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Connection Technologies in U.S. Foreign Policy
An Overview of “21st Century Statecraft” & “Internet Freedom”

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A Global Network

This paper is an overview and exploration of the U.S. State Department's recent use of the global information and communications network in the development and practice of American foreign policy, with a focus on two relatively new initiatives: "21st Century Statecraft" and "Internet Freedom." These initiatives, while different in their objectives, emerge from a common idea and argument: with the growth of the global information and communications technology (ICT) network, the State Department has a powerful new tool to pursue its goals, and must view universal, uncensored access to this network as a core foreign policy objective.

Our world is increasingly tied together in single, global network, and ever more of the world's commerce, communications, and information flows through this network. For most people around the world, their primary access to this network comes through a mobile phone: Today, over 4.5 billion individuals own a mobile phone, and within the next decade, over 90 percent of people on earth will have one.¹ With this rapid adoption, and with the technological progress that is lowering the cost of increasingly powerful tools, we are swiftly moving toward a world in which everyone—from a farmer in rural India, to a shopkeeper in Nairobi, to a student in San Francisco—has access to the complete body of human knowledge, regardless of who they are, where they were born, or what they do.²

Information and communication technologies (ICTs) have created great changes in the way we live and work here in the U.S. But the spread of these tools to the most remote corners of the world brings change in ways that are truly life-altering. From banking and commerce, to healthcare and education, to democracy and governance, the spread of the mobile phone is changing every aspect of people's lives around the globe.

Throughout the developing world, where access to traditional banking services is rare, mobile and connection technologies have extraordinary power to increase market

¹ ABI Research. *Wireless Subscriber Forecasts*. 2010.

² Portio Research. *Worldwide Mobile Market Growth, 2000-2020*. 2009.

efficiency, facilitate and increase remittances, and open financial systems to more participants. In Kenya, M-Pesa is a mobile phone-based payments and banking platform offered by Safaricom, the country's leading telecommunications company. While only about 10 percent of Kenyans have a bank account, over 25 percent subscribe to M-Pesa, and use the application to make purchases, send remittances and save money. In 2009, 11 percent of Kenya's GDP was moved through M-Pesa. This year, Safaricom expects to shift 20 percent of Kenya's GDP through their service.³

Likewise, connectivity has the potential to transform healthcare in the developing world by empowering health workers, offering diagnostic and treatment support, promoting health education and awareness, enabling remote monitoring and data collection, and tracking outbreaks and epidemics. Throughout the developing world, Tuberculosis is a major cause of death, even though 99 percent of those infected could be cured with proper medication. Part of the reason for the high fatality rate is that up to 80 percent of patients fail to follow their prescribed regimen. SIMpill is a project spearheaded in South Africa, now available worldwide, that equips pill bottles with a SIM card and transmitter. If the pill bottle is not opened at the specified time, the patient gets a text message reminder to take the medication, and a health worker is prompted to visit or call and encourage the patient to take the pill. The program has boosted compliance rates to over 90 percent.⁴

As in banking, commerce, healthcare, education, and every other part of society, connectivity is profoundly impacting democracy and governance. People around the world are using connection technologies like mobile phones, social media, and internet access to monitor elections, document human rights abuses, facilitate political activism, and organize against repressive regimes. During protests following Iran's fraudulent election in 2009, a short video of the death of a young woman—shot on a cell phone camera, and distributed as an e-mail attachment—rallied many Iranians against their

³ Wood, Nick. *LatAm lags in mobile money deployments – GSMA*. Total Telecom, 24 May 2010.

⁴ Vital Wave Consulting. *mHealth for Development: The Opportunity of Mobile Technology for Healthcare in the Developing World*. Washington, DC and Berkshire, UK: UN Foundation-Vodafone Foundation Partnership, 2009.

government and cost the regime legitimacy both domestically and around the world. Meanwhile, many Iranians used Twitter to share their experiences with the rest of the world, and people outside Iran were given a perspective inside the country that they would not have otherwise had. While the video didn't incite the uprising, nor did it cause the regime to collapse, this event was a window into the power of oppressed people to leverage ICT tools to make their voices heard.

Amid all this innovation, President Obama came into office in 2009. His campaign had leveraged new technologies—social networking, web video, text messaging, blogging and others—better than any previously, but governing with these tools presented entirely different challenges and new opportunities. For the Obama Administration's State Department, the global ICT network offered new avenues to pursue foreign policy objectives, while also presenting obstacles different than those faced in the 20th century.

