Net neutrality in the United States and the future of information policy

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Introduction

The Internet has played a significant role in improving commerce, deepening social connections, stimulating scholarship and affording greater opportunities for leisure and activism. Increasingly, the set of computer systems commonly referred to as the Internet plays a critical role in connecting people with the information they need to work, live and access government. In light of the importance of the Internet in American life, government should play a role in ensuring that it suits the needs of society as a whole, rather than a single group. The first decade of the 21st century has witnessed a great burst of interest in developing Internet regulation, in contrast to the laissez-faire government approach of the 1990s when the Internet offered seemingly unlimited potential to revolutionize commerce and made some people billionaires in short order. As the Internet increasingly became a platform for market activity, the ownership and regulation of the system became politically important. The common assumption of the 1990s – that the Internet was too revolutionary to govern or that it is impossible to govern – is quickly fading. The U.S. government needs to implement Net neutrality regulation as part of a new unified communications

strategy for the modern era, replacing the patchwork of policies currently in place.

Much contemporary debate on Internet regulation is fiercely ideological, which makes the formation of reasonable policy difficult. This can be overcome, however, through a better understanding of communications policy. This passionate debate has made its presence felt in public policy through a combination of advocacy, media attention, court cases and proposed legislative efforts. The regulatory actions of the Federal Communications Commission (FCC) since 2005 have also attracted a great deal of attention. Making sense of all this activity requires some historical perspective on American communications policy, especially on the regulation of the telegraph and telephone, where several of today's fundamental policy principles originate. After this historical framework is established, this essay will consider legislation proposed in 2005 and 2006, which approached the question of Internet regulation from different perspectives, often coinciding with the perspectives of well funded lobby efforts. Though this proposed legislation makes some steps in the right direction, successful Internet regulation needs to be reconceived as part of broader information policy. Such a policy would recognize the international nature of

information and how people use it. International law and regulation need to be better developed to handle the challenge of modern information.

A brief history of communications policy

The interest of the American state in controlling communications dates to the early years of the American Republic, with a long tension between the constitutional imperative of freedom of expression and the interests of control and censorship. In antebellum America, the postal service and newspapers were the main forms of communication subjected to government attention. Postal service reached unevenly through America but it served a crucial role in maintaining connections between Americans. The relatively slow delivery and high costs of this communications system both limited its effectiveness and made it relatively easy to control. For instance, government prosecution of publishers was one tactic of government control;¹ although, this was

¹ In early American history, government action in communications often involved suppressing criticism of the government. The Alien and Sedition Acts, signed into law in 1798, in the context of war with France were also used to silence the Democratic-Republican Party which was critical of the government. Library of Congress "Alien and Sedition Acts: Primary Documents of American History."

often carried out for moral reasons rather than the economic concerns that motivate contemporary regulation. The aims of communication regulation would shift substantially with the arrival of the telegraph in the mid-19th century.

Telegraphy was the first electric communications system that provided networks of communication in the United States and beyond. In parallel to contemporary views of the Internet, public discussions of new telegraph lines argued that this system would connect people and increase international understanding. US President Buchanan's 1858 message on the trans-Atlantic telegraph could have been published about the Web:

... it is a triumph more glorious, because [it is] far more useful to mankind, than was ever won by conqueror on the field of battle. May the Atlantic telegraph, under the blessing of heaven, prove to be a bond of perpetual peace and friendship between the kindred nations, and an instrument destined by Divine Providence to diffuse religion, civilization and law throughout the world.²

<http://www.loc.gov/rr/program/bib/ourdocs/Alien.html>. Accessed December 2, 2008

² Tom Standage. *The Victorian Internet: the remarkable story of the telegraphy and the nineteenth century's online pioneers*. Berkeley: Berkeley, 2002

The telegraph accelerated trans-Atlantic communication from a matter of weeks or days to hours or minutes, though this technology remained extremely expensive. The emerging regulation of the telegraph also embraced the principle of common carriers and neutrality. The 1860 Pacific Telegraph Act mandated that, "messages received... shall be impartially transmitted in the order of their reception, excepting that the dispatches of the government shall have priority."³ This can be seen as an early expression of Net neutrality principles.

