



Strengthening a Free and Open Internet in a Changing and Complex World

A Report of the 2014 Aspen Institute Forum
on Communications and Society

Elise Hu, Rapporteur

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THE ASPEN INSTITUTE
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*This report is written from the perspective of an informed observer at the
Aspen Institute Forum on Communications and Society.
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FOREWORD

The summer of 2014 was a pivotal time for Internet policy. In the midst of the debate over “Net Neutrality,” nearly four million people commented to the Federal Communications Commission on an issue that in prior years would have been the province of hundreds of interested parties. This citizen outcry will likely change the communications policy-making landscape for years to come.

Net Neutrality is a term that Columbia Law Professor Tim Wu coined a decade ago to describe a series of Open Internet policies aimed at preventing control from Internet Service Providers (ISPs) over what messages a net user has access to. In 2005, following then-FCC Chairman Michael Powell’s 2004 speech setting out four net freedoms, the FCC adopted its Open Internet policies:

1. Consumers are entitled to access the lawful Internet content of their choice;
2. Consumers are entitled to run applications and services of their choice, subject to the needs of law enforcement;
3. Consumers are entitled to connect their choice of legal devices that do not harm the network; and
4. Consumers are entitled to competition among network providers, application and service providers, and content providers.

When the FCC found that Comcast Corporation violated one of those policies by allegedly throttling BitTorrent users, the U.S. Court of Appeals reversed the Commission’s decision, saying that it had not given an adequate jurisdictional basis for the action. In response, the FCC adopted in 2010 a set of “Open Internet” rules, essentially affirming its original policies but making it clear that there was to be no blocking or unreasonable discrimination. But when it adopted these rules, the FCC still viewed ISPs as information services, not telecommunications carriers. Accordingly, the FCC used Section 706 of the Communications Act, aimed at encouraging innovative uses of the Net, as its basis for jurisdiction, not Title II, which governs common carriers.

Again the U.S. Court of Appeals reversed on jurisdictional grounds. It suggested that 706 might be a valid basis, but that the FCC had not properly articulated why it was in this instance. This led to the Open Internet proceeding that generated so much public attention in 2014.

But something happened on the way.

For one thing, the new FCC Chairman, Tom Wheeler, was moving along the path of justifying the same Open Internet rules under Section 706, but allowing for the possibility of “paid prioritization” within those rules. This was an ambiguous area of the old rules—could a content company pay the carrier to give it more bandwidth to get its product, namely, video streaming, to the consumer without delays of buffering?

Upon learning that this was a possibility, a number of public interest advocates created a public campaign against “fast lanes” and urged that the best way to assure Net Neutrality in the future would be by declaring the ISPs as telecommunications carriers subject to Title II, the section that covers common carriers. They argued that the FCC did not have to impose the full regime of common carriage. That is, it could forgo some of the regulation, but that this would be the best assurance that the rules would be upheld. From that point, a campaign reminiscent of the Stop-SOPA movement (netizen protest of stifling copyright legislation headed for passage in the U.S. Congress) generated millions of comments to the FCC. Comedian John Oliver devoted a substantial portion of his HBO show to the issue, urging his viewers to write in. And eventually the President issued a statement that he preferred the Title II approach.

It was within this context that the Aspen Institute convened its annual Forum on Communications and Society on “Strengthening a Free and Open Internet.” Forty leaders and activists from various elements of the Net gathered over three days in August 2014 to address issues related to openness on the Net. They pondered what one could learn from the public outpouring of comments, informed to a great extent by an analysis from San Francisco-based data analysis firm Quid. And at the request of a sitting FCC Commissioner, sought to suggest a series of principles that a policy-maker might use in considering the merits of an important policy debate such as this one.

The speed of events the past year has made the typical report of an Aspen Institute Communications and Society Program forum a bit obsolete. Accordingly, the Program has pared a more extensive report of the meeting down to the more lasting elements. In essence, this is a broadening of the conversation around Open Internet rules—from what the rules should entail (mostly agreed upon by representatives from both political parties for a decade), and what the jurisdictional bases for those rules should be (hotly contested) to the broader principles offered in the report that follows.

What principles should regulators employ in considering communications regulation going forward? We hope, with this report, to start that broader debate, knowing that the rules will need refinement, that new issues will arise, and that the surrounding milieu will change.

