

**Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, DC 20554**

In the Matter of	)	
	)	
Preserving the Open Internet	)	GN Docket No. 09-191
	)	
Broadband Industry Practices	)	WC Docket No. 07-52
	)	

**COMMENTS OF SLING MEDIA, INC.**

Sling Media, Inc. (“Sling”), a wholly-owned subsidiary of EchoStar Corporation (“EchoStar”), submits the following comments in response to the *Notice of Proposed Rulemaking* in the above-captioned proceedings.<sup>1</sup> It is timely for the Commission to expand and codify the *Internet Policy Statement* principles first established in 2005 given the rapid development of advanced communications networks as well as innovative services, devices, and applications.

The award-winning Slingbox and its SlingPlayer Mobile application provide consumers with a user-friendly and affordable means to view their home television programming on a number of different mobile devices, including many smartphones. Codifying the existing *Internet Policy Statement* principles in a technology-neutral manner, in addition to new proposed rules governing nondiscrimination and transparency, will protect consumers’ ability to run applications and services of their choice, including the SlingPlayer Mobile application.

To preserve openness and accessibility, network operators should not be permitted to deny subscribers access to desirable applications under the guise of network management, while

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<sup>1</sup> Preserving the Open Internet, *Notice of Proposed Rulemaking*, 24 FCC Rcd. 13064 (2009) (“*Notice*”).

at the same time allowing more bandwidth-intensive applications that are financially tied to a carrier with featured status.<sup>2</sup> Such behavior is representative of the type of anti-competitive and anti-consumer conduct the Commission's Internet policy principles seek to avoid. Furthermore, wireless carriers should be required to provide application developers with specific information pertaining to the amount of bandwidth a mobile application can use, and do so in a transparent fashion. Any limits or caps should apply equally to all interested application providers to ensure fairness and promote competition.

**I. THE SLINGPLAYER MOBILE APPLICATION OFFERS AN INNOVATIVE AND CONSUMER-FRIENDLY MEANS TO WATCH HOME TELEVISION ON A MOBILE DEVICE**

The Slingbox turns any Internet-connected personal computer into a consumer's living room television. The Sling interface allows consumers to watch their home television anytime on their computer with full use of their remote control and the ability to access live and recorded programming. Sling has further invested in SlingPlayer Mobile applications that provide those same functionalities on smartphones. The SlingPlayer Mobile applications support any type of high-speed Internet connection on a mobile device, including 3G or above cellular services, including EV-DO, HSDPA and WiFi.

Importantly, Sling customizes and optimizes the bandwidth usage of each SlingPlayer Mobile application for the wireless handset manufacturer's device and operating system, as well as the carrier's network. The size of the video display, the wireless network type, the available navigation tools (*e.g.*, touchscreen or rollerball) are all factored in to minimize the bandwidth usage of the SlingPlayer Mobile application for a particular device. The first SlingPlayer Mobile

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<sup>2</sup> Unlike other video applications, which stream content to many individuals, the SlingPlayer Mobile application provides a secure one-to-one connection between a Sling user and that user's set-top box.

application was made available in March 2006 for Windows Mobile Pocket PC devices. Subsequent SlingPlayer Mobile applications have been released for additional operating systems, including Windows Mobile Smartphone, Palm OS, Symbian OS, Blackberry, and iPhone. Sling also continues to work with technical counterparts at Google, Palm and RIM on SlingPlayer Mobile versions for the new Android platform, the new Palm webOS, and the Blackberry CDMA operating system.

Today, for a one-time fee, consumers with a compatible Slingbox can download the SlingPlayer Mobile application for their cell phone and watch their home television for no additional monthly fees or recurring charges. This provides a straightforward and pro-consumer option to pay for content once – *e.g.*, for a living room TV – and then watch that content at the place and time of a consumer’s choosing on their phone or their computer. Sling is also committed to working with retail partners and wireless carriers on additional pricing and service options that may be more attractive to consumers that seek to avoid initial upfront or set-up costs to use the Sling technology.

