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Introduction

The United States is pleased to participate in this meeting to prepare for the upcoming ITU World Telecommunications Development Conference. We congratulate the ITU Telecommunication Development Bureau and the Ministry of Transport and Communications of Peru for hosting this meeting in the historic city of Lima. We look forward to a constructive discussion with our colleagues from the Americas region to produce cohesive strategies for progress in communications globally.

The United States is committed to the progress of countries in the developing world. The United States, in particular, has taken manifold and deliberate steps to increase the financial assistance provided to developing countries and to ensure that this increase is mirrored by an increase in its programmatic quality. From 2000 - 2004 for example, the United States' Official Development Assistance (ODA) increased by ninety percent, rising from \$10 billion to \$19 billion. President Bush's decision to nearly double foreign aid during this period represents the largest increase since the Marshall Plan.

There are now nineteen Presidential Foreign Assistance Initiatives, and the United States has led the effort for trade, investment, and debt relief for developing nations, even calling on the World Bank as early as mid 2001 to provide up to fifty percent of its assistance to the most disadvantaged countries in the form of grants. At the same time, building on lessons learned, this Administration sought and implemented bold and creative new ways to distribute aid. Emphasizing good governance, accountability, and partnership, in 2004, it created the Millennium Challenge Account, administered by the Millennium Challenge Corporation.

The United States is the world's largest bilateral donor, a top importer of goods from developing countries, and the largest single-country contributor of capacity building assistance in the trade area. Forty to fifty percent of all humanitarian assistance given by donor governments is provided by the United States. In the context of the G8, the United States agreed to cancel one hundred percent of the bilateral and multilateral debt for qualifying Heavily Indebted Poor Countries, and among other initiatives, announced an additional \$674 million during this fiscal year for humanitarian needs in Africa. When combined with the \$1.4 billion already provided for this purpose, the total for FY'05 is more than \$2 billion. In 2004, the United States provided roughly \$3.2 billion in bilateral and multilateral ODA to Sub Saharan Africa alone. And, through its Middle East Partnership Initiative,

the United States, in 2003, administered a portfolio of \$100 million to address economic, political, educational, and gender issues in the Middle East/North Africa region.

The United States' commitment to developing nations' advancement in the field of communications is demonstrated by activities that include the U.S. Digital Freedom Initiative, the Arab Regional Telecommunications Network, the United States Telecommunications Training Institute, as well as various human capacity building programs sponsored by the U.S. private sector. These initiatives, and others described in Annex B, include critical infrastructure and training in policy, technology, and business matters, often in partnership with developing countries.

The United States promotes developing nations' communications progress because it recognizes the global benefits of robust communications capabilities – economic, social, political, and cultural – as well as its direct relationship to the security of nation states, including our own. The vast, global network we enjoy today becomes more valuable with every new user that is added.¹ As we seek to expand this network, we recognize that success in communications in the developing world is success for the world at large.

Accordingly, as we approach the 2006 World Telecommunications Development Conference, our goal for developing nations has been, and continues to be, universal, affordable access to a range of information and communications technology (ICT) applications and services. We continue to believe that this goal is best achieved by the establishment, in each country, of a transparent policy and regulatory regime that promotes innovation and competition between multiple service providers using multiple transport and technology options.

To this end, for the 2006 – 2010 development cycle, the United States encourages the ITU, within its mandate, to focus on: (1) strategies to expand communications infrastructure that (a) feature the private sector and (b) increase access to communications services and teledensity in the developing world; (2) policy and regulatory issues that support goal 1, including convergence, new technologies, network security and enforcement issues; (3) human capacity building that supports goal 1 and prepares ITU-D members for specific jobs or that fosters entrepreneurship; (4) gender issues consistent with the Resolution for WTDC '06 introduced by the Federal Republic of Germany; and (5) identifying and responding to private sector member requirements.

Finally, reflecting a key priority for the United States, Annex A contains a proposed new question for study on Cyber Security to be presented at the WTDC '06 for adoption.

