



# PUBLIC NOTICE

Federal Communications Commission  
445 12<sup>th</sup> St., S.W.  
Washington, D.C. 20554

News Media Information 202 / 418-0500  
Fax-On-Demand 202 / 418-2830  
TTY 202 / 418-2555  
Internet: <http://www.fcc.gov>  
<ftp.fcc.gov>

**DA 09-2376**  
**Released: November 3, 2009**

**COMMENT SOUGHT ON BROADBAND NEEDS IN EDUCATION, INCLUDING CHANGES  
TO E-RATE PROGRAM TO IMPROVE BROADBAND DEPLOYMENT  
NPB PUBLIC NOTICE # 15**

**PLEADING CYCLE ESTABLISHED**

**GN Docket Nos. 09-47, 09-51, 09-137**  
**CC Docket No. 02-6**  
**WC Docket No. 05-195**

**Comment Date: November 20, 2009**  
**Reply Comment Date: December 11, 2009**

In this public notice, as part of the Commission's development of a national broadband plan, we seek comment on various issues related to broadband access in education. We also seek comment on modifications to the schools and libraries universal service support mechanism (the E-rate program) to improve broadband deployment to meet the instructional and informational needs of schools and libraries.<sup>1</sup> In addition, we seek comment on whether and how increasing broadband deployment to schools can affect or stimulate the adoption of broadband more widely in communities and whether and how the E-rate program can be structured to more effectively distribute available funding. This proceeding is conducted pursuant to the American Recovery and Reinvestment Act of 2009 (Recovery Act), and for related purposes.<sup>2</sup> The Recovery Act directs the Commission to create a national broadband plan by February 17, 2010, that seeks to ensure that every American has access to broadband capability and establishes clear benchmarks for meeting that goal.<sup>3</sup>

Broadband has important roles to play in education, from digital learning resources to eTextbooks, professional development for teachers, remote instruction, and data records management. United States Secretary of Education Arne Duncan has stated that "[b]roadband access and online learning... presents a huge opportunity

---

<sup>1</sup> Under the E-rate program, eligible schools, libraries, and consortia that include eligible schools and libraries may receive discounts for eligible telecommunications services, Internet access, and internal connections. See 47 C.F.R. §§ 54.502, 54.503, 54.517.

<sup>2</sup> See American Recovery and Reinvestment Act of 2009, Pub. L. No. 111-5, 123 Stat. 115 (2009) (Recovery Act); see also *Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, and Possible Steps to Accelerate Such Deployment Pursuant to Section 706 of the Telecommunications Act of 1996, as Amended by the Broadband Data Improvement Act, A National Broadband Plan for Our Future*, GN Docket Nos. 09-137, 09-51, Notice of Inquiry, FCC 09-65 (rel. Aug. 7, 2009); *Comment Sought on International Comparison and Consumer Survey Requirements in the Broadband Data Improvement Act*, GN Docket No. 09-47, Public Notice, 24 FCC Rcd 3908 (2009).

<sup>3</sup> See Recovery Act § 6001(k).

that can be leveraged in rural communities and inner-city urban settings, particularly in subjects where there is a shortage of highly qualified teachers. At the same time, good teachers can utilize new technology to accelerate learning and provide extended learning opportunities for students.”<sup>4</sup>

Experts have recognized that schools, like businesses and governmental entities, need adequate technology to function most effectively. During an FCC public workshop on educational topics related to the national broadband plan, Dr. Joel Smith, Vice Provost and Chief Information Officer of Carnegie Mellon University who is also the principal investigator in charge of the Open Learning Initiative, noted that “connectivity ... gives us the opportunity to create virtual learning environments in which we can gather data about what is working and what is not working, feed that back to instructors, feed it back to course designers for the next iteration, so we do get continuous improvement in ways that we have not in the past.”<sup>5</sup> At the same workshop, Kumar Garg, Education Policy Analyst at the White House Office of Science and Technology Policy, noted that “[w]hether it is the high school administrator that wants to use cloud computing to improve operational efficiencies, whether it's the teacher that wants to use cutting-edge media resources, or student that wants to continue learning at home in the same rich content that might be available at the school, bandwidth is necessary.”<sup>6</sup> Jack O’Connell, California State Superintendent of Public Instruction, agreed, testifying that “today we live in a world that is increasingly technology oriented. . . . I feel strongly that our K through 12 public education system must absolutely keep pace with these advances in order to more effectively prepare our children for the challenges of this new world. . . . [Our students] are digital natives and are riding this wave with ease. Now educators and schools must find ways to use technology to help students navigate the increasingly competitive world and better prepare for successful futures.”<sup>7</sup>

