



12 October 2010

Comments – Via Electronic Submission

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

*Re: Further Inquiry Into Two Under-Developed Issues in the Open Internet
Proceeding, GN Docket No. 09-191; WC Docket No. 07-52*

Dear Ms. Dortch:

Attached to this letter for submission into the above referenced proceeding is 4G Americas' white paper on *Traffic Management Techniques for Mobile Broadband Networks: Living in an Orthogonal World* (2010), available for download free of charge at http://www.4gamericas.org/documents/3G%20Americas%20Traffic%20Management%20Paper_Final%20Aug%2010%202010.pdf 4G Americas unites mobile operators, vendors and manufacturers in the Americas to provide a single voice representing the Third Generation Partnership Project (3GPP) family of wireless technologies. The mission of 4G Americas is to promote, facilitate and advocate for the deployment of the 3GPP family of mobile broadband technologies throughout the ecosystem – including networks, services, applications and wirelessly connected devices – in the Americas.

The physical layer in mobile networks is subject to a unique confluence of orthogonal influences - unpredictable and unrelated. The attached white paper was written to help educate stakeholders on the importance of traffic management for mobile broadband networks to ensure high quality services to consumers and overall network reliability. Mobile broadband networks have some important differences from fixed networks, which lead to different traffic management requirements. Among the most significant differences for purposes of traffic management is the need for more granular visibility to circumstances on the ground. Optimally, traffic management for mobile broadband networks requires visibility to what is occurring (by device or application) at the cell site level and in a timeframe that enables as far as feasible near-time reactions to resolve issues.

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With the consumer in mind, an End-to-End (E2E) view of mobile service is critical for traffic management. 3GPP has endeavored to standardize increasingly more robust traffic management (Quality of Service, or QoS) techniques for mobile broadband networks with a consumer's E2E view of QoS. Typically, however mobile operators do not have full control over E2E provisioning of services that depend on mobile broadband Internet access.

Global standards organizations like 3GPP play an important role in the development of traffic management through provisions for addressing QoS, particularly regarding interworking with non-3GPP access mechanisms. These are important new innovations, and the attached white paper notes that the efforts of standards development organizations should be intensified.

In addition, the configuration of end-user devices and content and applications not provisioned by the network operator not only impacts the experience of the particular user, but potentially other users in a particular cell as well. Efforts to drive further QoS innovations should be mindful of potentially adverse impacts from these sources and support and foster interoperability of third party applications with existing network platforms. More innovations are needed throughout the mobile broadband ecosystem, in particular by application developers, in order to realize E2E quality of service.

Because of the need for mobile broadband QoS techniques to evolve, we have argued in the past that the Commission should not codify rules governing mobile broadband network management¹. In addition, while 4G Americas supports transparency for customers, transparency in network management practices must ensure the ability of operators to safeguard network reliability. Accordingly, we likewise have counseled against codifying a transparency rule for mobile broadband network management.

Respectfully submitted,

/s/

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¹ See *Reply Comments of 3G Americas*, GN Docket No. 09-191 and WC Docket No. 07-52 (filed Apr. 16, 2010). On September 28, 2010, the association publically announced the changing of the association's name to 4G Americas.