Other aspects of telegraphy acted as indirect regulations. The technology was biased toward very brief messages and the high cost of transmission meant that the technology was largely limited to businesses and governments, though individuals periodically used the telegraph in certain extraordinary circumstances. In terms of actual use, it is also important to remember that users typically had to visit telegraph offices to send their messages and required operators to send their messages. These factors facilitated government regulation as there was a well defined population –

³ The Central Pacific Railroad Photographic History Museum. Pacific Telegraph Act of 1860 http://cprr.org/Museum/Pacific_Telegraph_Act_1860.html, Accessed December 3, 2008

telegraph companies and skilled operators – compelled to follow the regulation. The policy challenge would only increase in the case of later technologies that empowered users to use communications technologies directly.

The telephone far surpassed the telegraph in popularity and arguably became more integral to American life. The telephone was considerably more accessible than the telegraph, requiring only that users speak to transmit information using this device.⁴ The regulatory response to the development of telephony eventually framed it as an economic problem; few companies controlled too much of the network and acted in an anti-competitive fashion. In 1934, the federal government addressed this concern through the creation of the Federal Communications Commission (FCC), which now regulates several communications technologies. The creation of the FCC signified a substantial increase in government interest in communications; previously communications had been regulated by general-purpose bodies.

Government regulation of the telephone system has the greatest parallel to de-

bates concerning the Internet. After decades of permitting the American Telephone & Telegraph (AT&T) company to operate as a monopoly, the FCC embraced greater regulation. In 1984, the FCC committed to providing more competition in the telephone industry.⁵ Anti-trust actions against AT&T and the Bell companies in the 1980s changed the communications scene substantially, but some commentators questioned whether this reactive policy did anything to improve productivity or other social goals.⁶ Beyond ensuring the general goal of competition, the FCC is also committed to providing universal access,⁷ a goal that continues to be extremely difficult to meet. The difficulty of mandating universal access to the general population when all of the providers are private lingers on in debates in Internet policy. This interaction of economic and social policy goals continues to frame the way Internet regulation is discussed in the 1990s and 2000s.

In the 1990s, the Internet started to become widely used beyond the circle of stu-

⁴ For about half its existence, users had to request connections from telephone operators but this was still technically simpler than encoding telegraph messages.

⁵ William E. Taylor and Lester D. Taylor. "Postdivestiture Long-Distance Competition in the United States." *The American Economic Review* 83(2), May 1993, 185-190

⁶ Patricia Aufderheide. "Universal Service: Telephone Policy in the United States." *Journal of Communications* 37:1 (1987 Winter), 82

⁷ Aufderheide, 82

dents, researchers and scientists who had served as the system's first users. Some technologists argued that the Internet was so revolutionary that any attempt to regulate it was futile.⁸ Others argued that it changes so quickly that it is beyond the ability of government to regulate. During the 1990s, the American communications policy was a patchwork of laws (such as the Telecommunications Act of 1996) and court cases. Traditional approaches continued to be favoured; a proposal to create a XXX domain for sexually explicit content⁹ – which would have facilitated filtering efforts – was blocked at ICANN.¹⁰ This application of American morality to Internet regulation was met with criticism by national governments, whose own views on such matters differed substantially; they bristled at the US govern-

ment's efforts to regulate the Internet as if it were simply an extension of America. It also started to become apparent that American attitudes towards the Internet were not shared across the world. The compliance of American companies in China's repressive Internet policies¹¹ has become notorious in the United States as violating norms of freedom that the Internet was thought to support and embody.