We are specifically seeking data, reports, and case studies regarding pre-kindergarten through graduate school students and schools working with broadband connectivity and online, application service provider (ASP) and cloud-based solutions. We welcome data and case studies from public, private, charter, and religious schools. While many specific questions follow in this document, please give special consideration to any available data that document the implementation strategies, budgets/expenses, financing strategies, programmatic goals, measured outcomes, and other detailed operational and strategic information about the programs using broadband for educational purposes.

## **BROADBAND DEPLOYMENT DATA**

1. We seek information on the current state of broadband connectivity, device availability, and adoption in U.S. schools and classrooms.
  - a. We seek statistics on the current state of network connectivity as well as information on technology deployment projects that address connectivity, access, and adoption.

---

<sup>4</sup> Press Release, U.S. Department of Education, U.S. Department of Education Study Finds that Good Teaching can be Enhanced with New Technology; Analysis of Controlled Studies Shows Online Learning Enhances Classroom Instruction (June 26, 2009), *available at* <http://www.ed.gov/news/pressreleases/2009/06/06262009.html> (last visited Oct. 1, 2009).

<sup>5</sup> Dr. Joel Smith, National Broadband Plan Education Workshop at p. 37 of transcript (Aug. 20, 2009) (transcript *available at* [http://www.broadband.gov/docs/ws\\_13\\_edu.pdf](http://www.broadband.gov/docs/ws_13_edu.pdf) (last visited Oct. 1, 2009), presentation *available at* [http://www.broadband.gov/docs/ws\\_education/ws\\_education\\_smith.pdf](http://www.broadband.gov/docs/ws_education/ws_education_smith.pdf) (last visited Oct. 1, 2009)).

<sup>6</sup> Kumar Garg, National Broadband Plan Education Workshop at p. 48 of transcript (Aug. 20, 2009) (transcript *available at* [http://www.broadband.gov/docs/ws\\_13\\_edu.pdf](http://www.broadband.gov/docs/ws_13_edu.pdf) (last visited Oct. 1, 2009)).

<sup>7</sup> Jack O’Connell, National Broadband Plan Education Workshop at pp. 66, 67 of transcript (Aug. 20, 2009) (transcript *available at* [http://www.broadband.gov/docs/ws\\_13\\_edu.pdf](http://www.broadband.gov/docs/ws_13_edu.pdf) (last visited Oct. 1, 2009)).

- b. Although kilobits/device, kilobits/classroom, kilobits/student and devices/student are metrics to consider, what metrics should be used to measure an effective balance of network, hardware, application development, training, and adoption? Please include comment on metrics, benchmarks, and results against benchmarks.
- c. What are the specific barriers to increased broadband deployment and usage for schools and libraries? Is lack of physical facilities, including, e.g., complete wireless coverage for a school district, a problem for some schools and libraries? Is cost of the monthly service or installation too expensive, even with the E-rate discounts? Is funding for services and equipment not supported by E-rate, such as computers or teacher and staff training, too expensive for schools and libraries to purchase additional bandwidth? Are internal networks insufficient to handle increased usage?

## **BROADBAND IMPLEMENTATION**

- 2. We seek comment on school and school system broadband initiatives including infrastructure and large-scale application deployment.
  - a. What projects have been considered successful and not successful? What were the success criteria?
  - b. What have been the barriers to entry and barriers to adoption?
  - c. What are the most common needs heard from classrooms and instructional leaders with regard to using broadband for instructional or other purposes?
  - d. What creates demand for using broadband in education?

