

E-Government for All:

Ensuring Equitable Access to Online Government Services

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About the EDC Center for Media & Community (CMC)

The Center for Media & Community promotes promising uses of information and communications technologies (ICTs) to foster stronger communities and lifelong learning. It develops policies and model practices to strengthen underserved communities around the world in their educational and economic development. Initiated by the Benton Foundation, CMC inherits the foundation's pioneering role as a leader in research and development related to the digital divide, education technology and ICT literacy. CMC is an institute of **Education Development Center, Inc. (EDC)**, an international, nonprofit organization that conducts research and creates materials and programs to advance learning and promote health. EDC currently manages 325 projects in 40 countries.

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About the NYS Forum

Part of the Rockefeller Institute of Government, the New York State Forum for Information Resource Management (NYS Forum) is a network of public officials and state government organizations concerned with information management, policy and technology. The NYS Forum's mission is to promote policies and practices for effective, equitable and secure use and management of information resources in New York state government at all levels.

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THE POTENTIAL of e-government as a development tool hinges upon three prerequisites – a minimum threshold level of technological infrastructure, human capital and e-connectivity – *for all*. E-government readiness strategies and programmes will be able to be effective and “include all” people only if, at the very minimum, all have functional literacy and education, which includes knowledge of computer and Internet use; all are connected to a computer; and all have access to the Internet. The primary challenge of e-government for development therefore, is how to accomplish this.

– *UN World Public Sector Report 2003: E-Government at the Crossroads*, October 2003

Foreword

AT THE U.N. WORLD SUMMIT on the Information Society in December 2003, governments from around the world adopted a plan of action to utilize information and communications technologies (ICTs) to achieve international development goals. ICTs, particularly the Internet, are providing millions of people with new opportunities in education, employment and civic participation, yet countless millions more remain on the wrong side of the digital divide. As long as this divide exists, nations that are unable to harness the promise of ICTs in promoting good government, education and other development goals will find themselves falling further behind those nations that are successfully embracing ICTs as a tool for development.

The official plan of action that came out of the WSIS meeting targeted a spectrum of areas in which ICTs should be used to reach international development goals. Among them is the notion of *e-government*: the use of ICTs to facilitate and transform government services and interactions with constituents, businesses and public sector institutions. According to the WSIS Plan of Action, nations should “develop national e-government initiatives and services, at all levels, adapted to the needs of citizens and business, to achieve a more efficient allocation of resources and public goods.”

Governments around the world are embracing the need for e-government: from providing the most basic informational website to deploying sophisticated tools for managing interactions within government agencies and beyond, e-government is already demonstrating its potential to streamline bureaucracy, improve good government, act as a tool for global development and expand the public’s access to government information and officials.

The bad news is a great deal of room exists for improvement, particularly in terms of insuring that e-government services are *adapted to the needs of citizens and business*, as laid out in the WSIS plan of action. It is all too common, for example, that information on most government websites is skewed to the needs and abilities of highly educated citizens. For low-literate populations, the Web remains an untapped resource. People with disabilities, such as the visually impaired, continue to struggle with government websites that don’t address their accessibility needs. And the emerging practice of fee-based government online services penalizes the poor, who would reasonably expect essential government information and services to be available at no cost. Millions of people are effectively cut off from these increasingly essential resources as long as government information and services are not offered appropriately to accommodate their needs.

The United States, for example, is a country generally regarded around the world as on the “right side” of the digital divide. Despite the fact that most middle class Americans have Internet access at home, there are still significant numbers of people there who lack the opportunity, the skills or the ability to go online:

- 112 million Americans were not online in early 2002, according to the U.S. Department of Commerce's most recent digital divide study, *A Nation Online*;
- 90 million adult Americans are defined as low literate, based on the findings from the National Assessment of Adult Literacy (1992);
- 53 million Americans have some level of disability, according the U.S. Census Bureau (1997), many of whom have trouble interfacing with most websites;
- 25 million adult residents speak a non-English language in the home, also according to the U.S. Census.

As U.S. government agencies expand e-government, a pressing question remains what will happen to these underserved, marginalized populations, particularly as traditionally offline government services are replaced entirely by online services. The same question can easily be asked of any nation.

Clearly this gap between public need and government action is more than a subject merely for academic debate. Inaccessible, unreadable government online services affect real people—those who often can no longer find what they need in the offline world, as governments migrate critical information and services to cyberspace. In some instances, brick-and-mortar government offices have closed their doors, leaving behind a friendly message: “for further information or assistance, please visit our website.” This is unhelpful at best for folks who are offline or lack the skills or abilities to access e-government services.

Beginning in late 2002, the Benton Foundation's Digital Divide Network (now a program of the EDC Center for Media & Community) and the NYS Forum came to this issue based on a perceived dearth of effective leadership and discourse in the field. Too many e-government resources are deployed with little attention paid to how they might inadvertently exclude millions of people from using them. As a consequence of this perception and the desire to contribute to moving this social agenda forward, a partnership was formed to conduct a virtual conference entitled E-Government for All (<http://www.egov4all.org>).

The event, co-sponsored by the Digital Divide Network, the NYS Forum and Group Jazz in conjunction with a host of programmatic partners from November 3-14, 2003, was intended to address the shortcomings of many e-government initiatives and to create an inclusive dialogue to:

- Convene and evaluate a first-ever virtual gathering of experts and practitioners to develop strategies to expand the relevance and accessibility of e-government in underserved communities;

- Raise awareness and spark engagement among policymakers of the importance of tackling the digital divide within the context of pursuing e-government ;
- Identify a set of principles for promoting e-government for all;
- Publish a report of the participants' collective wisdom summarizing the ideas generated at the conference

Initially conceived of as a small event focused on U.S. domestic policy, the E-Government for All virtual conference brought together approximately 1,300 individuals from 83 countries. These participants included leaders in government, the private sector, academia and civil society to discuss the need to link e-government initiatives with policy strategies to bridge the digital divide. The co-sponsors of the E-Government for All virtual conference would like to extend our appreciation to all the participants in this historic dialogue for their contribution of ideas. We hope this summary report of that event sparks reflection and action on the part of those who can make a difference in ensuring the democratic flow of public information and services in the digital age.

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Executive Summary

The E-Government for All virtual conference (www.egov4all.org) was co-hosted by the Digital Divide Network, the NYS Forum and Group Jazz in November 2003. Originally conceived as a U.S. domestic policy event focusing on strategies for achieving equitable public access to e-government, the event attracted 1,300 participants from more than 80 nations. Among the issues addressed at the event:

- Education, ICT literacy and Civic Literacy;
- Website Accessibility Standards;
- Linguistic Accessibility;
- Website Navigability and Document Formats;
- Creating Relevant, Substantive Content;
- Funding Challenges;
- Fitting E-Democracy into the Equation;

Participants had the opportunity to cite examples of e-government policies that failed to address inequities, as well as programs that successfully integrated digital divide and ICT literacy initiatives into the process, allowing for greater public inclusion and access.