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Strengthening a Free and Open Internet in a Changing and Complex World

By: Elise Hu

Laying the Groundwork: The Tension of Values

No one questions the Internet's already substantial impact on society, the economy and modern life in the 21st century. It's only growing. Over the next decade, an estimated 5 billion people will get connected to the Internet. What will this world-changing force look like in the years—and even the months—ahead?

“We're in the middle of an epic battle for power in cyberspace,” writes Harvard's Berkman Center's Bruce Schneier. “On one side are the nimble, unorganized distributed powers such as dissident groups, criminals, and hackers. On the other side are the traditional, organized, institutional powers such as governments and large multinational corporations.”

Will the Internet still exist with the global interoperability it enjoys now? How will American regulators enforce the notion of net neutrality? Will speeds and reliability be fast enough to meet the information and economic needs of communities? How do we help the Internet fulfill more of its promises to more citizens?

“Our preference for free speech is the freest possible speech,” Knight Foundation President Alberto Ibarguen said, in opening remarks at the 2014 Aspen Institute Forum on Communications and Society (FOCAS), a three-day brainstorm involving some of the leading thinkers on the Internet and society. The Internet is and has long been a means to the right of free speech and free information. But the ways it gets to people, and what information they see, are not neutral, due largely to issues of access.

The stakes are high—openness, free expression and the innovation necessary for economic viability and growth, among them. The tensions are ever present. The tension of liberty and security faced by all governments and societies—is baked into the Internet's challenges. And it's against this fast-changing context that the attendees at FOCAS 2014 convened.

This report features the discussions, questions and ideas for strengthening the way the Internet works today from notable Internet entrepreneurs, creators, communicators and regulators convened by the Aspen Institute and supported by the Knight Foundation, August 10-13, 2014, in Aspen, Colorado. The group explored the competing values of security, innovation, openness and privacy, and other tensions. The meeting aimed to better understand and devise a “most ideal” road ahead for a freest possible and most open Internet, and establish guiding policy principles to ensure the Internet's role as a means to free expression, consumer choice, and a secure and vibrant economy.

How We Got Here

“I feel like I have a front row seat at the digital revolution,” said current Federal Communications Commission (FCC) member Jessica Rosenworcel, opening her remarks at the 2014 FOCAS Forum by marking a birthday. This year, the World Wide Web turned twenty-five. And the FCC strives to foster the growth of communications networks that continue to support the web—and have from the start.

A key player in the recent history of the FCC is Reed Hundt, chairman of the Commission during the inception of the Internet. He recalls the top level meetings with Al Gore in 1993: “We wanted the Internet to borrow existing phone networks without paying for them, to enhance the value of phone lines and enhance the value of a personal computer,” Hundt said. “Furthermore, we decided if we did all this, the United States would be the country that would be establishing the design principles for the thing called the Internet.”

It sounds prescient, looking back. But the problem was it wasn’t welcome by the telephone companies, as you might expect, whose business was being disrupted by the upstart Internet. By 1997, a split was codified, saying all Internet communications will not be subject to regulations applied to voice telecommunications. “So the Internet used the hardware of a telephone network, but regulators established openness on top of it,” Hundt explains. “Everything beyond the telephone lines were not subject to regulation in terms of price and content.”

But with broadband came the end of telephone lines for Internet content. Broadband is generally reliant on existing cable lines, and in more recent times, our connections are based on wireless technology. That’s where Hundt sees reason to worry.

“What’s happened, is the physical platform for the Internet moved to wireless and cable ... two systems that are not traditionally open. Do we take the values of the Internet defined in the 1990s and celebrated for years, and impose those values on the two other ecosystems (wireless and cable)? That’s the burden,” Hundt says.

The Landscape

On broadband reach, Rosenworcel says Americans have access to high speed Internet, whether it’s through cable, wireless or phone lines, though gaps, particularly in rural areas, remain. The adoption rate has been stunning and unseen by previous technologies. “The percentage of people 18 years and older in the United States who have adopted the Internet over the past two decades has grown at a rate not seen since the popularization of the telephone, soaring nearly fivefold, from 14 percent in 1995,” [The New York Times](#) reported in 2013.

