



# Department of Justice

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**STATEMENT**

**OF**

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**BEFORE THE  
SUBCOMMITTEE ON THE CONSTITUTION,  
CIVIL RIGHTS, AND CIVIL LIBERTIES  
COMMITTEE ON THE JUDICIARY  
UNITED STATES HOUSE OF REPRESENTATIVES**

**CONCERNING  
EMERGING TECHNOLOGIES AND THE RIGHTS OF INDIVIDUALS WITH  
DISABILITIES**

**PRESENTED ON  
APRIL 22, 2010**

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**Principal Deputy Assistant Attorney General for Civil Rights**  
**Department of Justice**

**Before the**  
**Subcommittee on the Constitution,**  
**Civil Rights, and Civil Liberties**  
**Committee on the Judiciary**  
**United States House of Representatives**

**Concerning**  
**Emerging Technologies and the Rights of Individuals with Disabilities**

**Presented on**  
**April 22, 2010**

Chairman Nadler, Ranking Member Sensenbrenner, and Members of the Subcommittee, it is an honor to appear before you today to discuss the rights of individuals with disabilities to have access to emerging technologies. The Civil Rights Division enforces the Americans with Disabilities Act (“ADA”) and Section 504 of the Rehabilitation Act, and we have a substantial role in implementing Section 508 of the Rehabilitation Act. Pursuant to these statutes, access to the internet and emerging technologies is not simply a technical matter, but a fundamental issue of civil rights. As more and more of our social infrastructure is made available on the internet – in some cases, exclusively online – access to information and electronic technologies is increasingly becoming the gateway civil rights issue for individuals with disabilities.

Congress adopted the Americans with Disabilities Act in 1990. The statute is a comprehensive, broad-reaching mandate to eliminate discrimination on the basis of disability in all of the areas of American civic and economic life. The Department of Justice is responsible for enforcement and implementation of Titles II and III of the ADA, which cover State and local government entities and private businesses, respectively. We also enforce Title I of the ADA, which prohibits disability discrimination in employment, in cases involving State and local government employees. Most of the nondiscrimination requirements of Title III apply to private businesses that fall within one of the categories of “public accommodation” established in the statute and the Attorney General’s implementing regulations. The Department also enforces the statute on which the ADA is based, Section 504 of the Rehabilitation Act of 1973, 29 U.S.C. 794, which prohibits discrimination in federally assisted and federally conducted programs and activities.

When Congress enacted the ADA and Section 504, the internet as we know it today – the ubiquitous venue for information, commerce, services, and activities – did not exist. For that reason, although the ADA and Section 504 guarantee the protection of the rights of individuals with disabilities in a broad array of activities, neither law expressly mentions the internet or contains requirements regarding developing technologies. When Congress amended the Rehabilitation Act in 1998, it added section 508. That provision specifically requires Federal

government agencies to ensure that their electronic and information technologies, including their websites, are accessible to individuals with disabilities. 29 U.S.C. 794(d). Within the Civil Rights Division the Disability Rights Section is responsible for enforcement of the civil rights statutes relating to the accessibility of information technologies to individuals with disabilities.

In this testimony, I will first discuss the importance of accessible technology to people with disabilities. I will then talk about the significant barriers that keep people with disabilities from having full and equal access to emerging technologies. I will then discuss the actions the Department of Justice is taking to ensure that emerging technologies do not leave people with disabilities behind.

### *Disability Rights and Developing Technologies*

Information technologies play a significant and ever expanding role in everyday life in America. The most developed and entrenched of these technologies, the internet, has become a gateway to the full range of activities, goods, and services available offline. Constituents of State and local government use the internet to renew library books and driver's licenses, to file tax forms, and even to correspond with elected officials. Increasingly, businesses – even those with substantial physical sales facilities – use websites to sell goods and services to their customers. So-called e-commerce is a rapidly expanding segment of the American economy. Ensuring nondiscriminatory access to the goods and services offered through the internet is therefore essential to full societal participation by individuals with disabilities.