## **BROADBAND AND DIGITAL CONTENT**

- 3. We seek comment on schools' and school systems' online and digital content needs and uses, including content for student instruction (e.g., whole or partial textbooks or supplemental resources) as well as professional development content for educators.
  - a. What sets of instructional and operational problems are schools and school systems attempting to solve with online content solutions?
  - b. Of the typical set of online content tools (e.g., content creation, content publishing, content indexing, content management, content search) what have schools and school districts experienced when making purchasing decisions about the quality and availability of tools that meet their needs? Are there areas where needs are consistently unmet or under-served?
  - c. How is digital content being integrated with traditional textbooks and other materials? Are there issues preventing this integration?

## **DIGITAL LITERACY**

- 4. We seek comment on digital literacy programs, standards, and content.
  - a. Please provide case studies or data relating to the use of digital literacy training to improve access and use of online systems, and the educational, social or economic impact created by such work. Where has such digital literacy work been accomplished in a traditional classroom and where has it been accomplished in an online or blended model for developing these skills? What physical locations (if any) were used (libraries, schools, etc.)?
  - b. What barriers or issues have prevented implementation of such solutions?

## **ONLINE LEARNING SYSTEMS**

5. We seek comment on online learning systems.
  - a. Please provide examples of schools and school systems currently supporting blended online/offline instructional planning and delivery as well as distance learning via broadband and computer-based learning. What online content systems (e.g., online text books, resource libraries, learning management systems (LMS), distance learning programs, student portfolio systems) have been successfully implemented? How do schools and school systems align online learning systems with other traditional instructional tools (e.g., textbooks, curriculum, scope and sequence)?
  - b. How do schools and school systems measure the effectiveness of online vs. blended vs. offline instruction? What are the benchmarks used to compare delivery approaches?
  - c. What barriers or issues have prevented implementation of such solutions?

## **ACCOUNTABILITY AND REPORTING SYSTEMS**

6. We seek comment on schools and school system implementation of online/ASP/cloud-based student instructional data reporting systems and their impact on student achievement and school operations.
  - a. Many school systems have built Adequate Yearly Progress (AYP) systems to fulfill accountability obligations. Have schools and school districts had success building online student data reporting systems that have had a positive impact on student achievement and/or classroom/school operations? How have principals, teachers, students, or families benefitted?
  - b. What barriers or issues have prevented implementation of such solutions?
  - c. Within these systems, how do schools and school systems protect student-level data?
  - d. How have student data reporting systems supported school reform movements?

## **EDUCATIONAL DATA INTEROPERABILITY**

7. We seek comment on data interoperability projects utilizing the Internet and/or wide area networks (WANs). Such interoperability projects could include student record transfer solutions between enterprise software applications within a single organization, or inter-agency data transfers.
  - a. How effective were these projects?
  - b. What metrics were used to define the projects?
  - c. What barriers or issues have prevented implementation of such solutions?
  - d. What security systems were implemented and were they effective?

## **COMMUNICATION AND VIDEO SYSTEMS**

8. We seek comment on implementation of other online applications in schools and school systems.
  - a. How have communication tools like instant messaging and online video conferencing supported instructional program implementation?
  - b. Where have live video streaming programs been implemented to scale?
  - c. Where have social networking tools been implemented to support instructional goals?
  - d. How have concerns of content appropriateness/content blocking been addressed in rollout to students (especially in kindergarten through grade 12)?
  - e. What single sign-on and identity management tools and approaches have schools and school systems used to ensure security and seamless user experience across online tools?

## COLLABORATION AND COMMUNITY SYSTEMS

9. We seek comment on implementation of collaboration and best-practice-sharing online systems. For example, we have been directed to a number of systems which demonstrate features of collaboration or online community capabilities including: [www.curriki.org](http://www.curriki.org), [www.nylearns.org](http://www.nylearns.org), [www.oercommons.org](http://www.oercommons.org), [www.schooltube.com](http://www.schooltube.com), [www.boepilot.org](http://www.boepilot.org).