This report summarizes participants' recommendations by offering two "top 10" lists: one addressing common obstacles to achieving e-government for all; the other addressing opportunities for achieving it:

Obstacles:	Opportunities:
<ul style="list-style-type: none"> - A Disconnect in E-Government and Digital Divide Policies - Unnecessary "Bells and Whistles" - Non-Enforcement (or Lack) of Accessibility Standards - Insensitivity to Readability Levels - Linguistic Barriers - E-Government User Unfriendliness - "Out with the Old, In with the New" – Shutting Down Offline Services as E-Gov is Deployed - Funding Challenges - Non-Engagement of the Private Sector and Civil Society - Lack of Public Engagement 	<ul style="list-style-type: none"> - Educating Government Officials - Establishing Cross-Agency E-Government for All Working Groups - Employing Public Input to Improve Understanding of Audience - Enforcing Web Accessibility and Readability Standards - Creating "E-Government for All" Ombudsmen - Know Thy Audience – Development of User "Personas" - Engagement with Private Sector and Civil Society - Addressing the Cost of E-Government for All Prior to Deployment - Establishing standards for Digital Divide-Related Research - Maintaining Alternative Channels to Information and Services

The report also emphasizes the need for developing models of policy and practice that integrate the notion of “e-government for all” into the four stages of e-government (Presence, Interaction, Transaction & Transformation). To spur further discussion, they propose “Four Stages of Achieving E-Government for All,” which they describe as Initiation, Engagement, Integration and Equity. The report concludes with a call for ongoing dialogue, both online and offline, among government officials, the private sector and civil society, to address the equity aspects of e-government for promoting development.

E-Government for All: From Concept to Conference

THE NOTION OF A CONFERENCE addressing “E-Government for All” began in late 2002 during meetings between the Benton Foundation and the NYS Forum of the Rockefeller Institute of Government. Both organizations were interested in the progress of e-government deployment, but expressed concern that a relative lack of policy attention towards bridging the digital divide was creating a serious dilemma. As more government services and government-constituent interactions move from the “real world” to cyberspace—whether for eliminating bureaucracy, cost-cutting or other needs—constituents who lack Internet access or the ability to use it would be at a serious disadvantage. Examples were all too common: the visually impaired man who could no longer read important government documents because they were now published in inaccessible file formats; the family of immigrants frustrated by the lack of information translated into their native language; the single mother who never had the opportunity to learn ICT skills. Millions of people from all walks of life could potentially see e-government as a barrier, rather than an opportunity, to improve their lives.

The Benton Foundation’s Digital Divide Network and The NYS Forum soon began exploring the possibility of hosting a national conference on ensuring “e-government for all.” Originally conceived as a U.S. domestic policy conference to be held in Washington DC, the fact that U.S. state and local policymakers had been forced to slash their travel budgets due to fiscal crises made it clear that a “real-life” conference would not necessarily bring together the critical mass of policymakers to make the event a success. Thus the organizers chose to host a virtual conference instead.

A virtual conference had many potential strengths; namely, it wouldn’t require participants to travel, and the global nature of the Internet potentially could attract a large international audience. On the downside, was the possibility of both professional and personal distractions preventing participants from getting involved actively (compared to a real-world conference, where you travel to a forum to focus on an issue). And then there was the irony that this conference proposed to address the issue of government services being moved online and eliminated offline, would in itself be online—possibly preventing attendees from participating. After considering the number of potential participants in an online conference versus those who would be able to afford to attend a real-world conference, a virtual event remained the stronger of the two options.

The Digital Divide Network and The NYS Forum teamed up with online conference developer Group Jazz to co-sponsor the event, along with a coalition of organizational partners that would provide programmatic and promotional support. The American Library Association Office of Information Technology Policy, the Association for Community Networking, Athena Alliance, BytesForAll.org, the Council for Excellence in Government, CTCNet, the Information Technology Technical Assistance and Training Center, La Sociedad de Información de las Américas, One Economy Corporation and Thinkofit.com soon joined to support the event.

Following a successful pre-conference event among policymakers and civil society stakeholders at the National Press Club in Washington, the E-Government for All conference opened its virtual doors on November 3, 2003 for two weeks of online discussion and debate. Over 800 people from 60 countries pre-registered for the event; when it concluded two weeks later, approximately 1,300 people from more than 80 countries had registered online to participate.

The end result was an international gathering of policymakers, community activists, researchers, civil society representatives and business leaders tackling the complex issue of promoting e-government while achieving equitable constituent access and participation.

The Conference

Over the course of the two-week event, participants offered hundreds of ideas and insights about e-government, ICT literacy, accessibility and the digital divide. Much of the discussion soon settled around a core group of themes, outlined below. The summary provided here is by no means exhaustive; rather, it is an attempt to identify the most relevant concepts, principles and proposals offered by participants, in the hope of generating further dialogue and action for achieving e-government for all.

Education, ICT Literacy and Civic Literacy

One of the biggest barriers to achieving e-government for all is education. Despite the progress made in bridging the digital divide in the U.S. and abroad, education disparities remain a significant barrier: if populations lack the skills to use ICTs effectively, e-government will remain inaccessible to them.

In the “Connecting Research with Policy and Practice” virtual forum that occurred during the first week of the conference, Professor Darrell West of Brown University and John Horrigan of the Pew Internet and American Life Project noted some of the many challenges faced by individuals with limited skills. According to Professor West, government website readability is problematic for millions of Americans lacking advanced literacy skills. For example, U.S. government websites are often written at an equivalent of the 11th grade level, despite the fact that much of the U.S. public reads at the eighth grade level or lower. “Sixty-three percent of federal sites read at the 12th grade level, while 68 percent of state sites are at that level, and 70 percent of city sites are legible at the 12th grade level,” Professor West stated. “Only 12 percent of state and federal sites and eight percent of municipal sites fell at the eighth grade level or below.” Similar challenges can be expected in any country where segments of the population struggle with basic literacy.

According to a Pew study published in July 2003, there is also a correlation between education level and the likelihood of constituents attempting to interact with government. “The predilection to contact government using any means tracks closely with education,” Pew’s John Horrigan explained. “About 56 percent of all Americans contacted government in the past year. Eighty percent of those with a college education did this, compared with 44 percent of high

school graduates.” Similarly, the Pew study correlated the relationship between the length of a user’s Internet experience with their use of government websites. “Those who have more online experience are the heavy e-gov users,” he continued. “Seventy-eight percent of online users with six or more years of online experience visited a government website in the past year, compared with 42 percent of new Internet users” —those online for a year or less.

“I doubt if there are five people in the federal government who know how to write at the level required by law,” commented readability consultant William DuBay. “Addressing [low-level readers] does not come automatically, but only with training and method. As Jacques Barzun said, ‘Simple English is no person’s native tongue.’ We cannot blame the problem on the schools, immigration, or non-Native speakers of English. Most of the literacy problems are of native English speakers.”