21st Century Statecraft

Even as Secretary of State Hillary Clinton and her team arrived in Foggy Bottom in 2009, people around the world were connecting to each other through myriad new devices and on a variety of platforms—e-mail, social media, SMS, and others—many of which did not exist even a decade earlier. The world has become more closely networked than ever before, allowing individuals and groups to play unprecedented defining roles in international affairs. The U.S. government, however, still engaged the world much as they had for the previous half-century: through government-to-government interaction and engagement. The new Secretary of State and her advisors understood the world as a networked place, and saw an opportunity to embrace the new technologies that are tying together the world's people, incorporating them into the conduct of international affairs, and bringing diplomacy and global development into the 21st century.

To spearhead the effort to integrate an understanding of technology into their work, the Clinton State Department welcomed Alec Ross, who, as Senior Advisor for Innovation is responsible for “maximizing the potential of technology in service of America's

diplomatic and development goals.”⁵ The founder of OneEconomy, a major organization working to combat the digital divide, Ross worked for the Obama presidential campaign developing the candidate’s approach to technology and innovation, and jumped from there to his State Department perch, where he built a small team in his seventh floor Office of Innovation, coordinating closely with Jared Cohen, an appointee in the Policy Planning office. (Cohen recently departed the State Department and joined Google as Director of their new division “Google Ideas.”)

In May of 2009, Secretary Clinton announced a new initiative she called “21st Century Statecraft.” The Secretary described it as a strategy of expanding the conduct of foreign policy beyond traditional government-to-government relationships and leveraging the global ICT network to include people and civil society around the world in the business of diplomacy and development. Over the past 18 months, “21st Century Statecraft” has taken a variety of iterations, including using connection technologies to conduct public diplomacy, strengthen civil societies, improve security and promote economic development.

Connection Technology for Public Diplomacy

The idea of public diplomacy is nearly as old as the nation state. Herodotus wrote of how Xerxes of Persia appealed directly to the people of Argos for their neutrality in his invasion of Greece.⁶ And in the early days of the United States, Benjamin Franklin and Thomas Jefferson were both known to go around the French court to win the support of the French people for America’s priorities.⁷ In the 21st century, the State Department has updated the way they speak to foreign publics, taking advantage of social media and other new technologies to deliver their message directly to the citizens.

In early 2009, President Obama released a video on YouTube in which he spoke to the people of Iran on Nowruz, the holiday marking the Iranian New Year. His address—

⁵ U.S. Department of State. “Alec Ross.” <http://www.state.gov/r/pa/ei/biog/130142.htm>

⁶ Cull, Nicholas J. *Public Diplomacy: Lessons from the Past*. USC Center on Public Diplomacy at the Annenberg School, University of Southern California: 2009.

⁷ Bardos, Arthur A. “Public Diplomacy”: *An Old Art, A New Profession*. Virginia Quarterly Review: Summer 2001, pp 424-437.

subtitled in Persian—acknowledged the troubled history of the U.S.-Iran relationship, and welcomed “new beginnings” with Iran. Confronted with a state-controlled media that would likely block or distort the words of the new American leader, President Obama extended his hand directly to the people of Iran through a video that has been viewed over 100,000 times. Similarly, the speech President Obama delivered in Cairo in June 2009 was distributed via web video in 14 languages spoken across the Muslim world. While he spoke in front of an audience of a few thousand, the speech has been seen about 800,000 times.

On President Obama’s first trip to China, the State Department held advance briefings with Chinese bloggers, and the President held a townhall meeting in Shanghai where he addressed a group of students on censorship and freedom of speech, among other issues. The event was available for viewing in China via webcast, though it was not broadcast on television far outside Shanghai. The audience, handpicked by the Chinese government, contained at least a few Communist Party plants, and most of the questions were pre-vetted. Still, it was the first time a U.S. president had held a townhall meeting in such a repressive state, and even a tainted question and answer session was more democratic than anything many young Chinese had experienced before.

A portion of President Obama’s December, 2009 speech on Afghanistan was directed to Afghans themselves. Naturally, very few Afghans tuned in live on TV or on the internet (broadband penetration is around 2%), but the White House took advantage of the fact that about 30% of Afghans have mobile phones: They clipped out the 45 seconds of the speech in which he spoke to the Afghan people, dubbed the video in Arabic, Pashto, and four other languages spoken in the region, and made it available over mobile networks. The videos have reached thousands who would not otherwise have heard Obama’s words.

