Proposal: Internet Platform for Innovation Act
Introduction for Congress
Facing Reality on "Network Neutrality"
Two Types of Neutrality
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Preserve the Internet Standards for Network Neutrality

Facing Reality on "Network Neutrality"

Is there a place for fresh thinking and new recommendations in the infamous "network neutrality" debate? The advocates below suggest there is. In the following document we recommend the prosecution of distorted offerings of Internet connectivity as "deceptive practice."

When several incumbent telephone carriers announced their plans to give preferential treatment to favored Internet sites, a wide range of Internet users and designers felt in their guts that it somehow violated the very meaning of the term "Internet." On the other hand, many of these people feel uncomfortable letting Congress set parameters for Internet service. It is safer to deal with Internet offerings as a market issue, not to legislate fundamental protocols or router behavior.

As a way to break the impasse, we offer the following draft language. We believe the gut feeling -- that one cannot discriminate and still call the service "Internet" -- is founded in reality. The very term "Internet" suggests that participants assume their traffic will be passed without interference; the concept is backed up by over thirty years of standards and ISP behavior.

In effect, under the present circumstances, the system of developing specifications, which involves the writing and review of formal documents known as RFCs, which has held since the beginning of the Internet, would be tossed out by a few large providers and equipment manufacturers and replaced by corporate fiat. The loss of an open, consistent, and predictable platform would also crimp innovation at higher levels.

Thus, we recommend that Congress clarify the meaning of offering Internet connectivity and set up rules for the Federal Trade Commission to enforce the definition.

Signed,

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Legislative Proposal: The Internet Platform for Innovation Act

SECTION 1. SHORT TITLE.

This Act may be cited as the "Internet Platform for Innovation Act".

SEC. 2. FINDINGS.

The Congress finds the following:

(1) The Internet is the most successful means of communication ever developed, connecting people of all walks of life across the globe and enabling unprecedented flexibility in applications and unfettered exchange of information and ideas.

(2) The success of the Internet is built on the establishment of certain commonly observed principles of practice, expressed in "Internet protocols," governing the manner in which transmissions are exchanged. Interoperation among competing Internet providers on the basis of these principles assures that the Internet remains a generic, flexible platform that supports innovation and free expression.

(3) This flexible platform, commonly referred to as the "IP layer" of the Internet, enables users to independently develop innovative applications by devising rules and conventions describing how information transmitted between connected users will be interpreted in order to serve diverse purposes. The vast collection of applications that have been freely created in this manner is commonly referred to as the "application layer" of the Internet.

(4) The Internet protocols that created this architecture have been developed and maintained by globally recognized standards bodies through participatory processes that work to develop optimal engineering designs and establish the consensus necessary for interoperability.

(5) Among the commonly-observed principles of practice that govern Internet transmissions are the following:

a) Transmissions are broken down into small pieces referred to as "packets," comprised of small portions of the overall information useful to the users at each transmission's endpoints. A small set of data is prefixed to these packets, describing the source and destination of each packet and how it is

to be treated.

b) Internet routers transmit these packets to various other routers, changing routers freely as a means of managing network flow.

c) Internet routers transmit packets independently of each other and independently of the applications that the packets are supporting.

(6) These principles governing the IP layer establish a technical behavior that not only assures the platform's flexibility, but also assures its reliability, availability, universal accessibility, and uniform treatment of information flow. The IP layer assures that all applications may compete on a level basis of connectivity, be they commercially developed by a major corporation and made available to millions, or non-commercial applications developed by individuals and offered at no charge.

(7) These principles of practice are commonly understood and recognized as features of existing, commonly-observed communications standards defining the behavior of the Internet transport.

(8) This settled understanding of the Internet, based on an architecture created by well-recognized standards bodies, leading to user expectations about the accessibility and behavior of the Internet, is what "the Internet" has come to mean to users in the United States and around the world.

(9) Network providers who analyze and interpret the types of applications being conveyed within packets at the IP layer in order to offer special service features (including but not limited to prioritized delivery) intrinsically favor particular application designs that they recognize over competing ones. This practice therefore works at odds with the flexibility and other desirable features of the IP layer brought about by the above-described principles of practice. They depend, for their success, on the neutral platform afforded at the IP layer, even as they upset the neutrality of the IP layer to benefit services best offered at the application layer.

(10) Network providers who offer special treatment for specific types of applications by identifying the applications being conveyed by packets, presently face competition from providers who provide neutral networks by means of the above principles, as well as from the diversity of applications, flexibility, uniform treatment of information flow, availability and access made possible by these networks.

