AAU Position on Net Neutrality

AAU supports enactment of net neutrality provisions as part of the current telecommunications reform effort. Such provisions should focus on prohibiting anticompetitive discrimination that constitutes an abuse of market power. Net neutrality provisions should not prohibit all forms of discrimination or differential pricing. Specifically, telecommunications reform legislation should:

- prohibit anticompetitive discriminatory behavior
- permit differential access pricing based on differential performance or quality of service
- prohibit the imposition of new surcharges, separate from access charges, for transporting data over networks.

**Anticompetitive Discriminatory Behavior**

Anticompetitive discriminatory behavior refers to such practices as a network operator blocking or degrading access to a competitor’s content or service, or providing enhanced performance for some entities but refusing to supply a similar level of performance to other entities within a given market. Examples would include a network operator that also provides video content blocking access by its subscribers to the video content of competing video service provider, or providing enhanced performance to one search engine but limiting competing search engines to a lower level of performance.

**Differential Access Pricing**

Differential access pricing refers to network operators providing customers with differentially priced subscription options for differing levels of performance or quality of service—that is, subscribers pay more for better, faster service. Such options exist today and should be continued. They also can provide new sources of revenue to support broadband adoption and build-out as well as pricing schemes for new performance and packaging options.

**Data Transport Surcharges**

A major part of the debate over net neutrality concerns whether broadband network operators should be able to levy a new category of surcharges for the transport of data over their networks in addition to the access fees already paid. Prior to recent Supreme Court and FCC deregulation actions, the Internet generally operated under the common carrier rules that applied to telephone networks: network providers treated all data that flowed over their networks equally and could not apply surcharges for transporting that material.
The Internet continues to operate largely under these practices. Revenue is produced by access charges, and everyone who accesses the Internet pays such charges; this includes independent applications providers—companies like Google, Yahoo!, eBay, and Vonage which are not themselves network operators—which provide content or services over the Internet and pay large sums of money in access fees to multiple network operators.

The removal of the common carrier requirements has eliminated a number of restrictions on network operators and enables them to charge third parties for transporting data over their networks. There are arguments on both sides of the question about whether to permit the imposition of such charges.

**Pro:**
- Permitting such charges could prove beneficial by providing a substantial new source of revenue for broadband adoption and build-out without increasing—and perhaps decreasing—customer access charges. Such charges may also support new innovations in applications, packaging, and delivery of content and services to customers.

**Con:**
- The ability to levy such charges raises the prospect of anticompetitive discriminatory treatment of unaffiliated applications providers—companies that do not have contractual arrangements with network providers for data transport. Such discrimination could occur, for example, by providing fee-based facilitated data transport to one company and providing degraded transport to competitors, or by charging the same fees to all entities within a given market but setting those fees unreasonably high. Such pricing schemes could balkanize the Internet in ways that would threaten the end-to-end operation of the Internet that has been part of the common carrier tradition.

- The proposed new data transport charges could pose specific problems for universities. Currently, a university can reach any site connected to the Internet with no additional contractual arrangements needed beyond its established access terms. However, if network operators are permitted to levy data transport surcharges, universities may have to establish a number of separate contractual arrangements beyond their current network access arrangements in order to reach their destinations. Such a circumstance could greatly complicate distance education, telemedicine, and community outreach services.

Therefore, although recognizing the potential economic benefits of allowing a new category of charges for transporting data over networks, AAU recommends prohibiting such charges, at least until their implementation and impact on consumers and competition is better understood.

**Additional Issues Related to Net Neutrality**

Two additional issues that are part of the net neutrality debate are data prioritization and enforcement. AAU has not taken a formal position on either of these issues.

**Data Prioritization**

Data prioritization refers to network operators prioritizing or offering enhanced quality of service for data of a particular type. Such treatment would, for example, establish priorities for different categories of data in the case of network congestion, or would provide enhanced quality of service for latency-sensitive services such as delivery of video or voice.
Permitting such prioritization or enhanced quality of service is probably good national policy, with two restrictions:

- for the reasons outlined above, network operators should not be permitted to levy data transport surcharges (although quality of service or other enhanced performance is and can be funded through differential access charges—paying more for better, faster access to the Internet), and

- all content in a given market should be given the same priority or quality of service—e.g., if video is given enhanced treatment, all video providers must be granted that same treatment.

