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**Folder Title:**  
DIGITAL DIVIDE 6/2000 [4]

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Sharon H. Yuan  
07/07/2000 06:12:58 PM

Record Type: Record

To: See the distribution list at the bottom of this message  
cc:  
Subject: Fwd: Revised Digital Divide Documents -- 7/7/00 4:30 p.m.

----- Forwarded by Sharon H. Yuan/OPD/EOP on 07/07/2000 06:12 PM -----



LisaBarry9@aol.com  
07/07/2000 05:52:17 PM

Record Type: Record

To: See the distribution list at the bottom of this message  
cc:  
Subject: Fwd: Revised Digital Divide Documents -- 7/7/00 4:30 p.m.

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Dear Digital Divide Partners:

First, thank you for the tremendous initiative this week on the part of so many to really begin solidifying the private sector contribution to the upcoming G-8 meeting on Information Technology and Digital Opportunities. The attached documents reflect our collective efforts. They include: our framework paper; a call to action; a summary of deliverables; a compendium of global digital works in our Digital Leaders Initiative and highlights of training initiatives.

Second, we look forward to seeing you on Monday at the White House meeting. Please advise Sharon if you plan to participate ASAP so that the proper accommodations can be made.

Third, at the White House meeting, Lael Brainard, Gene Sperling, David Beier and other Administration officials will provide us with a briefing on the current status of G-8 discussions and deliverables. We will then review our initiatives to date. We hope to use this meeting to build further momentum for our private sector package. We urge each of you to explore the possibility of expanding your programs or launching programs as part of this initiative.

Thanks again for the contributions to date. We're almost there!!!!

Lisa Barry  
Julia Moffett  
Dennis Gilhooly  
Casey Anderson

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Return-path: <CaseyBAnderson@aol.com>  
Date: Fri, 7 Jul 2000 16:27:57 EDT  
From: CaseyBAnderson@aol.com  
Subject: Revised Digital Divide Documents -- 7/7/00 4:30 p.m.  
To: LisaBarry9@aol.com  
Cc: CaseyBAnderson@aol.com  
Message-id: <db.681a9de.2697974d@aol.com>  
MIME-version: 1.0  
X-Mailer: AOL 5.0 for Windows sub 106  
Content-type: multipart/mixed; boundary="Boundary\_(ID\_yrnP1+Tyaaa8Tv9ElylySw)"  
Full-name: CaseyBAnderson

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Message Sent To: \_\_\_\_\_



## DIGITAL LEADERS PROGRAM: U.S. INDUSTRY'S DIGITAL WORKS

U.S. corporations have an amazing array of programs underway to help prevent the emergence of a global digital divide. These "digital leaders" – including Microsoft, Eastman Kodak, Andersen Consulting, Star Media, PronetLink.com, Intel, Cisco, America Online, AT&T, McConnell International, IBM, Rubin Systems, Inc., Motorola, Lucent, Discovery Channel, Nortel Networks and Compaq – are committed to ensuring that these programs become part of a more comprehensive effort to capitalize on the global digital opportunity. Other U.S. corporations, including The Walt Disney Corporation, Oracle, Time Warner, Adobe, Citigroup, Verizon and others have highlighted some of the important domestic initiatives underway to create digital opportunities; these programs provide useful examples that could be replicated internationally. Just as importantly, a variety of non-profit organizations – such as the Internet Society, the Markle Foundation, the Open Society Institute, the Solar Electric Light Fund, and the Internet Alliance – have emerged as digital leaders and are already making rapid progress on numerous projects. Below is a partial listing of some of the most exciting initiatives underway and being planned. The first section describes existing projects designed to address the international digital divide; the second details some of the domestic programs undertaken by U.S. companies and foundations that could be expanded or replicated in foreign countries.

### INTERNATIONAL

#### Microsoft

Microsoft has focused its international philanthropy in the following areas: (1) education through the effective use of technology; (2) access to information technology skills training, with a focus on creating job opportunities; (3) improving the effectiveness and productivity of non-governmental, charitable organizations by providing software and technical assistance; and (4) supporting disaster and humanitarian crisis relief efforts. Microsoft has donated more than \$21 million (\$8 million in cash and \$13 million in software) through international giving programs over the past year, funding more than 95 projects in 67 countries to provide technology access and training to underserved communities around the world. In addition, Microsoft has donated more than \$570 million in cash and software to programs helping to bridge the digital divide within the United States. Highlights of Microsoft's efforts to address international technology access are described in an attachment to this paper.

#### Eastman Kodak

Digital Villages. Since 1997, Africare and its partners have been implementing their Digital Village project, an initiative aimed at providing training in and access to information technology to disadvantaged communities throughout South Africa. Digital

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Villages are aimed at making educational, cultural, and business resources available through the 'computer technology superhighway' in an accessible, affordable, and sustainable way. Africare works closely with several partner companies, such as Kodak, to provide funding and technical expertise. Digital Villages are computer education and resource centers located within the community and focused primarily on children. Since 1997, five Digital Villages have been established. The Villages provide access to personal computers, current software, multimedia educational CD-ROMs, digital imaging, video conferencing, scanners, fax machines, printers, and the Internet. Training in computer basics, Microsoft Windows 98 and Office programs, the Internet, and e-mail is also available. Africare hopes to extend the scope of the Digital Village beyond education and computer literacy to support of small business creation, basic education for adults, distance learning, and HIV/AIDS awareness.

**Telemedicine.** Kodak, the Harris Corporation, NetCom Solutions International, the University of Virginia, and the Community & Learning Information Network are working with South African partners to provide telemedicine and distance education with the aid of wireless technology. Kodak is involved in four aspects of the project: (1) using technology for accurate and consistent monitoring; (2) providing remote diagnosis possibilities, extending the range and timing of treatment possibilities; (3) managing medical records; and (4) delivering medical knowledge to health care providers.

**New Deal.** With its Green PCs and NewDeal Office Software, New Deal Inc., manufacturer of software to bring high-performance capacity to low memory computers, is helping to recondition older computers for use in local Information Technology (IT) infrastructure for cities, states and countries. New Deal's mission is to broaden computer literacy and Internet access worldwide by bringing advanced computing functionality to Intel-compatible PC through the use of smarter software. Many fully functional computers that have been abandoned as obsolete can be updated to run more complicated and memory-intensive software. Once updated, computers for the "second use" PC market are available at little or no expense. New Deal, along with several PC donors and sponsors, is implementing Green PC pilot programs to place donated and refurbished PCs in communities throughout the US and in emerging economies.

### Andersen Consulting

**Cambridge Childcare Project.** An initiative of Andersen Consulting in London and Windsor, the Cambridge Childcare Project provides web-enabled solutions for unemployed single parents to access information on childcare, training and job opportunities and on other issues connected with moving into employment. Companies, local authorities, childcare and other service providers and charities provide information, which is made accessible through kiosks and terminals in public libraries, the Citizens' Advice Bureau, charity offices, companies, Department of Social Security terminals, and other public locations to those without their own Internet access.

**Cyber Ecole.** Andersen Consulting sends five-member staff teams into underprivileged schools in France to work collaboratively with both teachers and children in the use of



ICT technologies. Children build their own websites and use all types of multimedia to create online content that is relevant to them. Andersen Consulting in France has also funded a central program website and a project management knowledge exchange for teachers. To date over 200 Andersen Consulting staff have been involved.

### StarMedia

The Committee for Democratization of Information Technology Americas (CDI) is a partnership formed by the StarMedia Foundation, the Inter-American Development Bank's Youth Development and Outreach Program and CDI Brazil. CDI's ambitious objective is to eliminate the digital divide amongst underprivileged Spanish and Portuguese speaking youth by empowering them with information technology and citizenship training. CDI Brazil has created 140 schools and graduated 40,000 students from the favelas of Brazil in the last five years.

Unlike many other programs, the CDI training actually keeps students in school to finish their courses of study. The chance to work with computers has brought dropouts back to school, and in some cases attracted youth who had never been enrolled in school or were engaged in illicit activity but wanted to find a way out. The schools are self-sustained and self-administered from day one. CDI Brazil operates on donations and the cost for implementing 140 schools has been extremely low.

The CDI Brazil model of information technology and citizenship schools, which teach basic computer skills and Internet in intensive 3-month modules, is now being implemented in every Latin American country, with Colombia, Mexico and Uruguay the initial hosts. In Colombia, some of the schools are located in Bello, one of the most violent cities in the hemisphere. Four schools will open in Bello by the end of the summer, and more than 6,000 applicants have sought to register there. The curriculum for the program focuses on teaching common computer programs & Internet training, such as MS Word, Excel, PowerPoint, Access & HTML. In addition, students are instructed in computer and hardware maintenance and civic education, which includes human rights advocacy, non-violence training, health and environmental responsibility. This approach is framed with extensive training in professional job skills to prepare the students for high-tech local internship programs.

### ProNetLink.com

**United Nations dialogue.** Through its membership in the Business Council of the United Nations, ProNetLink meets monthly with diplomats from around the world to discuss digital divide issues and often provides information to the UN on the Internet and global trade.

**Internet kiosks and free access.** ProNetLink established Free Internet Kiosks in Trade Assistance Center in Indonesia and are in the process of adding new kiosks in Africa and Eastern Europe. ProNetLink also provides free access to its Global Trade Internetwork to



trade associations and COC's in developing nations, and it broadcasts DOC and other government information on trade through our PNLTV.com division

### Intel

**Intel Teach to the Future.** The Intel Teach to the Future initiative – offered with support from Microsoft – is designed to address the barriers teachers face in effectively applying computer technology to improve student learning. Over the next three years, Intel will invest \$100 million to train 400,000 classroom teachers in 20 countries worldwide.

**Technology education.** Intel funds a variety of technology education programs in foreign countries. These include web sites with computer training materials for children in Asia, the world's largest pre-college science fair, microprocessor technology teaching materials adapted for delivery via the Internet in both Latin America and Asia, and science and technology museums as well as a web-based curriculum development effort for China and India.

**Oxford University Project.** Intel's Oxford University Project brings together educators, subject specialists, and innovative software companies to address how best to integrate software and technology with national educational curricula.

**Intel Computer Clubhouse Network.** The Intel Computer Clubhouse is a creative and safe after-school learning environment where young people (ages 8 to 18) from underserved communities work with adult mentors to explore their own ideas, develop skills, and build confidence in themselves through the use of technology. In partnership with the Museum of Science in Boston and the MIT Media Lab, Intel is supporting the establishment of 100 Intel Computer Clubhouses in underserved communities worldwide. The goal of this "Computer Clubhouse Network" is to spread the highly successful Clubhouse learning model and establish it as a model for technology learning. Funded in part by the Intel Foundation in 1993-1995, the Clubhouse has gained international recognition among educators and community leaders and serves as a model of how technological tools can support learning, creative expression, and community development.

### Cisco

Cisco's Networking Academy Program is a comprehensive 280 hour course developed to train students and in-transition workers to design, build, and maintain computer networks. Offered at high schools, universities, community colleges, occupational training centers and other educational programs around the world, the Networking Academy Program prepares its graduates for the information economy. About 11,000 students will have graduated from the Academy program this spring, with well over 30,000 graduates expected by 2001. Academy graduates are able to pursue advanced degrees in higher



education or get good jobs as IT specialists. Cisco has established 3,800 Network Academies in all 50 states and 65 countries, with a focus on underserved communities.

### America Online

**Clearinghouse.** AOL is working to create a single source to: (1) offer information about efforts to provide underserved communities with access to technology and (2) provide tools for information sharing and community building among those working to bridge the domestic and global digital divides. The Digital Divide Network launched last summer as the nation's premier clearinghouse of grants, funding opportunities, best practices and toolkits for bridging the digital divide. With more than 30,000 unique visitors per month, the Digital Divide Network continues to be a primary resource for government, industry and community efforts aimed at promoting digital opportunity. As part of an ongoing commitment to global digital opportunity, the Digital Divide Network will partner with international stakeholders and participating companies to create an "International Channel" within the Digital Divide Network.

The new channel will contain links to the best available resources existing around the world. It will also allow international partners and members to interact in a virtual idea exchange of program and policy initiatives. The new resource will be free to users and will be fully searchable. The Digital Divide Network will also begin to make its content available in other languages, starting with the International Channel - making it the premier multilingual clearinghouse for digital opportunity in the world.

**USTTI.** AOL is on the USTTI board and will be sponsoring a group of foreign government leaders and regulators this July for a weeklong course on Internet technology and policy issues. AOL has also committed to sponsor a second round of training later this fall.

**Digital divide grants.** The AOL Foundation's Digital Divide Grant Initiative seeks to invest in nonprofit organizations, social entrepreneurs, and collaborative ventures working to empower disadvantaged communities and populations through technology. The Foundation plans to support a variety of projects designed to close the digital divide.

### McConnell International

McConnell is preparing a comparative assessment of the "e-readiness" of 47 emerging economies for release in August. This public report will highlight the needs and progress of countries in making preparations to participate in the networked world. As a result of close consultation with governments, this effort is already spurring action to increase e-readiness. In addition, McConnell is supporting a network of government IT focal points from nearly 120 countries to share best practices in improving conditions for e-business and e-government.



## AT&T

**Global Distance Learning.** Through its ongoing support of the International Council for Distance Education in Oslo, Norway, AT&T has encouraged universities from around the world to develop and implement distance learning projects involving interactive communications technologies. Launched in 1995, AT&T's Global Distance Learning Initiative (in partnership with the International Council for Distance Education) has supported over 60 universities from 26 countries for projects that use technology to promote excellence and innovation in teaching, curriculum development, faculty development and research. Each project that is supported must involve at least two or more institutions, preferably from different continents. For example, Carnegie Mellon University collaborated with universities in Canada, Mexico, Venezuela, Colombia, and Chile to develop ways that technology could change their relationships with business, government, and other constituencies. Another grant supported the efforts of the University of Sao Paulo (Brazil) and the University of British Columbia (Canada) to establish a Virtual Library for Brazilian students. In another project, the Indian Institute of Technology collaborated with two other Indian universities and the Massachusetts Institute of Technology to design and conduct short courses for faculty development in the area of educational technology. AT&T plans continuing support to the International Council for Distance Education for a series of regional conferences in Brazil, Asia Pacific and the United States during the next two years, as well as support for ICDE's biennial conference in 2001 in Germany.

## IBM

**Reinventing Education.** The Reinventing Education is an IBM grant program that delivers expertise to spur school reform efforts throughout the world. Launched in 1994, Reinventing Education is now a \$45 million initiative, encompassing 21 sites in the United States and also seven countries throughout the world -- Italy, Ireland, Singapore, the United Kingdom, Vietnam, Mexico, and the State of Rio in Brazil.

**IBM KidSmart Early Learning Program.** KidSmart integrates new interactive teaching and learning activities using the latest technology into the pre-kindergarten curricula. The program is now being implemented in United Way daycare centers in nearly 200 cities in 45 states in the United States (benefiting as many as 250,000 children), and is being launched in nine countries internationally. The centerpiece of KidSmart is the Young Explorer, a colorful "kid-proof" play station manufactured by Little Tikes and IBM and loaded with award-winning educational software from Edmark. For teachers, the program offers online training and early learning educational materials.

**SWIRL.** IBM provides students from Victoria University of Technology School of Education in Australia with technology for an innovative literacy program entitled Story Writing in Remote Locations (SWIRL). Through SWIRL, teachers in training travel to the outback to work with the Aboriginal people, learning about their unique culture and teaching their children computer and literacy skills, while also helping them record their traditional and contemporary stories using IBM PCs and ThinkPads.



**Adult Education and Job Training Grants.** With more than 18 million people unemployed and many countries are experiencing serious levels of youth unemployment, IBM grants to six nonprofit organizations across Europe are focused on developing new models for attracting the unemployed into specific skills training programs that complement emerging industries.

**Escolas de Informática e Cidadania.** Through the donation of used PCs, IBM and CDI (Comitê para a Democratização da Informática), a not-for-profit organization dedicated to training the poor who live in suburban areas, established a partnership to provide technology training to poor people living in the slums in an near Rio to reintegrate young people into the workforce.

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**Readiness for the Networked World.** To help governments in developing countries prepare for e-business, IBM has sponsored the Center for International Development (CID) at Harvard University to create "Readiness for the Networked World: A Guide for Developing Countries." The Harvard Guide provides a flexible framework for thorough self-assessments to determine readiness to participate in the Networked World and reap the benefits of the Internet. The Harvard Guide is based on work by the Computer Systems Policy Project (CSPP).

**Used Technology Donation Program.** IBM's global Used Technology Donation Program provides used personal computer systems to qualified nonprofit organizations that provide adult education, training, and computer literacy, as well as agencies serving persons with disabilities. The program is a joint partnership between IBM and Gifts In Kind International, a leading charity in in-kind corporate donations. Since 1996, the program has provided over 12,000 used PCs to more than 2,500 nonprofits in the U.S., and the program is now being implemented in Singapore, Brazil, and Argentina and will soon expand to Germany, France, and the United Kingdom.

**Canadian National Institute for the Blind.** For the second year in a row, IBM Canada hosted the Canadian National Institute for the Blind (CNIB) - Gretzky SCORE (Summer Computer Opportunities in Recreation and Education) Camp at its headquarters in Markham, Ontario. Nineteen blind and visually-impaired students from across Canada, plus two from China, spent nine days learning how to build Web pages and developing skills for career opportunities in the IT industry.

**Victoria Memorial School for the Blind.** In Mumbai, India, IBM has developed a partnership with The Victoria Memorial School, a widely recognized charitable institution, to start a computer center that will provide students with training in computers that will enable them to pursue advanced education and acquire gainful employment.

**Integra Project for the Disabled.** In November 1999, IBM, in partnership with the Mexican government and Telmex, a major telecommunications company, announced Integra, a technology assistance program designed to integrate both disabled students and adults into the education and workplace environments. The program links Adapted



Technology Centers, which are located at a network of federal- and state-supported Rehab Centers in 32 Mexican states, so that they can share best practices on using technology to support training and education and to assess the most appropriate adaptive technology services for students. Through this multi-year grant initiative, IBM is providing technology and services worth approximately \$750,000; Telmex is donating telephone lines and Internet access at no cost to the centers; and the federal and state offices have agreed to dedicate the staff and funds needed to make this project work.

### Rubin Systems

**Mapping the digital divide.** Rubin Systems Inc., has been developing new economic and human development indices in order to map the competitive positioning of nations in the new economy and provide a basis for understanding the digital divide. The first such index set, the Global New e-Economy Index (GNEI) and the Technology Leadership Business Index, was published in June 2000 and covers approximately 50 nations. By the end of this year, Rubin Systems expects to have mapped more than 120 nations, and the indices will be updated in "real time".

**Modeling and analytic tools.** By using "sub-indices" of the GNEI a nation can assess its current position and rate of change in terms of factors widening or narrowing the digital divide. These focus on the nation's digital infrastructure, innovation capacity, workforce and knowledge jobs, and globalization of its economy. Rubin Systems is coupling this data with powerful data visualization techniques to allow policy, strategy, social, and economic modeling of digital divide forces.

### Motorola

**Technical curricula.** As part of its joint efforts with the infoDev program, Motorola University recently began a fellowship program for technical experts interested in developing curricula for wireless and IP networking. The idea is to create curricula that can be used by developing country universities to train the professionals they need to participate in rapidly changing telecommunications technologies. Motorola University offers its facilities and training materials and hosts exchange faculty from developing countries. InfoDev pays travel and a per diem for a four month stay for the first fellow, and two month stays for the next two. US AID is funding the fourth fellowship. The inaugural class includes fellows from Jordan, Ethiopia, India and Kenya.

**SURFView.** Motorola's advanced cable set top terminal, known as SURFView, is being used to provide low cost Internet access to consumers. Working with WorldGate Communications, developer of the cable software and headend equipment, Motorola's Broadband Communications Sector is offering SURFview to WorldGate-affiliated cable operators at less than \$100. The low price for the SURFview interactive set-top device and the low cost of WorldGate service mean that the cable company can provide unlimited monthly access to the Internet, including e-mail, at very low prices, e.g., under \$10/month, with no required purchase of a PC or any other equipment. Consumers gain access through a leased remote control or wireless keyboard. The SURFView set-top



device with WorldGate software has been developed to accommodate international requirements including a variety of languages, power requirements, and video and audio standards. SURFView is currently being deployed in Venezuela, Peru, India, Singapore, Spain and New Zealand.

### Lucent

Lucent's Global Science Scholars Program provides scholarships and internships for students with a strong math or science aptitude.

### Discovery Communications

Discovery's Global Education Fund helps local communities and organizations establish "high tech" learning centers in schools by providing satellite dishes, televisions and videocassette recorders. In addition to hardware, DCGEF also provides the learning centers with educational programming designed to complement their local curriculum. Each community works with DCGEF to develop the types of programming and guides that are most useful to them. DCGEF provides teacher-training programs that focuses on the technical use of the video equipment, as well as how to use video as a teaching tool. Training programs are developed and regularly modified according to local conditions through ongoing collaboration between DCGEF, local communities, and education experts. By year's end, 200 schools and community centers in South Africa, Zimbabwe, Uganda, Tanzania, Peru and Mexico will receive DCGEF educational resources and training. DCGEF is working on plans to expand into Asia and India over the next year.

### Nortel Networks

**Nortel Networks Foundation.** The foundation, which serves as the centerpiece of Nortel's corporate giving program, was established to invest in future Internet economy leaders by supporting science, math and technology education programs. The foundation focuses contributions on building capabilities in science and technology education. In 2000, the Nortel Networks Foundation will dispense \$16.5 million throughout Asia, Latin America, Europe and North America.

**Nortel Networks Scholars.** By the close of 2000, Nortel will have awarded approximately 12,500 scholarships to students in partnership with 62 institutions around the world. In Europe alone, Nortel Networks will award \$3.3 million in scholarships.

**Network Architecture & Entrepreneurial Project Course and Case Competition.** The Nortel Networks' Service Provider and Network Architecture Case Competition (UCC 2000) is a one-semester virtual learning course supplemented with in class lectures open to engineering, computer science and business students. The on-line virtual classroom concept will consist of several components including web-based network architecture lessons, face-to-face lectures in cities where Nortel has a presence, and an inter-university case competition judged by a panel. Nortel is partnering with ten North American universities and has plans to expand internationally beginning with Australia at



the University of Technology, Sydney, the University of New South Wales, and the University of Wollongong.

**Wireless Centers of Excellence** – In support of its commitment to increase the high-tech workforce in Europe by 10% and invest in the future generation of Internet leaders, Nortel Networks will create four new Wireless Centers of Excellence in Spain, Germany, Norway and Sweden. With its centers in the U.K., France and Italy, Nortel Networks will now provide Europeans with seven centers devoted to the research, development and testing for Wireless Internet technologies.

**USTTI.** Nortel is on the USTTI board and has trained 273 regulators in its 15 years of involvement. This year, Nortel will host 30 regulators at its facilities in Raleigh, North Carolina and Richardson, Texas for courses focusing on leading-edge technologies such as optical Internet and wireless telephony.

### Compaq

Compaq supports a number of technology-related programs in countries where the company does business. The primary focus of support is to enhance information technology literacy. For example, Compaq South Africa has partnered with the I Can Foundation to support teacher training and with the Skills Transfer Program for skills enhancement and job training.

### Citigroup

**Cyber School.** In Malaysia, China, Spain, Philippines and Turkey, the Citigroup Foundation's Cyber School initiative helped create or upgrade computer labs in schools serving children from low-income communities. Citigroup volunteers offer technical assistance and training for both teachers and students.

### Markle Foundation

**Digital Opportunities Summits.** The Markle Foundation, together with the Gates Foundation, Packard Foundation, Hewlett-Packard, Intel, MCIWorldcom, and I-Generation, is sponsoring Digital Opportunities Summits convened by the World Resources Institute, Harvard University, and the MIT Media Lab. These summits, to be held in October, will explore innovative strategies to create digital opportunities via low cost solutions for basic connectivity, devices and applications in developing nations will be explored at consecutive summits. The summits will bring together key technology providers and potential technology users to examine novel business models and market development strategies that suggest new market opportunities for extending connectivity and potentially create significant social and environmental benefits. The events are important first steps in catalyzing the active involvement of major technology companies in development by broadening awareness of new opportunities and stimulating investment and business development activity.



**CDT/Internews.** The Markle Foundation and AOL are working with the Center for Democracy and Technology (CDT) and Internews on the early stages of a project designed to promote international acceptance of legal and regulatory principles fostering the growth of an open, affordable and democratic Internet. CDT and Internews have begun an initial assessment to answer key questions: What countries offer the greatest potential for reform of Internet policy - that is, where is it best to allocate policy reform resources? What is the best model for an Internet policy project? What other Internet policy efforts are underway and what is the best way to coordinate these efforts? An initial assessment will survey other projects focused on Internet policy, such as the activities of the G-8 (including the private sector contribution to the US government's preparatory work for the July summit), the UNDP, UNESCO, and the GBDe. A goal of the long-term project will be to work with and through these other initiatives, so an element of the assessment phase will be to build relationships with and help to coordinate each of the ongoing efforts. The project will also assess other models for an international Internet policy project, including the CEELI model, the trade association model, and a more academic model, and determine what is best for promoting internationally the adoption of principles supporting an open and democratic Internet. The first round of assessments will cover 11 countries: Armenia, Azerbaijan, Georgia, Kazakhstan, Kyrgyzstan, Tajikistan, Uzbekistan, Brazil, China, Indonesia, and Nigeria.

