FORTIETH MEETING APEC TELECOMMUNICATIONS AND INFORMATION WORKING GROUP SEPTEMBER 2009 REGULATORY AND POLICY UPDATE UNITED STATES OF AMERICA

THE EXECUTIVE BRANCH

New Leadership

The United States Senate confirmed Lawrence E. Strickling as Assistant Secretary for Communications and Information at the Department of Commerce on June 25, 2009. In this role, Strickling will serve as Administrator of the National Telecommunications and Information Administration (NTIA), the executive branch agency that is principally responsible for advising the President on communications and information policies. Among other duties, NTIA is charged with implementing the Broadband Technology Opportunities Program, a grants program created by the American Recovery and Reinvestment Act to spur job creation and investment by increasing broadband access and adoption nationwide. NTIA is also responsible for a wide array of other communications activities, including federal spectrum management and Internet governance matters.

The American Recovery and Reinvestment Act of 2009: Broadband Technology Opportunities Program (BTOP)

The American Recovery and Reinvestment Act of 2009 (Recovery Act) was enacted on February 17, 2009, which allocates \$4.7 billion in funding to the National Telecommunications and Information Administration (NTIA) for the Broadband Technology Opportunities Program (BTOP), a grant program to support the deployment of broadband infrastructure and promote the adoption of broadband service. Of that amount, at least \$250 million is to be made available for programs that encourage sustainable adoption of broadband services, and at least \$200 million is to be made available for expanding public computer center capacity, including at community colleges and public libraries. The Recovery Act further provides for up to \$350 million to implement the State Broadband Data Program and to develop and maintain a broadband inventory map.

NTIA has coordinated closely with the other Federal agencies directed to lead these efforts including the US Department of Agriculture's Rural Utilities Program (RUS), which was appropriated \$2.5 billion by the Recovery Act for broadband loans and grants and the FCC which is required to develop a national broadband plan. NTIA, RUS, and the FCC are working together closely to leverage authorities and resources to develop and implement a coordinated federal government approach to addressing the challenge of expanding the access and quality of broadband services across the United States.

Congressional Testimony: Hearing on Oversight of the American Recovery and Reinvestment Act: Broadband, Part 2: Testimony of Lawrence E. Strickling, Assistant Secretary for

Communications and Information, NTIA, before the U.S. House of Representatives Committee on Energy and Commerce, Subcommittee on Communications, Technology and the Internet. http://www.ntia.doc.gov/congress/2009/BTOP_House_Strickling_090910.html *September 10, 2009*

Congressional Report: Commerce's NTIA Submits Second Quarterly Status Report to Congress: NTIA submitted the second quarterly status report on the Broadband Technology and Opportunities Program (BTOP) to Congress on August 18, 2009. http://www.ntia.doc.gov/recovery/BTOP/BTOP_QuarterlyReport_090818.pdf *August 18, 2009*

Congressional Report: Commerce's NTIA Submits First Quarterly Status Report to Congress: NTIA submitted the second quarterly status report on the Broadband Technology and Opportunities Program (BTOP) to Congress on May 18, 2009. http://www.ntia.doc.gov/recovery/BTOP/BTOP_QuarterlyReport_090518.pdf *May 18, 2009*

Fact Sheet for the Broadband Technology Opportunities Program http://www.ntia.doc.gov/broadbandgrants/BTOP_NOFAfactsheet_090702.pdf *July 2, 2009*

Fact Sheet for the State Broadband Data and Development Grant Program http://www.ntia.doc.gov/broadbandgrants/MAPPINGNOFA_FactSheet_090702.pdf *July 2, 2009*

Domain Name System Security

NTIA and National Institute of Standards and Technology (NIST) announced on June 3, 2009 that the two agencies are working with the Internet Corporation for Assigned Names and Numbers (ICANN) and VeriSign on an initiative to enhance the security and stability of the Internet. The parties are working on an interim approach to deployment of a security technology -- Domain Name System Security Extensions (DNSSEC) -- at the authoritative root zone (i.e., the address book) of the Internet.