It is not simply e-commerce that is affected, however. Electronic and information technologies are swiftly becoming a gateway to employment and education. Employment recruiting and hiring systems are often web based. In many cases, the only way to apply for a job or to sign up for an interview is on the internet. Job applicants research employment opportunities online, and they use the internet to most efficiently learn about potential employers' needs and policies. And schools at all levels are increasingly offering programs and classroom instruction through the internet. Many colleges and universities offer degree programs online; some universities exist exclusively on the internet. Even if they do not offer degree programs online, most colleges and universities today rely upon the internet and other electronic and information technologies in course assignments and discussion groups, and for a wide variety of administrative and logistical functions in which students and staff must participate.

For many individuals with disabilities who are limited in their ability to travel or who are confined to their homes, the internet is one of the few available means of access to the goods and services of our society. The broad mandate of the ADA to provide an equal opportunity for individuals with disabilities to participate in and benefit from all aspects of American civic and economic life will be served in today's technologically advanced society only if it is clear to businesses, employers, and educators, among others, that their web sites must be accessible.

But the internet is not the only information or electronic technology that is altering the way in which we do business and provide education in this country. Facing an exponential rise

in the cost of standard print text books, colleges and universities are beginning to use electronic books and electronic book readers instead. Electronic book readers are typically lightweight, hand-held devices with screens and operating controls. Texts in an electronic form appear on the screens of these devices to simulate the experience of reading a book. The texts that appear on screen are formatted to look just like they would in a print version. Colleges and universities are likely to use digital and electronic text books more and more. Some experts predict that traditional print texts will be replaced by electronic or digital texts within three to five years.

As public servants entrusted with the welfare of our citizens, we in the Federal government must provide the leadership to make certain that individuals with disabilities are not excluded from the virtual world in the same way that they were historically excluded from “brick and mortar” facilities. Emerging technology promises to open up opportunities for people with disabilities throughout our society. But a digital divide is growing between individuals with and without disabilities. If we are not careful, as technology becomes more sophisticated the gap will grow wider, and people with disabilities will have less access to our public life.

These problems—and the corresponding opportunities—are likely to become more acute in the years to come. As the population ages, more and more Americans will need access to emerging technologies to continue working and to access the healthcare system. The 2006 National Health Interview Survey (NHIS), revealed that 13.6 percent of Americans 65 to 74 years of age reported having a vision loss and 21.7 percent of Americans 75 years of age and older reported having a vision loss. Advances in the availability of accessible technologies will increase—and are already increasing—the long-term employability of individuals with progressive blindness and other vision disabilities.

#### *Technological Barriers to Accessibility*

Millions of people have disabilities that affect their use of the web – including people with visual, auditory, physical, speech, cognitive, and neurological disabilities. People who are blind or have low vision are often the most affected by inaccessible information and electronic technology.<sup>1</sup> Many individuals with visual impairments use an assistive technology known as a screen reader that enables them to access the information on computers or internet sites. Screen readers read text aloud as it appears on the computer screen. Individuals who are blind may also use refreshable Braille displays, which convert the text of websites to Braille. Sometimes, those individuals will use keyboards in lieu of a mouse to move up and down on a screen or sort through a list and select an item.

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<sup>1</sup>People who have difficulty using a computer mouse because of mobility impairments, for example, may use an assistive technology that allows them to control software with verbal commands. But websites and other technologies are not always compatible with those assistive technologies. Captioning of streaming videos may also be necessary in order to make them accessible to individuals who are deaf or hard of hearing. And individuals with difficult memory or cognitive impairments may be affected by complex websites.

The most common barriers on websites are posed by images or photographs that do not provide identifying text. A screen reader or similar assistive technology cannot “read” an image. When images appear on websites without identifying text, therefore, there is no way for the individual who is blind or who has low vision to know what is on the screen. The simple addition of a tag or other description of the image or picture will keep an individual using a screen reader oriented and allow him or her to gain access to the information the image depicts. Similarly, complex websites often lack navigational headings or links that would make them easy to navigate using a screen reader. Web designers can easily add those headings. They may also add cues to ensure the proper functioning of keyboard commands. They can also set up their programs to respond to voice interface technology. Making websites accessible is neither difficult nor especially costly, and in most cases providing accessibility will not result in changes to the format or appearance of a site.