**Enforcement**

Enforcement of net neutrality provisions could be carried out through FCC regulation and enforcement or through anti-trust laws, which would involve the Justice Department and the Federal Trade Commission. Since AAU’s position on net neutrality focuses on prohibiting anti-competitive discriminatory behavior, enforcement through the Justice Department’s anti-trust division might be preferred. The FCC’s recent record of interaction with higher education, demonstrating a seeming insensitivity to higher education concerns on CALEA and the proposed change to the formula for generating Universal Service Fund contributions, does not inspire confidence in FCC enforcement. However, concern has also been expressed about the high cost of anti-trust lawsuits.
Comparison of AAU position and net neutrality legislative proposals

House

H.R. 5252 (Barton bill)
Passed by full House — includes four FCC principles governing consumer rights but has the following limitations:
- the principles are worded broadly and subject to varied implementation interpretations
- the FCC is prohibited from developing any rules or regulations governing implementation of the principles
- the principles are silent on the treatment of unaffiliated applications providers

H.R. 5273 (Markey bill)
- permits differential access fees
- prohibits discrimination against unaffiliated applications providers
- permits prioritization and enhanced quality of service for data of a particular type but prohibits surcharges for them and requires comparable treatment of all data of that type
- calls for FCC enforcement

H.R. 5417 (Sensenbrenner bill)
Similar to Markey bill but calls for enforcement through the Federal Trade Commission

Senate

S. 2686 (Stevens bill)
Passed by the Commerce Committee—includes an "Internet Consumer Bill of Rights” which requires network operators to provide access by a subscriber to any unaffiliated applications providers, but includes no restrictions on pricing, portioning bandwidth, or prioritizing data

S. 2917 (Snowe-Dorgan bill)
- similar to Markey and Sensenbrenner bills but limits its requirements to “service made available via the Internet,” which may permit discriminatory treatment for a network operator’s services that are not provided over the public Internet
- failed to pass in Committee by an 11-11 vote
Discussion

**Net Neutrality**

The term network neutrality or “net neutrality” does not describe a clear, unitary concept as its use often implies. Indeed, neither “network” nor “neutrality” carries a commonly accepted, unambiguous meaning. The definition of the Internet is itself much debated. However, net neutrality is generally understood to refer broadly to a set of policies for determining how data traveling over broadband networks is to be treated.

Strong forms of net neutrality call for equal treatment for all data. A corollary to the principle of equal treatment of data is that all revenue for building and managing networks should come solely from charges for accessing the Internet; network operators receive their revenue for building and managing their networks from such access-charge revenue, and additional surcharges for transporting data over their networks should be prohibited.

Weaker forms of net neutrality do not call for the elimination of all forms of discrimination, which could include such current practices as providing different levels of performance for different prices, or providing different quality of service for different categories of data based on the needs of those categories—for example, video and voice data are much more time-delay sensitive than text or data streams. These weaker forms of net neutrality focus instead on the prevention of anticompetitive discriminatory behavior that represents an abuse of market power—for example, when a network operator that also provides video or voice service to its subscribers blocks access by those subscribes to competing video or voice services.

**Does Net Neutrality Require New Legislation?**

A first-order question in the debate over net neutrality is whether new legislation is needed to implement net neutrality or whether market competition and existing regulations and laws are sufficient. Supporters of strong net neutrality uniformly call for net neutrality legislation; some proponents of weaker forms of net neutrality believe the current market and regulatory environment are sufficient to prevent anticompetitive discrimination.

Those policy analysts who argue that FCC authority and existing anti-trust laws are sufficient to address serious discriminatory treatment by broadband network operators are also concerned that enacting statutory restrictions under the rubric of network neutrality legislation could limit revenue for broadband build-out, restrict innovations in developing and packaging new services, and risk other unintended consequences; indeed, last year, the FCC fined a North Carolina network operator that blocked its customers’ access to Vonage. The proponents of net neutrality legislation argue that the Internet developed and flourished under the common carrier policies of telephone networks, and the loss of those policies needs to be addressed through legislation.

The arguments against any legislation include:

- avoiding government regulation that would limit the capacity of network operators to generate revenue needed for broadband build-out,
- the absence of problems arising in current arrangements,
- sufficient market competition to protect consumer interests, and
- the capacity through existing FCC authority and anti-trust laws to control discriminatory behavior that may arise.
The counter-arguments to these four points, which argue for at least some form of legislation, include:

- promoting legislation aimed at prohibiting discrimination but permitting non-discriminatory differential pricing that provides flexibility for revenue generation,
- numerous cases of discriminatory behavior by network operators that have occurred, and statements by some network officials that indicate an intent to seek specific discriminatory pricing arrangements in the future,
- 94 percent of Americans have 0, 1, or 2 choices for broadband access (from a 2004 FCC report), and
- last year’s Brand X Supreme Court decision and the FCC’s parallel deregulation of DSL, combined with recent decisions limiting the domain of anti-trust law (e.g., the Trinko decision), which suggest insufficient capacity under current federal law and regulation to prevent discriminatory behavior.

The balance of the arguments favors enacting focused legislation to prohibit anti-competitive discriminatory behavior. The two-part question then becomes: what legislative provisions are needed to prohibit what behavior?

What Pricing Schemes Should be Permitted?

The net neutrality debate has focused on whether network operators should be able to levy a data transport surcharge on application providers in addition to the access fees already paid. Prior to the Brand X and FCC deregulation actions, the Internet generally operated under the common carrier rules that applied to telephone networks: network providers were required to treat all material that flowed over their networks equally and could not apply surcharges for transporting that material. The removal of the common carrier requirements has eliminated a number of restrictions on network operators and enables them to charge third parties for transporting material over their networks.

