

Issue Brief: How to Deal with Data Caps, Sponsored Data and Zero-Rating

Matt Wood Free Press February 2016

The FCC adopted its landmark Open Internet Order nearly a year ago. In this the agency made the correct decision to again treat broadband as an essential telecom service.

But as of February 2016, the rules and the reclassification itself are subject to a court challenge, with a decision due in the next few months. The FCC's rulings are in effect as the case wends its way through the courts, but wired and wireless broadband providers like Comcast, T-Mobile, AT&T and Verizon are taking advantage of the waiting period to test a series of new pricing and data schemes that harm Internet users and rightfully worry Net Neutrality proponents.

Those big ISPs have announced a series of changes to their data-cap policies and have also introduced exemptions to allow their respective customers to get out from under those caps. These schemes differ from each other in some ways, but they have one thing in common: Without the arbitrarily low and punitive data caps some ISPs impose on their customers, these exemptions wouldn't be a problem. They wouldn't even exist. You don't need an exemption if there's no bad cap. And the ISPs' eagerness and ability to provide exemptions from their own artificial limits shows they have little or no relationship to the underlying cost of connectivity or network management.

Net Neutrality defenders and advocates for broadband users are concerned about the implications of these caps and arbitrary exemptions. The principles in play are clear, and the stakes are high: The open Internet must stay open, and Internet access must be more affordable. This issue brief describes the proposals the major companies have put forward and prescribes the best policies to address them.

T-Mobile's Binge On

The facts

T-Mobile lets you watch video without counting the data against your monthly cap. Only participating video providers are eligible for this exemption. T-Mobile doesn't impose overage charges for its customers who go over the cap. It also doesn't demand payment from video providers to qualify for this exemption. But it does have technical hurdles that providers must overcome, which may discourage or prevent participation by providers using different streaming protocols or encryption methods.

The problem

To handle all of the traffic that users might stream thanks to this exemption, T-Mobile throttles *all* video traffic for customers who use Binge On. It's not just slowing down the video from participating providers that clear the technical hurdles and opt in to the program. T-Mobile also throttles content from non-participating providers yet still counts that data against a Binge On user's cap without granting an exemption. Research from the Electronic Frontier Foundation shows that when Binge On is turned on, all video is limited to 1.5 Mbps.

The law

The Net Neutrality rules clearly prohibit ISPs from impairing or degrading traffic "on the basis of Internet content, application, or service." This means that the T-Mobile can't slow down "a particular application … or class of application" such as all video applications. That's exactly what T-Mobile is doing here.

The solution

T-Mobile's offer makes one thing clear: Its network and its economic model can handle as much traffic *per month* as any single T-Mobile customer wants to use, as long as that customer uses 1.5 Mbps or less *at any given time*. This is an important clue to how the company could make the program truly "Net Neutrality-friendly," as its CEO claims he wants.

In place of its current plan, T-Mobile could exempt all data streams at or below 1.5 Mbps. This would get T-Mobile out of a cut-and-dried violation of the throttling rule, because it would no longer single out video for worse treatment. But it would also spare users from running up against their data caps without putting T-Mobile in the business of deciding that streaming video is exempt, while video chats, video games, and every other imaginable use counts against the cap.

AT&T's and Verizon's Sponsored Data

The facts

AT&T Wireless started offering a sponsored-data option in January 2014, more than a year before the FCC issued its open Internet rules and put them back on solid legal ground. Verizon Wireless more recently followed suit with a sponsored-data program it calls FreeBee. The basic idea for both is the same: Customers with data caps can access content and apps that are exempt from their caps, but only if the app or site "sending" that data to the customer pays for the data usage instead. Such sponsorships are ostensibly available to all comers, meaning in theory that any website or app can choose to participate and buy exemptions for people who use its services.

The handful of AT&T sponsored-data participants today are advertisers, presumably paying to put more ads onto Internet users' phones without those ads counting against monthly caps. But AT&T has recently started to make noise about sponsored-data models for video content from DIRECTV, the satellite-TV company it took over in 2015. At the launch of FreeBee this year, Verizon listed its own affiliate AOL as a participant, but it's not clear if that means it's already using this model for AOL content or AOL-delivered advertising. More recently, Verizon confirmed that it would be using this sponsored-data model for the company's own streaming video service, called go90.

The problem

When AT&T and Verizon use these payment models like this to prioritize and advantage their own content and vertically integrated affiliates, it's blatantly anti-competitive. But even if sponsored data is made available on superficially fair terms to all edge providers, this would mark a huge shift in the architecture and business models of the open Internet. Mobile providers like to compare sponsored-data schemes to 800 numbers, but there are many flaws in that analogy. In this case, it's more accurate to say that ISPs have invented a new toll in an entirely unregulated market and are now trying to collect payment from websites, app makers and content providers.