This history sets the context for the current decade's policy debates on Internet regulation. Certain themes from the history of communications policy reoccur here and many of the same general principles continue to be at stake. Fear concerning the power of large companies animates much discussion as does the possibility that some people are missing out on the benefits of the new digital technologies (the digital divide). This historical frame helps to make sense of and simplify much of the passionate rhetoric currently surrounding the issue. Before analyzing the Net neutrality debate of the present decade, one final preliminary matter has to be clarified: what exactly does Net neutrality mean?

⁸ John Parry Barlow. "A Declaration of Independence of Cyberspace."

<http://www.actlab.utexas.edu/~captain/cyber.decl.ind.html>. Originally published in 1996. Barlow is co-founder of the Electronic Frontier Foundation, an advocacy group that agitates for freedom on the Internet.

⁹ Thomas Crampton. "Agency Rejects .xxx Suffixes for Sex-Related Sites on Internet." *The New York Times*. March 31, 2007. The argument against XXX domain was that the ICANN did not want to be involved in the regulation of content in any way, while proponents argue that this domain could better enable filtering and could help to compel adult entertainment companies to follow a code of business ethics and better adhere to a ban on child pornography.

¹⁰ The Internet Corporation for Assigned Names and Numbers (ICANN) is a non-profit corporation created in 1998 that manages Internet naming conventions.

¹¹ Several major American companies including Google, Yahoo, Microsoft and Cisco have been accused of aiding the Chinese government in its efforts to suppress domestic dissent. Tom Zeller, Jr. "House Members Criticizes Internet Companies for Practices in China." *The New York Times*. February 16, 2006

Defining Net neutrality

Net neutrality has been defined differently by parties with different interests. Several economists have framed Net neutrality through the prism of price regulation.¹² In this view, Net neutrality is simply government regulation that unreasonably limits the action of Internet Service Providers (ISPs) and their clients. In contrast, legal intellectuals such as Lawrence Lessig define Net neutrality fundamentally in terms of freedom and social development.¹³ Lessig holds that Net neutrality is a technological embodiment of freedom of expression¹⁴ and the right to innovate in a fair environment. Finally, there is the engineering view of Net neutrality – “a bit is a bit is a bit” – which holds that all data should be treated the same - no filtering for content, usage or quality.¹⁵ American legislators and regulatory

officials have considered many of these points in their deliberations.

The fundamental premises of Net neutrality include: no blocking of applications (e.g. programs or services such as email, video conferencing, gaming, voice communication, file sharing and so forth) or content (e.g. political speech etc).¹⁶ Beyond that, Net neutrality advocates argue that there must be a ban on the notion of “access tiering” (i.e. Internet service providers cannot provide preferential access to one service over another, such as preferential access to the Yahoo! search over Google). Finally, there is an argument against vertical integration between content producing companies such as television networks and Internet service providers (ISPs) like Comcast. Advocates of this view generally argue the Internet has traditionally operated along lines of network neutrality and that this is a fundamental reason why it has been so successful

¹² Robert W. Hahn and Robert E. Litan. “The Myth of Net Neutrality and What We Should Do About It.” *International Journal of Communication*. 1 (2007), 595-606

¹³ Lawrence Lessig and Robert W. McChesney. “No Trolls on the Internet.” *The Washington Post*, June 8, 2006.

¹⁴ Representative Ed Markey framed the issue in these terms: “Net Neutrality is as basic to the function of the Internet as nondiscrimination is to the U.S. Constitution.” Rep. Markey is one of the major legislative sponsors of net neutrality legislation in Congress. Lauren Barack and Kath Ishizuka. “Net Neutrality Falters.” *School Library Journal*. July 2006: 18

¹⁵ This basic definition of net neutrality is supported by Google. “Google Public Policy Blog: What Do We

Mean by “Net Neutrality?”

<http://googlepublicpolicy.blogspot.com/2007/06/what-do-we-mean-by-net-neutrality.html>. Accessed December 4, 2008

¹⁶ In July 2005, Telus – a Canadian ISP – blocked its subscribers from being able to access the website of the Telecommunications Workers Union, then striking against Telus. A wave of protests followed and Telus lifted the block but did not announce any general change in policy. “Telus cuts subscriber access to pro-union website.” CBC News. July 24, 2005. <http://www.cbc.ca/canada/story/2005/07/24/telus-sites050724.html>. Accessed December 5, 2008

and innovative. Testing this claim empirically is difficult, which makes the debate even more difficult to conclude.

