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VIA ECFS

September 16, 2011

Marlene H. Dortch, Secretary
Federal Communications Commission
445 12th Street, S.W., Room TW-A325
Washington, D.C. 20554.

Re: **WC Docket Nos. 10-90, 07-135, 05-337, 03-109, CC Docket No. 01-92, 96-45, and GN Docket 09-51.**

Dear Ms. Dortch:

The recent Public Notice [1] sought comment on various components of the ABC Plan with regard to the transition to implementation of a low, uniform default rate for voice traffic, including whether particular aspects of the plan would perpetuate incentives for arbitrage schemes.

We agree with those commenters who suggest that, during the transition, the arbitrage danger which concerns the FCC is largely a result of differences between interstate and intrastate access rates, and that until the aforementioned rate is uniform across all providers and all jurisdictions, then “... *problems like ‘phantom traffic’ and ‘traffic pumping’ based on assessing different rates for transporting and terminating a call depending on the originating point of the call, the technology used, and the regulatory status of the carrier delivering the call ...*” [2] will persist and could potentially exacerbate the very issues the Commission is attempting to resolve in this proceeding.

Until a uniform rate has been fully implemented, the necessity to differentiate between IP and TDM originated traffic will be paramount. There are others who agree:

Time Warner says: “It is therefore imperative that the Commission first address the issue of traffic identification if it intends to adopt the ABC Plan’s proposal. Such action is critical to ensuring that the unique treatment of ‘VoIP traffic’ during the ICC transition does not perpetuate rate disputes and arbitrage schemes designed to allow providers to avoid their intercarrier compensation obligations.” [3]

The VON Coalition notes: “None of the plans, however, offers a clear explanation as to how carriers are expected to separately identify IP from TDM traffic, a somewhat

ludicrous exercise because most traffic is expected to originate in IP format in the near future. Failure to adequately address this question invites fraud and arbitrage.” [4]

The NTCA, included as part of their recent Ex Parte filing arguably agrees, suggesting this should be part of step one: *“Address ‘phantom traffic’ problems: phantom traffic rules would preclude the use of intermediate numbers to disguise a toll call as local for purposes of avoiding access charges.” [5]*

In light of market and technological changes, InCharge Systems (ICS) believes that effective reform and modernization of the inter-carrier compensation (ICC) system is predicated on adoption of a trustworthy mechanism for identifying the origination source of network traffic. Absent an enforceable mechanism to differentiate TDM versus IP originated traffic, arbitrage incentives that are contrary to the Commissions stated reform objectives will exist, if not be magnified. To date, the Commission has remained vague on this fundamental issue.

By contrast, in a related recent proceeding, the FCC has been much more specific regarding the source of the above referenced problem, as well as an industry consensus best practice solution for the authentication of traffic origination. As ICS referenced in our initial comments, the Commission includes the following in their recent report [6] submitted to Congress pursuant to the Truth in Caller ID Act of 2009:

- *“The ability to easily manipulate caller identification information is largely a product of the transition to an open system based on IP.”*
- *“Industry-consensus solutions for authenticating caller identification information in IP-based signaling have been defined but are not deployed. They generally rely on proven cryptographic techniques similar to those used to authenticate web sites and email messages.”*
- *“... although this approach would not preclude all caller ID spoofing ... the terminating provider would be able to identify calls for which the calling party information had not been spoofed with a very high degree of certainty. Such a determination would be useful for Caller ID service purposes and particularly valuable for law enforcement and public safety purposes.”*

Additionally, in the Federal Register (Vol. 76, No. 139, Wednesday, July 20, 2011), the Commission states:

“Indeed, we believe that caller ID spoofing done to wrongfully avoid payment of intercarrier compensation charges—whether by the originating provider, an intermediate carrier, or other intermediate entity—would be a violation of our rules.” [7]

Since the Commission expressly acknowledged that spoofing committed to “wrongfully avoid payment of intercarrier compensation charges would be a violation” [8], the recently adopted regulations implementing the Truth in Caller ID Act of 2009 could provide a regulatory framework through which the Commission can discourage originating and intermediary carriers from attempting to use spoofing to reduce or avoid ICC obligations. However, reliance on

regulatory prohibitions alone fails to provide a trustworthy detection mechanism. As a result, the probability is high that such regulations will continue to be circumvented by those who are financially incented to engage in arbitrage by the proposed tariffing framework. Therefore, it is clear that successful implementation of the proposed ICC tariffing framework is dependent on the Commission's adoption of a technological mechanism to detect violations.

The current proceedings offer the Commission a unique opportunity to mandate adoption of the type of cryptographic solution the Commission referenced in its initial *USF-ICC Transformation NPRM* (FCC 11-13, paragraph 627 and note 966). Coupling a requirement for originators of interconnected VoIP calls to assign a cryptographic signature as part of the originating call request with deployment of specified trunks to identify certain kinds of traffic when routing calls could differentiate between IP and TDM originated traffic anywhere along the call path, including transport or terminating network providers.

In conclusion, ICS shares in the pervasive industry consensus surrounding the Commission's objectives to modernize the existing ICC regulatory framework. A solution such as the one outlined above provides a trustworthy and enforceable means for implementing the ICC tariffing framework proposed by the Commission that can form the basis for such regulatory modernization. Failure to do so is likely to fall short of mitigating, and may actually compound, some of the very problems the FCC is seeking to resolve. We strongly encourage the Commission to adopt measures incorporating the above views.

Thank you.

Respectfully submitted,

/s/ Michael D. Hamilton

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References:

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- [2] <http://fjallfoss.fcc.gov/ecfs/document/view.action?id=7021705243>
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