(11) If network providers in the United States were given support in legislation for presenting as "Internet" services that diverge from the above global principles of practice, as they offer special treatment of packet transmissions on the basis of identifying particular types of applications, the result would be to:

a) supplant and undermine the consensus authority currently accorded to existing international protocols and standards-making processes;

b) impair innovation and competition by undermining the flexibility and other desirable features afforded by the technical behavior of the Internet transport as described above;

c) deny consumers the expectation of quality and breadth of service globally associated with the Internet; and

d) suppress freedom of speech within the United States, while the people of other nations continue to enjoy unabridged Internet communications.

(12) It is in the national interest to:

a) support the international consensus authority that gave rise to the current IP layer and associated protocols;

b) encourage innovation in the applications layer of the Internet through the flexibility, reliability, availability, and accessibility afforded by the commonly established principles of practice expressed in existing consensus standards for the IP layer; and

c) assure consumers in the United States that the globally accessible and open architecture of the Internet will be preserved even as some Internet access providers may choose to compete in offering additional features to their customers.

SEC. 3. DECEPTIVE PRACTICES IN PROVIDING INTERNET ACCESS.

(1) Definitions.- As used in this Section:

(A) Internet.- The term "Internet" means the worldwide, publicly accessible system of interconnected computer networks that transmit data by packet switching using the standard Internet Protocol (IP), some characteristics of which include:

i) Transmissions between users who hold globally reachable addresses, and which transmissions are broken down into smaller segments referred to as "packets" comprised of a small portion of information useful to the users at each transmission's endpoints, and a small set of prefixed data describing the source and destination of each transmission and how the packet is to be treated;

ii) routers that transmit these packets to various other routers on a best efforts basis, changing routers freely as a means of managing

network flow; and

iii) said routers transmit packets independently of each other and independently of the particular application in use, in accordance with globally defined protocol requirements and recommendations.

(B) Internet access.- The term "Internet access" means a service that enables users to transmit and receive transmissions of data using the Internet protocol in a manner that is agnostic to the nature, source or destination of the transmission of any packet. Such IP transmissions may include information, text, sounds, images and other content such as messaging and electronic mail.

(2) Any person engaged in interstate commerce that charges a fee for the provision of Internet access must in fact provide access to the Internet in accord with the above definition, regardless whether additional proprietary content, information or other services are also provided as part of a package of services offered to consumers.

(3) Network providers that offer special features based on analyzing and identifying particular applications being conveyed by packet transmissions must not describe these services as "Internet" services. Any representation as to the speed or "bandwidth" of the Internet access shall be limited to the speed or bandwidth allocated to Internet access.

(4) Unfair or Deceptive Act or Practice- A violation of paragraphs 2 or 3 shall be treated as a violation of a rule defining an unfair or deceptive act or practice proscribed under section 18(a)(1)(B) of the Federal Trade Commission Act (15 U.S.C. 57a(a)(1)(B)). The Federal Trade Commission shall enforce this Act in the same manner, by the same means, and with the same jurisdiction as though all applicable terms and provisions of the Federal Trade Commission Act were incorporated into and made a part of this Act.

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Two Types of Neutrality

So far, much of the argument over "net neutrality" has been over whether service providers should be allowed to favor one application, destination or Internet service over another. This is Net neutrality at the application layer. But the real issue is the neutrality of the IP layer where routers treat alike bits from every type of application. This neutrality is what makes the Internet flexible -- while it also assures uniform treatment of information flow. If this neutrality is not maintained, the Internet will be changed fundamentally. It will no longer be the flexible, open platform that allows anyone with a good idea to compete on a level ground.

IP-layer neutrality is not a property of the Internet. It *is* the Internet. The Internet is a set of agreements (protocols) that enable networks to work together. The heart of the Internet protocol is the agreement that all data packets will be passed through without regard to which application created them or what's inside of them. This reliable, uniform treatment of packets is precisely what has made the Internet a marketplace of innovation so critical to our economy.

Providers certainly should be allowed to develop services within their own networks, treating data any way they want. But that's not the Internet. If they want to participate in the Internet, they need to follow the protocols that have been developed over the course of more than thirty years through consensus standards processes. Nor should they be permitted to single-handedly subvert the authority of the processes that have developed and maintained the Internet.

