

Tech Policy Recommendations for the Obama Administration
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by the Computer & Communications Industry Association



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Computer & Communications Industry Association

As President-elect Obama takes his oath of office to defend the Constitution, he will have the opportunity to protect the Constitution's most important 1st Amendment, which guards free speech, in new and unique ways. Never before has there been a national leader who better understood both the importance of free speech and the power of the Internet as a tool to expand free speech, to maintain the free flow of information, and to build democratic institutions. Obama has been dubbed the first Internet president for using IT and communication technology to bring more openness, input and involvement of citizens to his campaign than any previous election. Now his transition team has offered plans to use technology to bring more transparency and democracy to government.

Throughout history democracies have depended on free and open communication, which is why our country has made extra efforts to protect political speech. The Internet has the immediacy and universal access similar to the pamphleteers of the 18th Century whose writings helped stir our nation's independence. The Internet offers the ability to see and hear candidates like broadcast media, but instead provides two-way communication that has the potential to transform the relationship between citizens and their government. At this pivotal point in history, it is all the more critical to protect the freedom and openness of the Internet.

The *Computer & Communications Industry Association* is a nonprofit trade association representing a wide range of companies in the computer, Internet, information technology and telecommunications industries. The companies employ nearly one million workers and generate nearly \$250 billion in annual revenue. For more than 30 years, we have advocated for open markets, open systems, open networks and full, fair and open competition.

Since we represent innovators, we have continually taken a stand for competition policy that makes it possible for the next YouTube to make it out of the dormitory or garage – so that the best technology can prevail over current business models. This has meant advocating for antitrust oversight, more competition in the broadband market and net neutrality, and balanced intellectual property. We have worked alongside consumer non-profit groups like Free Press, Center for Democracy and Technology, Public Knowledge and are a member of the Open Internet Coalition and Internet for Everyone, which all fight for principles of openness on the Internet. We also helped with OneWeb Day activities and an event this year that celebrated how the Internet helps build democracies.

Washington tends to debate issues like net neutrality, privacy rights, copyright enforcement, Internet censorship, and broadband deployment separately. But we believe it is important to understand them in a holistic way. At the core of these issues is the question of how firmly we are committed to a common ethic of promoting Internet openness, freedom, and innovation. Freedom on the Internet is critical to vibrant communication and information exchange, which foster innovation and help drive our economy.

CCIA joins other tech trade associations in supporting principles outlined in House Speaker Pelosi's Innovation Agenda, but we also want to stress our support for policies that keep an open Internet, balanced patent and copyright reform, broadband competition, net neutrality, and freedom from government censorship and Internet spying in any country. We offer these recommendations because they support the principles of Internet freedom and a climate of innovation, which CCIA has long advocated. We believe they uphold principles President-elect Obama outlined in his own Technology and Innovation agenda. We look forward to working with the administration on these matters and other areas where we can be helpful.

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CCIA Supports Freeing Innovators to Innovate

Net Neutrality/Internet Openness

Both telecommunications networks and the Internet have historically been content neutral and net neutrality is the reason the Internet has been such a key tool for communication and innovation. Open, inexpensive access to high speed Internet encourages users to try new applications and innovators to invent them.

CCIA supports rules to maintain network neutrality. CCIA is the only business group active in the Open Internet Coalition, which is working on net neutrality, ISP network management, and service disclosure rules. CCIA asks the Administration to:

- Appoint a new Chairman and a new Commissioner for the Federal Communications Commission who support strong enforcement and promotion of open Internet principles and would prohibit network discrimination based on source, ownership, or content. In addition, CCIA asks the FCC to:
 - Continue to enforce the principle of an open Internet upon Internet network providers, as it did in its Comcast decision in August 2008.
 - Uphold the concepts of neutrality, non-discrimination, equality of access, and non-exclusivity.
 - Issue regulations that codify its "Four Freedoms" of an open Internet along with prohibition of unreasonably discriminatory network management practices.
 - Adopt strict consumer disclosure rules involving network management practices
 - Spur broadband competition, including incentives for new entrants in the broadband access market and implementation of a plan for unlicensed use of "white spaces."

