

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of)	
)	
<i>Further Inquiry into Two Under-Developed</i>)	
<i>Issues in the Open Internet Proceeding</i>)	
)	
Preserving the Open Internet)	GN Docket No. 09-191
)	
Broadband Industry Practices)	WC Docket No. 07-52

JOINT REPLY COMMENTS OF VARIOUS
ADVOCATES FOR THE OPEN INTERNET

November 4, 2010

Comments on Advancing Open Internet Policy
Through Analysis Distinguishing Open Internet from
Specialized Network Services¹

¹ Available online at: <http://www.scribd.com/doc/41002510/On-Advancing-the-Open-Internet-by-Distinguishing-it-from-Specialized-Services>

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Through Analysis Distinguishing Open Internet from
Specialized Network Services**

Table of Contents

Recognizing a Key Principle.....	2
Defining the Distinction is Key.....	2
Insight and Analysis Serve Policy Goals.....	3
Understanding the Interplay of the Open Internet and Specialized Services.....	3
On Open Networking Policy and Research in New Networking Technologies.....	3
Recognizing How the Internet Brought General Purpose Networking to All.....	4
Beyond Various Policy Options.....	4
On Specialized Services Bypassing or Supplanting Open Internet Connections.....	5
On Reasonable Network Management and Specialized Services Inhibiting Performance of the Internet.....	6
In Conclusion.....	6
Signed.....	7

Recognizing a Key Principle

We are advocates of diverse policy approaches to preserving an open Internet. In these comments, we wish to highlight one principle which this NPRM exhibits, which represents a key advance in how the open Internet issue is articulated in policy-making channels. This principle is embodied in your treatment of the Internet as distinct from managed or specialized services.

While we have diverse views about the overall policy approach that the assurance of the open Internet entails, we note here that separating the Internet from specialized services is a dramatic advance in the discussion, one that is very helpful on its own terms to understanding the implications of various concerns surrounding this issue -- notably those you enumerate in this NPRM.

Defining the Distinction is Key

In these comments we describe some of the implications associated with these concerns, and in so doing we offer some illustration why this distinction needs to be defined clearly. In particular, the Internet should be delineated from specialized services specifically based on whether network providers treat the transmission of packets in special ways according to the applications those packets support. Transmitting packets without regard for application, in a best efforts manner, is at the very core of how the Internet provides a general purpose platform that is open and conducive to innovation by all end users.

Open networks may allow for flexibility for "reasonable network management" practices under this rubric -- for instance, temporary exceptions to the principle in order to ameliorate extraordinary and transient disruptions in the availability of capacity to end users; or a reasonable degree of transient variation from the specific speed or capacity levels that end users understand they have purchased. However, variations such as these will be most clearly and appropriately understood when compared and measured against the distinguishing principle, for open Internet services, of treating packets without regard for application.

Insight and Analysis Serve Policy Goals

We note that analysis according to this distinction is something the FCC can undertake that can definitively further the goal of preserving the advantages of the open Internet, regardless of any questions of the nature and scope of your authority or the particular form of rules you may enforce. Whatever type of policy develops for the open Internet, analysis according to this distinction must continue as a most appropriate and constructive basis for pursuing your policy goals.

Understanding the Interplay of the Open Internet and Specialized Services

This NPRM requests comments regarding concerns that open Internet access might be bypassed or supplanted by specialized services, and that anti-competitive practices might arise related to specialized services. Clear understanding of these concerns has been inhibited by the fact that the nature of the distinction between the Internet and specialized services has up to this point not been appropriately acknowledged and taken up in policy-making channels.

On Open Networking Policy and Research in New Networking Technologies

Policy-making channels have highlighted research in new networking technologies based on specialized treatment of packets according to the applications they support, suggesting that these may offer the prospect of effective ways to manage congestion, reduce latency and jitter, and provide for levels of quality of service, as well as product differentiation and pricing models; but until the FCC released this NPRM the tradeoff between specialized services of this type, and the general purpose platform of the Internet, has not been recognized appropriately.

As long as this research has not acknowledged the implications of the distinction between the open Internet and specialized treatment of packets, policy-making channels have not recognized the inherent value of the general purpose platform -- and how this platform reflects the values of openness, free expression, competition, innovation and private investment.

Recognizing How the Internet Brought General Purpose Networking to All

Under Title II rules that were applied when the Internet was initially deployed to the general public, Internet Service Providers (ISPs) on shared lines enabled interoperability and flexibility among all users and applications by applying the principle of digitization, by means of the Internet Protocol, with its transferring of information in highly granular units called packets, transmitted independently of each other and independently of the applications they support. Specialized treatment of packets would risk failing to interoperate with applications offered by end users on other global networks.

Competition among numerous ISPs was massively reduced once Internet connectivity other than copper-based dialup was placed under Title I. However, application-independent transmission of packets remains the key technical means by which general purpose functionality of open networks is made possible, assuring interoperability and flexibility by the same principle of digitization -- though now the dynamic is not maintained by the necessity for diverse ISPs entering the market on shared lines to interoperate with a multitude of independent competitors' routers. Instead, fewer providers are more free to diverge from the principle, experimenting with tailored treatment of packets on the basis of what end users are using them for, needing only to interoperate with global network providers outside the local, state or national regions in which they are dominant and in which they increasingly assert greater private powers over more recently installed lines.