We call on Congress to end the confusion and protect not only the Internet but the tens of millions of American citizens who need to know that when they buy Internet access, they're getting access to the ***real*** Internet. Network providers who offer services that depend on violating IP-layer neutrality should be prohibited from labeling those services as "Internet," as their doing so will only undermine the weight of consensus authority presently accorded to the existing standards. The term "Internet" represents specific standards that provide IP-layer neutral connectivity that supports the openness of access and innovation that have been the defining characteristics of the Internet since its origins.

To that end, we present the attached draft legislative language and call for concerned citizens and members of Congress to offer their support for passing it into law.

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Common Carrier and Neutral Communications

For much of the 20th century, the United States and most other nations found it useful to develop a notion of common carriage for communications and a status known as common carrier for the communications providers themselves.

A common carrier had to provide a neutral communications platform. Calls were completed between parties regardless of who they were, what was talked about, the language used, and so on. As long as each party paid its bills on time, it was treated by the carrier as a legitimate and equal user of the network.

On the Internet, where communications travel as packets of data in accord with a universal protocol, every carrier and service provider is, almost by definition, a common carrier. As a network of networks, the very architecture of the Internet demands that packets be routed regardless of who the initiator and recipient of the communications are, whether the communication constitutes information or entertainment, the language used, and so on.

Fears have arisen recently that the nature of the Internet will soon change. Legislation has been proposed that attempts to protect the Internet, and to, it is thought, encroach on it. Generally, such thinking has exhibited a confusion about what the Internet is and how information, ideas, and entertainment are conveyed across it. By and large, all legislative proposals to date have suffered from this confusion, either trying to protect what needs no protection, or trying to alter, by law, the technical standards and protocols by which the Internet operates.

We propose, in their place, a very modest law that would acknowledge some fundamental abstract principles of internetworking as it is practiced today, and place the responsibility for their continued development in the hands of the computer and communications scientists and engineers who have, over the last forty years, designed the most efficient communications platform the world has ever seen.

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Introduction and Summary for Congressional Staff

Attached is a fresh approach to "network neutrality." It recognizes that the Internet is, in fact, neutral. Neither slick promotions offering "premium" or "exclusive" services, nor thoughtful legislation, can change that. Any service offered by one of the many networks that form a part of the "network of networks" called "the Internet" which favors the delivery of some data packets over others based on their content, source or destination, is simply not "the Internet." To pass off access to specially modified networks as "Internet access" is false and deceptive.

In over thirty years of global standards and Internet service provider behavior, Internet participants have come to assume that their traffic will be passed without interference. Because the global "Internet Protocols" of the Internet are based on this concept, neutrality is inherent in it. So, when Congress seeks to preserve network neutrality, it need not do so by "regulating the Internet," as it would be difficult and unnecessary to legislate fundamental global protocols of Internet router behavior. Rather, it is far better to allow Internet-connected services and specially-tailored networks (even if perceived as more valuable to some) to compete freely in the marketplace, regulating those who would misrepresent them as "Internet" services or "Internet access." This has the critical advantage of not allowing the standards to be overridden by these custom modifications. Without standards, there is no competition or ability to connect between networks.

For as long as we have had an Internet, we have also had "local area networks," or LAN's, typically operated within a single company. Today, major network access providers have the capability of offering very large LAN's, and even networks of LAN's, which may look a lot like the Internet to many unsuspecting consumers. If such LAN providers happen to be the only viable choice for Internet access, they will have the power, working with a few major corporations, to replace the Internet access for millions of Americans with access to a "walled garden" containing only such portion of the Internet as they allow, and in which only those companies willing and able to pay will be able to have access – or best access – to their subscribers. It may be the case that some consumers will prefer the more limited access being offered, but such offers must compete on their own merits, and not at the loss of an open, consistent, and predictable platform for the transport of innovative products and services by all. Conversely, if networks that treat applications specially wish to create a global network consistent with their practices, they can enter into appropriate processes and work to develop standards.

Thus, this proposal recommends that Congress authorize the Federal Trade Commission to enforce a prohibition on false and deceptive representations pertaining to "Internet access" while leaving innovative networks free to develop their own proprietary services, so long as their nature is not misrepresented. This approach will enable consumers to make informed comparisons among the Internet access being offered as distinct from other products and services offered by their Internet access providers, while assuring that anyone who purchases true Internet access will get what they bargained for – access to the

	global Internet, unfettered communications throughout the globe, and access by myriad competitors, individuals, advocates, and news sources whose products, services and communications can be made available to them on a level playing field. ***Contact:*** *Seth Johnson* *(212) 543-4266* *seth.p.johnson@gmail.com*