Enhancing Information & Communication: Issues for Policymakers, Ambassadors, and Commanders

August 17, 2011

Lincoln Hall, Room 1105
Fort Lesley J. McNair
Washington, DC

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Wednesday, August 17th

0815-0830 Welcome

- **Dr. Linton Wells II.,** Director, Center for Technology and National Security Policy, National Defense University

0830-1000 The USG as a Distributed Network

Themes: This panel will critically examine the interagency as an IT driven work-force. What formal and informal incentives motivate personnel to share information? To what degree can/should trusted networks overcome parochial inter-departmental interests? How will these distributed interests concentrate or dilute individual responsibility when applied to issues of security, privacy, and information assurance? What safeguards (training and infrastructure) should be built in to new and existing systems? What will be the long-term effect of a more permissive information sharing environment on policy-making?

- **Mr. Robert J. Carey,** Deputy Assistant Secretary of Defense (Information Management, Integration and Technology); Department of Defense Deputy Chief Information Officer
- **Mr. David Ferguson**, Deputy Director, Science and Technology Office, U.S. Agency for International Development

1000-1015 Break

1015-1145 Enabling Non-USG Practitioners: Prospects and Pitfalls

Themes: How should USG and non USG practitioners contribute to a coordinated information architecture when sharing a common area of operations? To what degree should USG missions be outsourced to formal and distributed networks? Should the USG assist non USG stake-holders with enabling infrastructure and user-level products? If so, how should U.S. officials identify and prioritize the work of creditable organizations and crowd-sourced projects? What political and operational challenges do non-USG organizations experience when cultivating official and informal partnerships with the U.S. military and other instruments of American foreign policy? Do NGOs have a responsibility for preventing the militarization of open-source projects like crisis mapping, wikis, social media analysis, and other sites that feature user generated content?

- **Mr. Steven Birnbaum,** Lead, Humanitarian & Disaster Response, Global VSAT Forum
- **Mr. Sanjana Hattotuwa,** Special Advisor, ICT4Peace Foundation
- **Mr. Robert Kirkpatrick,** Director, Global Pulse, Executive Office of the Secretary-General, United Nations

1145-1300 Working Lunch- Keynote Speaker

- **Mr. Douglas B. Wilson,** Assistant Secretary of Defense for Public Affairs, United States Department of Defense

1300-1430 Information First: Case Studies in Leadership

Themes: In this section participants will discuss case studies that underscore the critical importance of information and communication for mission success among populations under stress. Specific examples of success, failure, and uncertainty will be discussed in the context of Haiti, Afghanistan, Katrina, the BP Oil Spill, and others. What lessons have practitioners concluded from these examples? What new developments offer solutions in future crisis scenarios? Do information and communication projects offer a common ground for cooperation among stake-holders that may have divergent long and short term interests? If so, what is the window for effective action, and how can expectations be managed over time?

- **Mr. Robert Jensen**, Deputy Director and Acting Director of External Affairs, Federal Emergency Management Agency
- **Mr. Larry Klooster,** Office of the Senior Telecom Advisor to the Commander**,** International Security Assistance Force
- **Mr. Larry Wentz,** Senior Research Fellow, Center for Technology & National Security Policy, National Defense University

1430-1445 Break

1445-1615 Action Plan for Change

Themes: The goal of this session is to outline an action plan for prioritizing information and communication among senior-level U.S. officers, policy-makers, and ambassadors. Participants will emphasize the importance of establishing clear and comprehensive long range strategies from a political, operational, technological, and cultural perspective in order to implement institutional change.

- **Mr. Paul W. Hanley,** Director, Project on Communication Integration, Center for Technology and National Security Policy, National Defense University
- **Ambassador Philip L. Verveer,** U.S. Coordinator and Deputy Assistant Secretary, International Communications and Information Policy, Bureau of Economic, Energy, and, Business Affairs, United States Department of State
- **Dr. Linton Wells II.,** Director, Center for Technology and National Security Policy, National Defense University

SPEAKER BIOGRAPHIES

Mr. Steven Birnbaum

Steve Birnbaum is the Lead for Humanitarian Assistance and Disaster Response with the Global VSAT Forum, the non-profit association of the global satellite industry. He is also an independent telecommunications industry consultant with 17 years experience developing business and technology solutions in North America, the Middle East and Africa. Previously, he held the position of CTO & VP Enterprise Solutions for Sky Vision Global Networks, a large VSAT Service provider where he was responsible for technology and product strategy, as well as managing key initiatives. Mr. Birnbaum cofounded the first commercial ISP in Ottawa, Canada, and has held a variety of roles within the Service Provider and telecom fields. He has provided consulting services to clients that include Canadian Department of Foreign Affairs, Nokia and the UN. After the earthquake in Haiti in January 2010, Mr. Birnbaum assisted as a civilian advisor to the NPS Hastily Formed Networks communications team under the JTF‐J6 with the deployment of ICT systems, and he organized the first frequency coordination meeting between the Government of Haiti, the UN, the US military, the FCC and various NGOs. In March 2011, at the request of UN OCHA and other private sector and USG partners, he successfully established procedures with the Japanese Government for the import and use of satcom technology by NGOs and other emergency responders. He has written articles for both online and print publication, and has spoken at conferences and seminars both in North America and Africa. Mr. Birnbaum is a member of various working groups hosted by the US State Department, MIT-Lincoln Labs, DHS and UN WGET that focus on technology and disaster response. Steve is also a volunteer firefighter in Montgomery County, MD and has a background in wilderness and technical rescue.

Mr. Robert Carey

Mr. Robert J. Carey serves as the Deputy Assistant Secretary of Defense (Information Management, Integration and Technology) / Department of Defense Deputy Chief Information Officer. Selected to this position after a brief tour as Director of Strategy and Policy for the US TENTH FLEET / FLEET CYBER COMMAND his principle roles will be to help lead the consolidation of Defense information technology enterprise as well as align, strengthen and manage the office of the DoD Chief Information Officer to have it better serve the Department's mission and help lead the IT workforce into the 21st century. From November 2006 to September 2010 he served as served as the fifth Department of the Navy (DON) Chief Information Officer (CIO) where he championed transformation, enterprise services, the use of the internet, and information security. In his new role, he will also help strengthen the DoD enterprise architecture, networks and improve cyber-security posture. Mr. Carey's Federal service began with the U.S. Army at the Aberdeen Proving Ground in October 1982 where he worked as a Test Director evaluating small arms and automatic weapons and their ammunition. He began his service with the Department of the

Navy in February 1985 with the Naval Sea Systems Command. He worked in the Anti-Submarine/Undersea Warfare domain where he served in a variety of engineering and program management leadership positions culminating in his assignment as the Deputy Program Manager for the Undersea Weapons Program Office. Mr. Carey joined the staff of the DON CIO in February 2000, serving as the DON CIO eBusiness Team Leader through June 2003. During this period he also served as the Director of the DON Smart Card Office from February through September 2001. Mr. Carey entered the Senior Executive Service in June 2003 as the DON Deputy Chief Information Officer and was responsible for leading the DON CIO staff in developing strategies for achieving IM/IT enterprise integration across the Navy / Marine Corps team. Mr. Carey earned a BS in Engineering in 1982 from the University of South Carolina and a Master of Engineering Management from the George Washington University in 1995. He has been a member of the Acquisition Professional Community and has been awarded the Department of the Navy Distinguished Civilian Service Award (twice) as well as the Superior and Meritorious Civilian Service Awards. He received the prestigious Federal 100 Award in 2006, 2008 and 2009 recognizing his significant contributions to Federal information technology. He was selected to the InformationWeek Top 50 Government CIOs in 2009, 2010, and 2011. Mr. Carey was named Department of Defense Executive of the Year for 2009 by Government Computer News and received the prestigious Association for Federal Information Resources Management (AFFIRM) Executive Leadership Award - Defense for 2011. Mr. Carey is an active member of the United States Navy Reserve and currently holds the rank of CAPTAIN in the Civil Engineer Corps. He was recalled to active duty for Operation Desert Shield/Storm and Operation Iraqi Freedom where, in 2006-2007, he served in the Al Anbar province with I Marine Expeditionary Force.

Mr. David Ferguson

David Ferguson joined USAID in September 2009 as the Director of USAID's connect, collaborate and innovate initiative, the Global Development Commons. He has worked on international development challenges over the past 5 years as an independent consultant at the nexus of technology, development and the private sector. His first career was 27 years at AT&T where he created and ran AT&T's Professional Services Division, developing it into a US$200M profitable entity. He was based in Hong Kong for seven years and focused on the developing markets of China, India and Indonesia, for telecommunications services investment opportunities. He built seven joint ventures during this period. His technical expertise includes Information and Communications Technology (ICT) for development, economic growth through private sector engagement, and government technology and telecommunications policy and regulation. Mr. Ferguson holds a Master of Science Degree in Electrical Engineering and Computer Science from Stanford University and a Bachelor of Science Degree in Electrical Engineering from the University of Massachusetts. He is

married, has three daughters, and resides in Oakton, VA.