- a. Please provide examples of successful online collaboration systems rolled out to educators and/or students. How have projects measured success?
- b. If they were not successful, what were the major challenges?
- c. What subject matter(s) attracted the most use or were the most helpful for educators or students (e.g., instructional practice development, classroom management strategies, mentor/mentee relationships, administrative processes, student projects, student research)?

## INNOVATION IN BROADBAND AND ONLINE SYSTEMS

10. We seek comment on opportunities for government to support innovation in the education technology sector, both in terms of driving innovative program and product development, as well as driving adoption.

- a. What are the opportunities for government to support technology literacy, access to devices, and adoption through school-based programs for students, their families, and their communities?
- b. What are the opportunities for government in setting technology standards?
- c. What are the opportunities for government to drive innovation in schools and school systems?
- d. What are the opportunities for the government to support research and development to drive innovation to the education technology market?

## E-RATE MODIFICATIONS

11. As part of the national broadband plan, we seek comment on how the Commission can modify the E-rate program to more effectively meet the needs of applicants as well as whether the program can be a vehicle to stimulate the adoption of broadband throughout communities. For example, in Portugal researchers have found that the usage of broadband in schools creates a “spillover” effect that leads to greater broadband adoption in the community as students increase their Internet usage at home and transfer their technology skills to other family members.<sup>8</sup>

- a. Currently, schools and libraries may obtain discounts on various services that provide high-speed access to the Internet as telecommunications and Internet access (priority 1) services.<sup>9</sup> We are aware that applicants may characterize their funding requests according to terminology used on the eligible services list, such as DSL, “internet access via cable modem,” ATM, frame relay, T-1, T-3, Ethernet, OC-3, OC-12, ATM, “internet access via fiber optics,” etc. We seek information that would enable us to better understand at a more granular level what broadband

---

<sup>8</sup> Patrick Agyapong and Pedro Ferreira, *Spillover Effects from Wiring Schools with Broadband: Implications for Universal Service Policy*, 37th Research Conference on Communication, Information, and Internet Policy, Arlington, VA. Sept 25-27, 2009, available at <http://www.tprcweb.com/images/stories/papers/AgyapongFerreira-TPRC2009.pdf> (last visited Oct. 21, 2009).

<sup>9</sup> The Commission’s priority rules for the E-rate program provide that first priority for the available funding for all discount categories shall be given to requests for telecommunications services and Internet access (priority 1 services). 47 C.F.R. § 54.507(g)(1)(i). The remaining funds are allocated to requests for support for internal connections (priority 2 services), beginning with the most economically disadvantaged schools and libraries, as determined by the schools and libraries discount matrix. 47 C.F.R. § 54.507(g)(1)(ii); *see also* 47 C.F.R. § 54.505(c). Since funding year 2000, the E-rate program has committed the maximum \$2.25 billion before funding all of the requests for internal connections. 47 C.F.R. § 54.507(a) (establishing annual cap of \$2.25 billion per funding year).

services eligible applicants are buying today. Overall, what percentage of priority 1 funding is subsidizing broadband services at what speed levels, and what percentage is subsidizing basic voice service (wireline or wireless)? Can we segment the applicant community that receives discounts on higher capacity broadband services based on specific characteristics (such as number of students, rural vs. urban, discount level, etc.)?

b. When applicants develop their technology plans, what factors do they consider in determining their bandwidth needs?

c. We seek comment on program modifications to maximize the use of broadband connections that are subsidized by the E-rate program. Recognizing that the statute requires that discounts be provided on services used for “educational purposes,” we seek information on whether, and if so, how, past interpretations of the “educational purposes” requirement have restricted demand aggregation at the community level to support higher capacity broadband.<sup>10</sup> For example, the program could be modified to allow for use of broadband facilities at schools by the general community, rather than just by school faculty and students.<sup>11</sup> We seek specific examples of whether and if so, how, expanding the permissible use of E-rate supported services could confer benefits to a larger community or encourage partnerships with private or public organizations to pool resources to maximize broadband utilization. What practical or operational impact would such a change have?