1. Global Telecommunications: WTDC '02 – Present

a) The WTDC '02

Nearly four years ago in Istanbul, when we gathered to agree on an action plan for advancing communications in developing nations, the world was beginning to emerge, but had not yet recovered, from a global economic downturn. The highly celebrated telecommunications/Internet bubble that had blazed so forcefully in the 1990's had decisively burst. The era of wholly owned state operators was over; however, there were more incumbent carriers with private capital participation than state owned operators. According to the World Bank, between 1993 and 2003, the private sector invested some \$230 billion in telecommunications infrastructure in the developing

¹ The well known Metcalf's law states that: "The value of a network scales as $2n$ where n is the number of persons connected." <http://www-ec.njit.edu/~robertso/infosci/metcalf.html>. Marc Andreessen, one of the founders of the World Wide Web, notes: "Every node, every new server, every new user expands the possibilities for everyone else who's already there."

world, and countries with well-regulated, competitive markets saw the greatest amount of investment.²

In 2002, most countries still had not opened their local and long distance markets to competition; but an overwhelming majority allowed competition in the mobile and Internet access markets. In fact, by late 2001, 78 percent of ITU Member States allowed some form of competition in mobile services provision, and globally, 86 percent of governments had authorized competition among ISPs. More countries had created national regulatory authorities (NRAs) than had allowed private investment in wireline incumbents or permitted competition in basic services. At the start of 2002, NRAs existed in roughly 110 countries.³

Perhaps most significant, 2002 marked the year mobile telephony became the predominant means of voice communications. By the end of 2002, there were 1.155 billion mobile cellular subscribers around the world, compared with 1.129 billion fixed telephone lines. A majority of developing countries had more mobile subscribers than fixed telephone lines. Worldwide, the broadband market was estimated to be worth some USD \$22 billion, and at the start of 2003, there were 62 million wireline broadband subscribers, compared with 1.1 billion total fixed line users. Digital subscriber line technology was the most commonly deployed platform, followed by cable modems, metro Ethernet, fixed wireless access, wireless local area networks (LANs), satellite transmission and other technologies. Nearly 25 percent of countries had enacted legislation to address convergence of telecommunications, information technologies and broadcasting, and by the end of 2002, a total of 26 countries and territories in Europe had issued 3G licenses. Around the world, cable TV systems were increasingly evolving into platforms for broadband Internet access, and by mid 2003, more than 70 governments had committed to the regulatory principles outlined in the World Trade Organization Reference Paper, attached to GATS Schedules of Commitments. The number of fixed telephone lines decreased in developed markets in 2002. Growth rates for fixed lines in developing countries also declined; but were still above levels of the early 1990s suggesting that there would continue to be expansion.⁴

b) The Present

By 2004, local, long distance, and international services were being provided under competitive conditions in a majority — 54 percent — of countries worldwide. Mobile and Internet use continued to surge, and by mid-2004, the world counted a total of 2.7 billion fixed line and mobile subscribers, including 1.185 billion fixed line subscribers and 1.484 billion mobile pre and post-paid customers. Added to that were 699 million Internet users worldwide. By mid-2004, developing countries accounted for 56 percent of the world's mobile cellular subscribers. Moreover, in the period between 2000 and mid-2004, the developing world accounted for almost 79 percent of the new growth in the market (i.e., new mobile users added). Similarly, although developing economies accounted for just less than 40 percent of Internet users worldwide (in 2003) they made up 66 percent of the new users added in the period 2000 – 2003.⁵

² *The Real Digital Divide*, The Economist, March 12, 2005, at page 11.

³ See generally, *Trends in Telecommunication Reform 2002, Effective Regulation*, International Telecommunication Union, 2002 at 7, 9, 17.

⁴ See generally, *Trends in Telecommunication Reform 2003, Promoting Universal access to ICTs: Practical Tools for Regulators*, International Telecommunication Union, 2003 at 1 – 9, 13.

⁵ See generally, *Trends in Telecommunication Reform 2004/2005: Licensing in an Era of Convergence* at 2, 8, 13.

