

**Before the
Federal Communications Commission
Washington, D.C. 20554**

In the Matter of)	
)	
Further Inquiry Into Two Under)	GN Docket No. 09-191
Developed Issues in the Open)	WC Docket No. 07-52
Internet Proceeding)	
)	

To: The Commission

REPLY COMMENTS OF HARRIS CORPORATION

This Reply Comment is submitted on behalf of Harris Corporation (“Harris”) before the Federal Communications Commission (“Commission”) in response to comments submitted regarding the Commission’s Public Notice¹ on underdeveloped issues in the Commission’s Open Internet proceeding. Harris is an international communications and information technology company serving government and commercial markets in more than 150 countries. Headquartered in Melbourne, Florida, the company has approximately \$5 billion of annual revenue and more than 16,000 employees — including nearly 7,000 engineers and scientists. Harris has an extensive background in the telecommunications industry, including, but not limited to, mission critical public safety communications, health information technology (“health IT”), cybersecurity, federal government communications, satellite communications, and broadcast communications. Managed and specialized services promote the public interest through numerous unique offerings and the Commission should not limit providers’ ability to

¹ Further Inquiry Into Two Under-Developed Issues in the Open Internet Proceeding, GN Docket No. 09-191, WC Docket No. 07-52, *Public Notice*, DA 10-1667 (rel. Sept. 1, 2010) (“*Underdeveloped Public Notice*”).

offer managed and specialized services. In response to the Commission’s recommendations in the aforementioned Public Notice, Harris makes the following recommendations:

- The Commission should not adopt the proposals regarding: (1) “definitional clarity;” (2) “limiting of specialized service offerings;” and (3) “guaranteed capacity for broadband Internet access services.”² Harris believes these recommendations would be too difficult to implement, stunt innovation, and deter investment in managed and specialized services.
- Harris supports the Commission’s recommendations regarding “disclosure,”³ which Harris believes would encourage consumer education about their broadband service and options, and provides the Commission with a manner to monitor developments in the managed and specialized services marketplace.
- At this time, Harris remains neutral on Commission’s recommendations regarding (1) “non-exclusivity in specialized services” and (2) “truth in advertising.”⁴ Harris is unsure whether these recommendations are necessary at this time, but believes the Commission should continue to monitor the marketplace to determine whether such recommendations would be appropriate in the future.

The enhanced quality of service provided by managed and specialized services is vital to the delivery of applications carried over such services. As pointed out by commenters, specialized and managed services unique needs require several key attributes not available over “best effort” Internet access services, such as: “(i) guaranteed (low) packet loss; (ii) guaranteed (low) packet delay; (iii) secure, private connectivity; and (iv) guaranteed bandwidth.”⁵ These

² Id., at 3-4.

³ Id., at 3.

⁴ Id., at 3-4.

⁵ Comments of the Telecommunications Industry Association, GN Docket No. 09-191, WC Docket No. 07-52, pg. 23 (filed Oct. 12, 2010); “Encouraging differentiation, innovation, and experimentation becomes all the more important as uses of broadband networks and the Internet continue to expand to encompass more and different services, with varying requirements and limitations. Some services – such as backing up data online – may require lots of capacity, but be less time sensitive or less affected by latency or jitter. Other services – such as VoIP – may not require much bandwidth, but may suffer if network conditions result in substantial latency. Still other services – such as HD video teleconferencing, gaming, or health monitoring services – may require both substantial amounts of capacity and heightened quality-of-service in order to meet consumers’ needs. And as broadband networks become increasingly integral to more sensitive uses – such as real-time heart monitoring or managing smart electrical or traffic grids in real-time – the need for differentiated services capable of meeting the varying demands of different uses becomes all the more crucial. Indeed, most consumers understand that at times of congestion, it makes sense to

unique requirements comprise several defining characteristics of managed and specialized services and are necessary due to the value and sensitivity of the content being carried over the network. The distinctive needs of managed and specialized services require special consideration by the Commission in its Open Internet proceeding. A less restrictive regulatory approach than the Commission may choose to adopt for “traditional” Internet access providers (*i.e.*, broadband Internet access services offering open-ended Internet connectivity) should be applied by the Commission to managed and specialized services.

