

Chairman's Report

In 2007 – the USTTI's 25th year of global outreach – we achieved the important benchmark of graduating our 7,500th USTTI scholar who, together with her fellow alumni, is working today to make modern communications a reality for their countrymen in 166 developing nations.

In 2007 the USTTI staff processed 10,746 applications – an all-time high that provides further evidence of the increasing relevance of ICT training in every corner of the developing world. Importantly, USTTI scholars continued to demonstrate a fierce determination to promote policies that will aggressively and efficiently use their country's spectrum so that new, affordable ICT communications are readily available to their countrymen.

2008 promises to be an even more exciting year for USTTI scholars and their volunteer expert trainers across the United States. The USTTI curriculum has been expanded to include special courses on Internet governance, e-government and rural connectivity. With the expanded curriculum, we still have maintained our bedrock courses in spectrum management, satellite communications, privatization, regulatory reform, wireless, wireline, distance learning and telemedicine.

As we start our 26th year of training, the USTTI Board of Directors is committed more than ever to provide the vital assistance and support that have become a hallmark of the USTTI's partnership with women and men who are equally committed to improving the quality of life for their fellow citizens in every region of the world.



Michael R. Gardner
Chairman, USTTI

USTTI 2008 Board of Directors



Michael R. Gardner
Chairman
USTTI
The Law Offices of
Michael R. Gardner, P.C.



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United States Telecommunications Training Institute

BACKGROUND

The United States Telecommunications Training Institute (USTTI) is a non-profit public-private partnership between senior federal officials and leaders of the U.S. information and communication technology (ICT) and broadcast industries. The goal of this collaborative effort is to share the United States' technological and managerial advances with women and men who regulate and maintain the IT and communications infrastructures throughout the developing world. The USTTI's comprehensive array of intensive tuition-free training courses are made possible by the support of federal and private board members, as well as hundreds of volunteer trainers across the country.

Michael R. Gardner, United States Ambassador to the International Telecommunication Union (ITU) Plenipotentiary Conference in Nairobi, Kenya, established the USTTI in 1982 to address the compelling need in developing countries for senior-level technical and managerial training in all areas of communication. In preparation for the Nairobi ITU Conference, Ambassador Gardner asked leaders of major, and often competing, U.S. communications corporations to join together with senior U.S. Government officials to provide tuition-free training for qualified communications professionals, regulators, and entrepreneurs from the developing world. Government officials and U.S. industry leaders enthusiastically responded with the USTTI's first curriculum offering in 1983, which featured 13 courses.

Joining Ambassador Gardner as founding members of the USTTI were: William McGowan, founder of MCI Communications; Dr. Joseph Charyk, Chairman of the Board and first President of the Communications Satellite Corporation (COMSAT); Charles Wick, the Director of the United States Information Agency (USIA) during the 1980s; Dick Nichols, Vice President of AT&T International; and Harrison "Jack" Schmitt, former United States Senator from New Mexico and the twelfth man to walk on the moon.

USTTI TODAY

Since first offering 13 tuition-free courses in 1983, the USTTI has expanded its curriculum to provide 86 diverse courses in 2008. Thanks to the steadfast support of USTTI corporate and government Board members, as well as vital contributions from universities, medical institutions, and others in the U.S. IT-communications arena, the USTTI has incorporated the latest technological developments in its 2008 curriculum to ensure its relevance for the developing world.

Corporate Board members of the USTTI are: Tim Cowen, BT Global Services; Kalpak Gude, Intelsat Global Service Corporation; Eric H. Loeb, AT&T; Jennifer A. Manner, Mobile Satellite Ventures; Michael McMenamin, Alcatel-Lucent; Sean Murphy, QUALCOMM Incorporated; James F. X. Payne, Bechtel Federal Telecoms; Dr. Robert Pepper, Cisco Systems, Inc.; Peter Pitsch, Intel Corporation; Michael Regan, News



International Telecommunications Union (ITU) Secretary General Hamadoun Toure (2nd from left) addresses members of the USTTI Board of Directors during his first visit to the United States as Secretary General. Later in 2007, Secretary General Toure was awarded the Chairman's Award for his outstanding efforts to close the digital divide throughout the developing world. Shown above with Secretary General Toure are Ambassador David Gross (left), U.S. Coordinator for International Communications and Information Policy at the U.S. State Department, USTTI Chairman Ambassador Michael R. Gardner (2nd from right) and Meredith Baker, Acting NTIA Administrator (far right). Ambassador Gross represents the State Department and Acting Administrator Baker is NTIA's representative on the USTTI Board.

Corporation; Jackie Ruff, Verizon; Lynn St. Amour, Internet Society; Sebastiano Tevarotto, The Hewlett-Packard Company; Shane Tews, VeriSign, Inc.; and Frank C. Weaver, The Boeing Company. USTTI Board companies provide tuition-free training at their corporate facilities, finance the general overhead costs of the USTTI, and designate a senior executive to serve on USTTI's Board of Directors.

Senior communications officials from the Federal Government also play a critical role in the success of the USTTI, and are represented on the USTTI Board of Directors by: Juan A. B. Belt, Director of the Office of Infrastructure and Engineering in the Bureau for Economic Growth, Agriculture, & Trade, U.S. Agency for International Development (USAID); Ambassador David A. Gross, United States Coordinator for International Communications and Information Policy, U.S. Department of State; Meredith Baker, Acting Assistant Secretary of Commerce for Communications and Information and Administrator of the National Telecommunications & Information Administration (NTIA), and Chairman Kevin J. Martin of the Federal Communications Commission (FCC). These federal leaders actively involve their agencies in important training outreach for the USTTI. Through their participation, and that of other officials in the Executive Branch and Congress, the U.S. Government has been a full partner with private industry to accomplish USTTI training goals.

In addition to their leadership on the USTTI Board of Directors, U.S. Government officials and their departments and agencies provide significant training as well as other in-kind and scholarship support for USTTI participants. USAID is a vital source of travel and subsistence funding for highly qualified USTTI scholars from less-developed countries. These scholarships are awarded each year through the invaluable assistance of the women and men working in USAID Missions overseas. The FCC provides vital training through its six courses each year, and plays an important leadership role in special USTTI seminars. The FCC also prints the biennial Participant Hand-

book, an orientation guide for USTTI trainees. The NTIA offers senior-level spectrum management and IT policy training, and provides an annual grant to help publish the USTTI's Course Catalog and Annual Report. The State Department awards training grants to the USTTI and provides valuable contacts with foreign governments that nominate candidates for USTTI training.

In addition, the US Trade and Development Agency (USTDA) and its dedicated staff provide a panoply of funding and additional support for the USTTI. Besides showcasing USTTI's tuition-free curriculum at their popular regional conferences around the globe, USTDA has provided important funding support in conjunction with these regional seminars.

The United States Congress has recognized the significance of the USTTI's global training outreach through special amendments to two legislative acts: the Omnibus Diplomatic Security and Antiterrorism Act of 1986 and the Cable Communications Policy Act of 1984. These amendments explicitly authorize support (including use of staff, other appropriate resources, and service on the Board of Directors) of USTTI's activities by the State Department, USAID, FCC, and NTIA.

USTTI TRAINING

To ensure a dynamic learning experience for USTTI scholars, the Board of Directors is committed to maintaining the diversity of USTTI's cutting-edge curriculum. Instead of operating a costly training center, USTTI offers the vast majority of its tuition-free training in corporate and federal training facilities, laboratories, and television stations that are volunteered by our sponsors across the U.S. As a result, the same facilities used for corporate and government in-house training also effectively serve as classrooms for USTTI scholars.

Throughout the past 25 years, the USTTI has offered a total of 1,528 diverse training courses and graduated 7,524 women and men who are the key IT-communications regulators, managers, and service providers in 166 developing countries. As USTTI enters its 26th year of training, the increased popularity and need for USTTI's tuition-free training is reinforced by the fact that in 2007, the USTTI's 70-course curriculum attracted 10,746 applications for the 998 available training slots, a 10:1 ratio of qualified applicants for each USTTI training slot.

USTTI ORIENTATION

For USTTI scholars, the free exchange of ideas and experiences with professionals from the United States and around the world is critical to maximizing the benefits of USTTI training. This exchange of information begins prior to each training course, with an important orientation session hosted by the USTTI staff in Washington, DC.

USTTI orientations are mandatory and typically held on the last business day prior to the first day of training. During these one-day sessions, USTTI scholars familiarize themselves with topics that may be addressed in training, receive introductory materials, and acquaint themselves with fellow participants. In addition, USTTI orientation sessions often include discus-

sions about communications policy in the U.S. led by government officials, academics, and policy experts from the business or legal community. Importantly, these meetings provide an excellent forum for the exchange of technical, professional and cultural information that is critical for the fulfillment of training objectives.

"I would like to thank USTTI for this outstanding opportunity to acquire state of the art knowledge. This field is of main interest to the development process in my country. I feel responsible for the task of spreading this to my colleagues."

-Ms. Marta Edith
Cauatta de Ramos, Paraguay, M7-220

Orientations also provide the USTTI staff an opportunity to brief scholars on a variety of subjects, including the history and layout of the nation's capital, Washington, DC. To ensure that all USTTI guests are able to fully appreciate the city, the USTTI facilitates a weekend tour of Washington's cultural and historical landmarks. Weekends are flexible to allow trainees to explore Washington or use the day to travel to alternate training cities when necessary.

GRADUATION AND DEPARTURE

Most USTTI training sponsors conduct a graduation ceremony at the conclusion of training, where certificates are awarded to USTTI scholars in recognition of their successful completion of the course. At the conclusion of most courses, an oral and written evaluation of the course is also administered. These evaluations are a reliable means for USTTI graduates to identify additional training needs and ensure that the USTTI curriculum continues to be fully responsive to the emerging technology and policy priorities of officials and entrepreneurs throughout the developing world. In accordance with the Conditions of Participation form signed at orientation, all USTTI graduates, whose travel is subsidized by USTTI grants, must return to their home countries in the days immediately following graduation.

Applicant Information

WHO SHOULD APPLY

Information technology, telecommunications, broadcast, satellite, wireless, telehealth, and emergency communications professionals who are proficient in English and employed in the public or private sector of a developing country are encouraged to apply for USTTI training. A post-secondary education is often required, and a university degree in telecommunications, broadcasting, management, engineering, or electronics is preferable. Substantial practical experience in a country's communications infrastructure may be substituted for formal academic credentials. Educational background, professional experience, achievements, and current job responsibilities must be clearly described in the USTTI Application for Training. Additionally, candidates should focus on the experience and goals section of the application, as these sections are critically reviewed by our course sponsors.

HOW TO APPLY

Those interested in applying for training should do so via the USTTI website, www.ustti.org. **Applying online guarantees the quickest processing time.** Another option is to fax or mail the application form found at the back of the USTTI catalog. **PLEASE NOTE: Due to lengthy visa requirements, USTTI urges applicants to submit applications at least 16 weeks before the beginning of their first desired course.** Applications received after the 16 week deadline will still be considered, but are less likely to result in acceptance. Applicants are reminded that their USTTI application **must be fully completed** and include current office, fax, and mobile phone numbers, at least one valid e-mail address, and contact information for two relatives living in their home country as well as any in the United States, if applicable. Incomplete applications may not be considered. For those applying via fax or mail, applications should be typed.

Applicants should carefully review the course descriptions provided in the catalog and apply selectively for only those courses that are most appropriate to their experience, responsibilities and goals. Applicants should take special notice of the available course sequences, which provide opportunities to maximize the training experience by attending several consecutive courses.

SELECTION PROCESS

The acceptance procedure is a collaborative effort between the USTTI and its training partners, with the final acceptance decisions made by course sponsors. Sponsors review each application and select only the most qualified candidates. Selection criteria include: professional qualifications, suitability for the course, thoroughness in completing the application, and most importantly, goals for participating in USTTI training. Applicants must clearly demonstrate in their "Applicant Training Goals" essay how their participation would benefit their company or organization, what leadership role they might assume upon completion of training, and how they envision implementing the training upon returning home.

If accepted, applicants will be notified by the USTTI via an official e-mail and/or fax at least 12 weeks prior to the start of training. Applicants may be accepted to one or all of the courses to which they apply, depending upon the number of training slots available, applicant qualifications, and course focus. Participation in USTTI training is not guaranteed until accepted applicants confirm attendance and funding source via e-mail or fax, secure a U.S. entry visa (if necessary), and provide their purchased travel itinerary to the appropriate Curriculum Coordinator.

FUNDING PROCESS

Applicants should seek funding from their employers for their international and domestic U.S. travel and for their living expenses during USTTI training. If employer funding is unavailable, applicants are encouraged to secure sponsorship from international organizations that recognize the importance of USTTI training, such as the International Telecommunication Union (ITU), The World Bank, the United Nations Development Program (UNDP), the United Nations Educational, Scientific and Cultural Organization (UNESCO), and the Organization of American States (OAS-CITEL). The USTTI will attempt to help qualified applicants for whom no other funding sources for travel and subsistence are available. However, USTTI funding is limited, and applicants are much more likely to attend training if they secure all or part of their travel and living expenses.

PARTICIPANT EXPENSES

The recommended subsistence rate for participants attending USTTI training is approximately US\$130 per day, although this amount may be greater or lesser at certain training locations due to varying hotel costs. This rate covers only the cost of meals and a shared hotel room in USTTI-designated hotels. This figure does not cover single occupancy rooms or personal expenses such as hotel services and souvenirs.

VISA INFORMATION

Due to significant changes in U.S. visa regulations, USTTI urges all applicants to contact the U.S. Consulate in their country to determine specific application requirements, fees, interview procedures, and deadlines before applying. It can take up to four months in some countries to secure a visa appointment.



For the past 25 years the USTTI has strived to empower women throughout the developing world. Each year we have seen an increase in the number of female applicants but have never had a class where women outnumbered men. That barrier was broken in July 2007 when there were more women than men attending Verizon's "Managing Effectively in the Changing Telecommunications Environment." The nine women, shown above, who attended this Verizon course have returned home and are now providing enlightened leadership in the ICT space.

Therefore, we recommend applicants contact the consulate immediately after submitting course applications to USTTI to ensure sufficient time for filing necessary documents. It is essential that all USTTI applicants possess passports that will be valid for **at least six months** after the conclusion of training; otherwise the U.S. Embassy has been instructed not to issue an entry visa.

TRAVEL ARRANGEMENTS

In order to avoid confusion and disruption during USTTI orientation and training, trainees must send a copy of their air travel itinerary for ALL required travel to a Curriculum Coordinator before arriving in the U.S. It is also necessary that all international and U.S. domestic airline reservations be made in accordance with the dates provided in USTTI acceptance information. Last-minute ticket purchases and itinerary changes are expensive and may not be possible.

Important Considerations before Submitting your Application:

- Have you reviewed the course sequencing information?
- Is your passport valid for at least six months beyond the conclusion of the last training course to which you applied?
- Have you consulted the website of the U.S. Consulate in your country to determine U.S. entry visa requirements and procedures?
- Have you visited the USTTI web site (<http://ustti.org>) to review the online application procedures?
- Is your application complete, including valid e-mail addresses, office and mobile phone numbers, passport details, supervisor contact information, and contact information for relatives in your country as well as the U.S.?

USTTI POLICIES FOR PARTICIPANTS

Participants in USTTI training must adhere to the USTTI's policies, which cannot be waived without written authorization from a professional member of the USTTI staff. The most important requirements are:

- Trainees must attend orientation in Washington, DC, even if the participant is a former USTTI graduate.
- Trainees must stay in the hotels designated by the USTTI. There are no exceptions.
- Spouses and/or family members may not accompany participants during training.
- Trainees must be prepared to pay their hotel room charge in full at time of check-in. All incidental expenses, such as telephone calls, movies, or room service, are the responsibility of the participant.



FCC Commissioner Robert McDowell explains how the Commission functions to senior officials attending the USTTI's e-Government Seminar. Sixteen scholars from Bhutan, Bolivia, Colombia, Dominica, Kenya, Laos, Mongolia, Nepal, Nigeria, Papua New Guinea, Uganda, Uzbekistan and Zambia attended two weeks of briefings pertaining to the development of strategies and policies for the implementation of e-Government programs. All the current FCC Commissioners have served as volunteer "USTTI Professors" sharing their views on policy and explaining the important role that an independent Commission plays in promoting consumer benefits and the free flow of information.

- Since USTTI training is offered only in English, participants must have a functional proficiency in English.
- Participants must attend all classes unless excused by the training staff for health or emergency reasons.
- During orientation, each trainee must pay an insurance and administrative fee of US\$150 for the first course and US\$75 for each additional course. This fee is mandatory since the USTTI is required to insure all participants regardless of the participant's own coverage under a personal or company insurance policy. This insurance does not cover dental care, eye care, prescriptions, or pre-existing conditions.
- To avoid any disruption to the USTTI admission process, applicants may not contact course sponsors regarding acceptance or funding decisions.

Failure to adhere to any of these requirements will result in a participant's immediate dismissal from training.

USTTI Funding

In 2007, the USTTI corporate and government Board members, along with training sponsors from both academia and the IT, telecom and broadcast industries, provided \$3.9 million in cash and in-kind contributions to support the USTTI, a 501(c)(3) non-profit corporation. These contributions reflect the costs of offering 70 tuition-free training courses in 2007, as well as travel and subsistence funding, educational materials, and a host of other services provided to the USTTI.

The USTTI's overhead costs - program development expenses, salaries for our small staff, and institutional costs such as rent, utilities, and postage - are paid for by private sector contributions. The USTTI's 2007 operating budget of \$700,554 was tightly controlled so that all revenues raised by the USTTI in excess of overhead costs were used to provide additional travel and subsistence support to qualified USTTI scholars from developing countries.

In addition to funding from the private sector, the USTTI received essential support from the Federal Government. The United States Agency for International Development (USAID) provided significant funding to the USTTI in 2007 for the travel and subsistence needs of USTTI scholars from the developing world. In addition, ten participants from Middle East and North Africa received travel and subsistence through a grant from the U.S. Trade and Development Agency (USTDA). Travel and subsistence funding also was provided by

the Department of State to one qualified telecommunications official from Oman, for the Chairman of the newly created Telecommunications Regulatory Authority in Lebanon and one telecommunications official from each of the following Freely Associated States (FAS): Republic of Marshall Islands, the Federated States of Micronesia and the Republic of Palau. The National Telecommunications and Information Administration (NTIA) of the U.S. Department of Commerce and the Federal Communications Commission (FCC), provided in-kind support for the USTTI. Voice of America underwrote a grant that provided funding for eight developing country broadcasters to attend training. International organizations, such as the International Telecommunication Union (ITU) and the Organization of American States (OAS)/Inter American Telecommunication Commission (CITEL), contributed additional in-kind support and funding to the USTTI in 2007.

The USTTI is a 501(c)(3) non-profit corporation, meeting all requirements for charitable contributions. In 2008, the USTTI will need approximately \$1,850,000 in order to provide travel and subsistence of qualified applicants who are unable to support their own participation in USTTI training. Corporations and organizations wishing to support the USTTI should contact Curriculum Director Brian McCloskey or Curriculum Coordinators Jim O'Connor or Janet Concepcion at 1150 Connecticut Avenue, NW, Suite 702, Washington, DC 20036-4131, USA. Telephone: +1-202-785-7373, Fax: +1-202-785-1930, E-mail: bmccloskey@ustti.org, joconnor@ustti.org or jcerbo@ustti.org.



Federal Communications Commissioner Deborah Tate discusses key issues with 18 officials during the 2007 Telecom/IT Policy and Regulation Sequence. Commissioner Tate is a popular guest lecturer at the USTTI as are her fellow colleagues on the Commission, Commissioner Michael Copps, Commissioner Jonathan Adelstein and Commissioner Robert McDowell. Chairman Kevin Martin is an active supporter and represents FCC on the USTTI Board of Directors. Over the 25 year history of the USTTI, FCC Commissioners have served as "volunteer professors," providing valuable insights for countless USTTI scholars who are now serving as Commissioners themselves on independent regulatory bodies throughout the development world.