Accessibility issues arise outside of the internet as well. Most significantly, as schools increasingly use electronic texts, the inaccessibility of many electronic book readers has become more and more salient. At the same time, however, the use of electronic texts holds great promise for people with disabilities. Students who are blind or have low vision have long used a form of electronic text as an accommodation that enables them to access the course materials their classmates use. These electronic texts, which are converted from standard print texts, are read on a computer, using a screen reader or a refreshable Braille display. In order for these electronic texts to be truly usable by someone who is blind or who has low vision, however, the texts must be coded with structural data so that the assistive technology can properly identify where to begin reading or where a sentence or paragraph begins and ends.

This system disadvantages blind students in colleges and universities as compared with sighted students, because it can take considerable time for a university to locate texts from publishers, and convert the text to a format usable by a screen reader or similar assistive technology. As a result, all too often course materials are not available to blind students until well after classes have begun.<sup>2</sup> If you ask just about any disability student services center at a major university, you will learn how significant this problem really is. Imagine as a student being unable – on a routine basis – to obtain your course materials for the first four months of the semester. As an alternative to obtaining converted texts from the publisher, universities may scan printed texts in order to provide them in electronic form. But this method can result in a “text dump,” which lacks structural data to ensure proper reading by assistive technologies. Conversion errors, too, are common. So, the choice available to blind students prior to use of the new, electronic book readers, was to receive accurate materials months into the semester or inaccurate materials in a more timely manner.

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<sup>2</sup>As the Disability Resource Center (“Center”) at Arizona State University, one of the universities involved in the Kindle matter that I will discuss in a moment, informs blind students in its handbook, for example, “textbook/print conversion is a time intensive process, especially for technical subject matter, and *can require up to four months to complete.*” See [www.asu.edu/studentaffairs/ed/drc/services\\_alternative\\_format\\_procedure.htm](http://www.asu.edu/studentaffairs/ed/drc/services_alternative_format_procedure.htm). (emphasis added).

The emergence of dedicated electronic book readers thus holds great potential to place students with disabilities on equal footing with other students. But that happy result will occur only if the electronic book reader is equipped with text-to-speech capabilities, so that it may read the electronic text aloud. In a few moments, I will discuss the Department of Justice's settlements in investigations of colleges and universities that used the Kindle DX, an inaccessible electronic book reader, as part of a pilot project. At the time the Kindle DX was used in this pilot project, it contained text-to-speech capabilities – meaning that it could read the electronic text aloud, rendering the text audible and therefore accessible to blind persons. Unfortunately, the device did not include a similar audio option for the menus or navigational controls. Without text-to-speech for the menu or navigational controls, blind students could not operate the electronic book reader independently, because they had no way of knowing which book they selected or how to access the search, note taking, or bookmark functions of the device. Electronic book readers developed by companies other than Amazon also pose barriers to use by individuals who are blind or have low vision, typically because they entirely lack a text-to-speech function.

But a dedicated electronic book reader can be made accessible. From the user perspective, an accessible electronic book reader might speak each option on a menu aloud, as the cursor moves over it, and then speak the selected choice aloud once made by the user. Special key strokes might be programmed specifically for blind users. For example, the user would press the alt-A key any time something related to accessibility is needed, at which point a menu with additional choices would come up allowing the user to scroll over the menu as described above. Appropriate coding would mean that the text, even mathematical formulas, or poetry in which line lengths vary, would be read aloud coherently. In this way, the user with the disability would gain access to all the information on the printed page.