- Appoint leaders at the Federal Trade Commission (FTC) and the Department of Justice (DOJ) who understand the importance of promoting an open Internet through vigorous use of pro-competition and consumer protection laws.
- Require the Chief Technology Officer and the U.S. Trade Representative to promote open Internet policies at home and abroad.
- Support legislation in Congress that protects the open Internet by prohibiting unreasonable discrimination by network operators.
- Require accurate plain language that discloses to consumers the terms of ISP services.
- Look to town hall feedback from the Internet for Everyone campaign to inform a National Broadband Internet Summit to be held in March or April 2009.

Intellectual Property

Patent Reform:

To respond to the continuing crisis in patent quality and growing patent litigation, CCIA would ask the U.S. Patent and Trademark Office to:

- Support the House and Senate Judiciary Committees in promptly reintroducing the Patent Reform Act
- Address enormous backlog and concerns about patent quality at PTO, redesign patent examination fees to reflect actual costs, whether incurred by the PTO or third parties, and diversify examination choices available to applicants.
- Establish a politically insulated unit within the Office to research innovation economics and patent policy, in order to support informed policy development. The cost of this institute should be funded from a one percent allocation of patent maintenance fees and justified as a necessary adjunct to the PTO's statutory responsibility to advise the administration on patent policy. In addition to supplying much-needed empirical research, such an institute could:
 - Explore making patent practice transparent by requiring patent owners to register with PTO any

assignments, licenses, and notice letters as a prerequisite to enforcing patents and accruing damages.

- Evaluate the benefits of an independent invention/innocent infringement defense to patent infringement.
- Assess the effect of raising the threshold standard of patentability in information technology.

Patent Data:

The lack of data on the business use, abuse, and effects of patents makes it difficult to make informed business decisions or to develop economically sound patent policy – resulting in unproductive, emotionally charged controversy.

- Constitute an interagency task force under the auspices of the Council of Economic Advisors and supported by the new chief economist at the PTO to consider options for increasing the transparency of patent practice at transactional, corporate reporting, and statistics collection levels.

Patent and Standards:

To prevent patent proliferation from undermining IT innovation and interoperability, CCIA believes the U.S. Patent and Trademark Office should:

- Organize a working group including the NIST and DOJ (with the FTC as an observer and advisor) to develop procedures, legislative proposals, and policies to protect open standards against predatory patenting and patent assertions. The working group should evaluate and make recommendations for the many areas of conflict between patents and standards: “ex ante” licensing (disclosure of licensing terms in advance of standard-setting); bad faith behavior by participants; ambush of industry standards by outsiders; royalty-stacking; and avoidance of licensing commitments by sale of patents to outsiders.

The increasing tension between IT patents and IT standards is a consequence of the strategic importance of standards to the IT sector and the growing scope and number of IT patents. It is especially troublesome when patent attacks come from outsiders after standards have been widely adopted and implemented. This inhibits the opening up of standards to public scrutiny, inasmuch as open processes permit nonparticipating patent applicants to craft their applications to capture evolving standards.

PTO, NIST, the competition agencies, and other government interests should work together to stop the ambush of openly developed standards.

- Develop procedures and assumptions that protect standards, especially openly developed standards, against third-party ambush. Patents and standards are both tools for innovation and must work together without undermining each other.

Patent Office Reform and Innovation:

Although the applications backlog and recent criticism of the practical effects of the patent system are forcing changes, the PTO has operated as an autarky captive the interests of its user community. Despite the goals of the patent system, PTO has not been an innovator in knowledge management, information science, and cyberinfrastructure. It does not collaborate with other agencies because it views its needs as unique, and it has relied heavily on outsourcing grand-design IT projects.