Social Technology for Civil Society

Non-profits, NGOs, community organizations, religious institutions, and other civic groups help form the fabric of any strong, stable, democratic nation, and the State Department counts assisting and reinforcing civil society groups in weak or repressive

states as a key goal. Only when these groups are secure in their existence and free from interference by government or other outside actors are states able to move beyond poverty or repression. As a part of “21st Century Statecraft,” the State Department has initiated programs that take advantage of technologies such as social networking that encourage stronger civil society and help civil society groups maximize their efficacy.

Speaking in Islamabad in October 2009, Secretary Clinton announced support for a mobile-phone-based social network in Pakistan. The network is called Humari Awaz, which means "our voice" in Urdu, and it is accessible via a free SMS shortcode on all five major Pakistani mobile networks. The US government paid for the first 24 million text messages sent through Humari Awaz; the program met with striking success, and these free texts were used in the first few weeks. Since then, the 450,000 users of the social network have sent over 320 million messages for a variety of purposes—from the purely social, to business, media, agricultural, and other ends.⁸

A short time later in Marrakesh, Morocco, Secretary Clinton unveiled a new “Civil Society 2.0” initiative, in which the State Department will provide funding and expertise to allow grassroots civil society organizations around the world use technology to grow and work more effectively. The State Department is currently accepting grant applications from civil society organizations in the Middle East and North Africa region for projects that would help these organizations leverage new technologies to improve communication with their constituents, and better organize on social and political issues.⁹

Apps 4 Africa is a competition announced jointly by the State Department, Nairobi-based iHub, Kampala-based Appfrica Labs, and the Social Development Network which works throughout East Africa. The competition, which ran throughout the summer of 2010, rewards the developers of web- or mobile-based applications created to benefit society. American development policy has seen mixed results over the past decades, and U.S.

⁸ E-mail interview conducted with MobileAccord. 2010.

⁹ *Tech Support: New Media Technical Assistance for Civil Society*. U.S. Department of State. June 23, 2010. <http://mepi.state.gov/opportunities/143571.htm>

relations with governments in developing countries—particularly in Africa—have compounded problems of corruption and ineffective governance as often as they have helped. By working directly with African NGOs and non-profit organizations on this tech-based initiative, the State Department is seeking to empower civil society organizations while giving regular citizens tools to improve their lives.

Security & Development

Already, we have glimpsed the power of the global mobile network to improve healthcare, education, commerce and banking in the developing world. Perhaps the greatest potential of the “21st Century Statecraft” initiative lies in leveraging the power of the network to facilitate and enhance such opportunities. While the State Department faces the challenge of pursuing projects that are appropriate for local conditions, sustainable, and crafted to address real problems in a responsive way, they have the potential to add new tools to their work in pursuit of global development and security.

Every month, 250 people are murdered in Ciudad Juarez, Mexico, and over 12,000 have been killed since the army was called in to battle the drug cartels in 2005.¹⁰ Juarez may be the world’s most violent city, and the headless bodies that turn up in the streets every day are attributable to the flow of drugs from Mexico to market in the United States. A collaborative effort between the State Department, the Mexican government, Mexican telecom firms, and Mexican NGOs aims to address one challenge of the drug violence in the border region—the inability of citizens to anonymously and securely inform the police. The groups, in partnership, are in the process of establishing a free SMS shortcode, to which Mexican citizens will be able to send text message tips on incidents of violence. The messages would be scrubbed of any identifying information, and forwarded to Mexican law enforcement, which would act upon the tips and report back on their work, creating a secure dialogue between people and police. Given high levels of governmental corruption and fear among the people, the State Department faces significant challenges earning the trust of their target population, but anticipates the system will go live in Juarez in late 2010, and later expand throughout the border region.

¹⁰ *Mexico’s Ciudad Juarez, World’s Most Violent City?*. Reuters World News Journal. 28 August 2009.

In the hours after a devastating earthquake rocked Port-au-Prince, Haiti in January 2010, the State Department mobilized to give Americans a way to donate to the cause using their mobile phones. Working with mGive, a mobile donations platform, and all the U.S.-based mobile network operators, they established a shortcode with which people could donate \$10 to the Red Cross by sending a single text message. Over the following weeks, they raised over \$41 million in this manner, shattering any previous record: the most money previously raised by a text campaign was less than half a million dollars.¹¹