At the start of 2004, there were more than 100 million broadband Internet subscribers in about 100 countries where it was available. Almost 30 percent of Internet subscribers had broadband access, at speeds ranging from 256 kilobits per second to 100 megabits per second and more. In terms of absolute numbers of subscribers, the United States had the largest single broadband market at the start of 2004, with over 25 million subscribers. And today, the United States leads the world in the total number of broadband connections with 38 million subscribers.⁶

By the middle of 2004, the number of regulatory authorities around the world stood at 132. By late 2004, 55 countries had allocated spectrum for unlicensed use and of the 91 governments that had made telecommunication commitments under GATS, more than 77 had committed to the regulatory principles outlined in the Reference Paper attached to their GATS Schedules of Commitments.⁷

2. Global Telecoms and Future Implications for Developing Countries

Developing nations have made steady progress toward universal service. More than ever before, users and consumers enjoy greater access to a wider array of communications services and applications. Competition has provided consumers and users with greater choice, better quality, and lower prices. It has spawned innovation in technology that is effectively meeting the communications needs of developing countries.

A number of countries have drafted, initiated regulatory consultations on, and even adopted legislation governing the convergence of voice, data, and video, and the need for appropriate statutes will continue for the foreseeable future. Countries that adopt a flexible policy framework that enables convergence, including an independent regulatory authority with jurisdiction and resources to implement the regime, should be well positioned to enable the industry to provide advanced services to citizens. Countries that maintain disparate regulations based on service category, or that have multiple organizations governing these categories, including spectrum issues, may experience inefficiency and administrative costs resulting in delayed service provision. Developing countries are making commendable progress in reaching their universal access goals, largely through wireless technology and Internet access – high growth sectors that experienced the most competition in the last four to five years. As demand for these services continues to grow, developing nations that institute transparent, efficient, flexible, spectrum policies that foster innovation and rapidly make available additional spectrum for wireless broadband services are likely to succeed in closing the access gap and reach universal access goals.

The uneven distribution of technology in many societies is often reflected most sharply in the case of women, particularly in developing countries. This phenomenon can be reinforced by social, cultural, political, and economic systems. Countries that identify and promote policies that address women's access, use, and participation in ICTs are likely to improve these existing disparities to the benefit of the communications sector and society as a whole.⁸

⁶ See *Id* at 8; *High Speed Services for Internet Access: Status as of December 31, 2004*, U.S. Federal Communications Commission, July 7, 2005 at 2.

⁷ See generally, *Trends in Telecommunication Reform 2004/2005: Licensing in an Era of Convergence* at 13.

⁸ See *Domestic Enforcement of Telecommunications Laws: Guidelines for the International Community - Report on ITU-D Question 18/1* at 42, citing *Is Information Technology Gender-Neutral?* Information and Communication Technologies for Development, an IDRC (Canada) Program Initiative, <http://www.idrc.ca/pan/gender/ginftecg.htm>.

3. Policy Recommendations for Attaining Universal and Affordable Access

Policy makers and regulators everywhere are searching for ways to meet the challenge to implement regulatory policies that foster increased broadband infrastructure. The United States' goal for developing nations has been, and continues to be, universal, affordable access to the entire range of ICT applications and services. This goal is best achieved, we believe, through a transparent policy and regulatory regime that promotes innovation and competition among multiple service providers using multiple transport and technology options.

In summary:

- The bedrock principles for achieving universal access – liberalized, competitive, markets featuring private investment; a strong, independent regulator; transparency; and, in instances of market failure, explicit subsidies for domestic universal access goals have served citizens in both developing and developed countries well.
- Steady progress in access to communications services and teledensity worldwide demonstrate the effectiveness of these bedrock principles. These well-known fundamentals still form the basis of sound telecommunications policy; emphasis on and adherence to these remains the first step in the telecommunications policies of tomorrow. Thus, going forward, we must build on this foundation.