But when it comes to the robustness of their connections, a different story emerges. About half of Americans get Internet access at speeds of 10mbps or more, but that’s not enough to land the United States into the top tier of countries with fast broadband access. The country that *invented the Internet*, and is home to tech behemoths Apple, Google,

Microsoft and others, ranks behind Estonia in download speeds. Commissioner Rosenworcel suggests the lack of competition among Internet providers is a concern.

The 1996 Telecommunications Act—[which was meant to foster competition](#)—allowed cable companies and telecom companies to sometimes divide markets and/or merge their way to what many consider oligopolistic practices. ISPs can charge customers incrementally higher prices without investing in research and development or faster fiber optic connections that are seen in places like South Korea, which boasts the world’s speediest average broadband speeds in the world.

“We don’t have enough competition,” Rosenworcel says. “Because half [of] those who have broadband can only get it from two or one providers. Even as an FCC commissioner, I am one of them.”

Fiber optic connections, in particular, are expensive to build out but offer faster and smoother connections than traditional copper wire connections. Verizon stopped building out fiber optic connections in 2010—citing high costs—although, recently, Google Fiber and other new entrants are extending fiber connections to more cities.

The Tension Between Markets and Government

Americans are becoming more aware of Internet governance issues than ever before. The biggest regulatory question facing the FCC and the future of the Internet—the issue of net neutrality and how to protect it—was not decided by the time of the conference, but the FCC has since issued its Open Internet order. The principle generally provides that no content should be prioritized above others, regardless of a content provider’s ability to pay more for the transmission. To Rosenworcel, it means “a user can go where he or she wants and do what he or she wants on the Internet unimpeded by the interference of his or her broadband provider.”

A key concern by net neutrality advocates is whether the playing field will allow for new companies to enter and compete against incumbents. Building a business costs money, and if the next YouTube or Snapchat feels the pressure of growing bandwidth bills is too high, startups could face insurmountable obstacles to getting launched.

In January 2014, the rules the FCC had been using since 2010 to support openness and enforce net neutrality were struck down by a U.S. Appellate Court after a years-long battle instigated by telecommunications companies. The Commission’s task in 2014 was to figure out how new rules and enforcement can fit into old laws—telecommunications laws written in 1934 and 1996, both of which are basically several pre-Internet generations ago.

“We’re seeing a level of public interest and engagement that is different from our prior discussions of this issue,” Commissioner Rosenworcel said. “That reflects just how powerful the Internet is. People are aware of what it really means to have networks that go far and go fast. These things are no longer abstract—they’re personal. For a

democracy, that's actually quite exciting. It's going to make our job hard, but it's the kind of hard we wish to have."

The Regulation Question in Practice: U.S. Net Neutrality Debate

How to regulate is another tough question. The debate over the open Internet is now intertwined with a specific policy option—whether to reclassify broadband Internet to fall under Title II of the Telecommunications Act. In January 2015, when the D.C. Circuit Court overturned the FCC's previous rules on net neutrality, it did so on the grounds that the agency did not justify its legal jurisdiction over ISPs under Section 706 of the Communications Act, nor under Title II of the statute since Internet providers were deemed not to be common carriers by an earlier FCC. Advocacy groups such as Free Press and the Electronic Frontier Foundation argued that the FCC should simply "fix the problem" and reclassify the industry so ISPs are regulated like public utilities. President Barack Obama, in a highly-publicized move in early November 2014, came out in support of the same reclassification favored by those advocates.

Big ISPs—Comcast, Verizon and Time Warner—and their trade associations and lobbyists argued that the Title II option will lead to suffocating regulation that would give them less incentive to invest millions in developing new technologies and maintaining or improving the current network connecting Americans to the Internet. They wanted the FCC to rewrite net neutrality rules relying on section 706 of the Telecommunications Act, as they say this is "lighter" regulation. Some advocacy groups, including a number of minority groups, agreed with this approach, saying that the D.C. Circuit's decision does allow for using Section 706 as a jurisdictional basis if the FCC does it right, and that Title II could have too much baggage for modern Internet regulation.

As she left the meeting, Commissioner Rosenworcel charged the group with an assignment: recommend principles that FCC Commissioners could use in deciding these tensions and issues.

Moving Forward: Principles for Regulation

Because it is easy for ideas about the future of the Internet to get incredibly abstract, to provide some structure and clarity the FOCAS participants developed a set of principles for Internet policy that reinforce important values.