FEDERAL COMMUNICATIONS COMMISSION Web site: http://www.fcc.gov/headlines.html

New Leadership

Julius Genachowski was nominated by President Barack Obama to a seat on the Federal Communications Commission on March 23, 2009. He was unanimously confirmed by the United States Senate on June 25, 2009, and sworn in as FCC Chairman on June 29, 2009. The other FCC Commissioners are Michael J. Copps, Robert M. McDowell, Mignon Clyburn, and Meredith Attwell Baker.

Broadband

9/4/09 - Comment Sought on the Implementation of Smart Grid Technology

In the American Recovery and Reinvestment Act of 2009 (Recovery Act), Congress directed the Commission, in its development of a National Broadband Plan, to include "a plan for the use of broadband infrastructure and services in advancing . . . energy independence and efficiency." Smart Grid technology has been identified as a promising way to use broadband and other advanced communications to promote energy efficiency, reduce greenhouse gas emissions, and encourage energy independence. Parties commenting on the *National Broadband Plan NOI* have described other potential benefits of Smart Grid technology, including the creation of new jobs, increased network performance and reliability, and the advancement of new, environmentally-friendly technologies. Accordingly, the FCC seeks tailored comment on how advanced infrastructure and services could help achieve efficient implementation of Smart Grid technology.

- Suitability of Communications Technologies. Smart Grid applications are being deployed using a variety of public and private communications networks. The FCC seeks to better understand which communications networks and technologies are suitable for various Smart Grid applications.
- Availability of Communications Networks. Electric utilities offer near universal service, including in many geographies where no existing suitable communications networks currently exist (for last-mile, aggregation point data backhaul, and utility control systems). The FCC seeks to better understand the availability of existing communications networks, and how this availability may impact Smart Grid deployments.
- **Spectrum.** Currently, Smart Grid systems are deployed using a variety of communications technologies, including public and private wireless networks, using licensed and unlicensed spectrum. The FCC seeks to better understand how wireless spectrum is or could be used for Smart Grid applications.
- **Real-time Data.** The Smart Grid promises to enable utility companies and their customers to reduce U.S. energy consumption using a variety of technologies and methods. Some of the most promising of these methods use demand response, in which utility companies can directly control loads within the home or business to better manage demand, or give price signals to encourage load shedding. Other methods reduce energy consumption simply by providing consumers access to their consumption information, via in-home displays, web portals, or other methods. Central to all of these techniques is energy consumption and pricing data.
- Home Area Networks. The FCC seeks to understand the ways in which utilities, technology providers and consumers will connect appliances, thermostats, and energy displays to each other, to the electric meter, and to the Internet.

8/7/09 - FCC Begins Sixth Section 706 Broadband Deployment Inquiry

The FCC began its sixth inquiry for Congress into the state of broadband in the U.S. – an inquiry that this year is intertwined with the agency's larger effort to create a National Broadband Plan. In the Notice of Inquiry, the Commission starts with a clean slate against a backdrop of statutory and policy changes. Those changes include Congress's requirement that the FCC develop a

comprehensive National Broadband Plan by Feb. 17, 2010, that it improve its broadband data collection, and the Commission's own efforts to collect broadband data on a more granular basis. A report based on the inquiry, commonly known as the "706 Report" after the section of the Telecommunications Act of 1996 mandating it, must be delivered to Congress on Feb. 3, 2010. Comments and other materials received for the National Broadband Plan relevant to the inquiry will be incorporated in the upcoming 706 Report.

7/23/09 - FCC Releases Final Data on High-Speed Services Collected Under the Previous Form 477 Framework

The Federal Communications Commission (FCC) released the final *High-Speed Services for Internet Access* report to be based on the old Form 477 data collection requirements. The FCC has collected basic service information from broadband providers on a semiannual basis since 2000. Statistics released today reflect data as of June 30, 2008, and are the last to be based on data collected under the previous Form 477 requirements. Under the previous requirements, filers were required to identify the number of subscribers they had in each state, broken down by speed tier and technology. Filers were also required to identify all Zip Codes in which they had at least one high-speed connection (defined as any connection delivering service at speeds exceeding 200 kilobits per second (kbps) in at least one direction) in service. According to the June 2008 data, there are no Zip Codes where there is not at least one such connection.