4. Recommendations for the BDT and ITU-D Sector

a) BDT Processes and Programs

The United States wishes to recognize the exemplary efforts of the BDT to refine its working methods to increase the efficiency of ITU-D and BDT activities over the 2002 – 2006 cycle. These actions assisted the United States in its active participation in the work of the Development Sector's study groups and contributed to the exceptional work produced in three substantive areas: (i) broadband access technologies (Question 20-1/2); (ii) guidelines for migration of mobile networks to IMT-2000 and beyond (Question 18/2); and (iii) guidelines for domestic enforcement of telecommunications laws (Question 18/1). Linking the BDT development programs adopted at WTDC '02, and its staff, with the work of the study groups remains important.

Study group questions should continue to be reviewed annually by the Study Group. Based on this review, questions should be modified as needed by TDAG, depending on interest, participation, progress, and responsiveness to developing countries needs. For example, if warranted, questions could be converted and assigned to a focus group, eliminated, or as they evolve, moved to a different ITU-D study group.

b) The BDT and Sector Members

ICT readiness and development depend upon policy, legal, and financial environments that facilitate competition, investment, and private sector participation. Specifically, this includes enlightened and trained regulators and a private sector that has the capacity to operate in a competitive environment. Small and medium sized operators and new entrants form a critical complement to incumbent operators and provide an important new constituency for the ITU.

The United States continues to support ITU-D partnerships with the private sector and other practical training that prepare ITU-D members for specific jobs, as well as those that foster entrepreneurship, infrastructure development, and ICT access. Encouraging the development of partnerships between the public and private sectors is critical to promoting broadband infrastructure and services in the developing world. Active participation from private Sector Members in the work of ITU-D will ensure that the developing world continues to benefit from the capital,

technology, entrepreneurship and experience the private sector brings to the table. The United States supports international cooperation and partnerships with private Sector Members as a vehicle to achieve objectives defined by the membership, particularly to exploit synergies and avoid duplication.

Participation by private Sector Members and inclusion of their views were key components of the Istanbul Action Plan adopted by WTDC '02; Sector Members should be encouraged to continue to play a critical role in the Plan of Action adopted by WTDC '06.

The United States recommends that ITU-D, particularly its regional offices, place increased priority on attracting new Sector Members, identifying their needs and providing capacity building, and information on regional partnership opportunities. In addition, we recommend that ITU-D promote opportunities for Sector Members and regulators and other government officials to meet within regions to exchange ideas and information on telecommunications issues.

ITU-D, particularly the Regional offices, should help to obtain input from the regions on Study Group questions, and disseminate and implement study group findings in the region. In addition, to provide greater transparency, regional offices should solicit priorities and information from Sector Members to fulfill the mandate of the Programs.

Within existing budgetary resources, regional operations might be improved by: (1) having websites that link into the ITU website, but which also list regional events, opportunities, resources and accomplishments; and (2) designating staff to lead efforts facilitating public-private partnerships advancing the goals identified above⁹, addressing gender issues and promoting youth opportunities. Further, the regional offices are best positioned to assist ITU Members from outside a particular country on potential partners and opportunities, to facilitate better communication between governments/regulators and the private sector, and to ensure that ITU activities incorporate regional needs.

5. Reflections on Phase I of the WSIS

The World Summit on the Information Society (WSIS) represents a pivotal stage in the ongoing dialogue on the role of information technology in achieving internationally agreed development goals. The United States was pleased to join in the consensus reached at Phase I of the WSIS where countries came together to recognize that information and communication technologies are a key element of political progress, economic growth and social development. The WSIS Declaration of Principles and Plan of Action recognize the importance of good governance, the rule of law, transparency and predictable policy and regulatory environments for the building of an inclusive information society. The WSIS also recognized the core competencies of the ITU, including "assistance in bridging the digital divide, international and regional cooperation, radio spectrum management, standards development and the dissemination of information".