Application-independent transmission of packets describes in technical terms what distinguishes the general purpose platform of the open Internet from specialized services, and serves to clarify that distinction even in circumstances where no rule is applied beyond truthful representation of a service as open Internet access of a certain speed and capacity. More importantly, the cost of any deployment of specialized services to the exclusion of open Internet access can be clearly delineated in terms of access to and availability of a general purpose platform.

This is not to say that stronger regulation is not required, but rather that the analysis and pursuit of effective policy to assure the open Internet has been profoundly advanced by the FCC in their addressing this distinction. Its application allows the impact of specialized service offerings on the availability of the open, general purpose platform to be observed with a clarity that was not available before.

Beyond Various Policy Options

The NPRM also seeks comment on several policy options, the first being establishing a clear definition of Internet service as distinguished from specialized services, the next two assuring clarity through truth in advertising or disclosure policies. What is of most note here is that simply establishing the appropriate definition furthers the goal of preserving the open Internet. The NPRM supplements these options with enforcement of open Internet rules or requiring the provision of a standalone open Internet service, but even regardless of these rules, the policy discussion is advanced markedly simply by recognizing the distinction.

On the specialized services side, the NPRM suggests rules for non-exclusivity or limiting types of specialized services allowed, requiring continued provision or expansion of capacity in open Internet offerings along with specialized services, or prohibiting specialized services from inhibiting open Internet services. But more important at this juncture is recognizing that the availability of a general purpose platform for any end user is the nature of the tradeoff evinced by specialized service offerings.

On Specialized Services Bypassing or Supplanting Open Internet Connections

If a service provides prioritized access to a particular application or endpoint/destination, it is not an open Internet service. Representations as to capacity and speed for the Internet must describe only capacity and speed allocated to Internet service.

While confusion may arise between open Internet offerings and specialized services that appear to provide Internet access, numerous applications will be developed and made available on the general purpose Internet platform, including many that will be designed to function optimally on connections that do not differentiate among packets. These applications would likely advertise their optimality on such a platform. Additionally, the general purpose platform has the characteristic of permissionlessness, and unlike specialized services, is assured of giving subscribers access to innovations freely made available by end users throughout the world, as well as giving subscribers the ability to provide directly to the world the fruits of their own innovation.

A pertinent question becomes whether consumers will demand these properties of the open Internet. Without a clear distinction recognized between Internet and specialized services in policy-making channels, the extent to which this type of demand exists has remained unclear. However, at the level of an individual subscriber, the experience of making special arrangements mediated by the network provider is often quite noticeable. And at a broader level, a general pattern of losing general purpose connectivity of this sort would be a very notable development warranting further, appropriate policy considerations.

Anti-competitive conduct in the sphere of specialized services would only impact the open Internet platform if specialized services supplant the general purpose platform. With the distinction drawn correctly, any movement toward supplanting the open Internet with specialized services would not occur without recognizing it is taking place, or without recognizing the consequences when such a shift occurs, in terms of the stakes that matter: general purpose connectivity to support end user innovation.

Analysis based on drawing this distinction allows these developments to be recognized in terms of their impairing the availability of a general purpose platform, including the prospect for competition through innovation by end users.

On Reasonable Network Management and Specialized Services Inhibiting Performance of the Internet

Specialized services can only inhibit general purpose Internet service by supplanting it at particular times. Providers that do this have intervened in the capacity of open, application-independent packet transmissions that they have sold to their subscribers. This would constitute a misrepresentation in advertising or disclosure.

But more importantly, in a context where a distinction between specialized services and the open Internet is acknowledged, the nature of the need for network management under conditions of congestion cannot be misrepresented: the general purpose platform defined as application-independent packet transmissions, would not require (would exclude in principle) tailored transmission of packets, unless the congestion was caused by less capacity being available than the provider offers to subscribers.

That is, "reasonable network management" would not be confused or misrepresented as being necessitated by the demands of particular applications or by a give and take between specialized or managed service packets and other packets being transmitted on a broadband channel that does not distinguish the two as distinct services. It would only be made necessary by the fact that the capacity represented as available by the providers is not available in fact.

In Conclusion

We hope to have illustrated that even without regard for more definitive regulations which you may implement, your addressing this distinction in itself enables the analysis and pursuit of policy goals to proceed with a profound new level of clarity. If you only establish a mandate to analyze the market in these terms, you will have moved the policy framework forward definitively.

The prospect of technological developments making possible specialized treatment of some applications, without differentiating these practices from Internet service, has obscured the greater value of the general purpose platform that application-independent treatment of packets makes possible.

The social value of a general purpose platform available and accessible to all end users should be obvious. What we observe here is that your introducing the distinction between Internet and specialized services enables us, for the first time, to observe the impact of policy choices and provider practices on availability and access to this type of platform. Even independently of the establishment of more definitive rules, the FCC can act in a manner that furthers the goal of preserving the open Internet simply on the basis of recognition of this distinction in its policy analyses.

Signed

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