Mr. Paul Hanley

Paul Hanley was born in England, raised in Arizona and Los Angeles, and educated at Oxford University, Claremont Graduate University, and the Industrial College of the Armed Forces. He currently serves as Director of the Project on Communication Integration at the Center for Technology and National Security Policy at the National Defense University. He reported to the Pacific Command in November 2007 as the first Senior Advisor for Communication Integration, after having served five and a half years as Director of Strategic Communication for the Chairman of the Joint Chiefs of Staff. Before returning to the Defense Department in the aftermath of the 9/11 attacks, he was founder and Managing Principal of DC Inc., a seventeen-year-old consulting firm that specializes in helping small government agencies and non-profits with corporate communication and strategic planning. Recent clients include the Commission on Roles and Missions in the Armed Forces, the President's Commission on Critical Infrastructure Protection, the National Defense Panel, the NRO Commission, and the Space Commission. Mr. Hanley was the Director for Public Affairs for the Defense Conversion Commission from its inception in May of 1992 until it completed its work in March 1993. The Commission was responsible for assessing the impact of defense reductions on the U.S. economy, reviewing programs to assist military and civilian defense personnel whose jobs are deleted, and examining measures to help defense industries convert to commercial activities. He served 24 years of active duty in the U.S. Navy, mostly as a public affairs specialist, retiring in 1992. Among other assignments he was Director of Public Affairs for the U.S. Atlantic Command and Atlantic Fleet in Norfolk, Virginia, where he dealt with the first Soviet Navy ship visit to the U.S., the entry of the Defense Department into the counter-narcotics effort in the Caribbean, and the aftermath of Hurricane Hugo. Mr. Hanley was the Public Affairs Officer for the Joint Staff in the Pentagon during the escort operations for reflagged Kuwaiti tankers in the Persian Gulf. Before that he directed external communication for the National Security Council in the White House. He served from 1983 to 1986 in the office of the Navy's Chief of Information in Washington, having returned from four years' duty in Yokosuka, Japan, where he was Public Affairs Officer first for U.S. Naval Forces Japan, and then for the Seventh Fleet. In 1978 he went to the U.S. Taiwan Defense Command, where he served as public affairs officer until the withdrawal of U.S. military forces following Washington's normalization of relations with Beijing. His early naval career included the Navy Office of Information, Boston, which handles the Navy's media relations in New England, a tour of duty as the Special Assistant to the Commander in Chief, Allied Forces Southern Europe in Naples, and billets as English teacher at the United States Naval Academy, Weapons Officer in the commissioning crew of the patrol gunboat USS Grand Rapids (PG-98), and Special Assistant to the President, U.S. Naval War College. Mr. Hanley is a sometime adjunct

professor at American University's School of Communication. He lives in Alexandria, Virginia with his wife, Priscilla. He has two children and three grandchildren.

Mr. Sanjana Hattotuwa

Educated at S. Thomas' College, Mount Lavinia, Sanjana read English at the University of Delhi, India and as a Rotary World Peace Fellow, was awarded an Advanced Masters in Conflict Resolution and International Relations from the University of Queensland, Brisbane with a Dean's Commendation for High Achievement. He is currently a Senior Researcher and Head of the Media Unit at the Centre for Policy Alternatives. He is a frequent commentator on journalism and new media in domestic and international fora. In addition to hosting a talk show on public television, Sanjana lectures at the Sri Lanka College of Journalism (SLCJ), engaging journalists from state, private, alternative media on how to use web, Internet and mobile technologies to strengthen professional, independent and investigative journalism. Sanjana is a Special Advisor to the ICT4Peace Foundation based in Geneva, Switzerland. Through the Foundation, Sanjana works to further the use of ICTs in crisis information management and peacekeeping initiatives at the United Nations. As a Fellow of the Center for Information Technology and Dispute Resolution at the University of Massachusetts, Boston, Sanjana writes and speaks on the evolution of Online Dispute Resolution (ODR), with a special focus on mobile telephony. Sanjana is the founding editor of Groundviews (www.groundviews.org), an award-winning web based citizen journalism initiative that has won critical acclaim internationally as one of the most vital websites for dissent in Sri Lanka. In 2010, Sanjana was the first Sri Lankan to be awarded a prestigious TED Fellowship, two years after he was awarded a News & Knowledge Entrepreneur Fellowship from the Ashoka Foundation. Both awards recognise Sanjana's pioneering efforts to leverage web based citizen journalism and new media to bear witness and strengthen democracy, human rights and a just peace. With a significant body writing, research and on the ground experience, Sanjana is globally recognised as an expert in the design and implementation of ICTs and new media in peacebuilding and crisis response.

Mr. Robert Jensen

Bob Jensen is currently Acting Director of External Affairs for the Federal Emergency Management Agency (FEMA) with direct oversight of the agency's Public Affairs, Legislative Affairs, Intergovernmental Affairs, International Affairs, Private Sector Outreach and Disaster Communication Operations. His former positions include Assistant Press Secretary for Foreign Affairs and Director for Public Affairs and Communications for the National Security Council; Deputy Director of External Affairs for FEMA; Director for Communication Operations for Iraq and Afghanistan and Director of the Iraq Communication Desk with the Office of the Assistant Secretary of Defense for Public Affairs; Senior Communication Advisor to the Spokesman and Director of National Media

Outreach for the Multi-National Force-Iraq; Executive Officer for Public Affairs and acting Spokesman at the U.S. Embassy in Baghdad, Iraq; Director of Air Force News Operations with the Air Force News Agency and Senior Visual Information Officer with the Air Force Orientation Group. He deployed to help set up and support U.S. Government communications during the Deepwater Horizon Gulf Oil Spill response; deployed to set up and lead the U.S. Government Joint Information Center after the massive earthquake in Haiti in January 2010; was part of a White House team to survey U.S. strategic communication efforts in Afghanistan in 2008; and deployed to Prince Sultan AB, Kingdom of Saudi Arabia as the Chief of Media Operations and News Generation for the Combined Forces Air Component Commander at the start of Operation Iraqi Freedom in 2003. He is a member of the Senior Executive Service, is a graduate of Air War College and has a Bachelor of Science in Industrial Design from The Ohio State University.

Mr. Robert Kirkpatrick

Robert Kirkpatrick is Director of the UN Global Pulse initiative in the Executive Office of the Secretary-General. His current work involves R&D in mining both the open web and massive passive data to detect the early impacts of crises on vulnerable populations. Robert designs and applies technology for crisis resilience and organizational change. He has spent more than 15 years creating software and the past 10 developing tools for public health, disaster relief, security coordination, citizen journalism, telemedicine, crisis monitoring, conflict mediation, and civil-military cooperation. His work with industry partners, government agencies, and humanitarian organizations has explored ways that techno-social innovation may enhance trust-building, information sharing, and joint decision making across boundaries and lower barriers to organizational change. He is a strong proponent of open data, open standards, open source software, and participatory development. Robert co-founded and led software development for two pioneering private-sector humanitarian technology teams, first at Groove Networks, and later as Lead Architect for Microsoft Humanitarian Systems. In 2003, Robert worked in Baghdad to improve coordination between coalition forces and Iraqi government ministries. In the wake of Hurricane Katrina, Robert provided on-site technology support to civil and military responders. Following the 2005 Kashmir earthquake, Robert supported relief organizations in the disaster-affected areas designing tools for data collection and logistics. He participated in two missions in Afghanistan (2006, 2007) prototyping tools to improve situational awareness for NGOs involved in telemedicine and local capacity building. From 2007-2009 he served as CTO of the nonprofit InSTEDD, where he help to establish the first public health innovation lab, or iLab, in Phnom Penh, Cambodia. He now sits on InSTEDD's Board of Directors.

Mr. Larry Klooster

Mr. Klooster returned to government service and joined the Defense Information Systems

Agency (DISA) in 2010. He is currently serving in Afghanistan on the International Security Assistance Force staff as Gen Allen's Senior Telecom Advisor responsible for ICT growth and development in the government and private sector. Mr. Klooster most recently led business capture for CA Inc, one of the world's largest independent IT management providers, supporting the Federal Aviation Agency, Department of Homeland Security, US Coast Guard, the intelligence community and DoD. While with CA he also served as a senior level architect and project manager. Prior to joining CA he served as the Senior IT consultant for Texas' Director of Homeland Security. In that role he oversaw the technical team that worked with local, state and federal law enforcement organizations and agencies (Customs, DEA etc) to develop and field jointly derived solutions to improve border security. Mr. Klooster retired from the military in 2006 as the Deputy J-6/CIO for NORAD and USNORTHCOM where he had extensive experience, planning and providing communication and automation support for combined and inter-agency operations. During Hurricane Katrina he deployed to Louisiana and was DOD's senior Communications and Automation Officer (J-6). He planned and coordinated the Communications and IT efforts of the local, state and federal governments to support the relief effort. As the Deputy G6/CIO for USAREUR and a Brigade commander he provided IT support for the international peacekeeping operations in Bosnia. During his last year in Europe he was responsible for overseeing the transition from the tactical military communications system to a commercial IT infrastructure. Larry is married and has two sons attending college. His hobbies include staying fit, cooking, fine coffees and wines.

Ambassador Philip Verveer

Ambassador Philip L. Verveer was confirmed as Deputy Assistant Secretary of State and U.S. Coordinator for International Communications and Information Policy in August, 2009. Ambassador Verveer has practiced communications and antitrust law in the government and in private law firms for more than 35 years. From 1969 to 1981, Ambassador Verveer practiced as a trial attorney in the Antitrust Division of the Department of Justice, as a supervisory attorney in the Bureau of Competition of the Federal Trade Commission, and as the chief of the Cable Television Bureau, the Broadcast Bureau, and the Common Carrier Bureau of the Federal Communications Commission. Between 1973 and 1977, he served as the Antitrust Division's first lead counsel in the investigation and prosecution of United States v. American Tel. & Tel. Co., the case that eventuated in the divestiture of the Bell System. As a Bureau Chief at the FCC, Ambassador Verveer participated in a series of decisions that enabled increased competition in video and telephone services and limited regulation of information services. In 1979, Ambassador Verveer became a charter member of the Senior Executive Service and in 1980 received the Distinguished Presidential Rank award. Between 1981 and 2009, Ambassador Verveer engaged in private law practice in Washington, DC. In 1995 and 1996, Ambassador Verveer chaired the Federal Advisory

Committee that identified the spectrum requirements necessary to afford public safety organizations efficient and interoperable wireless communications. He has served on the Visiting Committee of the University of Chicago Law School and the Executive Committee of the Alumni Board of Governors of Georgetown University. Ambassador Verveer is a graduate of Georgetown University (1966, BSFS), and the University of Chicago Law School (1969, JD).