Net neutrality regulation begins: the reactive phase

The current debate over Net neutrality regulation can be traced to two specific incidents – a legal case and a regulatory decision by the FCC. The legal case involved an ISP called Madison River Communications, which blocked the use of VoIP services¹⁷ provided by Vonage as this service competed with the ISP's telephone service. This case was eventually settled with a fine from the FCC, however it raised a great deal of activist interest and media attention. On the regulatory front, a June 2005 court case upheld the FCC's regulatory decision to classify cable ISPs as information services rather than telecommunications services.¹⁸ Later that year, the FCC decided that telephone broadband providers (i.e. DSL ISPs) should also be classified as infor-

¹⁷ VoIP uses the Internet to transmit voice communications; this can be computer to computer or computer to traditional phone. By almost any measure, VoIP "calls" are dramatically cheaper than any traditional phone calls.

¹⁸ Angele A. Gilroy. "Net Neutrality: Background and Issues." *CRS Report for Congress*. Updated: December 20, 2007.
<http://price.house.gov/issues/uploadedfiles/media5.pdf>. Accessed December 4, 2008.

mation services.¹⁹ These seemingly obscure regulatory decisions have had significant consequences for ISPs and their customers, as information services are subjected to significantly less regulation than telecommunications companies. The outrage leveled against the FCC as a result of these events no doubt played a major role in the issuing of the September 2005 Policy Statement²⁰ that established Commission support for Net neutrality. Yet, one could argue that this distinction – between information and telecommunications services - is a false one as many ISPs provide a variety of services. Scott Jordan has made an argument that this patchwork approach to communications policy inevitably leads to confused results.²¹ In this context, the US Congress took up the question of Net neutrality in 2005 and 2006.

The Major Actors In Net neutrality Debates

Several companies have undertaken multi-million dollar lobbying efforts to com-

¹⁹ Ibid.

²⁰ FCC Policy Statement, Released September 23, 2005.
http://fjallfoss.fcc.gov/edocs_public/attachmatch/FC-C-05-151A1.pdf. Accessed on December 4, 2008

²¹ Scott Jordan. "A Layered Network Approach to Net Neutrality." *International Journal of Communication*. 1 (2007)

municate their policy positions on Net neutrality. Given the importance of money in American politics, the roles of these financially resourceful actors cannot be ignored. In addition to the major commercial lobby efforts, there have also been a number of NGOs and citizen groups that have entered the debate mainly in favour of Net neutrality. This section will sketch the different positions held by these different actors as well as how each group has reacted to the others in the context of the Net neutrality debate.

The most active corporation lobbying for Net neutrality is Google, though Microsoft has been active as well. Google's CEO has written an open letter to users urging them to take action to protect the Internet through Net neutrality regulation.²² The company argues that the neutral Internet was a key reason for its success and ability to offer its services to the public. The viability of Google's business model partly depends on its low cost to users (effectively zero) and uniformly high speed of use. This could be threatened if ISPs charged Google for access to users. Some telecom companies have taken

out newspaper advertisements²³ attacking Google's Net neutrality stance. They argue that Google is essentially riding on the investments that telecoms have made in their networks. This telecom argument and Google's own commitment to Net neutrality is undermined by a new initiative – OpenEdge – launched by the corporation in December 2008.²⁴ According to the Wall Street Journal, Google has asked an ISP for a so-called “fast lane” (i.e. its own access tier) to deliver content to users. Whether this signals a complete move away from the company's long standing commitment to Net neutrality is unclear. The great popularity of Google's services and the prospect of these services being endangered or made less accessible could play a great role in increasing support for Net neutrality regulation.