**II. THE DEVELOPMENT OF THE WIRELESS APPLICATION MARKET HAS BEEN LARGELY A SUCCESS STORY, BUT GREATER TRANSPARENCY AND OPENNESS ARE NEEDED.**

Sling commends wireless carriers for their investment in higher capacity and higher functioning networks that provide consumers the ability to access video services. Sling also applauds device manufacturers and operating system developers for creating more complex and higher functioning devices with displays suitable to view video programming. Sling – as well as countless other broadband applications – would not exist without high capacity wired and wireless broadband networks that are capable of delivering content to an evolving constellation of advanced mobile devices. In turn, Sling offers both carriers and device manufactures a potential “killer app” – the ability to control your home TV and DVR – to drive deployment and

adoption of more advanced smartphones with higher speeds and higher capacity packages. This should be a “win-win” relationship for all affected constituencies, and consumers in particular.

In most instances consumers are indeed winning. Few substantial barriers prevent innovative companies from breaking into the application market, as illustrated by the SlingPlayer Mobile application’s success on multiple platforms. But continued innovation in the wireless application market will not be possible unless application developers are able to collaborate with wireless carriers and handset manufacturers to take advantage of the new capabilities opened up by next generation cell phones. Unfortunately, the proliferation of applications and the clear financial opportunities present in this new market represent a growing incentive for wireless carriers to act in an anti-competitive manner to benefit those applications financially tied to the carrier.<sup>3</sup>

For example, AT&T and Apple have entered into a commercial relationship to provide a means to dictate which applications are permitted on the iPhone, and forbid consumers from downloading the applications of their choice directly from the developer.<sup>4</sup> This gatekeeper

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<sup>3</sup> It should be noted that Sling has found the wireless carriers and operating system developers willing to work in a collaborative fashion to resolve technical issues and ensure that the SlingPlayer Mobile application for their respective devices and operating systems works effectively for our joint customers. Nonetheless, wireless application providers are dependent upon the carriers and operating system developers’ willingness to commit resources to the mobile application market to address technical issues. The manner in which those internal resources are distributed is an area of potential anti-competitive concern if particular applications that are financially tied to a network are provided priority access to technical resources.

<sup>4</sup> Importantly, Sling has no objection to an App Store structure and does not seek Commission oversight of AT&T’s business plan and its decision to differentiate itself from Google’s Android or any other business model with a “walled garden” approach. AT&T notes that “many consumers prefer the choice and convenience [the App Store] offers, together with the confidence and security that comes from obtaining applications through a source that has verified their safety and efficiency.” Comments of AT&T Inc., WT Docket No. 09-66, at 4-5 (Sept. 30, 2009) (“AT&T Competition Comments”). One important distinction between the AT&T/Apple store and the other stores referenced by AT&T and CTIA, however, is that no other store is the exclusive provider of application to any other device. In every other instance,

functionality – in practical effect shared by AT&T and Apple – enables AT&T to act in an anti-competitive manner. Indeed, the Commission has already inquired about the conduct of AT&T and Apple with respect to blocking access to Google mobile applications on the iPhone.<sup>5</sup> AT&T subsequently decided to permit applications with VoIP capabilities on the iPhone for 3G use.<sup>6</sup> In doing so, AT&T said “it was taking a fresh look at VoIP capabilities on iPhone for use on AT&T’s 3G network, consistent with its regular review of device features and capabilities to ensure attractive options for consumers.”<sup>7</sup> AT&T’s comments in the Commission’s Wireless Competition proceeding, however, attempt to limit the scope of the issues facing the iPhone application market to that now-resolved issue: “the unavailability of a single application (a 3G VoIP application) on a single device (the iPhone).”<sup>8</sup>

This is an incomplete picture. Sling has also been rejected by AT&T and Apple for use on AT&T’s 3G network. At its core, Sling is an application capable of providing video to its users. Yet there are multiple video applications available on the iPhone and AT&T’s 3G network today, including YouTube, TV.com, MLB At Bat, Jaman, and Showtime. One prominent new addition is the DIRECTV SuperFan application that shows live NFL football games, which is also available on AT&T’s 3G network. Thus, an AT&T subscriber can watch a

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the consumer is free to choose a verified App Store product or seek out on the Internet their own applications. Only AT&T and Apple forbid applications not found in the provider’s App Store. The issue is not AT&T/Apple’s gatekeeper role in and of itself. Rather, the potential issue is whether that gatekeeper is acting in an anti-competitive manner by serving a function beyond screening applications.