### United States Telecommunications Training Institute

USTTI has trained 5,670 regulators, entrepreneurs, and other leaders from the developing world in more than 1,000 tuition-free courses on telecommunications and related issues. USTTI is helping to implement the e-commerce initiative announced by Vice President Gore last summer. Under this initiative, USTTI has agreed to give priority to training applicants from a group of ten developing countries in electronic commerce and wireless technology. USTTI is offering special courses to meet the specific needs of these countries. Last year, sponsors including Cisco, AOL, Nortel, MCI WorldCom, the ITU, U.S government agencies, and others contributed approximately \$4.5 million in cash and in-kind donations to cover the cost of travel, food and lodging, educational materials, and other services for participants in USTTI courses. In 2000, USTTI has a total of 876 slots for 90 courses and will be offering a seminar on policy questions related to WRC 2000. USTTI will train approximately 350 foreign regulators this year.

### Internet Society

ISOC's Internet Network Technology Workshop is an intensive course series to train students from technologically emerging nations on the operation and management of the Internet. The workshop is specifically directed toward the needs of people from developing countries who are playing or will play an important part in introducing and extending public internetworking in their countries and regions. Attendees are involved in planning to establish or in establishing the Internet's presence in their countries and regions, in institutionalizing its operation, or in assisting the country's schools and universities, governmental agencies, local firms, and residents in learning about and exploiting the range of services available through the Internet. Many graduates of



ISOC's workshop programs have been responsible for successful implementation of the Internet in their countries. ISOC's workshops and their offshoots have trained approximately 2,500 people from almost all developing countries. The cost of each workshop has been between \$500,000 and \$1,000,000. The Internet Society is not a foundation, and has met these costs through a tuition charge and through aggressive fund raising from private and public donors such as Cisco as well as large loans of equipment.

### Open Society Institute

OSI has funded the extension of Internet Society training in Central and Eastern Europe and is interested in partnering with other entities to apply the lessons of this experience to other regions. In its efforts to date, OSI has developed a talent pool of highly educated and skilled trainers who have taken the Internet Society's courses, and the technical experts who were trained in earlier Central and Eastern European programs could be brought to Africa or other parts of the world to train a new group.

### Solar Electric Light Fund

SELF brings solar electricity and wireless telecommunications access to rural and remote villages in developing countries. For example, SELF has equipped Myeka High School, in the KwaZulu/Natal region of South Africa, with 25 solar-powered computers and a satellite dish -- also solar-powered -- that brings in educational material from the Learning Channel, a distance-learning enterprise in Johannesburg. SELF plans to wire several schools in rural, unelectrified parts of the Eastern Cape and Northern Province.

### Internet Alliance

IA's Law Enforcement and Security Council (LESC) is developing a global training program co-sponsored by INTERPOL and the G-8. This joint program will train law enforcement agencies around the world in critical cybercrime forensic techniques. Key elements of the training include: (1) understanding the Internet and its unique characteristics, (2) investigating Internet crimes, (3) computer forensics, i.e., techniques for obtaining and maintaining evidence from a computer, (4) procedures in obtaining cooperation from law enforcement agencies in other countries. A more detailed narrative structure was rolled out to the G-8 Conference on May 16. The training program will be delivered in video and CD-ROM formats. The CD-ROM format will offer the option to tailor the training program to local needs.



## DOMESTIC

### Time Warner

**High speed access to schools.** Time Warner currently provides free high speed Internet access to over 1,200 schools and over 100 libraries nationwide in a wide range of communities served by Time Warner's cable systems. For example, Time Warner's Northeast Ohio division provided free high-speed Internet service in the homes of 24 teachers in Akron and Canton, as well as in the homes of an entire second-grade class, to encourage an educational link between home and school. Time Warner will continue its commitment to provide this educational tool as its broadband service enters new markets.

**Cable in the Classroom.** In 1989, Time Warner helped found Cable in the Classroom, an industry initiative to provide cable connections, equipment, and programming to all K-12 schools in the nation. Time Warner now provides this service for over 90% of the schools in the areas served by its cable systems, reaching well over 7 million students. This effort includes substantial collaboration with teachers; Time Warner has distributed 13,500 teacher training kits which serve as a resource guide for using the Internet in the classroom in ways that are safe, rewarding and educational for students.

**Hands On Training.** Time Warner has partnered with Cisco Systems to establish computer-training programs at 10 New York City public high schools. Each year 400 students will learn to design, build and maintain computer networks in order to gain certification needed to fill some of the 350,000 high-tech jobs currently available in the U.S. Each school receives a computer lab with customized software, and participating teachers receive ongoing state-of-the-art training at a custom-designed computer training center at Time Warner headquarters. Time Warner also supports 25 Media Centers in New York City public schools. These centers provide expanded technological capacity to integrate computers and other technology into classroom instruction.

**Literacy.** Time Warner's Time To Read initiative is the nation's largest literacy program and has graduated more than 150,000 learners since its inception in 1985. Today more than 25,000 tutors and learners participate in the program at 352 locations nationwide. The digital economy puts a new perspective on Time Warner's long-standing literacy efforts -- the basics are now reading, writing and technology.

### Citigroup

**Smarter Classrooms.** The Citigroup Foundation's educational initiatives help low-income communities around the world improve student financial literacy and prepare for the world of work. Its Smarter Classrooms program is helping to shape the future of education in the digital age by increasing access to technology in under-served communities and helping educators harness the power of technology to improve classroom learning.



**Access.** The Citibank FamilyTech is helping residents of low-income Miami neighborhoods bridge the digital divide. Working with the Dade Public Education Fund and the local community, FamilyTech has provided 2,000 donated computers to students for at-home use and new computers and teacher training for 60 elementary school classrooms. FamilyTech has succeeded in helping children improve their scores on standardized tests, providing training for parents and increasing parent involvement in their children's education.

**On-line Educational Resources.** The Foundation has partnered with leading educational institutions to support the development of technology-based curriculum materials for teachers and students. Citigroup has made multi-million dollar grants to digitize the African American collection of the Library of Congress, the New York Public Library's Science, Business and Industry collections, the vast scientific resources of the American Museum of Natural History and the rich cultural heritage of the New York City History Museum, making these resources freely accessible via the Internet. Citigroup also joined with Classroom, Inc., to create technology-rich computer simulations for students in grades six through twelve that offer a glimpse into the issues and decisions that shape daily life in the financial services industry. For example, in one simulation, students take on decision-making roles in a virtual banking work environment. Students become adept at problem solving while increasing their reading, writing, computation, teamwork and research skills. Classroom, Inc., programs are being used in schools and community organizations by more than 300,000 students in both urban and rural areas. Citigroup is currently supporting the installation of Classroom, Inc., software in 125 public schools throughout South Dakota. More than 200 teachers are also receiving training to use the simulations to improve student performance.

**Teacher Training.** Citigroup is committed to help teachers learn to use technology effectively in the classroom. The Citigroup Foundation is a major underwriter of WNET School, Thirteen/WNET's award-winning web service for teachers. This free service features everything from standards-based lesson plans and classroom activities to a multi-media primer, on-line mentors and reviews of curriculum-based websites. Last year WNET School had more than 20,000 teacher subscribers. Online networks such as TeachNet use the Internet to link outstanding teachers with colleagues to encourage broad-based classroom improvements in teaching and learning. Their website, *www.Teachnet.org* features interactive, thematic hands-on curriculum projects for K-12 students and teachers designed by master teachers and searchable by subject and grade level. Citigroup is helping TeachNet explore the potential of replicating this successful model outside the U.S. Citigroup also sponsors TeachNet's New Teachers New York Program, an on-line survival course to help new teachers develop their skills, keep motivated and stay in the field. The site will also provide curriculum resources, links, and mentoring from experienced teachers. In addition, the CitiTech Series provides technology planning and training to hundreds of educators in low-income school districts in New York City and Hartford. Sponsored by the Citigroup Foundation with Teaching Matters, school district staff developers are offered a three-week 75-hour course to increase the capacity of school districts to train classroom teachers to integrate technology into the curriculum.



*over 8-5?*

**Workforce Development.** Citigroup has joined with Lucent Technologies and other IT industry leaders to support the creation of the Academy of Information Technology program to address the growing workforce needs of the IT industry. The National Academy Foundation, one of the nation's foremost school-to-career programs, created the Academy of Information Technology based on its successful programs to prepare students for careers in finance, travel and tourism and will spearhead its rollout. NAF is working with the Center for Occupational Research and Development (CORD), a national education reform leader, which specializes in curriculum development and teacher training. Beginning in September 2000, the Academy of Information Technology will be piloted in 12 secondary schools. The program will provide a ninth through twelfth grade curriculum with student internships and opportunities to partner with community colleges, universities and businesses.

### AOL

AOL@SCHOOL. AOL offers a variety of age-appropriate educational content, state-of-the-art communications features and special safety tools for teachers. Provided free of charge to K-12 schools, the program builds upon the in-roads made in wiring the nation's classrooms. Internet enabled schools can install the free AOL@SCHOOL software and take advantage of collections from many of the world's great museums and libraries, such as the Metropolitan Museum of Art and the Library of Congress, as well as education-specific sites like BOXERmath.COM, and Homeworkhelp.com. AOL@SCHOOL also provides access to content from leading textbook and content providers such as Scholastic Inc., Pearson PLC, and Harcourt General. Student portals provide a suite of features such as encyclopedias, a calculator, and other learning and communication tools.

**PowerUP.** PowerUP is a multimillion dollar joint effort by nonprofit organizations, corporations and federal agencies to help ensure that America's underserved young people acquire the skills, experiences and resources they need to succeed in the digital age. AOL has pledged 100,000 accounts for free Internet access in the United States.

### Disney

Disney's Creative Learning Grant program does not focus on the use of technology exclusively, but it often targets projects designed to get teachers and children to use technology in ways that promotes thinking and creativity. Recent research shows that in computerized instructional efforts tend to emphasize drill and rote learning for low income kids and more inquiry-based learning for middle and upper income kids, so Disney attempts to support programs that provide effective examples of how technology can be used in the service of creative teaching and learning for low-income children. For example, at Swan Valley Elementary School in Irwin, Idaho, teachers and students are using a Disney grant to develop a web site that integrates students' hands on research on their local surroundings with Internet-based investigations that require finding, analyzing and interpreting data. They are also reaching out to other schools via the Internet to engage them on collaborative research projects on science and natural history projects. At Seba Dalkai School in Winslow, Arizona, a CLC grant supports the development of an



integrated humanities curriculum centered on the students' native Navajo culture and language, with use of Internet-based research accompanying more conventional teaching methods. Students also create original dramas, performances and exhibitions to show what they have learned that make extensive use of computer and video technology. Disney is supporting a total of 32 elementary schools across the United States with this multi-year grant program.

### Verizon

**Aid for education and technology.** The newly created Verizon Foundation hopes to help transform the nonprofit community through the use of technology and innovative e-solutions. This year, the Verizon Foundation and its predecessors, the Bell Atlantic and GTE Foundations, will provide grants totaling \$70 million, placing the foundation among the nation's top 10 corporate foundations in monies distributed annually. Nonprofits will be able to apply online for in-kind donations, volunteers, Internet training and Web hosting services as well as cash grants. The use and integration of technology in support of educational initiatives – particularly in the areas of literacy, mathematics and science -- is a top priority for the new foundation. Visitors to the Verizon Foundation's bilingual (English and Spanish) Web site will find information on e-training and e-partners, a series of 'best-in-class' technology success stories, and a comprehensive technology resource guide with links to more than 350 online resources supporting technology applications. Linked sites will address the digital divide, literacy, and other issues.

**Civil rights.** In an effort to bring the promise of technology to all segments of society, the Bell Atlantic Foundation has endorsed the Digital Opportunity Partnership being launched by the Leadership Conference on Civil Rights and the AOL Foundation. The Bell Atlantic Foundation has helped organizations that aid traditionally underserved communities to forge partnerships around technology initiatives ranging from community technology centers to interactive Web sites to network design and development. For example, support from the Bell Atlantic Foundation has enabled the National Urban League to establish five community technology centers in Binghamton and White Plains, N.Y.; Baltimore, Md.; Boston, Mass.; and Newark, N.J., providing these underserved communities with a direct on-ramp to the information superhighway where citizens can study, learn and explore. The Bell Atlantic Foundation support also has bolstered the creation of numerous Web sites designed to help combat cyberhate and promote tolerance as well as building the communications infrastructure used by numerous non-profits.

### Andersen Consulting

**Native Americans.** In New Mexico, Andersen Consulting joined the White House in its efforts to bridge the digital divide for Native Americans by committing to provide in-kind services including "dot.com launch center" support for American Indians businesses interested in using the web and equipment/internet connectivity in tribal locations.

**Educational programs.** Andersen Consulting incorporates technology into several of its charitable activities. For example, Andersen's Discovery program is an educational



enrichment initiative designed to give technology skills to students in at risk neighborhoods in Philadelphia. Over 250 Andersen employees have volunteered their Saturday mornings to teach students how to develop content and use various computer technologies such as digital photography manipulation, graphic design and website development. In Washington, D.C., Andersen donates \$20,000 a year to the "Good Samaritan Foundation," a nonprofit founded by former NFL players with the mission of helping disadvantaged youth in the nation's capitol learn about technology and gain experience in using it through corporate internships. The organization's long-term goal is to build and wire a large technology/learning center in Anacostia, one of the city's poorest areas. In Minneapolis, Andersen's 8-year partnership with a local high school includes an e-mentoring initiative that pairs professionals with high school students, enabling virtual -- and often more frequent -- communication. Andersen has also helped the school plan and build a new science and technology wing. In Chicago, Andersen Consulting is teaming up with Junior Achievement, the Chicago Public Schools and ePrairie.com to develop a curriculum to prepare students for careers in technology. The program will complement the city's 5-year plan to wire the schools, train the teachers and prepare the students for the future. Andersen Consulting will provide volunteers to teach in the pilot schools. Future plans may include expanding this program in other markets.

### Compaq

**Technology access and education.** Compaq provides technological expertise, product and cash contributions, and encourages employee involvement in programs centered on a single theme: Investments and Innovations through Technology...Enhancing Education and Strengthening Communities. Compaq donated more than \$9 million last year to education and charitable organizations worldwide, with a significant proportion of this money spent to increase access to and training in the use of technology and the Internet. For example, Compaq has partnered with the Boys & Girls Clubs of America to develop and implement technology centers in 11 cities across the U.S. The program provides technology and Internet access to children across all racial and social-economic boundaries. The pilots serve as test sites to be replicated in the U.S. and abroad.

**National Center for Missing & Exploited Children.** Compaq has contributed to the development and distribution of educational materials related to online safety for children. A special program targets young girls, who are the most at risk for abuse and exploitation through the Internet. Compaq is a founding sponsor of the International Centre for Missing & Exploited Children, which opened in 1999, and Compaq is helping to significantly expand the center's work through technology and the Internet.

**Tech corps.** Compaq sponsored the development, pilot and national rollout of the "techs4schools" program -- a web-based virtual volunteer/mentor program that matches technical mentors at participating companies with schools. The program addresses the critical need for technical expertise to schools, particularly in areas such as Native American Reservations and School Empowerment Zones, where the program was successfully piloted.

## AT&T

**High speed Internet access.** AT&T Broadband offers free cable modem service to every school and library in areas reached by its cable television systems. Through its support for Cable in the Classroom, AT&T provides over 540 hours of commercial-free educational programming to schools along with free high speed data connections. AT&T Broadband also has extended high speed Internet access to rural areas such as its Billings, Montana cable system franchise area.

**AT&T Learning Network.** AT&T's Learning Network is a multi-million dollar program that offers free online resources to help families, schools, and communities improve teaching and learning opportunities for children in grades K-12. The Learning Network also is investing \$1 million to develop a Technology Leadership Program to help bridge the digital divide in ten low-income communities in New York, Oakland, the Rio Grande Valley, the Mississippi Delta, and other parts of the country. The Technology Leadership Program will provide training for teachers, community members, and young people to learn to use technology and teach others to do the same.

**United Negro College Fund.** AT&T awarded a three-year \$1 million grant to UNCF's technology enhancement program to help faculty at member institutions use technology to improve teaching and learning in their classrooms.

**Education alliance.** AT&T joined with five leading universities to form a \$1.25 million partnership to address the need for skilled workers in the fields of networking and information technology. The schools in the alliance are working to develop curricula in these areas that will serve the needs of both business and academia.

**Other technology education programs.** AT&T is providing 100 Black Men of America with \$300,000 in support for a new program designed to encourage African American youth to study math, science, and technology. The initiative will be rolled out in four cities a year over a three year period. It includes a comprehensive curriculum taught by IT professionals that will provide the skills needed to use the Internet, use software to improve math and science learning, and develop a practical understanding of digital technology. As part of its giving to other programs, AT&T supports a variety of technology education efforts, including the Academy of Information's technology curriculum effort, the Edison Job Corps technology training initiatives, and other programs run by community organizations in all parts of the country. AT&T also gives substantial funding to a wide range of science scholarships for the disadvantaged.



## Attachment: Microsoft international digital divide projects

### China

- Grant*
- Partnered with the Dalian Labor Bureau to develop model IT training program to help laid-off workers improve their re-employment prospects. In the first of 2 stages, 40 reemployment-training centers' (RTCs) computer instructors received advanced computer training. These RTC instructors will use their skills to train and estimated 1,200 laid-off workers per year. In the second stage a number of laid-off workers will receive hands-on computing and office skills.

### Hong Kong

- Launched "Cyber Action Summer Campaign" designed to provide computer training for NGO volunteers from the Salvation Army, Hope Worldwide, and Hong Kong Society for Rehabilitation.
- Joined with the Hong Kong Council of Social Service and a leading local newspaper to sponsor the "Unemployment Retraining Campaign," a program that offered computer training to unemployed workers. In addition, a new initiative called "Computer Donations Project" supported by Microsoft, the HK Professional Teachers' Union and two other media organizations was recently launched. Through this program, used office computers are collected, refurbished and then donated to disadvantaged secondary students whose families cannot afford to purchase home computers.

### India

- Funded teacher training for 1100 public school teachers in underserved communities throughout the state of Kerala. Working in partnership with local partners and the State Education Ministry, the program focused on making teachers comfortable with technology and on how to incorporate it into their lessons.
- Funded the establishment of a Computer Training Center (CTC) at the Indian Association for the Visually Handicapped (IAVH) in Mumbai to provide opportunity for IT literacy for visually impaired persons in the city.

### Indonesia

- Funded a project bringing computer and Internet introductory training to 4000 high school students over a one-year period.

### Japan

- Donated US\$150,000 (\16 million yen) to Kawasaki City Physical Handicapped People's Association and US\$88,000 (\9.25 million yen) to the Japan Muscular Dystrophy Association. The grant to the Kawasaki Association was made to support an IT educational project for the disabled, focusing on providing IT courses to assist disabled individuals in obtaining jobs. The grant to the Dystrophy Association supports the project "Dream Door" which aims to provide PC skills to patients whose disability requires them to live in hospitals. This project provides the patients with technology to enable them to access the Internet.

### Korea

- Continued with successful Microsoft Future Scholar Program in partnership with the Ministry of Information and Communications, the Ministry of Labor and the



Korean Economic Daily national newspaper. The program offers free IT-specialist training to unemployed workers, in an effort to assist those who lost their jobs during the Asian economic downturn. To date, the program has graduated approximately 300 people, 70% of which were re-employed or found new business opportunities as a result of such training.

#### **Malaysia**

- Continued as Corporate Sponsor of Cybercare, the Microsoft Foundation Campaign in Malaysia that links orphanages to the Internet -- program has to date invested a total of RM383,000 worth of software and hardware upgrades, multimedia PCs and Internet access. Since the start of support in late 1998, CyberCare has successfully equipped and linked 25 orphanages to the Internet. Program also trains home administrators to provide hardware and software support and will train over 500 children in the use of software applications to express themselves in forms of art, essays, website and development.

#### **Taiwan**

- Sponsored the Hua Lian Education Bureau in its efforts to develop a multi-media CD-ROM to be used in classroom instruction of students with special learning needs as part of the Young Minds in Motion program . On-going activities include a program to train K12 teachers on PCs and Internet usage, PC donations to local public libraries to encourage continuous learning, and partnerships with local OEMs to provide resources and support to local NGOs.

#### **Europe/Middle East/Africa**

##### **Baltics**

- Donated PC's, software, Internet connection and training to ~~3~~ orphanages, 1 in Latvia, Estonia and Lithuania -- specifically targeting orphanages with disabled children. Many of these children have never seen a PC before.

##### **Benelux**

- Continued work in the Netherlands on the Sterrkind Project, providing Dutch hospitals with all the technology needed to allow a sick child to communicate directly with home and school. Program is currently operating in 5 hospitals with 210 network connections and 33 stations available for the project. 130 children are recipients of the project. A similar program is planned for Belgium.

##### **Croatia**

- "Trained the trainers" of a new program to benefit disabled war veterans. The group received IT training with the goal of giving them marketable skills so that they may find employment.

##### **Egypt**

- Funded the creation of a multi-media, connected children's 20 PC lab in an underserved community as part of the "Kids 21st Century Club" initiative, led by RITSEC, a local non-profit organization. The objective is to make technology available to underprivileged children.

##### **France**

- Provided IT support to "Evasion Verticale", an innovative program that takes the children on a trek in the Atlas Mountains. Support enables children to send



reports and images of their travel back to all the students in their school in France, thereby connecting them to a world outside of their own.

#### **Ireland**

- Continued work with successful ESP program to support training for unemployed people through 3 other projects -- Peace Line Women's Project, Fast Track to Information Technology (FIT), and Mohill Training Leitrim. The Peace Line project targets women from both protestant and catholic communities and brings them together while providing training that will help them to return to work. It introduces increased understanding in a community long-divided through hatred and gives women independence through the provision of skills that will enable them to get good jobs. FIT is a public-private partnership with the national government and IT companies, equipping the long-term unemployed with skills for jobs in the IT industry. So far, over 60 people are fully trained and employed in the IT industry with 600 currently undergoing training in Dublin - with jobs ready for them upon completion of the training. The third program, the Mohill Training-Leitrim aims to do the same and has trained 25 members of the local Leitrim community with internationally recognised qualifications. Some graduates will stay on as trainers to give their skills back to the community from which they have come.

#### **Israel**

- Funded "A Computer for Every Child" project run by the Operation Social Development, a non-profit established in 1993 by a coalition of Israeli hi-tech industry leaders. The project provides children of economically disadvantaged households with state-of-the-art computers, educational software and comprehensive user training. The objective of the project is to help bridge the digital divide.

#### **Lebanon**

- Funded the creation of a connected PC centre in the Children's Museum of Beirut. The museum is situated in the heart of Beirut, offering easy accessibility from almost all parts of Beirut. The project is a result of requests from citizens of Beirut. The centre will encourage children and adults to explore and learn by using the Internet. Introductory training will be available to the community

### **Morocco**

- Partnered with a recruiting firm, the Ministry of Employment and a CTEC, to offer 50 unemployed people with MCP training and certification, and then placement assistance as a response to Morocco's high level of unemployment (21.9% in 1999).

### **Spain**

- Partnered with Bancaja (Spanish Saving bank) to extend its successful Spanish NGO training program to Valencia. The objective is to facilitate access to hardware, software and Internet to 300 NGOs working in Valencia.

### **Saudi Arabia**

- Funded an interactive children's PC lab for K12 students in Saudi Arabia. Working with the Ministry of Education, the lab will supplement school resources providing access to technology and the Internet to 100's of children.

### **South Africa**

- Supported a project run by Protec, a local NGO, which has 3 main goals: to train teachers and students in basic IT and computer skills; improve the planning, delivery, management and evaluation of teaching and learning in the classroom; and improve the quality of curriculum delivery, particularly in respect of the existing Grade 10 to 12 technology, science, maths and World-Of-Work curricula. The program is also providing on-line resources to support information access, communications, support and management to schools

### **United Kingdom**

- Continued work with the Workability Programme to enable the IT training of disabled people. The program is run through remote learning or college attendance and provides job placement schemes. Over 500 people have entered the program in the first year and over 60 are now in full-time employment or running their own business as a result of the training programme. MS UK is also a leading corporate sponsor of the National Society for the

### **SPAR**

#### **Argentina**

- Developed and funded the *Technology for the integration* project. The goal of the project is the improvement in Information Technology skills of physically disabled people in order to help them to find better job opportunities. The Program is collaboration with Fundación PAR, a foundation devoted to training disadvantaged people and job placement and the La Nación newspaper.

#### **Australia**

- Granted software and \$50,000 in cash to The Smith Family, an Australian charitable organization committed to the development of educational support programs for disadvantaged families. As a result of this grant, two Computer Clubs will be established in two areas in metropolitan Melbourne, to give students who do not have a computer at home, ready computer access in a recreational setting.

#### **Brazil**

- Granted \$4.5 million in software and \$150,000 in cash to CDI (Comitê para Democratização da Informatica), a local charitable organization committed to



combating what they call "digital apartheid" by making technology accessible to Brazil's underclass by establishing Computer Science Schools in the low-income communities (favelas). Today, with over 90 schools in 13 states, CDI has trained more than 25,000 people. The donation funded the purchase and refurbishment of a house for its new national headquarters, in the city of Rio de Janeiro. In FY00, Microsoft granted \$100,000 to fund new classrooms, instructor training and a National Coordinator to expand the program nationally.