2008 COURSE SCHEDULE

FIRST TRIMESTER

Number	Course Title	Orientation	Training	Sponsor	Location
Utility Regulation:					
M8-170	23rd International Training Program on Utility Regulation and Strategy	Jan 11	Jan 14 - 25	Public Utility Research Center (PURC)	Gainesville, FL
Spectrum Management Sequence:					
M8-100	Radio Frequency Spectrum Management	Mar 28	Mar 31 - Apr 11	National Telecommunications and Information Administration (NTIA), Comsearch and Alion Science & Tech.	Washington, DC
M8-101	Spectrum Management in the Civil Sector	Apr 11	Apr 14 - 25	Federal Communications Commission (FCC) and Comsearch	Washington, DC
M8-102	Radio Spectrum Monitoring and Measuring	Apr 25	Apr 28 - May 2	Federal Communications Commission (FCC) and National Instruments	Columbia, MD
M8-103	Practical Applications of Spectrum Management and Spectrum Monitoring	May 2	May 5 - 9	TCl, International, Inc., an SPX Company	Fremont, CA
Telehealth Sequence I:					
M8-110	Telemedicine and Distance Learning Synopsis	Apr 18	Apr 21 - 23	University of Virginia Health System, Office of Telemedicine	Charlottesville, VA
M8-111	Advanced Telemedicine and Distance Learning Applications	Apr 23	Apr 24 - 25	The Office for the Advancement of Telehealth (OAT), Health Resources and Services Administration (HRSA) of the Department of Health and Human Services	Rockville, MD
M8-112	Developing a Multiple Site Telemedicine Network	Apr 25	Apr 28 - May 2	Univ. of Arkansas for Medical Sciences (UAMS) Telemedicine Training Program	Little Rock, AR
Internet Governance / Mobile Broadband Sequence I:					
M8-120	Introduction to the IP Multimedia Subsystem	Apr 25	Apr 28	Alcatel-Lucent	Washington, DC
M8-121	ICT Policymaking in a Global Environment	Apr 28	Apr 29	The National Telecommunications and Information Administration (NTIA)	Washington, DC
M8-122	Building Cybersecurity Capacity	Apr 29	Apr 30	The National Telecommunications and Information Administration (NTIA)	Washington, DC
M8-123	Internet Regulatory and Trade Policy	Apr 30	May 1 - 2	The Information Technology and Innovation Foundation (ITIF)	Washington, DC
M8-124	Internet Governance: Issues and Challenges	May 2	May 5	AT&T	Washington, DC
M8-125	Communications Infrastructure Economics and Regulation	May 5	May 6	Packet Clearing House	Washington, DC
M8-126	WiMAX: Revolutionizing Broadband Wireless Access	May 6	May 7 - 9	Intel Corporation, Motorola and Sprint	Washington, DC
M8-127	IMT (3G/4G) Mobile Broadband and Mobile TV	May 9	May 12 - 16	QUALCOMM Incorporated	San Diego, CA
Internet Technology Sequence:					
M8-130	DNS and Related Internet Technologies	Apr 30	May 1 - 2	VeriSign Inc.	Washington, DC
M8-131	Internet Service Provider Design Seminar and Backbone Routing Protocol Workshop	May 2	May 5 - 23	Cisco Systems Inc.	San Jose, CA
Distance Learning Sequence:					
M8-140	Successful Satellite Regulation & Policy for Developing Countries	May 22	May 23	GVF – The Global Satellite Communications Association	Washington, DC
M8-141	Satellite and Internet Delivery of Educational Television and Multimedia	May 23	May 27 - June 6	SCOLA (A Foreign Language TV/Web Provider)	McClelland, IA
Radio and Television Broadcast Technology Sequence I:					
M8-150	Introduction to US Television Broadcasting	May 30	June 2 - 13	WCOV-TV, a National Assoc. of Television Program Executives (NATPE) Station	Montgomery, AL
M8-151	Introduction to US Television Broadcasting	June 6	June 9 - 13	WPMT-TV, Fox 43	York, PA
M8-152	Introduction to Public Television Broadcasting	June 13	June 16 - 27	WHUT-TV, Howard University Television	Washington, DC
M8-153	Advanced Editing Techniques	TBA	TBA	Discovery Communications, Inc.	Silver Spring, MD and Sterling, VA
M8-154	Introduction to the American Cable Television Industry	TBA	TBA	Black Entertainment Television (BET)	Washington, DC
M8-155	University Affiliated Public Radio Broadcasting	TBA	TBA	WAMU 88.5	Washington, DC
Radio and Television Broadcast Technology Sequence II:					
M8-160	New Technologies in Broadcasting	May 6	May 7 - 23	Broadcasting Board of Governors, U.S. International Broadcasting/Voice of America (VOA) in cooperation with the Inst. of Electrical and Electronics Engineers Broadcast Technology Society (IEEE/BTS)	Washington, DC

Number	Course Title	Orientation	Training	Sponsor	Location
M8-161	University Affiliated Public Radio Broadcasting	TBA	TBA	WAMU 88.5	Washington, DC
Fiber Optics:					
M8-171	Hands-on Fiber Optic Intensive	TBA	TBA	FiberLight International	Estes Park, CO
SECOND TRIMESTER					
Radio Spectrum Monitoring:					
M8-240	Radio Spectrum Monitoring Techniques and Procedures	June 2	June 2 - 6	Federal Communications Commission (FCC) and Agilent Technologies	Columbia, MD
Utility Regulation:					
M8-241	24th International Training Program on Utility Regulation and Strategy	June 6	June 9 - 20	Public Utility Research Center (PURC)	Gainesville, FL
e-Government:					
M8-242	Applying 21st Century ICT in Emerging Markets	June 6	June 9 - 13	Intel Corporation and USAID	Santa Clara, CA
M8-243	e-Government for Development: Strategies and Policies	June 13	June 16 - 27	USTTI and USAID	Washington, DC
Radio and Television Broadcast Technology Sequence:					
M8-200	Radio and TV Studio Design, Operation and Management	July 8	July 9 - 25	Broadcasting Board of Governors, U.S. International Broadcasting/Voice of America (VOA) in cooperation with the Inst. of Electrical and Electronics Engineers Broadcast Technology Society (IEEE/BTS)	Washington, DC
M8-201	Broadcast Transmitter Operation and Maint.	July 25	July 28 - Aug 8	Harris Broadcast Communications Division	Quincy, IL
M8-202	University Affiliated Public Radio Broadcasting	TBA	TBA	WAMU 88.5 FM	Washington, DC
Management Training Sequence:					
M8-210	Introduction to the IP Multimedia Subsystem	July 10	July 11	Alcatel-Lucent	Washington, DC
M8-211	Managing Effectively in the Changing Telecommunications Environment	July 11	July 14 - 25	USTTI	Washington, DC
M8-212	Key Trends in Evolution of the Public Network: a Managerial Perspective	July 25	July 28 - Aug 1	The Hewlett-Packard Company (HP)	Cupertino, CA
Telecom/IT Policy and Regulation Sequence:					
M8-220	Seminar in Competition Policy for Telecommunications	July 17	July 18	USTTI in Conjunction with the US Federal Communications Commission (FCC), Department of Justice, Federal Trade Commission (FTC), and the Washington, DC Legal Community	Washington, DC
M8-221	Regulatory and Privatization Issues in Telecommunications	July 17	July 21 - 25	Federal Communications Commission (FCC) and USTTI Board Member corporations	Washington, DC
M8-222	ICT Policymaking in a Global Environment	July 25	July 28	The National Telecommunications and Information Administration (NTIA)	Washington, DC
M8-223	Building Cybersecurity Capacity	July 28	July 29	The National Telecommunications and Information Administration (NTIA)	Washington, DC
M8-224	The WTO Reference Paper: A Primer	July 29	July 30 - 31	Verizon	Washington, DC
M8-225	Innovation that Matters: On Demand Government for Developing Nations	July 31	Aug 1	The IBM Institute for Electronic Government	Washington, DC
M8-226	Communications Infrastructure Economics and Regulation	Aug 1	Aug 4	Packet Clearing House	Washington, DC
M8-227	Purpose and Impact of European Regulation of Communication	Aug 4	Aug 5 - 6	United Kingdom Telecommunications Academy (UKTA)	Washington, DC
Wireless Communications Sequence:					
M8-230	Introduction to the IP Multimedia Subsystem	Aug 11	Aug 12	Alcatel-Lucent	Washington, DC
M8-231	A Comprehensive Review of the Mobile Communications Industry Focusing on Technologies for 3G and 4G Wireless Systems	Aug 12	Aug 13 - 15	AT&T	Atlanta, GA or Redmond, WA
M8-232	IMT (3G/4G) Mobile Broadband and Mobile TV	Aug 15	Aug 18 - 22	QUALCOMM Incorporated	San Diego, CA
M8-233	The Wireless Broadband Revolution: Wi-Fi and WiMAX: the Technical, Business, and Spectrum Policy Ramifications in the Global Marketplace	Aug 22	Aug 25 - 27	Intel Corporation	Santa Clara, CA
Fiber Optics:					
M8-244	Hands-on Fiber Optic Intensive	TBA	TBA	FiberLight International	Estes Park, CO

THIRD TRIMESTER

Number	Course Title	Orientation	Training	Sponsor	Location
Satellite Communications Sequence:					
M8-300	Sustainable Satellite Solutions for Developing Countries	Sept 17	Sept 18 - 19	GVF – The Global Satellite Communications Association	Washington, DC
M8-301	Successful Satellite Regulation and Policy for Developing Countries	Sept 19	Sept 22	GVF – The Global Satellite Communications Association	Washington, DC
M8-302	Satellite Services and Disaster Response	Sept 22	Sept 23	Inmarsat	Washington, DC
M8-303	Satellite Communications Primer	Sept 24	Sept 25 - 26	Intelsat Corporation	Ellenwood, GA
M8-304	Commercial Satellite Communication Appl.	TBA	TBA	The Boeing Company	TBA
Radio Broadcasting Sequence:					
M8-310	Introduction to Public Radio Broadcasting	Sept 18	Sept 19	National Public Radio (NPR)	Washington, DC
M8-311	Media Management in Emerging Democracies	Sept 19	Sept 22 - Oct 3	The Mississippi Consortium for International Development (MCID)	Jackson, MS
M8-312	University Affiliated Public Radio Broadcasting	TBA	TBA	WAMU 88.5 FM	Washington, DC
Spectrum Monitoring Sequence:					
M8-320	Radio Spectrum Monitoring Techniques and Procedures	Sep 29	Sept 29 - Oct 3	Federal Communications Commission (FCC) and Agilent Technologies	Columbia, MD
M8-321	Laboratory Techniques in Support of Equipment Authorization Programs	Oct 3	Oct 6 - 10	Federal Communications Commission (FCC) and Rhode and Schwarz	Columbia, MD
Internet Governance / Mobile Broadband Sequence II:					
M8-330	Introduction to the IP Multimedia Subsystem	Oct 2	Oct 3	Alcatel-Lucent	Washington, DC
M8-331	ICT Policymaking in a Global Environment	Oct 3	Oct 6	The National Telecommunications and Information Administration (NTIA)	Washington, DC
M8-332	Building Cybersecurity Capacity	Oct 6	Oct 7	The National Telecommunications and Information Administration (NTIA)	Washington, DC
M8-333	Internet Regulatory and Trade Policy	Oct 7	Oct 8 - 9	The Information Technology and Innovation Foundation (ITIF)	Washington, DC
M8-334	Internet Governance: Issues and Challenges	Oct 9	Oct 10	AT&T	Washington, DC
M8-335	IMT (3G/4G) Mobile Broadband and Mobile TV	Oct 10	Oct 13 - 17	QUALCOMM Incorporated	Bozeman, MT
M8-336	WiFi and WiMAX and the Wireless Broadband Revolution: the Technical, Business, and Spectrum Policy Ramifications in the Global Marketplace	Oct 17	Oct 20 - 22	Intel Corporation	Santa Clara, CA
Emergency Communications Sequence:					
M8-340	Amateur Radio Administration for Regulators	Oct 10	Oct 13 - 17	American Radio Relay League (ARRL)	Newington, CT
M8-341	Disaster Communications Management	Oct 17	Oct 20 - 24	Pan American Health Organization (PAHO)	Washington, DC
M8-342	Geographic Information Systems (GIS): A primer	Oct 24	Oct 27	ESRI	Washington, DC
M8-343	Satellite Services and Disaster Response	Oct 27	Oct 28	Inmarsat	Washington, DC
M8-344	Remote Sensing Applications for Disaster Management and Societal Benefits	Oct 28	Oct 29 - 30	NASA	Washington, DC
Telehealth Sequence II:					
M8-350	Successful Satellite Regulation & Policy for Developing Countries	Oct 14	Oct 15	GVF – The Global Satellite Communications Association	Washington, DC
M8-351	Telemedicine Review	Oct 15	Oct 16 - 17	Howard University and the Louis Stokes Health Sciences Library	Washington, DC
M8-352	Telemedicine and Distance Learning Synopsis	Oct 17	Oct 20 - 22	University of Virginia Health System, Office of Telemedicine	Charlottesville, VA
M8-353	Advanced Telemedicine and Distance Learning Applications	Oct 22	Oct 23 - 24	The Office for the Advancement of Telehealth (OAT), Health Resources and Services Administration (HRSA) of the Department of Health and Human Services	Rockville, MD
M8-354	Developing a Multiple Site Telemedicine Network	Oct 24	Oct 27 - 31	Univ. of Arkansas for Medical Sciences (UAMS) Telemedicine Training Program	Little Rock, AR
Internet Technology Sequence II:					
M8-360	DNS and Related Internet Technologies	Oct 29	Oct 30 - 31	VeriSign Inc.	Washington, DC
M8-361	Internet Service Provider Design Seminar and Backbone Routing Protocol Workshop	Oct 31	Nov 3 - 21	Cisco Systems Inc.	San Jose, CA
Rural Connectivity:					
M8-370	Applying 21 st Century ICT in Emerging Markets	Oct 3	Oct 6 - 10	Intel Corporation and USAID	Santa Clara, CA
Fiber Optics:					
M8-371	Hands-on Fiber Optic Intensive	TBA	TBA	FiberLight International	Estes Park, CO

2008 Course Descriptions

Utility Regulation

M8-170

23rd International Training Program on Utility Regulation and Strategy

Sponsored by

Public Utility Research Center (PURC)

Course Description

An intensive, two-week program is specifically designed for a select group of about 70 senior- and mid-level utility regulators from OECD and non-OECD countries plus about 15 regulatory strategy executives from utility companies in the telecommunications, electricity, gas, and water industries who are currently undertaking infrastructure reforms. Topics include market reform, competition, financial analysis, price caps and other forms of incentive regulation, non-price issues, such as service quality and universal service/access, pricing, and managing the regulatory process.

The course (ten full days of lectures, sector-specific case studies, practical exercises, team presentations and panel discussions) will be taught or moderated by leading international authorities in their fields. The course features approximately 55 different teaching modules that present topics in a manner that emphasizes their interrelationships. Lessons are drawn from basic principles, international best practices, and cross-country and cross-sectoral experiences.

The course is taught in English and participants should have a good command of the English language. Some case studies and papers will be available at the course in Spanish (see the PURC website: www.purc.ufl.edu for additional papers).

A free, introductory course in basic economic concepts will be taught on the Sunday before the course begins.

Additional activities and trips will be available for participants during off-hours that will facilitate the learning process and the enjoyment of the program. Some facilities of the University of Florida will be accessible to course participants.

Participant Learning Objectives

To enhance the economic, technical, and policy skills required for designing and managing sustainable regulatory systems for infrastructure sectors.

Focus

To explore principal areas of concern for infrastructure policy, namely: Market Reform, Financial Analysis, Incentive Regulation, Non-Price Aspects of Regulation, Competition, Rate Structure, and Managing the Regulatory Process.

Orientation

January 11, 2008

Training Dates

January 14 – 25, 2008

Location

Gainesville, FL

Spectrum Management Sequence

M8-100

Radio Frequency Spectrum Management

Sponsored by

National Telecommunications and Information Administration (NTIA), Comsearch, and Alion Science & Technology

Course Description

Developing and managing a national radio frequency spectrum management agency requires a highly trained, technical staff to meet the daily as well as long-range spectrum requirements resulting in the implementation of new systems and technologies. This course addresses the vari-

ous elements required to plan, organize, manage, and control an effective spectrum management agency with the developing nation in mind. Participants will be introduced to spectrum management principles, national spectrum planning and policy, engineering analysis, and computer-aided techniques. In addition, the course will introduce technological and regulatory changes that have taken place over the past few years.

The course generally covers these processes in detail, including sections on international and domestic legal and regulatory foundations, and typical bilateral and multilateral agreements. The organization of a spectrum management agency is presented as a class exercise with the class participants developing the organizational structure of an agency of a developing country. Frequency assignment methods are emphasized, and new marketplace forces such as auctions and spectrum fees and charges are presented.

Computerization of the spectrum management processes is presented including a demonstration on the latest spectrum management software. Special sessions are taught on engineering analysis, electromagnetic compatibility, spectrum measurements and monitoring, propagation, and technical standards. The radio services with great interest, such as land mobile communications and satellite communications, are given special attention.

The course is taught primarily by experts from the National Telecommunications and Information Administration (NTIA), the President's principal adviser on telecommunications matters, and manager of the federal government's use of the spectrum.



In 2007 Intel Corporation empowered 40 individuals from 29 developing countries through their tuition-free course offerings. USTTI scholars (above) take a break from their intensive hands-on-training to pose for a photograph with Intel's expert trainers, outside of Intel's world headquarters in Santa Clara, CA. Intel is represented on the USTTI Board of Directors by Peter Pitsch, Executive Director, Communications Policy, Associate General Counsel.

Comsearch experts will present spectrum management computer-aided techniques for frequency engineering of land mobile and cellular systems, microwave radio relay communications, and satellite-Earth station coordination. Alion Science & Technology will present an overview of modern spectrum management automation addressing national spectrum management architectures, strategic spectrum planning, and frequency assignment and licensing. Specific modeling techniques, appropriate for spectrum management, will be covered.

Participant Learning Objectives

Participants will be able to: (1) understand the appropriate principles and policies of an effective radio frequency spectrum management program; (2) identify, evaluate, and select the appropriate management techniques to establish and operate radio frequency assignment and associated planning processes; (3) recognize, assess, and select appropriate technical support programs for engineering and electromagnetic compatibility; (4) understand the procedures and elements required to plan, develop, and specify computer hardware and software for a computer-aided national spectrum management system; and (5) initiate or review overall regulatory plans for new or expanded radio services, as well as potential improvements in existing regulatory processes.

Focus

Managerial with technical emphasis, such as stakeholder analysis and consensus development, with an emphasis on policy-making processes in the regional and global environment during technology transitions.

Orientation

March 28, 2008

Training Dates

March 31 – April 11, 2008

Location

Washington, DC

Suggested Course Sequence

M8-100; M8-101; M8-102; M8-103

"Technology cannot be read only. Technology is hands-on. This is what third world countries lack. This is what USTTI is helping to overcome."

- Custodes Antonio
Baretto, Tanzania, M7-212

M8-101

Spectrum Management in the Civil Sector

Sponsored by

Federal Communications Commission (FCC) and Comsearch

Course Description

This course is intended to provide information and material for the national civilian telecommunications spectrum manager that will enable the making of logical spectrum related decisions that are well grounded in basic technical procedures. The training will initially provide an explanation of the dichotomy that exists in the United States with the Federal Communications Commission (FCC) responsible for civilian sector spectrum management and the National Telecommunications and Information Administration (NTIA) responsible for federal government sector spectrum management.

The course will provide information on: (1) the development of sound civilian telecommunications policy; (2) public sector telecommunications law; (3) national telecommunications rules and regulations; (4) elements and use of radio, television, wire-line or fiber-optic carrier, and satellite carrier licensee data bases; (5) criteria for the assignment of frequency authorizations in both national and international communications services; and (6) the general methodology for approval of transmitting and radiating equipment. It will include discussions with telecommunications industry leaders and will provide exposure to state-of-the-art systems in advanced communications technology from those in industry who are involved on a day to day basis.

Participants will receive instruction from FCC staff in Washington, DC, Columbia, MD; and Gettysburg, PA; and by Comsearch, the course co-sponsor, in communications engineering. Course time will be divided into classroom work in Washington with both sponsors, a tour of the FCC Laboratory in Columbia, MD., where equipment radiation measurement and authorization work is accomplished, and a visit to the automated FCC license issuance processing line in Gettysburg, PA. The course will be augmented by site visits to operating commercial telecommunications entities. Current issues confronting common carrier, mass media, and private radio terrestrial and satellite-based telecommunications services will be discussed. Regulatory policy options will be examined, the national process for creating telecommunications rules and regulations will be explained, and the spectrum allocation and assignment process will be examined. In addition,

market based spectrum philosophies, such as lotteries and auctions, will be discussed. The application of new and modern technologies (personal communications, cellular, paging, both low-Earth and geostationary mobile-satellite service, advanced and high definition television, digital audio radio, multiple access, satellite coordination, switching, ultra-wide band, etc.) will be included in course presentations. Operation of a national, geographically-dispersed telecommunications regulatory agency, incorporating automated licensing processes, provision of public service, standard-setting, and enforcement techniques will also be discussed.

Participant Learning Objectives

Participants will be able to: (1) understand the appropriate principles of national civilian radio spectrum management systems; (2) understand the automated station and equipment authorization process; (3) learn how to deal with the general public for information dissemination and radio interference complaint purposes; and (4) initiate or review civilian statutory and regulatory policies for new or expanded radio services, and be aware of the latest technology in telecommunications arenas.

Focus

Managerial and technical with technical emphasis

Orientation

April 11, 2008

Training Dates

April 14 – 25, 2008

Location

Washington, DC

Suggested Course Sequence

M8-100; M8-101; M8-102; M8-103

M8-102

Radio Spectrum Monitoring and Measuring

Sponsored by

Federal Communications Commission (FCC) and National Instruments

Course Description

Course participants will receive an introduction on spectrum monitoring and related measurement techniques at a fully functional, modern monitoring facility of the Federal Communications Commission (FCC). Initially, an overview of the role of the Enforcement Bureau and Field will be presented in a classroom setting prior to transportation of the class to the FCC Columbia Operations Center facility in Columbia,



Mrs. Kumba Toure(center) accepts the USTTI Chairman's Award on behalf of her husband, ITU Secretary General Hamadoun Toure who was honored for his enlightened and tenacious leadership to make modern communications a reality for all citizens of the developing world. Presenting the award to Mrs. Toure are USTTI Chairman Ambassador Michael R. Gardner (left) and Ambassador Richard M. Russell, U.S. Representative to the 2007 World Radio Conference in Geneva, Switzerland

Maryland. Following introduction of FCC course instructors, a tour will be conducted of these facilities. At the FCC training facility, the class will be separated into small rotating work stations: Fixed and Mobile direction finding; Spectrum Measurement Software; and Satellite Monitoring from an equipped satellite console using a large Cassegrain feed parabolic antenna. On the final day of the training, the course co-sponsor, National Instruments, will discuss methods for spectrum monitoring, including record and playback of spectrum for time continuous spectrum analysis. In addition, a hardware and software demonstration will be shown to highlight some common PC-based tools for spectrum monitoring applications. National Instruments is the industry leader in PC-based measurement and automation tools used worldwide in applications like communications, automotive, aerospace, and semiconductor.

Participant Learning Objectives

To obtain a working understanding of: (1) spectrum management techniques related to enforcement of national and international radio regulations, and apply them practically at a fully equipped monitoring position; (2) signal recognition, and how the signals are received through correlation between available publications and observed/measured signal characteristics; (3) how received signals are processed through receivers, monitors, oscilloscopes, DSP techniques, and spectrum analyzers to

establish transmission parameters; (4) how special engineering measurement equipment is applied against microwave, television, and satellite systems to understand the basis for their complex monitoring results; (5) how direction finding (DF) bearings are collected remotely from FCC Interferometer sites throughout the United States, and then how rapidly and accurately transmitter locations are fixed; (6) how radio interference observation problems are resolved or appropriately reported through the Centralizing Office to the International Telecommunication Union in Geneva, Switzerland; (7) the complexities of modern monitoring, measuring, and direction finding theory; and (8) the latest RF survey and measurement systems available today.