- PTO should commit 1% of its budget to building its own capacity for R&D and to collaborate with other agencies involved in the advanced application of information technologies.
- Work with NIST and other agencies on semantic standards to support better classification, assignment to appropriate examiners, and researching of prior art – as well as to make claims interpretation more consistent and predictable. (The rule that permits patent applicants to be their own lexicographer should be abolished or strictly

limited, because of the costs that it imposes on the system.)

- Make efforts to engage the academic community at all levels.

The expansion of the patent system has brought patents into growing conflict with consensually developed IT industry standards, creates problems for government IT users, who are obliged to look to industry standards by OMB Circular A-119. To address this OMB should:

- Update Circular A-119 to provide principled practical guidance on factors such as quality, utility, control, and terms of availability.

To safeguard the important role that ICT standards play in innovation and market creation, and to understand their vulnerability to overlap, inconsistency, and manipulation, the National Institute of Standards and Technology's Information Technology Laboratory should:

- Assess the need for high-level coordination of definitions and guidelines and make recommendations for changes needed to protect the integrity of consensus-based standards development.

Copyright:

It is time to modernize the current international copyright scheme, which predates the current era of Web 2.0 and the participatory Internet. In its activities in the World Intellectual Property Organization in Geneva, the U.S. Copyright Office should:

- Drop opposition to the proposal to increase the access of people with blindness or other visual impairments to copyrighted works.
- Support a protocol on minimum limitations and exceptions to protect Web 2.0 and participatory Internet services, including protection for Fair Use.
- Since 2002, the Federal Trade Commission has conducted

hearings and published two influential and prescient studies on competition and patent law and policy. Expanding on this expertise, the FTC should conduct hearings and publish a similar study on competition and *copyright* law and policy in the information economy.

Balanced IP Law in International Trade:

Even as the USTR rewards foreign governments with trade agreements, including the "Anti-Counterfeiting Trade Agreement (ACTA), their courts apply domestic intellectual property law to U.S. Internet companies in a protectionist manner, imposing liability on U.S. companies for innovative services permitted under U.S. law, in a manner that obstructs market access and advantages their own domestic interests. To protect U.S. high-tech jobs, CCIA asks the USTR to:

- Suspend negotiations on ACTA until trading partners can guarantee a minimum level of protection from unjustified liability for U.S. ICT and Internet companies
- Advocate for common-sense Internet laws overseas
- Amend the current Free Trade Agreement "template" to incorporate crucial protections for ICT and Internet innovators that exist in U.S. law, including copyright's "constitutional safety valve", the fair use doctrine (17 U.S.C. § 107).
- Exercise its authority to establish an Industry Trade Advisory Committee (ITAC) dedicated specifically to the Internet industries. While the ITAC framework gives most industries a means to advise on trade agreements, Internet businesses have been left without a seat at the table.

Broadband Deployment

Government investment in "last mile" broadband infrastructure can be an engine for economic growth, education, lowering health care costs and citizen participation in 21st century democracy. Strategic targeting of federal government subsidies can induce additional private

sector investment if done properly. Local on/off ramps are the most important yet substandard part of our broadband infrastructure, which should be no less universal than electricity or telephones. We cannot tolerate a digital divide that leaves rural and low-income households with limited opportunities for future prosperity. CCIA recommends:

- Creation of new Universal Broadband Fund as part of a National Infrastructure Bank, to subsidize construction of local broadband connections to unserved homes and small businesses. These connections can be fiber optic lines, fixed wireless connections, or 3G mobile wireless connections with data card access for laptop computers. In order to receive federal subsidies, companies should be required to roll out high-capacity infrastructure. Fiber connections should be at least 25 mbps downstream and wireless services should be at a minimum between 2-4 mbps. Government money would be wasted if it is used to deploy marginal services that will soon be obsolete.
 - Local and regional network operators should be given a right of first refusal for broadband funding before it becomes available to large national incumbents.
 - Network operators must certify they will comply with the FCC's 2005 Internet Policy Statement and refrain from unreasonable discrimination in network management practices.
 - Tax credits to ISPs and/or to homeowners for fiber "tails" can also facilitate build-out.
- NECA reform: Phase out of all payments not justified by carrier specific cost accounting.
- Spectrum reform: Liberation of frequencies assigned to but not used by federal govt.
- Conversion of the USF Lifeline and Link-Up plans to support broadband connections, computers and initial monthly service discounts to any household whose children qualify (or would qualify) for free or discounted school lunches. Customers who lose their jobs and are receiving unemployment benefits should be eligible for subsidies to help them keep their broadband connections while they are