*The Department of Justice Positions Regarding Website Accessibility.*

Ensuring that people with disabilities have a full and equal opportunity to access the benefits of emerging technologies is an essential part of our disability rights enforcement at the Department of Justice. Because the internet was not in general public use when Congress enacted the ADA and the Attorney General promulgated regulations to implement it, neither the statute nor the regulations expressly mention it. But the statute and regulations create general rules designed to guarantee people with disabilities equal access to all of the important areas of American civic and economic life. And the Department made clear, in the preamble to the original 1992 ADA regulations, that the regulations should be interpreted to keep pace with developing technologies. 28 C.F.R. pt. 36, App. B.

The Department of Justice has long taken the position that both State and local government websites *and* the websites of private entities that are public accommodations are covered by the ADA. In other words, the websites of entities covered by both Title II and Title III of the statute are required by law to ensure that their sites are fully accessible to individuals with disabilities. The Department is considering issuing guidance on the range of issues that arise with regard to the internet sites of private businesses that are public accommodations covered by

Title III of the ADA. In so doing, the Department will solicit public comment from the broad range of parties interested in this issue.

There is no doubt that the internet sites of State and local government entities are covered by Title II of the ADA. Similarly, there is no doubt that the websites of recipients of Federal financial assistance are covered by Section 504 of the Rehabilitation Act. The Department of Justice has affirmed the application of these statutes to internet sites in a technical assistance publication, *Accessibility of State and Local Government Websites to People with Disabilities* (<http://www.usdoj.gov/crt/ada/websites2.htm>), and in numerous agreements with State and local governments and recipients of Federal financial assistance. Our technical assistance publication also provides guidance with simple steps to ensure that government websites have accessible features for individuals with disabilities.

As to private places of public accommodation, only two cases – both in Federal district courts – have specifically addressed the application of ADA Title III to their websites, and those cases have reached different conclusions. But the position of the Department of Justice has been clear: Title III applies to the internet sites and services of private entities that meet the definition of “public accommodations” set forth in the statute and implementing regulations. The Department first made this position public in a 1996 letter from Assistant Attorney General Deval Patrick responding to an inquiry by Senator Harkin regarding the accessibility of websites to individuals with visual impairments. The letter has been widely cited as illustration of the Department’s position. The letter does not state whether entities doing business exclusively on the internet are covered by the ADA. In 2000, however, the Department filed an amicus brief in the Fifth Circuit in *Hooks v. OKbridge*, which involved a web-only business; the Department’s brief explained that a business providing services solely over the internet is subject to the ADA’s prohibitions on discrimination on the basis of disability.<sup>3</sup> And in a 2002 amicus brief in the Eleventh Circuit in *Rendon v. Valleycrest Productions*, the Department argued against a requirement, imposed outside of the internet context by some Federal courts of appeals, that there be a nexus between the challenged activity and a private entity’s brick-and-mortar facility to obtain coverage under Title III. Although *Rendon* did not involve the internet, our brief argued that Title III applies to any activity or service offered by a public accommodation either on or off the premises.<sup>4</sup>

The Disability Rights Section of the Department of Justice’s Civil Rights Division began to provide technical assistance to a host of public and private entities that were in the process of assisting Federal agencies with Section 508 compliance, and much of its guidance on making internet sites accessible developed from there. There are several sets of standards describing how to make websites accessible to individuals with disabilities. Government standards for

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<sup>3</sup>*Department of Justice Brief as Amicus Curiae* at p. 7, Case No. SA-99-CV-214-EP, Aug. 1, 2000 (on appeal from the United States District Court for the Western District of Texas.) The unpublished, per curiam opinion can be found at 232 F.3d 208 (5<sup>th</sup> Cir. 2000).

<sup>4</sup>*Department of Justice Brief as Amicus Curiae*, Case No. 01-11197, June 18, 2002 (on appeal from the United States District Court of the Southern District of Florida). 294 F.3d 1279 (11<sup>th</sup> Cir. 2002).

website accessibility were developed pursuant to Section 508. Many entities elect to use the standards that were developed and are maintained by the Web Accessibility Initiative, a subgroup of the World Wide Web Consortium (“W3C”).