d. We seek comment on any legislative changes that would expand the classes of eligible users. For example, the statute currently limits E-rate support to elementary schools and secondary schools, which are defined by each individual state.<sup>12</sup> What would the impact be of modifying the statute to permit colleges, community colleges, pre-kindergarten, Headstart, or other entities to participate in the E-rate program?<sup>13</sup>

e. To what extent does the fact that the E-rate program does not currently fund computers and other end user equipment inhibit the use of broadband by schools and libraries? Likewise, to what extent does the fact that the E-rate program does not currently fund training for teachers or librarians in the use of technology inhibit the use of broadband by schools and libraries? We seek specific information regarding what types of services are not available to teachers, students and library patrons due to lack of funding for end user equipment and training. If the E-rate program were to fund computers and training, what would the projected demand be? From a policy perspective, what are the potential negative consequences if such a change were adopted?

---

<sup>10</sup> *Federal-State Joint Board on Universal Service*, CC Docket No. 96-45, Report and Order, 12 FCC Rcd 8776, 9072, para. 562 (1997) (*Universal Service First Report and Order*) (subsequent history omitted).

<sup>11</sup> *Federal-State Joint Board on Universal Service, Petition of the State of Alaska Petition of the State of Alaska for Waiver for the Utilization of Schools and Libraries Internet Point-of-Presence in Rural Remote Alaska Villages Where No Local Access Exists and Request for Declaratory Ruling*, CC Docket No. 96-45, Order, 16 FCC Rcd 21511, 21513-14, para. 6 (2001) (*Alaska Order*) (granting limited waiver to permit members of certain remote Alaskan communities to use excess E-rate services when not in use by schools and libraries for educational purposes).

<sup>12</sup> For the purposes of the universal service programs, “elementary and secondary schools” are defined by the Elementary and Secondary Education Act of 1965, which defer to the definitions of those terms by individual states. *See* 47 U.S.C. § 254 (h)(7)(A), 20 U.S.C. § 7801 (18), (38).

<sup>13</sup> We note that certain states currently include pre-kindergarten, Headstart, and adult education within their definitions of schools. *See* USAC Website, Eligibility Table for Non-traditional K-12 Students and Facilities, <http://www.usac.org/sl/applicants/step01/non-traditional-k-12/k-12-eligibility-table.aspx> (last visited Sept. 8, 2009). However, college education would be prohibited because, pursuant to the Elementary and Secondary Education Act of 1965, “the term ‘secondary school’ means a nonprofit institutional day or residential school, ... as determined under State law, except that *the term does not include any education beyond grade 12.*” 20 U.S.C. § 7801 (38) (emphasis added).



f. Currently, WANs are not eligible for support “to the extent that states, schools, or libraries build or purchase a wide area network to provide telecommunications services.”<sup>14</sup> Would modifications to this rule regarding WANs, which link schools and libraries within a district or link several school districts together, result in greater broadband deployment?

g. Are there any programmatic rules and policies that have the effect of deterring requests for broadband funding? For instance, we understand that some libraries have suggested that compliance with filtering requirements under the Children’s Internet Protection Act represents a deterrent to program participation.<sup>15</sup> Are there other statutory provisions or Commission rules or policies that may reduce program participation by entities that otherwise would utilize discounts on broadband services? Commenters should be specific in identifying which current rules may create barriers to broadband deployment.

h. We seek comment on these ideas and on other suggestions for changing E-rate eligibility to improve broadband deployment.

## **E-RATE DISBURSEMENT**

12. We seek comment on how changing the E-rate disbursement and discount methodology might maximize the deployment of broadband.

a. One possible modification would be to create a new priority level for schools and libraries that do not have broadband or that have extremely slow Internet speeds to permit those entities to receive funding in advance of other eligible requests, which could enable such entities to “catch up.” An alternative would be to provide increased E-rate discounts for entities that wish to implement certain levels of connectivity. We seek comment on other methods by which the Commission could implement such changes, if they were proposed.