looking for new employment. Customers who currently pay for premium cable TV services should not be eligible. CCIA filed an FCC petition regarding LinkUp and Lifeline for broadband on October 7, 2008.

- Subsidies for laptop computers for middle school students (originally proposed by NDN and One-Economy).
- Digital literacy funding for community colleges to open their facilities several nights per week and/or on weekends so adults can get free computer training

Also:

- Eminent domain option for copper wiring in existing public housing to be used for DSL Internet connections, where incumbent phone company has not made DSL available.
- Pre-empt state prohibitions on community and municipal broadband partnerships.
- Any federal money for broadband should include a requirement to honor consumer rights that would prevent heavy handed, arbitrary denial of services.

Antitrust/Competition Policy

The recent economic crisis has illustrated the problems that develop when companies are too big to fail. Antitrust oversight has been little to nonexistent over the past seven years, allowing Europe and other countries to take the lead in setting competition policy practices. We need competition policy that allows the next Google or YouTube to make it out of the garage without getting crushed by existing players. CCIA recommends that the DOJ should be directed to more vigorously enforce Section II/monopolization cases.

- Issue a new report providing guidance on Section II and refuting the recent DOJ Section II Report on Single Firm

Conduct. The new report should state that antitrust's primary role is to protect consumer welfare and innovation. Such a report is needed to bring the DOJ in line with the FTC and Europe and provide legal clarity.

- Direct the DOJ (in coordination with the FTC) to establish clear guidelines outlining what constitutes abuse of the standard setting process. Standards are vitally important to many industries, especially technology industries. They can promote competition and innovation if designed correctly but are also vulnerable to deceptive actions. Several cases of "patent ambush" have recently received judicial attention and court precedent on the matter is incomplete and often ambiguous.
- Support Sen. Dorgan's FTC Reauthorization Act, which eliminates the "common carrier" antitrust exemption and allows for more specialized Administrative Law Judges with the background necessary to understand complex economic and technical cases.

CCIA Supports the US Innovation/Competitiveness Agenda

Innovation is vital to addressing long-term economic, environmental, and social challenges, but lacks championship and focus under existing bureaucratic structures.

- *Basic research and math and science education:*
 - Fund the America COMPETES Act. Congress passed legislation to increase basic research at the national labs and improve math and science education, but the funding was never fully authorized.
- Implement and build on the America COMPETES Act by constituting a high-level council on innovation, by
 - adding an Associate Director for Innovation to OSTP (and renaming it the Office of Science, Technology, and Innovation Policy),

- developing an aggressive interagency program on service science, knowledge infrastructure, and innovation, and
- institutionalizing support for innovation policy within the Commerce Department.
- *R&D tax credit*: Support legislation to make the research & development tax credit permanent. We must compete with incentives offered by Europe, India and China to keep research and associated jobs here.
- *Visa reform*: A chronic shortage of H-1B visas and employment-based green cards prevents U.S. technology companies from hiring the highly skilled workers they need to remain competitive. The administration should push for:
 - Emergency increases in the H-1B cap for FY 2010
 - Recapture of unused green card numbers from prior years
 - Exemption of advanced degree holders from the green card cap.
 - Implement a flexible market-based cap for employment-based visas.
 - Take steps to eliminate the backlog for EB green cards.
- *Trade*: As the leading export industry of the U.S., the high-tech sector benefits greatly from expanded trade. Free trade agreements should be considered according to their merits and their benefits to the economy as a whole.
 - Administration support for swift Congressional passage of the Colombia trade agreement, with Panama and especially South Korea to follow.
 - Push for Trade Promotion Authority, without which trading partners would be reluctant to engage in substantive negotiations.