Dr. Linton Wells, II

Dr. Linton Wells II is the Director of the Center for Technology and National Security Policy (CTNSP) at National Defense University (NDU). He is also a Distinguished Research Professor and serves as the Transformation Chair. Prior to coming to NDU he served in the Office of the Secretary of Defense (OSD) from 1991 to 2007, serving last as the Principal Deputy Assistant Secretary of Defense (Networks and Information Integration). In addition, he served as the Acting Assistant Secretary and DoD Chief Information Officer for nearly two years. His other OSD positions included Principal Deputy Assistant Secretary of Defense (Command, Control, Communications and Intelligence-C3I) and Deputy Under Secretary of Defense (Policy Support) in the Office of the Under Secretary of Defense (Policy). In twenty-six years of naval service, Dr. Wells served in a variety of surface ships, including command of a destroyer squadron and guided missile destroyer. In addition, he acquired a wide range of experience in operations analysis; Pacific, Indian Ocean and Middle East affairs; and C3I. Recently he has been focusing on STAR-TIDES, a research project focusing on affordable, sustainable support to stressed populations and public-private interoperability. Dr. Wells was born in Luanda, Angola, in 1946. He was graduated from the United States Naval Academy in 1967 and holds a Bachelor of Science degree in physics and oceanography. He attended graduate school at The Johns Hopkins University, receiving a Master of Science in Engineering degree in mathematical sciences and a PhD in international relations. He is also a 1983 graduate of the Japanese National Institute for Defense Studies in Tokyo, the first U.S. naval officer to attend there. Dr. Wells has written widely on security studies in English and Japanese journals. He co-authored Japanese Cruisers of the Pacific War, which was published in 1997 and co-edited Crosscutting Issues in International Transformation, published in 2009. His hobbies include history, the relationship between policy and technology, and scuba diving. He has thrice been awarded the Department of Defense Medal for Distinguished Public Service.

Mr. Larry Wentz

Larry Wentz is a Senior Research Fellow at the National Defense University, Center for Technology and National Security Policy and for the past year, has been a Senior Advisor to the Commander ISAF Senior Telecom Advisor and his Telecom Advisory Team. In this role he has spent considerable time on the ground in Kabul at ISAF HQs and with Afghan

Telecom and IT counterparts and in the field in Nanagahar, Paktika, Helmand, Kandahar, and Herat Provinces. He is an experienced manager, strategic planner, C4ISR systems engineer, author, and lecturer. In 2006 he visited Afghanistan to research Afghanistan Telecom and IT sector reconstruction and provided support to the Senior Telecom Advisor at the US Embassy, Kabul. During this time, he also spent time in Khost Province where he visited the ISAF Provincial Reconstruction Team as part of his research activities. Since then his research has taken him to Thailand in support of Myanmar relief effort, Geneva to work with UN OCHA and the ITU emergency telecom elements, Iraq to research the role of the Iraq Communications Coordination Element in support of Stability and Reconstruction, to Haiti to research information and communications support to Haiti earthquake recovery and reconstruction and more recently to Afghanistan to help set up and advise the office of the Senior Telecom Advisor to Commander ISAF. Before these activities, while on special assignments to the DoD Command and Control Research Program (CCRP) he spent time in Bosnia and Kosovo to research the role of information and communications in Stability Ops and authored two NDU/CCRP published books: Lessons from Bosnia: The IFOR Experience and Lessons from Kosovo: The KFOR Experience. Mr. Wentz has held the positions of Research Scientist at the George Mason University Center of Excellence in C3I, Vice President of Advanced Communication Systems-Washington Operations and Technical Director at the MITRE Corporation. He received a B.S. in Electrical Engineering from Monmouth College and a M.S. in Systems Engineering and Operations Research from the University of Pennsylvania. He completed the Executive Management Program at the University of Pennsylvania's Wharton Business School and the Harvard John F. Kennedy School of Government Program for Senior Executives in National and International Security.

Mr. Douglas Wilson

Mr. Wilson serves as the principal staff advisor and assistant to Secretary Panetta for communications strategy, public and internal information and outreach to America in support of DoD activities, leading a worldwide communications and public affairs team of several thousand military and civilian personnel. A native of Tucson, Arizona and a graduate of Stanford University (Phi Beta Kappa) and the Fletcher School of Law and Diplomacy, Mr. Wilson began his career as a Foreign Service Information Officer, serving at U.S. diplomatic posts in Naples, Rome, and London. He has also served as chief foreign policy advisor and campaign strategist for former US Senator Gary Hart; as Congressional Director and Senior Advisor at the former US Information Agency; and in senior communications roles at The Cohen Group, Business Executives for National Security and Penn, Schoen & Berland. Prior to joining this administration, Mr. Wilson served as Executive Vice President of the Howard Gilman Foundation. He has convened and led global cross-disciplinary meetings on issues including energy security, health and macroeconomics, women as leaders of change and media and policy; a series of bilateral meetings of U.S. thought leaders with

counterparts from India, Russia, South Asia, Europe and Muslim-majority nations. Mr. Wilson is the immediate past President of The Leaders Project, the global successor generation leadership initiative which he co-founded in 2001 with former U.S. Defense Secretary William Cohen. He is also a co-founder of the U.S.-Muslim Engagement Initiative. From 1997-1999, Mr. Wilson served as Deputy Assistant Secretary of Defense for Public Affairs and in the summer of 2000 returned to the Pentagon to become Principal Deputy Assistant Secretary of Defense for Public Affairs. He was twice presented the Department of Defense Medal for Distinguished Public Service, the Pentagon's top civilian honor.

ISAF Telecom Advisory Team
Overview and Initiatives

Aug, 2011

Larry Klooster
Senior Telecom Advisor
lawrence.klooster@afghan.swa.army.mil

Telecom Advisory Team (TAT)

- **Primary US Sponsors**
  - Defense Information Systems Agency (DISA)
  - Task Force for Business & Stability Operations (TFBSO)
- **Manning**
  - 10 Team Members: 7 DOD Civilians, 1 Military, (7 DOD/CIV) and 2 Deloitte Advisors

TAT Mission:

To grow the ICT economic sector and assist the Afghan government to accelerate the benefits of ICT as an essential service enabler by-

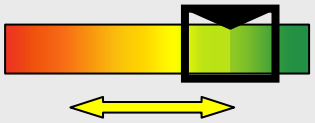
1. Extending governance and enable socio-economic development for stabilization
2. Developing Stabilization Solutions working with Inter-Agency and international Organizations
3. Recommending ICT strategic engagement initiatives that have benefit across all sectors
4. Improving performance and develop ICT capacity for GIRoA
5. Improving harmonization, coordination and synchronization of ICT policy, services and infrastructure initiatives across economic sectors

ICT Strategy & Scorecard for GIRoA

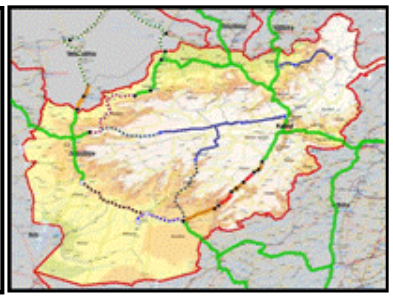
Terrestrial ICT Backbone

Terrestrial Wideband Links with Redundant Paths
Robust Internet Backbone
Development of Central Asian ICT Hub
Work has Slowed on Fiber Ring (Security)
Price of Internet Dropping

Rating



Trend

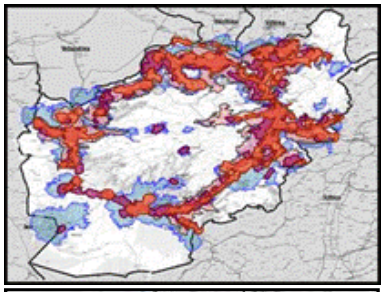


Wireless Cell Coverage

Restore 24 x 7 Cell Coverage
Primary Connectivity to Users Will be Wireless
Shutdowns More Frequent, Complex, and Destructive
Announced 3G Enhanced Services Licenses

Rating

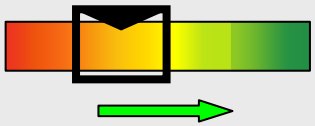
Trend



ICT to Support Extension of Legitimate Governance & Stability Ops

Extend Connectivity to Government- Kabul & Provinces
Privatization of AFTEL
Extend Wireless Services to Rural Areas
Extending Kabul City Fiber Connections to Institutions

Rating



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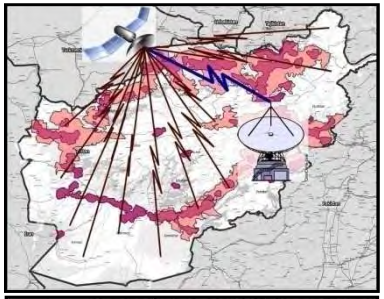
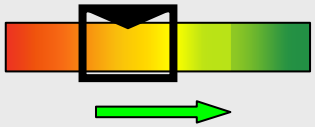


ICT to Support Socio-Economic Growth & Capacity Development

Increase Technical Capacity of ICT Personnel
Increase Ministerial Functional Capacity
Fostering/Promoting ICT Business Incubators
Facilitating Public-Private-Partnership