*The Department of Justice Positions Regarding Other Emerging Technologies*

In June of last year, the Department of Justice received several complaints from the National Federation of the Blind (“NFB”), the American Council of the Blind (“ACB”), and a coalition of disability rights groups collectively known as the Reading Rights Coalition – each alleging that colleges or universities were violating their obligations under the ADA and Section 504 by having their students use electronic book readers that were inaccessible to individuals who are blind for course materials. Case Western Reserve University, Princeton University, Pace University, Reed College, and Arizona State University, among others, had formed a pilot project with Amazon.com, Inc., to evaluate the viability of using the Kindle DX in a classroom setting. The NFB and the ACB, along with an individual blind plaintiff, also filed suit in Federal district court against Arizona State University; they argued that the pilot project violated Title II and Section 504. *Nat'l Fed. of the Blind, et al. v. Arizona Bd. of Regents, et al.*, Case No. CV 09-1359 GMS (D. Az. 2009).

The Department of Justice investigated each complaint and, on January 13, 2010, the Department issued a press release announcing that it had reached separate settlement agreements with Case Western Reserve University, Reed College, and Pace University.<sup>5</sup> The Department of Justice and the NFB and the ACB also jointly settled the litigation against Arizona State University in an agreement signed on January 11, 2010. Since that time, on March 29, 2010, the Department entered into a final settlement agreement with Princeton University.

These settlement agreements provide that the universities will not purchase, require, or in any way incorporate into the curriculum the Kindle DX or any other dedicated electronic book reader that is not fully accessible to individuals who are blind or have low vision. The agreements become effective at the end of the pilot projects. The agreements also contain a functional definition of accessibility when applied to dedicated electronic book readers – the universities must ensure that students who are blind or have low vision are able to access and acquire the same information, engage in the same interactions, and enjoy the same services as sighted students with substantially equivalent ease of use. The purpose behind these agreements is to underscore that requiring use of an emerging technology in the classroom that is inaccessible to an entire population of individuals with disabilities—individuals with visual disabilities—is discrimination that is prohibited by the Americans with Disabilities Act of 1990 (“ADA”) and Section 504 of the Rehabilitation Act of 1973 (“Section 504”).

During the course of its investigations and negotiations with the colleges and universities, Amazon.com, Inc., which is not covered by the ADA or Section 504 in its capacity as the

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<sup>5</sup>Agreement between United States and Case Western Reserve University, Jan. 13, 2010; Agreement between United States and Pace University, Jan. 13, 2010; Agreement between United States and Reed College, Jan. 13, 2010.

manufacturer of the Kindle DX, posted a notice on its website indicating its intention to make the menu and navigational controls of the Kindle DX fully accessible to individuals who are blind or have low vision by extending the text-to-speech feature to these functions by the end of the year 2010.

The accessibility of electronic text readers stands to improve dramatically the experience of students with visual disabilities. The instantaneous downloading of texts is obviously a “night and day” difference for blind students who are used to waiting for their materials until well into the semester or to receiving inferior materials that are difficult to follow. Moreover, if accessible electronic book readers are used in the classrooms of the future, students with and without disabilities will be able to use the same devices, albeit in different ways, resulting in an integrated experience for students with disabilities who will not have to rely on separate accommodations to gain access to course materials. Such integration is the core goal of the ADA and Section 504.

As we come to realize anew each day, the pace of technological change is amazing; what appeared impossible just months or years ago is now commonplace. Advancing technology can open doors for people with disabilities and provide the means for them to have full, equal, and integrated access to American life. But technological advances will leave people with disabilities behind if technology developers and manufacturers do not make their new products accessible. In carrying out its responsibilities under the ADA and the Rehabilitation Act, the Federal government must make sure that the legal protections for the rights of individuals with disabilities are clear and sufficiently strong to ensure that innovation increases opportunities for everyone. We must avoid the travesty that would occur if the doors that are opening to Americans from advancing technologies were closed for individuals with disabilities because we were not vigilant.

I look forward to answering any questions that Members of the Subcommittee may have.