



InCharge Systems Inc.  
1128 20th ST, West Des Moines, IA 50265  
February 8, 2012

The Honorable Senator Jeff Merkley  
313 Hart Senate Office Building  
Washington, D.C., 20510

Dear Senator Merkley:

Your recent letter to Federal Communications Commission (FCC) Chairman Julius Genachowski requesting more stringent enforcement of the Truth in Caller ID Act addresses both a substantial public risk resulting from Caller ID spoofing, as well as the significant challenge facing the FCC regarding enforcement of the Rules and Regulations Implementing the Truth in Caller ID Act of 2009. On behalf of my firm, InCharge Systems, Inc., I highlighted many of these same concerns in my April 13, 2011 Comments to the FCC Notice of Proposed Rulemaking (NPRM),<sup>1</sup> while also proposing a potential solution.

As your letter correctly observes, “technology exists which allows these laws to be circumvented.” For this reason, in the Conclusion of my NPRM comments, I advised:

... spoofing of Caller ID is a serious problem today that is certain to grow in frequency and severity, consistent with the ongoing deployment of successor VoIP technologies, which facilitate attack vectors utilized by bad actors. Due to the wide availability of attack tools, coupled with the ease with which attackers are able to maintain anonymity, it should be expected that regulations designed to be preventative will need to go beyond reactive prohibitions in order to achieve the desirable intended results.

This forms the basis of the enforcement challenge currently facing the FCC.

However, my FCC NPRM response also suggested adoption of an existing standards-based technological solution that enables relying parties to know if the received caller ID information has been manipulated. This solution relies on originators of interconnected VoIP calls assigning a cryptographic signature as part of the originating call request. These digital signatures can authenticate an originator’s caller ID information, and can be validated anywhere along the call path, including by the recipient of the call, as well as by transport or terminating network providers.

Such a solution could provide significant preventative benefits related to the problems you cited in your letter.

When submitting its June 21, 2011 “Caller Identification Information in Successor or replacement Technologies” Report to Congress,<sup>2</sup> the FCC cited this “digital signature” solution in paragraphs 43 and 44 as an industry-consensus solution for authenticating caller ID, very similar to methods we use today to authenticate web sites or emails. Equally as important, the Commission goes on to say that this solution, if deployed, could be valuable for law enforcement and public safety purposes as well.

<sup>1</sup> WC Docket No. 11-39, FCC 11-41, <http://fjallfoss.fcc.gov/ecfs/document/view?id=7021237895>.

<sup>2</sup> DA 11-1089, <http://www.fcc.gov/document/caller-id-information-successor-or-replacement-technologies>.

In conclusion, perhaps of greatest concern is that there is no reason to believe the escalation of Caller ID spoofing attacks that have been observed since the adoption of Rules and Regulations to Implement the Act won't continue to grow in both frequency and severity. Regulations that rely on legislative prohibitions and resulting penalties for violation have been obeyed by legitimate users, but largely ignored by the bad actors toward whom the legislation is directed, which has limited the impact and benefits of the current rules.

The FCC recognized this risk in paragraph 51 of its June 21, 2011 Report to Congress by advising:

Congress and the Commission will have the opportunity to determine whether the current rules are sufficient to deter malicious caller ID manipulation ... with a particular eye toward identifying those aspects for which regulation may be required to prevent misuse or abuse.

By providing the FCC with the authority to implement preventive regulations, i.e., requiring a digital signature when a call is originated, Congress could in fact facilitate significant mitigation of the attacks from which The Truth in Caller ID Act was originally designed to provide protection.

I and my associates at InCharge Systems would welcome an opportunity to further discuss this solution and the additional public benefits that could be derived from its implementation.

Respectfully submitted,

Warren Bent

---

Warren Bent  
Vice President, Business Development  
InCharge Systems, Inc.  
724 Duane Street  
Glen Ellyn, IL. 60137  
[warrenbent@inchargesys.com](mailto:warrenbent@inchargesys.com)  
+1.630.474.9451

Cc: The Honorable Senator Al Franken  
309 Hart Senate Office Building  
Washington, DC 20510

Julius Genachowski, Chairman  
Federal Communications Commission  
445 12th Street SW  
Washington, DC 20554