The Development Sector has a unique role to play in the implementation of the WSIS Plan of Action, particularly as many of the action lines contained in the Plan of Action correlate closely with the mandate of the BDT as outlined in the Istanbul Plan of Action. The United States believes the BDT should continue to highlight the substantial work already underway in the Development Sector in support of the WSIS principles. We note, in particular, the extensive stocktaking exercise conducted by the BDT to provide an overview of the ITU-D's role in the implementation of the

⁹ See page 1 of this contribution: 1) strategies to expand communications infrastructure to increase access to communications services and teledensity in the developing world; (2) related policy, regulatory, human capacity building, and gender issues.

WSIS Plan of Action. This extensive account of BDT activities is in line with the mandate of the BDT that, as the WSIS recognized, is directly linked with bridging the Digital Divide. As we prepare for the WTDC '06, we are mindful of the important role already played by the ITU in the follow-up to the WSIS – a role we believe should continue to align with the current mandate of the ITU. The United States looks forward to commenting further on the results of the WSIS upon conclusion of Phase II of the Summit.

6. Conclusion

The United States is encouraged by the progress made in communications access since the last World Telecommunications Development Conference. The collateral social, economic, cultural, and political benefits that are being delivered around the globe as a result are the real objective, for even universal access is not an end in and of itself. Among other things, expanding access to communications technology and thus to information can break down barriers of misunderstanding and misinformation that can fuel conflict and threaten the security and well being of the world's citizens. We look forward to working with others around the globe to chart a successful course for 2006 – 2010.

ANNEX A

The United States intends to propose the following for adoption at WTDC '06:

Proposed Question

WTDC, Doha, March 7-15, 2006

Title: Securing Information and Communication Networks: Best Practices for Cybersecurity

1 Statement of the situation or problem.

1.1 *In view of:*

- a) The explosive growth in the deployment and use of information and communication technology (ICT) networks.
- b) The need to ensure the security of these globally interconnected infrastructures if the potential of the information society is to be achieved.
- c) The growing recognition at the national, regional and international levels of the need to develop and promote best practices, standards, technical guidelines and procedures to reduce vulnerabilities of and threats to ICT networks.
- d) The need for national action and international cooperation to build a global culture of cybersecurity that includes national coordination, appropriate national legal infrastructures, watch, warning and recovery capabilities, government/ industry partnerships, and outreach to civil society and consumers.
- e) The requirement for a multi-stakeholder approach to effectively make use of the variety of tools available to build confidence in the use of ICT networks.

1.2 *Considering:*

- a) That consistent with its mandate the ITU should play a role in bringing together Members States, Sector Members and other experts to share experiences and expertise for securing ICT networks.
- b) That developing countries face unique challenges in developing security policies and approaches appropriate to their circumstances.
- c) That there exist considerable expertise and experience about network security among ITU Member States and Sector Members, within the current related work programs in ITU-T, particularly Study Group 17, and in the SPU, within other international organizations, and among national and international private sector bodies.
- d) That member states would benefit from a report detailing the various resources, strategies and tools available to build confidence in the use of ICT networks and the role of international cooperation in this regard.

2 Question or issue for study

- a) To survey, catalogue, describe and raise awareness of:
- the principal issues faced by national policy makers in working with all stakeholders to build a culture of cybersecurity.
 - the principal sources of information and assistance related to building a culture of cybersecurity.
 - successful best practices employed by national policy makers in working with all stakeholders to organize for cybersecurity and develop a culture of security.
 - the unique challenges faced by developing countries in addressing the security of networks and the best practices for addressing these challenges.
- b) To examine best practices for the establishment and operation of watch, warning and incident response and recovery capabilities that may be used by member states to establish their own national capabilities.

3 Expected output

- a) A report or reports to the membership on the issues identified in Section 2 above.

4 Timing

- a) This study is proposed to last four years, with preliminary status reports to be delivered on progress made after 12, 24, and 36 months.

5 Proposers/sponsors

- a) United States

6 Sources of input

- a) Contributions from Member States and Sector Members.
- b) Relevant work currently being undertaken in ITU-T, ITU-R and the SPU.
- c) Relevant international organizations, such as the OECD and COE.
- d) Relevant non-governmental organizations concerned with the promotion of cybersecurity and a culture of security.
- e) Surveys of ITU Members experiences, as appropriate.
- f) World Wide websites of national cybersecurity authorities.
- g) Other sources, as appropriate.