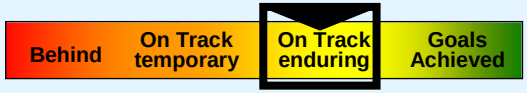
Rating



Trend

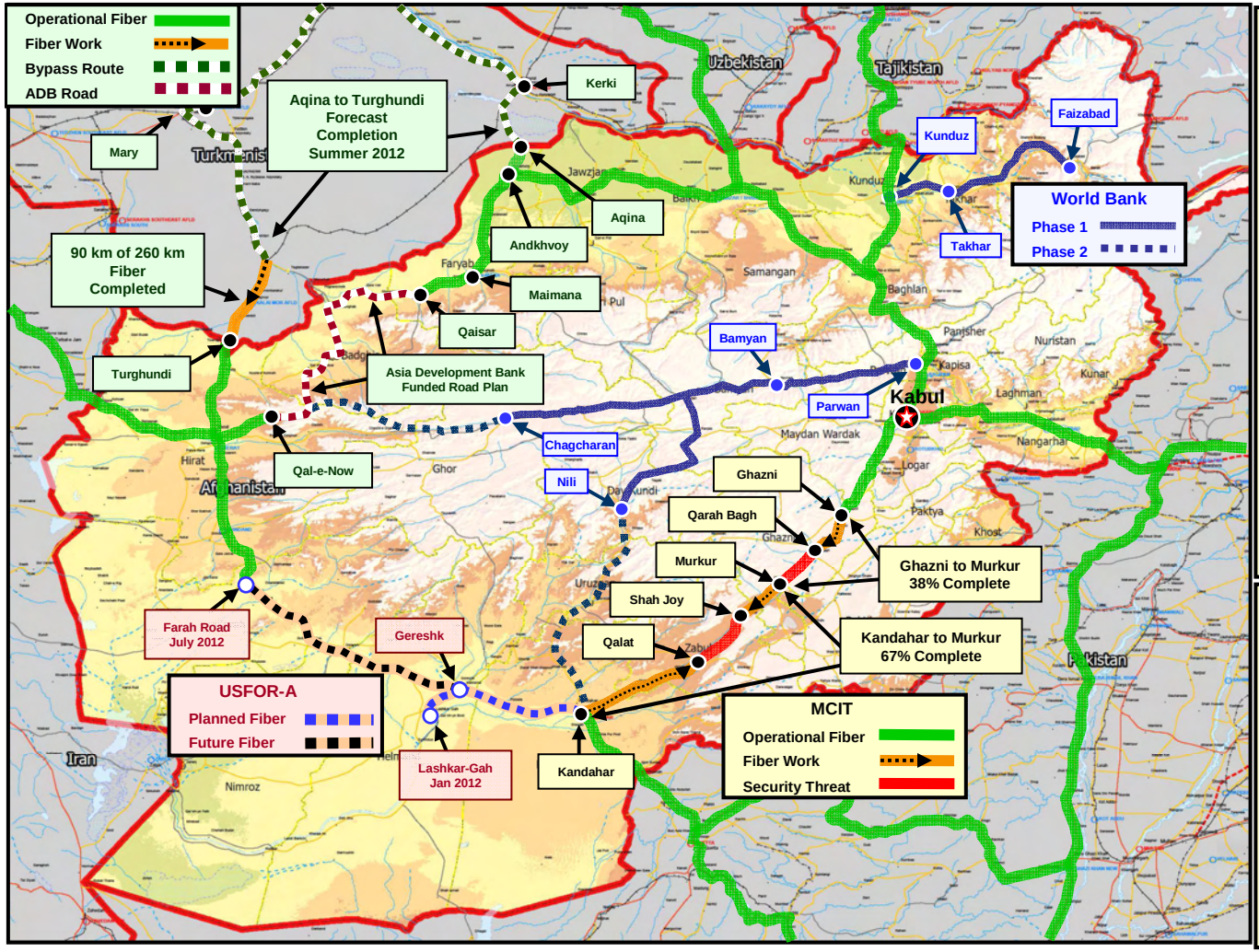
Legend for Slider Bars

Trend: = Change
Trend: = No Movement
Trend: = Negative Movement
Trend: = Positive Movement



Terrestrial ICT Backbone

Completion of Fiber Ring Funded



Strategy:

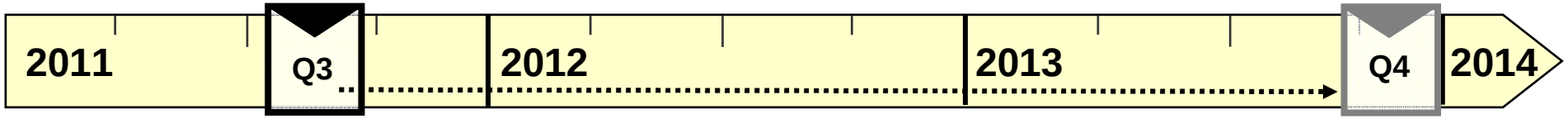
To Facilitate, Coordinate & Synchronize Programs from all Sources to Build Robust Broadband Terrestrial Networks, Extend Legitimate Governance and Support Tangible Socio-Economic Development

Establish Conditions to Enable 3G/4G Services and Broadband Internet Access. Components:

- Ring Road Expansion & Spurs
- International Gateway Access
- Center of Afghanistan Route
- National Internet Exchange

Status:

- Completion of Ring Funded- GIRoA, World Bank and USFOR-A
- World Bank Phase-1 Fiber Project will Finish by 2014 Transition
- World Bank to Coordinate with MCIT & MoPW to Plan and Fund Phase-2 Coincident with Road Construction



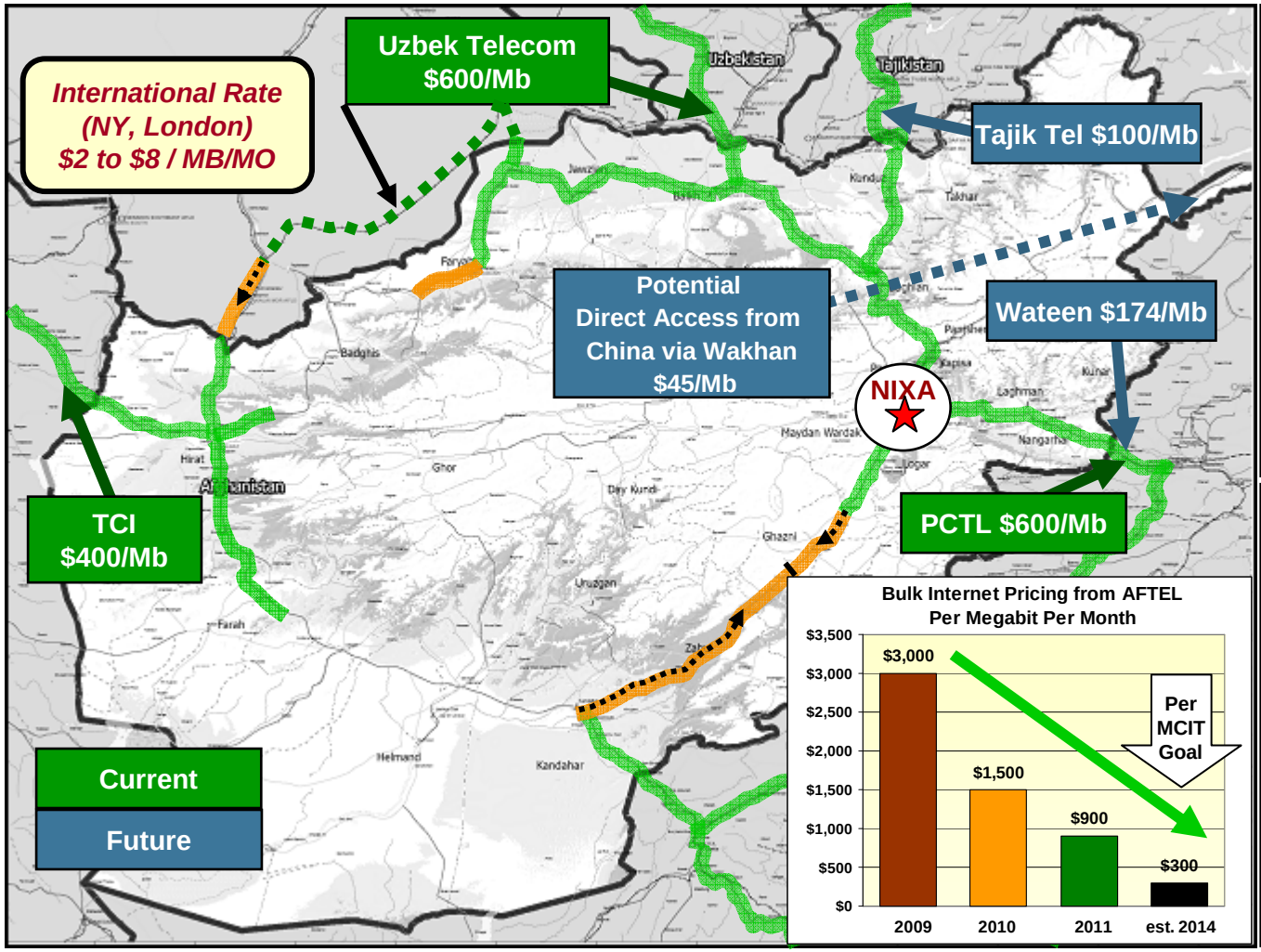
Terrestrial
ICT
Backbone

Expand Affordable Internet Connectivity

Goal-Increase Internet Penetration 20%+ by 2014

10% growth in Internet penetration equates to 1.34% growth in GDP*

****World Bank***

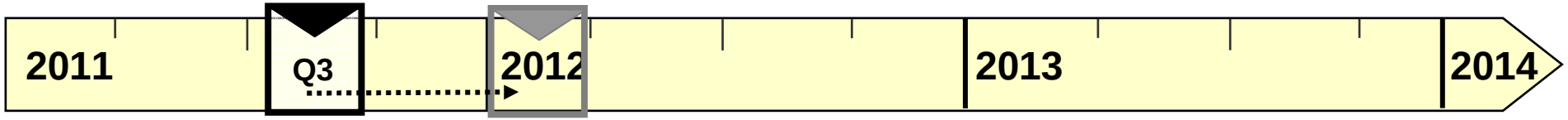


Strategy:

- Reduce Wholesale Cost of Internet
- Increase Access to Populace
  - -Fiber: Expansion
  - -Wireless: 3G & 4G
- Increased Utilization/Effect:
  - •Government = Efficiency and Transparency
  - •Business= Accelerated Growth
  - •Education = Access to Global Knowledge

Status:

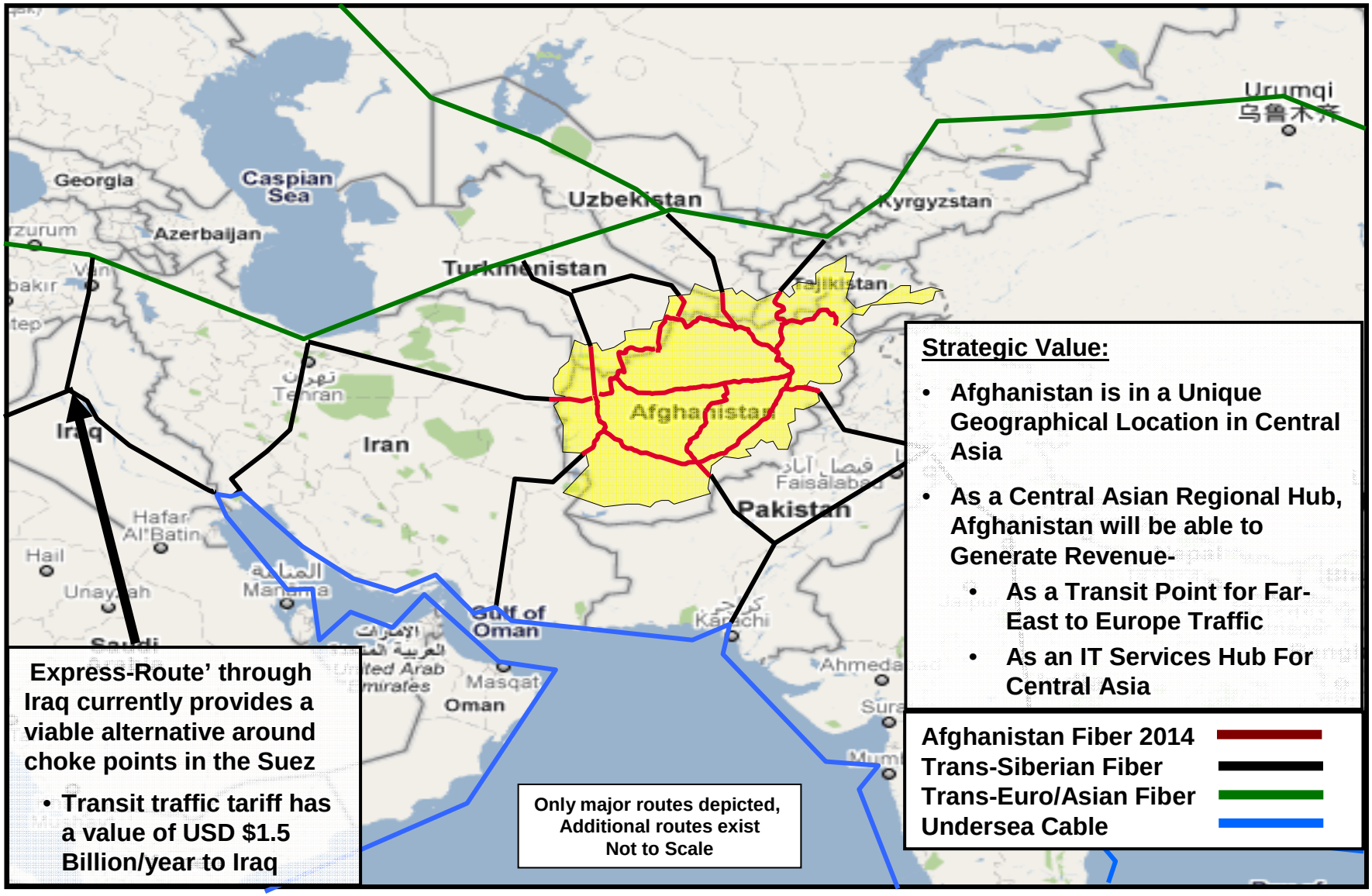
- Costs have been Reduced as Result of Competition- $3000 to $900/Mb ('09 to'11)
- Reducing Need for Traffic to Exit Afghanistan, via:
  - Internet Exchange (NIXA)
  - Introduction of Net Services. i.e., Google, Wiki, Content Caching
- Sept 2011-Initial IXP Capability



Terrestrial
ICT
Backbone

ICT End-State

Afghanistan: Central Asian ICT Hub

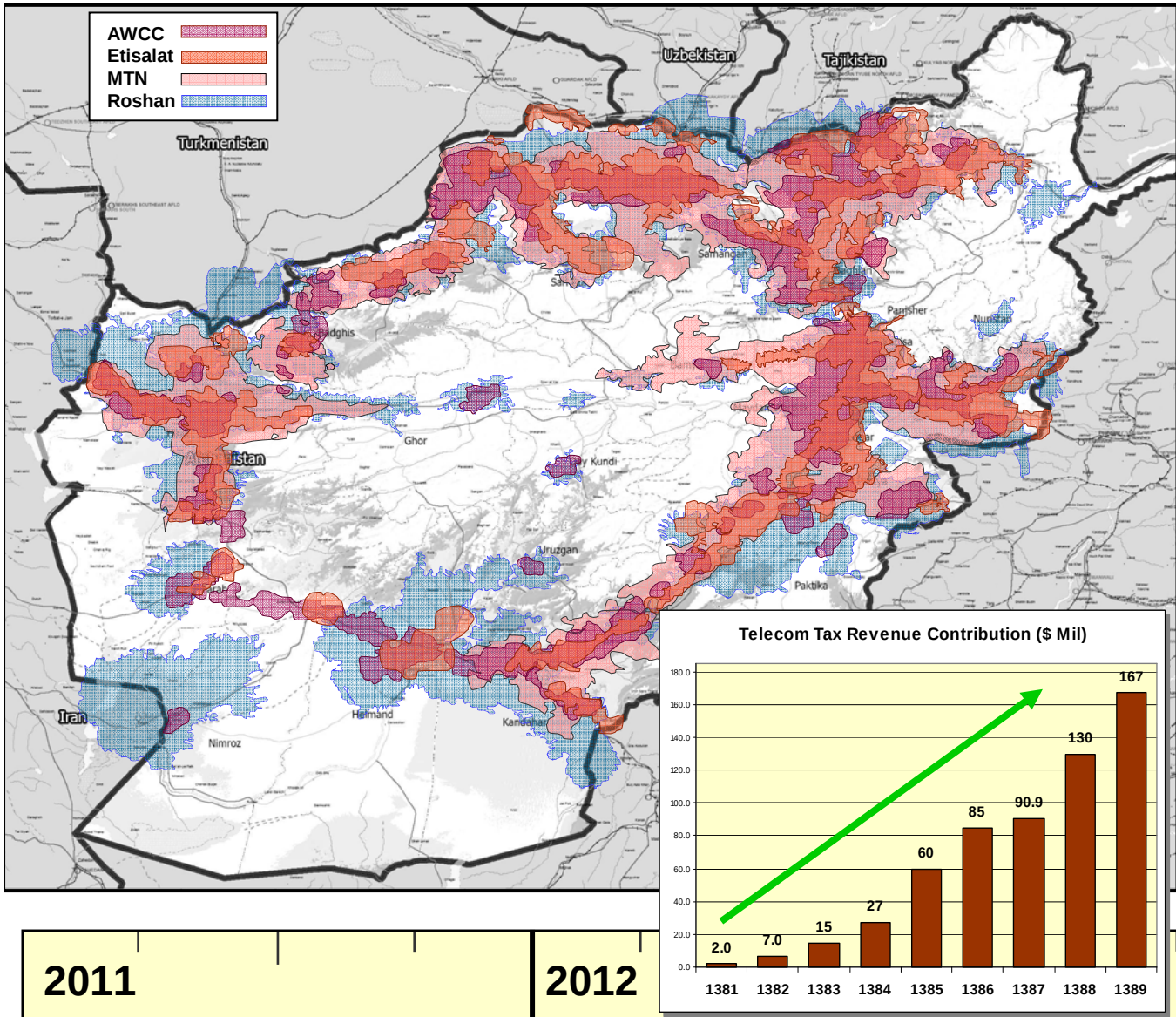


A Central Asian ICT Hub is Key to a Modern-Day ICT Silk Highway

Wireless
Cell
Coverage

Cellular Industry Background

Major Effort Restoring 24x7 Cellular Coverage



Strategy:

- Provide the Environment to Allow the Cellular Sector to Continue Growth
- Restore 24x7 Operations
  - Strategy: Security, protected systems insurgents cannot impact, Competition.
  - Programs: ECCS, CFSOCC, ANSF & AFTEL Initiatives
- Extend Service to Rural areas
- Leverage as a Cross-Sector Enabler
- Facilitate Migration to 3G/4G

Status:

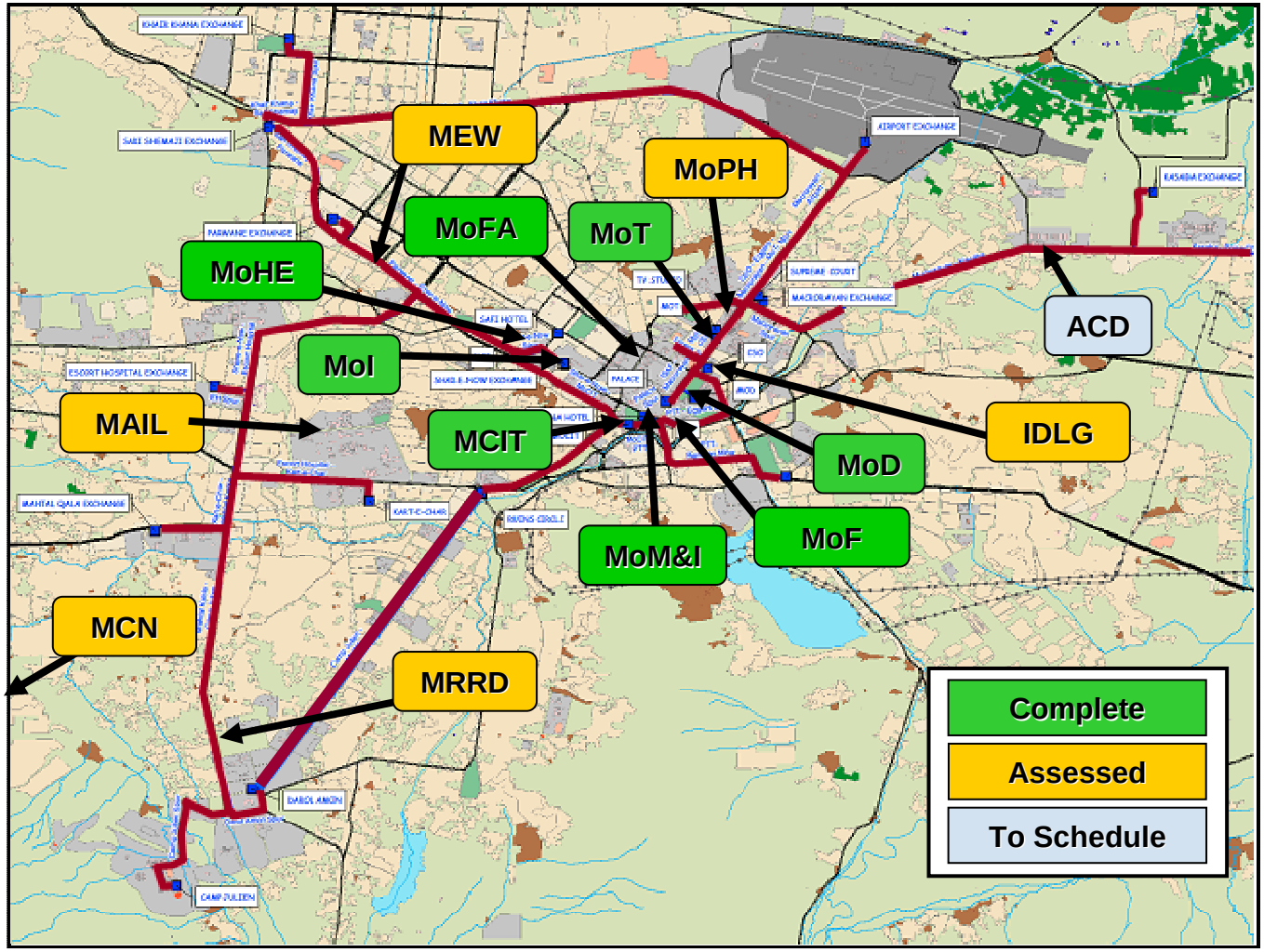
- Five National Cell Companies
  - AFTEL (State-Owned)
  - AWCC, Roshan (arrived first)
  - MTN, Etisalat (Multi-national)
- 16.2 Million Subscribers Covering >80% of the population
- $167 Mil to Tax Revenue (1389)
- Fastest Growing Legitimate Industry <100K in 2003 to 16.2M users in 2011
- Trend-more shut downs, more destructive reprisals