Focus

Managerial and technical with a technical emphasis

Orientation

April 25, 2008

Training Dates

April 28 – May 2, 2008

Location

Columbia, MD (Washington, DC area)

Suggested Course Sequence

M8-100; M8-101; M8-102; M8-103

M8-103

Practical Applications of Spectrum Management and Spectrum Monitoring

Sponsored by

TCI, International, Inc., an SPX Company

Course Description

Course participants will receive training at TCI International, Inc. (an SPX Company) at its corporate headquarters in Fremont, CA. The course focuses on the practical application of ITU-compliant spectrum management and monitoring techniques, including license database organization, propagation analysis tools, and radio direction finding and signal measurements for fixed, mobile and transportable applications. The course employs classroom and hands-on activities to provide students with a practical overview of spectrum management and monitoring techniques and their interaction. Classroom time is used to instruct in license database organization, principles of propagation analysis, operational principles of a monitoring station, principles of signal measurements and radio direction finding, signal identification, and recording. Special attention is given to automatic violation detection, where measurements from the monitoring system are combined with the management license database information to automatically detect licensing violations. The course emphasizes the benefits that derive from an integrated and automated management and monitoring system. The participants will also have the opportunity for hands-on training of spectrum monitoring and signal measurement techniques. Time spent with radio monitoring hardware will include an introduction to the use of propagation analysis tools, signal measurement, and direction finding equipment. The hands-on portion of the course will demonstrate real time application of the principles taught in the classroom and include mission planning, operational set-up, running missions, and data analysis.

Participant Learning Objectives

To learn the practical implementation of spectrum management, spectrum monitoring,

"The USTTI team gave us all a comprehensive view on the status of regulation in Europe and complemented our information on the regulation in the USA. Many thanks!"

- Patrick Eid, Lebanon, M7-215



Eighteen Senior Regulators from twelve developing countries take a break from the intense "Regulatory and Privatization" Course sponsored by the Federal Communications Commission (FCC). In 2007, the FCC officials from throughout the FCC offered six courses which graduated 63 women and men from 34 countries. The FCC, a founding Board member of the USTTI, has conducted 115 courses, graduating 913 women and men from 141 countries. FCC Chairman Kevin Martin represents the FCC on the USTTI's Board of Directors.

radio direction finding, and signal measurement techniques as they relate to the international standards of the ITU. This includes: (1) license database organization; (2) propagation analysis tools; (3) radio direction finding; (4) signal monitoring, identification, and correlation to the frequency management database; (5) spectrum occupancy observations and analysis as part of the frequency management function; and (6) transmitter measurements as required to ensure compliance to the radio regulations. The participants will also be able to: (1) relate their spectrum management and monitoring activities to the overall goals of the ITU; (2) understand the processes of monitoring as it relates to site constraints, monitoring technologies and available equipment; and (3) gain an insight into the directions of spectrum monitoring, especially as it relates to digital telecommunications technologies.

Focus

Managerial and high level technical, with emphasis and hands-on demonstrations

Orientation

May 2, 2008

Training Dates

May 5 – 9, 2008

Location

Fremont, CA (San Jose, CA)

Suggested Course Sequence:

M8-100; M8-101; M8-102; M8-103

Telehealth Sequence 1

M8-110

Telemedicine and Distance Learning Synopsis

Sponsored by

University of Virginia Health System,
Office of Telemedicine

Course Description

Participants will gain hands-on experience in a live Telemedicine and Distance Learning environment at the University of Virginia in Charlottesville, VA. Presentations and actual patient encounters will take place at rural sites throughout Virginia. Technicians will demonstrate numerous technologies such as transmission over ISDN, Wireless and over the Internet. Clinicians and multimedia production staff will cover the entire process of producing, broadcasting, and recording for later Internet access to Distance Education and Continuing Medical Education.

Participant Learning Objectives

To understand the many different options available to conduct interactive medicine and education

Orientation

April 18, 2008

Training Dates

April 21 – 23, 2008

Location

Charlottesville, VA

Suggested Course Sequence

M8-110; M8-111; M8-112

M8-111

Advanced Telemedicine and Distance Learning Applications

Sponsored by

The Office for the Advancement of Telehealth (OAT), Health Resources and Services Administration (HRSA) of the Department of Health and Human Services

Course Description

This two-day course, taught by leaders in the telehealth and telemedicine field, is designed for participants who want a more in-depth exposure to advanced telemedicine and distance learning applications and a better understanding of the United States federal and non-governmental telemedicine activities.

The purpose of the course is to highlight the use of teleconferencing networks, Internet applications, multimedia education tools and other advanced applications for the provision of health care services and education at a distance. In addition, this course provides the participant with a unique opportunity to learn about a large US federal Agency that specifically deals with some of the most difficult health care challenges facing the world; e.g., HIV/AIDS, maternal and child health. Based on our extensive experience with OAT telemedicine and distance learning grantees, we have developed "best practice" models for both clinical and technological procedures using telemedicine. Course participants will be introduced to these models by some of the leading practitioners in the field. Participants will have ample opportunity to interact with these leaders, and hopefully develop ongoing partnerships to enhance their resource network upon returning home.

Course lecturers will include OAT's interdisciplinary team of network engineers, clinicians, policy analysts, multimedia production staff and telemedicine grant program directors. Other guest lecturers will include members of the Joint Working Group on Telemedicine, the US federal government interagency group that provides an overview of the US government's telemedicine and telehealth activities.

The course is not limited to professionals with extensive experience in this field. We welcome participation by those who have a general familiarity with telemedicine, an interest in the field, and make a commitment to share the knowledge they gain in their home country. A good command of English and basic computer experience (e.g., familiarity with keyboard, mouse, etc.) is required.

Orientation

April 23, 2008

Training Dates

April 24 – 25, 2008

Location

Rockville, MD (Washington, DC area)

Suggested Course Sequence

M8-110; M8-111; M8-112

M8-112**Developing a Multiple Site Telemedicine Network****Sponsored by**

University of Arkansas for Medical Sciences (UAMS) Telemedicine Training Program

Course Description

This course, sponsored by the University of Arkansas for Medical Sciences (UAMS), provides a comprehensive overview for designing, developing, and delivering educational and clinical services using telecommunications technology. The course is designed for individuals who are at the initial stages of networking health care professionals together for better continuing education and for better patient services. This program focuses on needs assessment, development of partnerships between medical centers and local health care providers, selection of appropriate technologies, technical operation, educational programming, and marketing clinical services. Participants will receive training from a number of faculty and staff at UAMS, telecommunications professionals, and participating local health professionals. The course will include visits to representative sites served by the UAMS Interactive Television Network.

Participant Learning Objectives

After completing this course, participants will be able to: (1) describe how to evaluate the health care needs of communities; (2) conduct needs assessment; (3) determine the model for partnership between health professionals; (4) select needs that lend themselves to telecommunications solutions; (5) determine the best type of telecommunications technology; (6) describe how administrative, technical, teaching,

and medical staff work together; (7) outline the development of continuing education programs using interactive technologies; and (8) construct evaluation systems.

Focus

This course is designed for those who have an interest in developing networking between health professionals utilizing telecommunications technologies. It will benefit those with technical responsibility or administrative responsibility in the creation and operation of such networks.

Orientation

April 25, 2008

Training Dates

April 28 – May 2, 2008

Location

Little Rock, AR

Suggested Course Sequence

M8-110; M8-111; M8-112

Internet Governance / Mobile Broadband Sequence I

M8-120**Introduction to the IP Multimedia Subsystem****Sponsored by**

Alcatel-Lucent

Course Description

This course provides training in the fundamental principles which provide the basis for commercial CDMA wireless technology, as well as its network architecture. This course provides a basic understanding of the CDMA wideband digital ration IS-2000 standard and its application to cellular and personal communications services (PCS) markets.

This course is appropriate for technical operations or technical administrative personnel interested in an overview of the basic processes of CDMA, RF link architecture, RF call processing algorithms and Coverage/Capacity planning of an IS-2000 3G-1X CDMA network.

Participant Learning Objectives

- Identify the basic processes of CDMA.
- Identify Global 3G Standards.
- Identify the Key Attributes of IS-2000 CDMA.
- Identify the Radio Access Network Reverse Link Architectures.

- Identify the impact of 3G-1X CDMA on RF link budgets.
- Identify the general operation system access and call setup algorithms to 3G-1X CDMA call processing.
- Identify the general operation location, handoff, and power control algorithms to 3G-1X CDMA call processing.

Focus

Government regulators, technical, managerial, and business professionals. Experience with wireless devices, services and network engineering terminology and knowledge of fundamental mathematical skills used in engineering are required.

Orientation

April 25, 2008

Training Date

April 28, 2008

Location

Washington, DC

Suggested Course Sequence

M8-120; M8-121; M8-122; M8-123; M8-124; M8-125; M8-126; M8-127

M8-121**ICT Policymaking in a Global Environment****Sponsored by**

The National Telecommunications and Information Administration (NTIA)

Course Description

This course surveys policy development approaches to Information and Communication Technologies (ICTs) in context with current international technology and market trends. Over two days, course participants will examine the development of national ICT policies in a time of global technology transitions. Participants will also consider various stakeholders and power centers, including the private sector and civil society, and regional and inter-governmental ICT organizations. On the first or Foundation Day, course instructors will survey ICT technology trends, coupled with resultant policy approaches, providing examples that help students tie trends, policy, and decision-making together. The class will review policy concepts such as transparency, sovereignty, and consensus-building among multiple stakeholders across national boundaries. Participants will then examine key regional and global fora (e.g., ITU, APEC, CITEL, ITSO, ICANN, and WTO) that are currently involved in ICT policy discussions and technical developments. Participants are encouraged to describe their own

"My experience has clearly given me an understanding of the world of spectrum and that it should be managed accordingly not for benefit of my country but for the rest of the world – Harmonisation."

- Carthney Laukon, Republic of Marshall Islands, M7-105

country's perspectives, and/or those of their regional fora (Africa, Asia, Middle East, the Americas, etc.), through roundtable discussion and Q&A. On the second or Emerging Issues Day, course instructors will review emergent ICT policy issues in global fora, such as Internet governance and cybersecurity. Participants should come prepared to share their perspectives on the needs of developing countries, to improve opportunities for dialogue with their counterparts, at USTTI and in international inter-governmental and non-governmental fora (e.g., Internet Governance Forum).

Participant Learning Objectives

Develop an understanding of how cultural, political, and economic environments shape the development of information and communications technology policies worldwide. Gain insight into the roles that private sector, civil society, and inter-governmental organizations play in current regional and international ICT policy and technology trends. Improve communications skill-sets by establishing dialogue among students on their own country's policy and technology adoption experiences.

Focus

Basic concepts in ICT policy development to improve decision-making, such as stakeholder analysis and consensus development, with an emphasis on policymaking processes in the regional and global environment during technology transitions.

Orientation

April 28, 2008

Training Date

April 29, 2008

Location

Washington, DC

Suggested Course Sequence

M8-120; M8-121; M8-122; M8-123;
M8-124; M8-125; M8-126; M8-127

M8-122

Building Cybersecurity Capacity

Sponsored by

The National Telecommunications and Information Administration (NTIA)

Course Description

This course will focus on the cooperative roles of government and industry engaged in building cybersecurity capacity at the national level. The United States, in cooperation with the International Telecommunication Union's (ITU) Development Sector (ITU-D), has identified a five-point Framework for policymakers to achieve to build cybersecurity capacity in their



Seventeen USTTI scholars pose for a photo with Alcatel-Lucent trainer, Carmen Fernandez (sixth from right), during Alcatel-Lucent's course "Introduction to the IP and Multimedia Subsystem." Since 1997, Alcatel-Lucent has partnered with the USTTI to provide tuition-free training for 125 women and men throughout the developing world. Michael McMenamin, Senior Manager for Global Government Affairs, serves as Alcatel-Lucent's representative on the USTTI Board of Directors.

countries. These goals include: 1) formulating a national strategy for cybersecurity, 2) building national government-industry partnerships, 3) deterring cyber crime, 4) setting up national incident management organizations, and 5) fostering a national culture of cybersecurity. This course will outline the success of bilateral and ITU initiatives to promote cybersecurity worldwide based on shared experiences involving a two-way flow of information and dialogue. To strengthen each nation's cybersecurity, course participants will learn about the major ITU facilitating tools: the Framework for National Cybersecurity Efforts (the Framework); the Report on Best Practices for a National Approach to Cybersecurity (Best Practices Report); A Management Framework for Organizing National Cybersecurity Efforts; and the Cybersecurity Self-Assessment Tool. These tools were first presented at an ITU-D annual meeting in Geneva in September 2007. Efforts underway by the USA and at the ITU will be highlighted during the course to help national policymakers analyze issues, assess progress and organize a national strategy.

Participant Learning Objectives

Develop an understanding of how the five pillars in the Framework and the Best Practices Report can assist government and industry policymakers to build and enhance their cybersecurity capacity. Gain insight into how to use the ITU facilitating tools as training devices following the Cybersecurity Self-Assessment Tool as a model. Establish dialogue among students on their own country's cybersecurity policy and national activities currently underway to build cybersecurity capacity.

Focus

Learn basic concepts for the development of national and international policies to

build cybersecurity capacity, accompanied by the development of self-assessment skills, to determine the current scope/level of cybersecurity and analyze improvements for cybersecurity capacity.

Orientation

April 29, 2008

Training Date

April 30, 2008

Location

Washington, DC

Suggested Course Sequence

M8-120; M8-121; M8-122; M8-123;
M8-124; M8-125; M8-126; M8-127

M8-123

Internet Regulatory and Trade Policy

Sponsored by

The Information Technology and Innovation Foundation (ITIF)

Course Description

An ITIF staff member who is an expert in regulatory and international trade policy will teach the course. The first portion of the course will be devoted to addressing regulatory issues that relate specifically to the development of Internet technology. In addition, the first portion will address those regulatory issues, including unbundling the local loop, standards development, licensing practices and interconnection, which are or will be affected by the increasing convergence among various telecommunications and Internet technologies--particularly Voice Over Internet Protocol (VoIP). The second portion of the course will address regulatory issues and their relation-

ship to the development of trade. Specifically, the instructor will discuss technology neutral versus market-driven telecommunications environments, the role of the regulator, and optimum cost scenarios. The course will close with an interactive discussion of the current and future state of the telecom market and will include case studies.

Participant Learning Objectives

Provide an in-depth understanding of a broad spectrum of regulatory issues impacting the Internet and high-tech market. Develop an understanding of the inseparable connection between an open regulatory environment and attracting both domestic and foreign investment. By providing an overview of various global telecom environments, students will leave the class with a clearer understanding of potential methods for improving and making more efficient their home regulatory environment.

Focus

Global regulatory policy with an emphasis on its relationship to international commerce.

Orientation

April 30, 2008

Training Dates

May 1 – 2, 2008

Location

Washington, DC

Suggested Course Sequence

M8-120; M8-121; M8-122; M8-123; M8-124; M8-125; M8-126; M8-127

M8-124

Internet Governance: Issues and Challenges

Sponsored by

AT&T

Course Description

This course will highlight the key issues facing policy makers as they seek to advance the growth and adoption of the Internet in their domestic environment, consider the challenges of a global interconnected world, and identify key issues and questions where collaboration and cooperation are needed to create public policies for the Internet and IP networks. Topics addressed: Internet/IP Network Security; the role of telecom policy and how it affects, assists, or impedes Internet growth and adoption; Internet governance activities and the relationship to the technical coordination of the Internet (ICANN).

Internet Security Overview

As governments and individuals increase their reliance on the Internet to conduct mis-

sion critical activities, and as more private networks are interconnected to the Internet, a firm knowledge and implementation of Internet Security techniques has increasing importance. The increase in exposure with interconnected networks is accompanied by an increase in potential security risks presented by attacks such as viruses, spam, and denial of service, hacking and corporate espionage. To confront these risks, and to preserve the Internet as an essential tool for conducting important activity, Internet security measures are evolving and improving quickly. The course will provide a session on current forms of Internet security risk, an overview of cutting edge measures that can be taken to minimize those risks, and a discussion of areas for international cooperation on both the technical and policy areas.

Internet governance activities and the relationship to the technical coordination of the Internet (ICANN)

Today, the global Internet is being built and operated by the private sector. Growth of the Internet has shifted from US dominance to a more regional structure, and traffic on the Internet is growing rapidly, particularly in Asia Pacific. More and more applications are moving to the Internet, and its role as a critical communications infrastructure is well established. Many countries are now examining what "rules" or policies should govern the Internet. However, confusion and controversy still exists over "governance" or technical coordination of the Internet. During the four year World Summit on the Information Society (WSIS), governments and other stakeholders debated the role of governments and the private sector in governing the Internet, as well as how ICTs can address the digital divide.

Governments and policy makers are increasingly asking what the right way is to provide "rules" for the Internet and the applications that the Internet delivers. Some believe that the private sector through a self-regulatory approach can best devise appropriate rules and controls; and some believe that a stronger more governmental oversight is needed, perhaps even resulting in an international agreement governing the Internet. The World Summit on the Information Society (WSIS) included extensive discussions on this topic. The outcome of the Summits has led to numerous initiatives where stakeholders are considering what policies should change, and whether new policies are needed. The WSIS also created the Internet Governance Forum, which is chartered for a five year period, and is meeting annually to address numerous policy topics, including Internet access, openness, diversity, cyber security, and meets annually, in the fall. An overview of its agenda and outcomes from the

November 2007 IGF will be presented, along with a discussion on the IGF's ongoing activities and potential outcomes.

ICANN (International Corporation for Assigned Names and Numbers), an international private corporation supported by the broad and diverse stakeholders in the Internet, provides the technical coordination of the Internet's key unique identifiers – domain names, protocols, and IP addresses, as well as the Internet's root servers. In 2006, the US Government announced the further evolution of its relationship to ICANN, with the Joint Partnership Agreement (JPA), which is scheduled to lapse in 2009, with the next stage in the evolution of the Internet's unique identifiers to private sector management and coordination by ICANN.

The course will provide an overview of Internet Governance, including the activities of the Internet Governance Forum, ICANN and its functions and responsibilities, including how it works with its Government Advisory Committee and the broad base of global Internet stakeholders. Discussions will include the key policy agenda topics underway at ICANN, including the roles of the country code top level domains and generic top level domains and how each is represented within ICANN's policy structure. An overview of the current policy issues affecting the DNS will be provided. Guest speakers from the US DoC and ICANN's supporting organizations will join the session.

Telecom Policy and Its Impact on the Internet

Telecommunications is a key building block to the global Internet. Without a sound and widely deployed telecommunications infrastructure, the Internet cannot reach all users. This segment will examine key concepts in telecom policy that can affect, assist or impede the growth and adoption of the Internet. As policy makers consider what the "right" policies are for the Internet, it is essential to consider the role of telecom policy. Today, some countries are considering applying the vertical policies developed for telecommunications or content to the Internet. This segment will

"USTTI's selfless efforts cannot go unnoticed. The FCC staff did all they could to ensure that we got the best from their training materials. May God bless America, USTTI & FCC."

- Nelson Wasilwa, Kenya, M7-109

discuss licensing, financial investment, and Internet charging arrangements. An open issue to many developing countries is the issue of Internet connectivity. Some countries have advanced a concept of extending telecommunications settlements to the Internet. Others have proposed that new initiatives in encouraging aggregation of traffic and inter-regional connectivity can reduce the dependency on the US as a switching hub and provider of content. A candid and current discussion on this topic will be part of the session.

Orientation

May 2, 2008

Training Date

May 5, 2008

Location

Washington, DC

Suggested Course Sequence

M8-120; M8-121; M8-122; M8-123;
M8-124; M8-125; M8-126; M8-127

M8-125

Communications Infrastructure Economics and Regulation

Sponsored by

Packet Clearing House

Course Description

This one-day seminar will emphasize Internet economics, the development of national information economies, and the interaction between communications regulation and technological development. The first half of the day's discussion will focus on the general economic environment in which modern broadband telecommunications services operate. The second half of the day will be spent on the more specific regulatory and competitive requirements of Voice over IP, wireline broadband infrastructure, and mobile wireless technologies, in developing economies.

The seminar will be led by Bill Woodcock, research director of Packet Clearing House, a non-profit research institute dedicated to understanding and supporting Internet traffic exchange technology, policy, and economics. Bill has operated national and international Internet service provision and content delivery networks since 1989, and currently spends most of his time building Internet exchanges in developing countries.

Orientation

May 5, 2008

Training Date

May 6, 2008

Location

Washington, DC

Suggested Course Sequence

M8-120; M8-121; M8-122; M8-123;
M8-124; M8-125; M8-126; M8-127

M8-126

WiMAX: Revolutionizing Broadband Wireless Access

Sponsored by

Intel Corporation, Motorola and Sprint

Course Description

Find out more about the technology that has the wireless community talking.

This course will provide a global "behind the scenes" look at the technologies and standards driving the wireless broadband revolution. Taught by representatives of Intel Corporation and Motorola Corporation, this course will focus on how WiMAX can provide low cost, high quality Internet access solutions.

WiMAX is an open, worldwide standard that covers both fixed and mobile deployments. Designed specifically to deliver data, Mobile WiMAX provides multi-megabit data rates which can lay the foundation for innovative multimedia services and support multimedia content. The All-IP network architecture plus full compatibility with standard existing networking infrastructure can facilitate high performance, reduced cost, as well as rapid deployment.

Finally, the course will address what spectrum allocation, allotment, and assignment policies are best suited to fostering the efficient adoption and deployment of broadband technologies. Classroom discussions will be supplemented by demonstrations.

Participant Learning Objectives

- Overview of WiMAX wireless broadband devices and applications.
- In-depth understanding of WiMAX technology, standards update, system architecture, and performance characteristics.
- Insight into establishing an innovative regulatory framework for enabling flexible, low cost, interoperable wireless broadband deployment in developing countries.

Focus

Government regulators and policymakers; technical, managerial, and business professionals

Orientation

May 6, 2008

Training Dates

May 7 – 9, 2008

Location

Washington, DC

Suggested Course Sequence

M8-120; M8-121; M8-122; M8-123;
M8-124; M8-125; M8-126; M8-127

M8-127

IMT (3G/4G) Mobile Broadband and Mobile TV

Sponsored by

QUALCOMM Incorporated

Course Description

This course will cover the latest developments in IMT (3G/4G) technologies such as UMTS/HSPA, CDMA2000 1xEV-DO (inc. CDMA450) and their robust evolution paths (UMB, LTE). It will also cover Mobile TV solutions such as MediaFLO. An overview will be provided of the World Radiocommunications Conference 2007 (WRC-07) decisions with regards to IMT spectrum and technologies and how they can spur the deployment of affordable broadband connectivity in both urban and rural areas. As of September 2007, 399 3G operators in 135 countries are offering over 484 million consumers the same speed (or faster) and ease from their wireless devices that they experience on their wired PCs, due to the wireless broadband revolution. Many government entities are including both the provision of affordable basic telephony services and broadband connectivity in their universal access priorities. Mobile TV solutions and an overview of other broadband technologies will also be covered. Participants will be provided a laptop with broadband connectivity during the length of the course, as well as other live demos and tour of facilities.