#### **Canada**

- Donated \$532,933 worth of software to KidReach, a program to distribute software to over 30 children's charities across Canada. Additionally, donated \$566,000 worth in software to 123 public library recipients of the Gates Library Initiative in the provinces of Nova Scotia, Newfoundland and Labrador, to make technology accessible to underserved communities.

#### **Caribbean/Puerto Rico**

- Funded the Tomás Blanco Library in Puerto Rico's Juan Domingo district to establish a computer lab and digital library to provide k-12 students with access to online information resources. Juan Domingo is an economically disadvantaged community of approximately 2,000 families located in the outskirts of San Juan, Puerto Rico. The library serves more than 4,000 students annually and is run by Juan Domingo en Acción, a non-profit community-based organization established in 1970 by area residents to enhance the quality of life of its people through education and job skills initiatives.

#### **Colombia**

- Donated \$60,150 in cash to Virtual Schools, a project that aims at improving the quality of the education provided by rural primary schools through the use of the latest technologies in order to support the methodology of the New School Program in the department of Caldas, Colombia. The project promotes the use of computers as a tool to enrich the learning processes through the use of educational software. Up to July 1999, the project has enrolled 28 rural schools, 274 teachers and 5,206 students that benefit along with the community.

#### **Costa Rica:**

- Donated \$50,000 to Ayudenos para Ayudar Foundation to fund the creation of a 16 PC Technological Classroom. The Technological Classroom will be the first of its kind in Costa Rica. It is designed to target the country's young population with limited economic resources, enabling them to engage in creative activities, and learn to use different types of software.

#### **Ecuador**

- Partnered with the Fundacion Guayaquil Vive por Ti and Futurekids to provide innovative technology training and education to children 7 years old and up from low-income communities. This effort will benefit approximately 3,000 children per year.

#### **Mexico**

- Lead the initiative *Internet en mi Biblioteca*. Through this program, Microsoft partners with public libraries to bring access to computers, the Internet, and digital information for patrons in low-income communities in Mexico. The program aims to build on the previous year's program by increasing the number of

modules from 12 to 60 by providing comprehensive content and training to users and library staff.

#### **Panama**

- Supported the “Building the Canal for Panama Developers” project, a collaborative initiative with the Universidad Tecnológica de Panamá (U.T.P) and their Foundation to initiate a development community and IT industry in Panama. In addition to the creation of a strong IT curriculum, the program will give low-income students hands on training as well as assistance in job placement. Plans are to donate \$65,000 in Platform and Tools software and \$49,700 in cash to fund the training of 20 professors in the MSCD discipline, their exams, and hardware/technical assistance.

#### **Uruguay**

- Created a Virtual Academic Community involving educational centers in primary, secondary and higher education in a marginal area near the capital city of Montevideo. This Community will enable teachers and students to develop and share information and educational experiences. The project aims to familiarize students and teachers with the use and handling of the technological equipment in a virtual community.



Sharon H. Yuan  
07/07/2000 06:12:58 PM

Record Type: Record

To: See the distribution list at the bottom of this message  
cc:  
Subject: Fwd: Revised Digital Divide Documents -- 7/7/00 4:30 p.m.

----- Forwarded by Sharon H. Yuan/OPD/EOP on 07/07/2000 06:12 PM -----



LisaBarry9@aol.com  
07/07/2000 05:52:17 PM

Record Type: Record

To: See the distribution list at the bottom of this message  
cc:  
Subject: Fwd: Revised Digital Divide Documents -- 7/7/00 4:30 p.m.

Dear Digital Divide Partners:

First, thank you for the tremendous initiative this week on the part of so many to really begin solidifying the private sector contribution to the upcoming G-8 meeting on Information Technology and Digital Opportunities. The attached documents reflect our collective efforts. They include: our framework paper; a call to action; a summary of deliverables; a compendium of global digital works in our Digital Leaders Initiative and highlights of training initiatives.

Second, we look forward to seeing you on Monday at the White House meeting. Please advise Sharon if you plan to participate ASAP so that the proper accommodations can be made.

Third, at the White House meeting, Lael Brainard, Gene Sperling, David Beier and other Administration officials will provide us with a briefing on the current status of G-8 discussions and deliverables. We will then review our initiatives to date. We hope to use this meeting to build further momentum for our private sector package. We urge each of you to explore the possibility of expanding your programs or launching programs as part of this initiative.

Thanks again for the contributions to date. We're almost there!!!!

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Lisa Barry  
Julia Moffett  
Dennis Gilhooly  
Casey Anderson

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Return-path: <CaseyBAnderson@aol.com>  
Date: Fri, 7 Jul 2000 16:27:57 EDT  
From: CaseyBAnderson@aol.com  
Subject: Revised Digital Divide Documents -- 7/7/00 4:30 p.m.  
To: LisaBarry9@aol.com  
Cc: CaseyBAnderson@aol.com  
Message-id: <db.681a9de.2697974d@aol.com>  
MIME-version: 1.0  
X-Mailer: AOL 5.0 for Windows sub 106  
Content-type: multipart/mixed; boundary="Boundary\_(ID\_yrnP1+Tyaae8Tv9ElylySw)"  
Full-name: CaseyBAnderson

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**U.S. PRIVATE SECTOR CALL TO ACTION AND INITIATIVES  
TO BRIDGE THE GLOBAL DIGITAL DIVIDE**

DRAFT  
7/7/00

## I. A FRAMEWORK TO ENSURE THE GLOBAL DIFFUSION OF THE NETWORK ECONOMY AND SOCIETY

The growth of information technology has sparked rapid economic growth in developed countries and is changing the way people live, learn and work. One of the principal challenges facing the global community is to ensure that advanced communications services – and the attendant economic, social and political dividends – are spread throughout the world. Many developing countries have a strong interest in the Internet and electronic commerce but must address several challenges in order to obtain the full benefits of the online medium. This presents the global community with an opportunity to ensure that the Internet, information technology and electronic commerce can close what some have already begun to characterize as a global digital divide. To be effective, all stakeholders – including the G-8 Group of Nations, developing countries, multilateral institutions, the global business community, philanthropic foundations, and non-governmental organizations – must work together on a new framework for action to ensure that the benefits of information and communications technologies (ICT) are shared around the globe.

### Overarching principles

- **Sustainable success depends on the active participation of all “stakeholders.”** Private sector leadership has been critical to the rapid adoption of Internet services and information technology in the United States and other developed countries. In order to make telecommunications and the Internet truly global mediums, however, a new set of challenges must be addressed. A specific, measurable commitment from governments, multilateral lending institutions, non-governmental organizations and the private sector will be required.
- **Each country must tailor its own solution.** While the Internet, for example, is a global medium, it must serve local needs and aspirations. Indeed, one of the Internet’s most powerful features is its ability to unite individuals with shared interests and values. The online medium can be used to help the people of developing countries to preserve their cultural and linguistic heritage even as it helps break down barriers to economic and intellectual exchange. In addition, Internet content and services can be adapted to help meet basic development goals, such as improved education and public health. With this in mind, countries need to create comprehensive programs that will effectively advance their identified national information economy agendas.
- **Infrastructure is critical.** The best Internet content and services cannot reach the citizens of developing countries without communications platforms and devices that are capable of providing access to the online medium at reasonable costs. The availability and cost of communications infrastructure is a critical roadblock to the Internet in many countries. With legacy telecommunications networks (based on fixed, circuit-switched technology), low levels of telephone and personal computer penetration (particularly in rural areas), and few technical resources available, developing countries should consider low cost and innovative solutions such as wireless and Internet access as part of any comprehensive solution.
- **The policy and regulatory environment must facilitate ICT adoption.** Public policy and regulation is critical to expanded usage of networked information technology. The policy agenda should be comprehensive, identifying and removing roadblocks in the e electronic commerce value chain. These roadblocks begin with access to affordable telecommunications but extend to such divergent areas as encryption policies, intellectual property protection, trade barriers in the areas of banking, express delivery services, advertising, rights and responsibilities for online content, and

could be  
cultural content



consumer confidence (including privacy and consumer protection law). In the absence of a predictable, transparent policy environment, capital markets, business, and multilateral lending institutions will continue to be reluctant to participate in local economies.

- **Societies must understand how to fully embrace the tools of the network economy.** In order to be successful, any solution will require the understanding and active participation of the members of society. The tools of the network economy and society can be made available, in part, through traditional educational institutions. In places where educational institutions or government offices are connected, these places could be the starting points for extending access to broader groups of people and businesses. In addition, community centers or other centralized public access points may facilitate access while avoiding the need for massive information infrastructure deployment.

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with other  
educational goals

get public private

## II. A CALL TO ACTION

The information revolution has equipped American business and society with a fabulous array of resources for the new millennium. Yet even in the United States and despite these resources the dream of digital access for all remains elusive. Before additional steps can be taken in this arena, it is critical that A Call to Action be issued to articulate a process and program for moving forward and that can serve as a rallying cry for all stakeholders to work towards a common goal of achieving universal access to the Internet and the Global Information Infrastructure, in both developed and developing countries, over the next five to ten years.

We strongly recommend that the President issue such a Call that can be rapidly endorsed by the U.S. Private Sector as he heads into the G-8 Summit. Such a Call offers an historic opportunity to galvanise support for scaling up the many initiatives already underway as well as advancing a concerted, coordinated and comprehensive strategy to bridge the global digital divide by the year 2010. The vision and leadership of the U.S. is urgently needed to articulate the process and programs that will be required to ensure a globally inclusive network economy and society.

There has never been a better time. An unprecedented willingness exists in industrialized nations, the private sector, and civil society to work together and offer their efforts to eradicate digital inequity among rich and poor, young and old. The less developed countries offer their efforts to create the policy framework and enabling conditions that can allow nations and their citizens to benefit from the digital opportunity. And multilateral institutions and global networks of non-governmental organizations offer their efforts as catalysts and guarantors in this process.

The problem is local and global. Since growth and success in this network economy and society is self-reinforcing, there is a clear risk that those who are excluded from it will lose ground at an accelerating rate. The private sector recognizes that specific attention should be paid to the economic areas and geographical regions where connectivity and digital applications that can improve economic opportunity, human welfare, and environmental management are needed most. In this context, priority must be given to address the challenge of the digital divide in developing countries.

Innovative, catalytic and scalable solutions are within our grasp. New policy and regulatory constructs, lower cost connectivity, devices and applications, and transforming modes of education and training are emerging at an exhilarating pace. Together with partnerships forged among all stakeholders the opportunity to move forward in promoting global participation and a more equitable, more environmentally sustainable economy and society, and improved human welfare are unique.

Against this background, we suggest the following approach to bridge the global digital divide by the year 2010.





### **III. NEW DEVELOPMENT INITIATIVES – “DOWN-PAYMENTS”**

While a comprehensive strategy will flow from the broader G-8 process, we believe it is important to demonstrate the intensity of activity already underway in bridging the global digital divide as well a number of new initiatives on the part of the private sector that serve as important “down-payments” to the eventual action plan.

#### **A. Digital Leaders Compendium**

The U.S. Private Sector has an impressive and ongoing array of programs to help prevent the emergence of a global digital divide. Initiatives currently underway or in development include technology education for school children and technical training for network engineers, donations of time and money to develop and aggregate content resources tailored to developing countries, and a host of other forms of financial and technical assistance. Private sector “Digital Leaders” include Microsoft, Nortel Networks, AT&T, Compaq, Oracle, Eastman Kodak, Star Media, Oracle, Citigroup, PronetLink.com, Intel, Compaq, Cisco, America Online, Andersen Consulting, McConnell International, IBM, Rubin Systems, Inc., Motorola, Lucent, Discovery Channel, The Internet Society, Markle Foundation, Open Society Institute, the Solar Electric Light Fund and the Internet Alliance. The G-8 Summit provides the first opportunity to showcase these initiatives with view to greater coordination and significant increase in scale through the mechanism of the DOT.

Project Leaders: included in the compendium

Next steps: compendium to be completed and delivered to WH by Friday, 7/7; WH could invite “Digital Leaders” to a Call to Action Event

#### **B. Policy, Regulatory and Network Readiness Initiatives**

Public policy and regulatory decisions are crucial to information and communications technology usage and development. Network readiness is similarly dependent on variables ranging from the availability of basic infrastructure to the level of IT literacy and skills. A comprehensive approach will be required to remove barriers to use of the Internet and innovation in related technologies and services. Without a predictable, transparent policy, regulatory and network environment, entrepreneurs, investors, and lenders will be reluctant to enter developing country markets.

***1. Comprehensive Readiness Initiative:*** Pioneering work has been accomplished in assessing policy, regulatory and network readiness by CSPP, Harvard University, the GBDe, and APEC, among others. However, an urgent need exists for a definitive methodology, sensitive to local conditions, cultures and languages, to equip less developed countries to participate in the networked world. To be effective, the scope and scale of such an initiative will require a range of expertise and know-how combining basic principles and methodologies with a program of advocacy and advice on the ground.

A major global policy, regulatory and network readiness initiative is proposed that will cater to the individual needs of developing countries seeking guidance. The initial \$8 million fund covering up to 20 countries will be accessed by governments and private sector entities committed to comprehensive self-assessment of the country’s readiness to participate in the



network economy and society. Seeded by the US private sector and governments and foundations of the G-8, the initiative will have two principal components:

- development of policy, regulatory, and network readiness indicators on a country by country basis. The indicators will measure progress in five main areas: basic information infrastructure; enabling policy and regulatory environment; e-government; Human capacity; incentive regime for entrepreneurial activity
- establishment of an advice and advocacy Task Force drawn from academia and the public and private sectors dedicated to delivering high-level advice and advocacy on the ground.

Potential Project Leaders/Sponsors: Center for International Development at Harvard University, Center for Democracy and Technology, IBM, Markle Foundation

Next steps: (1) Further develop the "entity" to manage this initiative, (2) secure initial U.S. funding; and, (3) explore buy-in from G8 governments and funders.

**2. GBDe Policy and Regulatory Module:** The Global Business Dialogue on Electronic Commerce (GBDe) will work with leaders of the eASEAN initiative and other representatives of developing economies to produce a guide to the policy and regulatory issues that must be confronted in order to accelerate Internet usage and the development of electronic commerce. The goal will be to identify key policy and regulatory barriers, to outline approaches designed to remove these barriers, and to work with countries that want to pursue these approaches to facilitate the adoption of electronic communications. Among the areas to be addressed: telecommunications, encryption, intellectual property, trade barriers, electronic contracting and digital signatures, privacy and consumer protection law. In developing recommendations for countries interested in encouraging Internet and e-commerce adoption, special attention will be paid to the need to accommodate the varying economic, political and social needs of different countries. At the same time, the project will emphasize the common elements necessary to facilitate the growth of electronic communications worldwide.

Project Leaders: Global Business Dialogue on Electronic Commerce, eASEAN/Bobby Romulo

Next steps: Refine module; explore which other countries are interested in working with GBDe

### C. Building Human Capacity

The rise of information and communication technology has sparked rapid economic growth in developed countries. One of the principal challenges facing the global community is to ensure that advanced information technologies and applications – and the attendant economic, social and political benefits – are spread throughout the world. Many developing countries have a strong interest in the Internet and electronic commerce, but several challenges in these countries must be addressed in order to fulfill the potential of the medium, including the critical challenge of education and training.

**1. Coordinating/Scaling Up Training Initiatives:** The private sector is making a substantial commitment to a full range of training programs globally that will be critical to capacity building. These training programs are designed to address the full set of requirements for a networked society -- from educating children about how to use technology and the internet; to empowering teachers to use the medium; to courses to train students and in-transition workers to design, build and maintain computer networks; to training for "new economy" skills for displaced workers.



There are also training programs to help local communities establish high tech learning centers in schools, to train individuals to be technical experts, and to train regulators, entrepreneurs and community/national leaders. New initiatives include USTTI's commitment to train an additional 170 regulators.

Project Leaders: See compendium of training initiatives; to WH on Friday 7/7

Next steps: (1) Develop actual target numbers; (2) Determine if new funding is possible to scale up existing programs (see earlier proposal for Sustainable Internet Training Centers) with special emphasis on USTTI and ISOC programs

#### **D. Basic Connectivity, Low-Cost Devices and Applications**

Basic telecommunications connectivity is a prerequisite for Internet and electronic commerce use. Yet the lack of local, backbone and international capacity in many developing nations is a cause for concern as the developed nations reap the benefits of proliferating information infrastructure. Increasingly, the use of least cost technology methods such as IP, fiber optics, DSL, IP, fixed and 3G wireless, cellular, and satellite communications will provide the potential to bridge this gap. With a coordinated and cooperative approach among all stakeholders, deployment of at least one Internet and telephone terminal (telecenter) in every rural village, broadband connectivity to every small to medium size enterprise, and connection of every capital city to the Global Information Infrastructure could be achieved before the decade is out. In harness with the development of low cost devices and applications customized to developing nation needs, scalable and catalytic digital solutions can be created in a number of ways.

1. Digital Opportunities Summits, 16-20 October 2000: Innovative strategies to create digital opportunities via low cost solutions for basic connectivity, devices and applications in developing nations will be explored at consecutive summits. These summits will bring together key technology providers and potential technology users to explore novel business models and market development strategies that suggest major new market opportunities that extend connectivity and can potentially create significant social and environmental benefits. The events are important first steps in catalysing the active involvement of major digital companies in development, by broadening awareness of new business opportunities and stimulating new investment and business development activity.

Project Leaders: World Resources Institute, Harvard University, MIT Media Lab

Project Sponsors: Markle Foundation, Gates Foundation, Packard Foundation, Hewlett-Packard, Intel, MCIWorldcom, I-Generation

Next Steps: N/A

**2. Digital Nations Consortium:** A new research consortium that brings together a world-class collection of researchers and practitioners combining expertise in digital technologies, learning and international development to develop a new generation of technologies and applications geared towards populations with greatest needs. The consortium will test out ideas and technologies in pilot projects around the world, helping individuals and communities develop innovative strategies in domains ranging from commerce to agriculture to health care – and, more broadly, transform the ways they learn and develop.

Project Leaders/Sponsors: MIT Media Laboratory, Center for International Development/Harvard, Motorola, IBM, Intel, Mastercard



Next Steps: Additional sponsor identification/dollar numbers

### E. Clearinghouse

The Digital Divide Network launched last summer as the nation's premier clearinghouse of grants, funding opportunities, best practices and toolkits for bridging the digital divide. With more than 30,000 unique visitors per month, the Digital Divide Network continues to be a primary resource for government, industry and community efforts aimed at promoting digital opportunity. As part of an ongoing commitment to global digital opportunity, the Digital Divide Network will partner with international stakeholders and participating companies to create an "International Channel" within the Digital Divide Network.

The new channel will contain links to the best available resources existing around the world. It will also allow international partners and members to interact in a virtual idea exchange of program and policy initiatives. The new resource will be free to users and will be fully searchable. The Digital Divide Network will also begin to make its content available in other languages, starting with the International Channel - making it the premier multilingual clearinghouse for digital opportunity in the world.

Project Leaders: AOL, Benton Foundation

Next Steps: Explore partnership with World Bank Global Development Gateway and GBDe clearinghouse

### F. Additional Initiatives

**1. AOL Global Power Up Program:** PowerUP, a multimillion-dollar collaborative effort of more than a dozen major corporations, non-profits, and government agencies, has made significant progress in helping underserved youth obtain the skills, experiences and resources they need to succeed in the digital age. Based in schools and community centers around the United States, PowerUP not only provides young people with access to the wide range of content and information on the Internet, it also helps them to develop additional skills they need to succeed in the digital age. The program consists of PowerUP's "PowerPack" that delivers Gateway computers; trained adult staff; access to the Internet via AOL; innovative life enriching programming via PowerUP Online; healthy snacks from PowerBar; links with schools and educators; and community grants. PowerUP, in conjunction with America Online, proposes to launch four international PowerUP sites in 2001. These initial sites, located in cities with America Online corporate headquarters, will serve as the model template for PowerUP International. The goal of the international program will be to adapt the PowerUP "PowerPack" to meet the needs of various cultures, languages, and economies and provide it as a model for other countries to use. Key elements of the internationalization effort include:

- (1) PowerUP will adapt its online portal to be culturally and linguistically appropriate for each geographic region.
- (2) PowerUP will refine the use of PUPnet, a community extranet for PowerUP staff, to adapt to the needs of our international partners. PUPnet is designed to foster collaboration and sharing of best practices. In an international context, PUPnet will help share information on using technology to promote positive youth development.
- (3) PowerUP will adapt its training strategies for international NGOs working with youth and technology. PowerUP will also provide the necessary training for PowerUP site staff to help those involved best implement the PowerUP program.
- (4) PowerUP will explore potential international benefactor partnerships to provide hardware and software resources as well as installation support.

*So need  
also include*

Like the domestic PowerUP program, the new international pilot sites will be designed to offer positive youth development opportunities online, create relationships with local schools, fostering community involvement with PowerUP, creating local resource sustainability, providing ongoing feedback/communication, and evaluation.

**2. Vital Voices:** a project jointly funded by several corporations, including Discovery Communications, seeks to integrate women and girls into the digital community. Vital Voices recently began organizing its work, with initial efforts focused on creating the premiere community site for women on the World Wide Web. The web site will raise awareness about training programs, incubators, and other assistance projects intended to help close the digital divide. It also will provide a variety of news, links, chat/message areas, interviews, archived documents, and other content related to issues of particular interest to women. Vital Voices also intends to select emerging women leaders from throughout the world to attend IT training programs and enter incubator programs, with the goal of developing a network of women who can in turn train others in the use of communications technology in developing countries.

**3. CEO Forum on Education and Technology.** The CEO Forum plans to develop a "self-assessment tool" to permit nations, regions, districts and schools to systematically examine their use of technology in education. Such a self-assessment can serve as a platform for future plans to improve the use of technology in delivering top quality instruction. While some self-assessment tools exist for education technology, none of them have been adapted for developing nations. This will permit governments and educational institutions to develop programs to leverage technology for students with the best set of options that will enable world-class digital content to be integrated into an educational curriculum. The CEO Forum, working with the National Education Association and the National Schools Association, has developed a self-assessment tool for the United States called the School Technology and Readiness (STAR) Chart. The STAR Chart has been adopted by individual states and districts and schools all over the United States.



#### IV. A CONCRETE PROPOSAL FOR THE WAY FORWARD

Despite the significant number of initiatives currently underway and illustrated above, the digital divide is widening, not closing. As yet, there is no full understanding of the role network economics can play in wider economic and social development, nor the strategies which less developed countries should best take to enhance their own digital development. No single player or sector can bridge the digital divide. Neither can one size fit all. The only route to success is for public, private, voluntary, multilateral, and non-governmental organizations to cooperate together in integrated, holistic programmes in support of shared objectives.

The deliverable below represents has the potential to lay the foundation for such an approach as should be seen as synergistic and as a critical supporting mechanism to the creation of the G-8 Digital Opportunities Task Force.

**1. A Global Strategy to Bridge the Digital Divide:** It is proposed that the UN Development Programme (UNDP), in conjunction with Andersen Consulting and potential partners such as the Markle Foundation, develop a strategy and implementation plan for bridging the digital divide over the next five to 10 years. This will take no more than one year, with a report back to the 2001 G8 meeting. The initiative will fully support the activities of the G-8 Digital Opportunities Task Force (DOT).

The overall strategy will link the power and efficiency of Information and Communication Technologies and the Internet with development dynamics to show how countries and communities which have so far been excluded from the information society can benefit. *The implementation plan will suggest a broad timetable and set targets for bridging the global digital divide, and will propose appropriate roles and contributions from private and public organisations and NGOs, including recommendations for ongoing implementation of the program.* By the time of the 2001 G-8 meeting this should contain a series of practical commitments from public, private, multilateral and charitable organizations and from governments of less developed countries (LDCs). In particular, it will identify, develop and gain commitment to at least six immediate concrete initiatives (ideally one or two per continent), to act as exemplars for future work.

Under the leadership of the UNDP and Andersen Consulting the project team will work with public, private, academic, international and not for profit organizations on a global basis. It will consult widely both in the process of formulating the overall strategy and in shaping specific projects and brokering support for them. In particular it will seek to draw on the expertise of the World Bank and other multilateral and international agencies, plus organizations such as the GBDe the GIIC, the World Economic Forum (WEF). In order to mobilize support for the 'Call to Action', an interim presentation could be made at the WEF annual meeting in Davos in January 2001.

The UNDP and Andersen Consulting will provide appropriate staffing and support from within their global organizations, and by agreement will co-opt project team members from other organizations. Andersen Consulting will provide a full time ten-strong project team, with other senior involvement up to and including the firm's CEO and International Chairman. This deliverable totals a minimum \$5 million commitment.

**Digital Opportunity Task Force: Dot.Force**

*What are we  
specifically doing on  
1) Further details  
2) Call to Action?*

**Membership:** Government, industry, international organizations, non-profit organizations, foundations, academia -- from both developed and developing countries.

**Mission:** Serve as a catalyst for public and private actions that create digital opportunity for the people of the developing world, and maximize the contribution that new information and communications technologies can play in fostering sustainable and widely-shared economic growth, improvements in quality of life, and a vibrant civil society.

**Examples of specific challenges to be addressed:**

- **Policy, regulatory and network readiness:**
  - Advise and local capacity building to promote a policy and regulatory environment that encourages competition, private sector investment, and broad access to information and communications technologies.
  - Increased sharing of developing country experiences
- **Greater use of IT to support economic and social development**
  - Support for policies that effectively use information and communications technologies for goals such as poverty reduction, education and life-long learning, public health, culture, and good governance
- **Expanding connectivity**
  - Investment in information and communications infrastructure
  - Community access programs (e.g. tele-centers)
  - R&D on technology and applications adapted to the specific requirements of developing countries
- **Building human capacity**
  - Assisting the development of a pool of trained professionals in IT and policy/regulatory matters
  - Expand training for "end-users" of IT



- Networking of schools, research centers, universities
- **Encouraging participation in the global electronic marketplace**
  - Help existing and start-up businesses in developing countries adopt IT to improve their efficiency and access to new markets.