The FCC and others have recognized these requirements as insufficiently granular or precise to inform necessary policymaking. In June 2008, the FCC released a Report and Order (FCC 08-89) and Order on Reconsideration (FCC 08-148), which together implemented significant improvements to the way in which the Commission collects data on these services. As part of these improvements, which were effective for the March 2009 collection of data as of year-end 2008, providers of wired broadband, fixed-wireless broadband, and satellite-based broadband connections report subscriber counts at the Census Tract level rather than the state level, and all filers report their connections in accordance with an increased number of upload and download transmission speed tiers. In conjunction with measures underway pursuant to the Broadband Data Improvement Act and the Recovery Act, the new Form 477 data will provide the Commission and the public with a more valuable resource for evaluating the state of broadband in the country.

7/17/09 - Comment Sought on Providing Eligible Entities Access to Aggregate Form 477 Data as Required by the Broadband Data Improvement Act

The FCC seeks comment on how to interpret and implement sections 106(h)(1) and 106(h)(2) of the Broadband Data Improvement Act (BDIA). Section 106(h)(1) of the BDIA requires the Commission to "provide eligible entities access . . . to aggregate data collected by the Commission based on the Form 477 submissions of broadband service providers." Section 106(h)(2) of the BDIA imposes certain confidentiality requirements on eligible entities that receive the FCC Form 477 "aggregate data." In this Public Notice, we seek comment on how the Commission should implement these statutory provisions.

7/17/09 - Access Broadband over Power Line Systems/Carrier Current Systems

In the FCC's Request for Further Comment and Further Notice of Proposed Rulemaking (FNPRM), it addresses certain issues from the Commission's Report and Order on rules for broadband over power line systems and devices (*BPL Order*) that was remanded by the United States Court of Appeals for the District of Columbia. In the *BPL Order*, the Commission established technical standards, operating restrictions and measurement guidelines for Access Broadband over Power Line (Access BPL) systems to promote the development of such systems while ensuring that licensed radio services are protected from harmful interference. In *ARRL v. FCC*, the court remanded the *BPL Order* to the Commission for further consideration and explanation of certain aspects of its decision. Specifically, the court directed the Commission to provide a reasonable opportunity for public comment on unredacted staff technical studies on which it relied to promulgate the rules, to make the studies part of the rulemaking record, and to provide a reasoned explanation of the choice of an extrapolation factor for use in measurement of emissions from Access BPL systems.

5/27/09 - Acting Chairman Copps Releases Report on Broadband Strategy for Rural America

Concluding that all rural Americans must have the opportunity to reap the full benefits of broadband services, Acting Federal Communications Commission Chairman Michael J. Copps released a report providing a starting point for the development of policies to deliver broadband to rural areas and restore economic growth and opportunity for Americans residing and working in those areas. Recognizing that the need for broadband in rural America is becoming ever-more critical, Congress in the 2008 Farm Bill required the FCC Chairman, in coordination with the Secretary of the Department of Agriculture, to submit a report to Congress describing a rural broadband strategy. Entitled "Bringing Broadband to Rural America: Report on a Rural Broadband Strategy," the report by Acting Chairman Copps identifies common problems affecting rural broadband, including technological challenges, lack of data, and high network costs, and offers some recommendations to address those problems.

Wireless

8/27/09 - FCC Announces Wireless Innovation and Investment Notice of Inquiry

The FCC announced a Wireless Innovation and Investment *Notice of Inquiry* ("*NOP*") that seeks to identify concrete steps the Commission can take to support and encourage further innovation and investment in the wireless marketplace. This NOI also seeks to better understand the factors that encourage innovation and investment throughout this area. Innovation in wireless, an increasingly significant part of the communications sector, can be an engine for near-term economic recovery and long-term economic growth. In furtherance of this goal, the NOI seeks comment broadly on all ideas that will foster wireless innovation and investment. In particular, the NOI focuses on spectrum availability and use, wireless networks, devices, applications, and business practices. The NOI also seeks comment on how the public has used wireless services and technology to solve real-world problems in areas such as health care, energy, education, and public safety. More generally, the NOI seeks to develop a framework for analyzing wireless innovation and investment, including any metrics or data sources that should be considered.