The emphasis on principles rather than prescriptions underscores the idea that only principles can be lasting, as specific policy proposals can quickly become outdated. They are "aspirational principles with limited structural requirements," New America Foundation's Open Technology Institute Director Alan Davidson said.

In order to strengthen the Internet and protect the freedoms enjoyed by users in its earliest, most idealized iterations, the following principles are aimed at moving future policy decisions in the right direction. The principles are written with the following values in mind: Maintaining freedom of expression and creativity, protecting a certain level of individual privacy (that individuals should know what is happening with their

data) and universal access—the notion that everyone should be able to have fast, quality access to an unfettered Internet.

The principles are as follows:

Competition and Markets

- Regulate to open markets, never to close markets;
- Allow all firms to aspire to market success; never help a firm maintain a monopoly;
- Enable [permissionless innovation](#).

Access

- Use competition or subsidies to provide everyone access to fast, quality connectivity, all public information, collective action, all means of expression, and the ability to learn, share and speak with one another;
- Act quickly to correct market failures, particularly if they are disadvantageous to the already disadvantaged;
- Seek interoperability to extend scale and network effects to new entrants.

Security and Free Speech

- Ensure sufficient information and reasonable oversight to instill trust that any government surveillance protects civil liberties;
- Limit [intermediary liability](#) for third-party speech in order to protect free expression;
- Maintain transparency and accountability around the collection and use of private data.

Consistent application of these principles is also important. The guidelines and indicators include:

- Do not compromise principles, uphold them all;
- When deciding whether or how to regulate, these principles should guide the decision.

“If you’re a regulator, people are always asking you to compromise on your principles,” former FCC Chair Reed Hundt says. “They’re saying things like, we’ll give you interoperability if you don’t insist on opening the market in which we’re operating. Don’t compromise [in the above principles] means don’t strike those deals.”

Google’s Matt Cutts defaults toward openness and accountability: “In a post-Snowden world, people have lost a lot of faith in their government, [and don’t believe] that they’re acting appropriately. So government should provide sufficient information and oversight to make sure citizens are adequately informed. You should be able to give enough of the outlines so people are not scared, sufficient oversight so that you’ve reassured the people that the people in government are doing their jobs,” said Cutts.

Epilogue

The open Internet debate remains a contentious policy issue, and is even starting to attract the attention of citizens outside of traditional political circles. It received an extra burst of attention following the midterm elections of November 2014 when President Barack Obama, in a surprising move, came out behind strong net neutrality protections in a way he had not previously. He said if the FCC reclassifies Internet service under Title II of the Telecommunications Act to treat it as a utility, the agency will be better positioned to protect equal access to information and to ensure huge Internet service providers don't dominate the market deleteriously.

“This is a basic acknowledgment of the services ISPs provide to American homes and businesses, and the straightforward obligations necessary to ensure the network works for everyone—not just one or two companies,” Obama said.

Obama's recommendation to the FCC has four components that are in line with the principles for regulation recommended at the FOCAS Forum. They also match many of the millions of online comments sent to the FCC and the proposals by advocates for strong protections. The components of the recommendation include:

- **No blocking.** All legal sites should be accessible from all ISPs.
- **No throttling.** All sites and services are delivered at the same speed and none receive preferential speeds.
- **Increased transparency.** To allow the FCC to evaluate an ISP's entire network.
- **No paid prioritization.** No service has to or can pay an ISP to be delivered to users at faster speeds. (This would mean that companies like [Netflix wouldn't have to cut deals](#) with ISPs anymore.)

ISPs have pushed back in a big way, with a newly-elected Republican Congress on their side. Sen. Ted Cruz, R-Texas, likened net neutrality to “Obamacare for the Internet,” a sign of how contentious a political debate regulating the Internet has become in the U.S.

In its 2015 Open Internet decision the FCC in a 3-2 decision (along party lines) chose to follow the President's recommendation and base its rules on Title II of the Communications Act. It also applied the rules to wireless carriers. ISP associations (telecommunications carriers, cable operators) have appealed to the same appellate court that has reversed previous attempts to codify net neutrality rules, and Congressional leaders are proposing to adopt new legislation that would clarify the FCC's jurisdiction to adopt net neutrality rules, but limit how far the FCC could go in adopting such rules.