#### **Possible Milestones**

- Organizational meeting at experts level in October 2000
- "Action teams" formed on specific subjects by December 2000
- Meeting at ministerial level in Spring 2001.
- Report to Genoa Summit and to some high-profile developing country or U.N. meeting (e.g. G-77)

#### **Secretariat**

##### *Options:*

- Housed at World Bank, but not owned by World Bank.
- UNDP.
- Create new organization.

#### **Specific types of activities of Dot.Force**

- Build consensus on medium and long-term goals.
- Identify activities that are already underway that can meet these goals - improve coordination of existing activities.
- Identify organizations (foundations, governments, international organizations, private sector) that are willing and able to address the short-fall between current and needed investment
- Monitor progress and follow-up on commitments.
- Not a direct funder or manager of projects - but Dot.Force helps mobilize additional public and private resources by virtue of participation from people who can speak on behalf of their organization.

DETERMINED TO BE AN  
ADMINISTRATIVE MARKING

INITIALS: JM DATE: 6/22/23

2019-0203-F

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## Digital Divide

Brainstorming with heads of state - Tokyo 19 July

| USA                                                     |                               | Nominee DD task force | Status                  |
|---------------------------------------------------------|-------------------------------|-----------------------|-------------------------|
| Bill Gates / Bernard Vergnes <sup>1</sup>               | Microsoft<br>Microsoft Europe | Carrie Goux           | Pending                 |
| Stephen Case                                            | AOL                           | George Vanderburg III | Pending                 |
| Michael Dell                                            | DELL                          |                       | Pending                 |
| John T Chambers                                         | Cisco                         | Laura Ipsen           | Interested              |
| Eric Schmidt                                            | Novell                        | Raymond Nasr          | Pending                 |
| Lou Gerstner <sup>1</sup> / Lucio Stanca <sup>2</sup>   | IBM                           |                       | Pending                 |
| Scott McNealy<br>Edward Zander<br>Bill Joy<br>John Gage | Sun Microsystems              | John Gage             | McNealy+Zander declined |
| Carleton Fiorina                                        | Hewlett Packard               | Roger Wilson          | Pending                 |
| Eric Benhamou                                           | 3Com                          |                       | Pending                 |
| John Sidgmore                                           | MCI Worldcom                  |                       | Pending                 |
| Raymond Lane <sup>1</sup> / P.C. Falotti <sup>2</sup>   | Oracle                        | Juan Rada - Cancelled | Pending                 |
| Jeffrey Weitzen                                         | Gateway Inc.                  |                       | Pending                 |
| Michael Capellas                                        | Compac Computer               |                       | Pending                 |
| Tim Koogle                                              | Yahoo! Inc.                   |                       | Pending                 |

| Germany           |                  | Nominee           | Status  |
|-------------------|------------------|-------------------|---------|
| Volker Jung       | Siemens          | Rolf-Dieter Kasch | Pending |
| Hasso Plattner    | SAP              |                   | Pending |
| Ron Sommer        | Deutsche Telecom | Rüdiger W. Slabon | Pending |
| Thomas Middelhoff | Bertelsmann      |                   | Pending |

| France             |                       | Nominee         | Status   |
|--------------------|-----------------------|-----------------|----------|
| Jean-Marie Messier | Vivendi               |                 | Pending  |
| Michel Bon         | France Telecom        | Alain-Louis Mie | Pending  |
| Serge Tchuruk      | Alcatel               |                 | Pending  |
| Thierry Breton     | Thomson<br>Multimedia |                 | Declined |

| Italy             |                | Nominee | Status         |
|-------------------|----------------|---------|----------------|
| Giuseppe Morchio  | Pirelli        |         | Not written to |
| Roberto Colaninno | Telecom Italia |         | Pending        |

| Canada        |                 | Nominee | Status   |
|---------------|-----------------|---------|----------|
| John A. Roth  | Nortel          |         | Declined |
| Jean C. Monti | BCE - Teleglobe |         | Pending  |



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| Japan           |          | Nominee      | Status    |
|-----------------|----------|--------------|-----------|
| Taizo Nishimuro | Toshiba  | Akira Kagaya | Confirmed |
| Nobuyuki Idei   | Sony     | Teruo Masaki | Confirmed |
| Masayoshi Son   | Softbank |              | Pending   |

| UK                |                   | Nominee                  | Status   |
|-------------------|-------------------|--------------------------|----------|
| Marjorie Scardino | Pearson Group     |                          | Declined |
| Christopher Gent  | Vodafone Airtouch |                          | Declined |
| Peter Bonfield    | BT                | Peter Archer - cancelled | Declined |

| Other                |                 | Nominee              | Status         |
|----------------------|-----------------|----------------------|----------------|
| Kurt Hellström       | LM Ericsson     | Lars Stalberg - cld. | Declined       |
| Richard Li           | Pacific Century |                      | Confirmed      |
| Martin Velasco Gomez | Telefonica SA   | Martin Velasco Gomez | Not written to |

17 May 2000

July 6, 2000

MEMORANDUM FOR GENE SPERLING

FROM: Sean Dobson  
SUBJECT: Briefing Materials for July 6, 2000

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Please find attached the following briefing materials:

**Tab A** Deputies Meeting on Steel

- Subtab 1:** Cover Memo from Shapiro
- Subtab 2:** Overview of Steel Report
- Subtab 3:** Draft Meeting Agenda and Analysis
- Subtab 4:** Memo on Options for Rollout of Steel Report
- Subtab 5:** Most Recent Version of the Recommendations Chapter of the Steel Report
- Subtab 6:** Recent Articles on Steel Report from Inside U.S. Trade

**Tab B** Digital Divide Meeting

- Subtab 7:** Cover Memo from Kvaal on Dig Div versus Other NEC Approp Priorities
- Subtab 8:** "Clinton-Gore Agenda for Creating Digital Opportunity"
- Subtab 9:** Digital Divide Appropriations Chart as of 6/23



July 5, 2000

MEMORANDUM TO GENE SPERLING

FROM: James Kvaal

SUBJECT: Appropriations Priorities

Per your request for information on how the Digital Divide initiatives are faring compared to the NEC's other appropriations priorities, below is a summary of NEC issues that have not been fully funded so far in the appropriations process.

**DIGITAL DIVIDE.** On Labor-HHS, neither the House nor the Senate meet the President's request for \$150 million for Preparing Tomorrow's Teachers to Use Technology and \$100 million for Community Technology Centers. On the Commerce bill, the House provides one-third of the President's \$45 million request for Technology Opportunities Program and none of the President's \$50 million request for Home Access and \$23 million for Broadband. (The Senate hasn't marked up the Commerce appropriations bill yet.) However, the House and Senate do fund other education technology programs, and the House provides more for education technology than we requested.

**NEW MARKETS.** The House has not funded New Markets Venture Capital firms, Round II Empowerment Zones, or America's Private Investment Corp. The Senate has not yet acted.

**DEBT RELIEF.** The FY 2000 supplemental does not include our request for \$210 million for the HIPC Trust Fund. In FY 2001, the House provides \$82 million and the Senate \$75 million of the President's \$262 million request for bilateral and multilateral HIPC debt relief and tropical rainforest preservation. Finally, the House cuts \$520 million and the Senate cuts \$315 million from our \$1,343 million request for multilateral development banks.

**LABOR AND TRAINING PROGRAMS.** From the President's budget, the House bill cuts \$389 million from Dislocated Workers, \$200 million from Youth Opportunity Grants, \$255 million from Fathers Work/Families Win, and \$154 million from One-Stop Centers. The Senate makes similar, but smaller, cuts.

**EDUCATION.**

- **GEAR UP.** The President requested \$325 million for GEAR UP, but the House provides only \$200 million and the Senate \$225 million. However, the House provides \$760 million for TRIO, \$35 million above the President's request, and the Senate provides \$736.5 million, \$11.5 million above the request.

- **School Construction.** While the House Labor-H bill provides no funding, the Senate includes \$1.3 billion in its Title VI block grant for school construction. Conversely, a bipartisan majority has co-sponsored our School Modernization Bonds in the House but this proposal has no traction in the Senate. We are working hard to promote our message; however, if things remain on our present path we will likely be able to get dedicated funding for our renovation loans, but not pass our bonds.
- **K-12 Priorities.** The House does not fund Class-Size Reduction or Urgent School Repairs, while the Senate includes those funds in its block grant. Both the House and Senate provide only \$600 million of our \$1 billion request for After-School. The bills also ignore the President's \$1 billion teacher quality initiative in favor of the Teacher Empowerment Act (\$1.75 billion in the House) or Eisenhower Professional Development (\$435 million in the Senate).

**CHILD LABOR AND BASIC EDUCATION.** Senate Committee provided all of International Program on the Elimination of Child Labor funding and \$15 million of basic education funding, with a commitment from Sen. Specter to go to \$30 million. House Committee bill provides no increases.

**TRADE-RELATED/NEW CONSENSUS PROGRAMS.** In light of the side legislation and commitments made in connection with House passage of PNTR and enactment of Africa/CBI, we have an opportunity to activate additional Hill support for our trade, labor, and environmental international budget initiatives, many of which show signs of needing the extra political lift. Our trade enforcement, child labor, basic education, labor/environment capacity building, and community/labor adjustment proposals are potentially more compelling to the Hill when cast at least in part as follow-up/complementary to PNTR and Africa/CBI as well as an important aspect of the implicit compact we make with working Americans when we expand trade and investment, particularly with developing countries. These kinds of initiatives can only improve the Congressional climate for future trade legislation.

- **\$22 million for trade enforcement.** The House put in only \$1.3 million for USTR enforcement. Senate hasn't marked up yet.
- **\$5 million for International Labor Capacity Building/Monitoring.** \$4 million is in the Senate Labor-H bill; the remaining \$1 million was requested on the Commerce bill, which hasn't been marked up yet. Neither of the House bills provides funding.
- **\$4.75 million for International Environmental Capacity Building/Monitoring** (\$4 million requested through State and an additional \$0.75 million through EPA). Not in the House bills; the Senate Committee has not started process.
- **\$35 million for Community Economic Adjustment.** Not in House bill.



## THE CLINTON-GORE AGENDA FOR CREATING DIGITAL OPPORTUNITY

Private sector competition and rapid technological progress are powerful forces for bridging the digital divide and for making Information Age tools available for more and more Americans. The information technology industry is able to double the amount of computing power available at a given price every 12-18 months, and is now selling low-cost computers and "information appliances" – such as specialized Internet access devices. Some companies are even offering free, advertiser-supported Internet access. By working with the private sector and community-based organizations, the Administration can accelerate the trend of expanded access.

But access to technology is only the first step. We also need to give more people the skills they need to use technology, promote content and applications of technology that will help empower under-served communities, and ensure that our teachers can use technology effectively in the classroom. Below is a brief description of the initiatives that President Clinton and Vice President Gore are proposing to help accomplish these goals:

1. **\$2 billion over 10 years in tax incentives to encourage private sector donation of computers, sponsorship of community technology centers, and technology training for workers:** President Clinton's budget includes \$2 billion in tax incentives to encourage companies to donate computers to schools, libraries and community technology centers, to sponsor schools, libraries, and community technology centers in designated Empowerment Zones, and to provide basic computer training, workplace literacy, or other basic education for their employees.
  - **Encouraging companies to donate computers.** The President proposes to extend and expand an enhanced tax deduction to provide companies with an incentive to donate computers to schools, libraries and computer technology centers. This enhanced deduction allows companies to deduct more than the cost of their donation. Under current law, this enhanced deduction applies to donations of computers to schools only and expires after the year 2000. The President's proposal would extend this provision through June 30, 2004 and would expand it to donations to public libraries or community technology centers in Empowerment Zones, Enterprise Communities, and high-poverty areas.
  - **Promoting corporate sponsorship of schools, libraries and community technology centers.** The President proposes tax relief to encourage companies to sponsor schools and community technology centers in Empowerment Zones and Enterprise Communities and targeted low-income areas. The President's proposal would allocate credits for \$16 million in corporate sponsorship to each of the 31 existing Empowerment Zones and 10 proposed new Empowerment Zones and \$4 million in corporate sponsorship for each of the more than 80 Enterprise Communities. In total, the President's proposal would help support up to nearly \$1 billion in annual sponsorships to help improve schools and community technology centers.
  - **Supporting technology training for workers.** The President's proposal would provide targeted tax relief to encourage companies to provide basic computer training, workplace literacy, or other basic education for employees that lack the basic skills to succeed in the modern workplace. Companies would be allowed to take a 20 percent tax credit for up to \$5,250 in annual expenses per employee. Eligible employees generally would not have received a high school degree or its equivalent.
2. **\$150 million to help train all new teachers entering the workforce use technology effectively in the classroom:** Under the leadership of President Clinton and Vice President Gore, the United States



has made enormous progress in connecting schools to the Internet, and increasing the number of modern computers in the classroom. However, access to computers and the Internet will not help students achieve high academic standards unless teachers are as comfortable with a computer as they are with a chalkboard. President Clinton's budget calls for \$150 million in Department of Education grants -- double the last year's investment of \$75 million -- to ensure that all new teachers entering the workforce are technologically literate and can integrate technology into the curriculum. The need for this investment is clear. According to the National Center for Education Statistics, only 20 percent of teachers report that they are "very well prepared" to integrate technology into classroom. And over the next 10 years, K-12 schools will need to hire 2 million new teachers to fill the vacancies left by retiring teachers and to accommodate increasing student populations.

3. **\$100 million to create up to 1,000 Community Technology Centers in low-income urban and rural communities:** The President's budget more than triples the Department of Education's support for Community Technology Centers - from \$32.5 million in FY2000 to \$100 million in FY2001. This initiative, championed by Congresswoman Maxine Waters was initially funded at \$10 million in fiscal year 1999. The goal of the initiative is to help close the "digital divide" by providing computers and Information Age tools to children and adults that are not able to afford them at home. These community technology centers will help empower hundreds of thousands of low-income children and adults in a variety of ways. Children will be able to improve their performance in school by having access to high-quality educational software after school and prepare for the high-tech workplace of the 21st century by getting certified with an information technology skill. Adults will be able to use computers and the Internet to take a self-paced adult literacy course; get access to America's Job Bank to see what jobs are available; learn to type up a resume and cover letter using word processing software; learn to start up their own "micro-enterprise" or Web-based business, or acquire new training. A study sponsored by the National Science Foundation confirms that Community Technology Centers are helping to bridge the digital divide. Of the users surveyed: 62 percent had incomes of less than \$15,000; 65 percent took computer classes to improve their job skills; and 41 percent got homework help or tutoring at the center.
4. **\$50 million for a public/private partnership to expand home access to computers and the Internet for low-income families:** The President's budget includes a new \$50 million Department of Commerce pilot program to expand access to computers and the Internet for low-income families, and to give these families the skills they need to use these new Information Age tools effectively. This new program will provide competitive grants to public-private partnerships at the local level. Potential partners might include: local school districts seeking to expand parental involvement in education; high-tech companies willing to provide discounts on computers and access; libraries offering training on "information literacy"; employers seeking to upgrade the skills of their workforce using distance learning, and government agencies at all levels seeking to save taxpayer dollars through the electronic delivery of government services. The Administration will continue to work with the private sector and non-profit organizations on the most effective way to design this program.
5. **\$45 million to promote innovative applications of information technology for under-served communities:** President Clinton's budget will increase the investment in the Department of Commerce's highly-successful Technology Opportunities Program (TOP) to \$45 million -- triple the current level of \$15 million. This program encourages innovative applications of information technology that help empower low-income communities -- public health information systems that raise childhood immunization rates in inner-cities, tele-mentoring for at-risk youth, and electronic networks that strengthen local communities by fostering communication and collaboration.
6. **\$25 million to accelerate private sector deployment of high-speed networks in under-served urban and rural communities:** High-speed Internet access is becoming as important to the



economic vitality of a community as roads and bridges are today. The President will propose a new \$25 million program at the Department of Commerce and the Department of Agriculture to accelerate private sector deployment of broadband networks in under-served urban and rural communities -- using grants and loan guarantees. The potential payoff from these kinds of investments is enormous. One company, for example, has helped people move from "welfare-to-work" by connecting their community with the high-speed networks needed to support telecommuting. This solves some of the biggest barriers associated with welfare-to-work -- lack of childcare and transportation.

7. **\$10 million to prepare Native Americans for careers in information technology and other technical fields:** The National Science Foundation will support efforts by tribal colleges to increase the number of Native Americans who are prepared to pursue careers in information technology and other technical fields. The ability to use technology is becoming increasingly important in the workplace, and jobs in the rapidly growing information technology sector pay almost 80 percent more than the average private sector wage.

**Digital Divide/Digital Opportunity Appropriations**

|                                                                      | <b>Administration<br/>Request</b> | <b>House</b> | <b>Senate</b> |
|----------------------------------------------------------------------|-----------------------------------|--------------|---------------|
| Tax Incentives                                                       | \$2,000                           | No action    | No action     |
| Preparing Tomorrow's Teachers to Use Technology<br>(Education)       | \$150                             | \$85         | \$125         |
| Community Technology Centers<br>(Education)                          | \$100                             | \$32.5       | \$65          |
| Connecting America's Families<br>(Commerce/NTIA)                     | \$50                              | \$0          | No action     |
| Technology Opportunities Program<br>(Commerce/NTIA)                  | \$45                              | \$15.5       | No action     |
| Broadband<br>(Commerce/EDA)                                          | \$23                              | \$0          | No action     |
| Broadband loan program for rural programs<br>(USDA/RUS)              | \$2                               | \$1.4        | \$2           |
| IT Training for Native Americans<br>(National Science Foundation)    | \$10                              | \$10         | No action     |
| Technology for people with disabilities<br>(Department of Education) | \$141                             | \$110        | \$136         |

**Other Education Technology Programs**

|                                        |       |       |       |
|----------------------------------------|-------|-------|-------|
| Technology Literacy Challenge Fund     | \$450 | \$517 | \$425 |
| Next Generation Technology Innovation  | \$170 | \$0   | \$0   |
| Technology Innovation Challenge Grants | \$0   | \$197 | \$100 |
| Star Schools                           | \$0   | \$45  | \$43  |

**As of July 5, 2000**



NEED GS SIGN - off

June 27, 2000

MEMORANDUM FOR DISTRIBUTION

FROM: GENE SPERLING, ASSISTANT TO THE PRESIDENT FOR ECONOMIC POLICY

NEAL LANE, ASSISTANT TO THE PRESIDENT FOR SCIENCE AND TECHNOLOGY

RE: MEETING ON DIGITAL DIVIDE AND PEOPLE WITH DISABILITIES

We would like to invite you to participate in a meeting to discuss an upcoming Presidential event on bridging the digital divide for people with disabilities. The meeting will be held in the Roosevelt Room in the West Wing of the White House, on July 10<sup>th</sup> at 10:00 a.m. To RSVP, please contact Joe Crisci at (202) 456-2807. Please feel free to bring one person from your staff.

**Background**

As part of his "digital divide" initiative, President Clinton will hold an event in August or September to focus on the need to make information and communications technologies more accessible for people with disabilities. At the event, he will announce new initiatives by government and industry to make progress on this important issue.

Information and communications technologies have the potential to improve the quality of life for people with disabilities and increase their ability to participate in the workplace. However, if they are not accessible, people with disabilities could be further isolated from the mainstream of America's economy and society.

We would like to explore what role research agencies could play in ensuring that people with disabilities will benefit from new information and communications technologies. Examples of possible actions might include:

- Increasing investment in R&D that will improve the "state-of-the-art" for assistive technology and universal design;
- Supporting efforts by industry consortia and other standards-setting organizations to work to make their technologies accessible (the Web Accessibility Initiative is an example of this);
- Supporting testbeds that integrate assistive technologies (e.g. advanced home design, intelligent transportation systems);
- Promoting adoption of assistive technology and universal design within your agencies;

- Transferring technologies that have been developed for other purposes but might benefit people with disabilities; and
- Encouraging universities to make universal design part of the training of IT professionals.

We would appreciate it if you could come with a written presentation of your agency's current activities and what additional concrete steps your agency might be able to take in this area.

We look forward to working with you on this important initiative.

**Distribution**

Defense, Dr. Delores Etter  
Education, Judith Heumann, Dr. Kate Seelman  
Energy, Dr. Ernie Moniz  
FCC, William E. Kennard  
NASA, Dan Goldin  
NIH, Dr. Ruth Kirschstein  
NIST, Ray Kammer  
NSF, Dr. Rita Colwell  
VA, Dr. John Feussner



June 25, 2000

MEMORANDUM FOR GENE SPERLING

FROM: TOM KALIL

RE: MEETING WITH PRIVATE SECTOR ON GLOBAL DIGITAL DIVIDE

**Summary:** The purpose of this meeting is to review the current draft of the private sector document on "global digital divide" and to see whether it is possible to converge on a few concrete deliverables -- possibly before the President leaves for the G-8 summit.

Options

1. **Coordinating Mechanism:** Create a "Digital Opportunity Committee" with representation from governments (from the developing and developed worlds), multilateral institutions, private business, the philanthropic community, academics, and NGOs.

*Comments:* Broad agreement that we should do this -- although the notion that we should create a fund of \$500 million has not been discussed in any serious way.

2. **Policy, Regulatory and Network Readiness Guide:** Readiness and self-assessment guides that build on work by Harvard, World Economic Forum, Global Business Dialogue on E-Commerce.

*Comments:* This is clearly a good deliverable, we need some greater clarity on who does what.

3. **Education and Training:** Create 8 "Sustainable Internet Training Centers" around the world to train 3,000 - 5,000 people per year in developing countries. G-8 countries should set a goal of sending 5,000 private sector IT professionals.

*Comments:* As written, their proposal looks like the government pays for the training. We should ask them whether countries that already have training programs (e.g. Cisco Network Academy) would be willing to expand them overseas. Also -- we want to expand training to include NGOs.

4. **Basic Connectivity, Low Cost Devices and Applications:** Summit in October 2000, university-based centers of excellence on low-cost devices and applications.

*Comments:* We proposed the "centers of excellence" idea -- not clear whether some company or group of companies will step forward to fund it.

5. **Incubators, Social Venture Capital Fund:** Incubators to create Internet-related start-ups in developing countries, social venture funds to make investments that may not have a huge return on investment.

*Comments:* Good idea -- World Bank is also exploring this.

## MEMORANDUM

June 23, 2000

To: Lael Brainard

From: Lisa Barry and Julia Moffett

Re: G8 Private Sector Meeting

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Please find attached the most recent list of attendees for Monday's meeting, a tentative agenda, and a document from which we plan to work on Monday. Additionally, below are some comments we thought might be useful prior to your planning meeting this afternoon.

### Context

We have come to think of this meeting as the "end of the first phase and beginning of the second." Over the past month and a half, significant progress has been made by the initial working group to coordinate and develop some very strong ideas that can feed into a large-scale US initiative. The Monday meeting can serve to solidify some of the major ideas and begin to identify key stakeholders. The meeting will be comprised of both the initial active participants as well as a considerable number of new members who had not previously been engaged.

While some of the participants have not yet been introduced to some of the specific ideas on the table, everyone recognizes that activity on this front is being discussed in almost every corner and is often more talk than action. This process presents an important opportunity to coordinate what are a lot of efforts and momentum for this issue, and to use the G8 process to give it more depth, reach and momentum. In many ways, this process is a deliverable in and of itself.

### Deliverables

The current list of "deliverables" is attached. You will see that some are farther along than others. There are some very strong ideas reflected here that, added up, form a very strategic and comprehensive initiative. In some instances, you will see that commitments and likely partners are already on the table. In other instances, we are still at the stage of developing and shopping the ideas and see Monday's meeting an opportunity to do so with an important group. It is most likely that people will need to come back with commitments and leadership roles at a date to be set.



## The White House

As we discussed a few days ago, this seems like the appropriate moment for your team to engage a little more deeply with this group. We are aware of your constraints in appealing to them, however, your ability to provide context, incentive, support and a sense of urgency will be important in boosting this crowd to the next level. Specifically, we suggest:

- You open the meeting by welcoming the group and thanking so many new faces who have joined the earlier team. I would go ahead and directly outline how you might like this process to move: (a) today is the last of the idea review/refinement; (b) we are hopeful that after today's meeting, individuals can go back and see where they might participate; (c) the timetable is "x" and a presidential process would look like "y."
- We feel it is very important that you provide a contextual overview of the G8 and how this plays into it. Two points in particular might be useful: frame this for them so they understand that what you want to build here is a Presidential – US - Private Sector Initiative to showcase US leadership that you may then be able to generate additional partners for in Japan as well as give momentum and coherence to the efforts along the way. From there, let them know that the ideas we are hoping to move forward today are parts of a strategic whole, not piecemeal.
- Additionally, we think it is critical that you then talk about the proposal for the Digital Opportunity Committee. It is important that the group know that this is moving along, both so they don't spend time reinventing it, and also so they see some broader ideas and activity that involve all the necessary actors. You should know that there is solid support for the creation of a \$500 million fund from both governments and private sector players and that it may well be raised.
- Lastly, while we can moderate the meeting (see attached proposed agenda), active involvement from members of your team could really be useful at this juncture – both in terms of the refinement of the ideas themselves during the meeting and in the ability to work on them from here on out.