Free Press has warned about the double-charging aspects of this set-up. An ISP customer pays in full for a mobile broadband connection and a certain amount of data per month, yet "sponsors" might also pay an unknown amount for data traveling over that user's connection before they hit their cap. And as with the T-Mobile program, there really is no reasonable network-management claim that would justify these practices. Sponsored-data programs do not purport to manage congestion — nor could they.

The law

The Net Neutrality rules do not explicitly prohibit sponsored data or data caps. But the FCC's Open Internet Order did discuss the topic at some length and promised to assess practices as they arose under the rules' general conduct standard, which guards against unreasonable interference and disadvantages ISPs could impose on Internet users' choices and their free expression.

The solution

The FCC should continue the inquiry it has already started and then open a rulemaking to examine the broad questions surrounding sponsored data. This doesn't preclude the possibility of a complaint against the specific sponsored-data programs already launched by AT&T and Verizon, or their possible use to promote the content of AT&T- or Verizon-owned or affiliated content.

But there are also deeper implications for such a fundamental shift in the way the Internet works. These issues are similar to those raised in discussions during the open Internet proceeding about the interconnection fees ISPs impose just for the "privilege" of terminating traffic that the end-users have already requested (and paid their ISP handsomely to receive over their broadband connections). Forging these sender-side relationships would for the first time permit bottleneck ISPs to dictate terms for and demand payment from edge providers and individuals with whom they have no relationship, and to whom they provide no telecommunications services.

Comcast's Unnecessary Data Caps and Stream TV Exemptions

The facts

Comcast had a 250 GB monthly data cap in place as recently as 2012. It suspended the enforcement of its caps when Free Press and others raised questions about Comcast's plan to exempt its own "Xfinity" video content from them.

In the fall of 2015, Comcast announced that caps were coming back — now at 300 GB per month — but with fees set at \$10 for every 50 GB over that limit. Comcast also offers customers unlimited data and the ability to get out from under the cap for an additional \$30–35 per month, no matter how much (or how little) data they actually use.

While these latest data-cap "trials" are still limited to select markets (chiefly in Southern states), all signs point to their imposition in Comcast markets nationwide. Comcast has also brought back plans for data-cap exemptions for its own streaming video service, now branded as Stream TV (which for the moment is available only in a few Northern markets).

The problem

When Comcast's caps and exemptions for its own streaming video are in play in the same market, there is a clear anti-competitive impact that protects Comcast's legacy cable-TV business and revenues. But even without such self-dealing exemptions, Comcast's data caps unduly discourage online video substitution and Internet usage in general. While the number of Comcast users reportedly exceeding 300 GB per month is small, it's risen from 2 percent of users in late 2013 to 8 percent late last year. It will keep growing as people use their connections for any bandwidth-intensive entertainment, communications, education or business needs.

There's no technical reasonable network-management rationale for Comcast's caps — because its networks aren't congested. Even if they were, monthly caps are a poor way to manage congestion. According to training manuals apparently leaked by Comcast

employees, its customer-service reps aren't even allowed to mention congestion as a rationale for these limits.

There's no legitimate business case for these limits, either. Comcast's fixed costs to install high-capacity broadband lines are considerable, but those investments have been made. The wires are in the ground, and future expansions require little more than software upgrades, not new construction. That means Comcast's marginal costs are vanishingly small for delivering additional data over your connection. And despite Comcast's Orwellian claims about the inherent "fairness" of charging more to people who use more data, this isn't electricity, gas or some other limited resource.

Comcast's overage fees are more like extra charges for people who not only buy cable-TV channels but actually watch them: You've paid for the capacity already, but Comcast wants to charge you *again* for actually using what you bought.

The law

The Open Internet Order doesn't ban or regulate data caps at present. It recognizes the arguments on both sides of the data-caps debate, including the understanding that such usage limits could "potentially be used by broadband providers to disadvantage competing over-the-top providers." The FCC has authority under the general conduct standard to assess whether ISP practices unreasonably interfere with or disadvantage Internet users' access to the information of users' choosing. The FCC also has the authority to ask whether any telecommunications carrier's practices are unreasonable, unjust or unreasonably discriminatory to its own customers.

The solution

As it did when it thought better of this experiment in 2012, Comcast should pull the plug on its so-called data-cap trials as well as its plans to exempt Comcast streaming video from those caps. But despite reporting record revenues for its high-speed Internet access business, it seems unlikely that Comcast will give up on its plans to squeeze even more revenue out of captive customers who either go over their data caps or who'll pay to get out from under them.

The FCC has the ability to prevent broadband providers from abusing their customers in this way, and that's a good thing. The agency should investigate Comcast's claims and prohibit such abuses.