In general, conference participants felt that basic readability needed to be addressed by the agencies implementing e-government. Online services and resources that are meant to better engage constituents with government have to be readable to all populations if they are truly going to facilitate that engagement.

If communities are to utilize e-government services equitably and effectively, it is also necessary to improve strategies for teaching the public a broad set of relevant technical, cognitive and civic skills—abilities that have been termed as *21st century skills*. The Partnership for 21st Century Skills, a U.S. coalition of education institutions and IT corporations supported by the U.S. Department of Education, has begun to tackle the challenge of how to teach 21st century skills in primary and secondary education. In its landmark report, *Learning for the 21st Century* (http://www.21stcenturyskills.org/downloads/P21_Report.pdf), the Partnership outlined the various skill sets required for full participation in the information society. Other entities in the U.S. and abroad have invested heavily in identifying these necessary ICT literacy skills. Built upon a backbone of basic literacy and numeracy, the public must become ICT literate—possessing the ability to access, utilize, manipulate and create information, whether via computers, the Internet or other tools. Developing these skills is vital for achieving e-government for all: if individuals can’t navigate the Internet or manage information effectively, they will be unable to use e-government at any level. To succeed, initiatives such as the Partnership for 21st Century Skills and others around the world must be applied beyond the halls of primary and secondary schools. Adults must have ICT learning opportunities in both formal and informal settings, whether through job training initiatives, libraries, telecenters or other community lifelong learning programs.

Additionally, if communities lack the skills to *create* information and *interact* through the Internet and other ICTs, they will be in a weaker position to participate in the political process, especially as more constituent-to-government communications occur online. “The point of being a producer in today’s technology-reliant and media saturated world is to have some voice in ... political discourse,” explained Tony Wilhelm of the Benton Foundation. In the U.S., for example, the well-documented campaign of former presidential candidate Howard Dean has demonstrated how Internet-savvy constituents can influence campaign politics, whether through online event organizing, participating in virtual discussions and Internet polling or publishing

Web logs (commonly known as “blogs”). These trends are proving to be a boon for those people fortunate enough to be well versed in the ways of the Internet. But as political campaigns, government services and policymaking migrate to the Internet, individuals and communities lacking 21st century skills will find it harder and harder to participate in civic discourse.

“If the Internet is going to fulfill its promise to support and enhance the quality of civil society and support our efforts to collaborate to make a better outcome, then we need to focus more on the social computing capacities of the Internet and less on its information processing capacity,” added Lisa Kimball of Group Jazz.

Beyond the obvious technical and cognitive skills required to use the Internet effectively, it is also necessary to address the notion of *civic literacy*. Too many people are uninformed about how government actually works and how decisions are made. “Just because you can have e-rulemaking facilities doesn’t mean everyone understands how a rule is made, how to submit comments, how to follow up with [government] agency heads, where to look for background citations, etc,” noted Ryan Turner of OMB Watch.

“It’s becoming quite clear that 21st century skills are an inherent prerequisite to achieving E-Government for All,” concluded Andy Carvin of the Digital Divide Network, now program director at the EDC Center for Media & Community. As public sector institutions develop e-government initiatives to give constituents greater access to politicians and the policymaking process, they must also educate constituents about the workings of government—and how they too can play a part.

Website Accessibility Standards

Website accessibility for the disabled reoccurred as a major discussion theme throughout the virtual conference. E-government for all depends fundamentally on equitable access to information and services, without discrimination because of one’s physical abilities. Overall, participants concluded that providing access to information and services could be a pivotal step in creating and maintaining effective e-government initiatives.

U.S. websites that are considered accessible comply with the “Priority Level One” guidelines recommended by the World Wide Web Consortium (W3C), as well as compliance with federal statutory requirements known as Section 508 of the Rehabilitation Act. Section 508 mandates that government websites adhere to all guidelines to make e-government websites accessible for those with disabilities. Conference participants repeatedly discussed the need for greater adoption of techniques for achieving accessibility, including e-government websites that adopt alternative keyboard navigation, comply with screen-reader compatibility and utilize verbal tagging of graphics and images.

Conference panelist Judy Brewer of the W3C’s Web Accessibility Initiative presented a case for international accessibility standards harmonization. “Can adoption of the same set of Web accessibility guidelines across different countries, states, and provinces actually accelerate the

process of making the Web accessible, by creating a unified market for Web authoring software developers to respond to?” she asked participants.

U.S. federal agencies have developed their own style guides that take general accessibility into account, particularly in the context of Section 508 compliance. Participants generally felt that recent improvements in making federal websites more accessible for the disabled show the promise for e-government to become accessible for all in the future, but that there was still much work to be done, particularly in the enforcement of accessibility regulations.

Linguistic Accessibility

In an increasingly globalized world characterized by complex patterns of immigration and migrant workers, many societies that previously spoke a single language are becoming multilingual. For many nations around the world, of course, multiple languages is the historic norm, yet too often certain linguistic populations do not have their language represented adequately or officially, particularly in the context of interactions with government. These populations who do not speak the official languages of a country are often marginalized and placed at a socioeconomic disadvantage. E-government that does not acknowledge the need for services and resources in alternative languages further marginalizes these non-native language speakers. Darrell West’s research indicates that U.S. governments have been slow to make their websites accessible in minority languages spoken by large concentrations of constituents. West found that in 2003, only 13 percent of U.S. federal websites and 16 percent of city websites offered some type of foreign language translation.

“The reality of our world today is that there are millions of people in the U.S. who are here legally, yet haven’t mastered the language yet,” said session moderator Andy Carvin. “Does that mean they should be expected to access important government information only in English, in the hopes of them improving their English through essentially what could be considered ‘tough love’ assimilation?”

Professor Stephen Coleman of the Oxford Internet Institute commented that the U.S. could learn strategies from multilingual environments like Canada or Wales, which by local necessity must operate e-government services in more than one language. “I advise the National Assembly for Wales on its e-democracy strategy and there would be no prospect of this being pursued as a monolingual project,” he said. “Americans should observe that most of the world’s Internet users do not speak English and many of the world’s countries do very well by having more than one officially recognized language.”

“It is important to remember that many non-native speakers *are* citizens,” offered Rosemary Gunn of Information Renaissance. “One reason for participation is the possibility of more realistic, effective decisions. Then the important question in thinking about whose participation should be encouraged is not language or citizenship—it is who will be affected by a decision and who needs to be involved to get it implemented—and therefore who decision makers need to hear from before deciding.”

In some cases, e-government linguistic inequity is the result of political upheaval. Andrei Marusov of Ukraine, moderator of the first email discussion list in the former Soviet Union focused on e-government, noted that the fall of the USSR has led to a linguistic backlash against the use of the Russian language in former Soviet states. “Let’s look into Ukrainian experience,” he suggested. “One fifth of population is Russian by ethnic origin. Over 50 percent use Russian at home. The logical/rational step is to adopt Russian as the second official language (at least in localities heavily populated by Russians) and to mandate that all governmental websites have a Russian version. Such logic does not work in Ukraine. Though Ukraine ratified European Charter on Regional Minority Languages, local decisions about official status of Russian are fiercely opposed by some political forces, and often dropped by initiators. And the state keeps silence. The governmental policy about state websites mandates that they ‘must be in Ukrainian, English or any other language.’ No hint about Russian. The reason for such ‘irrational’ behavior is simple: the logic of nation-building still overrides any other considerations.”