## Next Steps

We should leave this meeting with a clear path forward. Our sense is that you will set the stage for how the process might move forward with regards to Presidential involvement, integration into the G8 meetings, timetable, etc. Additionally, depending on where we feel the group is, your team will be able to assist in the continued development of these initiatives. We will certainly attempt to make sure leadership roles have been assigned on individual issues and can continue to liaison with the group and drive specific initiatives as appropriate.

Talking points for Intellibridge event  
Tom Kalil - Draft 7:00 p.m.

① China - Democ  
② uses - w/o all in  
③ Balance w/ st- priority  
④ Competition: Mexico  
1-53  
Jag-  
10-53

**Q. The Clinton Administration clearly has an interest in ensuring that the digital divide doesn't grow between developed and developing countries? What are you planning on doing about it?**

- It's obviously not something that the United States can do on its own -- it really is going to require a partnership between developed and developing countries -- and between government, multilateral institutions like the World Bank, the private sector, and NGOs.
  - But as the country that is leading the world in the Information Revolution, I think we have a special interest and a special obligation to serve as a catalyst -- and to focus international attention on this issue.
  - This is an issue that President Clinton and his counterparts will be discussing at the G-8 summit in Okinawa.
  - Obviously -- IT is not a silver bullet for all of the economic and social challenges that developing countries face -- that's why the President will also be discussing universal education, debt relief, and infectious diseases.
  - I think there are at least three things that we help with -- including support for policy reform, training, and pilot projects.
  - We've also been having conversations with the U.S. private sector about what they might do to help bridge the digital divide.
1. **Putting in place the right policies:** Clearly, if the Internet and the IT sector is to thrive in developing countries -- they need to adopt the right policies. That's what will attract private sector investment. That means taking steps such as:
- Promoting competition and privatization in the telecom sector
  - Not allowing dominant telecom carriers to charge exorbitant prices for the telecom infrastructure
  - Allowing entry from any company that wants to be an Internet Service Provider
  - Allowing e-commerce to flourish
- Obviously -- developing countries have to want to adopt these policies -- but we can help by providing:
  - Technical assistance

Best Policy  
① Policy Possible



- Regulator-to-regulator training (e.g. the FCC working with its counterparts)
- Collecting and disseminating best practices in developing countries

## 2. Training:

- All countries face a shortage of people with the necessary skills to build and effectively utilize the Internet and other new information technologies.
- Organizations like the Internet Society have been training people in developing countries to become networking experts - but have only been able to reach a few hundred people per year. I think efforts like this need to be scaled up.
- Not only do we have to reach the techies and the Internet gurus -- we also have to reach the people who will be using the networks -- the doctors who might be able to tap into the latest medical databases, or educators in developing countries.

## 3. Pilot projects focused on applications

- Technology is not an end in itself -- it's a powerful tool for addressing a number of important economic and social goals. U.S. and other developed countries should be supporting pilot projects that demonstrate the power of IT to make a difference in developing countries:
  - **Micro-enterprise development:** How can developing country micro-enterprises use e-commerce to expand their markets, sell directly to customers in global markets, and thereby get more revenue from their products?
  - **Health:** In Africa -- IT was used successfully in the war against river blindness. This freed up 100,000 square miles of land capable of feeding 17 million people, and protected 30 million people from getting infected. [IT was used to gather information on black-fly population -- and calculate the best times to use pesticides.]

## Q. Why should this be a priority for developing countries -- when they face so many other challenges?

- Promoting IT is part of a comprehensive development strategy that has to include adopting the right fiscal and monetary policy, investing in education, health, etc.
- IT can help address these other development challenges -- through distance learning, telemedicine, support for microenterprises, etc.

## Q. What do you think about the U.N. proposal to create a \$500 million fund for IT?

- I think we are open to considering proposals to increase global investment in this area, but we've made no final decisions. Obviously, this would require agreement from other major developed countries as well.

## **Background**

### **1. Statistics on global digital divide**

- Only 5 percent of the world's population is connected to the Internet.
- There are more computers connected to the Internet in New York than in Africa.
- There are more computers connected to the Internet in Finland than in Latin America and the Caribbean combined.
- Africa – outside of South Africa – generates 0.02 percent of global content on the Internet (2/100<sup>th</sup> of 1 percent)
- Bangladesh – which has a population of 125 million – has 1/5 the number of Internet users as the World Bank.
- It is estimated that half of the world's population has never made a phone call.
- The Internet and IT is starting to take off in some developing countries. In Latin America – spending on information and communications technologies grew 42 percent from 1997 to 1999 – compared to 15 percent growth rate during the same period in North America.

### **2. Statistics on importance of IT and Internet**

- Global e-commerce could reach \$7 trillion by 2004.
- Worldwide spending on information and communications technologies reached \$2.1 trillion by the year 2003.
- 1.5 billion Web pages with almost 2 million pages being added each day.
- IT accounting for 1/3 of U.S. economic growth – and is generating jobs that pay 85 percent more than the average private sector wage.
- Widespread adoption of Internet and IT technologies helps account for U.S. economic performance – high growth, rising productivity, low inflation, reduced risk of dip in the business cycle from unplanned inventories.

### **3. Administration record**

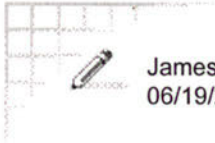
- In 1994 – Vice President Gore gave a speech before the ITU on the “Global Information Infrastructure” – articulating five principles for the construction of the GII – private sector investment, competition, flexible regulation, open access, and universal service.



- In 1995 – the Vice President launched the Leland Initiative – a 5 year, \$15 million initiative to expand the Internet in over 20 sub-Saharan African countries. The initiative was named after Mickey Leland – whose plane went down in Ethiopia, and had strong bipartisan support from Congressman Jack Fields – a close friend of Mickey's. [Kalil worked on this.]
- In an October 12, 1998 address to the International Telecommunications Union, Vice President Gore set forth a series of "grand challenges" to ensure that everyone, including people living in developing countries, has the opportunity to benefit from new information and communications technologies. These included improving access to computing and communications technology so that everyone is within walking distance to voice and data services, creating global knowledge networks, and supporting e-commerce, especially for small businesses in developing countries.
- On November 30 1998, President Clinton directed the Secretary of State, AID, and other agencies to "initiate a program to help accelerate the spread of the Internet and electronic commerce to developing countries." This was done as part of the release of the First Annual Report of the U.S. Government Working Group on Electronic Commerce. Since then, State and AID has identified 12 countries that have agreed to work with the United States. These countries include Guatemala, Haiti, Jamaica, Bulgaria, Egypt, Morocco, Ghana, Guinea, Uganda, South Africa, Mozambique and India.

#### 4. Importance of IT for development

- **Equity:** Even the ability for farmers to find out what price their crops are selling for in the capital city can make a big difference – in some cases doubling the price that they are able to get from middlemen.
- **Micro-enterprises:** Many micro-enterprises in developing countries have been helped. Helen Mutono, a Ugandan woman, uses the Internet to sell her handmade African baskets; and spends the proceeds on helping children who have been orphaned by AIDS. In a letter to Vice President Al Gore, Ms. Mutono wrote, "For the grandmothers and aunts who are burdened with the responsibility of caring for these orphans, access to the Internet may be the only way of reaching the global market and making real income from their handicrafts."
- **Democratization:** The Internet makes it very difficult for governments to control the flow of information. Access to the Internet by NGOs will strengthen civil society by allowing "many to many" communication outside of state-run or state-controlled print and broadcast media.
- **Sharing of best practices:** Internet makes it possible to form communities that are based on shared interests as opposed to geography – and easier to disseminate "best practices."
- **Health:** Doctors in developing countries can access the latest medical literature – that would otherwise not be available to them.
- **Anti-corruption:** Getting government online increases transparency and reduces opportunity for corruption in government procurement.



James R. Kvaal  
06/19/2000 08:12:36 PM

Record Type: Record

To: See the distribution list at the bottom of this message

cc:

Subject: memo on work-study and digital divide

per Gene's request, here is more information on a proposal for using federal work-study students to address the digital divide. it would be great if he could see it in the next day or two so we can keep moving forward and have this ready when it's needed.

thanks.



FWS dig divide.d

Message Sent To:

---

David Tseng/OPD/EOP@EOP  
Melissa G. Green/OPD/EOP@EOP  
Elliott H. Baer/OPD/EOP@EOP  
Joseph N. Crisci/OPD/EOP@EOP  
Thomas A. Kalil/OPD/EOP@EOP

JX/TAK



June 19, 2000

MEMORANDUM TO GENE SPERLING

FROM: James Kvaal

SUBJECT: Work-Study and the Digital Divide

As you know, the Corporation for National Service suggested an initiative to use college work-study students to address the digital divide. Like America Reads and America Counts, "America Connects" would waive the college or employer's match for participating work-study students. Tom Kalil and I met with the Corporation and the Department of Education last week to discuss this idea.

Concept.

In schools, work-study students can:

- Assist teacher workshops — perhaps co-sponsored by the school district — in basic computer skills such as word processing, email, browsing the Internet, etc.;
- Provide classroom support, such as helping teachers create a web-based library of term papers or a database of science supplies, lesson plans, etc.;
- Work in small groups with young children to help them develop computer skills;
- Provide technical support for hardware, software and network maintenance; and
- Train K-12 students to provide teacher assistance and technical support.

In community-based organizations, community service students can:

- Help develop web sites;
- Help teach adults computer professional use and repair skills;
- Staff community technology centers; and
- Organize computer recycling programs.

Discussion.

America Connects would:

- Encourage college students to further K-12 education reform in an area where they can make a real difference; and
- Combine two of the President's priorities, national service and the digital divide.

However, there are policy trade-offs. Some are concerned that it would:

- Reduce the comparative advantage of America Reads and America Counts over other work-study jobs, and thereby undercut those initiatives;
- Further undermine the institutional match component of the work-study program;
- Make it more difficult to maintain the President's goal of one million work-study students. However, the Department of Education believes it would not significantly impact the number of recipients (see attached table); and
- Require regulatory amendments. To change the regulations this year, the Secretary must exempt the new rule from negotiated rulemaking — something he did for American Reads and America Counts, but prefers not to do often.

The Department of Education doesn't have concerns about the policy but notes that we should seek early buy-in from the higher education community. OMB staff notes the policy trade-offs of this policy, but does not object to it.

#### Recommendation.

Tom and I believe that this is a promising policy and we should implement it. If you agree, we will:

- Work with the Corporation, the Department, and OMB to flush out the design of the program and identify model programs (such as a program with about 100 students at the University of Pennsylvania) and potential partnerships (such as businesses or foundations to train the college students);
- Work with the Corporation and the Department to reach out to the higher education community, both associations and college presidents; and
- Work with Dorton and WH Communications on an announcement strategy.



*"The power of the Web is in its universality.  
Access by everyone regardless of disability is an essential aspect."*

**Tim Berners-Lee**, W3C Director and inventor of the World Wide Web

The World Wide Web offers unprecedented access to information, electronic commerce, educational opportunities, employment opportunities, workplace communication, government services, recreation, and more. However, there are currently barriers on the Web for people with visual, hearing, physical and cognitive disabilities.

The World Wide Web Consortium (W3C) is committed to promoting a high degree of usability for people with disabilities. Web accessibility solutions also benefit other users, such as those using mobile devices, those with low bandwidth connections, or without audio output on a device. W3C's Web Accessibility Initiative (WAI), in coordination with industry, disability organizations, research centers and government, addresses accessibility of the Web through five complementary activities:

- Ensuring that Web technologies support accessibility
- Developing guidelines for accessibility
- Developing tools to evaluate & facilitate accessibility
- Conducting education and outreach
- Coordinating with research and development

### W3C/WAI RESOURCES:

Guidelines:

**Web Content Accessibility Guidelines (WCAG):** <http://www.w3.org/TR/WCAG>  
**Authoring Tool Accessibility Guidelines (ATAG):** <http://www.w3.org/TR/ATAG>  
**User Agent Accessibility Guidelines (UAAG):** <http://www.w3.org/TR/UAAG>

Additional resources linked from the WAI home page <http://www.w3.org/WAI> include:

Getting Started: Making a Web Site Accessible  
Curriculum on Web Content Accessibility Guidelines  
Online Overview of WAI  
Techniques for WCAG, ATAG, UAAG  
Accessibility Features of HTML, CSS, SMIL  
Fact Sheets for WCAG, ATAG  
Alternative Web Browsing  
Evaluation and Repair Tools  
Policies Relating to Web Accessibility  
Quick Tips to Make Accessible Web Sites

### QUICK TIPS:

The "Quick Tips to Make Accessible Web Sites" on the back of this flyer provide an introduction and memory prompt for key concepts of the Web Content Accessibility Guidelines. The complete guidelines are available at <http://www.w3.org/TR/WCAG>, and include a prioritized checklist. Copies of the Quick Tips in a business-card sized format can be ordered from <http://www.w3.org/WAI/References/QuickTips>.

W3C's Web Accessibility Initiative International Program Office is supported in part by funding from the U.S. National Science Foundation; U.S. Department of Education's National Institute on Disability and Rehabilitation Research; the European Commission's DG XIII Telematics for Disabled and Elderly Programme; Government of Canada, Industry Canada; Microsoft Corporation; IBM/Lotus; and Bell Atlantic.

## QUICK TIPS TO MAKE ACCESSIBLE WEB SITES

- **Images & animations.** Use the **alt** attribute to describe the function of each visual.
- **Image maps.** Use client-side **MAP** and text for hotspots.
- **Multimedia.** Provide captioning and transcripts of audio, and descriptions of video.
- **Hypertext links.** Use text that makes sense when read out of context. For example, avoid “click here.”
- **Page organization.** Use headings, lists, and consistent structure. Use **CSS** for layout and style where possible.
- **Graphs & charts.** Summarize or use the **longdesc** attribute.
- **Scripts, applets, & plug-ins.** Provide alternative content in case active features are inaccessible or unsupported.
- **Frames.** Use **NOFRAMES** and meaningful titles.
- **Tables.** Make line-by-line reading sensible. Summarize.
- **Check your work.** Validate. Use tools, checklist, and guidelines at [www.w3.org/TR/WCAG](http://www.w3.org/TR/WCAG).

**FOR COMPLETE GUIDELINES & CHECKLIST: [WWW.W3.ORG/WAI](http://WWW.W3.ORG/WAI)**



*Mike  
Rosen*

*Al  
Dinsmore*

*Long  
Goldby*

*Greg  
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Waters*

*Judy B.*

*M. Damm*

*Steve Jackson  
NCR - Ideas*

*Andy  
APU*



Judy Brewer <jbrewer@w3.org>  
06/07/2000 07:38:39 PM

Record Type: Record

*Jane West*

To: Gene B. Sperling/OPD/EOP, Thomas A. Kalil/OPD/EOP, Jonathan M. Young/WHO/EOP  
cc: Joseph N. Crisci/OPD/EOP, Janet Daly <janet@w3.org>, Alan Dinsmore <adinsmore@afb.net>  
Subject: Ideas for disability digital divide tour

---

Dear Gene:  
cc: Tom Kalil, Jonathan Young

To follow up on our previous discussions, here are ideas for goals that could be pursued in the context of a digital disability divide tour. Some of these ideas have come out of discussions with Tom Kalil, and some from discussions that Jonathan Young has organized.

The theme could include Web accessibility, but need not be exclusive to Web accessibility; e.g. it could encompass industry commitments to implement Web accessibility guidelines and other guidelines, and to increase involvement in the W3C/Web Accessibility Initiative and similar activities; and commitments to contribute funds to this and other industry-disability partnerships in the area of accessible mainstream technology development.

I appreciate your continuing interest in addressing this topic. Please let me know if I can be of any help in further discussing or developing these possibilities. I can be reached at 617 258 9741.

Regards,

- Judy

#### A. POTENTIAL COMMITMENTS TO REQUEST COULD INCLUDE:

##### 1. "Implementation commitments" could include:

- \* Businesses could commit to implement the Web Content Accessibility Guidelines 1.0, level 1, by December 2000, and level 2 by July 2001, so that their Web sites would be accessible to people with disabilities;
- \* Developers of Web authoring software (software used to make Web sites) could commit to implement the Authoring Tool Accessibility Guidelines 1.0 at level 1 by December 2000 and level 2 by December 2001, so that software used to create Web sites would more readily produce accessible sites;
- \* Developers of Web user agents (browsers, multimedia players, and assistive technologies used with those) could commit to implement the User Agent Accessibility Guidelines 1.0, at level 1 by July 2001 and level 2 by July 2002, so that browsers and multi-media players would be accessible to people with disabilities;
- \* Software developers could commit to implement other set(s) of relevant software accessibility guidelines by specific dates, to increase the

accessibility of mainstream computer software available to people with disabilities.

2. "Involvement commitments" could include:

- \* Software developers could commit to assign an increased number of engineers to work on implementing accessibility solutions within their own companies, in their own products;

- \* Software developers could commit to assign an increased number of engineers to participate in and contribute to consensus-based vendor-neutral discussions (such as those at W3C/WAI) on developing accessibility guidelines and/or accessible approaches to mainstream technologies.

3. "Funding commitments" could include:

- \* Businesses could commit funds to support research and development on accessible mainstream technologies and assistive technologies;

- \* Businesses could commit funds to support new partnerships on development of accessible technologies and/or consensus-based development of accessibility guidelines;

- \* Businesses could commit to fund training in emerging technologies for people with disabilities in order to facilitate increased participation by people with disabilities in discussions to improve the accessibility of mainstream technologies.

## B. SUGGESTED LIST OF BUSINESSES FROM WHICH TO INVITE COMMITMENTS

The following suggested list includes over twenty businesses which might be invited to participate in making commitments if the focus were specific to the Web. These include major, nationally-known players in the Web industry whose public commitments would help drive significant improvements in accessibility of the Web.

About half are major Web content producers; and half develop some of the leading software for the Web. Many of these organizations are already discussing or have begun to implement Web accessibility solutions. The attached notes are informal only and do not represent official statements about the companies.

Adobe Systems Corporation

<http://www.adobe.com/>

Produces graphics tools for the Web.

Allaire Corporation

<http://www.allaire.com/>

Produces authoring tools for the Web.

Amazon

<http://www.amazon.com/>

Electronic commerce site which pioneered book sales over the Web.

American Express

<http://www.americanexpress.com/>

Provides financial services over the Web.

America Online, Inc.

<http://www.aol.com/>

Provides internet services, and produces browsers and authoring tools.



AT&T

<http://www.att.com/>

Provides telecommunications services and products.

Bell Atlantic

<http://www.bellatlantic.com/>

Provides telecommunications services.

Boeing

<http://www.boeing.com/>

Manufacturers airplanes; was early adopter of Web throughout corporation including on shop floor.

C|NET

<http://www.cnet.com/>

Provides online news services, and pioneered news delivery over the Web.

E-Bay

<http://www.ebay.com/>

Provides online auction services.

Fidelity

<http://www.fidelity.com/>

Provides online investment services.

IBM

<http://www.ibm.com/>

Develops browsers and authoring tools and provides electronic commerce services.

Macromedia

<http://www.macromedia.com/>

Develops Web authoring tools.

Microsoft Corporation

<http://www.microsoft.com/>

Develops browsers and authoring tools.

Motorola

<http://www.motorola.com/>

Manufactures devices including mobile phones that can be used to access the Web.

New York Times

<http://www.nytimes.com/>

Provides online news services.

Oracle Corporation

<http://www.oracle.com/>

Develops authoring tools including database software for the Web.

RealNetworks

<http://www.real.com/>

Develops multimedia players for the Web.

Quark

<http://www.real.com/>

Develops authoring tools including desktop publishing tools for the Web.

Sun Microsystems

<http://www.sun.com/>

Develops technologies for the Web including Java.

Xerox

<http://www.xerox.com>

Develops printers and copiers for output of Web-based material.

Yahoo

<http://www.yahoo.com/>

Web indexing site and portal which provides online Web search services.

## C. SUGGESTION FOR BOSTON-BASED SEGMENT OF DISABILITY DIGITAL DIVIDE TOUR

The following outline describes a potential cluster of Boston-area highlights, around a common theme of Web accessibility. The focus would include an overall theme of collaborative work between industry, the disability community, and access research organizations on Web accessibility, and resources that are available for implementing Web accessibility solutions.

An announcement about implementation, involvement, and/or funding commitments could be made during this event. The format and/or participants could be adjusted in a number of ways. This is similar to a proposal sent to Jonathan in March from Larry Goldberg (director of National Center for Accessible Media at WGBH) and myself (director of Web Accessibility Initiative at W3C).

Proposed program: Remarks by the President, followed by four ten-minute demos and presentations around the theme of Web accessibility, for an estimated program length of one hour. Venue could be MIT's Interactive Classroom "LiNC" (Learning Network Central) - a fully-wired lecture hall for connecting with remote classrooms globally. Themes could include:

- Web accessibility is vital for millions of Americans;
- Web accessibility is do-able;
- there is progress in accessible online education, in e-commerce, and in software development to support accessible Web design.

Highlights could include the following four projects:

Project: World Wide Web Consortium (W3C)  
Web Accessibility Initiative (WAI)

Focus: Guidelines, technology development,  
education/outreach to make Web accessible.

Detail: International effort, hosted by World Wide Web Consortium (W3C), to make Web accessible for people with disabilities. Ensures support for accessibility in core Web technologies; develops guidelines for Web sites, browsers, authoring tools; develops tools & educational materials; funded in part by the Department of Education's NIDRR (National Institute on Disability and Rehabilitation Research) and NSF.

Demo: Provides overview & context for following presentations. Brief description of cross-disability barriers and demos of resources available for making Web sites and software accessible.

Contact: Judy Brewer, Director Web Accessibility Initiative, W3C  
jbrewer@w3.org, 617 258 9741  
<http://www.w3.org/WAI>

Project: WGBH National Center for Accessible Media (NCAM)  
& MIT PIVOT Project (Physics Interactive Video  
On-Line Tutor)



Focus: Accessible on-line education

Detail: Collaborative effort with WGBH/NCAM & MIT Center for Advanced Educational Services (CAES), to make an introductory physics class accessible on-line, using captions for audio and descriptions for video; funded in part by NSF.

Demo: Individual w/ a visual disability and individual with a hearing disability browsing accessible physics curriculum; and brief demo of captioning & description tools. Brief description of project by NCAM Director and CAES Director.

Contact: Larry Goldberg, Director National Center for Accessible Media, WGBH  
Larry\_Goldberg@wgbh.org, 617 300 3722  
<http://www.wgbh.org/ncam>

Project: Bell Atlantic's BellAtlantic.com site

Focus: Accessible e-commerce Web site

Detail: Shows corporate commitment to Universal Design Principles and implementation of W3C Web Content Accessibility Guidelines on commercial Web site.

Demo: Brief tour by individual with visual disability of e-commerce aspects (checking phone bill, purchasing services)

Contact: Rich Ellis, Director of Strategic Alliances, Bell Atlantic  
rtellis@bellatlantic.net, 202 336 7839  
<http://www.bellatlantic.com>

Project: Allaire Corporation's HomeSite authoring tool

Focus: Integration of accessibility principles into top of market commercial-grade authoring tool for Web sites

Detail: Presentation of accessibility improvements underway in HomeSite

Demo: Demo of how easily accessible pages can be built w/ HomeSite; and how little effort is required to convert inaccessible pages.

Contact: Patrik Muzila, Development Manager for Visual Tools Group, Allaire Corporation  
patrik@allaire.com, 617 761 2175  
<http://www.allaire.com/products/homesite/index.cfm>

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Judy Brewer jbrewer@w3.org +1.617.258.9741 <http://www.w3.org/WAI>  
Director, Web Accessibility Initiative (WAI) International Program Office  
World Wide Web Consortium (W3C)  
MIT/LCS Room NE43-355, 545 Technology Square, Cambridge, MA, 02139, USA

June 15, 2000

**MEMORANDUM FOR MARY BETH CAHILL**

**FROM:** Jonathan Young, OPL Associate Director for Disability Outreach

**CC:** Maria Echaveste, Assistant to the President and  
Deputy Chief of Staff

Gene Sperling, Assistant to the President and  
Director, National Economic Council

Tom Kalil, Special Assistant to the President for Economic Policy

**RE:** President Clinton's Digital Divide Disability Trip

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**INTRODUCTION**

On April 18, in Chicago, President Clinton made a public announcement: "in a couple of months we will have a part of this digital divide tour devoted solely to the potential that web accessibility offers to disabled Americans to participate more fully in the educational and economic life of the United States." Information Technology offers unprecedented potential to level the playing field for people with disabilities and offer greater participation in the education, economic, and social fabric of our nation. It also improves the likelihood of financial independence and economic self-sufficiency for people with disabilities.

The purpose of this memo is to: 1) provide background information about the digital divide for people with disabilities; 2) suggest themes for framing the President's trip; 3) discuss possible destinations and deliverables for the trip; and, 4) suggest a strategy meeting to discuss next steps.

**I. BACKGROUND**

**A. EMPLOYMENT OF ADULTS WITH DISABILITIES**

Administration Disability Policy currently centers on the need to increase employment opportunities for people with disabilities. Despite low overall unemployment rates, there is a staggering rate of unemployment for working-age people with "severe" disabilities -- in the range of 73.9% (according to data reported by the Census Bureau, based on the 1994-95 Survey of Income and Program Participation). The Administration has focused on how a *coordinated* and *holistic* approach is necessary to successfully increase employment rates. The availability of a



job, for example, may be practically meaningless if an individual does not have a place to live, or transportation to get to a job, or health care, or adequate education and training, or assistive technology, etc.