Graduates of Intelsat's "Satellite Communications Primer" take a break from training at Intelsat's Operations center in Ellenwood, GA. Since 1990, Intelsat Global Service Corporation has offered a total of 17 courses, graduating 236 women and men from 81 developing nations. Intelsat is represented on the USTTI Board of Directors by their Vice President and General Counsel Kalpak Gude (fifth from the right).

Participant Learning Objectives

- Overview of commercial IMT (3G/4G) mobile broadband and mobile TV technologies, standards roadmap, market updates, including network deployments and device availability.
- Overview of WRC-07 results regarding IMT, including IMT frequency bands, the impact on spectrum and technology decisions, as well as the introduction of new services in both existing spectrum and green field scenarios.
- Programs how 3G solutions are making an economic impact and benefiting society in education, health and public safety among other areas.

Focus

Designed for technical managers in regulatory agencies, communications ministries, and mobile or fixed operators who are faced with making decisions on terrestrial wireless issues, including spectrum allocation recommendations and how these impact technology deployment, planning, and expanding wireless connectivity in their countries. A basic understanding of 3G wireless networks and technologies such as CDMA and GSM is required.

Orientation

May 9, 2008

Training Dates

May 12 – 16, 2008

Location

San Diego, CA

Suggested Course Sequence

M8-120; M8-121; M8-122; M8-123;
M8-124; M8-125; M8-126; M8-127

Internet Technology Sequence I

M8-130

DNS and Related Internet Technologies

Sponsored by

VeriSign, Inc.

Course Description

The training will address DNS and related Internet technologies as well as Internet, network and end user security issues. The two day course will include a tour of VeriSign's Internet Briefing Center and Network Operating Center.

"Many thanks to USTTI, USAID, AED and all concerned for excellent hospitality and an invaluable experience."

- Ms. Arlette Vidal, Dominica,
M7-133

Day 1: DNS AND RELATED INTERNET TECHNOLOGIES

- DNS Theory – addresses Internet design, architecture, protocols and standards development; comprehensive treatment of root server system, IP protocol, IP addresses, infrastructure and Next Generation Networks.
- DNS Policy – overview of DNS management and Internet Governance; national and international policy making for DNS; Internet Governance Forum and enhanced cooperation

Day 2: INTERNET, NETWORK AND END USER SECURITY

- Overview - Networks, infrastructures and interdependencies
- Key security concepts: security v. survivability; risk, resilience, recovery, restoration
- Policy – OECD, multilateral bodies, governments, academia
- Industry best practices and codes of conduct
- Authentication – of devices and of persons
- ID Management and Abuse
- Operational Network Security – risk assessment; key asset management; physical assets and security; logical assets and security
- Securing Organizations and Delivering Secure Network Experience to Citizens
- Key elements of an organizational security strategy; best practices by sector; application security; role of government in security management; government as infrastructure steward (network and TLD operations)
- Security Agencies – international, national and local; network defense; CERTS; intelligence/national security; law enforcement/forensics

Orientation

April 30, 2008

Training Dates

May 1 – 2, 2008

Location

Washington, DC

Suggested Course Sequence

M8-130; M8-131

M8-131

Internet Service Provider Design Seminar and Backbone Routing Protocol Workshop

Sponsored by

Cisco Systems, Inc.

Course Description

Proper design, operation and security of a network infrastructure is important not only for the Internet Service Provider (ISP) operating the network, but also for the health of the global Internet as a whole.

This three week advanced Workshop is designed to train ISP engineers in the best practices of network design, operations and security. It provides an empowering learning environment for ISP engineers through a combination of lectures and intensive hands-on laboratory exercises focused on teaching the participants how to design, scale, maintain, manage and secure a production ISP backbone.

A team of senior technical staff from Cisco Systems who have built, maintained, supported and operated ISPs will conduct the workshop.

A sample curriculum includes (specific areas covered will vary on available time):

Week 1: Techniques for the design, setup, operation and management of a secure ISP backbone network including IP addressing, Cisco IOS™ essentials for ISPs, network troubleshooting, routing protocols (e.g., OSPF), Domain Name System (DNS) and Regional Internet Registry (RIR) name and address coordination.

Week 2: Fundamentals of BGP4 and policy based routing configurations, techniques for configuring multiple connections to the Internet (multihoming), including peering at Internet Exchange Points (IXP) and connecting to transit providers, quality of service engineering and Internet telephony in an ISP.

Week 3: Security best practices, site-to-site IPsec and Distributed Multipoint Virtual Private Network (DMVPN) solutions.

Participant Learning Objectives

The participants learn, in a hands-on environment, the basic principles for designing, securing and operating an ISP infrastructure using industry best practices.

Focus

Delegates should be engineers from Service Providers, e.g., ISPs, PTTs, competitive telecommunications providers, etc. These engineers should be actively involved with the design, operations, and maintenance of IP-based backbones. Technical staff for regulatory authorities who are actively involved in issues regarding Internet development in

their countries are also encouraged to apply. Delegates should be familiar with the fundamentals of routing, switching, addressing and basic networking.

Orientation

May 2, 2008

Training Dates

May 5 – 23, 2008

Location

San Jose, CA

Suggested Course Sequence

M8-130; M8-131

*Distance Learning
Sequence*

M8-140

Successful Satellite Regulation & Policy for Developing Countries

Sponsored by

GVF – The Global Satellite Communications Association

Course Description

Recently, in Developing and Least Developed Countries the public and private sector have begun making great progress related to the deployment of cost-effective satellite communications. From narrow-band to broadband, and from telecom to broadcasting, delivery of these services is being facilitated by national and regional groups of Administrations that have been applying successful satellite regulations and policies. This course will examine the types of satellite regulatory and policy practices that have been proven to work in Developing and Least Developed Countries, as well as the trends relating to the development of next-generation approaches.

Participant Learning Objectives

Course participants will gain an understanding of effective regulation of satellite communications, including fixed and mobile; voice, video and data; domestic and international; and more.

Focus

The course will begin with a brief overview of the primary aspects of satellite communications systems, services and applications. This will be followed by a focus on key features of satellite regulation and policy, including licensing, spectrum management, type approvals and homologation, and more. Also addressed will be key regulatory considerations, such as competition, technology neutrality, the rationale for

“light-touch” approaches, Voice over IP, cross-border, and more.

Orientation

May 22, 2008

Training Date

May 23, 2008

Location

Washington, DC

Suggested Course Sequence

M8-140; M8-141

M8-141

Satellite and Internet Delivery of Educational Television and Multimedia

Sponsored by

SCOLA (A Foreign Language TV/Web Provider)

Course Description

Participants will work side-by-side for two weeks with SCOLA experts and technicians in hands-on involvement with all the multimedia aspects of SCOLA transmissions of television and other services to more than 2,000 schools, including colleges and universities throughout North America. The various departments and operations are:

- SATELLITE PREPARATION hands-on operation
- INTRODUCTION TO VIDEO PRODUCTION
- WEB SITE COMMUNICATIONS
- HANDS-ON OPERATION of six digital compressed channels via satellite & Internet
- DOWNLINK/PREPARATION of live and taped programs for transmission
- LIAISON WITH TELEVISION NEWS PRODUCERS from around the world

• AFFILIATE RELATIONS – deliverables, educational services, etc.

• COORDINATION OF MEDIA SERVICES - courses, lessons, translations, multimedia files, etc.

Participant Learning Objectives

To be able: (1) to duplicate the SCOLA learning resources delivery system anywhere in the world; (2) to create analogous learning systems appropriate to any learning environments; (3) to operate the SCOLA multimedia system in all its aspects: uplinking, downlinking, transmission, educational materials preparation including interactive participation in courses via satellite and via the web; and (4) to duplicate the educational, engineering, and business elements of the operation in other countries.

Focus

To be able: (1) to duplicate the SCOLA learning resources delivery system anywhere in the world; (2) to create analogous learning systems appropriate to any learning environments; (3) to operate the SCOLA multimedia system in all its aspects: uplinking, downlinking, transmission, educational materials preparation including interactive participation in courses via satellite and via the web; and (4) to duplicate the educational, engineering, and business elements of the operation in other countries.

Orientation

May 23, 2008

Training Dates

May 27 – June 6, 2008

Location

McClelland, IA

Suggested Course Sequence

M8-140; M8-141



USTTI Scholars celebrate the completion of this year's "Radio and TV Studio Design, Operation and Management" Training offered by Voice of America. This year, 340 broadcasters and broadcast engineers applied for VOA's two training courses taught by Ms Sandra Stewart, VOA's Program Planning and Development Officer (fourth from the right) and Dr. Gerald Berman, past president of the IEEE/BTS (far right). Since 1984, VOA has offered 33 tuition-free courses which have empowered broadcasters and broadcast engineers from 79 developing countries. Also, joining the group for Graduation was USTTI Curriculum Coordinator Janet Cerbo (far left).

"The course was excellent and an eye opener to new innovations in technology. I have benefited a lot beyond my imagination on this course."

-Lucious Ofeni, Malawi, M7-111

Radio and Television Broadcast Technology Sequence

M8-150

Introduction to US Television Broadcasting

Sponsored by

WCOV-TV, a National Association of Television Program Executives (NATPE) Station

Course Description

This intensive, two-week program in a fully functional, commercial television station will provide participants with an overview of several aspects of television broadcasting, including production, programming, engineering, public affairs, promotion, and sales.

Participant Learning Objectives

To increase working knowledge and understanding of several aspects of television broadcasting from the standpoint of a commercial television station.

Focus

Managerial, technical and sales

Orientation

May 30, 2008

Training Dates

June 2 – 13, 2008

Location

Montgomery, AL

Suggested Course Sequence

M8-150; M8-152; M8-153; M8-154; M8-155

M8-151

Introduction to US Television Broadcasting

Sponsored by

WPMT-TV FOX 43

Course Description

This intensive, one-week program in a fully functional, commercial television station will provide participants with an overview of several aspects of television

broadcasting, including production, news, programming, engineering, public affairs, promotion, and sales.

Participant Learning Objectives

To increase working knowledge and understanding of television broadcasting from the standpoint of a commercial TV station.

Focus

Managerial and technical

Orientation

June 6, 2008

Training Dates

June 9 – 13, 2008

Location

York, PA

Suggested Course Sequence

M8-151; M8-152; M8-153; M8-154; M8-155

M8-152

Introduction to Public Television Broadcasting

Sponsored by

WHUT-TV, Howard University Television

Course Description

This intensive two-week program based in a major market public television station will provide participants with an overview of U.S. public television. The course reviews national, regional and local financing and editorial strategies and includes an in-depth look at programming for audiences of all ages. The course covers policy, management, planning, engineering, production, programming, and promotion and includes visits to relevant federal, national and local agencies.

Participant Learning Objectives

To increase working knowledge and understanding of several key aspects of public service television with an emphasis on elements that might have utility in participants' countries of residence.

Focus

Managerial

Orientation

June 13, 2008

Training Dates

June 16 – 27, 2008

Location

Washington, DC

Suggested Course Sequence

M8-150 **or** M8-151 and M8-152; M8-153; M8-154; M8-155

M8-153

Advanced Editing Techniques

Sponsored by

Discovery Communications, Inc.

Course Description

Discovery Communications is the leading global real-world media and entertainment company. Discovery has grown from its core property, the Discovery Channel, first launched in the United States in 1985, to current global operations in more than 160 countries and territories with 1.3 billion cumulative subscribers. DCI's over 90 networks of distinctive programming represent 25 network entertainment brands including TLC, Animal Planet, Travel Channel, Discovery Health Channel, Discovery Kids, Discovery Times Channel, The Science Channel, Military Channel, Discovery Home Channel, Discovery en Español, Discovery Kids En Español, Discovery HD Theater, FitTV, Discovery Travel & Living (Viajar y Vivir), Discovery Home & Health and Discovery Real Time. DCI's other properties consist of Discovery Education and Discovery Commerce, which operates 120 Discovery Channel Stores. DCI also distributes BBC America in the United States.

This course will serve as an introduction to the activities of a major international communications company, including a visit to a state-of-the-art origination facility and an overview of the latest video editing technologies courtesy of Discovery's Technology and Media Services division.

Participant Learning Objectives

To provide participants with an introduction to DCI's businesses, a tour of the Discovery Television Technology Center in Sterling, VA, and hands-on exposure to the latest editing equipment and techniques

Focus

Managerial and technical

Orientation

TBA

Training Dates

TBA

Location

Sterling, VA and Silver Spring, MD (Washington, DC Area)

Suggested Course Sequence

M8-150 **or** M8-151 and M8-152; M8-153; M8-154; M8-155

"This course has been an eye-opener. It has broadened my knowledge which will not only be of benefit for myself but also my organization and my country as a whole. Thank you, USTTI."

-Viliame Rasumu, Fiji, M7-205

M8-154

Introduction to the American Cable Television Industry

Sponsored by

Black Entertainment Television (BET)

Course Description:

During a visit to BET's corporate headquarters in Washington, D.C., participants will attend a 2-4 hour orientation providing a series of presentations by BET management. Presentations will provide exposure to the daily operations of BET's entertainment, music, and news departments as well as its corporate operations

Participant Learning Objectives:

To acquire an overview of cable television operations and gain exposure to day-to-day operations.

Focus

Managerial

Orientation

TBA

Training Dates

TBA

Location:

Washington, DC

Suggested Course Sequence

M8-150 or M8-151 and M8-152; M8-153; M8-154; M8-155

M8-155

University Affiliated Public Radio Broadcasting

Sponsored by

WAMU 88.5 FM

Course Description

WAMU 88.5 FM is the leading public radio station for NPR news and information in the greater Washington, DC area. It is member-supported, professionally staffed, and licensed to American University. Since 1961, WAMU has provided programming to a growing audience that now totals more

than 450,000 listeners in the District of Columbia, Maryland, and Virginia.

This visit will consist of a tour of the high-tech WAMU facilities and a brief introduction to the activities of a major public radio station that is affiliated with one of Washington, DC's leading universities.

Participant Learning Objectives

To become more familiar with the important potential of operating a radio broadcast facility in conjunction with a university or college.

Focus

Technical and managerial

Orientation

TBA

Training Dates

TBA

Location

Washington, DC

Suggested Course Sequence

M8-150 or M8-151 and M8-152; M8-153; M8-154; M8-155

Radio and Television Broadcast Sequence II

M8-160

New Technologies in Broadcasting

Sponsored by

Broadcasting Board of Governors, U.S. International Broadcasting/Voice of America (VOA) in cooperation with the Institute of Electrical and Electronics Engineers Broadcast Technology Society (IEEE/BTS)

Course Description

The field of broadcasting is undergoing rapid change. Traditional AM, FM and TV broadcasting is being enhanced and supplanted by a host of new services and delivery methods to meet the evolving demands of listeners and viewers at home and on the move. These changes will require new equipment and in many cases new spectrum.

This course is intended to provide an overview of these evolving broadcasting services and the technologies that make them possible. The course begins with an introduction to the technical concepts governing digital audio, radio and TV. Traditional AM, FM and TV broadcasting is then briefly reviewed. The focus then shifts to new services and delivery methods including terrestrial and satellite digital radio

and television, cable, wideband and IP radio and TV. Related topics include spectrum needs, propagation, antennas, transmitters, digital modulation, signal compression, error correction, computer applications and automation. A special session on broadcast management is also included.

This course is appropriate for government and private sector engineers, regulators, technical managers and policy makers who are faced with making decisions on broadcasting issues in their home countries.

Lectures are presented by engineering professionals from the IEEE Broadcast Technology Society, the U.S. International Broadcasting Bureau and selected manufacturers of broadcast equipment.

Field trips to several radio and TV stations in the Washington, DC metropolitan area provide an insight to the latest developments and in some cases "all" digital facilities.

Participant Learning Objectives

Upon successful completion of this course, the participants should be able to evaluate, advise and/or determine the technologies, systems, types of equipment and spectrum requirements needed to introduce new emerging broadcasting services in their countries.

Focus

The focus is highly technical. Applicants must have appropriate technical training or the equivalent in work experience. A degree in engineering is highly desirable.

Orientation

May 6, 2008

Training Dates

May 7 – 23, 2008

Location

Washington, DC

Suggested Course Sequence

M8-160; M8-161

M8-161

University Affiliated Public Radio Broadcasting

Sponsored by

WAMU 88.5 FM

Course Description

WAMU 88.5 FM is the leading public radio station for NPR news and information in the greater Washington, DC area. It is member-supported, professionally staffed, and licensed to American University. Since 1961, WAMU has provided programming to a growing audience that now totals more than 450,000 listeners in the District of Columbia, Maryland, and Virginia.

This visit will consist of a tour of the high-tech WAMU facilities and a brief introduction to the activities of a major public radio station that is affiliated with one of Washington, DC's leading universities.

Participant Learning Objectives

To become more familiar with the important potential of operating a radio broadcast facility in conjunction with a university or college.

Focus

Technical and managerial

Orientation

TBA

Training Dates

TBA

Location

Washington, DC

Suggested Course Sequence

M8-160; M8-161

Fiber Optics

M8-171

Hands-on Fiber Optic Intensive

Sponsored by

FiberLight International

Course Description

Fiber optic technology serves a full spectrum of user needs from point-to-point data links to global networks. This course will provide participants with a basic understanding of this growing industry, as well as hands-on experience. Participants will identify and solve real world problems associated with the design, installation, and repair of fiber optic networks.

Participants learn on a variety of the latest equipment in a job-simulating setting. Topics covered include preparation of cables and closures, mechanical and fusion splices, termination, and testing of fiber cable for both inside and outside plant applications. Restoration and maintenance

procedures will also be addressed. Fiber Optic network planners, engineers, project managers and technicians will benefit from this training. Each participant will receive a course manual.

Participant Learning Objectives

To develop a comprehensive understanding of basic fiber optics and gain entry-level skills necessary in planning and installing a fiber optic network.

Focus

Technical and managerial with technical emphasis

Orientation

TBA

Training Dates

TBA

Location

Estes Park, CO (Denver area)



This year 43 women and men from 30 developing countries graduated from QUALCOMM's intensive training courses. Above, USTTI graduates from QUALCOMM's "Mobile Broadband" course, in San Diego, CA, pose for a post graduation photo. Since 2004, QUALCOMM Incorporated has conducted 19 cutting edge courses and graduated 249 USTTI scholars who are now knowledgeable about the most advanced wireless technology. QUALCOMM is represented on the USTTI Board of Directors by Sean Murphy, Vice President & Counsel International Government Affairs.

Radio Spectrum Monitoring

M8-240

Radio Spectrum Monitoring Techniques and Procedures

Sponsored by

Federal Communications Commission (FCC) and Agilent Technologies

Course Description

This intensive five day course is designed specifically for those who are, or who expect to be, working directly in the field of radio monitoring for a radio administration or regulatory agency. Participants will be instructed in the skills of radio monitoring methods as utilized within an administration's communications regulatory department or agency. It will focus on monitoring methods that can be adapted to a broad range of equipment sophistication. Participants will work alongside enforcement staff at a field facility of the FCC. The course provides practical instruction in aspects of the facility's work including: radio direction finding, off-the-air technical measurements, signal identification, interference resolution and regulation compliance. On the final day of the course, the participants will receive a presentation given by Agilent Technologies, a leading test equipment manufacturer, on Spectrum Analyzers. A product demonstration will be provided to show new measurement capabilities.

Participant Learning Objectives

To be able to: (1) operate contemporary radio monitoring equipment; (2) measure radio signal parameters; (3) use a variety of direction finding techniques; (4) identify radio emissions; (5) secure compliance with radio regulations; and (6) select optimum monitoring methods for local requirements.

Focus

Technical

Orientation

June 2, 2008

Training Dates

June 2 – 6, 2008

Location

Columbia, MD (Washington, DC area)

Utility Regulation

M8-241

24th International Training Program on Utility Regulation and Strategy

Sponsored by

Public Utility Research Center (PURC)

Course Description

An intensive, two-week program is specifically designed for a select group of about 70 senior- and mid-level utility regulators from OECD and non-OECD countries plus about 15 regulatory strategy executives from utility companies in the telecommunications, electricity, gas, and water industries who are currently undertaking infrastructure reforms. Topics include market reform, competition, financial analysis, price caps and other forms of incentive regulation, non-price issues such as service quality and universal service/access, pricing, and managing the regulatory process.

The course (ten full days of lectures, sector-specific case studies, practical exercises, team presentations and panel discussions) will be taught or moderated by leading international authorities in their fields. The course features approximately 55 different teaching modules that present topics in a manner that empha-

sizes their interrelationships. Lessons are drawn from basic principles, international best practices, and cross-country and cross-sectoral experiences.

The course is taught in English and participants should have a good command of the English language. Some case studies and papers will be available at the course in Spanish (see the PURC website: www.purc.ufl.edu for additional papers).

A free, introductory course in basic economic concepts will be taught on the Sunday before the course begins.

Additional activities and trips will be available for participants during off-hours that will facilitate the learning process and the enjoyment of the program. Some facilities of the University of Florida will be accessible to course participants.

Participant Learning Objectives

To enhance the economic, technical, and policy skills required for designing and managing sustainable regulatory systems for infrastructure sectors

Focus

To explore principal areas of concern for infrastructure policy, namely: Market Reform, Financial Analysis, Incentive Regulation, Non-Price Aspects of Regulation, Competition, Rate Structure, and Managing the Regulatory Process.

Orientation

June 6, 2008

Training Dates

June 9 – 20, 2008

Location

Gainesville, FL

e-Government Sequence

M8-242

Applying 21st Century ICT in Emerging Markets

Sponsored by

Intel Corporation and USAID

Course Description

Twenty-first century Information Communication Technologies (ICTs) can provide more opportunity for people worldwide to participate in today's global economy and take advantage of the value of information and collaboration. This course focuses on leaping across the digital divide, especially in rural communities where the latest broadband wireless technologies and shared access to technology can create sustainable business and empowerment environments. The course will also address how to establish new



USTTI scholars from Africa, South America and the Caribbean take a break from VeriSign's course "DNS and Related Internet Technologies" to pose for a picture with volunteer professor Matt Larson (fourth from the left). In 2007, VeriSign provided training detailing the most cutting edge Internet security to 24 individuals from 21 developing countries. VeriSign is represented on the USTTI Board of Directors by Shane Tews, Senior Washington Representative.

business and technology models, build partnerships and seek sources of financing, and apply the most cost effective technologies to meet your needs. Creating collaboration between local and worldwide partners is a valuable framework for providing social/community services, meeting education and economic needs of a region, as well as for improving the lives and well fare of citizens.