7 Target audience

	Developed countries	Developing countries	LDCs
Telecom policy-makers	*	*	*
Telecom regulators	*	*	*
Service providers/operators)	*	*	*
Manufacturers	*	*	*

Where appropriate, please provide explanatory notes as to why certain matrix points were included or excluded.

a) Target audience - Who specifically will use the output

National policymakers and Sector Members, and other stakeholders involved in or responsible for cybersecurity activities, especially those from developing countries.

b) Proposed methods for the implementation of the results

The study program being focused on gathering information and best practices is intended to be informative in nature and can be used to raise awareness for Member States and Sector Members of the issues of cybersecurity and to draw attention to the information, tools and best practices available, the results of which may be used in conjunction with BDT-organized seminars and workshops.

8 Proposed methods of handling the Question or issue

a) How?

Given the nature of the proposed question, the potential quantity of information sources required and the time that will have to be devoted to identifying solutions to the issues at hand, it is considered necessary that the Question be addressed within a study group over a four-year study period (with submission of interim results).

9 Coordination

Coordination with ITU-T, in particular SG 17, as well as with ongoing SPU activities is necessary. In addition, given the existing level of technical expertise on the issue in ITU-T SG 17, all documents (questionnaire, interim reports, draft final reports, etc.) should be sent to SG 17 for comment and input prior to being submitted to the full ITU-D SG for comment and approval.

ANNEX B

EXAMPLES OF UNITED STATES ASSISTANCE IN THE FIELD OF COMMUNICATIONS: PARTNERSHIP WITH DEVELOPING COUNTRIES¹⁰

The Digital Freedom Initiative (DFI) is a Presidential Initiative led by the U.S. Department of Commerce with the involvement of the U.S. Agency for International Development, the U.S. Department of State, Peace Corps and the USA Freedom Corps. The goal of the DFI is to promote economic growth by transferring the benefits of information and communication technology (ICT) to entrepreneurs and small businesses in the developing world. The approach leverages the leadership of the U.S. government, the creativity and resources of America's leading companies, and the vision and energy of entrepreneurs throughout the developing world. The DFI was piloted in Senegal in 2003. Peru, Indonesia and Jordan are the newest DFI partner countries. The DFI business Roundtable is an open membership body composed today of over 40 U.S. companies, non-governmental organizations, and academic institutions. U.S. private sector participants provide business expertise to all phases of the DFI. They provide volunteers and other resources that leverage activities supported by the U.S. government; and they collaborate with private sector entities in the DFI host countries to identify and implement activities that promote economic growth and opportunities.

The USAID **Leland Initiative** brings information and communications technologies to the people of Africa, with special emphasis on rural poor, ethnic minorities, and women. Since its launch in 1996, it has established national Internet gateways in 12 countries, grown a robust industry of private Internet service providers and cybercafe operators in 25 countries, and helped numerous institutions use the Internet to reach development goals. Currently, there are over 21 countries that are at various stages of implementing the Initiative: Benin, Botswana, Cote d'Ivoire, Eritrea, Ethiopia, Ghana, Guinea, Guinea Bissau, Kenya, Madagascar, Malawi, Mali, Mozambique, Namibia, Rwanda, Senegal, South Africa, Tanzania, Uganda, Zambia and Zimbabwe.

The Middle East Partnership Initiative (MEPI) is an initiative founded to support economic, political, and educational reform efforts in the Middle East and champion opportunity for all people of the region, especially women and youth. To date, the Administration has committed almost \$293 million to MEPI over four fiscal years. The initiative links Arab, U.S., and global private sector businesses, NGOs, civil society elements, and governments to develop policies and programs that support reform in the region. MEPI is structured in four areas: economic, political, educational, and women. Examples of MEPI communications initiatives include:

The **Digital Reform Initiative** grant which will enable the Safadi Foundation to provide computer hardware and software, extensive English language training, and computer skills training to women and youth in Tripoli and Northern Lebanon.