The framework for the President's New Markets Initiative dovetails with the employment challenges for people with disabilities. In fact, the language the President used to explain the need for the work incentives legislation closely paralleled the way he discussed New Markets. "Even as we celebrate more than 18 million new jobs and a nationwide unemployment rate of 4.2 percent, the lowest in a generation..., 75 percent of Americans with disabilities remain unemployed," the President said on June 4, 1999. "This is not just a missed opportunity for Americans with disabilities. It's a missed opportunity for America. This is an era now of labor shortages, where companies go begging for employees they need to stay competitive in the global economy. And we simply cannot afford to ignore the potential of millions of potential workers simply because they have a disability."

The difficulty with making a direct link between the New Markets Initiative and people with disabilities was that they (fortunately) do not constitute geographically-concentrated markets. People with disabilities instead are a sort of "cyber-community" spread throughout the nation, who cut across every race, ethnicity, gender, sexual orientation, and religion. The New Markets concept -- of being an untapped resource that could not only empower individuals but also help the economy -- was directly applicable to people with disabilities, but not concretely demonstrable. The President's Digital Divide initiative, however, makes a direct integration of people with disabilities possible.

## **B. OPL ACTIVITIES REGARDING DIGITAL DIVIDE FOR PEOPLE WITH DISABILITIES**

In January, following the President's State of the Union Address, OPL began facilitating conversations with disability advocates about the Digital Divide for people with disabilities, and solicited examples of efforts already taking place to bridge the divide. Community representatives joined an OPL-wide Digital Divide briefing on February 22, and noted the specific needs of people with disabilities. OPL subsequently began hosting weekly conference calls with individuals interested in digital opportunities for people with disabilities, to identify the nature of the challenges and generate suggestions for how they could be addressed.

On March 10, as part of its outreach efforts to multiple constituencies regarding the Digital Divide, OPL hosted a briefing for the disability community. The discussion underscored the real gaps in access to computers and the internet for people with disabilities, and highlighted the possibilities of accessible information technology. In particular, technology experts noted the importance of "usability." They explained that when we speak of "universal accessibility" we tend to mean universal *availability* -- carrying an assumption that the products made available could also be used by all purchasers. But the availability of a given type of technology does not mean it is necessarily *usable* (more discussion of this concept below).

In addition to weekly conference calls since the March 10 meeting, OPL has met individually with a variety of groups -- corporate as well as non-profit -- to discuss possibilities for the



President's Digital Divide Tour. Although there was some disappointment that disability issues did not get more fully integrated into the original tour, the disability community is excited about the President's announcement of an additional disability-related trip.

On Thursday, June 1, OPL convened a meeting of representatives from federal agencies to review possible federal initiatives to bridge the Digital Divide for people with disabilities.

### C. OVERVIEW OF DIGITAL DIVIDE FOR PEOPLE WITH DISABILITIES

Although the disability community has recognized the benefits and importance of technology for many years, the Department of Commerce's high-profile consideration of the Digital Divide, has devoted little attention to the importance of information technology for people with disabilities.

A recent DoED-funded report, "Computer and Internet Use Among People with Disabilities," helps fill the disability void in *Falling Through the Net*. The study "demonstrates that gaps in computer and Internet use based on disability status are *just as large as those based on race and ethnicity* [emphasis added]." Its principle findings, based on Current Population Survey data include:

- 32.6% of people aged 15-64 with a work disability have a computer in their home (compared with 55.6% in same age range of the general population );
- 15.8% of people aged 15-64 with a work disability have Internet access at home (compared with 33.9% in same age range of the general population);
- 15.1% of people aged 15-64 with a work disability use the Internet either at home or elsewhere (compared with 42.3% in same age range of the general population);
- Disparities in computer ownership and Internet access among seniors with work disabilities parallel the 15-64 population.

The report also explains that, beyond the general gaps between people with disabilities and the general population, the disability community is similarly affected by general socio-economic factors:

- Disparities regarding computers and the Internet according to level of **education** among people with disabilities parallel the general population;
- Disparities regarding computers and the Internet according to level of **income** among people with disabilities parallel the general population.

The study also indicates similar usage patterns of the Internet for people with disabilities and the general population:

- Reasons for Internet use among people with disabilities are similar to the general population (e-mail and searching for information the two most common reasons);
- 17.0% of people with disabilities use the Internet to shop, pay bills, or for other commercial activity.



#### D. CURRENT PROJECTS AND INITIATIVES FOR BRIDGING THE DISABILITY DIGITAL DIVIDE

Examples of projects and programs across the country currently attempting to bridge the Digital Divide for people with disabilities include the following:

- **ABLE-NET Internet Service** specializes in offering affordable, accessible Internet Access for People with Disabilities in 31 States and Canada;
- The **CPB/WGBH National Center for Accessible Media (NCAM)** is collaborating with the Massachusetts Institute of Technology's Center for Advanced Educational Services to make an on-line interactive physics course accessible to students with disabilities;
- The **Web Accessibility Initiative** of the World Wide Web Consortium is developing standards for accessible web design;
- **Bancroft e-Solutions** seeks to identify job openings conducive to telecommuting and match with individuals working out of their home over the Internet.
- **CAST** is a leader in the development of the Universal Design for Learning educational paradigm, working to make the general educational curriculum accessible and educationally relevant for everyone;
- **DPI** (Disabled Programmers, Inc.) is a nonprofit agency working in partnership with Silicon Valley businesses and the community to prepare people with disabilities for competitive employment. Through adaptive computer access technology and career transition services, DPI creates opportunities for significant advances in universal access, social integration, and employment for people with disabilities;
- **Edapta**, a for-profit company, is developing third-party Internet solutions that would enable customization of Internet information according to one's visual and input preferences.
- **e-Transcribe**, started by Goodwill Industries of Hawaii, trains individuals with disabilities to become medical transcriptionists and provide them contract work to perform from their homes using an array of technology, including computers with voice activated software, the Internet, and Dictaphone equipment.
- **High School High Tech**, a program of the President's Committee on Employment of People with Disabilities, seeks to provide high school students with internships with high-tech companies and agencies, including Goddard Space Flight Center in the Washington, DC area. The program currently has projects in 10 states.
- The **Merze Tate Center for Technology and Educational Reform** at Western Michigan University is leading a public-private initiative to develop a national on-line support center to help facilitate the training of people with disabilities for employment in the fast growing computer industry.
- The **Motion Picture Access Project**, with initial funding from NIDRR, has developed digital technology that allows people who are deaf or blind to access closed-captioning or video descriptions in movie theaters.
- **Virtual Buddies** takes donated computers, and donated Internet accounts, and places them in the homes of low-income people with different disabilities. The program gives individuals largely isolated in their homes a way to communicate with others and enhance their education through distance learning.



## II. THEMATIC FRAMEWORK

### A. SUGGESTED THEMES FOR POTUS DISABILITY TRIP

The President's Disability Digital Divide trip will meet with the greatest success if it is situated in the broader context of employment of *people* with disabilities, not merely on the specific *technologies* that enable many people with disabilities to participate in the digital economy. Moreover, even the issues of technology access can be presented in the broader context of *usability* for all Americans. This framework will help ensure greater collaboration from the business community, which is in many respects fearful of a regulatory approach, and has even mobilized efforts against internet accessibility (for example, a February 9, 2000 congressional hearing on the subject). Two main themes are suggested for the framework for the trip:

**Maintaining Economic Growth.** The United States has reached its lowest unemployment in decades by dipping under 3.9%. While this is a great achievement, it also presents challenges for meeting labor shortages. Congress has issued visas for high technology workers because so many positions have gone unfulfilled. With unemployment among people with "severe" disabilities exceeding 70%, not to mention underemployment of people with disabilities generally, people with disabilities represent an under-utilized reserve of American labor. Finding ways to encourage companies to hire and to mentor people with disabilities, and to work with the non-profit disability community to build awareness of job opportunities, is essential. One of the best ways of reducing the digital divide for people with disabilities is to increase employment, since income-level, as with the general population, is a strong determinant of access.

**Availability & Usability.** "Access" is generally discussed in terms of the availability of computers and the internet. Equally important is "usability," which applies to everyone. Individuals of all ages, backgrounds, and abilities have a variety of ways of accessing electronic information. Language, visual, motion, and hearing impairments have all been barriers that have presented substantial challenges. Some of the technologies originally designed to make electronic information usable to people with disabilities have wide applicability in the general population. The tools that have helped people with disabilities will make it easier for all Americans; developing more of them is the challenge and opportunity. Examples of "usability" include:

- Language translation software for documents;
- Speech Recognition software that eliminates the need to use a keyboard;
- "Audiotext" where the content of a document is verbally articulated for user to listen to;
- "Sticky keys" that make it easier for users who have difficulty using regular keyboards input information.

### B. CONCEPTUAL POSSIBILITIES FOR DELIVERABLES



Ideally, a powerful package of announcements could focus on private-sector hiring commitments in collaborative partnerships with government and non-profit entities. Such an announcement would include:

- commitments to provide all necessary reasonable accommodations, including assistive technologies;
- commitments to accessible web design;
- mentoring/internship programs;
- design stage R&D for accessible products and software;
- new efforts at data collection and reporting regarding people with disabilities and information technology;
- education and training; and,
- efforts to provide hardware and software to people with disabilities.

This announcement could also be linked with implementation of the Ticket to Work and Work Incentives Improvement Act. Business and government entities could emphasize they want to make the legislation a reality by providing employment opportunities, and disability organizations could help by identifying people with disabilities who are able and ready to work.

### **III. DESTINATIONS AND DELIVERABLES**

#### **A. POSSIBLE DESTINATIONS FOR A TRIP**

**Willow CyberCenter Networks (Miami, FL).** Willow is a web-based Network for telecommuting customer service operations, which is reaching out to people with disabilities to become an integrated component of its pool of CyberAgents representing people of all ages and backgrounds.

**Web Accessibility Initiative, MIT, and WGBH (Boston, MA).** WAI is working to help make websites more accessible; MIT is developing innovative internet-based, cross-disability instruction; and WGBH is creating captioning technologies in partnership with MIT and others.

**Georgia Tools for Life and Georgia High School High Tech (Atlanta, GA).** Georgia Tools for Life sponsors ReBoot, a computer recycling program for people with disabilities. Georgia's High School High Tech program is one of the most extensive in the country, providing high tech internship opportunities for disabled high school students.

**Western Michigan University in (Kalamazoo, MI).** Western Michigan University in cooperation with IBM, Smartforce.com and Monster.com along with the Association of Rehabilitation Programs in Computer Technology (ARPCT) are about to launch a national on-line support center for preparing people with disabilities for IT careers.

\* More detailed information on each of these possibilities is available as requested.

## B. POSSIBLE DELIVERABLES

OPL has been discussing a variety of deliverables with for-profit and not-for-profit entities. Most of the potential deliverables are still in planning stage, in part because people do not have a solid grasp of when the President's trip will take place; some lack certainty that the trip will in fact take place. Likely deliverables, however, include the following entities.

- **Procurement Central, Inc.** wants to announce a major commitment to hire thousands of people with disabilities for its web-based procurement data management centers (the CEO is a person with a disability);
- **Willow CyberCenter Networks** is exploring possible ways to build on their commitment to hiring people with disabilities as CyberAgents;
- Members of the **Able to Work Consortium**, a network of corporate business leaders, are exploring the possibility of hiring commitments;
- **NCR Corporation** submitted a proposal for the initial trip and is now putting together a new proposal (OPL met with NCR representatives on Friday, May 26);
- **The National Rehabilitation Hospital** is developing an initiative to provide low-end computers or web devices to patients with disabilities leaving the hospital and provide training in information technology;
- The President's Committee on Employment of People with Disabilities is seeking to expand its **High School High Tech** program, perhaps announcing new projects in additional states;
- **HalfthePlanet.com**, an internet portal for people with disabilities, is exploring an initiative to provide scholarships supporting design-stage engineering projects;
- **Edapta** has proposed using SSA's Access Seniors website as a test site for its Internet transformations;

\* More detailed information on each of these possibilities is available as requested.

## IV. Recommended Strategy Session

The following individuals would be ideal for a strategic planning meeting, tentatively scheduled for Thursday, June 22, at 11:00 AM.

**\*Judy Brewer:** Director of the World Wide Web Consortium's Web Accessibility Initiative, she is a leading expert in the mechanics of designing and developing standards for accessible websites.

**Steve Jacobs:** President of IDEAL, a non-profit at NCR Corp. dedicated to promoting the hiring of people with disabilities, he is an expert in a variety of accessible technologies, including information kiosks.

**David Bolnick:** Accessibility Program Manager at Microsoft, he is the engine behind the Microsoft-inspired Able To Work consortium and the Enable educational video about computers and people with disabilities.



**\*Greg Vanderheiden:** Director of the Trace Research and Department Center in Madison, WI, he is a leading expert who has worked closely with corporations such as Microsoft to encourage integration of accessible technologies.

**Cynthia Waddell:** ADA Coordinator, City of San Jose, she is a well known author and speaker on the subject of the Internet and the fair and accessible presentation of information for everyone, including presentations before the Department of Commerce.

**Andrew Imparato:** President of the American Association of People with Disabilities, he is working with AOL and others about IT for people with disabilities, focusing not so much on specialized technologies but the basic income- and education-based divide.

**Ed Eckenhoff:** President of the National Rehabilitation Hospital, he is developing a web-based initiative, HealthTown, which will enable patients to communicate with the hospital more efficiently, and provide discharged patients with computer or web devices.

**\*Alan Dinsmore:** Executive Director of the American Council of the Blind, he is an expert on the accessibility issues for individuals who are blind and visually-impaired.

**Jane West:** Disability consultant working with the Association of Tech Act Projects and corporations, including Edapta.

\* Attended the March 10 Digital Divide meeting.

## CONCLUSION

President Clinton's Disability Digital Divide trip provides an outstanding opportunity to demonstrate the potential of technology in improving the educational, social, and economic lives of people disabilities, which can result in increased economic independence and self-sufficiency. Equally important, the New Markets framework offers a way to redefine the relationship between the disability and business communities. At a time when Clint Eastwood has publicized an adversarial relationship between people with disabilities (as represented by "parasitic attorneys") and the business community, the Digital Divide trip can help move both the disability and the business communities toward **a collaborative relationship based on win-win results.**

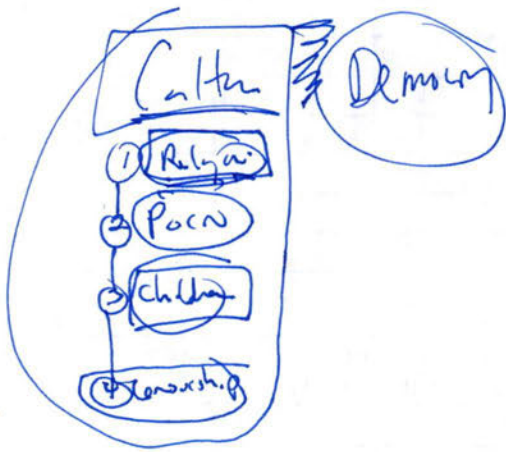
**INTELLIBRIDGE GLOBAL INFOTECH DEVELOPMENT INDEX**
*Weighted Scores*

| Rank | Country      | Overall Score | Fixed Lines/k | Mobile Phones/k | PCs/k  | Internet Hosts/10k | Population online | Tech R&D |
|------|--------------|---------------|---------------|-----------------|--------|--------------------|-------------------|----------|
| 1    | USA          | 85.60         | 98.07         | 44.76           | 100.00 | 100.00             | 100.00            | 70.74    |
| 2    | Sweden       | 82.72         | 100.00        | 81.12           | 78.81  | 38.54              | 97.86             | 100.00   |
| 3    | Finland      | 81.72         | 82.20         | 100.00          | 76.14  | 74.02              | 84.04             | 73.94    |
| 4    | Norway       | 74.64         | 97.92         | 82.87           | 81.42  | 49.99              | 93.60             | 42.02    |
| 5    | Australia    | 62.60         | 75.96         | 50.00           | 89.75  | 31.67              | 80.35             | 47.87    |
| 6    | Canada       | 60.58         | 94.07         | 33.07           | 71.96  | 28.03              | 94.48             | 44.15    |
| 7    | Singapore    | 54.62         | 83.38         | 60.49           | 99.96  | 21.36              | 32.45             | 30.05    |
| 8    | Japan        | 52.36         | 74.63         | 65.38           | 51.72  | 10.85              | 37.11             | 74.47    |
| 9    | U.K.         | 52.08         | 82.64         | 44.06           | 57.35  | 17.90              | 58.63             | 51.86    |
| 10   | Germany      | 49.78         | 84.12         | 29.72           | 66.44  | 11.53              | 42.76             | 64.10    |
| 11   | Israel       | 46.46         | 69.88         | 62.76           | 47.36  | 12.42              | 23.84             | 62.50    |
| 12   | Korea        | 46.17         | 64.24         | 52.80           | 34.19  | 3.68               | 47.09             | 75.00    |
| 13   | Taiwan       | 44.87         | 77.80         | 91.15           | 34.58  | 17.88              | 47.81             | -----    |
| 14   | France       | 43.93         | 84.57         | 32.87           | 45.31  | 7.33               | 33.69             | 59.84    |
| 15   | Ireland      | 42.98         | 35.98         | 44.93           | 59.25  | 10.39              | 35.98             | 42.82    |
| 16   | New Zealand  | 43.70         | 71.07         | 35.49           | 61.51  | 31.56              | 34.88             | 27.66    |
| 17   | Italy        | 38.57         | 66.91         | 62.06           | 37.81  | 4.53               | 36.18             | 23.94    |
| 18   | Spain        | 28.96         | 61.42         | 31.29           | 31.57  | 5.09               | 20.44             | 23.94    |
| 19   | Greece       | 27.76         | 77.45         | 33.92           | 11.32  | 3.95               | 27.42             | 12.50    |
| 20   | Czech Rep.   | 22.79         | 54.01         | 16.43           | 21.22  | 5.67               | 7.51              | 31.91    |
| 21   | Hungary      | 19.90         | 49.85         | 18.36           | 12.84  | 6.17               | 14.08             | 18.09    |
| 22   | Poland       | 15.22         | 33.83         | 8.74            | 9.57   | 2.71               | 16.00             | 20.48    |
| 23   | Chile        | 13.19         | 30.42         | 11.36           | 10.51  | 1.42               | 7.37              | 18.09    |
| 24   | Malaysia     | 12.34         | 29.38         | 17.31           | 12.78  | 1.56               | 6.62              | 6.38     |
| 25   | Russia       | 11.90         | 29.23         | 0.87            | 8.85   | 0.87               | 8.15              | 23.40    |
| 26   | Argentina    | 11.70         | 30.12         | 13.64           | 9.66   | 1.85               | 4.81              | 10.11    |
| 27   | Turkey       | 11.12         | 37.69         | 9.27            | 5.06   | 0.53               | 2.21              | 11.97    |
| 28   | S. Africa    | 11.05         | 17.06         | 9.79            | 10.34  | 2.21               | 8.26              | 18.62    |
| 29   | Brazil       | 10.70         | 17.95         | 8.22            | 6.56   | 1.22               | 8.72              | 21.54    |
| 30   | Venezuela    | 9.68          | 17.36         | 15.21           | 9.38   | 0.26               | 2.85              | 13.03    |
| 31   | Costa Rica   | 8.79          | 25.52         | 4.90            | 8.53   | 0.69               | 7.51              | 5.59     |
| 32   | Mexico       | 7.49          | 15.43         | 6.12            | 10.25  | 1.53               | 2.87              | 8.78     |
| 33   | Colombia     | 7.27          | 25.67         | 8.57            | 6.08   | 0.50               | 2.80              | -----    |
| 34   | Saudi Arabia | 6.77          | 21.22         | 5.42            | 10.82  | 0.08               | 3.09              | -----    |
| 35   | Iran         | 6.27          | 16.62         | 1.05            | 6.96   | 0.00               | 0.22              | 12.77    |
| 36   | China w/o HK | 5.80          | 11.05         | 3.32            | 1.94   | 0.03               | 1.57              | 17.55    |
| 37   | Pakistan     | 5.67          | 2.82          | 0.17            | 0.85   | 0.01               | -----             | 24.47    |
| 38   | Philippines  | 5.54          | 5.49          | 3.85            | 3.29   | 0.09               | 0.07              | 20.48    |
| 39   | Ukraine      | 5.33          | 28.34         | 0.35            | 3.01   | 0.30               | -----             | -----    |
| 40   | Thailand     | 5.03          | 12.46         | 5.59            | 4.71   | 0.30               | 3.64              | 3.46     |



|                                                    |                   |             |       |      |      |       |      |       |
|----------------------------------------------------|-------------------|-------------|-------|------|------|-------|------|-------|
| 41                                                 | <i>Tunisia</i>    | <b>4.41</b> | 12.02 | 0.70 | 3.21 | ----- | 2.56 | 7.98  |
| 42                                                 | <i>India</i>      | <b>4.07</b> | 4.07  | 0.17 | 0.59 | 0.01  | 0.99 | 19.41 |
| 43                                                 | <i>Kaz</i>        | <b>4.06</b> | 15.43 | 0.35 | 0.00 | 0.09  | 0.00 | 8.51  |
| 44                                                 | <i>Peru</i>       | <b>3.77</b> | 9.94  | 5.24 | 3.95 | 0.20  | 3.31 | ----- |
| 45                                                 | <i>Egypt</i>      | <b>3.06</b> | 3.06  | 0.17 | 1.98 | 0.02  | 1.43 | 0.06  |
| 46                                                 | <i>Indonesia</i>  | <b>2.79</b> | 2.79  | 0.87 | 1.79 | 0.05  | 8.17 | 0.02  |
| 47                                                 | <i>Senegal</i>    | <b>0.94</b> | 2.37  | 0.35 | 2.49 | 0.02  | 0.15 | 0.27  |
| 47                                                 | <i>Vietnam</i>    | <b>0.94</b> | 3.86  | 0.35 | 1.40 | ----- | 0.04 | ----- |
| 48                                                 | <i>Nigeria</i>    | <b>0.71</b> | 0.59  | 0.00 | 1.24 | 0.00  | 0.02 | 2.39  |
| 49                                                 | <i>Kenya</i>      | <b>0.37</b> | 1.34  | 0.00 | 0.55 | 0.01  | 0.53 | 4.00  |
| 50                                                 | <i>Bangladesh</i> | <b>0.24</b> | 0.45  | 0.17 | 0.00 | 0.00  | 0.01 | 0.80  |
| Ranking based on relative weighting against leader |                   |             |       |      |      |       |      |       |

|   | Region                            | Overall Score | Fixed lines/k | Mobile phones/k | PCs/k | Internet Hosts/10k | Population Online % | Tech R&D |
|---|-----------------------------------|---------------|---------------|-----------------|-------|--------------------|---------------------|----------|
| 1 | USA/Canada                        | <b>80.43</b>  | 41.96         | 94.39           | 85.61 | 98.45              | 97.27               | 64.89    |
| 2 | Euro-zone                         | <b>47.08</b>  | 40.21         | 49.91           | 10.44 | 48.19              | 76.26               | 57.45    |
| 3 | E Europe/<br>Russia/ Central Asia | <b>11.71</b>  | 2.97          | 7.98            | 0.99  | 7.48               | 29.53               | 21.28    |
| 4 | Emerging East Asia                | <b>9.33</b>   | 4.37          | 3.07            | 0.16  | 2.87               | 10.39               | 35.11    |
| 5 | Latin America                     | <b>9.13</b>   | 7.87          | 7.41            | 0.98  | 4.86               | 18.25               | 15.43    |
| 6 | N Africa and Middle East          | <b>2.89</b>   | 1.4           | 2.16            | 0.02  | 1.77               | 12.02               | 3.34     |
| 7 | Sub-Saharan Africa                | <b>1.31</b>   | 0.87          | 1.64            | 0.15  | 0.44               | 2.08                | 2.66     |



Thanks while script prayer  
Internet



Draft June 9, 2000

## Specific Public and Private Sector initiatives for Developing Countries

### 1. IT Readiness:

- a. **Readiness self-assessment:** Building on tools like the Harvard-IBM guide, all developing countries would be offered self-assessment tools of their current readiness to embrace information and communications technology and e-commerce. These assessments would look at metrics such as availability and cost of information and communications products and services, the availability of training, and the extent to which the policy environment helps or hinder the growth of IT adoption. Completing this assessment could be a condition to participating in some of the initiatives described below.
- b. **Regulatory Training** G-8 Governments could commit to providing a series of regulator-to-regulator training seminars that would be conducted around the world, on a regional basis. This would provide expertise to enable developing countries to move toward transparent, pro-competitive regulatory regimes that will encourage private investment. This could build on existing efforts by the FCC and USTTI to provide regulators with education and training in policies that promote privatization, competition, and private sector investment.
- c. **Clearinghouse:** Developing countries would have access to an easy-to-use clearinghouse of best policy and regulatory practices to move forward on the issues identified in their self-assessment.

### 2. Human Capital for the Information Age.

- a. **Technical Training** – providing technical experts (people who can manage national and regional networks, provide staff for Internet Service Providers, Internet content providers and application developers. See: <http://www.isoc.org/inet98/ntw-report.shtml> for a model that could be scaled.