<sup>5</sup> Letter from James D. Schilicting, Chief, Wireless Telecommunications Bureau, to James W. Cicconi, AT&T Inc., DA 09-1737 (July 31, 2009).

<sup>6</sup> Press Release, AT&T Inc., AT&T Extends VOIP to 3G Network for Phone (Oct. 6, 2009).

<sup>7</sup> *Id.*

<sup>8</sup> AT&T Competition Comments at 69.

Broncos-Redskins game on their iPhone on AT&T's 3G network from a DIRECTV-backed application (a commercial partner with AT&T), but that same AT&T subscriber cannot watch the same game from their Slingbox on AT&T's 3G network. CNET similarly noted that Major League Baseball's video application "MLB At Bat is now doing the same thing [as Sling], but with AT&T's approval."<sup>9</sup>

AT&T has defended its decision on network congestion grounds: "Slingbox, which would use large amounts of wireless network capacity, could create congestion and potentially prevent other customers from using the network."<sup>10</sup> The relevant metric for how much capacity an application uses on a mobile network is an application's bit rate measured in kilobits per second. AT&T concurs that the relevant means to measure "a satisfactory experience for end-user customers" is the "bit rate used to deliver ... audio and video applications."<sup>11</sup>

AT&T has never provided an analysis showing that the SlingPlayer Mobile application uses any more capacity than other approved video applications. Sling's analysis using the iPhone's own built-in bandwidth statistics suggests the opposite result. Other prominent video applications Sling tested used more capacity than the version of the SlingPlayer Mobile application submitted to AT&T/Apple by Sling:

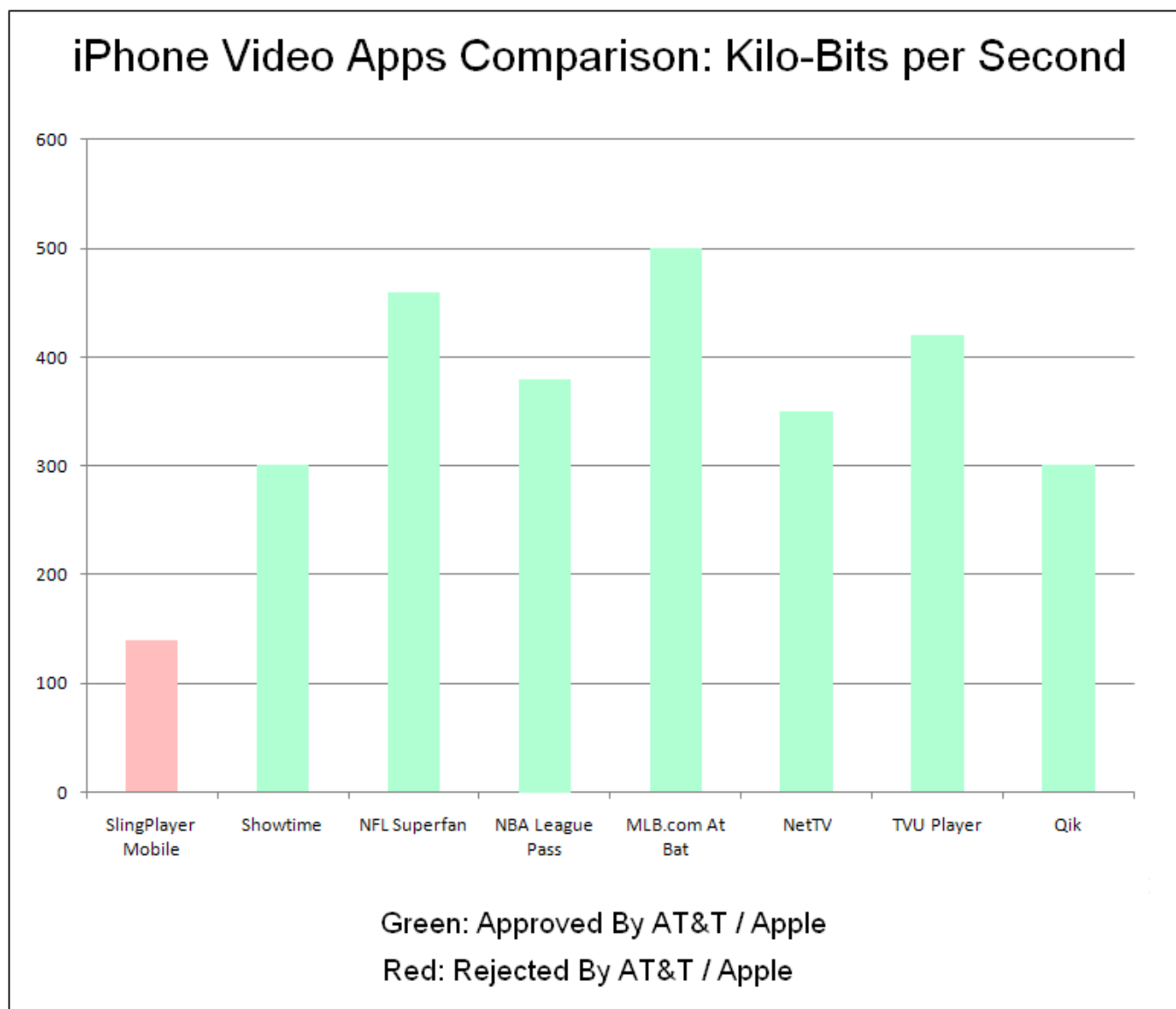
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<sup>9</sup> Erica Ogg, *MLB streaming all games to iPhone, iPod Touch*, CNet (July 22, 2009, available at <http://www.att.com/gen/press-room?pid=4800&cdvn=news&newsarticleid=27207>) (last visited Jan. 14, 2009).