2011 | **2012** | **2014**

Extend
Legitimate
Governance

Ministerial Connectivity

Kabul City Fiber Project



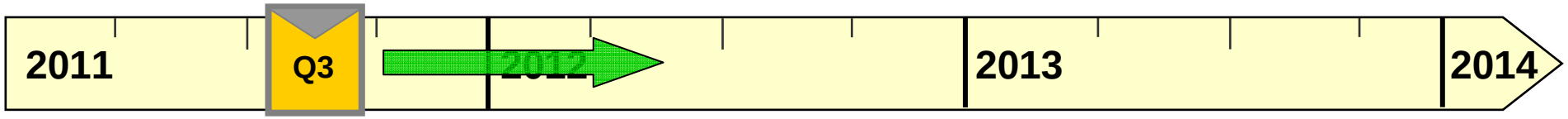
Strategy:

Provide Broadband Connectivity and Enhance the Infrastructural Capacity of each Ministry

- **Start in Kabul, Expand to Provinces and Districts**
- **Bring Each Ministry to Common Standard for Connectivity and Capacity**
- **Ensure Sustainment Factors**

Status:

- **Assessing each Ministry & Institution (34 of 40)**
- **All Ministries Have Legacy Broadband (DSL/Fiber/WiMax)**
- **Prioritizing Ministries for Fiber Upgrade Based on:**
  - **Ministry Role**
  - **Proximity to Fiber**
  - **Existing Infrastructure**
  - **Capacity to Utilize**



Socio-Economic Growth & Capacity Development

ICT Socio-Economic Development

Strategy – Increase Socio-Economic Development Through. . .

Programs for Economic Growth

USAID
Mobile Money
Micro-Finance
and Payments

TFBSO
Information
Technology
Incubator Program

World Bank
ICT Village
And Incubator

MCIT
ICT Village

Human Capacity Developing

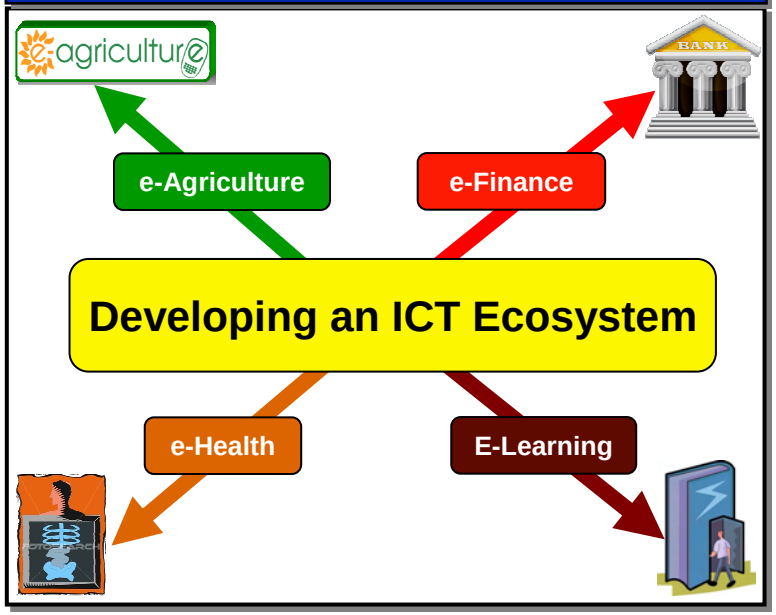
Universities
Herat, Kabul, ICTI,
American University
Of Afghanistan (AUAF)

AUAF
Prof Dev Institute,
CISCO, Microsoft certs
ICDL

Cisco-Academy
Certifications

EMB/ISAF/AID
Ministry CIO
Development,
USTTI and Others

ICT- Enabling Socio-Economic Growth



Private Sector Company Engagement

Cisco & Microsoft
Capacity
Development

Google
Web Caching
Web Search
Web Entry-point

Akamai
Content Distrib.,
Streaming Media

ESRI
Common GIS
Architecture

Professional & Organizational Development

ICT Collaboration Conferences

Mobile Money Institute

National ICT Alliance of Afghanistan (NICTA)

National ISP Association of Afghanistan (NISPA)

Core ICT Infrastructure

- National Fiber Optic Ring
- MCIT National Internet Exchange (NIXA)
- MCIT Kabul City Fiber Ministry Connect
- Wireless Cellular Infrastructure

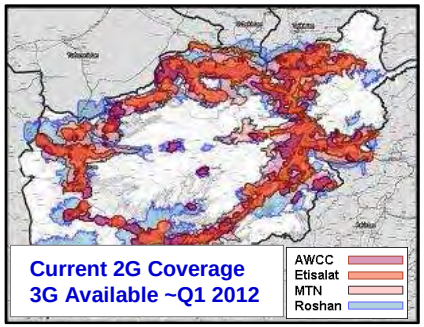
Synchronizing Participants- MCIT, TF-BSO, World Bank, ISAF, USEMB, USAID, ADB. . .

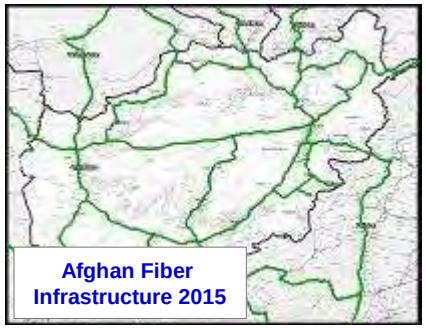
Socio-Economic Growth / Wireless Cell Coverage

Socio-Economic Development

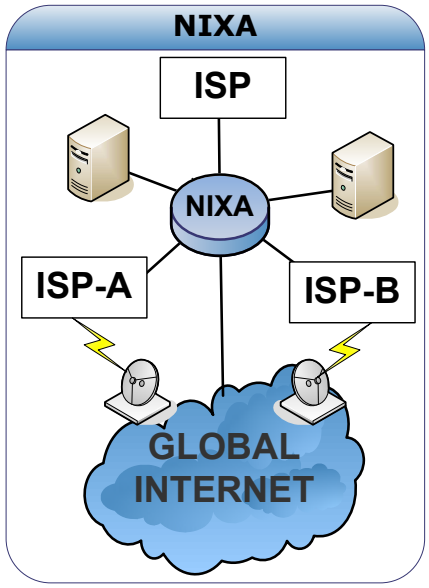
Growing the ICT Economic Sector

1 Access Infrastructure: *3G and Fiber*



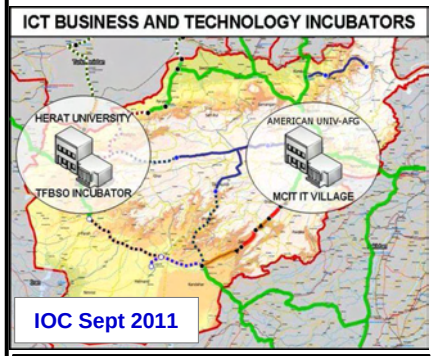


2 Internet Infrastructure: *National Internet Exchange of Afghanistan*



IOC September 2011 (3 ISP's)

3 Business Infrastructure: *Incubation, Capacity Development* 4



Strategy:

To Provide ICT Infrastructure and Services as a Basis for Growth Across all Economic Sectors:

- **Build ICT Business Infrastructure**
  - Internet Exchange (NIXA)
  - Enhanced User Access (3G)
  - Lower Cost, Higher Quality
- **Increase ICT Coverage & Penetration**
  - Enhanced Services (Mobile Broadband)
- **Foster ICT Business & Technology Incubation**
  - Application Development (E-Gov)
  - Employment Opportunity (Local Talent)

Status:

1 **Access Infrastructure**
- MCIT 3G Offering – Award 1 Dec 11

2 **Internet Infrastructure**
- Installation of Internet Exchange (Sept)
- Executing ISP Exchange Agreements
- Connecting ISP's to Exchange

3 **Business Infrastructure**
- Developing ICT Business Incubators (2)
- Opportunities for Mobile Applications

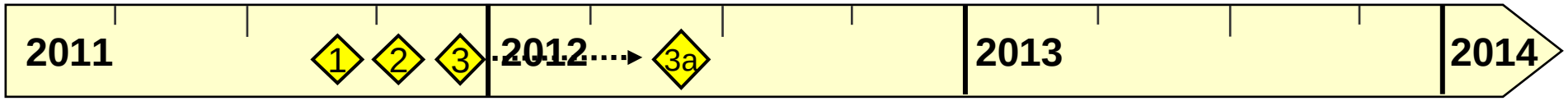
4 **Capacity Development (IT Training)**
- ICT Institute - 50/Yr
- AUAF - 60/Yr & Prof Dev Inst
- MCIT/WB - Target 1500 5/Yrs
- Herat University - 50/Yr

"Less than 4% of Afghans have Internet Access, However 55% of Afghans have Mobile Phones and 85% have Mobile Phone Access"

-MCIT

"For Every 10% Increase in Internet Penetration, there is a Corresponding 1.34% increase in Gross Domestic Product."