Technologies: Today's underserved rural areas can have access to state-of-the-art telephone and Internet technologies – no “affordable,” scaled back versions of past years' models. What are these technologies? What are the latest low cost computing platforms connected to both wired and wireless broadband access? Do they compare in capability, in price, and in operation in different settings? This course, taught by representatives from the world's largest chip maker and a leader manufacturer of computer, networking and communication products, will focus on the best of today's technologies with a special focus on applying 21st century ICT solutions in emerging markets.

The successful partnership between this private enterprise and USAID are collaborating to address issues, such as broadening access and usage of information and communication technology (ICT) in developing communities around the world, etc. They share the belief of the importance of ICT in accelerating social and economic development in emerging and developing markets. The intent of this course is to share the best known methods (BKM) of deployed ICT in the areas of connectivity, education, content, digital health, and others with attendees. One of the examples of BKM is the execution of the Universal Service Fund (USO) to extend the successful WiMax – WiFi – Internet – VoIP project to rural areas in Vietnam.

Sustainable Models: The course will show how to integrate all the pieces together into a comprehensive solution set, with a focus on the best technologies, prices and the best business models, all based on lessons learned from more than thirty countries in USAID's programs and worldwide project experience from the private enterprise. The course will cover key ICT areas, such as Accessibility, Connectivity, Education and Content.

Best Practices in Funding Sources: The course will focus on sustainability by helping to develop the local infrastructures that will sustain this access. It will include insights into building business plans that are sustainable for obtaining private sector financing and re-shaping Universal Service Funds.

Classroom discussions include Sharing of Best Practices; Architecture Starter-kits Exercise; Sustainable Business Model Development, Local Content Innovation and Creation, etc. A live demonstration of WiMax and WiFi technologies will also be presented

“It was a great experience. The training session was organized very well and absolutely relevant to my job.”

– Ms. Krasimira
Vasileva, Bulgaria, M7-118

in the course along with the deployment of VoIP and Integration with existing PSTN and mobile operators.

Participant Learning Objectives

The learning objectives for this course are to assist participants in creating a plan to kick start 21st Century ICT in emerging markets, such as the “Shared Access” and/or “1:1 eLearning” programs for addressing the digital divide in their countries, including:

- Accessibility – to bring the power of PC usage to more people by increasing shared access to fully capable PCs tailored to regional needs
- Connectivity – to expand via both WiMax and WiFi internet access availability into areas that are currently underserved
- Education – to prepare teachers and students for success in the global economy by bringing useful technology – affordable and adapted to local needs
- Content – to collaborate with governments, nongovernmental organizations (NGOs), education and healthcare leaders, and local businesses to accelerate a world of localized content

Focus

Government regulators and policymakers; technical, managerial and business professionals

Orientation

June 6, 2008

Training Dates

June 9 – 13, 2008

Location

Santa Clara, CA

Suggested Course Sequence

M8-242; M8-243

M8-243

e-Government for Development: Strategies and Policies

Sponsored by
USTTI and USAID

Course Description

e-Government is defined as the systematic incorporation and use of Information

and Communication Technologies (ICTs) in government to promote developmental objectives including: improving efficiency and effectiveness; increasing transparency and responsiveness; and enhancing the delivery of government services and information to citizens, businesses, and other stakeholders. This two-week seminar will include lectures, panel discussions, and interactive workshops presented by leading e-Government experts from USAID, USTTI Board member corporations, private sector firms, universities, NGO's, and multinational organizations.

The seminar curriculum will include modules that will address the following aspects of e-Government and focus on what goes into building and operating a functional e-Government system:

- e-Government Strategies and Solutions
- Best Practices and Global Case Studies
- Service and Information Delivery including paying government fees on-line (licenses, taxes), health and education information, and support for e-commerce
- Security Considerations including authorization, identity and e-authentication, infrastructure protection, and payment system safeguards
- e-Procurement
- E-banking services and other electronic payment systems (mobile banking, pre-paid cards)
- Requirements for systems, support, and maintenance
- Change Management
- Enabling Policy Environment including
 - Inter-Ministerial Coordination
 - Policy/Legal/Regulatory Reform
 - Project Financing and Public-Private Partnerships
 - Citizen Participation

Participant Learning Objectives

The seminar curriculum is intended to provide developing country government officials with the tools to best introduce electronic government in central and local governments in a way that is coherent, prioritized, interoperable, secure, efficient, EU- and WTO-compatible (where indicated), of benefit to all stakeholders and realistic in light of economic and institutional realities within a given country. Another important outcome will be to create a global community of e-Government leaders who will continue to share experiences, knowledge, and resources with one another following the seminar for the greater benefit of all.

Focus

Applicants should be senior government planning officers, the implementer or program manager, from Ministries of planning,



Fifteen USTTI scholars from nine developing countries gather for a photo during a break in the NTIA's "Radio Frequency Spectrum Management" Course. During two weeks of rigorous training, the NTIA's spectrum experts helped USTTI scholars better appreciate the latest principles and policies available for the most efficient use of the radio frequency spectrum. NTIA has graduated 483 USTTI scholars from 119 countries over the past 25 years. NTIA is represented on the USTTI Board by Acting Administrator Meredith Baker.

ICT, or finance or from the office of the President or Prime Minister. Seminar participants will be expected to contribute information and brief presentations about planned or on-going e-Government projects in their countries both in advance of the seminar and during the two-week event.

Orientation

June 13, 2008

Training Dates

June 16 – 27, 2008

Location

Washington, DC

Suggested Course Sequence

M8-242; M8-243

Radio and Television Broadcast Technology Sequence

M8-200

Radio and TV Studio Design, Operation and Management

Sponsored by

Broadcasting Board of Governors, U.S. International Broadcasting/Voice of America (VOA) in cooperation with the Institute of Electrical and Electronics Engineers Broadcast Technology Society (IEEE/BTS)

Course Description

The "digital era" has ushered in a host of new systems and techniques that have become the contemporary standard for the design, operation and management of radio and TV studios.

This course is intended to provide an overview of these new systems and techniques

and the technologies that make them possible. The course begins with an introduction to the technical concepts governing digital audio, radio and TV. Traditional topics of acoustics and building noise, studio layout and basic design, microphone theory and selection, and studio lighting are then addressed. The focus then shifts to the implementation of new technologies. Topics include; digital studio equipment selection, integration, operation, testing and maintenance; application of computers, automation, and security measures in broadcasting and studio operations; availability and use of open source software; Internet program distribution; and issues of intellectual property in digital networks. Special sessions on broadcast management and digital audio editing are also included.

This course is appropriate for technical operations and administrative personnel and technical decision makers responsible for the design, construction and upgrading of studio and broadcasting facilities within their countries.

Lectures are presented by engineering professionals from the IEEE Broadcast Technology Society, the U.S. International Broadcasting Bureau and selected consultants and manufacturers of broadcast equipment.

Field trips to several radio and TV studios in the Washington, DC metropolitan area provide an insight to the latest developments and in some cases "all" digital facilities.

Participant Learning Objectives

Upon successful completion of this course, the participants should be able to evaluate, advise and/or determine the studio designs, methods of operation and types of equipment best suited for their specific needs.

Focus

The focus is highly technical. Applicants must have appropriate technical training or the equivalent in work experience. A degree in engineering is highly desirable.

Orientation

July 8, 2008

Training Dates

July 9 – 25, 2008

Location

Washington, DC

Suggested Course Sequence

M8-200; M8-201; M8-202

M8-201

Broadcast Transmitter Operation and Maintenance

Sponsored by

Harris Broadcast Communications Division

Course Description

The course will consist of classroom discussions and/or equipment demonstrations of new and recent developments in broadcasting equipment including: (1) Medium Wave Digital Modulation, High Power Digital Modulation (up to and over 1 Megawatt); (2) FM transmission, including high-power solid state and DAB FM transmitters; (3) quarter wave cavity applications in FM and TV; (4) New High Efficiency IOT based UHF transmitters and RF correction for common amplification; (5) Overview of antennas used for FM and TV; (6) Low power and high power solid state VHF transmitters for TV; (7) Solid State low and high-power UHF TV transmitters; (8) Digital Video Routing technologies to transmitter sites including remote control advances; and (9) Overview of Digital TV technologies (DVB-T) including special requirements. The above topics will be presented by lecture, demonstration, and hands-on participation by the trainees.

Participant Learning Objectives

(1) To increase working knowledge of the theory, operation and maintenance of broadcast transmitters as presented in this technical education program; and (2) to develop an understanding of the latest advances in broadcast technology.

This course has been structured primarily for radio and television engineers. Management level personnel who wish to enhance their overall technical understanding of transmitters are also encouraged to apply.

Focus

Technical with lab exercises for hands-on practice

Orientation

July 25, 2008

Training Dates

July 28 – August 8, 2008

Location

Quincy, IL

Suggested Course Sequence

M8-200; M8-201; M8-202

M8-202**University Affiliated Public Radio Broadcasting****Sponsored by**

WAMU 88.5 FM

Course Description

WAMU 88.5 FM is the leading public radio station for NPR news and information in the greater Washington, DC area. It is member-supported, professionally staffed, and licensed to American University. Since 1961, WAMU has provided programming to a growing audience that now totals more than 450,000 listeners in the District of Columbia, Maryland, and Virginia.

This visit will consist of a tour of the high-tech WAMU facilities and a brief introduction to the activities of a major public radio station that is affiliated with one of Washington, DC's leading universities.

Participant Learning Objectives

To become more familiar with the important potential of operating a radio broadcast facility in conjunction with a university or college.

Focus

Technical and managerial

Orientation

TBA

Training Dates

TBA

Location

Washington, DC

Suggested Course Sequence

M8-200; M8-201; M8-202

*Management Training Sequence***M8-210****Introduction to the IP Multimedia Subsystem****Sponsored by**

Alcatel-Lucent

Course Description

This course provides training in the fundamental principles which provide the basis for commercial CDMA wireless technology, as well as its network architecture. This course provides a basic understanding of the CDMA wideband digital ration IS-2000 standard and its application to cellular and personal communications services (PCS) markets.

This course is appropriate for technical operations or technical administrative personnel interested in an overview of the basic processes of CDMA, RF link architecture, RF call processing algorithms and Coverage/Capacity planning of an IS-2000 3G-1X CDMA network.

Participant Learning Objectives

- Identify the basic processes of CDMA.
- Identify Global 3G Standards.
- Identify the Key Attributes of IS-2000 CDMA.
- Identify the Radio Access Network Reverse Link Architectures.
- Identify the impact of 3G-1X CDMA on RF link budgets.
- Identify the general operation system access and call setup algorithms to 3G-1X CDMA call processing.
- Identify the general operation location, handoff, and power control algorithms to 3G-1X CDMA call processing.

Focus

Government regulators, technical, managerial, and business professionals. Experience with wireless devices, services and network engineering terminology and knowledge of fundamental mathematical skills used in engineering are required.

Orientation

July 10, 2008

Training Date

July 11, 2008

Location

Washington, DC

Suggested Course Sequence

M8-210; M8-211; M8-212

M8-211**Managing Effectively in the Changing Telecommunications Environment****Sponsored by**

USTTI

Course Description

Executives and managers responsible for general management in developing international organizations will find this program appropriate in building their management skills and increasing their knowledge. Through classroom discussion and activities, the program will focus on: (1) effective management techniques; (2) the telecommunications climate; and (3) efficient operational decisions. This two-week program is designed to present broad management concepts and considerations. The course is appropriate for managerial level telecommunications staff. It is not appropriate for telecommunications staff without management responsibilities.

Participant Learning Objectives

- Review telecommunications environment
- Expand planning and financial background
- Explore cultural differences
- Examine management of change
- Experience effective team building and group problem solving
- Investigate steps of project management
- Discuss effective managerial concepts

Focus

Managerial

Orientation

July 11, 2008

Training Dates

July 14 – 25, 2008

Location

Washington, DC

Suggested Course Sequence

M8-210; M8-211; M8-212

"Coming back to my country with newly acquired skills and experiences will be beneficial for me and my country."

- Karen Avanesyan, Armenia, M7-209

M8-212**Key Trends in Evolution of the Public Network: a Managerial Perspective****Sponsored by**

The Hewlett-Packard Company (HP)

Course Description

This course examines the impact of new and emerging technologies on the evolution of the network and provides a managerial perspective on these changes. Technologies such as mobility, VoIP, IPTV, 802.11, WiMAX, fixed mobile convergence, IMS, Service Delivery, pervasive computing and broadband coupled with new business models are re-shaping the public network. At the same time the Communications, Media and Entertainment industries are converging. The course will examine trends in the market and how these technologies are fundamentally altering the structure of the public network and the services the network provides. These changes require that service providers update their business models, reexamine the services they offer and rethink how they build and manage their network infrastructure. This new infrastructure will require that service providers revisit everything from how service is provided and planned, to how it is sold and supported. The course will also provide a perspective on these changes from that of a computer company based in Silicon Valley. The course will include a visit to HP Labs, one of the leading research laboratories in the world, to discuss new and emerging technologies.

Lecture, discussion, and hands-on demonstrations will cover the subject areas.

Participant Learning Objectives

This course will equip participants with the knowledge that they need to help their organizations address the dramatic changes in the public network.

Focus

Managerial

Orientation

July 25, 2008

Training Dates

July 28 – August 1, 2008

Location

Cupertino, CA

Suggested Course Sequence

M8-210; M8-211; M8-212

"The training I received is highly beneficial in upgrading my organization with new technology."

- Anup Sharma, Nepal, M7-205

Telecom/IT Policy and Regulation Sequence

M8-220**Seminar in Competition Policy for Telecommunications****Sponsored by**

USTTI in conjunction with the US Federal Communications Commission (FCC), Department of Justice, Federal Trade Commission (FTC), and the Washington, DC legal community agree to offer the following tuition-free training course under the auspices of the USTTI in 2008

Course Description

The course will be conducted by recognized competition policy and antitrust experts from the US Federal Communications Commission (FCC), the Department of Justice, the Federal Trade Commission (FTC) and the Washington, DC legal community and will address basic aspects of competition policy, particularly as applicable to telecommunications industries. The discussion during the first half of this intensive one-day seminar and workshop will focus on three interrelated aspects of competition policy:

To what extent (and with what qualifications and exceptions) can we anticipate that freely functioning private markets will satisfy consumer-citizens' needs, enhance society's wealth, and provide opportunities for workers and owners to increase their wealth? How do these principles apply to telecommunications markets?

What laws and legal institutions, especially anti-trust law and agencies regulating telecommunications firms, have proved beneficial in protecting and fostering market performance in those areas where reliance on marketplace forces and market decisions appears warranted?

What kinds of legal oversight of private behavior are necessary in cases where markets either will fail to operate optimally or cannot provide what society desires? For example, why does competition policy not fully embrace unregulated private markets for telecommunications services?

The second half of the course will consist of a workshop where participants and instructors

will jointly address issues of telecommunications policy and competition that currently affect the participants' home countries.

Participant Learning Objectives

For policy makers and regulatory managers who wish to develop a more thorough understanding of competition policy which may serve as a foundational backdrop for policy-making considerations as applied to the telecommunications sector.

Focus

Theory and practice of competition policy, as applied to telecommunications

Orientation

July 17, 2008

Training Date

July 18, 2008

Location

Washington, DC

Suggested Course Sequence

M8-220; M8-221; M8-222; M8-223; M8-224; M8-225; M8-226; M8-227

M8-221**Regulatory and Privatization Issues in Telecommunications****Sponsored by**

Federal Communications Commission (FCC) and USTTI Board member corporations

Course Description

This course, taught by Federal Communications Commission (FCC) Bureau-level policy managers, offers executive-level telecommunications policy personnel a broad overview of telecommunications policy-making considerations in a dynamic and competitive environment. With the rapidly changing regulatory environment predominant in so many countries, regulatory bodies are confronted with new challenges as they attempt to assimilate modern telecommunications technology.

The course describes the US regulatory structure including the legislative authority, the FCC organizational structure and an outline of the regulatory philosophy affecting the major services. The changing regulatory structure, which reflects current technological developments, and influences the need for competition and privatization, as mandated by the Telecommunications Act of 1996, is presented. Discussion of the FCC decision-making process, a site visit to the Washington, DC headquarters of the Intelsat Global Service Corporation, and a roundtable discussion concerning the changing global telecommunication environment,

with class members, government, and industry representatives as participants, will be included to enhance the learning process.

Participant Learning Objectives

The objectives of the course are: (1) to understand the changing regulatory philosophy of the United States as we participate in the dynamic worldwide telecommunications environment, including development of the necessary considerations that need to be given in responding to those changes; and (2) to develop, with high-level regulatory managers from developing nations, methods of grappling with privatization and other related deregulatory issues in managing their organizations in an effective, efficient market-driven manner.

Focus

Strategic planning and management (limited to those responsible for communications policy determination)

Orientation

July 17, 2008

Training Dates

July 21 – 25, 2008

Location

Washington, DC

Suggested Course Sequence

M8-220; M8-221; M8-222; M8-223;
M8-224; M8-225; M8-226; M8-227

M8-222

ICT Policymaking in a Global Environment

Sponsored by

The National Telecommunications and Information Administration (NTIA)

Course Description

This course surveys policy development approaches to Information and Communication Technologies (ICTs) in context with current international technology and market trends. Over two days, course participants will examine the development of national ICT policies in a time of global technology transitions. Participants will also consider various stakeholders and power centers, including the private sector and civil society, and regional and inter-governmental ICT organizations. On the first or Foundation Day, course instructors will survey ICT technology trends, coupled with resultant policy approaches, providing examples that help students tie trends, policy, and decision-making together. The class will review policy concepts such as transparency, sovereignty, and consensus-building among multiple stakeholders across national boundaries. Participants will then

examine key regional and global fora (e.g., ITU, APEC, CICTEL, ITSO, ICANN, and WTO) that are currently involved in ICT policy discussions and technical developments. Participants are encouraged to describe their own country's perspectives, and/or those of their regional fora (Africa, Asia, Middle East, the Americas, etc.), through roundtable discussion and Q&A. On the second or Emerging Issues Day, course instructors will review emergent ICT policy issues in global fora, such as Internet governance and cybersecurity. Participants should come prepared to share their perspectives on the needs of developing countries, to improve opportunities for dialogue with their counterparts, at USTTI and in international inter-governmental and non-governmental fora (e.g., Internet Governance Forum).

Participant Learning Objectives

Develop an understanding of how cultural, political, and economic environments shape the development of information and communications technology policies worldwide. Gain insight into the roles that private sector, civil society, and inter-governmental organizations play in current regional and international ICT policy and technology trends. Improve communications skill-sets by establishing dialogue among students on their own country's policy and technology adoption experiences.

Focus

Basic concepts in ICT policy development to improve decision-making, such as stakeholder analysis and consensus development, with an emphasis on policymaking processes in the regional and global environment during technology transitions.



Eighteen USTTI Scholars take a break from the Hewlett-Packard Company (HP) course "Key Trends in the Evolution of the Public Network: A Managerial Perspective," to visit the birthplace of HP - the Garage. Since 1993, Hewlett-Packard has sponsored 17 tuition-free training courses which have empowered 272 women and men. Kenneth Myers, HP's Planning and Operations Manager for Network & Service Providers (far right) works each year to develop a rigorous but enjoyable week of training. The Hewlett-Packard Company's Vice President and General Manager for Communications Media and Entertainment Business Unit, Sebastiano Tevaritto represents HP on the USTTI Board of Directors.

Orientation

July 25, 2008

Training Date

July 28, 2008

Location

Washington, DC

Suggested Course Sequence

M8-220; M8-221; M8-222; M8-223;
M8-224; M8-225; M8-226; M8-227

M8-223

Building Cybersecurity Capacity

Sponsored by

The National Telecommunications and Information Administration (NTIA)

Course Description

This course will focus on the cooperative roles of government and industry engaged in building cybersecurity capacity at the national level. The United States, in cooperation with the International Telecommunication Union's (ITU) Development Sector (ITU-D), has identified a five-point Framework for policymakers to achieve to build cybersecurity capacity in their countries. These goals include: 1) formulating a national strategy for cybersecurity, 2) building national government-industry partnerships, 3) deterring cyber crime, 4) setting up national incident management organizations, and 5) fostering a national culture of cybersecurity. This course will outline the success of bilateral and ITU initiatives to promote cybersecurity worldwide based on shared experiences involving a two-way flow of information and dialogue. To strengthen each nation's cybersecurity, course participants will learn about the major ITU facilitating tools: the Framework for National Cybersecurity Efforts (the Framework); the Report on Best Practices for a National

"The training received was professionally handled and I am eager to spread the news about USTTI and the course to my countrymen."

- Cornelius Akujobi, Nigeria, M7-212

Approach to Cybersecurity (Best Practices Report): A Management Framework for Organizing National Cybersecurity Efforts; and the Cybersecurity Self-Assessment Tool. These tools were first presented at an ITU-D annual meeting in Geneva in September 2007. Efforts underway by the USA and at the ITU will be highlighted during the course to help national policymakers analyze issues, assess progress and organize a national strategy.

Participant Learning Objectives

Develop an understanding of how the five pillars in the Framework and the Best Practices Report can assist government and industry policymakers to build and enhance their cybersecurity capacity. Gain insight into how to use the ITU facilitating tools as training devices following the Cybersecurity Self-Assessment Tool as a model. Establish dialogue among students on their own country's cybersecurity policy and national activities currently underway to build cybersecurity capacity.

Focus

Learn basic concepts for the development of national and international policies to build cybersecurity capacity, accompanied by the development of self-assessment skills, to determine the current scope/level of cybersecurity and analyze improvements for cybersecurity capacity.

Orientation

July 28, 2008

Training Date

July 29, 2008

Location

Washington, DC

Suggested Course Sequence

M8-220; M8-221; M8-222; M8-223;
M8-224; M8-225; M8-226; M8-227

M8-224

The WTO Reference Paper: A primer

Sponsored by

Verizon

Course Description

This program is organized around the structure of the World Trade Organization (WTO) "Reference Paper" -- the framework of telecommunications regulatory principles that WTO member countries have adopted. Since the entry into force of the WTO Basic Telecom Agreement in 1998, many regulators and policy makers from developing nations face major challenges in understanding the scope of the Reference Paper and determining how to implement its obligations. As many developing nations are preparing to undertake even greater commitments to liberalize their telecommunications markets, either through trade negotiations underway in the WTO Doha Development Round, or through other initiatives, a thorough understanding of the Reference Paper is essential. In addition, the Reference Paper is an excellent model for a regulatory framework for general purposes independent of the WTO.