The American Library Association (ALA) has been among the most vocal NGOs in favour of Net neutrality. Most librarians are committed to the importance of freedom of

²² Paul Ganley and Ben Allgrove. “Net Neutrality: a user's guide.” *Computer Law & Security Report*. 22 (2006): 458. See footnote 26 for details.

²³ Stephen Labaton. “House Backs Telecom Bill Favoring Phone Companies.” *The New York Times*. June 9, 2006

²⁴ Vishesh Kumar and Christopher Rhoads. “Google Wants Its Own Fast Track on the Web.” *The Wall Street Journal*. December 15, 2008.
<http://online.wsj.com/article/SB122929270127905065.html>. Accessed January 14, 2009

expression and the related intellectual freedoms of access to information and freedom from censorship.²⁵ Thus, Net neutrality fits well within the profession's ideology. The ALA's most recent policy statement agrees with the September 2005 Policy Statement issued by the FCC, but argues that the agency must go further.²⁶ The ALA is very skeptical of ISP promises to act in a responsible fashion, and so this group very much favours greater government intervention. The Association does make the important point that some services are increasingly only available via the Internet and that a lack of access to the Internet could undermine the maintenance of an informed citizenry. While the ALA's submission does not single out particular incidents or companies, there is a strong undercurrent of anti-corporate or anti-ISP thought

present throughout the Association's submission to the FCC. The views of the ALA may be taken to stand for the views of many other educators and professionals who are committed to intellectual freedom and related ideas.

Many popular commentators have also taken on the cause of network neutrality – typically framing the issue as the protection of the public from the corporate power of providers. Author and Internet activist Cory Doctorow argues that the telecom companies that oppose Net neutrality as malignant government regulation rarely admit how much of the traditional telephony business relies on government regulation.²⁷ That being said, Doctorow also admits that defining Net neutrality is difficult, with substantial policy compromises to be struck between preserving access to existing services and resources and paving the way for new Internet tools and services. Whether government agencies such as the FCC – an entity that dates back to the 1930s – can respond fast enough to changing Internet trends is very much an open question in Doctorow's view. The presumption that a properly tuned regulatory environment is, in fact, essential to fostering innovation is rarely acknowledged. A recent article in *The Economist*

²⁵ The American Library Association Code of Ethics states, in part, "We uphold the principles of intellectual freedom and resist all efforts to censor library resources." ALA Code of Ethics, amended January 22, 2008.
<http://www.ala.org/ala/aboutala/offices/oif/statementspols/codeofethics/codeethics.cfm>. Accessed December 7, 2008. Given that libraries provide access to many of their services through the Internet (and provide Internet terminals for public use), the Internet is clearly a "library resource."

²⁶ ALA Comments to the Federal Communications Commission in the Matter of Broadband Industry Practices, WC Docket N0. 07-52.
http://fjallfoss.fcc.gov/prod/ecfs/retrieve.cgi?native_or_pdf=pdf&id_document=6519529250. Accessed December 10, 2008

²⁷ Cory Doctorow. "How to Prevent Internet 'Neutricide'" *Information Week*. June 26, 2006.

on the possibility that the growth in Internet infrastructure may not keep pace with demand, presented the argument that neutrality regulations may serve as a disincentive toward such investments, which are very expensive²⁸ and which do not pay immediate returns in any case.²⁹ The question of how Net neutrality would affect investment in the Internet is an important issue when crafting policy in this area.

What policy effects do such activist calls to action have on the formation of government policy? Doctorow does not lead any organization or directly exert power as an official. The influence of figures like Doctorow and Lessig are best understood as providing intellectual leadership, transforming discontent into policy positions. One should ask whether they succeed in persuading people to adopt their framing of the issue as one of “the people” against malicious corporations and self-interested ISPs. Given the general legisla-

tive support and interest in Net neutrality, these efforts should be considered successful.