Darrell West cited an idea offered during a previous discussion by Tony Wilhelm of the Benton Foundation, now director of the Technology Opportunity (TOP) Program at the U.S. Department of Commerce, in which governments would mandate the deployment of e-government in multiple languages when the percent of people speaking a particular language in a given jurisdiction equals 10 percent or more of the overall jurisdictional population. This would be similar to the policy adopted by some governments in which voting ballots are translated into multiple languages when there is a critical mass of minority-language speakers in a given voter area. One drawback to this concept, though, is that it would place a greater burden on smaller jurisdictions: a national government, for example, would have more resources to coordinate the translation of content and services into a second, third or more languages than would a provincial or local government. This would mean that smaller jurisdictions with local spikes in linguistic diversity might have to solicit technical or financial assistance from their national governments to support the necessary translation.

Website Navigability and Document Formats

Conference participants noted on several occasions that e-government services must be governed by standards that ensure public access. Government officials who oversee the deployment of e-government content face a difficult task because they have to create content and design sites that address the varying abilities and needs of the public. For example, the average person often struggles with website navigation—particularly in the case of government resources with complex, interlocking layers of content.

“Since there is no uniform look to government websites, every time someone goes onto to a new government site, he or she must take a few moments to figure out how this particular site is organized and how to find the material that is needed,” Darrell West offered. Creating a website that can be easily navigated by all users is key to maintaining an easily accessible virtual environment.

The issue of how and how long public documents are stored was raised in the chat session with Bruce James, Public Printer of the United States. A group of librarians suggested restoring the

role of governmental document storage and retrieval to public libraries. Another concern with online documents was file format accessibility. Documents that use Adobe's popular PDF format are not always readable by assistive technology devices utilized by the disabled and low-literate populations. Participants felt that promoting open formats, in parallel with closer engagement with companies that promote proprietary file formats, is needed to ensure that e-government document publishing does not exclude entire groups of users.

Creating Relevant, Substantive Content

Along with e-government readability and accessibility, participants felt that the *content* and *substance* of e-government resources are crucial to the success of e-government. For example, some attendees stressed the importance of creating e-government websites with greater sensitivity to users' varying needs. "Much of what is being called e-government is really about service delivery," said participant Rosemary Gunn. She called for governments to think about who needs each particular e-government service and who should be involved in their deployment. The challenge, of course, is identifying the needs of different groups of people, especially those who are generally underserved or disenfranchised.

"There is little evidence of how low-income communities access online resources, because there is a lack of sources relevant to their needs," said conference panelist Jessica Alvarez of the Digital Community of Columbia Heights and Shaw, a Washington DC neighborhood. Developing need-based services could potentially increase the diversity of e-government users, she said. "We need to develop self-paced sites that are designed with consumer's/end user's voice as a central point of development," she added.

"These people may not harness computers or even want them because they may see no value in them," noted Taran Rampersad, a software developer from Trinidad and Tobago and teacher at the University of the West Indies School of Continuing Studies. "If they see a way to use them which *adds value* to them, they will use them." Rampersad went on to cite the elderly as a case in point. "Many people see a divide with the elderly. I perceive a cultural grey area, where the interests of the elderly vary from those of the younger generations—and this is nothing new," he said. "However, if you capture the interest of the elderly on the new media and allow them to affect policies they are interested in on the Internet, they would be the first ones there...."

"Everything relates back to the interest of the citizen in their own governance," Rampersad concluded. "Encouraging the interest is key—through easier use of technology, to assuring that the most is done to meet primary needs of citizens, to simply making things readable."

"The major concern that we have with the current [e-government] system ... is that it has been designed *without* the input of the people that would benefit from it," stated Shireen Mitchell of Washington DC's Digital Sisters initiative. E-government initiatives that are being developed with the general public in mind should solicit input from a diversity of potential users, she added.

Gopalakrishnan Devanathan, an e-government consultant in Chennai, India, emphasized the need for formal input by constituents. "E-government will not sustain [itself] if it is just the

implementation of technology for the sake of implementation,” he said. “It needs deep involvement, commitment and buy-in by citizens. Watch-dog groups of senior citizens and professionals can be set up to disseminate information to the public at large, which can be debated and accepted. It is easier said than done. But we should make a beginning to succeed. E-governance of the people, by the people for the people is the need of the hour. Let’s all work towards that.”

Karl Hebenstreit, Jr. of the U.S. General Services Administration noted a conversation at a recent usability workshop in which speakers suggested that government agencies develop a collection of constituent case studies, or “personas,” that would help government website developers think more about the needs and abilities of particular audiences. “The idea is that we should be able to build some composite ‘personas’ (probably about a dozen) which could then be shared across government agencies, and that these personas could help guide user interface design,” he explained.

Public versus At-Home Internet Access

Attendees debated the contentious issue of whether ubiquitous public Internet access would suffice for all people to access e-government services, rather than the harder goal of achieving ubiquitous at-home access. Some policymakers, for example, have argued that the digital divide is not a major concern because constituents who don’t have Internet access at home can always travel to their local library or community technology center to go online. Indeed, telecenters are one of the driving forces in combating the digital divide, particularly because they are often seen as trusted institutions within the community, where residents unfamiliar with ICTs may interact with fellow community members to learn how to use them.

Carol Barraclough of Durban, South Africa, shared her experience with an experimental e-government project utilizing public libraries as Internet access points. Eighteen libraries initially were set up as telecenters, and now the project is being expanded. During the project’s implementation, Barraclough discovered that residents needed to trust library staff if they were going to develop ICT skills. “It led me to believe that in the early stages of e-government, particularly with older members of the population, a friendly and trusted intermediary is critical to the process,” she said.

While institutions like these are playing vital roles in their communities, some participants worried that the sole reliance on public access in policymaking could be a deterrent for people wishing to use the Internet to address sensitive personal issues. “If we could only use a [public] kiosk, how would you make sure the individual who uses it would not have to worry about their private information being available to others that should not have access—even as simple as looking over their shoulder?” questioned Shireen Mitchell. Even if these privacy issues could be addressed through technical or other means, would undeserved populations who are suspicious of government or technology feel confident to use public Internet access?

“It’s unacceptable to expect people to use public computers for transactions and information collecting that require personal, sometimes highly embarrassing information,” Andy Carvin

added. "Imagine going to a computer in a library to look up a sexually transmitted disease you might have, or the schizophrenia your son's been diagnosed with. Some people are comfortable doing this; a lot of others simply aren't."

Of course, bridging the digital divide is more realistic if governments adopt policies to promote public Internet access, given the cost of achieving ubiquitous at-home access. To address these privacy concerns, therefore, constituents must be able to access ICTs through familiar, trusted institutions in their community—institutions in which they can feel confident that their privacy will be respected.