b. Currently, the program’s funding varies for applicants based on the number of their students who qualify for free or reduced lunch and based on their geographic location.<sup>16</sup> Using this measure, discounts range from 90 percent to 20 percent of the pre-discount price for eligible services, with the poorest schools receiving funding to pay for 90 percent of eligible services. Some rural schools receive additional discounts.<sup>17</sup> The Commission could recalculate these E-rate discount levels to factor in not just poverty and whether the school is located in a rural area, but also whether the entity lacks broadband services. In addition, the Commission could change its priority structure to give preference for those schools that have not received funding for internal connections in several years. We seek comment on the extent to which schools that have not received funding for internal connections (Priority 2 funding) need to improve their internal connections in order to most efficiently use their broadband connections now and in the future.

c. To what extent have current rules inhibited the development of or expansion of existing state, regional or local broadband networks? Are there changes to the Commission’s rules that would facilitate these types of networks?

d. If the Commission established a national broadband goal for schools or libraries, what effect would that have on demand for E-rate funding?

---

<sup>14</sup> 47 C.F.R. § 54.518.

<sup>15</sup> 47 U.S.C § 254(h)(6); 47 C.F.R. § 54.520. *See, e.g.*, “Public Libraries and the Internet 2008: Study Results and Findings,” College of Information, Florida State University, funded by the Bill and Melinda Gates Foundation and the American Library Association at 47 (2006) (2008 ALA Study) (noting that 40.5% of libraries did not apply in 2008 because of the need to comply with CIPA’s filtering requirements, up from 36.1% in 2007).

<sup>16</sup> 47 C.F.R. § 54.505.

<sup>17</sup> *Id.*

e. We seek comment on these issues as well as other ideas to modify E-rate disbursements and discounts to maximize the deployment of broadband.

## E-RATE FUNDING

13. We seek comment on the implications of modifying E-rate funding to support additional broadband deployment and how changes to the E-rate program would improve the ability of the program to meet applicant needs for broadband.

- a. To what extent does the annual E-rate funding cap of \$2.25 billion limit the extent of broadband deployment by eligible schools and libraries?<sup>18</sup> What are the financial or programmatic implications of increasing the cap to fund additional services not currently covered by E-rate? What are the implications of indexing the cap to inflation? Would there be specific implementation issues that would arise related to such changes?
- b. To the extent the Commission modifies its E-rate rules to encourage additional requests for funding for broadband services under priority 1, how would that change likely impact the availability of funding for priority 2 services?
- c. To the extent that commenters believe that providing additional funding above the current cap would advance broadband deployment, we seek comment on what additional amounts would be needed to achieve specific levels of broadband connectivity. Commenters should identify all assumptions regarding their dollar estimates.
- d. The Commission could decrease the discount levels for basic telecommunications, or otherwise modify the existing discount levels, to increase the amount of E-rate funds available for broadband deployment. What would be the effect of such a change?
- e. Would eliminating some of the services currently eligible and expanding eligibility to other services result in greater levels of broadband connectivity? Commenters should specifically articulate how proposed changes in the eligible services list would enable greater broadband deployment.
- f. What other costs not currently covered under the E-rate program would be incurred if schools and libraries could purchase additional broadband capacity? Would schools and libraries have to upgrade personal computer equipment, internal wiring, servers, and other hardware?
- g. Additionally, we seek comment on suggestions for coordinating with federal or state agencies on grant programs that could supplement the Commission's E-rate program. For example, the United States Department of Education's Enhancing Education Through Technology State Program (Ed Tech) provides grants to state educational agencies to improve student achievement through the use of technology in elementary and secondary schools.<sup>19</sup> Money from grants such as this, in combination with E-rate funds, could greatly increase a school's broadband connectivity.
- h. Alternatively, E-rate funds could be used in conjunction with funds from other entities to support broadband projects. For example, upon a state's recommendation, a particular project might be funded by having the state pay for the computers and training, and providing E-rate discounts for the broadband connection. Are there other specific ways the Commission could better leverage the benefits of E-rate funding through coordination with other federal, state, local or non-profit programs that seek to advance broadband deployment?
- i. We seek comment on these suggestions and other ideas to increase the amount of E-rate funds available for broadband technologies, or to more effectively use E-rate funding to improve broadband deployment.

---

<sup>18</sup> See 47 C.F.R. § 54.507(a).