The legislative phase of Net neutrality

In 2006, the Internet Freedom Preservation Act was introduced in the United States Senate. Sponsored by Senators Clinton and Obama, among others, this bill represented an effort to introduce Net neutrality provisions into federal law. The provisions of the bill show the influence of the 2005 controversies. This particular bill is not the only one on this topic, but it appears to have the greatest chance of being passed.

The Bill amends the Communications Act of 1934 with new regulations on broadband service providers. The bill states that ISPs shall, “not block, interfere with, discriminate against, impair, or degrade the ability of any person to use a broadband service to access, use, send, post, receive, or offer any lawful content, or application, or service made available by the Internet.”³⁰ This bill also has provisions that indicate disapproval of integration: “Stand-Alone Broadband Service – A

²⁸ A recent estimate claims that the capacity of existing network infrastructure (i.e. copper cable, which has delivered traditional telephone service for decades) will have been reached in 2007 and that investing in upgrades to fibre optics will need to undertaken at a large scale. Such upgrades may cost as much as \$45 billion US. Paul Ganley and Ben Allgrove. “Net Neutrality: A user’s guide.” *Computer Law & Security Report*. 22 (2006): 459

²⁹ “Surviving the exaflood” *The Economist Technology Quarterly* (*The Economist*). December 6th, 2008.

³⁰ Internet Freedom Preservation Act (Introduced in Senate) S 2917 IS. <http://thomas.loc.gov/cgi-bin/query/z?c109:S.2917>:. Introduced on May 19, 2006.

broadband service provider shall not require a subscriber, as a condition on the purchase of any broadband service... to purchase any cable service, telecommunications service, or IP-enabled voice service.”³¹ The Bill also protects what might be termed “device neutrality”: providers shall, “not prevent, or obstruct a user from attaching or using any device to the network [as long as this does not damage the network or severely impair its effectiveness.]”³² The Bill implements many of the basic requirements of Net neutrality, but it is still reactive and may not prove sustainable.

The principle of allowing service providers some exemptions to Net neutrality is the result of an effort to balance competing interests. Unfortunately, the phrasing used may be ambiguous enough that it will be difficult to enforce. Indeed, some ISPs regard certain types of multimedia and peer-to-peer file sharing to be an undue burden on their networks. Thus, it is difficult for users or ISPs to know what would count as following the rules. There have been only a handful of cases in the United States where ISPs have violated the principles of Net neutrality, as clear rules in enforcement have yet to emerge. Further, it

should also be pointed out that this set of principles was hitherto a convention of the Internet, rather than a legal requirement. Some test cases would be needed to evaluate whether or not this approach was successful.

Recommendations for a Modern Communications Policy

Thus far, this discussion has sketched the history of American communications regulations and explored the current state of Internet regulation. The slow progress of efforts to create Net neutrality legislation show little indication of changing – though one may be encouraged by the election of Barack Obama as President in 2008 since he sponsored such efforts in the Senate. Some of this resistance is due to substantive conflicts of interests at play and those differences can only be resolved through the democratic process. This commentary can play a role in arguing for the most important policy questions that ought to be addressed in any new formulation of communications policy.

Communications policy has to be viewed holistically rather than reacting to individual technologies. While it is more difficult to implement policies that require such

³¹ Ibid

³² Ibid.

ambitious goals,³³ the point has been made by other commentators that much of the conflict over this area of policy is due to the piecemeal attempt to tackle the problem rather than re-developing policy more generally.³⁴ Communications is about the flow of information and what people, businesses and other entities gain from using information. Furthermore, it is best to understand the modern economy as one premised on the provision of and manipulation of information, rather than specific technologies and devices. This level of abstraction will also go some way toward “future proofing” a policy that would otherwise need to be redrafted with every new technology.