Digital Television

6/13/09 - Full-Power TV Broadcasters Go All-Digital

The nation's historic switch to digital television by 971 full-power stations prompted hundreds of thousands of consumers to call for assistance but caused no widespread disruption of free, over-the-air television broadcasts. A record 317,450 consumers called the FCC's toll-free help line, 1-888-CALL-FCC, for a total of almost 700,000 from June 8 through 12. Of the calls handled by live FCC help line agents, nearly 30% concerned the operation of digital converter boxes. Most of those calls were resolved when consumers were instructed to "re-scan" their converter boxes in order to receive the digital channels that had moved to new frequencies. Over 20% of the calls handled by live agents dealt with reception issues.

Reports from the 200-plus FCC staff stationed across the country as part of the Commission's extensive outreach effort reflected similar concerns. At DTV transition events held across the country, consumers routinely sought information on the government converter box coupon program and raised concerns about reception. FCC field staff also worked closely with local broadcasters, cable operators and satellite providers to identify and address issues that arose, and to serve as a liaison with FCC headquarters in Washington.

Consumer Issues

8/31/09 - Commission Implements Child Safe Viewing Act by Adopting Report on Parental Control Technologies

The FCC issued a Report to Congress pursuant to the Child Safe Viewing Act of 2007 ("Child Safe Viewing Act" or "Act"). The Act directs the Commission to provide, by August 29, 2009, an assessment of the current state of the marketplace with respect to: the existence and availability of advanced blocking technologies; methods of encouraging the development, deployment and use of such technologies that do not affect the packaging or pricing of programming; and the existence, availability and use of parental empowerment tools and initiatives already in the market.

Pursuant to the Act, the Commission adopted a *Notice of Inquiry* ("*NOI*") on March 2, 2009, in response to which the Commission received numerous comments. This report is a summary of the record developed in response to that *NOI*—drawing certain conclusions from the comments submitted as well as identifying additional important questions that remain unresolved.

Taken as a whole, the record indicates that no single parental control technology available today works across all media platforms. Moreover, even within each media platform, these technologies vary greatly with respect to the following criteria: (i) cost to consumers; (ii) level of consumer awareness/promotional and educational efforts; (iii) adoption rate; (iv) customer support; (v) ease of use; (vi) means to prevent children from overriding parental controls; (vii) blocking content/black listing; (viii) selecting content/white listing; (ix) access to multiple ratings systems; (x) parental understanding of ratings systems; (xi) reliance on non-ratings-based system; (xii) ability to monitor usage and view usage history; (xiii) ability to restrict access and usage; (xiv) access to parental controls outside of the home; and (xv) tracking. In addition, a common theme that runs throughout the comments is the need for greater education and media literacy for parents and more effective diffusion of information about the tools available to them. Many commenters urge the government to play a more substantial role in meeting this need.

8/27/09 - FCC Seeks Comment on Additional Opportunities to Protect and Empower Consumers in Communications Marketplace

The FCC has issued a Notice of Inquiry on whether there are additional opportunities to protect and empower American consumers by ensuring sufficient access to relevant information about communications services. The Commission seeks comment from communications service providers, academic researchers, consumer groups and third-party analysts on how best to ensure consumers have the information they need to make informed decisions in the communications marketplace.

The Commission's approach to information disclosure issues has traditionally focused on the formatting of consumer bills. This is relevant only after a consumer has already selected a service provider, and has been restricted to wireline voice and wireless services. This Notice asks questions about the information available to consumers at each stage of the purchasing process: (1) choosing a provider, (2) choosing a service plan, (3) managing use of the service plan, and (4) deciding whether and when to switch an existing provider or plan for all communications services, including wireline voice and wireless services, as well as broadband and subscription video (cable and satellite).