Meanwhile, State worked with Ushahidi (a mobile mapping platform), a group of students at Tufts University's Fletcher School, and relief workers on the ground in Haiti to build a system for delivering relief to Haitians in need. Their system allowed for Haitians to send a free text message that would be translated from Creole to English by members of the Haitian diaspora, and forwarded on to an operations center at Tufts. A group of volunteers would then decide whether the text message was actionable, and if it was, they would forward the request on to people on the ground. More than 2200 messages moved through this loop, each of them processed in a matter of minutes, ensuring that life-saving support arrived as swiftly as possible.¹²

The ambition of "21st Century Statecraft" is greater than all these disparate projects: it is part of a mode of thinking at the State Department that understands the world as a network not just of states, but of individuals, organizations and associations. The global ICT network is placing incredible powers of connectivity in the hands of every person on earth, empowering people and groups within states. Acknowledging this, the State Department is working to integrate "21st century statecraft thinking" into every level of foreign policymaking.¹³ For now, this is happening gradually, but thanks to support from the highest levels of the State Department, it is happening faster than many thought possible.

¹¹ Mobile Accord Blog. Mobileaccord.wordpress.com. 2010.

¹² Ushahidi-Haiti Website. Haiti.Ushahidi.com. 2010

¹³ Interview conducted with Anonymous State Department Employee, 2010.

Internet Freedom

Even as the State Department has begun to leverage the global ICT network to pursue their goals, they have encountered new challenges to American foreign policy unique to a networked world. With the world's information, communications and commerce moving onto the global network, traditional freedoms of expression, assembly and exchange gain an online dimension. Though connectivity is expanding at amazing rates, not all of the world's people enjoy equal access to the information and communications services on the internet and mobile networks. Online censorship, suppression of free speech and national firewalls all hinder freedom of expression, assembly and commerce, and run contrary to American values, strategic interests and economic objectives.

In the interconnected world of the 21st century, it has become hard to imagine freedoms of expression, assembly, and commerce without the extension of these freedoms to the internet. As Alec Ross and Simon Rosenberg wrote in a 2007 paper published by NDN:¹⁴

*We believe it should be a core priority of the United States to ensure that all the world's people have access to this global network and have the tools to use it for their own life success. There is no way any longer to imagine free societies without the freedom of commerce, expression, and community, which this global network can bring. Bringing this network to all, keeping it free and open and helping people master its use must be one of the highest priorities of those in power in the coming years.*¹⁵

Ross found warm reception for these ideas in Secretary Clinton's State Department. In a groundbreaking speech delivered at the Newseum in January of 2010, Secretary of State Clinton laid out the argument that "Internet Freedom" is a natural extension of offline freedoms, and established uncensored access to the global ICT network as a global

¹⁴ NDN is the 501(c)(4) affiliate of the New Policy Institute

¹⁵ Ross, Alec & Simon Rosenberg. *A Laptop in Every Backpack*. NDN, 2007.

imperative and a foreign policy priority for the U.S. State Department.¹⁶ Restrictions on online freedoms of expression, assembly and commerce, she argued, must be seen as a threat to American interests, while expansion of open, uncensored access to the network may powerfully support American values, strategic objectives, and economic goals.

A Human Right

Since the founding of this country, the United States has defined itself as a nation of values, and has stood—at times more successfully than others—for individual liberty, rule of law, free speech, and free markets, and the spread of these values around the world. As Secretary Clinton said in her speech, “We need to synchronize our technological progress with our principles,” and advanced the argument that these values had to be defended online just as they are offline.

Secretary Clinton’s speech drew on Franklin D. Roosevelt’s famous “Four Freedoms”—freedoms of speech and religion, and freedoms from want and fear—and added a fifth for the 21st century: the freedom of individuals to connect to the Internet, to the sites of their choosing, and to each other over ICT networks. The Secretary argued that this new, fifth freedom was essential to supporting the other four in the modern world, and that access to the global network has given individuals around the world incredible potential to pursue their own success and empowerment. The end-user to end-user nature of the internet and global mobile network puts control into the hands of individual people all over the world—an outcome that could not be more in line with American values.

Online freedoms, however, face serious obstacles. China’s harsh censorship has gotten a great deal of attention; less publicized are the regimes of light censorship that are becoming increasingly common around the world. In Australia, the government has broad power to regulate “offensive content,” and promotes an “opt-in filtering program” that allows users to install software that blocks foreign content deemed offensive by the

¹⁶ Clinton, Hillary. *Remarks on Internet Freedom*. 2010. <http://www.state.gov/secretary/rm/2010/01/135519.htm>

government.¹⁷ Turkey, Brazil, Russia, and numerous other countries have all blocked access to YouTube at one time or another.

