

**STATEMENT OF
COMMISSIONER JESSICA ROSENWORCEL**

Re: *Modernizing the E-Rate Program for Schools and Libraries*, Notice of Proposed Rulemaking (July 19, 2013)

This is big—because here comes E-Rate 2.0.

Over the last several months I have had the opportunity to talk about the E-Rate program at length with teachers, librarians, superintendents, school administrators, education technology providers, network engineers, device manufacturers, and content creators. They obviously have different interests. They spend their days in everything from classrooms to cubicles to corner offices. They work with different educational systems in different communities across the country. But they have one thing in common. They believe in the power of E-Rate to bring connectivity to our nation's schools and libraries. They believe it is absolutely essential for digital age opportunity—and digital age success.

I agree. E-Rate is the nation's largest education technology program. Launched seventeen years ago through the vision and leadership of Senator Jay Rockefeller, Senator Olympia Snowe, and then Congressman, now Senator, Ed Markey, E-Rate has helped connect more than 95 percent of classrooms to the Internet.

Impressive! But laurels are not good resting places. Because we are quickly moving from a world where what matters is connectivity to a world where what matters is capacity. Already, year-in and year-out, the demand for E-Rate support is double the roughly \$2.3 billion the Commission now makes available annually. Moreover, the agency's own survey indicates that 80 percent of schools and libraries believe that their broadband connections do not meet their current needs.

Let's be honest. Those needs are only going to grow. School administrators are facing tough choices about limited bandwidth in the classroom. How to divvy it up, what grades and classrooms get it, and what programs they can run on it. This means that without adequate capacity our students are going to fall short. They will be unable to realize the full potential of digital learning. That's a serious problem.

But this is not just a matter of getting schools and libraries connected; it's a matter of our global competitiveness. Welcome to the world that is flat. Knowledge, jobs, and capital are going to migrate to places where workers have digital age skills, especially those in science, technology, engineering, and math—or STEM fields. In fact, the Bureau of Labor Statistics tells us that here at home over the next five years we will have over 1 million STEM-related job openings. STEM jobs are growing at a rate three times faster than all other occupations. And even opportunities outside of STEM will be increasingly digitized, and students will need technology skills to become competitive in the worldwide workforce.

But we fail our students if we expect digital age learning to take place at near dial-up speeds. A recent Harris survey found that roughly half of E-Rate schools access the Internet at

speeds of 3 Megabits or less. That is too slow for streaming high-definition video and not fast enough for the most innovative teaching tools. Add to this that in the United States, out of 42,000 high schools, only 2100—five percent—offer computer science courses.

Contrast this with efforts underway in some of our world neighbors. They are pouring resources into these subjects, into schools, and connectivity.

For example, in Singapore 100 percent of schools are wired with high-speed broadband. In South Korea, 100 percent of schools are also connected to high-speed broadband. With so much capacity, an effort is underway to transition all students from traditional textbooks to digital readers in 2016. In Uruguay, through a national program, nearly all primary and secondary schools have been connected and every primary school student has access to a free laptop. Uruguay also has revamped its secondary school science and math curricula adding robotics and national math competitions. In Turkey, the Prime Minister is seeking a provider to supply 10 million tablets to Turkish students by 2015. In Thailand, the government has established a one tablet per child policy in effort to reduce the education gap between the nation's urban and rural children. By the end of next year, the government will have distributed devices to 13 million school children.

For now, we can recognize that these countries are smaller than the United States. They have different cultures. They have different education systems. But we can still take from these examples that improving broadband capacity to schools for digital age learning must be a national priority. If we fracture this effort and leave it to every local school jurisdiction we will miss opportunities for scale and savings. Yet in the end the point is a simple one. Access to adequate broadband is not a luxury—it is a necessity for our next generation to be able to compete. Just like in my day you wouldn't have a classroom without a blackboard, today we shouldn't have a classroom without broadband.

We are at a crossroads. We have a choice. We can wait and see where the status quo takes us and let other nations lead the way. Or we can choose a future where all American students have the opportunity to gain the skills they need to compete, no matter who they are, where they live, or where they go to school.