*Cost:* Assuming that travel and tuition for a one week workshop would be \$5000 per person. Training 4,000 developing country professionals would cost \$20 million/year. Private sector could provide in-kind contributions of equipment and trainers and development of curriculum.

- b. **IT Volunteers:** G-8 countries could set a goal of collectively sending 5,000 private sector IT professionals from developed countries to spend a semester in developing countries. This would build on existing efforts such as the U.S. Government's Global Technology Corps; NetCorps Canada International and other efforts that currently help match private sector volunteers with projects that need it.

- c. **Exchange program:** Governments, foundations and the private sector could support the development of an exchange program to train entrepreneurs and other developing country professionals. Exchanges could be "South-to-South" (e.g. Africa to India) as well as "South-to-North."

### 3. Promotion of innovative applications of IT for developing countries

- a. **Applications Training** -- Foundations and NGOs with experience in use of the Internet in specific application areas (i.e. telemedicine, micro-e-commerce, public health information, cultural preservation, etc.) could commit to partnering with G-8 and corporations to add application-specific training to regional conferences.
- b. **Digital Libraries for Development:** Sponsor "digital libraries for development" in areas such as: Public health; Agriculture; Micro-enterprise and policies towards the informal sector; and education and training. Digital libraries could contain courseware, case studies, reference material, statistics, papers, etc. Also help support "communities of interest" through e-mail discussions and other forms of interaction between practitioners.

*Cost:* \$2 million/year per library.

- d. **Expand efforts of multilateral institutions to promote innovative applications:**  
Expand programs in multilateral institutions such as InfoDev.

### 4. Encourage creation of IT businesses in developing countries

- a. **Create venture funds and incubators:** Provide risk capital and managerial and technical assistance to IT businesses in developing countries.
- b. **Create "social venture" funds:** These funds would look at both the commercial and social rates of return, and might support projects that can be self-sustaining (e.g. community access centers that provide telephony and Internet access) -- but are unlikely to provide the huge potential "upside" (10x or more return from initial investment) that VC firms are looking for.

### 5. Encouraging the Development of Technology for Meet Needs of LDCs.

Provide Design and Development Incentives for low-cost computing and communications devices for LDCs. These should include devices that can be used off the power grid, without a wired telecommunications infrastructure, and that operate on visual or verbal commands for low-literacy populations.

- a. **Centers of Excellence for Affordable IT:** Governments, foundations and the private sector could support the establishment of university-based "centers of excellence" that would conduct research and development on low cost devices, connectivity and applications to make IT widely available in low-income communities. Centers of excellence would be funded in both developed and developing country universities.

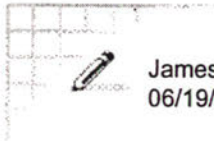


Centers would also provide inter-disciplinary education and training at the intersection between IT and development.

Cost: \$5 million per center per year - \$50 million for 10 centers.

6. **Create "Development in the Information Age" Network**

- Participation from both developed and developing countries, and both government, private sector, foundations, and community-based organizations.
- World Bank secretariat, but not "owned" by the Bank.
- Has responsibility for creating "one stop shop" for readiness assessment, creating a forum for discussion and consensus-building on these issues, and collecting/disseminating best practices among developing countries.



James R. Kvaal  
06/19/2000 08:12:36 PM

Record Type: Record

To: See the distribution list at the bottom of this message

cc:

Subject: memo on work-study and digital divide

per Gene's request, here is more information on a proposal for using federal work-study students to address the digital divide. it would be great if he could see it in the next day or two so we can keep moving forward and have this ready when it's needed.

thanks.



FWS dig divide.d

Message Sent To:

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David Tseng/OPD/EOP@EOP  
Melissa G. Green/OPD/EOP@EOP  
Elliott H. Baer/OPD/EOP@EOP  
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JX/TAK



June 19, 2000

MEMORANDUM TO GENE SPERLING

FROM: James Kvaal

SUBJECT: Work-Study and the Digital Divide

As you know, the Corporation for National Service suggested an initiative to use college work-study students to address the digital divide. Like America Reads and America Counts, "America Connects" would waive the college or employer's match for participating work-study students. Tom Kalil and I met with the Corporation and the Department of Education last week to discuss this idea.

Concept.

In schools, work-study students can:

- Assist teacher workshops — perhaps co-sponsored by the school district — in basic computer skills such as word processing, email, browsing the Internet, etc.;
- Provide classroom support, such as helping teachers create a web-based library of term papers or a database of science supplies, lesson plans, etc.;
- Work in small groups with young children to help them develop computer skills;
- Provide technical support for hardware, software and network maintenance; and
- Train K-12 students to provide teacher assistance and technical support.

In community-based organizations, community service students can:

- Help develop web sites;
- Help teach adults computer professional use and repair skills;
- Staff community technology centers; and
- Organize computer recycling programs.

Discussion.

America Connects would:

- Encourage college students to further K-12 education reform in an area where they can make a real difference; and
- Combine two of the President's priorities, national service and the digital divide.

However, there are policy trade-offs. Some are concerned that it would:

- Reduce the comparative advantage of America Reads and America Counts over other work-study jobs, and thereby undercut those initiatives;
- Further undermine the institutional match component of the work-study program;
- Make it more difficult to maintain the President's goal of one million work-study students. However, the Department of Education believes it would not significantly impact the number of recipients (see attached table); and
- Require regulatory amendments. To change the regulations this year, the Secretary must exempt the new rule from negotiated rulemaking — something he did for American Reads and America Counts, but prefers not to do often.

The Department of Education doesn't have concerns about the policy but notes that we should seek early buy-in from the higher education community. OMB staff notes the policy trade-offs of this policy, but does not object to it.

#### Recommendation.

Tom and I believe that this is a promising policy and we should implement it. If you agree, we will:

- Work with the Corporation, the Department, and OMB to flush out the design of the program and identify model programs (such as a program with about 100 students at the University of Pennsylvania) and potential partnerships (such as businesses or foundations to train the college students);
- Work with the Corporation and the Department to reach out to the higher education community, both associations and college presidents; and
- Work with Dorton and WH Communications on an announcement strategy.



## G-8 PROPOSAL:

### MOVING FROM GLOBAL DIGITAL DIVIDE TO OPPORTUNITY

#### I. THE CHALLENGE

The international "digital divide" between industrialized and developing countries is immense and growing. Only half of the approximately 275 million people currently accessing the Internet reside outside North America. In the Middle East and Africa, slightly more than one million and two million people are online, respectively. Just 3 percent of the world's Internet users live in South America. As a result, many developed and developing countries are concerned that the developing countries will not participate fully in the social and economic benefits of a networked world.

A G-8 initiative that helps to close the international "digital divide" would:

- Assure developing countries that the developed world is politically committed to their full participation in the Information Revolution;
- Integrate developing countries more fully into the burgeoning global economy, increasing peace and stability as well as prosperity;
- Help developing countries to address their most pressing social challenges in education, health and cultural preservation;
- Encourage the free flow of ideas and information and, therefore, the spread of universal values of human rights and democracy; and
- Prompt increased international cooperation and understanding on a host of global Internet issues.

#### II. LESSONS LEARNED

G-8 governments, the international community, the private sector, non-governmental organizations and many developing country governments have launched programs designed to bridge the international digital divide. Experience with these projects has shown that:

- In order to fully participate in the new global information economy and attract long-term private sector investments in this area, countries must adopt pro-competitive policy and regulatory regime. This includes ensuring that e-commerce rules and regulations are transparent, predictable and fair. It also means liberalizing telecommunications, transportation, and delivery services and ensuring that goods flow quickly and predictably through the customs process.
- Investments from the international community that target technical (e.g., connectivity) and human (e.g., technical education) limitations and include community-based approaches can speed development considerably.
- Institutions and governments in developing nations will succeed only if they take full advantage of new technologies (leapfrogging older ones), reject outdated approaches and embrace bureaucratic and policy change.



Existing assistance efforts, however, have been inadequate to for two reasons:

- Available resources have been limited; and
- Resource commitments to date have not been coordinated among donors.

It is essential, therefore, that the G-8 increase efforts and resources to close the international digital divide and to coordinate development efforts more closely.

### III. COLLABORATION AMONG THE G-8, PRIVATE SECTOR, FOUNDATIONS AND MULTILATERAL INSTITUTIONS

The G-8 could agree to establish a "Digital Opportunities Working Group" and identify key contacts in participating G-8 governments. The group should be tasked with developing a comprehensive approach to closing the digital divide that leverages contributions from the private sector, including foundations.

The G-8 Role. At the most practical level, the G-8 is best situated to adopt a coordinating role rather than a direct operational role. The G-8 provides a unique venue for coordinating and catalyzing the activities of G-8 governments, private sector groups and multilateral institutions. The G-8 should focus on rationalizing efforts, avoiding duplication, and identifying synergies. These coordinating activities could be undertaken using information technologies provided by the private sector and hosted with possible assistance from a multilateral development organization. The G-8 also could explore establishing other mechanisms that would encourage the adoption by developing countries of appropriate policy and regulatory frameworks.

Private Sector Partnerships. The G-8 also should work to mobilize corporations and other private sector entities to establish programs and provide funding for efforts to close the international digital divide. The recent announcement by Softbank that it would help fund a \$200 million investment fund designed to "incubate" Internet-related businesses in the developing world is just one example of a public-private partnership that can contribute significantly to helping countries participate in the Global Information Economy. The private sector is also a potential source of hardware, software, training and technical assistance, in particular for countries that have agreed to adopt pro-competitive policies. The G-8 initiative should encourage and channel several types of private sector initiatives.

Leveraging Foundation and NGO Efforts: In recent years, non-profit foundations -- both independent foundations and those affiliated with corporations -- have played an increasingly important role in closing the digital divide, especially in developed countries. These foundations have critical experience identifying appropriate programs and significant financial resources to fund them. We should encourage foundations to devote additional resources to the international dimension of this problem.

Non-governmental organizations (NGOs) also have a key role to play. NGOs have the on-the-ground experience needed to identify critical developmental needs and suggest the most appropriate responses. They also have the human capacity, operational know-how, and existing infrastructure to manage programs seeded with G-8 resources.



Mobilizing Non-traditional Actors: The G-8 also should focus on mobilizing non-traditional actors. Universities, technical colleges, medical clinics, even museums are an often-overlooked source of critical expertise. The G-8 should seek to identify those institutions that are ready and able to collaborate with sister institutions in developing countries.

A Declaration of Commitment: The G-8 should work with the private sector, foundations, and NGOs to memorialize by the G-8 meeting in June the role of the private sector in "A Declaration of Commitment." This document would commit the private sector to addressing the international digital divide and state specific objectives.

#### IV. THE VISION: A DIGITAL COMPACT

The G-8 should begin by articulating a vision for cooperation with developing countries. A vision statement should present a practical sense of what the G-8 hopes to achieve and a message of hope and confidence to developing countries. Developing countries recognize that they are not keeping pace with rapid technological changes and seek assurances from the developed countries that they are sensitive to disparities in the use of the Internet and other Information and Communication Technologies (ICTs). The suggested vision paper, possibly in the form of a "Digital Compact" among G-8 countries or with developing countries, should:

- Articulate a role for developed countries to play in efforts to address the digital divide;
- Suggest the scope and scale of the G-8 commitment; and
- Outline the responsibilities of developing countries in helping themselves to participate in the Global Information Economy and Society.

This vision statement also should reflect and underscore the qualities of the Internet. The Internet is:

- Inclusive -- Participation in the Internet is open to all;
- Distributed -- There are no inherent limits to the geographical diffusion of the Internet;
- Flexible -- The Internet can be adapted to a nearly limitless assortment of social and economic challenges; and
- Synergistic -- The network becomes more valuable as more people connect to it.

#### V. G-8 ACTION PLAN

The G-8 action plan should focus on the critical sectors that will enable developing countries to prepare most effectively for participation in the Global Information Economy and those that demonstrate most clearly the potential benefits of joining the Global Information Society. A balanced agenda that stresses economic development and social growth is most likely to achieve long-term support in developing countries.



## Establishing the Critical Preconditions

While the G-8's primary operational role is coordination, one of its key objectives should be to articulate the three critical preconditions for investment and growth:

*Building the Right Environment:* Creating a liberalized, pro-competitive regime for telecommunications services is a critical precursor to the development of information economies. Our first objective should be helping developing countries to create a regulatory, policy framework that encourages privatization, liberalization and competition in the telecommunications and related sectors. Affordable and reliable telecommunications services are the foundation for information economies and should be given appropriate attention. The G-8 countries should work in a coordinated fashion to provide developing countries with the necessary government and private sector technical assistance.

*Investing in Human Capacity:* Making pro-competitive policy and regulatory environments a living reality requires developing a cadre of trained professionals. A pilot project that establishes regional training facilities is one possible means for creating the human capacity needed to manage the transition to information economies. The regional institutes could offer courses on policy, development applications, and technical issues, including competition policy, licensing, cost-based pricing, and spectrum allocation. Instructors could be drawn from the governments and private sectors of all our G-8 partners. One role for the Digital Opportunities group would be to coordinate the curriculum.

Developing the necessary human capacity also means developing a cadre of technically literate IT users. Basic technical training in IT skills should be complemented by lifelong learning. Developed countries can contribute to technical education via distance learning projects, the establishment of community learning and access centers, and on-the-ground training provided by development agencies like the Peace Corps.

*Infrastructure and Equipment:* Improving infrastructure, especially community infrastructure and access, is an essential means of jump-starting the development of information economies in developing countries. Creative, short-term infrastructure improvements also can illustrate the tangible benefits of IT. In-kind contributions by companies provide one possible avenue for improving infrastructure and access in developing countries. Companies also could be encouraged to provide and lay fiber-optic lines as part of ongoing water, sewer and other non-IT-related infrastructure projects, including those funded by host governments and those funded by international finance institutions. Another possibility is to hold "Net Days" where the private sector and citizens volunteer time, expertise and hardware to bring connectivity to communities. The private sector also should be encouraged to develop low-cost, energy efficient, and rugged information and communications technologies that are optimized for developing countries.



## Addressing Key Economic and Social Challenges

In nations fully prepared to exploit the Internet's potential, G-8 efforts should focus on Internet applications that promote social and cultural development as well as economic growth. Projects that produce demonstrable social benefits can make it easier to sustain developing countries' long-term commitment to economic reform. Most immediately, projects focused on social development can help develop constituencies for policy and regulatory changes associated with the Information Revolution. Social "demonstration projects" also help develop and diffuse relevant IT skills.

The Digital Opportunities Working Group should work with stakeholders identified earlier to develop a comprehensive slate of projects in key areas.

✓ Education: Pilot projects in education can give people in developing countries access to the same universe of knowledge enjoyed by developed countries. These projects could include:

- Establishing satellite-assisted distance learning projects at the primary and secondary levels;
- Providing support for the African Virtual University being established by the World Bank;
- Creating school-to-school partnerships between developed and developing countries.

✓ Public Health: Pilot projects in these areas could dramatically improve health practices in developing countries. These projects could include:

- Quote POTW on Indig village*
- Establishing public health kiosks where citizens could access basic information on a range of public health issues;
  - Creating online mentoring relationships between developed country and developing country health clinics and medical schools;
  - Developing online "communities of practice" where health professionals in developing countries could share information and best practices over the Internet;
  - Providing links that enable specialists to review medical images captured in remote health facilities.

✓ Cultural Preservation: Pilot projects in this area can offer developing countries a way to preserve their cultural heritage and disseminate it globally. These projects could establish:

- Online oral history projects with files that are accessible in audio or text format.
- "Virtual" galleries that display the visual arts, handicrafts and dances of developing countries;
- Cyber-libraries that capture and catalog the sounds of traditional music.

Developing the Electronic Marketplace: The Internet provides a means for developing countries to access global markets and expand their economies. With little more than a computer and some software even the remotest businesses can become a worldwide presence. The G-8 should focus on fostering Internet-based micro-enterprises in developing countries through training and financing mechanisms. Community-based market development activities, including the use of shared Internet servers and other resources, is one means of facilitating participation in the global electronic marketplace. Many developing countries also are significant producers of raw materials and other commodities. IT can help producers of these goods gain information on market conditions, negotiate more favorable contracts, and even disintermediate middlemen who traditionally have controlled access to national and global markets. The G-8 and its partners should support efforts that economically empower developing country users throughout the value chain. Finally, the Internet also is a medium for producers of cultural products – including music and visual arts - to distribute their wares. The G-8 should support activities that expand economic opportunity for artisans while enhancing global cultural diversity.

## VI. OKINAWA ANNOUNCEMENTS

At the Okinawa Summit, leaders could announce the establishment of the G-8 Digital Opportunities Working Group and their intention to develop jointly with the private sector some of the pilot projects described above. The July meeting also would give G-8 and private sector leaders an opportunity to announce the expansion of existing IT-related development efforts and unveil the joint statement on e-commerce principles and policies.

The Okinawa Summit also could be the venue for unveiling a "Declaration of Commitment," announcing a major new private sector initiative, and demonstrating new or existing IT-related development technologies.

The leaders could make their announcements during a live webcast.



May 16, 2000

MEMORANDUM FOR GENE SPERLING

FROM: TOM KALIL

RE: NEXT STEPS ON DIGITAL DIVIDE

**I. Disabilities event**

1. Identify possible public and private sector deliverables. Examples:
  - a. Commitments by private sector to adopt the Web Accessibility Initiative standards -- which has developed standards for Web content, Web browsers, and Web authoring tools
  - b. Commitments by private sector to increase their resources to ensuring that their products are designed to be accessible (e.g. cell phone/hearing aid compatibility, personal digital assistants, digital TV)
  - c. Support for second phase of Web Accessibility Initiative
2. Meeting with disabilities community to generate ideas for potential deliverables
3. Meeting with private sector and groups of companies that are employers of persons with disabilities
4. Generate venue and event options:
  - Technology demo
  - Roundtable with high-tech CEOs, disabilities community, major employers of persons with disabilities
  - Traditional speaking program
5. Lock in date for July

**II. Follow-up on Digital Divide for remainder of 2000**

1. Continue to make Digital Divide initiatives a priority in appropriations process
  - Include in SAPs
  - GS calls to key appropriators - also look for opportunities to address the House or Senate Democratic Caucus or Congressional Black Caucus, Congressional Hispanic Caucus

- Kalil calls at staff level
- 2. Digital divide report on company commitments
  - Need sponsor
- 3. Develop options for digital divide tax incentives
  - Kalil to rewrite memo based on GS comments
- 4. Public Service Announcement campaign
  - Kalil to talk to Kaiser re: time-line for release of PSAs
  - Media surrounding release of PSAs (work with Patrick)
- 5. Seek to advance the debate on the "content" dimension of the digital divide
  - Focus on a few applications that would promote "digital opportunity" (e.g. adult literacy, assistance for micro-enterprises)
  - "Notice of inquiry" on the content issue
  - Discussions with private sector, foundations, non-profits
- 6. Outreach to mayors to determine level of interest in "Connected Communities" idea
- 7. Sperling/Kalil op-ed or article on digital divide
- 8. Daley events
  - Daley is committed to doing at least one event per month on digital divide
- 9. Digital divide report
  - Need to find out when Commerce is releasing next version of "Falling Through The Net."



INTELLIBRIDGE CORPORATION PRESENTS:  
THE GLOBAL SCENARIOS SERIES

“EMERGING MARKETS, EMERGING TECHNOLOGIES”

June 21-22, 2000  
Washington DC  
Four Seasons Hotel

WEDNESDAY, JUNE 21

6:00-8:00 p.m.

Welcome Reception and Remarks  
*“International Power and Policy in the Internet Age”*

Following an opening reception, participants will hear opening remarks from senior global experts in government and business that will frame the next day’s scenario sessions.

Panelists:

- Jan Krzysztof Bielecki, Director, EBRD and former Prime Minister, Poland
- Ken Courtis, Vice Chairman, Goldman Sachs
- John Gannon, Chairman, National Intelligence Council
- Gordon Smith, President, Gordon Smith International
- Gene Sperling, Assistant to the President for Economic Policy and Director, National Economic Council

THURSDAY, JUNE 22

7:30-8:30 a.m.

Continental Breakfast and Registration for Delegates

8:30-10:00 a.m.

Opening Plenary Session  
*“Emerging Markets, Emerging Technologies: Global Technology Drivers of the Next Decade”*

Key technology leaders from the United States and around the world will highlight the major developments and trends of 2000 and what they see in store for the coming decade. A special focus will be on those trends that will have a particular impact on emerging markets growth patterns, distributions of wealth and political power and other issues that are likely to be central to economic and political dynamics between the emerging and developed worlds.

Discussion leaders:

- John Gage, Chief Science Officer, Sun Microsystems
- Y.T. Lee, Chairman, Trigem Computer, Inc., South Korea
- Elliott Masie, President, The Masie Center

- Othman Yeop Abdullah, Chairman and CEO, Multimedia Development Corporation, Malaysia
- Alexander Pentland, Academic Head, MIT Media Labs

*PLEASE NOTE: THIS OPENING PLENARY SESSION WILL BE OPEN TO THE PRESS. ALL OTHER SESSIONS WILL BE CLOSED TO THE PRESS AND STRICTLY OFF THE RECORD.*

10:15-12:15 p.m.

Scenario I

*“Bridging the Digital Divide: Challenges and Opportunities”*

In this scenario, participants will review and consider how to overcome the growing gap between countries and regions in investment and growth of a digital economy. The discussion will analyze the forces behind the digital divide and what political leaders and companies need to do to bring these new technologies into new markets. Two scenarios are presented. In the first scenario, the policies and private sector actions that lead to technology serving as an integrative force in the world and one which bridges and reduces gaps will be explored. How did technology empower greater numbers of people, alleviating economic and social ills, and offering new models of development? In the second scenario, current trends continue and the digital divide grows worse. Technology fails to reach all segments of society, which ultimately widens existing cleavages. Economic and political chaos erupts. Fault-lines are defined. That country finds itself further behind in its technological development. How did that society fail and what choices did the government, business and society make that resulted in failure?

Discussion leaders:

- Donald Abelson, Chief, International Bureau, FCC
- Brian Atwood, Executive Vice President, Citizens Energy Corp. and former Administrator, USAID
- Chan Heng Chee, Ambassador, Embassy of Singapore
- Tom Kalil, Special Assistant to The President, The White House
- John Kerry, United States Senator
- Scott Yeager, Senior Vice President for Strategic Development, Enron Broadband Services
- Chung-bun Yoon, President, Korea Information Society Development Institute, South Korea

12:30-2:45 p.m.

Luncheon

*“Infrastructure for the Information Economy: Prerequisites to Growth”*

This luncheon roundtable discussion will focus on how a new generation of policy makers around the world is reacting to rapid changes in technology,



what policies are being considered and adopted to attract technology investment and stimulate technology growth, and how new public-private partnerships are being fostered to accelerate the development of the needed technological infrastructures that are the essential prerequisite for national competitiveness in the information age.

#### Discussion leaders:

- **Hattie Babbitt**, Deputy Administrator, USAID
- **John Gardner**, Vice President, AT&T
- **James Harmon**, Chairman, Export-Import Bank of the United States
- **Tengku Mohd Azzman Shariffadeen**, President and CEO of MIMOS Berhad, Malaysia
- **Tom Kalil**, Special Assistant to the President, The White House

3:00-5:00 p.m.

#### Scenario II

##### *"New Economies in Search of New Models"*

In this scenario, top international business leaders and policy makers will address the lingering sense that while the private sector has ushered in the era of a "new economy" our models for creating growth, ensuring social equity and managing trade, fiscal and monetary issues are antiquated and useless. Is the Fed overly cautious of growth rates that are to be the norm in this new environment? What are the consequences for emerging markets? Should e-commerce be regulated differently from old fashioned commerce? Are multilateral institutions promoting old industrial growth models in an era in which new approaches are needed, where the focus needs to be on new kinds of training, entrepreneurship, access to venture capital, etc.? In the scenario session, we will explore the logical conclusions --and occasional shortcomings--of existing models to their logical conclusions. We will also explore the implications of some new models with a special eye toward which regions are best positioned for growth and how the dynamic between developed and developing regions is likely to change in this new world.

#### Discussion leaders:

- **Jagdish Bhagwati**, Columbia University
- **Lael Brainard**,\* Deputy Director, National Economic Council
- **Rudolf Dolzer**, Director, Institute for International Law and former Director General, Germany
- **Clyde Prestowitz**, President, Economic Strategy Institute
- **Ira Shapiro**, Partner and Head of International Trade Practice, Long, Aldridge & Norman
- **Dorothy Yu**, Executive Vice President, Nextera Enterprises

5:00 -6:30 p.m.

#### Cocktail Reception

6:30-9:00 p.m.

**Dinner and Concluding Discussion**  
*"Winners and Losers in the New Cyber-Order"*

Distinguished economic and international affairs experts will talk about how technology is driving globalization and changing the international environment. How are countries competing against each other to draw high tech investment and business? How are high-tech firms helping to intensify the trend of globalization? Specifically: who looks likely to end up in the technological winners circle, who is most likely to be left behind, and why. *(Dinner hosted by Multimedia Development Corporation, Malaysia and Trigem Computer, Inc., South Korea))*

**Panelists:**

- **Jose Miguel Insulza**, Minister of Interior, Chile
- **Mohsen Khalil**, Director of Global Information and Communications Technology, International Finance Corporation
- **Anthony Lake**, Co-Chairman, Intellibridge Advisory Council and former Assistant to the President for National Security Affairs
- **Othman Yeop Abdullah**, Chairman and CEO, Multimedia Development Corporation, Malaysia
- **Y.T. Lee**, Chairman, Trigem Computer, Inc., South Korea
- **Jack Pellicci**, Vice President, Global Public Services, Oracle Corporation
- **Yoo Chong Ha**, former Foreign Minister, South Korea

9:00 p.m.