The actions of these states set a course contrary to the internet's history as a free, unregulated space, and pose a threat to online freedoms. As Article 19 of the Universal Declaration of Human Rights states: "Everyone has the right to freedom of opinion and expression; this right includes freedom to hold opinions without interference and to seek, receive and impart information and ideas through any media regardless of frontiers." Though written half a century ago, this ideal clearly applies to online media today, and it must be respected by countries that wish to be seen as open, democratic societies. In diplomatic discussions with allies and rivals alike, the State Department has begun advancing the idea and argument that online freedoms deserve protection equal to their offline analogues.

A Strategic Priority

Beyond suiting American values, the United States' support for online freedoms is at the core of America's strategic interest in creating a more open, democratic world. As President Obama wrote in the introduction to his 2010 National Security Strategy: "Democracy does not merely represent our better angels, it stands in opposition to aggression and injustice, and our support for universal rights is both fundamental to American leadership and a source of our strength in the world." The debate over online freedoms is certain to be a major topic in this broader struggle over democratic values, and may be one of the defining battlegrounds in the coming years.

Increasingly it appears that geopolitics in the 21st century will be defined by competition between open and closed societies. In recent years, the world has suffered a broad trend against democratic values. After the fall of the Berlin Wall and the collapse of the Soviet Empire, a great wave of countries democratized throughout the 1990s, capping a 40-year global trend toward more open, free societies in which dozens of countries in Latin

¹⁷ *Australia and New Zealand*. OpenNet Initiative. <http://opennet.net/research/australia-and-new-zealand>. 2010.

America, Europe, Africa, and parts of Asia became democratic. Over the past decade, however, this trend has slowed and even regressed. In their annual report “Freedom in the World,” Freedom House has observed an overall deterioration of freedom in each of the past four years, with 40 countries seeing declines of freedom in 2009.¹⁸

The trend against democratic values has expanded to the online sphere, particularly in the past year. In a speech at NDN and the New Policy Institute, Alec Ross called 2009 “the worst year on record” with regard to freedom on the internet.¹⁹ In Iran, the government responded to the post-election uprising by reining in the online rights of their citizens and using ICT networks to observe, infiltrate, and spy on their people. The Chinese government continued its record of censorship and manipulation of the online sphere, and saw its practices mimicked in Vietnam and other developing countries. And in France, Italy, Australia, and many other free, open, democratic societies, governments have shown less commitment to protecting freedom of expression on the internet than they have offline, setting a dangerous precedent.²⁰

As countries in Latin America, Africa and Asia face a choice between developing as open, free-market democracies, or as closed, statist autocracies, these more-developed countries send the unfortunate message that censorship has a place in a democratic society. If this trend continues, there is a danger that countries will selectively censor out a great deal of foreign content, creating a series of national intranets, rather than a “single global knowledge commons,” as Secretary Clinton called it.

The basic liberties reinforced by Internet Freedom are essential to any democratic society, and inherently subversive to any authoritarian state. By supporting stronger democracies around the globe, the State Department seeks to create a world that is friendly to America, its people, and its ideals. In her speech, Secretary Clinton recognized that promoting Internet Freedom was an important part of supporting democracy around the world, while failing to do so would concede a powerful tool to our rivals.

¹⁸ Puddington, Arch. *Freedom in the World 2010: Erosion of Freedom Intensifies*. Freedom House. 2010.

¹⁹ Ross, Alec. Address at NDN & The New Policy Institute. 2010.

²⁰ *Europe*. OpenNet Initiative. <http://opennet.net/research/regions/europe>. 2010.

An Economic Imperative

In addition to the human rights and security components of Internet Freedom, Secretary Clinton also made clear that it is an economic issue as well. Global commerce and finance increasingly run on the ICT network, and barriers to the free flow of information must be seen as barriers to economic activity. In her speech, Secretary Clinton said: “By providing people with access to knowledge and potential markets, networks can create opportunities where none exist.” She went on, later in her speech: “Countries that censor news and information must recognize that from an economic standpoint, there is no distinction between censoring political speech and commercial speech. If businesses are denied access to either type of information, it will inevitably impact on growth.”²¹

In an interview, Alec Ross elaborated on the Secretary’s words: “When we think about having a truly connected economic system, that’s only really possible if the end-user to end-user principle upon which the internet was originally built continues to exist.”²² That principle of individuals connecting to individuals allows communication, collaboration, innovation and cooperation in ways that were previously impossible. Any barrier to the free flow of information must also be seen as a barrier to economic activity, and a hindrance to innovation and global economic progress.

