Caller ID is most often "spoofed." *See Horeis et al. Decl.* ¶ 8. In the example above, the Caller ID information in each of the 10,600-plus calls in the ten minute span logged on September 19 was spoofed. The number that appeared in recipients' Caller ID was an unassigned number, belonging to no one. *See Horeis et al. Decl.* ¶ 12.

In crafting rules implementing the opt-out provisions of the Junk Fax Prevention Act, the Commission should address the increasing use of Caller ID spoofing by fax broadcasters. The Commission's current rules already require telemarketers to transmit Caller ID information identifying either the telemarketer itself or the seller on whose behalf the telemarketing is conducted and enabling the called party to place a return call during regular business hours to make a do-not-call request. *See* 47 C.F.R. § 64.1601(e). The Commission's rule, however, does not appear on its face to apply to fax broadcasters. *See id.*; 47 C.F.R. §§ 64.1200(f)(4), (6), (7). The Commission should therefore amend section 64.1601(e) to apply to fax broadcasters as well.

The Commission should amend its rules to address fax broadcasters' practice of spoofing their Caller ID information for a number of reasons. *First*, spoofing frustrates individuals' ability to invoke the Act's opt-out provisions, which require that recipients of unwanted fax solicitations be provided sufficient information to contact the sender and request to be put on the sender's "do not fax" list. When faxes are sent to phone numbers rather than to fax machines – a common occurrence – spoofing prevents the recipients from receiving information that would permit them to make an opt-out request.

*Second*, spoofing places a substantial burden on the Unlawful Call Centers (and other carriers' similar facilities), impairing the Centers' ability to address other unlawful calling issues. Customers who repeatedly receive unwanted fax transmissions over their telephones, with no

valid Caller ID information, understandably turn to their telephone company in the hopes that their carrier can provide some remedy. Verizon's Unlawful Call Centers have seen a dramatic increase in the number of customer complaints regarding fax transmissions sent to telephone numbers in recent months. For example, in September 2005, the Unlawful Call Centers received over 5,500 complaints from customers that had received fax transmissions sent to their residential phones, without Caller ID information. The total number of all customer complaints to the Unlawful Call Centers increased 34% in September – with the increase due to the 5,500-plus complaints of unsolicited faxes transmitted to telephone numbers. *See Horeis et al. Decl.* ¶ 13. Unfortunately, because of the fax blaster's spoofing, the Unlawful Call Centers cannot identify the violator and is therefore unable to provide assistance to these customers. Because spoofing alters the SS7 information that contains the calling party number, any attempts by the Unlawful Call Centers to use traps or traces on an individual telephone line will produce the same spoofed number that appears on the called party's Caller ID. All that the Unlawful Call Centers are able to determine is that, in almost all cases, the transmissions originate on a network other than Verizon's. *See Horeis et al. Decl.* ¶ 11.

*Third*, spoofing interferes with enforcement of the ban on unsolicited faxes. Customers that receive fax transmissions on their telephone lines have difficulty reporting junk fax violations, because they cannot use Caller ID to identify the violator. Verizon's Unlawful Call Centers face the same problem. Because neither the recipient nor the terminating carrier is able to identify the source of the unsolicited fax, neither the customer nor the carrier can report the violation to the Commission or state authorities. Spoofing therefore stands as an obstacle to the effective enforcement of junk fax prohibitions.

For all of these reasons, the Commission should amend its rules to prohibit Caller ID spoofing by senders of fax advertisements. In the Junk Fax Prevention Act, Congress directed the Commission to implement regulations requiring fax advertisers to provide recipients the sender's valid contact information so that recipients may ask not to receive any future fax transmissions from the sender. *See* 47 U.S.C. § 227(b)(1)(C)(iii), (b)(2)(D); NPRM ¶¶ 19-23. In considering what information fax advertisers must transmit so that recipients may opt out of future fax transmissions, the Commission should recognize that written disclosures on the faxes themselves will not provide a remedy to those who receive unsolicited fax transmissions delivered to their telephones. The Commission should therefore amend 47 C.F.R. § 64.1601(e) so that the Caller ID rules that govern telemarketers apply to fax broadcasters as well.

**CONCLUSION**

For the foregoing reasons, the Commission should amend 47 C.F.R. § 64.1601(e) to include fax broadcasters within its Caller ID rules.

Respectfully submitted,



Karen Zacharia  
Amy P. Rosenthal  
Verizon  
1515 North Courthouse Road  
Suite 500  
Arlington, VA 22201-2909  
(703) 351-3175

Counsel for Verizon

Michael E. Glover  
Of Counsel

Date: January 18, 2006

THE VERIZON TELEPHONE COMPANIES

For purposes of this filing, the Verizon telephone companies are the local exchange carriers affiliated with Verizon Communications Inc. These are:

Contel of the South, Inc. d/b/a Verizon Mid-States  
GTE Southwest Incorporated d/b/a Verizon Southwest  
Verizon California Inc.  
Verizon Delaware Inc.  
Verizon Florida Inc.  
Verizon Maryland Inc.  
Verizon New England Inc.  
Verizon New Jersey Inc.  
Verizon New York Inc.  
Verizon North Inc.  
Verizon Northwest Inc.  
Verizon Pennsylvania Inc.  
Verizon South Inc.  
Verizon Virginia Inc.  
Verizon Washington, DC Inc.  
Verizon West Coast Inc.  
Verizon West Virginia Inc.

**Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, DC 20554**

In the Matter of

Rules and Regulations Implementing the  
Telephone Consumer Protection Act of 1991

Junk Fax Prevention Act of 2005

CG Docket No. 02-278

CG Docket No. 05-338

**DECLARATION OF PAUL HOREIS, JOHN LEWANDOWSKI,  
JAMES MATTEO, AND HELEN TARPEY**

1. My name is Paul R. Horeis. My business address is 2701 South Johnson Street, San Angelo, Texas. I have been employed by Verizon and its predecessor companies for over 23 years. My current title is Manager – Security Operations. For the past 8 years, I have managed Verizon’s Unlawful Call Center West, located in San Angelo, Texas.

2. My name is John S. Lewandowski. My business address is 201 North Franklin Street, Tampa, Florida. I have been employed by Verizon and its predecessor companies for over 32 years. My current title is Manager – Security Systems. For the past seven and a half years, I have managed Verizon’s telecommunications fraud investigations.

3. My name is James D. Matteo. My business address is 1 East Telecom Parkway, Temple Terrace, Florida. I have been employed by Verizon and its predecessor companies for over 10 years. My current position is lead of the Cyber Intrusion Response Team. In that capacity, I work extensively with the Unlawful Call Centers and Verizon’s fraud investigation groups.

4. My name is Helen C. Tarpey. My business address is 185 Franklin Street, Boston, Massachusetts. I have been employed by Verizon and its predecessor companies for 17 years. My current title is Manager – Security Operations. For the past 7 years, I have managed Verizon’s Unlawful Call Center East, located in Boston, Massachusetts.

5. Verizon has two Unlawful Call Centers. The Unlawful Call Centers assist Verizon customers who have received unlawful or harassing calls or faxes. The Unlawful Call Centers also interface with law enforcement agencies investigating such calls and faxes and assist law enforcement agencies in responding to bomb threats, kidnapping, and other life-threatening situations. The Unlawful Call Center East addresses customer calls and law enforcement inquiries in the former Bell Atlantic serving areas, which include jurisdictions primarily in the east. The Unlawful Call Center West performs the same functions for the former GTE serving areas, which include states primarily in the south and west. Together, the two Unlawful Call Centers employ 56 individuals who are dedicated full-time to addressing issues related to illegal or harassing calls and faxes.

6. One of the issues that the Unlawful Call Centers frequently deal with is “fax blasting.” “Fax blasting” is a term used to refer to the practice of sending large numbers of unsolicited facsimile messages in a short period of time. Fax blasters generally employ automatic dialers and outbound fax servers in order to send large volumes of faxes in a short time.

7. The Unlawful Call Centers can identify fax blasting by studying data from the Signaling System 7 (SS7) stream. When the Unlawful Call Centers have received complaints suggesting that fax broadcasts seem to be originating from a particular Caller ID number, Verizon can create a log file recording all traffic on SS7 including that Caller ID number for a

specified block of time. Notably, the SS7 log file will not necessarily identify the true telephone number where the faxes originated. Rather, the log is based on the telephone number passed as the Caller ID number in SS7, whether that number is accurate or not.

8. Based on Verizon's experience in the Unlawful Call Centers, fax blasters often do not limit their broadcasts to numbers known to serve facsimile machines. As a result, numerous unsolicited facsimile transmissions are sent to telephones, rather than fax machines. When the recipient answers his or her ringing phone, the recipient hears only the high-pitched "beep" that indicates that the sender is attempting to send a fax. In addition, fax blasters often send facsimile transmissions in the middle of the night, and also often use the same dialing list repeatedly during a short period of time, such that the numbers on the dialing list receive numerous facsimile transmissions over a period of a few days or weeks. In most cases, the fax blaster also "spoofs" the Caller ID number, such that the recipient is unable to use Caller ID to identify the sender or to call the sender back and ask not to receive future transmissions.

9. Over the past year, Verizon's Unlawful Call Centers have received increasing numbers of customer complaints resulting from the use of Caller ID spoofing by fax broadcasters that engage in fax blasting. For example, in the single month of September 2005, the Unlawful Call Centers received over 5,500 customer complaints regarding unsolicited facsimile transmissions sent to primary residential telephone lines with spoofed Caller ID information. These unsolicited faxes were sent in the middle of the night, often between midnight and 6 o'clock in the morning, local time. Customers who called the Unlawful Call Centers had generally received multiple attempted faxes over the course of several nights. Because the Caller ID information had been spoofed, these customers were unable to contact the fax broadcaster to ask to be removed from the sender's fax list. In the few cases where customers were able to

reach what appeared to be the fax sender, their calls were directed to a voicemail box for “do not fax” requests, but the voicemail box was already full. Moreover, September’s high volume of fax complaints was not an isolated phenomenon, but rather a reflection of a trend of increasing fax blasting complaints throughout 2005 as compared with prior years.