A three phase e-learning pilot project is providing **Internet for Yemeni High Schools** through a collaborative learning network for 24 high schools throughout Yemen. Phase I will focus on basic

¹⁰ These initiatives represent a small sample of what the United States government and industry are doing to address some of the communications challenges faced by developing countries as reported in the ITU/WSIS stocktaking survey found at: <http://www.itu.int/wsis/stocktaking/scripts/listing.asp>. It is by no means exhaustive.

connectivity issues, refurbish and equip Internet classrooms, and provide computer/Internet training to teachers and students. Phase II will train teachers in the pilot schools: linking them to e-learning resources in the region and in the United States; providing Arabic teacher-training materials; developing lesson plans that incorporate the Internet and multimedia materials; and sensitizing them to gender-specific behaviors to ensure girls' involvement. Phase III will introduce projects for Yemeni students to work together and with American students electronically.

The Internet Policy Reform project in **Algeria** provides technical and expert support for Algerian regulators to create a national policy framework that fosters competition, transparency, and entrepreneurship. The program also aims to support the growth of accessible and affordable information and communications technologies as well as to lower prices and encourage information exchange.

Some private companies have programs that provide technology training to students around the world. One program exists in more than 10,000 academic institutions in 160 countries and it is currently providing training to more than 450,000 students. Since its inception, 6 million students around the world have graduated from this program.

In partnership with the United Nations Development Program, U.S. Agency for International Development and the International Telecommunication Union, one company has made the Academy program available to students in Least Developed Countries (LDCs) to help them build their country's economies, and contribute to the Millennium Declaration Goals. Since its establishment in 2000, this company's Least Developed Countries initiative has established 200 academies in LDCs and trained more than 8,000 students. A goal was set that 30 percent of all students are women. This objective is being met.

Another program run by a private company provides technology skills for underserved young people and adults through community-based organizations around the world. Since May 2003, this company has invested a total of \$118 million in both grants and software in Unlimited Potential programs operating in 89 countries. This private entity partners with 445 organizations in these countries to provide community centers with funding to launch or sustain IT skills training programs, including hiring and training technology instructors, and expanding course offerings. In addition, it has developed curricula that emphasize real-world technology applications and will initially be available in English, French, Spanish and German. The Unlimited Potential learning centers are tailored to each of the countries in which they operate. In India, the focus is on developing the workforce skills of women; in Southern Africa, the company is working with the UN Development Program to explore innovative ways that technology can be used to address HIV/AIDS.

The Local Language Program is a global initiative that enables regional language groups to preserve and promote their language and culture while benefiting from IT advancements. One private company collaborates with local governments to offer citizens the ability to customize leading, value-based software applications with local language capabilities so they can work in their native language.

Through the **Partners in Learning** initiative, one private company works with 92 national governments to increase access to technology skills to schools and educators, providing software and helping to improve and expand teacher training. One of these projects is Innovative Teachers, available in 27 countries, which provides teachers with training in enhancing learning in the classroom using software.

The **Last Mile Initiative** is a global program to expand the access of the rural poor to telecommunications. It was launched in April 2004 by USAID Administrator Andrew Natsios to spur increases in productivity and transform the development prospects of farmers, small

businesses, new startups and other organizations in rural areas presently underserved by the world's major voice and data telecommunications networks. A budget of \$3 million is initially available to seed program activities and a budget of \$10 million is planned over two to three years. This initiative sponsors country programs that incorporate key elements including innovative technology solutions that extend connectivity to the underserved, innovative business models that make extending connectivity profitable, and innovative content and applications. In Sri Lanka for example, in partnership with private firms and with technical assistance from USAID, private companies and financial institutions have donated surplus telecommunications capacity, reliable electricity, and facilities for communities to access the Internet and other services in evenings and on weekends when the sites would have been otherwise empty.