The course will consist of several modules that will closely examine the major components of the Reference Paper, including:

- Establishment of independent regulators
- Competitive safeguards

- Interconnection
- Universal service
- Allocation and use of scarce resources
- Transparency

Orientation

July 29, 2008

Training Dates

July 30 – 31, 2008

Location

Washington, DC

Suggested Course Sequence

M8-220; M8-221; M8-222; M8-223;
M8-224; M8-225; M8-226; M8-227

M8-225

Innovation that Matters: On Demand Government for Developing Nations

Sponsored by

The IBM Institute for Electronic Government

Course Description

This session will be held at IBM's Institute for Electronic Government in Washington, DC. The course will focus on important areas for Governments to address as they build and develop on demand government programs utilizing information technology in today's rapidly changing world. The session has five modules which include a review of Innovation that Matters in e-Government, perspectives for government ministries and agencies on what others are doing globally in the areas of economic development, workforce development and related issues, actual hands-on demonstrations of leading-edge e-Government applications, a discussion of why open software policies are important in making Government investments, a glimpse into the next generation Internet and how the changing expectations of the public regarding the Internet will affect how governments serve their constituents, as well as an opportunity to roundtable with the presenters. The program is aimed at individuals working to build and develop an e-Government program.

Module 1: Innovation that Matters in On Demand Government

There are three important focus areas for Governments related to information technology in today's rapidly changing world. Governments can use technology internally to be more effective and efficient, but they must also set the policies for their entire economy. In addition, they can be a facilitator of the use of technology in business and society. The presentation highlights these roles and the information society initiatives that have



Eighteen USTTI Scholars from 15 developing nations take a break from Cisco System's popular training course "Internet Service Provider Design Seminar and Backbone Routing Protocol Workshop." Pictured with the USTTI Scholars are members of Cisco's Consulting Engineering team Hank Mauldin (Back row, third from left), Earl Carter (Back row, fifth from left) and (Back row, sixth from the left) Cisco's Program Manager, Rose Mary Ramirez.

been established in major countries and progress that is being made today. Perspectives on how governments are moving into an on-demand era are presented. In addition, the benefits governments can achieve with information technology and both the progress and the challenges in implementing significant new initiatives are discussed.

Module 2: Leading-Edge e-Government Application Demonstrations

Many innovative applications that are in use by governments around the world are demonstrated. The demonstrations include actual e-Government websites and other technology solutions which have been selected to highlight the key areas where public sector organizations are achieving benefits from Internet and stakeholder-centric initiatives: (1) delivery of services to citizens and business, (2) improved efficiency, (3) economic development, (4) education, (5) security and (6) mobile workers. Perspectives on the use of these solutions in developing nations are provided.

Module 3: The Changing Expectations of the Public: How Governments Will Serve Stakeholders

The Internet is the embodiment of significant technology advancements that are changing our society in many ways. As these technologies continue to improve at a very rapid rate, the future Internet will offer much more capability at potentially lower cost, which will bring even more change in the way individuals and organizations work and interact. This topic will cover the expectations of the public and how governments will have to make changes to better serve their stakeholders.

Module 4: Open Computing Open Innovation Policy for Governments

Governments are considering their options on how to build and implement systems that will serve their constituencies. How should these systems be built and implemented in an open way to better leverage limited resources? This module will explore why open systems for Government is important.

Module 5: e-Government Roundtable

The class will conclude with a roundtable with the speakers of the day so that class participants can interact informally, ask questions, and discuss some of the new ideas and perspectives they have obtained during the day with all of the presenters.

Orientation

July 31, 2008

Training Date

August 1, 2008

Location

Washington, DC

Suggested Course Sequence

M8-220; M8-221; M8-222; M8-223;
M8-224; M8-225; M8-226; M8-227

M8-226

Communications Infrastructure Economics and Regulation

Sponsored by

Packet Clearing House

Course Description

This one-day seminar will emphasize Internet economics, the development of national information economies, and the interaction between communications regulation and technological development. The first half of the day's discussion will focus on the general economic environment in which modern broadband telecommunications services operate. The second half of the day will be spent on the more specific regulatory and competitive requirements of Voice over IP, wireline broadband infrastructure, and mobile wireless technologies, in developing economies.

The seminar will be led by Bill Woodcock, research director of Packet Clearing House, a non-profit research institute dedicated to understanding and supporting Internet traffic exchange technology, policy, and economics. Bill has operated national and international Internet service provision and content delivery networks since 1989, and currently spends most of his time building Internet exchanges in developing countries.

Orientation

August 1, 2008

Training Date

August 4, 2008

Location

Washington, DC

Suggested Course Sequence

M8-220; M8-221; M8-222; M8-223;
M8-224; M8-225; M8-226; M8-227

"USTTI gave me more than training. They gave me the opportunity to learn new experiences and meet friends from other countries."

- Wenceslao Bejarano,
Honduras, M7-213

M8-227

Purpose and Impact of European Regulation of Communication

Sponsored by

United Kingdom Telecommunications Academy (UKTA)

Course Description

This course, taught by Professor David Mellor, Chairman of the United Kingdom Telecommunications Academy (UKTA), provides exposure to the operations of a European independent regulatory body for communications, in comparison with those of the Federal Communications Commission in the United States.

The course offers a broad overview of the European regulatory model covering the Telecommunications Act of 1984 and the Communications Act of 2003, the evolution of the United Kingdom's independent regulator the Office of Communications (Ofcom) from the Office of Telecommunications (OfTel), licensing and authorization, the role of the regulator, and the impact of liberalization in Europe. Technology neutrality, European legislation for communications, and European Directives will also be discussed in this two-day course.

Participant Learning Objectives

A broad overview of the European regulatory model using the UK experience covered by the Telecommunications Act 1984 and Communications Act 2003 as an example of Regulatory Convergence.

Focus

Regulators, Policy Makers and Operators

Orientation

August 4, 2008

Training Dates

August 5 – 6, 2008

Location

Washington, DC

Suggested Course Sequence

M8-220; M8-221; M8-222; M8-223;
M8-224; M8-225; M8-226; M8-227

Wireless Communications Sequence

M8-230

Introduction to the IP Multimedia Subsystem

Sponsored by
Alcatel-Lucent

Course Description

This course provides training in the fundamental principles which provide the basis for commercial CDMA wireless technology, as well as its network architecture. This course provides a basic understanding of the CDMA wideband digital ration IS-2000 standard and its application to cellular and personal communications services (PCS) markets.

This course is appropriate for technical operations or technical administrative personnel interested in an overview of the basic processes of CDMA, RF link architecture, RF call processing algorithms and Coverage/Capacity planning of an IS-2000 3G-1X CDMA network.

Participant Learning Objectives

- Identify the basic processes of CDMA.
- Identify Global 3G Standards.
- Identify the Key Attributes of IS-2000 CDMA.
- Identify the Radio Access Network Reverse Link Architectures.
- Identify the impact of 3G-1X CDMA on RF link budgets.
- Identify the general operation system access and call setup algorithms to 3G-1X CDMA call processing.
- Identify the general operation location, handoff, and power control algorithms to 3G-1X CDMA call processing.

Focus

Government regulators, technical, managerial, and business professionals. Experience with wireless devices, services and network engineering terminology and knowledge of fundamental mathematical skills used in engineering are required.

Orientation

August 11, 2008

Training Date

August 12, 2008

Location

Washington, DC

Suggested Course Sequence

M8-230; M8-231; M8-232; M8-233



USTTI Chairman Ambassador Michael R. Gardner (left) presents the 2007 Chairman's Award for outstanding Federal service in support of the USTTI to Laura Samotshozo (center), Information Technology Project Manager United States Agency for International Development (USAID). Along with countless colleagues from USAID, Ms. Samotshozo has provided tenacious support to the USTTI, facilitating the USTTI's outreach into some of the most remote areas of the developing world. Joining Ambassador Gardner for the presentation is Ms. Jacqueline E. Schafer (left) Assistant Administrator for the Bureau for Economic Growth, Agriculture, & Trade (EGAT). Juan Belt, Director Office of Infrastructure and Engineering, Bureau for Economic Growth, Agriculture, & Trade (EGAT) represents USAID on the USTTI Board.

M8-231

A Comprehensive Review of the Mobile Communications Industry Focusing on Technologies for 3G and 4G Wireless Systems

Sponsored by
AT&T

Course Description

This course provides a comprehensive overview of the industry surrounding all major existing cellular/PCS technologies, 3G systems and their enhancements, and proposed 4G systems. The course includes an understanding of the technologies particularly those developed under the auspices of 3GPP. Additional coverage is given to the work of ITU-R on IMT-2000 and IMT-Advanced (3G and 4G) and to an understanding of the standards entities working in the current global wireless industry. Course emphasis is placed on providing the students a thorough foundation into the current and planned future wireless industry, the application of wireless to a developing country, and technology evolution options. In addition to the radio technology focus, the course also considers systems aspects, core networks, and services.

Participant Learning Objectives

To understand the current and future possible technologies behind commercial wireless communication, as well as the working bodies in the industry contributing to these developments. Participants will gain an understanding of practical limitations, operational issues, and evolution challenges surrounding the operation of a wireless digital network offering voice and data in both

*"I couldn't ask for anything more.
Every aspect of our training and
our stay here was met and pro-
vided for."*

-Lino Almuenda, Philippines,
MZ-205

a circuit switched and packet based environment. Attendees will also understand wireless data technologies from a 3G and beyond perspective. Finally, participants will understand 3G and possible 4G technologies including EDGE, HSPA/UMTS, and LTE and the ability of these technologies to cost effectively meet current and future marketplace demands for voice and high-speed data. The course includes the possibility of a hands-on view of the services with an on-site tour of the actual equipment.

Focus

Technical management, government regulators

Orientation

August 12, 2008

Training Dates

August 13 – 15, 2008

Location

Atlanta, GA or Redmond, WA

Suggested Course Sequence

M8-230; M8-231; M8-232; M8-233

M8-232**IMT (3G/4G) Mobile Broadband and Mobile TV***Sponsored by*

QUALCOMM Incorporated

Course Description

This course will cover the latest developments in IMT (3G/4G) technologies such as UMTS/HSPA, CDMA2000 1xEV-DO (inc. CDMA450) and their robust evolution paths (UMB, LTE). It will also cover Mobile TV solutions such as MediaFLO. An overview will be provided of the World Radiocommunications Conference 2007 (WRC-07) decisions with regards to IMT spectrum and technologies and how they can spur the deployment of affordable broadband connectivity in both urban and rural areas. As of September 2007, 399 3G operators in 135 countries are offering over 484 million consumers the same speed (or faster) and ease from their wireless devices that they experience on their wired PCs, due to the wireless broadband revolution. Many government entities are including both the provision of affordable basic telephony services and broadband connectivity in their universal access priorities. Mobile TV solutions and an overview of other broadband technologies will also be covered. Participants will be provided a laptop with broadband connectivity during the length of the course, as well as other live demos and tour of facilities.

Participant Learning Objectives

- Overview of commercial IMT (3G/4G) mobile broadband and mobile TV technologies, standards roadmap, market updates, including network deployments and device availability.
- Overview of WRC-07 results regarding IMT, including IMT frequency bands, the impact on spectrum and technology decisions, as well as the introduction of new services in both existing spectrum and green field scenarios.
- Programs how 3G solutions are making an economic impact and benefiting society in education, health and public safety among other areas.

Focus

Designed for technical managers in regulatory agencies, communications ministries, and mobile or fixed operators who are faced with making decisions on terrestrial wireless issues, including spectrum allocation recommendations and how these impact technology deployment, planning, and expanding wireless connectivity in their countries. A basic understanding of 3G wireless networks and technologies such as CDMA and GSM is required.

"Excellent opportunity, excellent organization, materials and training."

- Imad Hoballah,
Lebanon, M7-210

Orientation

August 15, 2008

Training Dates

August 18 – 22, 2008

Location

San Diego, CA

Suggested Course Sequence

M8-230; M8-231; M8-232; M8-233

M8-233**The Wireless Broadband Revolution: Wi-Fi and WiMAX: the Technical, Business, and Spectrum Policy Ramifications in the Global Marketplace***Sponsored by*

Intel Corporation

Course Description

Find out how your country can join the wireless broadband revolution.

This course, taught by representatives from the world's largest chip maker and a leading manufacturer of computer, networking and communications products, will provide a global "behind the scenes" look at the technologies and standards driving the wireless broadband revolution. The course will focus

on how standards-based wireless broadband technologies can enable flexible, low cost, high quality Internet access solutions for developing countries.

Standards-based wireless broadband technologies have grown exponentially in recent years. Local area networks using IEEE 802.11 standards, or Wi-Fi "hot spots," have been popping up in coffee shops, hotels, and airports worldwide. Similarly, WiMAX, a rapidly emerging wide area network technology using IEEE 802.16 standards, will provide last-mile broadband solutions and high-speed wireless Internet access over longer distances in the very near future. WiMAX will offer an inexpensive alternative to DSL and cable broadband access and, thus, a practical way to extend broadband service to developing countries. Your country can – and should – join this wireless broadband revolution.

Classroom discussions will be supplemented by demonstrations of Wi-Fi and WiMAX technologies.

Participant Learning Objectives

- Overview of Wi-Fi and WiMAX wireless broadband devices and applications.
- In-depth understanding of Wi-Fi and WiMAX technology, standards update, and performance.
- Insight into establishing an innovative regulatory framework for enabling flexible, low cost, interoperable wireless broadband deployment in developing countries.

Focus

Government regulators and policymakers; technical, managerial, and business professionals

Orientation

August 22, 2008



USTTI Scholar's take a break from Bechtel Communications course, "Building Mobile Wireless Networks." In 2007, Bechtel's Steve Tryer (far right), Manager of Site Development and Engineering, provided valuable training for 17 women and men from the developing world. Bechtel has served on the USTTI Board of Directors since 2004 and is currently represented on the Board by James F. X. Payne, President, Bechtel Federal Telecoms.

"I should say this kind of training has really opened my eyes and I am looking forward to going back to my country and implement what I have gained."

- Eric Mulindwa,
Uganda, M7-111

Training Dates

August 25 – 27, 2008

Location

Santa Clara, CA

Suggested Course Sequence

M8-230; M8-231; M8-232; M8-233

Fiber Optics

M8-244

Hands-on Fiber Optic Intensive

Sponsored by

FiberLight International

Course Description

Fiber optic technology serves a full spectrum of user needs from point-to-point data links to global networks. This course will provide

participants with a basic understanding of this growing industry, as well as hands-on experience. Participants will identify and solve real world problems associated with the design, installation, and repair of fiber optic networks.

Participants learn on a variety of the latest equipment in a job-simulating setting. Topics covered include preparation of cables and closures, mechanical and fusion splices, termination, and testing of fiber cable for both inside and outside plant applications. Restoration and maintenance procedures will also be addressed. Fiber Optic network planners, engineers, project managers and technicians will benefit from this training. Each participant will receive a course manual.

Participant Learning Objectives

To develop a comprehensive understanding of basic fiber optics and gain entry-level skills necessary in planning and installing a fiber optic network.

Focus

Technical and managerial with technical emphasis

Orientation

TBA

Training Dates

TBA

Location

Estes Park, CO (Denver Area)



Members of the USTTI Board of Directors and representatives from the FCC joined USTTI scholars for a roundtable discussion focusing on "Regulatory and Privatization Issues in Telecommunications." Pictured here are Richard Nohe, BT Global Services; Board Member Frank Weaver, The Boeing Company; Babara Cutts, FCC; Frank Urbany, retired Vice President BellSouth Corporation; David Roberts, FCC; Board Member Dr. Robert Pepper, Cisco Systems Inc; Ann Bushmiller, FCC; Julius Knapp, FCC; Tom Tycz, Senior Policy Advisor law firm of Goldberg, Godles, Wiener & Wright ; Roundtable Moderator Rudy Baca of the law firm Rini Coran PC; Laura Samatshozo, USAID; William Lane, FCC and Gonzalo De Dios, Intelsat

Satellite Communications Sequence

M8-300

Sustainable Satellite Solutions for Developing Countries

Sponsored by

GVF – The Global Satellite Communications Association

Course Description

This course is designed for representatives of public and private sector organizations that are engaged in or are thinking about launching operations that involve satellite communications. The course is offered for organizations that operate in developing or developed nations – or both – and the course focuses on the steps that need to be taken to enable sustainable provision of applications in emerging economies. Content is not highly technical, with the primary focus covering business aspects, including the communications industry structure and where satellite fits; types of satellite-based business; critical success factors; core competencies; customer management; business strategy & planning; risk analysis; and outlook for the future.

Participant Learning Objectives

Professionals who attend the course will strengthen their skills in designing, procuring, contracting for, installing, maintaining and building sustainable satellite-based applications for Developing and Least Developed Countries.

Orientation

September 17, 2008

Training Dates

September 18 – 19, 2008

Location

Washington, DC

Suggested Course Sequence

M8-300; M8-301; M8-302; M8-303; M8-304

M8-301

Successful Satellite Regulation & Policy for Developing Countries

Sponsored by

GVF – The Global Satellite Communications Association

Course Description

Recently, in Developing and Least Developed Countries, the public and private sector have

begun making great progress related to the deployment of cost-effective satellite communications. From narrowband to broadband, and from telecom to broadcasting, delivery of these services is being facilitated by national and regional groups of Administrations that have been applying successful satellite regulations and policies. This course will examine the types of satellite regulatory and policy practices that have been proven to work in Developing and Least Developed Countries, as well as the trends relating to the development of next-generation approaches.

Participant Learning Objectives

Course participants will gain an understanding of effective regulation of satellite communications, including fixed and mobile; voice, video and data; domestic and international; and more.

Focus

The course will begin with a brief overview of the primary aspects of satellite communications systems, services and applications. This will be followed by a focus on key features of satellite regulation and policy, including licensing, spectrum management, type approvals and homologation, and more. Also addressed will be key regulatory considerations, such as competition, technology neutrality, the rationale for “light-touch” approaches, Voice over IP, cross-border, and more.

Orientation

September 19, 2008

Training Date

September 22, 2008

Location

Washington, DC

Suggested Course Sequence

M8-300; M8-301; M8-302; M8-303; M8-304

M8-302

Satellite Services and Disaster Response

Sponsored by

Inmarsat

Course Description

Agenda from 2007:

- Role of satellites in disaster response
- Disaster Response Activities, Phases, and Major Actors
- First Responders
- Regulatory Issues
- Fixed Satellite Services v. Mobile Satellite Services
- Next Generation Capabilities and Trends

- Case Studies (Hurricane Katrina and Tsunami)

Focus

Engineers and managers of all experience levels

Orientation

September 22, 2008

Training Date

September 23, 2008

Location

Washington, DC

Suggested Course Sequence

M8-300; M8-301; M8-302; M8-303; M8-304

M8-303

Satellite Communications Primer

Sponsored by

Intelsat Corporation

Course Description

This course will provide practical technical and regulatory fundamentals of satellite communications and services. The training will focus on the technical basis and characteristics of satellite architecture and operations, signal and applications management, and frequency use. In addition, this course will explore regulatory aspects associated with satellite communications, including international policy and regulations, frequency assignments and allocations, coordination issues, spectrum management policies, and the regulation of satellite communications and services. The course will also provide a fundamental understanding of satellite transmission technologies, as well as an overview of satellite applications. Work will focus on the state of technology development and the practical implementation of satellite services, including the integration of digital applications and hybrid, end-to-end solutions.

Participant Learning Objectives

Participants will become aware of the range of technical and regulatory issues associated with satellite communications and services,

“This course was outstanding! Thanks to USTTI for organizing this program. It will be helpful to me and my country to develop broadcast industry.”

- Jagath Kahaduwa Alahakoon,
Sri Lanka, M7-205

including technological developments related to satellite transmission and reception techniques. The focus of this course will be on developing an understanding of the fundamentals that impact the global satellite industry, the state of development of present and future satellite applications, and technical challenges applicable to the satellite industry. This course is oriented toward managerial and technical staff seeking to gain a better technical understanding of the working methodologies of satellite communications, including application development, as well as policy and regulatory issues affecting satellite communications and spectrum management.

Focus

Policy makers, managerial and technical staff.

Orientation

September 24, 2008

Training Dates

September 25 – 26, 2008

Location

Ellenwood, GA

Suggested Course Sequence

M8-300; M8-301; M8-302; M8-303; M8-304

M8-304

Commercial Satellite Communication Applications

Sponsored by

The Boeing Company

Course Description

This course provides a broad overview of how satellites are used for the provision of communications and is intended for both engineers and managers with a wide range of experience levels.

Students will learn the terminology and technology of satellite communications, including: (1) communication satellite system architectures; (2) satellite constellations; (3) communication satellite payloads and other subsystems; (4) regulatory environment/governmental license process and allocation of frequency bands around the world; (5) satellite links and access methods; and (6) interference mitigation techniques.

The technical discussion will include application of these technologies to specific products and services. The course includes a review of some of the major satellite communications projects under development by Boeing.



Organization of American States/Inter American Telecommunication Commission (CITEL) Executive Secretary Clovis Baptista (fourth from the left) visits with seven USTTI/CITEL scholars who attended the Internet Security Training Sequence. Each year CITEL contributes vital funding and subsistence support which allows the most promising telecommunications/ICT professionals from the Caribbean and South American regions to attend training.

Participant Learning Objectives

Upon successful completion of this course, students should be able to understand the differences between communications satellite system architectures, satellite constellations, satellite bus and payload designs, multiple access and modulation techniques and how these technologies can be applied. Students will have a basic understanding of the international regulatory process and major satellite communications projects under development by Boeing.

Focus

Engineers and managers of all experience levels.

Orientation

TBA

Training Date

TBA

Location

TBA

Suggested Course Sequence

M8-300; M8-301; M8-302; M8-303; M8-304

Radio Broadcasting Sequence

M8-310

Introduction to Public Radio Broadcasting

Sponsored by

National Public Radio (NPR)

Course Description

This course offers an overview of public radio broadcasting from a managerial standpoint. As part of the one-day session,

participants will be able to observe the production of NPR's award-winning news program, All Things Considered, from various points in the production process in order to obtain a better understanding of the essentials of radio news reporting and presentation.

Participant Learning Objectives

To expose radio journalists and managers to the daily operations of a radio network with member stations.