**Adjournment**

**FRIDAY, JUNE 23**

*AT THE REQUEST OF PARTICIPANTS AND SPONSORS, FRIDAY HAS BEEN RESERVED FOR MEETINGS AND NETWORKING OPPORTUNITIES AMONG PARTICIPANTS. IF INTERESTED IN RECEIVING ASSISTANCE IN ARRANGING MEETINGS WITH FELLOW PARTICIPANTS, PLEASE CONTACT ELAINE SANDERLIN AT (202) 298-6300*

\* Invited



*Mc/Talk/CD  
We need to discuss  
seems like 2 should  
do Wednesday but  
not Thursday*

**Event:** Newmarket Event on "Emerging Markets, Emerging Technologies"

**Event Date:** June 21<sup>st</sup>-23<sup>rd</sup>, 2000 in Washington, DC (specifically participating on Wed. June 21<sup>st</sup> 6:00-8:00pm and Thurs. June 22<sup>nd</sup> 6:30-9:00pm)

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6/18/01*

**Overview:** Participate in 2 Panels during the three days of the conference. Wednesday, June 21<sup>st</sup> at the Welcome Reception and Remarks on "International Power and Policy in the Internet Age". Thursday, June 22<sup>nd</sup> 6:30-9:00pm Dinner and Concluding Discussion "Winners and Losers in the New Cyber-Order"

**Note:** You will participate in these two panels which are all Q & A sessions. It is an interactive discussion with no prepared remarks.

**Speech Length:** Wednesday's interactive discussion will last for two hours. Thursday-2 and a half hours of discussion

**Q's & A's:** Yes

**Press:** No

**Program:** The first discussion on Wednesday June 21<sup>st</sup> will be on "International Power and Policy in the Internet Age" Other members of that panel will be:

- Richard Haas-The Brookings Institute
- Elliott Masie-President, The Masie Center
- Donald Roth-Managing Partner, Emerging Markets Partnership
- YOU

The second discussion on Thursday June 22<sup>nd</sup> will be on "Winners and Losers in the New Cyber-Order" Other members of the panel will be:

- John Kerry-United States Senator
- Anthony Lake-Co-Chairman, Intellibridge Advisory Council and former National Security Advisor
- Jack Pellicci-Vice President, Global Public Services, Oracle

**Audience Size:** Estimated 60-70 attendees

**Composition:** Made up mostly of CEO's, Presidents and Vice-Presidents of Technology enterprises. (See attached list)

Gene,

**This document is what was handed out to the private sector on Friday, June 9th. Here Kalil uses it to brief you for the Dig Divide Conference panel discussion.**

Draft June 6, 2000

### **Specific Public and Private Sector initiatives for Developing Countries**

#### **1. E-Commerce Readiness:**

- a. **Readiness assessment:** Building on tools like the Harvard-IBM guide, all developing countries would be offered an assessment of their current readiness to embrace e-commerce and the information society. These assessments would look at metrics such as availability and cost of information and communications products and services, the availability of training, and the extent to which the policy environment helps or hinders the growth of IT adoption. Completing this assessment could be a condition to participating in some of the initiatives described below.
- b. **Regulatory Training** G-8 Governments could commit to providing a series of regulator-to-regulator training seminars that would be conducted around the world, on a regional basis. This would provide expertise to enable developing countries to move toward transparent, pro-competitive regulatory regimes that will encourage private investment. This could build on existing efforts by the FCC and USTTI to provide regulators with education and training in policies that promote privatization, competition, and private sector investment.

#### **2. Human Capital for the Information Age.**

- a. **Technical Training** – providing technical experts (people who can manage national and regional networks, provide staff for Internet Service Providers, Internet content providers and application developers. See: <http://www.isoc.org/inet98/ntw-report.shtml> for a model that could be scaled.

*Cost:* Assuming that travel and tuition for a one week workshop would be \$5000 per person. Training 4,000 developing country professionals would cost \$20 million/year. Private sector could provide in-kind contributions of equipment and trainers and development of curriculum.

- b. **IT Volunteers:** G-8 countries could set a goal of collectively sending 5,000 private sector IT professionals from developed countries to spend a semester in developing countries. This would build on existing efforts such as the U.S. Government's Global Technology Corps; NetCorps Canada International and other efforts that currently help match private sector volunteers with projects that need it.



### 3. Promotion of innovative applications of IT for developing countries

- a. **Applications Training** -- Foundations and NGOs with experience in use of the Internet in specific application areas (i.e. telemedicine, micro-e-commerce, public health information, cultural preservation, etc.) could commit to partnering with G-8 and corporations to add application-specific training to regional conferences.
- b. **Digital Libraries for Development:** Sponsor "digital libraries for development" in areas such as: Public health; Agriculture; Micro-enterprise and policies towards the informal sector; and education and training. Digital libraries could contain courseware, case studies, reference material, statistics, papers, etc. Also help support "communities of interest" through e-mail discussions and other forms of interaction between practitioners.

*Cost:* \$2 million/year per library.

- c. **Expand efforts of multilateral institutions to promote innovative applications:** Expand programs in multilateral institutions such as InfoDev.

### 4. Encourage creation of IT businesses in developing countries

- a. **Create venture funds and incubators:** Provide risk capital and managerial and technical assistance to IT businesses in developing countries.
- b. **Create "social venture" funds:** These funds would look at both the commercial and social rates of return, and might support projects that can be self-sustaining (e.g. community access centers that provide telephony and Internet access) -- but are unlikely to provide the huge potential "upside" (10x or more return from initial investment) that VC firms are looking for.

### 5. Encouraging the Development of Technology for Meet Needs of LDCs.

Provide Design and Development Incentives for low-cost computing and communications devices for LDCs. These should include devices that can be used off the power grid, without a wired telecommunications infrastructure, and that operate on visual or verbal commands for low-literacy populations.

- a. **Centers of Excellence for Affordable IT:** Governments, foundations and the private sector could support the establishment of university-based "centers of excellence" that would conduct research and development on low cost devices, connectivity and applications to make IT widely available in low-income communities. Centers of excellence would be funded in both developed and developing country universities. Centers would also provide inter-disciplinary education and training at the intersection between IT and development.

*Cost:* \$5 million per center per year - \$50 million for 10 centers.

### 6. Create "Development in the Information Age" Network

- Participation from both developed and developing countries, and both government, private sector, foundations, and community-based organizations.
- World Bank secretariat, but not "owned" by the Bank.
- Has responsibility for creating "one stop shop" for readiness assessment, creating a forum for discussion and consensus-building on these issues, and collecting/disseminating best practices among developing countries.



**Draft proposal for State/AID FY2001 "Internet for Economic Development Initiative"**  
**September 29, 1999 [shot down]– Tom Kalil**

**I. Background**

- In an October 12, 1998 address to the International Telecommunications Union, Vice President Gore set forth a series of "grand challenges" to ensure that everyone, including people living in developing countries, has the opportunity to benefit from new information and communications technologies. These included improving access to computing and communications technology so that everyone is within walking distance to voice and data services, creating global knowledge networks, and supporting e-commerce, especially for small businesses in developing countries.
- On November 30 1998, President Clinton directed the Secretary of State, AID, and other agencies to "initiate a program to help accelerate the spread of the Internet and electronic commerce to developing countries." This was done as part of the release of the First Annual Report of the U.S. Government Working Group on Electronic Commerce. The Internet for Economic Development Initiative builds on the Leland Initiative, which seeks to promote the Internet in 20 African countries.
- Since then, State and AID has identified 11 countries that have agreed to work with the United States. These countries include Guatemala, Haiti, Jamaica, Bulgaria, Egypt, Morocco, Ghana, Guinea, Uganda, South Africa and Mozambique.
- Currently, there is no significant funding that has been set aside for the initiative. State and AID have been able to make some limited progress by identifying modest funding in AID country mission budgets. AID is also requesting \$2 million in its FY2001 budget submission. Given the priority that the President and the Vice President have attached to this initiative, however, this level of funding is inadequate.

**II. Goals of Initiative**

1. Accelerate the growth of the Internet in developing countries. Ensure that access is as broad-based as possible, and not limited to capital cities and elite institutions.
2. Create the legal and regulatory environment that will attract private investment in e-commerce and Internet services.
3. Promote applications of the Internet, such as:
  - e-commerce for micro-enterprises;
  - distance learning and school-to-school partnerships;
  - "knowledge networks" that link governments, experts, practitioners and NGOs in specific fields and disciplines [e.g. public health, primary education, agriculture.]

- new models of grassroots and “civil society” interaction that are enabled by the Internet, such as a networked diaspora.
- 4. Help build the human capacity needed to sustain the information revolution, providing education and training to local entrepreneurs, knowledge workers and policy makers.
- 5. Define research agenda and provide R&D support for computing and communications technologies that are designed with the needs of developing countries in mind, such as lack of a power grid, lack of a wired telecommunications infrastructure, low levels of literacy, and need for ultra-low cost computing. (MIT, for example, is trying to design a \$10 Web browser.)
- 6. Increase developing country support for a pro-competitive, market-led approach to e-commerce and the Internet by strengthening their capacity to be full participants in the Global Information Society.
- 7. Maximize the impact of the initiative by coordinating with other bilateral and multilateral initiatives, such as the World Bank and other IFIs, and leveraging additional resources from the U.S. private sector.

### III. Rationale for initiative

1. Participation in global e-commerce is essential if developing countries are to enjoy higher rates of economic growth. Global e-commerce could reach \$3 trillion by 2003. If developing countries are not plugged in to the digital economy, they risk not being able to tap into these markets falling further and further behind. With the exception of South Africa – no African country has more than one-tenth of one percent of its population online.
2. Promotion of the Internet and its applications will not only promote economic growth, it will also advance other goals for U.S. economic assistance, such as:
  - **Democratization:** The Internet makes it very difficult for governments to control the flow of information. Access to the Internet by NGOs will strengthen civil society by allowing “many to many” communication outside of state-run or state-controlled print and broadcast media.
  - **Education:** Internet access can give people in developing countries access to the same universe of knowledge that developed countries enjoy. In many areas, information on the Internet is freely available or supported by advertising. The Internet can also be used to support distance learning.
  - **Health care:** Internet can give medical practitioners in developing countries access to the latest medical literature.



- **Equity:** Even simple applications like allowing farmers to find out the price of their crops in the capital city can dramatically improve their bargaining position vis-à-vis traders and other intermediaries.
3. Developing countries may oppose U.S. positions on the need for a market-driven approach on the Internet, telecommunications and e-commerce unless they believe that they have a stake in the emerging digital economy.

#### **IV. Elements of initiative and budget**

**Total budget:** \$45 million

A. Country-specific partnerships (\$2 million per country - \$22 million total)

1. **Policy reform:**

- Foster private investment and competition in both telecommunications and Internet services.
- Avoid monopoly provision of Internet services by PTT, or restrictions on licensing of Internet Service Providers.
- Move towards cost-based pricing for leased lines.
- Allocate spectrum for wireless Internet access.
- Remove legal and regulatory impediments for e-commerce.

2. **Infrastructure Investment**

- Help defray some of costs for connectivity between developing country and U.S. Internet.
- Support for network access points (NAPs) to encourage interconnection at a neutral point between multiple national and regional networks.
- Help extend Internet from the capital city to other cities and rural areas using wired or wireless networks.

3. **Training and Capacity-building**

- Provide training and technical assistance for:
  - end-users and NGOs;
  - policy-makers and regulators;

- network technicians (people who can install, run, and manage TCP/IP networks);
- providers of information services (e.g. digital libraries) so that developing countries can be both producers as well as consumers of information.
- Start-up funding for regional Internet Societies or other NGOs seeking to promote the development of the Internet.
- 4. **Applications and pilot projects**
  - Support for micro-enterprises on the Web and other e-commerce applications;
  - Distance learning and school-to-school partnerships;
  - Community technology centers in remote areas – with eventual goal of discovering viable business model so that they can be self-sufficient;
  - Other applications that support economic and social development.
- 5. **Private sector investment and participation**
  - Engage U.S. private sector to encourage investment in developing countries, especially when policy environment has been improved.
  - Examples of involvement include:
    - commercially-motivated investments to provide Internet service, hosting of e-commerce Web sites, etc.
    - Loan equipment to train networking professionals in developing countries
    - Participation in pilot projects in telemedicine, distance learning, etc.

B. Initiative-wide activities

1. **Computing for developing countries - \$12 million**

- Currently, computers, software and communications systems are designed with the needs of developed countries in mind.
- Developing countries need computers and communications systems that (for example) are ultra-low cost, low-power, wireless, and use icons or speech as the primary form of human-computer interaction (given low levels of literacy).



- There is growing interest within the research community in designing computers and communications systems that are optimized for developing countries. MIT, for example, has launched a “\$10 Web browser” project.
- The U.S. Government should capitalize on this interest by establishing several university-based centers of excellence in “computing for developing countries.” These centers would conduct R&D in two areas:
  - Computing and communications technology that meet the unique needs of developing countries;
  - Policy-relevant research that would help decision-makers and practitioners in developing countries promote the Internet and its applications through activities such as case studies, project evaluation, workshops, policy recommendations, etc.
- \$12 million would fund 3 centers at \$4 million/year, the approximate level of funding for most NSF-sponsored university-based centers. This program would require matching funds from industry and a strategy for technology transfer.

2. **Knowledge networks** - \$8 million – 4 “knowledge networks” at \$2 million each

- One of the most important applications of the Internet is to enable the formation of communities that are based on shared interests as opposed to geography, often called “communities of interest” or “communities of practice.”
- Knowledge networks might connect practitioners, civil servants, experts and NGOs that have a shared interest in a particular subject – such as micro-enterprise development, primary education, privatization, public health, etc.
- Services that might be provided by knowledge networks include:
  - Support for real-time and asynchronous collaboration;
  - Subject-specific digital libraries;
  - Web-based training; and
  - Directories of participants.
- These networks could lead to:
  - expanded access to networked information;
  - accelerated diffusion of “leading practices”;
  - greater South-South (as opposed to North-South) interaction.

3. **Initiative-wide training/technical assistance** - \$3 million

- Curriculum development – working with NGOs such as USTTI and Internet Society
- Global or regional workshops
- Translation of technical material into multiple foreign languages

[This is in addition to the country-specific training and technical assistance.]



USG Proposal to G-8—  
Still being discussed by Sherpas

## G-8 PROPOSAL:

### MOVING FROM GLOBAL DIGITAL DIVIDE TO OPPORTUNITY

#### I. THE CHALLENGE

The international "digital divide" between industrialized and developing countries is immense and growing. Only half of the approximately 275 million people currently accessing the Internet reside outside North America. In the Middle East and Africa, slightly more than one million and two million people are online, respectively. Just 3 percent of the world's Internet users live in South America. As a result, many developed and developing countries are concerned that the developing countries will not participate fully in the social and economic benefits of a networked world.

A G-8 initiative that helps to close the international "digital divide" would:

- Assure developing countries that the developed world is politically committed to their full participation in the Information Revolution;
- Integrate developing countries more fully into the burgeoning global economy, increasing peace and stability as well as prosperity;
- Help developing countries to address their most pressing social challenges in education, health and cultural preservation;
- Encourage the free flow of ideas and information and, therefore, the spread of universal values of human rights and democracy; and
- Prompt increased international cooperation and understanding on a host of global Internet issues.

#### II. LESSONS LEARNED

G-8 governments, the international community, the private sector, non-governmental organizations and many developing country governments have launched programs designed to bridge the international digital divide. Experience with these projects has shown that:

- In order to fully participate in the new global information economy and attract long-term private sector investments in this area, countries must adopt pro-competitive policy and regulatory regime. This includes ensuring that e-commerce rules and regulations are transparent, predictable and fair. It also means liberalizing telecommunications, transportation, and delivery services and ensuring that goods flow quickly and predictably through the customs process.
- Investments from the international community that target technical (e.g., connectivity) and human (e.g., technical education) limitations and include community-based approaches can speed development considerably.
- Institutions and governments in developing nations will succeed only if they take full advantage of new technologies (leapfrogging older ones), reject outdated approaches and embrace bureaucratic and policy change.



Existing assistance efforts, however, have been inadequate to for two reasons:

- Available resources have been limited; and
- Resource commitments to date have not been coordinated among donors.

It is essential, therefore, that the G-8 increase efforts and resources to close the international digital divide and to coordinate development efforts more closely.

### III. COLLABORATION AMONG THE G-8, PRIVATE SECTOR, FOUNDATIONS AND MULTILATERAL INSTITUTIONS

The G-8 could agree to establish a "Digital Opportunities Working Group" and identify key contacts in participating G-8 governments. The group should be tasked with developing a comprehensive approach to closing the digital divide that leverages contributions from the private sector, including foundations.

*The G-8 Role.* At the most practical level, the G-8 is best situated to adopt a coordinating role rather than a direct operational role. The G-8 provides a unique venue for coordinating and catalyzing the activities of G-8 governments, private sector groups and multilateral institutions. The G-8 should focus on rationalizing efforts, avoiding duplication, and identifying synergies. These coordinating activities could be undertaken using information technologies provided by the private sector and hosted with possible assistance from a multilateral development organization. The G-8 also could explore establishing other mechanisms that would encourage the adoption by developing countries of appropriate policy and regulatory frameworks.

*Private Sector Partnerships.* The G-8 also should work to mobilize corporations and other private sector entities to establish programs and provide funding for efforts to close the international digital divide. The recent announcement by Softbank that it would help fund a \$200 million investment fund designed to "incubate" Internet-related businesses in the developing world is just one example of a public-private partnership that can contribute significantly to helping countries participate in the Global Information Economy. The private sector is also a potential source of hardware, software, training and technical assistance, in particular for countries that have agreed to adopt pro-competitive policies. The G-8 initiative should encourage and channel several types of private sector initiatives.

*Leveraging Foundation and NGO Efforts:* In recent years, non-profit foundations -- both independent foundations and those affiliated with corporations -- have played an increasingly important role in closing the digital divide, especially in developed countries. These foundations have critical experience identifying appropriate programs and significant financial resources to fund them. We should encourage foundations to devote additional resources to the international dimension of this problem.

Non-governmental organizations (NGOs) also have a key role to play. NGOs have the on-the-ground experience needed to identify critical developmental needs and suggest the most appropriate responses. They also have the human capacity, operational know-how, and existing infrastructure to manage programs seeded with G-8 resources.



Mobilizing Non-traditional Actors: The G-8 also should focus on mobilizing non-traditional actors. Universities, technical colleges, medical clinics, even museums are an often-overlooked source of critical expertise. The G-8 should seek to identify those institutions that are ready and able to collaborate with sister institutions in developing countries.

A Declaration of Commitment: The G-8 should work with the private sector, foundations, and NGOs to memorialize by the G-8 meeting in June the role of the private sector in "A Declaration of Commitment." This document would commit the private sector to addressing the international digital divide and state specific objectives.

#### IV. THE VISION: A DIGITAL COMPACT

The G-8 should begin by articulating a vision for cooperation with developing countries. A vision statement should present a practical sense of what the G-8 hopes to achieve and a message of hope and confidence to developing countries. Developing countries recognize that they are not keeping pace with rapid technological changes and seek assurances from the developed countries that they are sensitive to disparities in the use of the Internet and other Information and Communication Technologies (ICTs). The suggested vision paper, possibly in the form of a "Digital Compact" among G-8 countries or with developing countries, should:

- Articulate a role for developed countries to play in efforts to address the digital divide;
- Suggest the scope and scale of the G-8 commitment; and
- Outline the responsibilities of developing countries in helping themselves to participate in the Global Information Economy and Society.

This vision statement also should reflect and underscore the qualities of the Internet. The Internet is:

- Inclusive -- Participation in the Internet is open to all;
- Distributed -- There are no inherent limits to the geographical diffusion of the Internet;
- Flexible -- The Internet can be adapted to a nearly limitless assortment of social and economic challenges; and
- Synergistic -- The network becomes more valuable as more people connect to it.

#### V. G-8 ACTION PLAN

The G-8 action plan should focus on the critical sectors that will enable developing countries to prepare most effectively for participation in the Global Information Economy and those that demonstrate most clearly the potential benefits of joining the Global Information Society. A balanced agenda that stresses economic development and social growth is most likely to achieve long-term support in developing countries.



## Establishing the Critical Preconditions

While the G-8's primary operational role is coordination, one of its key objectives should be to articulate the three critical preconditions for investment and growth:

*Building the Right Environment:* Creating a liberalized, pro-competitive regime for telecommunications services is a critical precursor to the development of information economies. Our first objective should be helping developing countries to create a regulatory, policy framework that encourages privatization, liberalization and competition in the telecommunications and related sectors. Affordable and reliable telecommunications services are the foundation for information economies and should be given appropriate attention. The G-8 countries should work in a coordinated fashion to provide developing countries with the necessary government and private sector technical assistance.

*Investing in Human Capacity:* Making pro-competitive policy and regulatory environments a living reality requires developing a cadre of trained professionals. A pilot project that establishes regional training facilities is one possible means for creating the human capacity needed to manage the transition to information economies. The regional institutes could offer courses on policy, development applications, and technical issues, including competition policy, licensing, cost-based pricing, and spectrum allocation. Instructors could be drawn from the governments and private sectors of all our G-8 partners. One role for the Digital Opportunities group would be to coordinate the curriculum.

Developing the necessary human capacity also means developing a cadre of technically literate IT users. Basic technical training in IT skills should be complemented by lifelong learning. Developed countries can contribute to technical education via distance learning projects, the establishment of community learning and access centers, and on-the-ground training provided by development agencies like the Peace Corps.

*Infrastructure and Equipment:* Improving infrastructure, especially community infrastructure and access, is an essential means of jump-starting the development of information economies in developing countries. Creative, short-term infrastructure improvements also can illustrate the tangible benefits of IT. In-kind contributions by companies provide one possible avenue for improving infrastructure and access in developing countries. Companies also could be encouraged to provide and lay fiber-optic lines as part of ongoing water, sewer and other non-IT-related infrastructure projects, including those funded by host governments and those funded by international finance institutions. Another possibility is to hold "Net Days" where the private sector and citizens volunteer time, expertise and hardware to bring connectivity to communities. The private sector also should be encouraged to develop low-cost, energy efficient, and rugged information and communications technologies that are optimized for developing countries.



## Addressing Key Economic and Social Challenges

In nations fully prepared to exploit the Internet's potential, G-8 efforts should focus on Internet applications that promote social and cultural development as well as economic growth. Projects that produce demonstrable social benefits can make it easier to sustain developing countries' long-term commitment to economic reform. Most immediately, projects focused on social development can help develop constituencies for policy and regulatory changes associated with the Information Revolution. Social "demonstration projects" also help develop and diffuse relevant IT skills.

The Digital Opportunities Working Group should work with stakeholders identified earlier to develop a comprehensive slate of projects in key areas.

✓ Education: Pilot projects in education can give people in developing countries access to the same universe of knowledge enjoyed by developed countries. These projects could include:

- Establishing satellite-assisted distance learning projects at the primary and secondary levels;
- Providing support for the African Virtual University being established by the World Bank;
- Creating school-to-school partnerships between developed and developing countries.

✓ Public Health: Pilot projects in these areas could dramatically improve health practices in developing countries. These projects could include:

- Establishing public health kiosks where citizens could access basic information on a range of public health issues;
- Creating online mentoring relationships between developed country and developing country health clinics and medical schools;
- Developing online "communities of practice" where health professionals in developing countries could share information and best practices over the Internet;
- Providing links that enable specialists to review medical images captured in remote health facilities.

✓ Cultural Preservation: Pilot projects in this area can offer developing countries a way to preserve their cultural heritage and disseminate it globally. These projects could establish:

- Online oral history projects with files that are accessible in audio or text format.
- "Virtual" galleries that display the visual arts, handicrafts and dances of developing countries;
- Cyber-libraries that capture and catalog the sounds of traditional music.

quote POTW  
on Indig  
village

Developing the Electronic Marketplace: The Internet provides a means for developing countries to access global markets and expand their economies. With little more than a computer and some software even the remotest businesses can become a worldwide presence. The G-8 should focus on fostering Internet-based micro-enterprises in developing countries through training and financing mechanisms. Community-based market development activities, including the use of shared Internet servers and other resources, is one means of facilitating participation in the global electronic marketplace. Many developing countries also are significant producers of raw materials and other commodities. IT can help producers of these goods gain information on market conditions, negotiate more favorable contracts, and even disintermediate middlemen who traditionally have controlled access to national and global markets. The G-8 and its partners should support efforts that economically empower developing country users throughout the value chain. Finally, the Internet also is a medium for producers of cultural products – including music and visual arts - to distribute their wares. The G-8 should support activities that expand economic opportunity for artisans while enhancing global cultural diversity.

## VI. OKINAWA ANNOUNCEMENTS

At the Okinawa Summit, leaders could announce the establishment of the G-8 Digital Opportunities Working Group and their intention to develop jointly with the private sector some of the pilot projects described above. The July meeting also would give G-8 and private sector leaders an opportunity to announce the expansion of existing IT-related development efforts and unveil the joint statement on e-commerce principles and policies. (1) (2) (3) (4)

The Okinawa Summit also could be the venue for unveiling a "Declaration of Commitment," announcing a major new private sector initiative, and demonstrating new or existing IT-related development technologies. (5)

The leaders could make their announcements during a live webcast.