The **DOT-COM Alliance**, a USAID-funded program, promotes the use of information and communications technology (ICT) to achieve development objectives. DOT-COM works in all sectors, including education, economic growth, women in development, agriculture, trade, health, environment, and telecommunications/e-commerce policy. The program promotes policy and regulatory reform to create enabling environments for ICT and also extends ICT access to underserved communities and accelerates development-related uses of ICT such as e-commerce and e-government. The Alliance is made up of 99 Resource Partners, including traditional NGOs, corporations, multilateral organizations, universities and foundations. The expected value of the DOT-Com Alliance agreements is \$75,000,000 over five years: \$15,000,000 of core funds; \$60,000,000 of mission/regional bureau funds.

The **Afghanistan District Communications Network** with the assistance of USAID is developing a VSAT-based infrastructure system known as the District Communications Network (DCN). The system will bring phones and Internet access to all 355 district centers in Afghanistan and link them to Kabul. USAID also assists with the **Afghanistan Codan Radio Program**, which has linked communications among the Kabul based Afghan government and its 32 provincial governments through an electronic network.

USAID helped to create the **Arab Telecommunications Regulator's Network (ATRN)**, a framework for promoting pro competitive, legal, policy, and regulatory reform for countries in the region, including Iraq. The ATRN strives to make telecommunications and information technology in the Middle East more widespread, affordable, reliable, and pro-consumer.

USAID has assisted the **Palestinian ICT Industry** in ICT sector growth and has also provided technical assistance in creating an independent telecommunications regulatory authority in the West Bank and Gaza and has worked with Palestinian telecommunications officials on communications policy issues.

The **United States Telecommunications Training Institute (USTTI)**, a non-profit joint venture between leading U.S. based communications and IT corporations and leaders of the Federal government, provides tuition-free management, policy, and technical training for professionals from the developing world. In 2004, USTTI conducted 7 specialized training courses for 87 participants from 36 countries, covering topics such as spectrum management, spectrum monitoring and measurement, regulatory and privatization issues, and laboratory techniques for equipment authorization.

The **United States Federal Communications Commission** has conducted several workshops to assist regulators and policy makers around the globe. In addition, its International Visitors Program hosts approximately 400 regulators and policy makers from roughly 100 countries annually for brief issue-specific programs, consultations, and discussions. Workshops include:

Outreach and Training on Advanced Spectrum Management Techniques and Approaches, 15 videoconferences with regulators from across the globe to discuss flexible and cutting-edge spectrum management policies to accommodate convergence and new technologies, as well as the recommendations of the FCC's Spectrum Policy Task Force.

Training for Regulators from the Andean Region, an intensive training program for regulators and trade negotiators from Colombia, Ecuador, Peru and Bolivia to discuss regulation, competition, enforcement, consumer issues, and other topics in the context of U.S. free trade negotiations with this region.

Training and outreach on Voice over Internet Protocol (VOIP) and Internet-Protocol Enabled Services, nearly twenty video conferences with regulators from across the globe to discuss the technology and regulatory policy toward IP-enabled services, including VOIP.

NetTel@Africa developed by USAID with input from various sources including the U.S. Federal Communications Commission, provides and maintains a comprehensive curriculum for training IT policy and regulatory officials. The program has developed a growing network of more than 20 higher education institutions in the U.S. and Africa offering joint degrees in this area.

The State Department in coordination with USAID administers the **Telecommunications Leadership Program (TLP)** which provides technical assistance and builds institutional capacity in developing countries that are reforming their telecommunications policies and practices. TLP's primary goal is to help developing-country governments establish fair, transparent, and market-oriented telecommunications policies and practices. The program's secondary goal is to help the public and private sectors in developing countries use telecommunications more effectively to spur economic growth, strengthen democratic institutions, and improve standards of living. TLP has allowed USAID and the State Department to provide expertise from US federal agencies, principally the U.S. Federal Communications Commission, to support numerous ICT regional workshops, training programs and international conferences.

USAID's **Bangladesh Shoe Industry Program** provides a variety of e-commerce tools to help the industry dramatically increase exports, generate revenue for local business, and increase employment for women.

USAID has also established the **IT Mentors Alliances Program** that helps IT business associations actively and effectively engage policymakers.