Harris agrees with a number of commenters in this proceeding that including managed and specialized services under the umbrella of Open Internet regulations could be detrimental to innovation, investment, and the continued offering of numerous specialized broadband applications, such as telemedicine, smart grid, eLearning, teleworking, and intelligent transportation.⁶ Throughout the proceeding commenters note how managed and specialized services have fueled the deployment of new innovative applications that are of an immense

ensure that these forms of sensitive traffic make it through, even if that delays the download of a video by a few milliseconds.” Comments of Verizon and Verizon Wireless, GN Docket No. 09-191, WC Docket No. 07-52, pg. 46 (filed Oct. 12, 2010) (“Comments of Verizon”); *see also* Comments of Alcatel-Lucent GN Docket No. 09-191, WC Docket No. 07-52, pgs. 2-3 and 7 (filed Oct. 12, 2010) (“Comments of ALU”) (discussing the unique quality of service characteristics of managed and specialized services and difficulty of adopting strict regulatory definitions for defining managed and specialized services).

⁶ “[T]hese proposals would serve only to undermine broadband innovation, investment, consumer welfare, and the critical policy goals of this Administration...In short, specialized and wireless broadband services are delivering, and will continue to deliver, untold benefits to consumers and the economy if the Commission maintains a hospitable regulatory environment for such services.” Comments of AT&T Inc., GN Docket No. 09-191, WC Docket No. 07-52, pgs. 3-4 (filed Oct. 12, 2010) (“Comments of AT&T”); “Restrictions that deny consumers the option of differentiated broadband services would discriminate against, if not foreclose, potential services, applications, or devices that are incompatible with a best-efforts approach, and could undermine innovation that would benefit consumers.” Comments of Verizon, *supra* note 5, at p. 47; “Absent a clear and documented problem, the Commission must not act to stifle the development of specialized services in the manner suggested by the *Public Notice* given their clear public interest benefits...” Comments of TIA, *supra* note 5, at p. 9; *see also* Comments of Motorola, Inc., GN Docket No. 09-191, WC Docket No. 07-52, pgs. 14-16 (filed Jan. 14, 2010) (discussing how managed services are a key driver of innovation in the broadband ecosystem and why the Commission should not implement regulations that would chill the growth of such services).

societal benefit.⁷ In fact, the Commission itself has recognized in its Open Internet proceeding the societal benefits that are provided by managed and specialized services.⁸ In order to advance the public interest and encourage continued development and investment in applications provided by managed and specialize services, the Commission should limit the degree of regulation placed on managed and specialized services. Fully implementing Open Internet regulations on managed and specialized services would impair providers' ability to provide the enhanced quality of service attributes necessary to support such services.

Harris believes the Commission's recommendations regarding: (1) definitional clarity; (2) limiting of specialize service offerings; and (3) guaranteed capacity for broadband Internet access services, may be too difficult to implement, constrain innovation in the broadband marketplace, and deter investment in managed and specialized services. Harris is primarily concerned that it may be too difficult for the Commission to accurately define what services fit under the category of "managed" and "specialized" services. This issue is particularly relevant to the Commission's proposals regarding (1) definitional clarity and (2) limiting specialized service offerings. Given the number and diversity of managed and specialized services, as well

⁷ "For proper healthcare, managed networks provide more than just a benefit. They can be the vital links in life-threatening circumstances." Comments of Center for Telehealth at the Medical College of Georgia, GN Docket No. 09-191, WC Docket No. 07-52, pg. 1 (filed Mar. 22, 2010); "Rural communities require broadband internet connections that are supported by secure and managed networks so that critical telemedicine applications can be delivered in a consistent and timely manner." Comments of the National Rural Health Association, GN Docket No. 09-191, WC Docket No. 07-52, pg. 1 (filed Feb. 25, 2010); *See also* Comments of AT&T, *supra* note 6, pg. 6 (explaining the types of applications and societal benefits provided by specialized services, including telemedicine, vehicle telemetry, and business applications).