<sup>19</sup> <http://www.ed.gov/programs/edtech/index.html> (last visited Aug. 28, 2009).



## OPEN CALL

14. We seek any additional case-studies, research and other evidence that may provide additional insight into the types of questions asked in this document.

This matter shall be treated as a “permit-but-disclose” proceeding in accordance with the Commission’s *ex parte* rules.<sup>20</sup> Persons making oral *ex parte* presentations are reminded that memoranda summarizing the presentations must contain summaries of the substance of the presentations and not merely a listing of the subjects discussed. More than a one- or two-sentence description of the views and arguments presented generally is required.<sup>21</sup> Other rules pertaining to oral and written *ex parte* presentations in permit-but-disclose proceedings are set forth in section 1.1206(b) of the Commission’s rules.<sup>22</sup>

**All comments should refer to GN Docket Nos. 09-47, 09-51, 09-137; CC Docket No. 02-6; and WC Docket No. 05-195. Please title comments and reply comments responsive to this public notice as “Comments (or Reply Comments)– NPB Public Notice # 15.” Further, we strongly encourage parties to develop responses to this public notice that adhere to the organization and structure of the questions in this notice.**

Comments may be filed using (1) the Commission’s Electronic Comment Filing System (ECFS), (2) the Federal Government’s eRulemaking Portal, or (3) by filing paper copies.<sup>23</sup> Comments filed through the ECFS can be sent as an electronic file via the Internet to <http://www.fcc.gov/cgb/ecfs/> or the Federal eRulemaking Portal: <http://www.regulations.gov>.<sup>24</sup> Generally, only one copy of an electronic submission must be filed. In completing the transmittal screen, commenters should include their full name, U.S. Postal Service mailing address, and the applicable docket or rulemaking number. Parties may also submit an electronic comment by Internet e-mail. To get filing instructions for e-mail comments, commenters should send an e-mail to [ecfs@fcc.gov](mailto:ecfs@fcc.gov), and should include the following words in the body of the message, “get form.” A sample form and directions will be sent in reply. Parties who choose to file by paper must file an original and four copies of each filing.

Filings can be sent by hand or messenger delivery, by commercial overnight courier, or by first-class or overnight U.S. Postal Service mail (although we continue to experience delays in receiving U.S. Postal Service mail). All filings must be addressed to the Commission’s Secretary, Office of the Secretary, Federal Communications Commission.

- The Commission’s contractor will receive hand-delivered or messenger-delivered paper filings for the Commission’s Secretary at 236 Massachusetts Avenue, N.E., Suite 110, Washington, D.C. 20002. The filing hours at this location are 8:00 a.m. to 7:00 p.m. All hand deliveries must be held together with rubber bands or fasteners. Any envelopes must be disposed of before entering the building.
- Commercial overnight mail (other than U.S. Postal Service Express Mail and Priority Mail) must

---

<sup>20</sup> See 47 C.F.R. §§ 1.1200, 1.1206.

<sup>21</sup> See 47 C.F.R. § 1.1206(b).

<sup>22</sup> See 47 C.F.R. § 1.1206(b).

<sup>23</sup> See *Electronic Filing of Documents in Rulemaking Proceedings*, GC Docket No. 97-113, Report and Order, 13 FCC Red 11322 (1998).

<sup>24</sup> Filers should follow the instructions provided on the Federal eRulemaking Portal website for submitting comments.

be sent to 9300 East Hampton Drive, Capitol Heights, MD 20743.

- U.S. Postal Service first-class mail, Express Mail, and Priority Mail should be addressed to 445 12th Street, S.W., Washington, D.C. 20554.

People with Disabilities: To request materials in accessible formats for people with disabilities (Braille, large print, electronic files, audio format), send an e-mail to [fcc504@fcc.gov](mailto:fcc504@fcc.gov) or call the Consumer and Governmental Affairs Bureau at (202) 418-0530, (202) 418-0432 (TTY).

For further information about this Public Notice, please contact Anita Cheng at (202) 418-7400 or Sharren Bates at 202-418-3615.

- FCC -