Outside debates in the U.S., growth of the mobile-based, global Internet continues to rocket. The nations that are likely to decide structural norms around the Internet are far flung—Brazil, China, India and other developing nations. One major concern among Internet leaders is the reality that some of the fastest-growing places for Internet connectivity are also under the most repressive governments. Laws are being written to prohibit digitally distributing content that opposes the government; outright censorship is happening in places like Russia, Turkey and China; and if beating repression is a priority,

the tools that measure digital repression and undermine filters and throttles are critically underinvested. While conversations at FOCAS largely focused on domestic threats to Internet freedom, the principles laid out by the group are meant to be transferable to questions of Internet governance across industries, and the globe.

APPENDIX

Public Participation Sources and the Challenge of Engagement

The stakes were high and a decision on net neutrality was imminent. 2014 was the most visible year for open Internet issues ever. The FCC received nearly four million public comments on the matter, more comments than on any other issue in its history, including the controversial “wardrobe malfunction” during Janet Jackson’s 2002 Super Bowl performance. (That was previously the high water mark for communications to the FCC.)

But because net neutrality is “more boring [a term] than a pair of Dockers,” as comedian John Oliver described it in June 2014, just how much the public was willing to engage in the issue was an open question at the year’s outset. As part of a challenge from Forum sponsor, the Knight Foundation, the FOCAS group addressed how to bring more Americans into the dialogue on Internet governance and policies—people beyond the familiar groups that often participate.

To better understand the groundwork, Quid, a San Francisco-based data analysis firm, was commissioned by the Knight Foundation to take a closer look at public engagement in net neutrality throughout the year. The firm analyzed news mentions, social media conversations, lobbying activity on the issue and the more than one million public comments and emails received by the FCC to its open docket item on how to enforce the principle after a federal court struck down its previous enforcement power in January 2014.

More specifically, Quid read 250,000 comments and emails sent into the FCC, scanned individual tweets and traced them to their sources, clustered them into thematic conversations, and analyzed news volume on the issue over the course of the year. Researchers found that interest in the issue hit peaks during the following events:

- FCC announcements;
- Court decisions;
- Major tech companies getting involved in net neutrality, such as when Netflix Chief Executive Officer Reed Hastings spoke out against Internet service providers having too concentrated power; and
- John Oliver’s 13-minute segment explaining and railing against ISP’s.

All of these incidents drove news coverage, amplified by social sharing. The firm further found that different channels amplify different messages. For example, when comparing net neutrality coverage among different types of news outfits, Quid’s analysis shows the technology industry press accounts for nearly 40 percent of the coverage.

Meanwhile, on local news outlets and in the financial press, coverage of net neutrality is disproportionately low when compared with any other “regular day of news” item that would run in those broadcasts or newspapers.

Analyzing the Comments

The FCC received more engagement from the public on net neutrality than any other previous rulemaking measure. In total, it received nearly 1.1 million comments on the measure at the time of the analysis. (The total eventually reached four million.)

Quid's analysis of what was in the messages reveals six dominant themes in the messages to the rulemakers:

- Haves and have nots;
- Higher costs for consumers;
- FCC conflict of interest;
- David vs. Goliath battle between startups and telecommunication companies;
- Internet is a right/utility; and
- No free lunch for content providers.

All but one—that there should be no free lunch for content providers—indicate positions in favor of strict protections of net neutrality. The “no free lunch for content providers” message, when analyzed further, shows the comments derived from a single “campaign” that generated templated comments from the public. Other issues also had template responses, but all organic, individually-penned, non-templated public comments supported rules protecting net neutrality.

Compared to population statistics, some states are over- or under-represented in net neutrality comments submitted to the FCC, according to Quid's analysis. For example, Washington residents sent in twice as many comments as might have been expected from a state of its population. But the state is also home to tech giants Amazon and Microsoft, which might account for greater interest in the issue.

"You're seeing huge kinds of West Coast lean to this with Portland, California and Seattle with the most over represented constituencies," Quid's co-founder and Chief Technology Officer Sean Gourley said, of the data. "The South and Texas are being pretty underrepresented."