- Work to rebuild the bipartisan consensus for free trade by ending the partisan exploitation of trade votes and insulate trade issues from politics.
- *Exports*: Overly broad export controls that impede legitimate export operations negatively impact a broad range of industries. In particular, unnecessarily burdensome deemed export regulations would obstruct the legitimate sharing of technological information in the research and development process.
 - Reduce the scope of controlled technologies and the nationalities of foreign persons subject to deemed export licensing, without the loyalty test recommended by the Deemed Export Advisory Committee (DEAC).
 - Implement reforms toward a more targeted and efficient export control regime and away from unilateral controls.
- *Cyberinfrastructure*: Presently only NSF has a major program on advanced cyberinfrastructure, and it is focused on academic communities. NIST should work with NSF, but it should play a central, catalytic role in coordinating the advance of knowledge infrastructure across sectors – academic, government, and industry – along with context-sensitive implementation of the related socio-technical research agenda.

OSTP/NIST Innovation Initiatives:

U.S. leadership in advancing and utilizing information and communications technology is vital to advancing national competitiveness, increasing productivity, progress in addressing scientific and technological challenges, and the efficient and effective functioning of the federal government.

While some lament the demise of the Technology Administration and its Office of Technology Policy, there is in fact an opportunity to craft a new vision of innovation policy supported by an agency with both theoretical and hands-on expertise and a strong tradition of professionalism. The National Institute for Standards and Technology

could take the lead in creating a new agency to support and coordinate administrative policies on innovation.

- An Office of Innovation Policy should be reestablished at NIST to support and coordinate administration policy, initiatives, agency programs, research, and policy development.
- While the role of the proposed “chief technology officer” has not been fully defined, it should not duplicate the Associate Director for Technology at OSTP, nor should it be the Chief Information Officer contemplated in early versions of the E-Government Act of 2002.
 - The position should be charged with overseeing the diverse public policy aspects of ICT as enabling technology for all sectors. The “CTO” would in effect be a Chief Information Technology Officer (CITO) – a position broad enough without burdening it with responsibility for other technologies.
 - The CITO should provide vision and high-level coordination for managing the complex relationship of ICT to different programs and policy domains, including standards, intellectual property, broadband, government IT (especially interoperability and services to the public), and advanced cyberinfrastructure.
 - While the position needs a White House base, and OMB, NSF, PTO, NTIA, and NIST all lead in particular areas, NIST is best suited to coordinate because of its competence in standards, its working relationship with the private sector, and its research and programs on innovation-enabling technology.
- Reduce tension between patents and standards in a proactive and collaborative manner by engaging both PTO and NIST. Create an interagency task force, including NIST, PTO, and the Department of Justice (with the FTC as an observer). It should evaluate and make recommendations for areas of conflict between patents and standards. These include: “ex ante” licensing (disclosure of licensing terms in advance of standard-setting); bad faith behavior by participants; ambush of industry

standards by outsiders; royalty-stacking; and avoidance of licensing or non-assertion commitments.

- Create an institute for “innovation economics and patent policy” funded from patent renewal fees to be housed at the PTO but formally insulated from direct political and economic influence. The agenda for this institute should be coordinated with broader and complementary policy research activities in the NIST Office of Innovation Policy.

E-Government Initiatives:

CCIA supports E-Government initiatives that bring greater openness and transparency to the government.

U.S. leadership in information and communications technology is vital to national competitiveness, economic revitalization, scientific and technological progress, and the efficient functioning of the government itself.

- The “chief technology officer” (CTO) and/or the Chief Performance Officer should be charged with providing vision and high-level coordination for managing the complex relationship of ICT to different programs and policy domains.
- Issue an executive order to require full implementation of the E-Government Act by federal agencies, and to establish measures for accountability for those that fail to do so. Though this does not include free file by the IRS.