Aspects of a New Information Policy

Just as access to education has been recognized³⁵ as a necessity for leading a happy and successful life in the modern world, so too should access to information and com-

munication technologies (ICT). Although America may not wish to follow the path of Estonia which recently passed legislation stating that, “Every person shall be afforded the opportunity to have free access to public information through the Internet in public libraries,”³⁶ this approach suggests the importance of such access. While the profit motive should not be extinguished, the vital importance of public access to ICTs cannot be understated. This principle builds on historical communications policies that recognized the importance of providing mail, and later, telephone access to everyone in America. Failure to make such access a guiding principle of communications policy will exacerbate the digital divide and ultimately hamper efforts to bring maintaining an informed and engaged citizenry.

America’s new information policy needs to recognize the fundamental importance that such access plays in daily life. Just as the British Parliament decreed that all railway companies had to provide low rate fares on trains in the 19th century to improve the accessibility of this vital service, so the US

³³ Leslie A. Pal. “Beyond policy analysis: public issue management in turbulent times.” Toronto: Thomson/Nelson, 2006. Chapter Seven.

³⁴ Scott Jordan. “A Layered Network Approach to Net Neutrality.” *International Journal of Communication* 1 (2007): 442p

³⁵ While federal authority in education is limited by the 10th Amendment, the federal government plays an active role in supporting higher education through student loans, scholarships and funding for research.

³⁶ Estonia. Public Information Act (consolidated March 2003). <http://www.legaltext.ee/text/en/X40095K2.htm>. Accessed December 7, 2008

Congress should mandate the provision of low cost Internet access to all. This recommendation can be achieved in a number of different ways with different players. Public libraries, for example, already provide community access to the Internet. Public libraries and municipalities should enter into partnerships to roll out free or low cost Internet access to cities, with greater federal support. This policy is not meant to exterminate the role of the private sector; ISPs would continue to play a role in providing higher speed services and value-added services such as security protections, family access controls, and automated entertainment content delivery. The great challenge of providing a full suite of ICTs to America's rural regions will continue to be a major challenge and one that can be faced with incentives to commercial companies to encourage them to expand their offerings in these areas.

As modern communications become ever more global, America's new information policy needs to recognize this and implement greater international cooperation than has been the case in the past. While the United States remains an important player in ICTs – an estimated 25% of global Internet data flows through the United States – policy makers need to recognize that America does not

play a leading role in every technology. Attempting to dictate policy in this field will only marginalize American influence in a time when America is already seen as financially weak. An important early step of this global opening up will involve making ICANN a truly international organization with a more representative membership. The FCC and other regulatory agencies should also be mandated to seek the input of their counterparts around the world as they decide policy.

Instructing domestic agencies to seek international cooperation will only work to a point. Ultimately, America will need to pursue a multi-lateral approach. The value of taking this approach is already clear from the quiet successes of the International Postal Union and the International Telecommunications Union, two organizations with 19th century origins that continue to play a valuable role in the modern world. American policy makers should consider merging these organizations into a single International Communications Union that will have the mandate to develop standards, sanctions and other policy instruments to a unified approach to communications. This will require reaching agreements with countries like China – already a major player in communications – rather than simply refusing to engage with countries that are un-

democratic. The previous communications agreements outlined above show that cooperation is possible in this field, though resolving many of the details will be difficult. Further development of an American approach to a treaty of communications requires more development than is feasible in this case.

Conclusion

Net neutrality is part of a much bigger debate about how communications is regulated by government. Many of the same issues – anxiety over commercial control, censorship and moral concerns – in contemporary debates involving the Internet date back to discussions of earlier technologies like the telephone and telegraph. Net neutrality regulation represents an effort to constrain the power of ISPs to control the Internet user's freedom of access and an opportunity to create innovative services, in addition to supporting freedom of speech. With activist writers, legal intellectuals, NGOs like the American Library Association, and major companies such as Google and Microsoft in favour of Net neutrality, one should not be surprised that the basic elements of Net neutrality have received some attention in Congress. This implementation, however, does not go far enough. The United States needs to completely revise its disparate

communications policies into a single approach and pursue greater international cooperation. With a unified domestic approach and a well coordinated international treaty, access to ICT resources will continue to remain dependable well into the future.

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