The now infamous declaration last year by Ed Whitacre, AT&T CEO, is often cited as launching the net neutrality debate:

Now what they would like to do is use my pipes free, but I ain’t going to let them do that because we have spent this capital and we have to have a return on it. So there’s going to have to be some mechanism for these people who use these pipes to pay for the portion they’re using. Why should they be allowed to use my pipes? The Internet can’t be free in that sense, because we and the cable companies have made an investment and for a Google or Yahoo! or Vonage or anybody to expect to use these pipes free is nuts.

It is not clear what Whitacre is referring to by free use of pipes: no one uses the Internet for free, everyone pays some network provider for access to the Internet, and large firms like Google and Yahoo! pay large amounts of money to multiple providers. What Whitacre is probably referring to is a case where an applications provider has, for example, Verizon as its network provider and needs to use AT&T’s network to get to another end user. Currently, network providers carry each other’s traffic through reciprocal arrangements at no cost to subscribers, but some network operators such as Whitacre are proposing to levy new data transport surcharges for transporting information over their networks.

Most proponents of net neutrality advocate legislation that would restore common carrier requirements, including prohibiting network operators from levying data transport surcharges. The strongest versions of net neutrality policy would also prohibit tiered pricing of network access based on performance or quality of service. The concern by advocates of this position is that such tiered pricing could lead to a set of “fast lanes” available only to large, well-capitalized companies, leaving individual subscribers and small, under-capitalized businesses and start-ups with “dirt roads.” The goal of such a position is a national policy that
charges everyone the same price and, most importantly, guarantees fast lanes to everyone. However, such a policy would likely have one of two undesirable outcomes in terms of revenue generation either by setting prices at a high level that large companies could afford and requiring all others to meet that price, or by holding prices down to the lowest category payer and precluding substantial revenue generation from those who could pay more. Such a policy would be the equivalent of prohibiting the U.S. Postal Service from operating Express Mail, clearly a desirable differential-price-for differential-performance capacity that the Internet should maintain.

Differential access pricing exists now. It seems clear that national policy should support a continuation of differential access pricing based on differing levels of performance or quality of service. What then should be the policy with respect to surcharges for transporting material over networks?

**Data Transport Charges**

Permitting data transport charges could prove beneficial by providing a substantial new source of revenue for broadband adoption and build-out without increasing—and perhaps decreasing—customer access charges. However, such a policy would also result in applications providers unaffiliated with a network operator having to “pay twice”—once for access to the Internet, a second time (or many times across many different network operators) for the transport of data across a network. Since the domain of network operators today is essentially a “duopoly” of telecommunications and cable companies, such a pricing structure would potentially disadvantage all independent applications providers such as Google, Yahoo!, eBay, Vonage, and other VoIP providers.

If such data transport surcharges were permitted, there would be at least two quite different ways of levying such surcharges.

- One non-discriminatory pricing procedure would be to charge all applications providers in a given market, or all data of a given type—e.g., video—the same price. Such a procedure would require a network operator that provided its own video service to charge other unaffiliated video service providers the same price the network operator charges its own customers for such service.

- A different, discriminatory procedure would be to establish contractual arrangements with selected content or service providers for preferential treatment while denying such treatment to unaffiliated competitors of those providers.

The clearest form of such discrimination would be when the network operator which also provides a given service, such as video content, blocks or discriminatorily prices the transport over its network of video content delivered to its subscribers by competing video content providers. A second form of discrimination would be an arrangement where a network operator which does not provide a given service provides preferential treatment for one content provider to the exclusion of other providers in a given market through a closed contractual arrangement. As an example, William Smith, the chief technology officer of BellSouth, was quoted as saying that an Internet service provider such as his firm should be able to charge Yahoo! for the opportunity to have its search site load faster than that of Google.

Whether imposed discriminatorily or non-discriminatorily, the implementation of data transport surcharges could create a serious problem for universities through the addition of pricing or contractual obstacles inserted into end-to-end transactions. Currently, a university can reach any site connected to the Internet with no additional contractual arrangements needed beyond its established access terms, and the reverse is
true as well—anyone who has paid for access to the Internet can contact that university. However, if network operators are permitted to levy transport charges to third parties seeking to send or receive information over their networks, universities may have to establish a number of separate contractual arrangements beyond their current access arrangements established with their network providers (major universities typically have more than one) in order to reach all of their destinations. Such a system could greatly complicate distance education, telemedicine, and community outreach services.

Summary

It seems clear that universities should support differential access pricing, already a well established practice, and should oppose anticompetitive discriminatory behavior. Though there may economic benefits to allowing new data transport surcharges, including benefits to individual subscribers, such a policy carries with it enough uncertainty generally and specific concerns for universities that universities should oppose such new pricing policies at this time. Given the uncertainties about the extent of competition in the existing telecommunications market and uncertainties about the reach of current regulatory and statutory restrictions on anticompetitive discriminatory behavior, new legislation should be enacted to implement narrowly focused net neutrality policies.