Funding Challenges

Even if a government entity has a plan to deliver effective and accessible e-government, the dilemma of funding it often remains the most significant barrier—particularly when achieving e-government for all requires education solutions as well as technical ones. "If e-government is going to be successful then they need to include in their implementation designs of any services at least twice the amount of money spent on the technology on educating the citizens and community based organization that will provide the education to citizens," Shireen Mitchell stated.

Unfortunately, because some government officials adopt the rhetoric that e-government is primarily a means to cutting the costs of bureaucracy, the actual costs associated with implementing a holistic e-government policy may cause some policymakers to balk at making the necessary appropriations to fund equity-related expenses.

"It seems to be quite clear that many initial and continuing e-government efforts are being driven by achieving cost reductions and government efficiency, or even by the perceived need to simply 'keep up' and/or 'be on the Web,'" observed Gregory M. Benson of The NYS Forum. "Those motives have often resulted in diminished citizen access to information and services as the migration to the Web has given rise to the faulty assumptions inherent to the idea that simply being on the Web can supplant traditional government service delivery channels."

Whether e-government content is being updated or created from scratch, there is always a cost associated with it, especially if the content is to be readable and accessible to all. But much of e-government remains focused on streamlining bureaucracy and cost-cutting, rather than achieving accessibility and equity. So while it is true that many government websites strive to achieve greater accessibility, this process often moves at a glacial pace, while other standards of equity such as second language access and low-level readability are rarely addressed due to their perceived cost and complexity.

Funding also draws attention to the long-term sustainability of e-government initiatives. Given the best-case scenario, in which e-government initiatives are long-lasting and successful, it will be essential to maintain funding streams to keep these services current and relevant. "It was almost as though there was an assumption [by policymakers] of technology being a one-time major expense, and the attitude was 'Hey we gave you the computers, what more do you want?'"

offered Gloria Bobbie, a lecturer at the State University of New York/Plattsburg and Director of Research for IntegrateLearning.Org. Technology and content are constantly evolving, demanding regular upgrades of both equipment and information, all of which requires ongoing investment.

“In today’s economy and with the huge cuts in government funding for education, there just is no money to sustain technology and training needed to use it effectively,” Bobbie continued. “Perhaps it’s time to say, ‘Stop the tech world: the citizens want to get on,’ and take a more gradual approach that allows time to think through how technology can match citizen abilities and needs.”

Participants also expressed concern over a lack of consistent leadership when it comes to implementing equitable e-government. In some cases, the problem occurs when innovative civil servants get transferred from one department to another, stifling ongoing support of e-government projects. “There seems to be some commitment from few of the administrators heading the government departments, but in India the commitment gets nowhere because of frequent transfers of these administrators from one department to another,” said Piyush Gupta, an ICT consultant for the Indian state of Punjab. “What happens when the concerned government administrator or head of department is transferred to another department?”

“Government officials should recognize equity and accessibility as important principles of government, principles that adhere in the physical and virtual worlds,” Darrell West concluded. “It is not sufficient to place information and services online if there are barriers to their usage among various sectors of society. People who are poor, disabled, not highly literate, or non-English speakers are entitled to an equal opportunity to access essential information and services to improve their lives.”

Fitting E-Democracy into the Equation

E-democracy emerged early as a conference theme and remained one of the most popular topics throughout the event. In general, participants agreed that e-government should be more than the online provision of information and services. E-democracy is the use of e-government for the purpose of actively engaging citizens in the process of governance. Rik Panganiban of the World Federalist Movement described e-democracy as the use of ICTs “to increase citizen participation, consultation and deliberation on government policy.” He noted this might be initiated by an official government agency, a grass-roots organization or an individual activist. Mr. Panganiban then quoted e-democracy advocate Steven Clift: “E-government is paying your taxes online; e-democracy is having a say in how those taxes are spent.”

Conference participants uncovered some of the challenges and opportunities related to e-democracy and civic engagement. There was a general sense of optimism about the promise of the Internet expanding civic participation and re-engaging underserved communities in the political process. However, in the context of achieving e-government for all, Kenan Jarboe of the Athena Alliance warned participants of what he referred to as “fig leaf” civic participation. “In some cases e-government will be used to present the fig leaf of access, notification and

participation—without having to make the extra effort to provide real access, notification and participation to those who are easily shut out,” he said. As an example he cited a recent online vote that took place in the U.S. city of Baltimore. The city’s mayor wanted Baltimore’s Howard Street Bridge painted green, against the original color scheme of the artist and architects. He said he would abide by the decision of constituents, who could vote for their preference on the city’s website. Apparently there were no other avenues for participation, so constituents without Internet access were unable to have their voice heard on the issue. This case illustrates the need to build greater awareness among policymakers so they may understand the need to promote equal opportunities for civic participation, both offline and online, while embracing strategies to bridge the digital divide.

Perceptions regarding the state of the digital divide generated a heated debate in the context of e-democracy. Alan J. Rosenblatt of e-advocates.com, moderator of the E-Democracy and Civic Participation panel, suggested that e-democracy activists should not overreact about the digital divide, citing statistics to indicate that the gap is perhaps not as serious as some may think. In response, Andy Carvin warned of painting too rosy a picture, saying complacency about the digital divide will only further marginalize underserved groups from participating in civic life. “The fact that the mainstream [U.S. population] is online only exacerbates the socioeconomic, civic and educational gap that exists between them and America’s millions of marginalized, low-income, low-skilled and disabled citizens,” he retorted. “And if these folks remain offline, they certainly are in no position to benefit from e-government or e-democracy.”

Other participants generally concluded that the digital divide could not be dismissed, and governments should use all channels available—both online and offline—to encourage civic participation. “If you think that, in the best case, about four percent of Mexicans ... have access to the Internet, then [it] is easy to understand that [access] is one of the most important of our problems,” said Martin Levenson, an ICT advisor to the government of the Mexican state of Michoacán. “Local and federal government agencies are trying to do something about that, but we have a *long* road to go in this way. If you think it’s direct democracy with four percent of the people who can vote, it doesn’t sound very democratic.” Levenson added that Michoacán state is focusing on creating a “multi-channel” relationship with constituents, relaying important government information via telephone as well as the Internet.

Despite these concerns over the digital divide, the view emerged that e-democracy efforts should not be cut back simply because the divide exists. “Just because key groups tend to be offline, we should not diminish the role of online politics,” Dr. Rosenblatt concluded. “Rather, we should be sure to use offline methods to engage those not online, as well, until such time when everyone has Internet access.”

A key question that emerged in the discussion was how to mobilize diverse civic participation. “Some of the digital divide emphasis seems to forget that the groups we talk about involving are also not participating in other ways,” commented Rosemary Gunn. “This only emphasizes the need to let people know that policymaking is relevant to their lives.” One possible solution is ongoing, multi-channel outreach to these groups, through activities such as public media campaigns, community events promoting ICT literacy and traveling road shows offering access

to mobile telecenters. Greater outreach to underserved communities would help constituents see the relevance of policy debates and grassroots civic participation, both offline and online.