10. In some cases, the Unlawful Call Centers have been able to determine the content of the fax. In response to a customer complaint, the Unlawful Call Centers can set up a three-way fax system, such that the fax messages that are sent to the customer’s telephone line are forwarded to a fax machine in the Unlawful Call Centers. The faxes that the Unlawful Call Centers receive as a result are commercial advertisements, generally for penny stocks, mortgage rates, vacations, and the like.

11. Verizon’s ability to investigate complaints of unsolicited facsimile advertisements is frustrated when the fax broadcaster spoofs Caller ID. Spoofers alter the calling party number information in the SS7 stream. As a result, any attempts by the Unlawful Call Centers to use Call Trace or manual trapping to identify the sender will produce the same spoofed number that appears on the called party’s Caller ID. All that the Unlawful Call Centers are generally able to determine from the SS7 data is that a large number of messages were transmitted using the same spoofed Caller ID number, and that the messages almost always originated on another carrier’s network. Although Verizon can often identify the carrier that handed the traffic to Verizon, there is no way for Verizon to determine whether the facsimile broadcast originated on that carrier’s network, or merely passed through that carrier’s network on its way to Verizon.

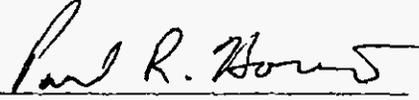
12. An example from a single night in September 2005 illustrates the magnitude of the fax blasting and spoofing problems faced by Verizon’s customers and Verizon’s Unlawful Call Centers. In mid-September, the Unlawful Call Centers received hundreds of complaints that

unsolicited facsimile transmissions with the same Caller ID number had been sent in the middle of the night to residential phone numbers. On September 19, 2005, the Unlawful Call Centers requested a log of all traffic delivered to Verizon's network with that Caller ID number as the calling party number in the SS7 stream during a ten minute period. Verizon recorded over 10,600 separate transmissions with the same Caller ID number in SS7 in a 10 minute span. Periodic monitoring of the SS7 signaling information has demonstrated that such volumes are not unusual. Verizon frequently observes thousands of transmissions originating from spoofed telephone numbers in only a matter of minutes. Moreover, the Caller ID information in each of the 10,600-plus calls in the 10 minute span on September 19 was spoofed. The number that appeared in recipients' Caller ID was an unassigned number, belonging to no one.

13. Fax blasting, particularly when combined with Caller ID spoofing, has been a major source of irritation for customers for approximately the past year, as evidenced by the number of complaints the Unlawful Call Centers receive about unsolicited faxes with missing or invalid Caller ID information. Fax blasting and spoofing also impose a substantial burden on Unlawful Call Centers such as Verizon's, which are inundated with complaints about these types of illegal faxes. For example, in September 2005, Verizon's Unlawful Call Centers fielded 34% more customer complaints than in an average month in prior years – with the increase attributable to the over 5,500 complaints about these kinds of illegal faxes. Other months in 2005 saw similar increases in fax complaints over prior years. Addressing such complaints consumes substantial resources, as the Unlawful Call Centers attempt to compile do-not-fax lists based on customer complaints and forward them to the carriers from which Verizon receives this unwanted traffic, in the hopes that the upstream carriers will pass the information on to either its fax broadcaster customers or to the next carrier upstream.

I declare under penalty of perjury under the laws of the United States of America that the foregoing is true and correct.

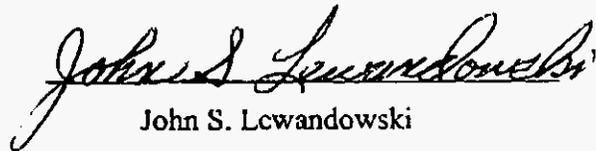
Executed on January 16, 2006

A handwritten signature in cursive script, reading "Paul R. Horeis", written over a horizontal line.

Paul R.Horeis

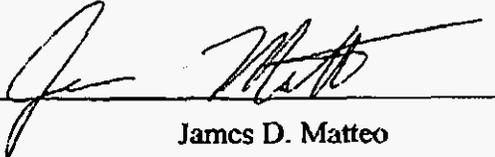
I declare under penalty of perjury under the laws of the United States of America that the foregoing is true and correct.

Executed on January 17, 2006

  
John S. Lewandowski

I declare under penalty of perjury under the laws of the United States of America that the foregoing is true and correct.

Executed on January 16, 2006



James D. Matteo

I declare under penalty of perjury under the laws of the United States of America that the foregoing is true and correct.

Executed on January 16, 2006



Helen C. Tarpey