E-government initiatives that modernize government functions through the Internet and computing are an appropriate and important part of good government. However, great care must be taken not to encroach on viable private sector activities.

CCIA believes that government stepping into the competitive software marketplace, replacing private financial services with government ones, could have far-reaching impacts, destabilizing competition private investment and innovation. Important policy goals, such as tax simplification and tax reform, can be achieved without also unnecessarily inserting the federal government into a new role in the economy currently provided by the private technology sector. Likewise, reduction of taxpayer burden can be achieved by non-

monetary partnering with the private sector for innovations to achieve the President-elect's objectives without reducing the essential citizen-centric and decentralized character of the U.S. voluntary tax compliance system.

A new model of collaboration between the private and public sectors is needed to change the direction of e-government systems. CCIA was involved in developing the e-government model of a free public-private partnership such as the Free File program, rather than the replication of private sector services by the government. CCIA asks the administration to:

- Commit to using public-private partnerships as the e-government innovation model rather than building massive, expensive new government e-commerce systems or inserting the government into the private marketplace as a replacement for competitive private sector electronic financial software and service.

CCIA Supports Freedom on the Internet

Government Surveillance/Privacy:

CCIA advocates greater transparency and checks and balances when it comes to using the Foreign Intelligence Surveillance Act to spy electronically on Americans. We join Center for Democracy and Technology in asking that:

- When legislation connected to the PATRIOT Act expires in 2009, checks and balances on government surveillance should be restored.
- The Administration support Congressional action to conduct a vigorous, non-partisan oversight investigation to determine the extent and scope of warrantless surveillance conducted after September 11.

CCIA supports the ACLU's recommendations that the new Administration should:

- Issue an executive order recognizing the executive branch's obligation to comply with FISA and other statutes and prohibiting the NSA from collecting the communications, domestic or international, of U.S. citizens and residents.
- Issue an executive order prohibiting new FISA powers from being used for suspicionless bulk collection.
- Re-examine the recent amendments to Executive Order 12333 and revise the order to limit and regulate all intelligence community activities and to fully protect the privacy and civil liberties of U.S. citizens and residents.
- Make publicly available any and all internal policies, procedures or memoranda produced by or for the intelligence and law enforcement agencies regulated under E.O. 12333, which interpret or qualify provisions of that order.
- Make all minimization procedures designed to protect the privacy and civil liberties of U.S. persons public, as well as any internal policies or memoranda that interpret these procedures.
- Order the attorney general to launch an investigation to determine if any laws were broken or to appoint a special counsel to do the same.

Also:

- The FCC should ban network operators from using deep packet inspection (DPI) technology unless an end user agrees to "opt in."
- Support CDT development of Privacy Act amendments in collaboration with other stakeholders, governing both federal government and commercial data collection, retention and use/disclosure

International Internet Freedom:

Global Internet freedom should be a policy priority.

- Initiate multilateral consultations to ensure the United States actively participates in a family of nations acting to guarantee freedom of expression and who recognize censorship as a trade barrier.

Presently, foreign governments, most notably the People's Republic of China, censor domestic Internet access to legitimate sites and services. In addition to limiting the freedom and openness of the Internet, these policies constitute a trade barrier obstructing U.S. ICT and Internet industries from providing electronic commerce and services, in direct violation of China's WTO commitments.

- The USTR should take the necessary steps to bring a WTO case against China should it continue to flout its obligations.

China and Saudi Arabia, among others, appear to be "splitting the root" or operating parallel networks based on their own DNS servers, partly to exclude foreign influences.

- ICANN should further engage other governments, bringing them into the discussion about Internet governance while rejecting any attempt at control by another government. The U.S. government should remove itself from supervising policy matters that do not deal directly with the stability and security of the root. ICANN should adopt greater transparency in its mission of Internet governance while further evolving into a private sector function.