“If we can facilitate meaningful (and informed) dialogue between citizens, they may come to a better understanding of issues ... and hopefully this would lead to useful compromises and governments introducing policies which have a better chance of success,” commented Ella Smith of the International Teledemocracy Center in Scotland. Deliberation should involve an exchange of ideas based on equitable access to government services and information.

“E-democracy is not a separate process,” said Tim Erickson, founder of Politalk. “It’s a tool to be used in a wider context.” For example, Move-On.org and MeetUp.com use online tools to connect individuals who then meet face-to-face for discussion and action within their communities. “Let’s be creative and not see e-democracy as an *alternative* which excludes some segments of society,” Erickson added. E-democracy, therefore, should be *complementary* to real-world civic participation rather than a way of replacing it.

Returning to the problem of achieving civic participation representing diverse interests, participants felt there was no “magic bullet” that would ensure that e-democracy is accessible to all. Reaching people facing different equity challenges requires a variety of policy strategies and communication channels. Engaging these constituents in the political process will require additional efforts and financial resources. Providing information on policy issues, online/offline opportunities for public dialogue and meaningful channels for participation accessible to all constituents should be important concerns of governments at all levels. Further research and collaboration is needed to identify best practices and strategies for reaching marginalized populations and involving them in the political process.

Case Studies from Conference Participants

Problems in Implementing E-Government for All

Participants discussed core challenges to e-government implementation, including projects that showed early indication of failure. Many of the examples discussed suggested that the problem in implementing e-government for all was often due to bureaucratic or technical problems, the lack of political will or consensus, and funding limitations.

Tim Erickson of PoliTalk offered the situation in Andhra Pradesh, India as an example. Erickson recently visited the Andhra Pradesh assembly and met with government officials. He noticed very few computers in the government offices. “I had a sense that putting the technology in place is only the first step, but that a far more important cultural transition will need to accompany it before it has a real effect,” he added.

In the U.S. state of Ohio, officials announced in 2002 their intent to terminate its smart-card food stamp system, known as the Ohio Direction Card. The card has the dubious distinction of being the most costly food stamp system in the U.S., and faced a variety of equity challenges. During

its five years of operation, the system created numerous problems for low-income clients who struggled to access their food stamp benefits. Problems were often based on the limited number of affiliated public access terminals for managing one's benefits, as well as persistent technical problems with these terminals. "Many clients, especially senior citizens and disabled persons, reported they voluntarily left the food stamp program because of their frustration and the inconvenience encountered as they attempted to access their modest food stamp benefits," said Lisa Hamler-Podolski of the Ohio Association of Second Harvest Foodbanks. "As more government services are moved to online systems, it's important to recognize that not all people have the knowledge base, access to the internet, equipment and/or ability to read and fully understand how these systems operate. Thus there will always be a need to operate parallel service delivery systems to accommodate and provide access to such information, services, and programs."

In another case, in the state of Missouri, the state government stopped the paper publication of a guide for senior citizens on locally available public health programs. Seniors were now expected to go online and access a PDF document instead. In an interview with a local journalist, a senior citizen described how he was holding on to a tattered copy of the publication, even though some of its information was now obsolete, because he was unable to access the Internet.

Andy Carvin provided an example from the state of Alabama that had been documented by the local newspaper, the Birmingham News. In Alabama's poorest region, where few people have computers, the state employment agency erected billboards encouraging job-seekers to surf its website for openings and training. But in an area where few households have Internet access and libraries have only one computer, some locals were puzzled that the agency's billboards didn't even provide a phone number as an alternative source of information for job seekers. Doug Dyer, chief of the Labor Market Information Division of the Industrial Relations Department, said the department's intent was to provide assistance to people in areas where there are no employment centers. While the agency realized that few residents in this region have computers or home Internet access, Dyer hoped that they could somehow take advantage of public access to the Internet.

Examples of Initiatives Tackling E-Government for All

Participants from the U.S. and abroad were given the opportunity to share examples of projects in which governments were attempting to achieve equitable public access to e-government services. Among the initiatives described by participants:

U.S. Federal Communications Commission (FCC)

Conference presenter David Kitzmiller, webmaster for the U.S. Federal Communications Commission (FCC), described how the FCC strives to ensure accessibility of its Web pages. A template-based design provides a uniform look and standard navigation that was developed based on usability studies, accessibility standards and input from stakeholders, he explained. This template development involved manual, line-by-line evaluation against each of Section 508's accessibility criteria, which were then double-checked with automated accessibility

evaluation tools and screen readers. Section 508 adherence is maintained through the use of published design standards, style guides, an internal intranet site on accessible-design techniques for FCC webmasters, updates on accessibility issues through monthly FCC and government-wide webmasters' meetings, and direct advice from a citizens access board. "Our challenge is to make our web site readable, useful, useable, efficient, effective, interactive and informative for all citizens, including traditionally underserved communities such as people with disabilities, people in rural and tribal areas, older adults, people with low-literacy, non-English speakers and people from a variety of backgrounds and educational levels—from consumers to telecommunications-industry professionals," Kitzmiller said.

Minnesota

Tim Erickson of Politalk discussed a weather-related project in the U.S. state of Minnesota. During snow storm emergencies, residents must move their cars off designated streets to make way for snow plows. Individuals who do not get the communication about the snow emergency face the prospect of having their cars towed and paying a hefty fine. The city of St. Paul is currently experimenting with ways of using a combination of offline and online communications to ensure that word of snow emergencies gets out as effectively as possible. Along with using radio and television, the city has begun to use email networks to encourage people with Internet access to spread the word among their offline neighbors by telephone or door-knocking when a snow emergency is declared. "I think there is real potential for this combination of traditional media, e-government and grassroots neighborliness," Erickson said.

Chicago, Illinois

The city of Chicago presents a different example of developing greater community Internet access in conjunction with skills initiatives to accompany e-government initiatives. Conference participant Andrew Pincon discussed his work with the Illinois eGovernment Working Group. Chicago's Technology Council has developed a successful and sustainable program of recycling and refurbishing computers for deployment to schools and colleges. The state's network of 65 Small Business Development Centers has adopted a progressive technology policy, including online seminars and workshops reaching the desktops of some of the state's 678,000 small businesses at no cost to the small business community. In addition, Illinois has the "largest private education telecommunication network of its kind in the world with over 6,000 full wired end points at K-12 schools, colleges and universities, museums and county offices," Pincon said. "This network is increasingly being put to use by state agencies and NGO nonprofits as they adapt to 21st century technology and the convergence of voice and data networks." By providing resources and low-skilled individuals with 21st century skills, Chicago is creating an environment where constituents will be prepared to access and take advantage of e-government services.