<sup>10</sup> Brian Chen, *AT&T: SlingPlayer for iPhone Would 'Create Congestion' for 3G*, Wired (May 12, 2009) available at <http://www.wired.com/gadgetlab/2009/05/applesling/> (last visited Jan. 14, 2009) (quoting an AT&T spokesman).

<sup>11</sup> Letter from James W. Ciconni, AT&T Inc., to Ruth Milkman, FCC at 5 (Aug. 21, 2009) ("Ciconni Letter").

<b>Developer</b>	<b>Application Name</b>	<b>Content Shown</b>	<b>Bitrate on AT&amp;T's 3G network</b>
Major League Baseball	MLB.com At Bat	Live MLB games	500 kbps
DirecTV	NFL Superfan	Live NFL games	460 kbps
Showtime Networks	Showtime	Full length episodes of original Showtime programming such as Dexter and Nurse Jackie	300 kbps
TVU Networks	TVUPlayer	Live TV programming from 300 channels worldwide, including CBS and Spike in the US	CBS: 420 kbps Spike: 351 kbps
Chestnut Soft	NetTV	Live TV programming from 200 channels worldwide, including MSNBC in the US	MSNBC: 350 kbps
Qik (recently approved by AT&T/Apple)	Qik for 3GS	Allows users to record and upload videos to the Internet	Video upload: 300 kbps
Sling Media	SlingPlayer Mobile	Live TV programming from the user's home TV	140 kbps



Tellingly, DIRECTV’s approved 3G application consumes 3.2 times more bandwidth than the SlingPlayer Mobile application. This apparent favoritism is of particular concern given AT&T’s close business partnership with DIRECTV.

It is ironic that a Sling application would be denied on network congestion grounds. Consistent with its collaborative relationships with wireless carriers, Sling’s technology is uniquely designed to help address network congestion issues by automatically minimizing its bandwidth usage to compensate for unanticipated network stress. One of the key advances in the

SlingPlayer Mobile application is the ability of the application in real-time to calibrate the video quality to match the available network capacity. Part of that optimization process involves the adjustment of frame rate and video resolution to address network congestion.