-World Bank



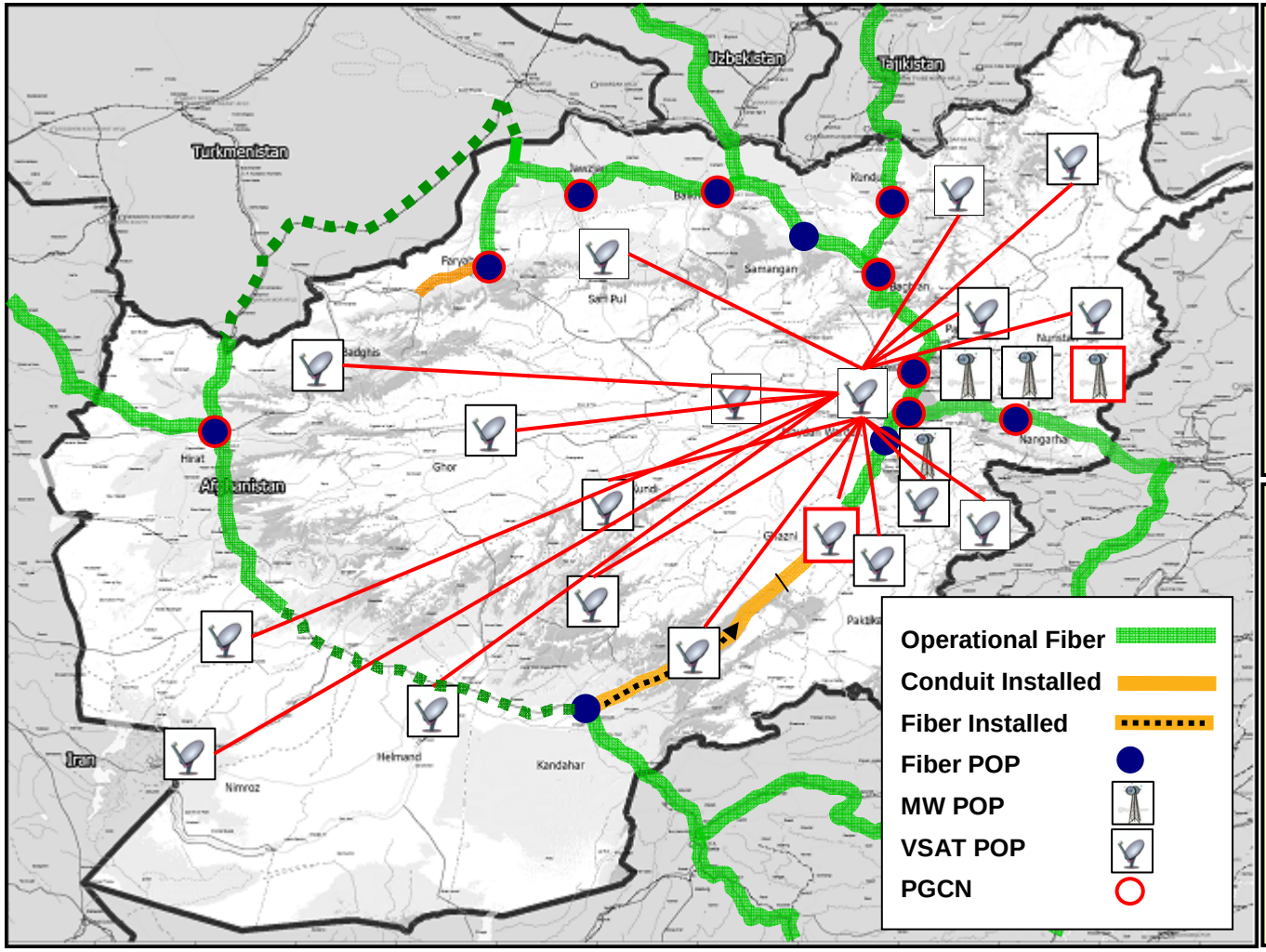
Way Ahead

- **Better Synchronization and Coordination of Economic Growth Efforts – Strategy, Plans and Programs**
- **Opportunities**
  - **Business Growth**
    - **TF-BSO Incubator**
    - **TF-BSO Investment Program**
    - **MCIT/World Bank ICT Village**
  - **Privatization of AFTEL**
  - **Capacity Development**
    - **CISCO Academy**
    - **American University of Afghanistan**
    - **Kabul University**
    - **SILK Program**
  - **Internet Growth**
    - **IXP**
    - **Services**
  - **Media**
    - **Cell Towers**

Back Up

Extend
Legitimate
Governance

Provincial Government Connectivity



Strategy:

Provide Robust Connectivity to Provincial Governor and Government Offices

- **Migrate Satellite Connectivity to Terrestrial**
- **Build Infrastructure to Support e-Afghanistan**
- **Private Sector Solution**

Enable Environment for Improved Governance and e-Gov Services

Status:

34 Provincial Capitals have Backbone Connectivity:

- **12 OFC, 4 MW, 18 VSAT**

Provincial Government Communications Network (PGCN)

- **Connectivity to Government Center Offices (WiMax)**
- **Provides Voice, Data & VTC**

Additional Communications Provided by Carriers & ISP's

2011	Q3	2012	2013	2014

Wireless
Cell
Coverage

24 x 7 Cellular Scorecard

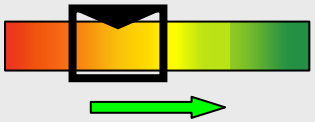
Expeditionary Cellular Services

IOC 5 May 2011; Currently 20 Sites but most with logistics problems affecting system reliability

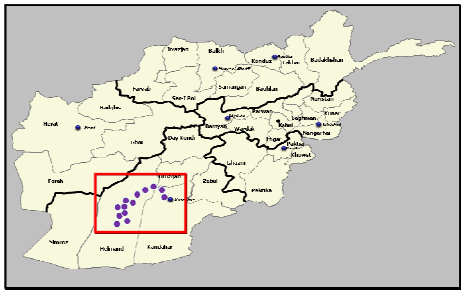
Initially Emergency Calling Only

FOC Delayed to end of July

Rating



Trend



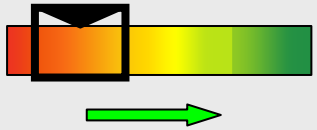
CFSOCC ALP/VSO Cellular Solution

Focus is Emergency Services

Program has been re-set to align with hybrid solution

2 sites, mid to late - Zabul Province

Rating



Trend

ANSF Cellular Services

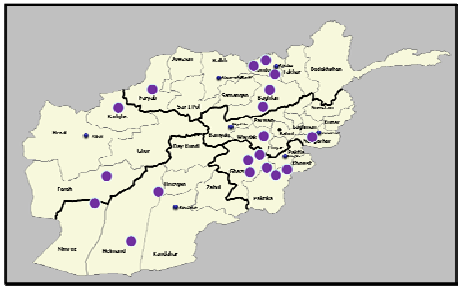
Focus is Emergency Services

Awaiting Oversight Decision at NTM-A on 25 July

Support to IJC OP OMID Effort

IOC: 7 Sites 1 Oct 2011 (schedule and funding at risk)

New Baseline



GIRoA / AFTEL GSM

FOCUS is Populace Services leveraging TDF Sites

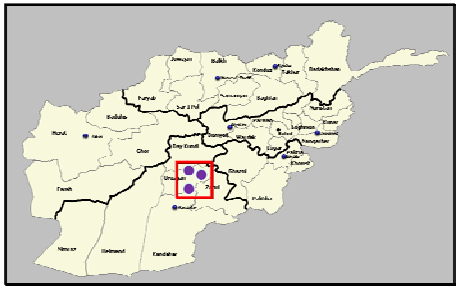
Awaiting GSM Switch Implementation at MCIT/AFTEL

Increase Capacity of Technical Personnel

Increase Ministerial Capacity

Rating

New Baseline



Legend for Slider Bars

Trend: New Task = New Baseline

Trend: = No Movement

Trend: = Negative Movement

Trend: = Positive Movement

ACICIP International Disaster Response Sub-Committee Presentation of Draft Recommendations

Paul Chiswell 28 June 2011

The Team

Mathew Taylor	Senior ICT Strategist and Architect with Intel's World Ahead Program
Harmony Mabrey	Senior Operations Manager of the Microsoft Disaster Response Team
Nick De Tura	SVP of Supply Chain, Logistics & Operations for the Americas at Alcatel-Lucent
Paul Margie	US Representative for Telecoms Sans Frontieres
Donna Bethea-Murphy	VP Regulatory Engineering at Iridium Communications
Tim Woods	Senior Manager of Cisco's Tactical Operations Team
Jerry McConnell	Customer Support Manager at Motorola Solutions
Jim Bugel	VP Public Safety and Homeland Security for AT&T
Gisli Olafsson	Emergency Response Director for NetHope
David Hartshorn	Secretary General, Global VSAT Forum
Thierry Guillemin	SVP and CTO of Intelsat
Nan Buzard	Senior Director of International Response & Programs for the American Red Cross
Paul Chiswell	Senior Director of Customer Assurance at Cisco

Brief Introduction of our recommendations

- Experiential based
- Consensus
- 4 phases of a disaster
  - Preparation
  - Response
  - Recovery
  - Reconstruction
- No technology religion
- Living document

Common Themes

- Information
  - What is the condition of the network?
  - What critical infrastructure has been affected?
  - What are the priorities for restoration?
  - What resources or equipment is needed?
  - What in-country expertise exists?

- Contacts
  - In government agencies, affected countries, NGOs, private sector companies, service providers, suppliers, industry associations, etc
  - Relationships

- Collaboration

Key Objectives

1. Foster Global Disaster Preparedness and help to reduce barriers often faced by private, public, and NGO ICT providers
2. Increase recognition of ICTs as critical infrastructure for international disaster preparedness and response
3. Improve coordination and expedite engagement between host country response leads and public, private and NGO ICT providers
4. Improve communication and information flows

OBJECTIVE 1: Foster Global Disaster Preparedness and help to reduce barriers often faced by private, public, and NGO ICT providers.

Recommendation 1.1: We recommend that in its engagement with other countries and multilateral organizations the USG offer information of successful practices and case studies to encourage preparedness capabilities.