⁸ "We recognize that these managed or specialized services may differ from broadband Internet access services in ways that recommend a different policy approach, and it may be inappropriate to apply the rules proposed here to managed and specialized services...the record in our National Broadband Plan proceeding includes discussion of potential future offerings such as specialized telemedicine, smart grid or eLearning applications that may require or benefit from enhanced quality of service rather than traditional best-effort Internet delivery." Preserving the Open Internet, Broadband Industry Practices, *Notice of Proposed Rulemaking*, 24 FCC Rcd. 13064, 13116-17 (rel. Oct. 22, 2009). "These services may drive additional private investment in networks and provide consumer new and valued services." *Underdeveloped Public Notice*, *supra* note 4, at pg. 2.

as the constantly evolving nature of service offerings, enforcing these recommendations may be too difficult and result in over extensive industry regulation.⁹ Harris also believes that the recommendations proposed by the Commission could end up inhibiting development and investment in managed and specialized services. In particular, the Commission's recommendations that would (1) institute capacity requirements and (2) limit specialized service offerings could dissuade providers from carrying managed and specialized services and discourage investment in the development of such services.¹⁰

Nonetheless, Harris supports Commission efforts, such as the Commission's "disclosure" recommendation, which will inform consumers about other services being offered over the same network as their "traditional" Internet access service. Education and disclosure will provide consumers the opportunity to make informed decisions about the network and services they choose to purchase.¹¹ Disclosure will also allow the Commission to continue to monitor developments in the managed and specialized services marketplace. However, Harris cautions

⁹ "In considering a definition, the Weldon Declaration submitted with TIA's Open Internet Comments makes clear that "we are entering a period of tremendous change in the definition of managed services" and, as a result, "there is a very real risk that any attempt to explicitly and narrowly define what is a 'Managed Service' or to limit the number or variety of such services that are permitted, will seriously miss the mark and stifle innovation." Thus, to the extent the Commission considers defining specialized services at all, it should only do so in the broadest possible way." Comments of TIA, *supra* note 6; "Consumer demand for future Internet services cannot so easily be predetermined, and this approach could establish a finite list of acceptable Specialized Services that may prove obsolete in a short period of time." Comments of ALU, *supra* note 5, p. 9.

¹⁰ "ALU is opposed to this approach because it narrowly defines acceptable Specialized Services in a manner that will not permit the market to develop based on consumer demand and sustainable business models." Comments of ALU, *supra* note 9; "[The guaranteed capacity proposal] would indefinitely force each company to invest X dollars in broadband Internet access capacity if it invests Y dollars in capacity for specialized services, and it would thus rob each company of the ability to tailor its investments over time to unpredictable shifts in demand for different types of services. It would thus radically magnify the risks of deploying new networks in the first place." Comments of AT&T, *supra* note 7, at p. 35.

¹¹ "At this point in the development of Specialized Services, the only agreeable policy principle offered by the Commission in the Public Notice is disclosure of information sufficient to enable consumers and the FCC to evaluate the impact of Specialized Services in the market. If necessary, the FCC could consider requiring ISPs disclose certain characteristics of its Specialized Services to the Commission and/or consumers in order to better appreciate how these services impact competition and consumers. Such a condition would inform consumers of the capabilities and limitations of the ISP's service and would be consistent with the transparency framework discussed in the Open Internet NPRM and in Alcatel-Lucent's Reply Comments." Comments of ALU, *supra* note 10, at pg. 6.

the Commission against implementing overly burdensome disclosure requirements that would unintentionally deter providers from offering managed or specialized services.

For the foregoing reasons, the Commission should view the terms “managed services” and “specialized services” expansively and limit the regulation of managed and specialized services. Managed and specialized services provide innovative solutions and applications, especially in the fields of healthcare (*i.e.*, telemedicine), energy (*i.e.*, smart grid), education (*i.e.*, eLearning), transportation (*i.e.*, intelligent transportation) and business (*i.e.*, TelePresence). Harris urges the Commission not to inhibit investment and innovation in these services by adopting the regulatory requirements set forth in the Commission’s Public Notice, notably the recommendations regarding: (1) definitional clarity; (2) limiting of specialized service offerings; and (3) guaranteed capacity for broadband Internet access services. However, Harris supports Commission recommendations with regards to “disclosure,” which Harris believes will further educate consumers about their Internet choices and provide the Commission the necessary level of oversight to monitor developments in the managed and specialized services marketplace.

Respectfully submitted,

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