

May 16, 2007

Marlene H. Dortch
Secretary
Federal Communications Commission
445 12th Street SW
Room CY-B402
Washington, D.C. 20554

Ex Parte Submission

RE: CC Docket No. 01-92, *In the Matter of the Missoula Intercarrier Compensation Reform Plan; Missoula Plan Phantom Interim Process and Call Detail Records Proposal*; Written *Ex Parte* supporting consideration of FeatureGroup IP's Universal Tele-traffic Exchange by Google and pulver.com

Dear Ms. Dortch:

This joint written *ex parte* is submitted by Google Inc. and pulver.com, Inc. (“Non-Geographic Voice Application Providers”).¹ The NGVA Providers encourage the Commission to issue a public notice requesting comments on the Universal Tele-traffic Exchange (the “UTEX”) “method to uniquely identify, represent and allow callback to an Internet endpoint from the Legacy Public Switched Telephone Network” provided by FeatureGroup IP.² The method outlined by FeatureGroup IP appears to have real technical merit, and warrants an open discussion by the stakeholders and full consideration by the Commission. As part of that process, the parties also could address coordinated network planning and standards development, and propose any additional or competing technical solutions.

The UTEX presents a technically sound method to provide local exchange carriers (“LECs”) with information about the identity of a party, using non-legacy technology that initiates a call session involving the public switched telephone network (“PSTN”) at one or more endpoints. It does so by representing Internet-based addresses within the Legacy SS7 protocol, rather than forcing Internet networks to emulate legacy addressing. Legacy networks can recognize and act on this information if they look for the “SS7 ISUP Internet Address Parameter” described in the specification. Such networks will be able to use that information for whatever purpose are deemed appropriate – subject, of course, to applicable

¹ Non-Geographic Voice Application Providers are a type of end user, characterized by three criteria: 1) We are not telecommunications carriers, nor do we have carrier affiliates; 2) Our VoIP services are not tied to terrestrial geography but instead to a unique user identity (i.e. e-mail address), and; 3) Running our applications via Internet-based technology obviates the need for per transaction business models since the application transactions have marginal costs at or near zero.

² Written *Ex Parte* dated March 28, 2007, Docket 01-92, providing cover letter and technical description of the “Universal Tele-traffic Exchange” or “UTEX.”

regulatory rules and/or their interconnection agreements with other carriers. The specification will also have the salutary benefit of supporting call-back (Call Return) from the PSTN to Internet endpoints that do not have E.164 addresses. Further, this method will expand interoperation of CPN-based features, functions and services (including the Privacy Indicator) now available on the PSTN so they can transparently work when one or more endpoints are Internet-based. This proposed approach appears to be superior to the LECs' insistence that new technology services and providers must shoehorn legacy addressing and signaling capabilities into their more modern architectures and protocols purely for regulatory reasons when Internet-based VoIP application and service providers have no "service-driven reason to incorporate such capability" into their operations, especially where, as here "implementation would impose substantial costs retrofitting Digital Voice into a traditional voice service model for the sole purpose of making it easier to apply traditional voice regulations."³ Memorandum Opinion and Order, *In the Matter of Vonage Holdings Corporation for Declaratory Ruling on Order of the Minnesota Public Utilities Commission*, WC Docket No. 03-211, FCC 04-267, 19 FCC Rcd 22404 ¶ 29 (rel. Nov. 2004).

Sections 256(a)(1)(B) and (d) of the Communications Act of 1934, as amended, require that the Commission ensure the ability of users and information providers to seamlessly and transparently transmit and receive information between and across telecommunications networks on an integrated basis and without degeneration. The CPN requirement proposed by the LECs would impose obligations that are not seamless, transparent or reasonably integrated; instead, they would lead to degeneration because legacy protocols are imposed on modern networks. Further, the LECs' proposed rule would functionally require every Internet-based user desiring to communicate with the PSTN to obtain one (or perhaps many) telephone numbers, thereby contributing to number exhaust. This ILEC proposal runs afoul of the economic principles supporting the statutory policy of interoperation.⁴ Under the UTEX, on the other hand, Internet-based users could

³ There is a significant question as to whether any CPN requirement passes muster under Section 157 of the Communications Act because of its impact on new technology providers. The UTEX allows for interoperation without requiring ten digit CPN (as proposed by the interim Missoula Plan supporters), and without exhausting numbering resources for legacy services. From a public policy perspective, the UTEX solution appears superior to the interim Missoula Plan solution. However, we concede that there may well be other technical solutions, or even a modified UTEX solution, that would be more forward looking.

⁴ The economic principle promoting interoperability to obtain a "network of networks" is commonly referred to as Metcalf's Law or Reed's Law. A recent interview with David Reed commented on the use of numbering resources with respect to public policy (March 12, 2003 article by David Weinberger titled *The Myth of Interference*):

Here Reed is dogmatically undogmatic: "Attempting to decide what is the best architecture before using it always fails. Always." This is in fact a one-line recapitulation of the end-to-end argument he and his coauthors put forward in 1981. If you want to maximize the utility of a network, their paper

fully interoperate with the PSTN without the need to obtain or use any legacy phone number, thereby allowing new technology and the new technology end points to define capabilities without harmful government or ILEC requirements.

The UTEX specification will give LECs the information they claim they need to obviate or significantly reduce the so-called “Phantom Traffic” user identification issue. The LECs can then use that information to apply whatever billing or rating is supported by current tariffs and/or interconnection agreements. In turn, the Commission can continue its focus on integrated, holistic reform of the intercarrier compensation system, one that allows and supports many different business models. In our view, this approach makes far more sense than rushing to implement a piecemeal, one-sided and costly technical requirement that will benefit only a small group of carriers while thwarting new technology uses and business models.

The NGVA Providers respectfully request that the Commission promptly issue a public notice requesting comment on the UTEX. As part of this notice, the Commission should specifically seek input on whether the Commission should invoke Section 256(b) of the Communications Act, and establish or sponsor joint planning by end users and the carrier sector to facilitate implementation.

Thank you for your attention to this issue.

Sincerely,

/s/

Richard Whitt

Richard S. Whitt
Washington Telecom and Media Counsel
Google Inc.
1001 Pennsylvania Avenue, NW

maintained, you should move as many services as feasible out of the network itself. While that may not be as counterintuitive as the notion of photons not occupying space, it is at least non-obvious, for our usual temptation is to improve a network by adding services to it.

That's what the telephone companies do: They add Caller I.D., and now their network is more valuable. We know it's more valuable because they charge us more for it. But the end-to-end argument says that adding services decreases the value of a communications network, for it makes decisions ahead of time about what people might want to do with the network. Instead, Reed and his colleagues argued, keep the network unoptimized for specific services so that it's optimized for enabling innovation by the network's users (the “ends”).

Suite 600 South
Washington, D.C. 20004

/s/

Jonathan Askin

Jonathan Askin
General Counsel
pulver.com
115 Broadhollow Road
Suite 225
Melville, NY 11747