In addition to the State Department’s work on Internet Freedom, the U.S. Department of Commerce is investigating barriers to the global free flow of information. The Internet Policy Task Force—a joint effort of several agencies within Commerce—has begun a process that may lead to internet censorship being treated as a trade barrier, which would raise global information flows in trade negotiations and put the subject on the table in global economic policy discussions.

Progress and Promise

Clearly, countries like China and Iran have not given up their censorship of the internet, nor has access to the global communications network yielded much improvement in other

²¹ Clinton, Hillary. *Remarks on Internet Freedom*. 2010. <http://www.state.gov/secretary/rm/2010/01/135519.htm>

²² Interview conducted with Alec Ross, 2010.

basic freedoms for people in those countries. But these efforts are in their early stages. According to Ross, the State Department's work for Internet Freedom falls into four categories: policy, monitoring and reporting, programming, and diplomacy.

The "policy" plank has consisted of modernizing and updating State Department policies to account for the role of the global network, including knocking down trade barriers that prevent empowering technologies to reach individuals in repressive states. As one example, the much-publicized, highly secretive anti-censorship software "Haystack" has been approved by State and several other agencies for distribution in Iran, despite trade barriers. The "Monitoring and reporting" plank is an effort to remedy the paucity of data on Internet Freedom and the global free flow of information. The State Department has begun closely monitoring internet freedom around the world and collecting data, and plans to publicly release their findings. The "Programming" vertical has consisted of financial and programmatic support of NGOs in their efforts to help people work around government-imposed censorship, largely through the use of circumvention technologies.²³

The "diplomacy" plank, says Ross, is the most crucial: "The single most important and effectual thing we can do to tackle Internet Freedom issues is to put it on the table in our interactions. So when our diplomats sit down with their foreign interlocutors, this is an issue. There's nothing else we can do that's as powerful on a bilateral or multilateral basis." Already, Ross says, their diplomatic efforts have had an effect. Since Secretary Clinton's speech, the negative trend against internet freedom has slowed, and in those places where internet has been curtailed, such as in Pakistan and Bangladesh, the State Department has intervened diplomatically to help restore access.²⁴

Since Secretary Clinton's groundbreaking speech on Internet Freedom in January, the conversation about the free global flow of information has largely devolved into a back-and forth between tech-utopians and tech-doomsayers who tend to depict the internet as either a silver bullet against authoritarianism or a tool of autocrats. The reality is

²³ Ibid.

²⁴ Ibid.

somewhere in between. The global network clearly has the potential to be a platform for warfare, terror, oppression and manipulation. But it also has unprecedented capacity to fight ignorance, isolation, poverty and disease the world over.

The lack of hard evidence of the global network creating democratic change should not be taken as a sign that it cannot do so. This technology is still very new, and change happens very slowly. Ethan Zuckerman, a fellow at Harvard's Berkman Center for Internet and Society, writes: "Communication tools may not lead to revolution immediately, but they provide a new rhetorical space where a new generation of leaders can think and speak freely. In the long run, this ability to create a new public sphere, parallel to the one controlled by the state, will empower a new generation of social actors."²⁵ The potential of connectivity to empower individuals in autocratic states lies in its ability to give voice to their interests and ideas in ways that were not previously possible. And a network that gives individuals this kind of power, diffusing access to information and communications tools, is one that will tilt, if gradually, toward freedom.

Conclusion

Around the world, still less than 30% of people are internet users. But for the next two billion who log on, their main point of access to the global network will be a mobile phone. Already, the five billion mobile handsets that network our world are giving people the ability to communicate and share ideas across borders and around the globe. As the technology continues to become less expensive and more ubiquitous the power of the internet will shape the lives of people who, a decade ago, had no access to any kind of communication technology. While challenges and barriers remain—language and literacy, electricity and service, to name a few—the rapid democratization of information and technology constitutes a seminal moment in human history.

"Knowledge is power," the axiom goes, and throughout history, those with greatest access to information have seen more success and more control over their lives than those without. The incredible devolution of the power of information to individual people is a

²⁵ Zuckerman, Ethan. *Internet Freedom: Beyond Circumvention*. My Heart's in Accra... 22 February 2010.

great triumph for democracy, and fits squarely within American values of individual liberty and equality of opportunity. With ICTs putting newfound power in the hands of individuals, organizations, and other groups, the State Department has little choice but to engage using the same tools, and an obligation to help this technology realize its better potential. The State Department is right to view expansion of this network, and defense of its global, uncensored, end-user to end-user nature as high priorities for the 21st century.