Focus

Managerial

Orientation

September 18, 2008

Training Date

September 19, 2008

Location

Washington, DC

Suggested Course Sequence

M8-310; M8-311; M8-312

M8-311

Media Management in Emerging Democracies

Sponsored by

The Mississippi Consortium for International Development (MCID)

Course Description

This program is designed for radio journalists and station managers who are grappling with the transitional changes inherent in the democratization processes that are taking place in so many countries around the globe. This course will focus on the essentials of broadcast management in democratic, free-market contexts. Areas of emphasis will include the following: (1) essentials of station management; (2) pro-

gram design and format; (3) advertising and marketing; and (4) essentials of radio news reporting. The course will consist of lectures, practical exercises and applications, internships, and field visits.

Although the program will be technical in nature, it will also be designed to assist participants in assessing the degree to which the social, political, and economic changes taking place within their countries will impact the day-to-day operations and the role of broadcast media. Prior to leaving, participants will be required to develop a strategic action plan, which will be used to solve the problems they face as broadcast managers in societies in transition.

Participant Learning Objectives

To: (1) provide participants with academic and on-the-job training in the essentials of broadcast management; (2) assist participants in developing creative and innovative approaches to program design and format in order to better respond to consumer interests and needs in an open society; (3) assist participants in developing effective advertising and marketing campaigns which will boost station revenues and allow for greater expansion in services provided and for the acquisition of more advanced technology; and (4) provide participants with academic and on-the-job training in the areas of research, investigative reporting, accuracy and reliability in journalism, and ethics.

Orientation

September 19, 2008

Training Dates

September 22 – October 3, 2008

Location

Jackson, MS

Suggested Course Sequence

M8-310; M8-311; M8-312

M8-312

University Affiliated Public Radio Broadcasting

Sponsored by

WAMU 88.5 FM

Course Description

WAMU 88.5 FM is the leading public radio station for NPR news and information in the greater Washington, DC area. It is member-supported, professionally staffed, and licensed to American University. Since 1961, WAMU has provided programming to a growing audience that now totals more than 450,000 listeners in the District of Columbia, Maryland, and Virginia.

This visit will consist of a tour of the high-tech WAMU facilities and a brief in-

roduction to the activities of a major public radio station that is affiliated with one of Washington, DC's leading universities.

Participant Learning Objectives

To become more familiar with the important potential of operating a radio broadcast facility in conjunction with a university or college.

Focus

Technical and managerial

Orientation

TBA

Training Dates

TBA

Location

Washington, DC

Suggested Course Sequence

M8-310; M8-311; M8-312

Spectrum Monitoring Sequence

M8-320

Radio Spectrum Monitoring Techniques and Procedures

Sponsored by

Federal Communications Commission (FCC) and Agilent Technologies

Course Description

This intensive five day course is designed specifically for those who are, or who expect to be, working directly in the field of radio monitoring for a radio administration or regulatory agency. Participants will be instructed in the skills of radio monitoring methods as utilized within an administration's communications regulatory department or agency. It will focus on monitoring methods that can be adapted to a broad range of equipment sophistication. Participants will work alongside enforcement staff at a field facility of the FCC. The course provides practical instruction in aspects of the facility's work including: radio direction finding, off-the-air technical measurements, signal identification, interference resolution and regulation compliance.

"Thank you for your attention and great work. The course is useful not only for participants but for their countries too."

- Valerica Marin, Romania, M7-116

On the final day of the course, the participants will receive a presentation given by Agilent Technologies, a leading test equipment manufacturer, on Spectrum Analyzers. A product demonstration will be provided to show new measurement capabilities.

Participant Learning Objectives

To be able to: (1) operate contemporary radio monitoring equipment; (2) measure radio signal parameters; (3) use a variety of direction finding techniques; (4) identify radio emissions; (5) secure compliance with radio regulations; and (6) select optimum monitoring methods for local requirements.

Focus

Technical

Orientation

September 29, 2008

Training Dates

September 29 – October 3, 2008

Location

Columbia, MD (Washington, DC area)

Suggested Course Sequence

M8-320; M8-321

M8-321

Laboratory Techniques in Support of Equipment Authorization Programs

Sponsored by

Federal Communications Commission (FCC) and Rohde & Schwarz

Course Description

This program is intended to give participants hands-on training and experience in a functioning laboratory environment, in making technical measurements, and in the testing and calibration of telecommunications equipment in support of governmental radio frequency equipment authorization programs. In addition to an explanation of the U.S. equipment authorization process, the course will focus on four elements of related laboratory activities. 1) testing radio frequency equipment for compliance with established technical standards; 2) developing and using new compliance measurement techniques for application in testing new radio technology; 3) developing techniques for improving electromagnetic compatibility in radio frequency equipment; and 4) calibrating equipment used in laboratory compliance measurements. The participants will have the opportunity to work with FCC engineers and technicians in a fully operational electronics laboratory using modern equipment and methodologies. A site visit to the PCTest Engineering Laboratory of Columbia, MD will be included.

"I'm grateful for the training. With this training I improved my professional skills and gained knowledge about transmitters. Thanks."

- Ernesto Canales, Peru, M7-212

Rohde & Schwarz is a leading global provider of test equipment and systems for EMI and EMS applications. Headquartered in Columbia, Maryland, the company also provides a 17025 accredited calibration/service center. Rohde & Schwarz offers a wide range of test and measurement instruments for use in FCC-type test environments, including EMI receivers, spectrum analyzers, signal generators, power meters and communication analyzers. Rohde and Schwarz will provide training on the final day of the course offering.

This course is intended for engineers and technicians involved in active and developing radio frequency equipment authorization programs.

Participant Learning Objectives

Participants will develop a working knowledge and understanding of the type of measurements used to determine compliance with technical standards for radio frequency emissions, how to improve the performance of equipment with respect to electromagnetic compatibility, how to calibrate equipment used for such measurements, and how to approach the development of new measurement techniques for new radio services.

Focus

Technical

Orientation

October 3, 2008

Training Dates

October 6 – 10, 2008

Location

Columbia, MD (Washington, DC area)

Suggested Course Sequence

M8-320; M8-321

Internet Governance / Mobile Broadband Sequence II

M8-330

Introduction to the IP Multimedia Subsystem

Sponsored by
Alcatel-Lucent

Course Description

This course provides training in the fundamental principles which provide the basis for commercial CDMA wireless technology, as well as its network architecture. This course provides a basic understanding of the CDMA wideband digital ration IS-2000 standard and its application to cellular and personal communications services (PCS) markets.

This course is appropriate for technical operations or technical administrative personnel interested in an overview of the basic processes of CDMA, RF link architecture, RF call processing algorithms and Coverage/Capacity planning of an IS-2000 3G-1X CDMA network.

Participant Learning Objectives

- Identify the basic processes of CDMA.
- Identify Global 3G Standards.
- Identify the Key Attributes of IS-2000 CDMA.
- Identify the Radio Access Network Reverse Link Architectures.
- Identify the impact of 3G-1X CDMA on RF link budgets.
- Identify the general operation system access and call setup algorithms to 3G-1X CDMA call processing.
- Identify the general operation location, handoff, and power control algorithms to 3G-1X CDMA call processing.

Focus

Government regulators, technical, managerial, and business professionals. Experience with wireless devices, services and network engineering terminology and knowledge of fundamental mathematical skills used in engineering are required.

Orientation

October 2, 2008

Training Date

October 3, 2008

Location

Washington, DC

Suggested Course Sequence

M8-330; M8-331; M8-332; M8-333;
M8-334; M8-335; M8-336

M8-331

ICT Policymaking in a Global Environment

Sponsored by

The National Telecommunications and Information Administration (NTIA)

Course Description

This course surveys policy development approaches to Information and Communication Technologies (ICTs) in context with current international technology and market trends. Over two days, course participants will examine the development of national ICT policies in a time of global technology transitions. Participants will also consider various stakeholders and power centers, including the private sector and civil society, and regional and inter-governmental ICT organizations. On the first or Foundation Day, course instructors will survey ICT technology trends, coupled with resultant policy approaches, providing examples that help students tie trends, policy, and decision-making together. The class will review policy concepts such as transparency, sovereignty, and consensus-building among multiple stakeholders across national boundaries. Participants will then examine key regional and global fora (e.g., ITU, APEC, CITEL, ITSO, ICANN, and WTO) that are currently involved in ICT policy discussions and technical developments. Participants are encouraged to describe their own country's perspectives, and/or those of their regional fora (Africa, Asia, Middle East, the Americas, etc.), through roundtable discussion and Q&A. On the second or Emerging Issues Day, course instructors will review emergent ICT policy issues in global fora, such as Internet governance and cybersecurity. Participants should come prepared to share their perspectives on the needs of developing countries, to improve opportunities for dialogue with their counterparts, at USTTI and in international inter-governmental and non-governmental fora (e.g., Internet Governance Forum).

Participant Learning Objectives

Develop an understanding of how cultural, political, and economic environments shape the development of information and communications technology policies worldwide. Gain insight into the roles that private sector, civil society, and inter-governmental organizations play in current regional and international ICT policy and technology trends. Improve communications skill-sets by establishing dialogue among students on

their own country's policy and technology adoption experiences.

Focus

Basic concepts in ICT policy development to improve decision-making, such as stakeholder analysis and consensus development, with an emphasis on policymaking processes in the regional and global environment during technology transitions.

Orientation

October 3, 2008

Training Date

October 6, 2008

Location

Washington, DC

Suggested Course Sequence

M8-330; M8-331; M8-332; M8-333;
M8-334; M8-335; M8-336

M8-332

Building Cybersecurity Capacity

Sponsored by

The National Telecommunications and Information Administration (NTIA)

Course Description

This course will focus on the cooperative roles of government and industry engaged in building cybersecurity capacity at the national level. The United States, in cooperation with the International Telecommunication Union's (ITU) Development Sector (ITU-D), has identified a five-point Framework for policymakers to achieve to build cybersecurity capacity in their countries. These goals include: 1) formulating a national strategy for cybersecurity, 2) building national government-industry partnerships, 3) deterring cyber crime, 4) setting up national incident management organizations, and 5) fostering a national culture of cybersecurity. This course will outline the success of bilateral and ITU initiatives to promote cybersecurity worldwide based on shared experiences involving a two-way flow of information and dialogue. To strengthen each nation's cybersecurity, course participants will learn about the major ITU facilitating tools: the Framework for National Cybersecurity Efforts (the Framework); the Report on Best Practices for a National Approach to Cybersecurity (Best Practices Report); A Management Framework for Organizing National Cybersecurity Efforts; and the Cybersecurity Self-Assessment Tool. These tools were first presented at an ITU-D annual meeting in Geneva in September 2007. Efforts underway by the USA and at the ITU will be highlighted during the course to help national policymakers analyze issues, assess progress and organize a national strategy.

Participant Learning Objectives

Develop an understanding of how the five pillars in the Framework and the Best Practices Report can assist government and industry policymakers to build and enhance their cybersecurity capacity. Gain insight into how to use the ITU facilitating tools as training devices following the Cybersecurity Self-Assessment Tool as a model. Establish dialogue among students on their own country's cybersecurity policy and national activities currently underway to build cybersecurity capacity.

Focus

Learn basic concepts for the development of national and international policies to build cybersecurity capacity, accompanied by the development of self-assessment skills, to determine the current scope/level of cybersecurity and analyze improvements for cybersecurity capacity.

Orientation

October 6, 2008

Training Date

October 7, 2008

Location

Washington, DC

Suggested Course Sequence

M8-330; M8-331; M8-332; M8-333;
M8-334; M8-335; M8-336

M8-333

Internet Regulatory and Trade Policy

Sponsored by

The Information Technology and Innovation Foundation (ITIF)

Course Description

An ITIF staff member who is an expert in regulatory and international trade policy will teach the course. The first portion of the course will be devoted to addressing regulatory issues that relate specifically to the development of Internet technology. In addition, the first portion will address those regulatory issues, including unbundling the local loop, standards

"An excellent opportunity and challenge, not only in learning diverse cultural aspects but gaining knowledge quickly and thoroughly."

- Mark DeOrio,
Federated States of Micronesia,
M7-105

development, licensing practices and interconnection, which are or will be affected by the increasing convergence among various telecommunications and Internet technologies--particularly Voice Over Internet Protocol (VoIP). The second portion of the course will address regulatory issues and their relationship to the development of trade. Specifically, the instructor will discuss technology neutral versus market-driven telecommunications environments, the role of the regulator, and optimum cost scenarios. The course will close with an interactive discussion of the current and future state of the telecom market and will include case studies.

Participant Learning Objectives

Provide an in-depth understanding of a broad spectrum of regulatory issues impacting the Internet and high-tech market. Develop an understanding of the inseparable connection between an open regulatory environment and attracting both domestic and foreign investment. By providing an overview of various global telecom environments, students will leave the class with a clearer understanding of potential methods for improving and making more efficient their home regulatory environment.

Focus

Global regulatory policy with an emphasis on its relationship to international commerce.

Orientation

October 7, 2008

Training Dates

October 8 - 9, 2008

Location

Washington, DC

Suggested Course Sequence

M8-330; M8-331; M8-332; M8-333;
M8-334; M8-335; M8-336

M8-334

Internet Governance: Issues and Challenges

Sponsored by

AT&T

Course Description

This course will highlight the key issues facing policy makers as they seek to advance the growth and adoption of the Internet in their domestic environment, consider the challenges of a global interconnected world, and identify key issues and questions where collaboration and cooperation are needed to create public policies for the Internet and IP networks. Topics addressed: Internet/IP Network Security; the role of telecom policy and

how it affects, assists, or impedes Internet growth and adoption; Internet Governance activities and the relationship to the technical coordination of the Internet (ICANN).

Internet Security Overview

As governments and individuals increase their reliance on the Internet to conduct mission critical activities, and as more private networks are interconnected to the Internet, a firm knowledge and implementation of Internet Security techniques has increasing importance. The increase in exposure with interconnected networks is accompanied by an increase in potential security risks presented by attacks such as viruses, spam, and denial of service, hacking and corporate espionage. To confront these risks, and to preserve the Internet as an essential tool for conducting important activity, Internet security measures are evolving and improving quickly. The course will provide a session on current forms of Internet security risk, an overview of cutting edge measures that can be taken to minimize those risks, and a discussion of areas for international cooperation on both the technical and policy areas.

Internet Governance activities and the relationship to the technical coordination of the Internet (ICANN)

Today, the global Internet is being built and operated by the private sector. Growth of the Internet has shifted from US dominance to a more regional structure, and traffic on the Internet is growing rapidly, particularly in Asia Pacific. More and more applications are moving to the Internet, and its role as a critical communications infrastructure is well established. Many countries are now examining what "rules" or policies should govern the Internet. However, confusion and controversy still exists over "governance" or technical coordination of the Internet. During the four year World Summit on the Information Society (WSIS), governments and other stakeholders debated the role of governments and the private sector in governing the Internet, as well as how ICTs can address the digital divide.

Governments and policy makers are increasingly asking what the right way is to provide "rules" for the Internet and the applications that the Internet delivers. Some believe that the private sector through a self-regulatory approach can best devise appropriate rules and controls; and some believe that a stronger more governmental oversight is needed, perhaps even resulting in an international agreement governing the Internet. The World Summit on the Information Society (WSIS) included extensive discussions on this topic. The outcome of the Summits has led to numerous initiatives where stakeholders are considering what policies should change, and whether new policies are needed. The

WSIS also created the Internet Governance Forum, which is chartered for a five year period, and is meeting annually to address numerous policy topics, including Internet access, openness, diversity, cyber security, and meets annually, in the fall. An overview of its agenda and outcomes from the November 2007 IGF will be presented, along with a discussion on the IGF's ongoing activities and potential outcomes.

ICANN (International Corporation for Assigned Names and Numbers), an international private corporation supported by the broad and diverse stakeholders in the Internet, provides the technical coordination of the Internet's key unique identifiers – domain names, protocols, and IP addresses, as well as the Internet's root servers. In 2006, the US Government announced the further evolution of its relationship to ICANN, with the Joint Partnership Agreement (JPA), which is scheduled to lapse in 2009, with the next stage in the evolution of the Internet's unique identifiers to private sector management and coordination by ICANN.

The course will provide an overview of Internet Governance, including the activities of the Internet Governance Forum, ICANN and its functions and responsibilities, including how it works with its Government Advisory Committee and the broad base of global Internet stakeholders. Discussions will include the key policy agenda topics underway at ICANN, including the roles of the country code top level domains and generic top level domains and how each is represented within ICANN's policy structure. An overview of the current policy issues affecting the DNS will be provided. Guest speakers from the US DoC and ICANN's supporting organizations will join the session.

Telecom Policy and its Impact on the Internet

Telecommunications is a key building block to the global Internet. Without a sound and widely deployed telecommunications infrastructure, the Internet cannot reach all users. This segment will examine key concepts in telecom policy that can affect, assist or impede the growth and adoption of the Internet. As policy makers consider what the "right" policies are for the Internet, it is essential to consider the role of telecom policy. Today, some countries are considering applying the vertical policies developed for telecommunications or content to the Internet. This segment will discuss licensing, financial investment, and Internet charging arrangements. An open issue to many developing countries is the issue of Internet connectivity. Some countries have advanced a concept of extending telecommunications settlements to the Internet. Others have proposed that new initiatives in encouraging aggregation of traffic and inter-regional connectivity can reduce the dependency on the US as a switching hub

and provider of content. A candid and current discussion on this topic will be part of the session.

Orientation

October 9, 2008

Training Date

October 10, 2008

Location

Washington, DC

Suggested Course Sequence

M8-330; M8-331; M8-332; M8-333; M8-334; M8-335; M8-336

M8-335

IMT (3G/4G) Mobile Broadband and Mobile TV

Sponsored by

QUALCOMM Incorporated

Course Description

This course will cover the latest developments in IMT (3G/4G) technologies such as UMTS/HSPA, CDMA2000 1xEV-DO (inc. CDMA450) and their robust evolution paths (UMB, LTE). It will also cover Mobile TV solutions such as MediaFLO. An overview will be provided of the World Radiocommunications Conference 2007 (WRC-07) decisions with regards to IMT spectrum and technologies and how they can spur the deployment of affordable broadband connectivity in both urban and rural areas. As of September 2007, 399 3G operators in 135 countries are offering over 484 million consumers the same speed (or faster) and ease from their wireless devices that they experience on their wired PCs, due to the wireless broadband revolution. Many government entities are including both the provision of affordable basic telephony services and broadband connectivity in their universal access priorities. Mobile TV solutions and an overview of other broadband technologies will also be covered. Participants will be provided a laptop with broadband connectivity during the length of the course, as well as other live demos and tour of facilities.

Participant Learning Objectives

- Overview of commercial IMT (3G/4G) mobile broadband and mobile TV technologies, standards roadmap, market updates, including network deployments and device availability.
- Overview of WRC-07 results regarding IMT, including IMT frequency bands, the impact on spectrum and technology decisions, as well as the introduction of new services in both existing spectrum and green field scenarios.
- Programs how 3G solutions are making an economic impact and benefiting society in

Emergency Communications Sequence

education, health and public safety among other areas.

Focus

Designed for technical managers in regulatory agencies, communications ministries, and mobile or fixed operators who are faced with making decisions on terrestrial wireless issues, including spectrum allocation recommendations and how these impact technology deployment, planning, and expanding wireless connectivity in their countries. A basic understanding of 3G wireless networks and technologies such as CDMA and GSM is required.

Orientation

October 10, 2008

Training Dates

October 13 – 17, 2008

Location

Bozeman, MT

Suggested Course Sequence

M8-330; M8-331; M8-332; M8-333;
M8-334; M8-335; M8-336

M8-336

Wi-Fi and WiMAX and the Wireless Broadband Revolution: the Technical, Business, and Spectrum Policy Ramifications in the Global Marketplace

Sponsored by

Intel Corporation

Course Description

Find out how your country can join the wireless broadband revolution.

This course, taught by representatives from the world's largest chip maker and a leading manufacturer of computer, networking and communications products, will provide a global "behind the scenes" look at the technologies and standards driving the wireless broadband revolution. The course will focus on how standards-based wireless broadband technologies can enable flexible, low cost, high quality Internet access solutions for developing countries.

Standards-based wireless broadband technologies have grown exponentially in recent years. Local area networks using IEEE 802.11 standards, or Wi-Fi "hot spots," have been popping up in coffee shops, hotels, and airports worldwide. Similarly, WiMAX, an innovative network technology based upon IEEE 802.16 standards, provides last-mile broadband solutions and mobile broadband wireless access. WiMAX offers an inexpensive way to extend broadband service to developing countries. Your country can

– and should – join this wireless broadband revolution.

Finally, the course will address what spectrum allocation, allotment, and assignment policies are best suited to fostering the efficient adoption and deployment of these technologies.

Classroom discussions will be supplemented by "demonstrations of Wi-Fi and WiMAX technologies.

"My experience with the USTTI was wonderful. They made it very comfortable and easy. I would like to thank all who helped for this to happen."

- Zainab Al Farsi, Oman, M7-111

Participant Learning Objectives

- Overview of Wi-Fi and WiMAX wireless broadband devices and applications.
- In-depth understanding of Wi-Fi and WiMAX technologies, standards update, and performance
- Insight into establishing an innovative regulatory framework for enabling flexible, low cost, interoperable wireless broadband deployment in developing countries.

Focus

Government regulators and policymakers; technical, managerial, and business professionals.

Orientation

October 17, 2008

Training Date

October 20 – 22, 2008

Location

Santa Clara, CA

Suggested Course Sequence

M8-330; M8-331; M8-332; M8-333;
M8-334; M8-335; M8-336

M8-340

Amateur Radio Administration for Regulators

Sponsored by

American Radio Relay League (ARRL)

Course Description

The Radio Regulations of the International Telecommunication Union define the Amateur and Amateur-Satellite Services and provide allocations to these radio services. Three million individuals, in virtually every country of the world, have earned licenses to operate stations in these services and are recognized internationally as a valuable voluntary telecommunications resource. Who are radio amateurs? What makes them want to devote their time to this activity? Why is amateur radio so strongly supported by the administrations of so many nations? How can a telecommunications administration bring the benefits of a healthy Amateur Service to its nation? ARRL staff instructors will answer these and many other questions as the course participants discover the ever-expanding universe of amateur radio communication.

Participant Learning Objectives

To be able to help create, administer and foster an Amateur Radio Service among the citizens of one's country.

Focus

This course is designed for those in developing countries who regulate and manage the Amateur Radio Service.

Orientation

October 10, 2008

Training Dates

October 13 – 17, 2008

Location

Newington, CT (Hartford area)

Suggested Course Sequence

M8-340; M8-341; M8-342; M8-343;
M8-344

M8-341

Disaster Communications Management

Sponsored by

Pan American Health Organization (PAHO)

Course Description

The course is designed to address telecommuni-

"I am very satisfied with the course. It provided more than I expected!"