Delaware

Mark Headd of Delaware's Department of Technology and Information encouraged those implementing e-government to experiment with VoiceXML, the new coding language for

creating vocal interactions between people and computers. The state of Delaware is starting to use VoiceXML to provide phone-based access to content and services previously only available on the Web. This technology is at the core of the Access Delaware project (http://www.state.de.us/dti/access_des.html), which provides a number of important services for Delaware residents. “As one example, we took an existing visual Web application that provided information on voter polling places and created a VoiceXML implementation,” Headd explained. “This voice application received several thousand phone calls during the statewide general election last year.”

Headd added that VoiceXML can provide a number of significant advantages for governments by dramatically widening the audience for government Web content and helping address the wariness that keeps some people from using the Web as a way of learning about government services and information. The degree of telephone literacy among constituents far out paces computer literacy; simply stated, phones are generally a lot easier to use than computers. “VoiceXML has a huge untapped potential to help bridge the digital divide by allowing governments to convert Web content and Web-based services that exist today only on the visual Web into phone-based applications,” he said.

San Diego County, California

Rebecca Stawiski, Executive Director of the San Diego Futures Foundation, discussed how San Diego County is developing creative ways of engaging local underserved populations as the county embraces e-government. “The county decided in 1999 to outsource all of its information technology work to private contractors,” she explained. “[T]he county required all competing contractors to submit an ‘added value’ proposal for how they might support the community and the county’s e-government vision. The result was that a nonprofit foundation, called the San Diego Futures Foundation, was formed to provide computers and technical training and support to San Diego County’s underserved populations, thus helping to ensure that those constituents who need access to the county’s new online services would have that access.”

“In less than four years, the San Diego Futures Foundation has delivered 5,000 computers and 10,000 hours of technical support and training to San Diego’s underserved populations,” she continued. “Additionally, the Futures Foundation has built a portal that provides community members with an interactive capability to get involved in their communities, provides them with information on local community services, and supports e-government through direct links to local, state, and federal government online resources.... The Futures Foundation, in conjunction with other local organizations, is supporting e-government initiatives that include installing computer centers to facilitate application for earned income tax credits for low-income constituents. To bring technology directly to San Diego’s underserved populations, the County and Union Bank sponsor the eBus, a 20 station mobile computing lab with Internet connectivity.” To support computer ownership, Stawiski’s organization is working with the Urban League, the Annie E. Casey Foundation, Operation Homefront, and San Diego State University Foundation to get computers into the hands of low-income families.

“In the case of San Diego County, the public private partnership came from the need of the county to update their entire information technology infrastructure,” Stawiski said. “The solution called for outsourcing the IT to high technology companies that have IT as their core competency and it meant that the county would not have to raise the cash needed for this massive change since the cost could be spread over the life of the contract. In this case, there were no obstacles. The partnership was brought together through a public sector need and a private sector solution. In fact, this partnership exemplifies what makes most successful partnerships work: mutual need.”

“A very big challenge for San Diego and other communities is ensuring that all constituents have access to e-government services,” she concluded. “As you are all well aware, there are a range of issues that accompany that access: access to computers and the Internet, training, and language and physical barriers. Through the San Diego Futures Foundation, the county is addressing some of those issues, specifically in the area of computer and Internet access and basic computer training.”

Sweden

Gail Watt of Sweden offered several Swedish e-government initiatives that address issues of at-home Internet access. Five years ago, he explained, Sweden enacted a program for citizens to deduct the cost of a PC purchase from their taxes. The initiative has cost the country nearly USD\$1 billion in tax revenue, but Mr. Watt says the program has worked “like a charm” in increasing Internet access and usage. According to Nielsen/NetRatings, nearly two-thirds of the households in Sweden currently have Internet access.

Conclusion & Next Steps

After two weeks of engaging discussion exploring the concept of E-Government for All, there was a strong sense among participants that governments are eager to implement e-government, yet aren’t always aware of how the issue fits into the broader equation of bridging the digital divide. In many cases, local governments appeared to be making the connection between the issues better than national governments; across the board, though, participants felt that much work could be done to encourage governments to pursue their e-government strategies while keeping in mind the various equity disparities among their constituents.

Conference panelists and attendees brainstormed to identify reoccurring obstacles to ensuring e-government for all, as well as general principles that might be adopted for achieving it. Based on these online discussions, we offer the following “Top 10 Lists” of obstacles and opportunities. These lists are by no means exhaustive; rather, they are presented to encourage policymakers to examine the issue further while encouraging the development of creative policies and practice.

10 Obstacles to E-Government for All:

- **A Disconnect in E-Government and Digital Divide Policies.** Eagerness to implement e-government while failing to examine its impact on underserved, marginalized populations; not connecting existing digital divide initiatives to e-government deployment strategies.
- **Unnecessary Bells and Whistles.** Online government services that are over-designed with unnecessary multimedia, making them inaccessible to certain populations, either due to physical disability or limited bandwidth.
- **Non-Enforcement (or Lack) of Accessibility Standards.** Policymakers acknowledging the need for website accessibility but lacking the enforcement mechanisms for implementing it at all levels of government; publishing government documents in inaccessible proprietary formats.
- **Insensitivity to Readability Levels.** Creating documents and services written in language above the reading level of their intended target audience.
- **Linguistic barriers.** Creating content only in the language(s) of the majority while failing to provide assistance to minority language speakers.
- **E-Government User Unfriendliness.** Online services that are confusing and cumbersome to all but the most sophisticated Internet user.
- **Out with the Old, In with the New.** Shutting down government services that were previously available offline in exchange for moving them online; lack of long-term strategy for archiving government documents; charging fees for online government documents that were once available at no cost
- **Funding Challenges.** Inability to cover the costs of making e-government services more equitable, unsustainable funding for digital divide/ ICT literacy initiatives.
- **Non-Engagement of the Private Sector and Civil Society.** Failure to seek partnerships with businesses, NGOs and other entities that are working “in the trenches” to bridge the digital divide, improve ICT literacy or promote civic engagement.
- **Lack of Public Engagement.** Failure to promote e-government programs to the general public, particularly in the context of encouraging access to relevant digital divide/ICT literacy programs that would improve equity among marginalized communities.

10 Opportunities for Achieving E-Government for All

- **Educating Government Officials.** Digital divide activists and others seeking ICT equity should seek out policymakers to help them make the connection between successful e-government and bridging the digital divide; buy-in from political leaders can lead to the development and enforcement of e-government policies that address equity issues.
- **Establishing Cross-Agency E-Government for All Working Groups.** Expand interaction between policymakers and civil servants involved in e-government deployment, infrastructure, education, ICT literacy and bridging the digital divide, to help interconnect disparate policies, budgets and technical resources for achieving e-government for all.
- **Employing Public Input to Improve Understanding of Audience.** Government agencies providing e-government services should integrate panels of constituents representing a diversity of backgrounds, skills and abilities to review e-government practices and offer input during the implementation process.