For my part, I believe that it is time to compete. It is time for E-Rate 2.0. We need to protect what we have already done, build on it, and put this program on a course to provide higher speeds and greater opportunities in the days ahead.

So I am especially pleased that today we begin this process with this rulemaking. In keeping with our tradition here at the FCC, this document is comprehensive. It reflects the diligent work of many dedicated lawyers. It covers a lot of important issues. But there are two issues I believe deserve our immediate focus if we want to see E-Rate 2.0 up and running fast. We need to focus on setting capacity goals and simplifying the application process.

First, E-Rate 2.0 must be built on clear capacity goals. The fact that we have connected so many schools and libraries with E-Rate is good. But the job is not done. A recent survey from Project Tomorrow tells us that only 15 percent of schools believe they have the bandwidth

they need for instructional purposes. It means they are unable to use the most up-to-date educational materials. We can fix this with capacity goals.

Furthermore, capacity goals will signal to markets that the United States is serious about making digital education a priority. This will yield more opportunities through greater scale for new services, teaching tools, and devices—everywhere. We can use them to facilitate public-private partnership opportunities that will bring education enhancing technology to classrooms in communities across the country.

Today's rulemaking sets out some capacity goals that I have proposed in the past—and fully support. By the 2015 school year, every school should have access to 100 Megabits per 1000 students. Before the end of the decade, every school should have access to 1 Gigabit per 1000 students. Libraries, too, will need access on par with these capacity goals. And this provides more than just scale for content and device providers. Because the spillover effect for this kind of broadband in local communities is substantial. Building Gigabit capacity to anchor institutions like schools and libraries is the ticket to Gigabit cities and the ticket to digital education and economic growth.

To get to these goals, we need to take a hard look at the existing program. We need to collect better data from each of our applicants about what capacity they have and what capacity they need. Then I think we can make adjustments to how we prioritize funding to ensure that schools shorter on capacity get greater access to support.

As part of this hard look, we should phase down the estimated \$600 million we currently spend on outdated services like paging and free up those funds for more high-capacity broadband. But growing this program is about growing national infrastructure and enhancing educational opportunity for the next generation. It is a conversation we need to have, because it is where we need to invest now.

Second, we need ideas from stakeholders far and wide about how to simplify the application process. I can tell you from my experiences speaking about E-Rate during the last several months that nothing gets applause like the promise of simplifying the process. I hope we can take a fresh look at how the complexity of our existing system can deter small and rural schools from applying. To this end, in our rulemaking we ask about the feasibility of multi-year applications. This could substantially reduce paperwork and administrative expense. We also ask how to encourage greater use of consortia applications. This could mean greater scale and more cost-effective purchasing. I think these are good ideas. We should be open to others—especially from those who know the challenge of filling out these forms year-in and year-out.

As we move forward with our rulemaking, I think E-Rate 2.0 requires us to think big and reach beyond Washington. We need to hear from educators and technology experts on the front lines in classrooms across the country. Because as President Obama put it in Mooresville, North Carolina last month, we are “at a moment when the rest of the world is trying to out-educate us[.]” But it is within our reach to make sure that our young people have every tool they need to go as far as their talents and dreams and ambitions and hard work will take them.

So let's do something audacious. Let's seize the powerful combination of broadband, plummeting device costs, and increasing opportunity for cloud-based educational content. Call it ConnectED, call it E-Rate 2.0, but let's do it.

Thank you to the Wireline Competition Bureau for your hard work on this rulemaking. Thank you to Professor Jim Steyer and Secretary Margaret Spellings and the LEAD Commission for fostering an important national conversation about the seismic shifts coming in education and technology. Thank you also Principal John Word for your powerful statement today and of course, your work with students every day.

Finally, thank you to Chairwoman Clyburn and Commissioner Pai for engaging with me on this issue. I look forward to working together to reboot, reinvigorate, and recharge the E-Rate program.