- Stephen Bereaux, Trinidad and Tobago, M7-210

cations needs for mitigating the effects of natural and manmade disasters in which normal communications are often disrupted by physical damage, system overload, weather conditions, or natural features such as terrain.

Site selection, planning and design considerations, and the purposes and uses of Emergency Operations Centers (EOCs) will be featured, along with the requirements for interfacing between EOCs and government officials, public safety operations, public and government media, emergency medical response and radio amateur networks. Participants will tour several types of EOCs, communications centers and commercial television facilities. Special focus will be on methods of tracking and exchanging critical information prior to, during and after an emergency, including use of computerized maps, data management, modeling and communications. The course will cover vulnerability assessment and telecommunications infrastructure development requirements for disaster-prone regions, and operational issues such as emergency access to telephone central offices and reordering of existing radio networks.

Participants will be introduced to a wide range of technologies including Very Small Aperture Terminals (VSATs), wireless mobile and fixed satellite and terrestrial communications, remote sensing, Global Positioning System (GPS - positioning location), and Geographic Information System (GIS). Participants will be given the tools to help them evaluate which technologies will be of most potential use to them for a wide range of applications including: refugee management, anti-terrorism, disaster recovery and relief operations, early detection and warning, public safety, public information and emergency medical including telemedicine.

Participant Learning Objectives

Participant learning objectives include the ability to make choices concerning the application of disaster-related communications technologies and to develop an understanding of information flow and how to integrate available and new communications technologies and services into a disaster network.

Focus

Managerial, planning, preparedness and technology applications.

Orientation

October 17, 2008

Training Dates

October 20 – 24, 2008

Location

Washington, DC

Suggested Course Sequence

M8-340; M8-341; M8-342; M8-343; M8-344

M8-342

Geographic Information Systems (GIS): A primer

Sponsored by

ESRI

Course Description

GIS provides an integrated platform, (server, desktop, mobile and web) upon which companies can build and deploy solutions that leverage their geospatial data across multiple departments. It is now possible to seamlessly integrate marketing, network, operational and customer care data within an enterprise solution to deliver a complete picture of your business environment across the entire enterprise. With this geographic approach, companies experience faster time to market for delivering new products with lower costs and higher customer satisfaction.

Participant Learning Objectives

Understand how GIS can be used as a communications tool to improve workflows and processes across the entire enterprise.

Focus

Managerial, planning, preparedness and technology applications.

Orientation

October 24, 2008

Training Date

October 27, 2008

Location

Washington, DC

Suggested Course Sequence

M8-340; M8-341; M8-342; M8-343; M8-344

M8-343

Satellite Services and Disaster Response

Sponsored by

Inmarsat

Course Description

Agenda from 2007:

- Role of satellites in disaster response

- Disaster Response Activities, Phases, and Major Actors
- First Responders
- Regulatory Issues
- Fixed Satellite Services v. Mobile Satellite Services
- Next Generation Capabilities and Trends
- Case Studies (Hurricane Katrina and Tsunami).

Focus

Engineers and managers of all experience levels

Orientation

October 27, 2008

Training Date

October 28, 2008

Location

Washington, DC

Suggested Course Sequence

M8-340; M8-341; M8-342; M8-343; M8-344

M8-344

Remote Sensing Applications for Disaster Management and Societal Benefits

Sponsored by

NASA

Course Description

A comprehensive overview of use of ICTs, related to the usage of active and passive space-based sensing systems, for the purpose of the full range of societal benefits with an emphasis on disaster prediction, detection and mitigation. The material is derived primarily from the activities within the United Nations specialized agency of the International Telecommunications Union – Development Sector (ITU-D) and the Group on Earth Observations (GEO).

Participant Learning Objectives

The participant will obtain information on the current and future usages of active and passive remote sensing in the frequency range of High Frequency (HF) to Optical frequencies. Also, the participant will obtain information on the availability of remote sensing data and visualization tools associated with the analysis of this data. Finally, there will be the opportunity to assess the capacity building for the effective utilization of remote sensing data.

Focus

A comprehensive overview of use of ICTs, related to the usage of active and passive space-based sensing systems, for the purpose of the full range of societal benefits with an emphasis on disaster prediction, detection and mitigation.

Orientation

October 28, 2008

Training Dates

October 29 – 30, 2008

Location

Washington, DC

Suggested Course SequenceM8-340; M8-341; M8-342; M8-343;
M8-344*Telehealth Sequence II***M8-350****Successful Satellite Regulation & Policy for Developing Countries****Sponsored by**

GVF- the Global Satellite Communications Association

Course Description

Recently, in Developing and Least Developed Countries the public and private sector have begun making great progress related to the deployment of cost-effective satellite communications. From narrowband to broadband, and from telecom to broadcasting, delivery of these services is being facilitated by national and regional groups of Administrations that have been applying successful satellite regulations and policies. This course will examine the types of satellite regulatory and policy practices that have been proven to work in Developing and Least Developed Countries, as well as the trends relating to the development of next-generation approaches.

Participant Learning Objectives

Course participants will gain an understanding of effective regulation of satellite communications, including fixed and mobile; voice, video and data; domestic and international; and more.

Focus

The course will begin with a brief overview of the primary aspects of satellite communications systems, services and applications. This will be followed by a focus on key features of satellite regulation and policy, including licensing, spectrum management, type approvals and homologation, and more. Also addressed will be key regulatory considerations, such as competition, technology neutrality, the rationale for "light-touch" approaches, Voice over IP, cross-border, and more.

Orientation

October 14, 2008

Training Date

October 15, 2008

Location

Washington, DC

Suggested course sequenceM8-350; M8-351; M8-352; M8-353;
M8-354**M8-351****Telemedicine Review****Sponsored by**

Howard University and the Louis Stokes Health Sciences Library

Course Description

Participants will visit the medical library and the telemedicine facilities at Howard University. They will experience technology demonstrations, review equipment/applications and participate in exchanges with telemedicine and medical informatics staff.

Participant Learning Objectives

Exposure to telemedicine and education applications

Focus

Engineers and managers of all experience levels

Orientation

October 15, 2008

Training Dates

October 16 – 17, 2008

Location

Washington, DC

Suggested Course SequenceM8-350; M8-351; M8-352; M8-353;
M8-354**M8-352****Telemedicine and Distance Learning Synopsis****Sponsored by**

University of Virginia Health System, Office of Telemedicine

Course Description

Participants will gain hands-on experience in a live Telemedicine and Distance Learning environment at the University of Virginia in Charlottesville, Virginia. Presentations and actual patient encounters will take place at rural sites throughout Virginia. Technicians will demonstrate numerous technologies such as transmission over ISDN, Wireless and over the Internet. Clinicians and multimedia production staff will cover the entire process of producing, broadcasting,

and recording for later Internet access to Distance Education and Continuing Medical Education.

Participant Learning Objectives

To understand the many different options available to conduct interactive medicine and education

Orientation

October 17, 2008

Training Dates

October 20 – 22, 2008

Location

Charlottesville, VA

Suggested Course SequenceM8-350; M8-351; M8-352; M8-353;
M8-354**M8-353****Advanced Telemedicine and Distance Learning Applications****Sponsored by**

The Office for the Advancement of Telehealth (OAT), Health Resources and Services Administration (HRSA) of the Department of Health and Human Services

Course Description

This two-day course, taught by leaders in the telehealth and telemedicine field, is designed for participants who want a more in-depth exposure to advanced telemedicine and distance learning applications and a better understanding of the United States federal and non-governmental telemedicine activities.

The purpose of the course is to highlight the use of teleconferencing networks, Internet applications, multimedia education tools and other advanced applications for the provision of health care services and education at a distance. In addition, this course provides the participant with a unique opportunity to learn about a large US federal Agency that specifically deals with some of the most difficult health care challenges facing the world; e.g., HIV/AIDS, maternal and child health. Based on our extensive experience with OAT telemedicine and distance learning grantees, we have developed "best practice" models for both clinical and technological procedures using telemedicine. Course participants will be introduced to these models by some of the leading practitioners in the field. Participants will have ample opportunity to interact with these leaders, and hopefully develop ongoing partnerships to enhance their resource network upon returning home.

Course lecturers will include OAT's interdisciplinary team of network engineers,

clinicians, policy analysts, multimedia production staff and telemedicine grant program directors. Other guest lecturers will include members of the Joint Working Group on Telemedicine, the US federal government interagency group that provides an overview of the US government's telemedicine and telehealth activities.

The course is not limited to professionals with extensive experience in this field. We welcome participation by those who have a general familiarity with telemedicine, an interest in the field, and make a commitment to share the knowledge they gain in their home country. A good command of English and basic computer experience (e.g., familiarity with keyboard, mouse, etc.) is required.

Orientation

October 22, 2008

Training Dates

October 23 – 24, 2008

Location

Rockville, MD (Washington, DC area)

Suggested Course Sequence

M8-350; M8-351; M8-352; M8-353; M8-354

M8-354

Developing a Multiple Site Telemedicine Network

Sponsored by

University of Arkansas for Medical Sciences (UAMS) Telemedicine Training Program

Course Description

This course, sponsored by the University of Arkansas for Medical Sciences (UAMS), provides a comprehensive overview for designing, developing, and delivering educational and clinical services using telecommunications technology. The course is designed for individuals who are at the initial stages of networking health care professionals together for better continuing education and for better patient services. This program focuses on needs assessment, development of partnerships between medical centers and local health care providers, selection of appropriate technologies, technical operation, educational programming, and marketing clinical services. Participants will receive training from a number of faculty and staff at UAMS, telecommunications professionals, and participating local health professionals. The course will include visits to representative sites served by the UAMS Interactive Television Network.

Participant Learning Objectives

After completing this course, participants will be able to: (1) describe how to evalu-

ate the health care needs of communities; (2) conduct needs assessment; (3) determine the model for partnership between health professionals; (4) select needs that lend themselves to telecommunications solutions; (5) determine the best type of telecommunications technology; (6) describe how administrative, technical, teaching, and medical staff work together; (7) outline the development of continuing education programs using interactive technologies; and (8) construct evaluation systems.

Focus

This course is designed for those who have an interest in developing networking between health professionals utilizing telecommunications technologies. It will benefit those with technical responsibility or administrative responsibility in the creation and operation of such networks.

Orientation

October 24, 2008

Training Dates

October 27 – 31, 2008

Location

Little Rock, AR

Suggested Course Sequence

M8-350; M8-351; M8-352; M8-353; M8-354

*Internet Technology
Sequence II*

M8-360

DNS and Related Internet Technologies

Sponsored by

VeriSign, Inc.

Course Description

The training will address DNS and related Internet technologies as well as Internet, network and end user security issues. The two day course will include a tour of VeriSign's Internet Briefing Center and Network Operating Center.

Day 1: DNS AND RELATED INTERNET TECHNOLOGIES

- DNS Theory – addresses Internet design, architecture, protocols and standards development; comprehensive treatment of root server system, IP protocol, IP addresses, infrastructure and Next Generation Networks.
- DNS Policy – overview of DNS management and Internet Governance; national and international policy making for DNS; Internet Governance Forum and enhanced cooperation

Day 2: INTERNET, NETWORK AND END USER SECURITY

- Overview - Networks, infrastructures and interdependencies



The USTTI's lean professional staff works with hundreds of volunteer "professors" throughout the United States to offer the USTTI's 86 tuition-free courses. Shown above are the members of the USTTI professional staff: seated, left to right are: Demetriss Nuriddin, Accountant; Janet Concepcion, Curriculum Coordinator; Esther Gabriel, Office Manager. Standing from left to right are: Jim O'Connor, Curriculum Coordinator; Rogelio Encarnacion, Senior Administrative Manager and Brian T. McCloskey, Curriculum Director.

"USTTI has broadened my capacity and prepared me for something that will buttress development and productivity in my country. Thanks again for the great work you all are doing at the USTTI."

- Ms. Eva Flomo, Liberia, M7-332

- Key security concepts: security v. survivability; risk, resilience, recovery, restoration
- Policy – OECD, multilateral bodies, governments, academia
- Industry best practices and codes of conduct
- Authentication – of devices and of persons
- ID Management and Abuse
- Operational Network Security – risk assessment; key asset management; physical assets and security; logical assets and security
- Securing Organizations and Delivering Secure Network Experience to Citizens
- Key elements of an organizational security strategy; best practices by sector; application security; role of government in security management; government as infrastructure steward (network and TLD operations)
- Security Agencies – international, national and local; network defense; CERTS; intelligence/national security; law enforcement/forensics

Orientation

October 29, 2008

Training Dates

October 30 – 31, 2008

Location

Washington, DC

Suggested Course Sequence

M8-360; M8-361

M8-361

Internet Service Provider Design Seminar and Backbone Routing Protocol Workshop

Sponsored by

Cisco Systems, Inc.

Course Description

Proper design, operation and security of a network infrastructure is important not only for the Internet Service Provider (ISP) operat-

ing the network, but also for the health of the global Internet as a whole.

This three week advanced Workshop is designed to train ISP engineers in the best practices of network design, operations and security. It provides an empowering learning environment for ISP engineers through a combination of lectures and intensive hands-on laboratory exercises focused on teaching the participants how to design, scale, maintain, manage and secure a production ISP backbone.

A team of senior technical staff from Cisco Systems who have built, maintained, supported and operated ISPs will conduct the workshop.

A sample curriculum includes (specific areas covered will vary on available time):

Week 1: Techniques for the design, setup, operation and management of a secure ISP backbone network including IP addressing, Cisco IOS™ essentials for ISPs, network troubleshooting, routing protocols (e.g., OSPF), Domain Name System (DNS) and Regional Internet Registry (RIR) name and address coordination.

Week 2: Fundamentals of BGP4 and policy based routing configurations, techniques for configuring multiple connections to the Internet (multihoming), including peering at Internet Exchange Points (IXP) and connecting to transit providers, quality of service engineering and Internet telephony in an ISP.

Week 3: Security best practices, site-to-site IPsec and Distributed Multipoint Virtual Private Network (DMVPN) solutions.

Participant Learning Objectives

The participants learn, in a hands-on environment, the basic principles for designing, securing and operating an ISP infrastructure using industry best practices.

Focus

Delegates should be engineers from Service Providers, e.g., ISPs, PTTs, competitive telecommunications providers, etc. These engineers should be actively involved with the design, operations, and maintenance of IP-based backbones. Technical staff for regulatory authorities who are actively involved in issues regarding Internet development in their countries are also encouraged to apply. Delegates should be familiar with the fundamentals of routing, switching, addressing and basic networking.

Orientation

October 31, 2008

Training Dates

November 3 – 21, 2008

Training Location

San Jose, CA

Suggested Course Sequence

M8-360; M8-361

Rural Connectivity

M8-370

Applying 21st Century ICT in Emerging Markets

Sponsored by

Intel Corporation and USAID

Course Description

Twenty-first century Information Communication Technologies (ICTs) can provide more opportunity for people worldwide to participate in today's global economy and take advantage of the value of information and collaboration. This course focuses on leaping across the digital divide, especially in rural communities where the latest broadband wireless technologies and shared access to technology can create sustainable business and empowerment environments. The course will also address how to establish new business and technology models, build partnerships and seek sources of financing, and apply the most cost effective technologies to meet your needs. Creating collaboration between local and worldwide partners is a valuable framework for providing social/community services, meeting education and economic needs of a region, as well as for improving the lives and well fare of citizens.

Technologies: Today's underserved rural areas can have access to state-of-the-art telephone and Internet technologies – no "affordable," scaled back versions of past years' models. What are these technologies? What are the latest low cost computing platforms connected to both wired and wireless broadband access? Do they compare in capability, in price, and in operation in different settings? This course, taught by representatives from the world's largest chip maker and a leader manufacturer of computer, networking and communication products, will focus on the best of today's technologies with a special focus on applying 21st century ICT solutions in emerging markets.

The successful partnership between this private enterprise and USAID are collaborating to address issues, such as broadening access and usage of information and communication technology (ICT) in developing communities around the world, etc. They share the belief of the importance of ICT in accelerating social and economic development in emerging and developing markets. The intent of this course is to share the best known methods (BKMs) of deployed ICT in the areas of connectivity, education, content,

digital health, and others with attendees. One of the examples of BKM is the execution of the Universal Service Fund (USO) to extend the successful WiMax – WiFi – Internet – VoIP project to rural areas in Vietnam.

Sustainable Models: The course will show how to integrate all the pieces together into a comprehensive solution set, with a focus on the best technologies, prices and the best business models, all based on lessons learned from more than thirty countries in USAID’s programs and worldwide project experience from the private enterprise. The course will cover key ICT areas, such as Accessibility, Connectivity, Education and Content.

Best Practices in Funding Sources: The course will focus on sustainability by helping to develop the local infrastructures that will sustain this access. It will include insights into building business plans that are sustainable for obtaining private sector financing and reshaping Universal Service Funds.

Classroom discussions include Sharing of Best Practices; Architecture Starter-kits Exercise; Sustainable Business Model Development, Local Content Innovation and Creation, etc. A live demonstration of WiMax and WiFi technologies will also be presented in the course along with the deployment of VoIP and Integration with existing PSTN and mobile operators.

Participant Learning Objectives

The learning objectives for this course are to assist participants in creating a plan to kick start 21st Century ICT in emerging markets, such as the “Shared Access” and/or “1:1 eLearning” programs for addressing the digital divide in their countries, including:

- Accessibility – to bring the power of PC usage to more people by increasing shared access to fully capable PCs tailored to regional needs

- Connectivity – to expand via both WiMax and WiFi internet access availability into areas that are currently underserved
- Education – to prepare teachers and students for success in the global economy by bringing useful technology – affordable and adapted to local needs
- Content – to collaborate with governments, nongovernmental organizations (NGOs), education and healthcare leaders, and local businesses to accelerate a world of localized content.

Focus

Government regulators and policymakers; technical, managerial and business professionals

Orientation

October 3, 2008

Training Dates

October 6 – 10, 2008

Location

Santa Clara, CA

Fiber Optics

M8-371

Hands-on Fiber Optic Intensive

Sponsored by

FiberLight International

Course Description

Fiber optic technology serves a full spectrum of user needs from point-to-point data links to global networks. This course will provide participants with a basic understanding of this growing industry, as well as hands-on

experience. Participants will identify and solve real world problems associated with the design, installation, and repair of fiber optic networks.

Participants learn on a variety of the latest equipment in a job-simulating setting. Topics covered include preparation of cables and closures, mechanical and fusion splices, termination, and testing of fiber cable for both inside and outside plant applications. Restoration and maintenance procedures will also be addressed. Fiber Optic network planners, engineers, project managers and technicians will benefit from this training. Each participant will receive a course manual.

Participant Learning Objectives

To develop a comprehensive understanding of basic fiber optics and gain entry-level skills necessary in planning and installing a fiber optic network.

Focus

Technical and managerial with technical emphasis

Orientation

TBA

Training Dates

TBA

Location

Estes Park, CO



2008 USTTI APPLICATION FOR TRAINING

We recommend that you file your application online at www.ustti.org. You must answer the following questions completely in order to qualify for USTTI training. Please print or type clearly. Use additional sheets if necessary. Photocopies of this application are acceptable. Please **fax** or **airmail** your completed application along with a copy of your valid passport's information page(s) to USTTI. A **working fax number or e-mail address where you can be reached is essential**.

APPLICANT INFORMATION

Have you applied to USTTI in the past? Yes No

Given (First) Name(s) _____ Surname (Last) Name(s) _____

Job Title _____

Organization/Employer _____

Organization Mailing Address _____

City, State, Country _____

Mobile/Emergency Number (Country Code/City Code/Number) _____

Business Phone _____ Fax _____

Work E-mail _____ Personal E-mail _____

Home Address _____ Home Telephone _____

Home City _____ Birthplace (City, Country) _____

Date of Birth (Month/Day/Year) _____ Citizenship _____

Previous USTTI Participant? If yes, Year(s) _____ Passport Number _____

Female Male Single Married Expiration Date _____

COURSE SELECTION

Indicate below the number and name of the course(s) to which you are applying, in order of preference.

APPLICANT TRAINING GOALS

Please explain how your participation would benefit your company/organization and your country. What potential leadership role might you play upon your return home? Please attach a separate document if necessary.

ENGLISH LANGUAGE ABILITY

Please check the appropriate boxes below.

	Excellent	Adequate	Poor
Reading	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Writing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Speaking	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comprehension	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Name _____ Country _____

FORMAL EDUCATION

Please list formal education, beginning with secondary school

Secondary _____ Location _____
Subject _____ Degree _____ Year Earned _____
University _____ Location _____
Subject _____ Degree _____ Year Earned _____
Other _____ Location _____
Subject _____ Degree _____ Year Earned _____

CURRENT POSITION, PROFESSIONAL EXPERIENCE, AND ACHIEVEMENTS

Describe your current and previous communications/IT responsibilities; where applicable, please highlight managerial experience. Include types of systems and equipment with which you have worked, attendance at major conferences, awards, and any other accolades you have received. Please attach a separate document if necessary.

EMERGENCY CONTACT INFORMATION

Please provide contact information for two relatives or friends in your country. Please also provide the contact information of two relatives or friends in the United States. If do not have any contacts in the United States, please leave the sections blank.

In-country:

Name _____ Relationship _____
Phone _____ Email _____
Name _____ Relationship _____
Phone _____ Email _____

In the U.S.:

Name _____ Relationship _____
Phone _____ Email _____
Name _____ Relationship _____
Phone _____ Email _____

FUNDING

Please check the appropriate boxes below.

- 1. My organization will pay for my travel. Yes No
- 2. My organization will pay for my subsistence. Yes No
- 3. I am applying for USTTI support for: Travel Subsistence

USTTI financial support is limited. Applicants are strongly encouraged to seek other sources of travel and subsistence funding. Please notify USTTI immediately if your funding status changes. Please note that at orientation each participant must pay the US\$150 administrative fee for the first course and US\$75 for each subsequent course.

Please provide your supervisor's information below:

Supervisor Name _____
Position/Title _____
Organization _____
Telephone _____
Fax _____
E-mail _____
Supervisor Signature _____ Date _____
Applicant Signature _____ Date _____

Send application via Airmail or fax to:
USTTI
1150 Connecticut Avenue, NW
Suite 702
Washington, DC 20036-4131
USA
Telephone: +1-202-785-7373
Fax: +1-202-785-1930
E-mail: train@ustti.org
Website: www.ustti.org