This Notice also seeks particular comment on cost-effective best practices in information disclosure from within the communications sector – as well as familiar examples for other areas, such as nutrition labeling on food products, fuel efficiency for automobiles, energy efficiency for household appliances, and rates and fees for credit cards.

5/6/09 - Fourth Quarter Report on Informal Consumer Inquiries and Complaints Released

During this quarter, complaints in the reported categories decreased over 28%, from 98,816 in the 3rd quarter to 70,836 in the 4th quarter of 2008. Most of the decrease occurred between the Radio and Television Broadcasting category where complaints decreased over 27% from 40,057 in the third quarter to 29,106 this quarter and in Wireline Telecommunications where complaints decreased from 39,546 in the third quarter to 27,160 this quarter. Cable & Satellite Services-related complaints decreased over 7% from 2,263 in the 3rd quarter of 2008 to 2,097 in the 4th quarter. Wireless complaints decreased 26% from 16,950 in the 3rd quarter of 2008 to 12,464 in the 4th quarter. TCPA issues comprised over 66% of the complaints in this category. Wireline complaints decreased in the 4th quarter of 2008 to 27,160 from 39,546 in the 3rd quarter of 2008. Telephone Consumer Protection Act – Other Issues, Telephone Consumer Protection Act – Do Not Call List and Telephone Consumer Protection Act – Unsolicited Fax ranked as the top categories of wireline complaints and when combined, totaled over 82% of the wireline-related complaints.

Competition Reports

7/23/09 - FCC Releases Data on Local Telephone Competition

The FCC released new data on local telephone service competition in the United States. Twice a year, all incumbent local exchange carriers (incumbent LECs) and competitive local exchange carriers (CLECs) are required to report basic information about their local telephone service, and all facilities-based mobile telephony providers are required to provide information about their subscribers, pursuant to the FCC's local telephone competition and broadband data gathering program (FCC Form 477). Statistics reflect data as of June 30, 2008:

- End-user customers obtained local telephone service by utilizing approximately 124.6 million incumbent LEC switched access lines, 30.0 million CLEC switched access lines, and 255.3 million mobile telephony service subscriptions at the end of June 2008.
- Of the 30.0 million CLEC end-user switched access lines, 9.4 million lines were provided over coaxial cable connections. The 9.4 million lines represent about 71% of the 13.1 million end-user switched access lines that CLECs reported providing over their own local loop facilities.
- Mobile telephony service providers reported 255.3 million subscribers at the end of June 2008, which is 17.0 million, or 7%, more than a year earlier. About 8% of these subscribers were billed by mobile telephony service resellers.
- There was at least one CLEC serving customers in 82% of the nation's Zip Codes at the end of June 2008. About 97% of United States households resided in those Zip Codes. Moreover, multiple carriers reported providing local telephone service in the major population centers of the country.
- The 30.0 million lines reported by CLECs is about 19% of the 154.7 million total end-user switched access lines reported for the end of June 2008.
- CLECs reported 12.4 million (or 14%) of the 89.6 million lines that served residential end users and 17.7 million (or 27%) of the 64.7 million lines that served business, institutional, and government customers.
- CLECs reported providing 44% of their end-user switched access lines over their own local loop facilities, 36% by using unbundled network elements (UNEs) that they leased from other carriers, and 20% through resale arrangements with unaffiliated carriers.
- Incumbent LECs reported providing about 11% fewer UNE loops with switching (referred to as the UNE-Platform) to unaffiliated carriers at the end of June 2008 than they reported six months earlier (4.9 million compared to 5.5 million) and about 7% fewer UNE loops without switching (3.8 million compared to 4.1 million).
- Incumbent LECs were the presubscribed interstate long distance carrier for 59% of the switched access lines they provided to end users, while CLECs were the interstate long distance carrier for 79% of their switched access lines.