Lobbying Spending

Spending on lobbying efforts is “massively skewed,” says Quid's Gourley. The big players—cable companies that provide Internet services—are doing the most spending. Verizon spent \$100 million in 2014 alone. In terms of lobbying dollars spent between 2009 and 2013, Quid found 65 percent of the money spent on the net neutrality issue was spent to lobby against strict enforcement, 30 percent was spent in favor. As a point of comparison, The Sunlight Foundation analysis [found that 99 percent](#) of the public comments sent to the FCC on the issue were supportive of maintaining enforcement of net neutrality.

“About two-thirds of the studied comments called for reclassifying broadband providers under Title II of the Communications Act—a move that would allow the FCC to regulate ISPs more heavily but would likely provoke a strong political backlash,” *The Washington Post's* Brian Fung wrote, of the Sunlight analysis.

Public Engagement Challenges

The very fact more than 3 million people cared about the open Internet to write into the FCC about it indicates it is important in a way that was not important just a few years ago, when the same body was similarly debating net neutrality. But the challenge is how to message and “market” complicated Internet governance issues to an even wider public—how to make the issues simple enough to understand without losing its inherent complexities.

“There’s a need for inclusive messaging that resonates. People need to understand the impact of how a more closed Internet would affect health care, or jobs,” Harper Reed said. “Tech may be cool, but it’s not that inclusive....When people talk about digital equity, [we need to] bring about messaging that can create honest dialogue and debate.”

The other big challenge going forward is how to get the public to engage more constructively with government such that the engagement is beneficial to both sides. As things are now, the commenting system is largely one-way communication that many rulemakers tend to ignore if it comes in the form of “templated” messages, or those that seem to follow a general text that advocacy groups encouraged people to follow. “Cut and paste doesn’t work,” said Atlanta Mayor Kasim Reed. “It doesn’t have the same impact on an elected [official] as someone writing three sentences that they personally wrote.”

The counterpoint, of course, is that even though more than half the comments to the FCC were form letters pre-written by advocacy campaigns, it says something that the side opposing stronger net neutrality provisions wasn’t able to get more than a handful of people to simply click to support its position.

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(Titles and affiliations are as of the date of the conference)

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Elise Hu covers technology and its impact on culture for NPR's on-air and online platforms. She joined NPR in 2011 to head up the digital and editorial launch of StateImpact, a Columbia-DuPont award winning public policy reporting network.

Previously, she was a founding journalist at the non-profit digital news startup, The Texas Tribune. While working as a political reporter, she also oversaw the Tribune's social and multimedia journalism, statewide television partnerships and toyed around with new story forms.

An honors graduate of the University of Missouri-Columbia's School of Journalism, Elise's work has earned a Gannett Foundation Award for Innovation in Watchdog Journalism, a National Edward R. Murrow and The Austin Chronicle once dubiously named her the "Best TV Reporter Who Can Write." Outside of work, she's an adviser to the John S. and James L. Knight Foundation and teaches at Georgetown University.

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The Communications and Society Program is an active venue for framing policies and developing recommendations in the information and communications fields. We provide a multi-disciplinary space where veteran and emerging decision-makers can develop new approaches and suggestions for communications policy. The Program enables global leaders and experts to explore new concepts, exchange insights, develop meaningful networks, and find personal growth, all for the betterment of society.

The Program's projects range across many areas of information, communications and media policy. Our activities focus on issues of open and innovative governance, public diplomacy, institutional innovation, broadband and spectrum management, as well as the future of content, issues of race and diversity, and the free flow of digital goods, services and ideas across borders.

Most conferences employ the signature Aspen Institute seminar format: approximately 25 leaders from diverse disciplines and perspectives engaged in roundtable dialogue, moderated with the goal of driving the agenda to specific conclusions and recommendations. The program distributes our conference reports and other materials to key policymakers, opinion leaders and the public in the United States and around the world. We also use the internet and social media to inform and ignite broader conversations that foster greater participation in the democratic process.

The Program's Executive Director is Charles M. Firestone. He has served in this capacity since 1989 and also as Executive Vice President of the Aspen Institute. Prior to joining the Aspen Institute, Mr. Firestone was a communications attorney and law professor who has argued cases before the United States Supreme Court. He is a former director of the UCLA Communications Law Program, first president of the Los Angeles Board of Telecommunications Commissioners, and an appellate attorney for the U.S. Federal Communications Commission.