A network provider should not be permitted to deny an application like the SlingPlayer Mobile without any qualitative evidence that the application – or “redirecting television signals” more generically – uses more bandwidth than any other comparable video application, particularly when the same content is available on the iPhone from AT&T-affiliated application developers. This latter practice – allowing a business partner’s video applications – is counter to CTIA’s claim in several proceedings that “[w]ireless carriers’ network management tools currently strike a content-neutral balance.”<sup>12</sup>

Moreover, AT&T and Apple attempted to mask Sling’s denial by basing it on a violation of AT&T’s terms of service. Specifically, AT&T explains that it prohibits “uses that cause extreme network capacity issues” and “expressly disallows ‘redirecting television signals for viewing on Personal Computers.’”<sup>13</sup> AT&T states that “[i]n contrast to some video applications, today’s television redirection applications typically do not make any attempt to minimize the[ir] network usage ... in order to reduce network congestion.”<sup>14</sup> This is untrue with respect to SlingPlayer Mobile. The source of the video content – whether it redirects TV signals or streams a YouTube clip – is irrelevant to the amount of network capacity used by that application. Thus, if network congestion is the concern, this term of service is an illogical proxy. AT&T has never explained why more bandwidth-intensive applications are not problematic, or why Sling-based

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<sup>12</sup> See e.g., Reply Comments of CTIA, GN Docket No. 09-51, at 12 (July 21, 2009) (advising the Commission not to apply open Internet principles to the wireless industry).

<sup>13</sup> Ciconni Letter at 6.

<sup>14</sup> *Id.*

services are uniquely problematic. Rather, the only apparent purpose of this term of service is to preclude approval of a Sling product.<sup>15</sup> Network operators should not be permitted to use terms of service to frustrate broader consumer and competitive policies. Promisingly, AT&T's own experts underscore this need: "[T]ransparency is an absolute necessity ... customers need to know what types of applications are permitted, what types of network management practices are in place, and what range of performance they can typically expect."<sup>16</sup> AT&T's practice today, however, does not live up to these standards.

Sling raises this matter here to provide the Commission with a full evidentiary record of the current competitive market as well as a concrete illustration of why the Commission's proposed regulations in this proceeding are critical to ensure consumer access to the applications of their choice. Sling continues to work with AT&T and Apple, and is committed to finding a commercial resolution to provide AT&T consumers with access to the SlingPlayer Mobile application on AT&T's 3G network.<sup>17</sup> To that end, AT&T's recent action to address the iPhone VoIP problem is a promising development demonstrating AT&T's willingness to seek out pro-

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<sup>15</sup> The timing of the adoption of the terms of service underscores that AT&T has singled out Sling in its terms of service. A variant of this term of service was first adopted only after Sling submitted its iPhone application for approval. AT&T retracted this initial term of service after negative press attention because it was "done in error." Yet, later that same month, the current version of the term of service re-appeared this time more targeted to outlaw only Sling and those application that redirect television signals.

<sup>16</sup> Gerald Faulhaber and David Farber, *Innovation in the Wireless Ecosystem: A Customer-Centric Framework*, at 28 (Sept. 30, 2009) (submitted with Comments of AT&T Inc., GN Docket Nos. 09-157, 09-51 (Sept. 30, 2009)).

<sup>17</sup> Apple and AT&T did authorize the SlingPlayer Mobile application for the iPhone for WiFi-use only. In its response to the FCC, Apple suggests that Sling "fixed the application to use WiFi only," thereby resolving the issue. *See* Letter from Catherine A. Novelli, Apple, to Ruth Milkman, FCC, at 5 (Aug. 21, 2009). This is not a fair characterization of the approval process. Sling did not "fix" anything. Instead, Sling agreed to the WiFi-only limitation because the only other option was an outright denial of access to the iPhone, the largest wireless carrier's most popular phone, for all Sling users. Sling believes that the WiFi-only limitation is unwarranted and anti-consumer, and should be reversed.

consumer solutions. Following up on AT&T's VoIP decision, Sling resubmitted the SlingPlayer Mobile application for 3G approval. Nonetheless, an examination of the barriers faced by the SlingPlayer Mobile application on the iPhone is illustrative of the types of barriers that can be raised against wireless application developers in the absence of codified, concrete nondiscrimination principles that apply to all network providers.

### **III. CONCLUSION**

Sling supports the Commission's proposal to codify the four original *Internet Policy Statement* principles, in addition to new transparency and nondiscrimination principles, applied in a platform-neutral manner. The proposal recognizes the rapid growth and consumer adoption of new and innovative wireless application offerings, and will ensure this new market – so dependent upon fair treatment by a handful of wireless carriers – continues to develop in a transparent and impartial manner.

Respectfully submitted,

/s/

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January 14, 2010