- **Enforcing Web Accessibility and Readability Standards.** Governments should mandate a minimum level of accessibility that addresses the needs of people with disabilities, working with entities such as the W3C Web Accessibility Initiative. National governments should seek agreement on technical standards for achieving accessibility goals. Similarly, governments should develop readability standards based on the *actual* reading levels of the population; agencies should pay particular attention to e-government services targeting populations in which low literacy levels and other equity challenges are likely to be a factor.
- **Creating E-Government for All Ombudsmen.** Agencies managing e-government services should task a high-level civil servant to serve as representative for constituents seeking equity-related improvement of e-government services; providing constituents merely with an email address of webmaster or other technical support person is insufficient.
- **Know Thy Audience – Development of User “Personas.”** Government agencies, in conjunction with citizens’ panels, should develop hypothetical profiles of e-government users, paying particular attention to the diversity of literacy and language skills, as well as physical ability; profiles can be used during the development process to assist authors and designers in creating accessible content, particularly when content targets marginalized populations.
- **Engagement with Private Sector and Civil Society.** Government officials should tap into networks across various sectors of society that work with underserved populations to maximize opportunities for bridging the digital divide as well as improving basic and ICT literacy.
- **Address the Cost of E-Government for All Prior to Deployment.** Rather than treaty equity goals as an afterthought to e-government deployment, governments should factor equity into the appropriations process to ensure that costs related to accessible website design, readability testing, translation services, long-term archiving, etc. can be addressed.
- **Establish standards for Digital Divide-Related Research.** Governments should work with the research community at both a national and international level for creating metrics for measuring the digital divide at the community level, taking into account data related to public/at-home Internet access, basic and ICT literacy, content development/availability, civic participation, etc.
- **Maintaining Alternative Channels to Information and Services.** The creation of e-governments services should not be seen as an excuse to eliminate their offline equivalent; rather, online government information and services should be *complementary* to resources and opportunities available via other media (television, radio, paper, telephone) and at public offices.

E-government for all should be seen as an ongoing process: there is no bureaucratic light switch that can be flipped on to make current and future e-government services equitable to all populations, particularly when addressing the many other development challenges faced by less-developed nations. In much the same way the governments use multi-stage models like Gartner’s Four Stages of E-Government to map out their e-government goals, they should integrate the notion of “e-government for all” throughout the entire process of planning and implementing e-government. One possible example of this process might look like the following chart.

Four Stages of E-Government (Gartner Group, 2001)	Four Stages of E-Government for All (EDC Center for Media & Community, 2004)
Presence Basic government information made available online; resources available passively, not actively, e.g. “brochureware”	Initiation Basic online documents made available in multiple formats to suit all users’ needs; users provided access to free translation tools; Internet access provided to the public via schools and libraries, telecenters and other public institutions; promotion of volunteer programs for addressing ICT literacy; preservation of existing offline channels for constituents to access government information and services.
Interaction Constituents can manipulate online services to download documents, data, access other resources. Interactions are relatively simple and straightforward: user defines basic request and e-government resource identifies the closest match to that request.	Engagement Governments engage constituents to develop user-friendly, accessible interactive government services; promote opportunities for constituents to gain Internet access, improve literacy and ICT skills; partner with the private sector, civil society and academia to coordinate strategies regarding ICT literacy and the digital divide; adopt technical standards for accessibility, readability, etc; develop policy prototypes to address equity concerns; partner with the private sector to invest in advanced translation tools.
Transaction Constituents can complete entire transactions with government entities (licenses, tax payments, contracting, etc) virtually. Ability for e-government resource to complete transaction based on common, predictable requests of constituents.	Integration Broader adoption of successful policies and practices for expanding ICT equity; long-term strategy for addressing equity in the appropriations/budgeting process; Government agencies and officials accountable for providing equitable e-government.
Transformation ICTs are fully integrated into how governments do business within itself and between its constituents, businesses, other governments; users can complete all interactions with government online, tailored to their exact needs.	Equity All people have equal access to government information and services, both online and offline, no matter their education level, language spoken, income or disability; universal basic literacy; successful implementation of sustainable universal service policies for ubiquitous Internet access and ICT literacy.

Future Discussion

It has become abundantly clear that there is a growing appetite for cross-sector dialogue on e-government for all. Through the international process surrounding the World Summit on the Information Society, governments, civil society and private sector entities around the world are eagerly exploring e-government as a tool for development. But as the UN World Public Sector Report on e-government notes, “If unchecked, the impact of the digital divide in today’s globalized world is likely to greatly exacerbate the economic divide, the social divide and the democratic divide among peoples of the world. The cost of inaction far outweighs the benefit of adoption a global and holistic approach to sustainable development that takes full account of the potential of e-government.”

Based on the enthusiastic feedback provided by conference participants, as well as the ongoing dialogue within the UN and among other international bodies regarding the use of ICTs for global development, it seems appropriate that the discussion on ensuring e-government for all continue into the future. International agencies, donors and governments at all levels should explore opportunities to engage with each other and with the public, the private sector and civil society to tackle the issue, identifying common ground and seeking new strategies for linking e-government policy goals with ICT equity goals. These dialogues should occur in conjunction with the establishment of cross-sector networks, both offline and online, for developing and implementing equitable e-government policies, as well as sharing the latest research and practices. With the approaching November 2005 World Summit on the Information Society in Tunis, policymakers should work alongside representatives from other sectors to identify how the elements regarding e-government and the digital divide in both the WSIS Declaration of Principles and Plan of Action can be mobilized to enhance equitable access to e-government and embrace these services as a tool for reaching the UN Millennium Development Goals.

It is no longer a question of whether e-government will be implemented. Some governments are clearly well ahead of other governments, but the trend is moving directly towards the seamless use of ICTs for facilitating good government, civic participation and global development. The big question is whether e-government will serve as a resource for *all* people rather than only those with the resources, skills and abilities to use it.

Resources

E-Government for All Conference Archive
(free registration to access archive)
<http://www.egov4all.org/>

UN World Public Sector Report 2003: E-Government at the Crossroads
http://www.unpan.org/dpepa_worldpareport.asp

WSIS Declaration of Principles and Plan of Action
(in English, French, Russian, Spanish, Arabic, Chinese)
<http://www.itu.int/wsisis/documents/>

W3C Web Accessibility Initiative
<http://www.w3c.org/wai/>

CPB/WGBH National Center for Accessible Media
<http://ncam.wgbh.org/>

Bringing A Nation Online: The Importance of Federal Leadership
http://www.benton.org/publibrary/nationonline/bringing_a_nation.html

The Digital Divide: Understanding and Addressing the Challenge
http://www.nysfirm.org/documents/html/nysfirm_digital_divide.htm

Inclusion in the Information Economy: Reframing the Debate
<http://www.athenaalliance.org/apapers/inclusion.html>

Engaging Citizens Online for Better Policy-Making
<http://www.oecd.org/dataoecd/62/23/2501856.pdf>

E-Government Handbook for Developing Countries
<http://www.cdt.org/egov/handbook>

The E-Government Imperative
<http://www.oecd.org/dataoecd/60/60/2502539.pdf>

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