

Preface

Net neutrality is a term that has taken on many apparent meanings and has served to provoke many debates over the past several years. The issues that invoke the use of the term vary depending on geography, economic and business conditions and regulatory environment. A consequence is that the arguments for or against net neutrality may be inconsistent when compared side by side. This year's meeting of the Dynamic Coalition on Network Neutrality is an opportunity to compare notes and observations on the ongoing debate.

In the USA, there is limited competition for provision of broadband Internet access. Historically, the dial-up Internet had many providers (some reports estimated more than 8000 ISPs), but broadband technology tended to be associated with coaxial cable television networks, hybrid fibre/coax, digital subscriber loops on copper (DSL, ADSL, etc.) and fibre to the home (FTTH). The usual providers of these broadband services were traditional telephone companies and television cable companies. Residential subscribers might have a choice of two broadband providers (a telco and a cableco), or perhaps only one of them or, especially in rural areas, no broadband service choice at all.

Alternative access methods including Wireless Internet Service and satellite tended to have limits either with regard to speeds or latency or both. In all cases, the residential services tended to be asymmetric, providing higher speeds in the download direction. In the recent past, some providers, notably Google, have been offering very high capacity in the gigabit per second range in both directions.

After lengthy debates, the American Federal Communications Commission decided to reclassify Internet service as a Title II Telecommunications Service, while forbearing to apply most of the regulations found in that title to the providers of Internet service. This was a controversial decision but understandable, given that court cases disputing the FCC's jurisdiction in the space turned on the earlier decision by the FCC to declare the Internet a vertical information service. The new classification appears to give the FCC authority to respond to potential anticompetitive behaviours by Internet service providers. A risk is that the forbearance might be reverse and a more elaborate regulatory practice might be adopted. Perhaps the most

practical outcome would be a new title in an amendment to the Telecommunications Act that would be specific to Internet and suitably constrained.

In other jurisdictions, while the same term, *net neutrality*, is used, the local regulatory conditions may be different. In some countries, broadband services are provided on a wholesale basis to any party that wishes to use the infrastructure to provide residential customers with access to Internet. In the UK, Australia, the Netherlands and New Zealand, variations on this theme have been undertaken with varying results.

There are also debates about quality of service, fueled by the belief that the Internet should be sensitive to application requirements and provide low latency or high bandwidth, depending on the need. Some take the position that there is no need for special controls for quality of service if the absolute capacity of the access is high enough. Others think that users and application providers should be able to obtain the appropriate quality of service needed for specific applications. It is common, however, to argue that the broadband access providers should not be in a position to selectively extract additional rents from the application and content providers, effectively controlling which application can be used or content providers can be reached and used satisfactorily by users—essentially dictating user choice.

It seems important to preserve the notion that the Internet should support what is sometimes called “permissionless innovation”—that is, that innovators of new applications and services should *not* be forced to conclude some kind of contractual agreement *with every Internet access provider in the world* before a service can be offered. One must accept, however, that some services may work poorly or not at all if adequate capacity is not available to support them.

The conundrum in the net neutrality debate is to fashion incentives for access providers to continue to invest in and upgrade service capacity while preserving user choice and provide incentives for new applications to be brought to the Internet and made accessible to all access subscribers without inhibiting new entrants into the marketplace of Internet services by erecting barriers to their entry.

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