- Focus on Preparation
- Examples and case studies
- The better the preparedness, the more effective the later stages

OBJECTIVE 1: Foster Global Disaster Preparedness and help to reduce barriers often faced by private, public, and NGO ICT providers.

Recommendation 1.2: We recommend that the USG support and advocate for ICT-related disaster response and preparedness training, particularly in developing countries.

- Less requirement for travel
- Local knowledge, language, culture, technology in use
- Supports longer term growth

OBJECTIVE 1: Foster Global Disaster Preparedness and help to reduce barriers often faced by private, public, and NGO ICT providers.

Recommendation 1.3: We recommend that the USG ratify the UN Tampere Convention

- Four key areas of Tampere Convention:
  - Cooperation and sharing of information
  - Training mechanisms
  - Reduction in regulatory barriers
  - In-country information and resources inventory development

OBJECTIVE 2: Increase recognition of ICTs as a critical infrastructure in the context of international disaster preparedness.

Recommendation 2.1: We recommend that the USG agencies responsible for international disaster and humanitarian response encourage recognition of ICTs as critical infrastructure for international disaster preparedness, response and recovery.

- Criticality of ICT
  - Need to communicate with first responders
  - Coordinate restoration efforts
  - Provide information to the affected population

OBJECTIVE 2: Increase recognition of ICTs as a critical infrastructure in the context of international disaster preparedness.

Recommendation 2.2: We recommend that the USG encourage countries and organizations to carry out resource planning, including pre-positioning of ICT equipment and services, and the training of personnel.

- Resource planning
  - Equipment
  - Functionality
  - Skills

OBJECTIVE 3: Improve coordination and expedite engagement between host country response leads and public, private and NGO ICT service/solution providers.

Recommendation 3.1: We recommend that the USG identify agency points of contact responsible for ICT aspects of international disaster preparedness, response and recovery, including specific liaisons within the host countries.

- USG Points of Contact in all agencies and regions
- Participation in conferences and working groups

OBJECTIVE 3: Improve coordination and expedite engagement between host country response leads and public, private and NGO ICT service/solution providers.

Recommendation 3.2: We recommend that the USG analyze its own ability to offer direct ICT assistance to foreign governments following a disaster.

- Identify baseline offerings
- Establish procedures
- Prepare
  - Training, documentation, vaccinations, equipment

OBJECTIVE 3: Improve coordination and expedite engagement between host country response leads and public, private and NGO ICT service/solution providers.

Recommendation 3.3: We recommend that the USG should partner with private, public sector and NGO personnel that could be used to support USG efforts in disaster response.

- Remove barriers for qualified non-USG personnel
  - Credentialing
  - Security
  - Logistics

OBJECTIVE 4: Improve communication and information flows.

Recommendation 4.1: We recommend that the USG develop relationships with and maintain contact lists of foreign officials, particularly those responsible for ICT, disaster preparedness and response.

- In-country contacts
- Preparedness support
- Real time information flow during disaster

OBJECTIVE 4: Improve communication and information flows.

Recommendation 4.2: We recommend that the USG identify a common interface point that can field questions from, and disseminate information to, private, public and, NGO sector ICT providers.

- Common Point of Contact
- Identified and communicated early
- Triage and route requests and information

OBJECTIVE 4: Improve communication and information flows.

Recommendation 4.3: We recommend that the USG provide support for assessments of ICT impact, needs, and capabilities, in the host country

- Work with foreign contacts
- Assist with damage assessment
- Provide guidance on assistance requests and offers

OBJECTIVE 4: Improve communication and information flows.

Recommendation 4.4: We recommend that the USG work with the relevant host government points of contact to facilitate entry of required external technology and expertise resources.

- Avoid or remove regulatory barriers to the importation of personnel and equipment into disaster areas
  - Licensing
  - Immigration
  - Importation/customs

OBJECTIVE 4: Improve communication and information flows.

Recommendation 4.5: We recommend that the USG promote the sharing of information to foster a common understanding of needs, resources, priorities and status of response efforts during a disaster.

- Encourage information sharing across the whole disaster response community

Next Steps for the Sub-Committee

Five deliverables:

1. Recommendations Report
2. Successful Practices Document
3. ICT Assessment Checklist
4. Disaster Response Playbook
5. Cross-community Collaboration Guideline

Q and A

Private Sector Participation in International Disaster Response

Steve Birnbaum
Lead, Humanitarian Assistance & Disaster Relief
Global VSAT Forum

www.gvf.org

First Response & GVF Resources

- Non-Profit Satellite-Sector Association (FSS, MSS, BSS)
- 230+ Member Organizations Based Globally
- Members Support Millions of Systems Worldwide
- GVF Enabling Satcom Service Delivery Thru:
  - Facilitation: Emergency Notifications, Dialogue
  - Regulatory Affairs: National and international…
  - Training: VSAT Installation and…
  - Preparedness: *GVF Registry & Installer Database*

Private Sector in Disaster Response

- Local business success intertwined with recovery
- Doing the right thing often makes good business sense
- Suspicion of motivations
- Lack of tight integration with private sector
- Can result in stove-piping

GVF Satellite. Solutions. The World.

www.gvf.org

Haiti

Haiti

- Assumptions:
  - All comms are down
    - FCC: worst-hit mobile operator lost 40%, back to 80% in 3 wks
    - Fugate's first call from Haiti to US was via roaming GSM phone
    - Sean Penn camp still on VSAT in May 2010
  - Must bring in satcom for connectivity
    - While initially helpful, commercial ISPs were active after 2-3 wks
  - No government regulator for coordination
    - Regulator was asking for help
- Telecommunications as critical infrastructure!!!

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"Survivors" vs "Victims"

ICT as Critical Infrastructure

Use of Local Resources

Effective Intra-Organizational ICT Collaboration

IDEA

Katrina Ad-Hoc Networking

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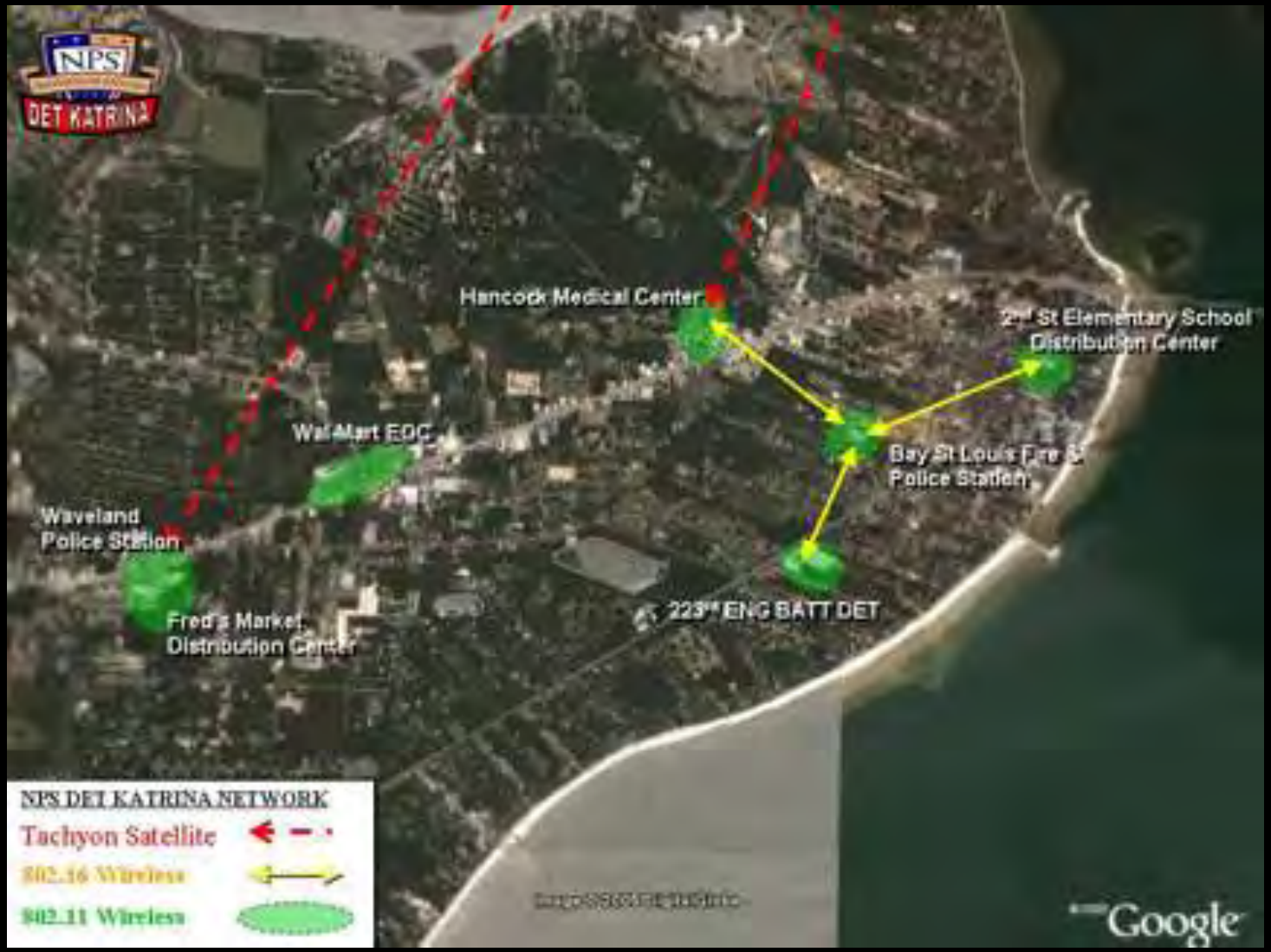

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‘Pre-Positioning’: What’s Already There

Enterprise

Carriers

Broadband, ISPs

Government

DCC

Providing data, IP applications and broadband Internet access to corporate customers including banks (for example FBN and Oceanic) and enterprise clients.

Connecting South Africa

Bringing telephony and Internet to over 3000 sites in the Northern Province, for communication and business needs

SpaceStream

Bringing broadband IP to corporate users, SOHOs, small businesses (SME) and power users throughout South and Sub-Saharan Africa .

Kenya Post

Over 600 Tele-centers in Kenya, offering Phone, FAX and Internet services, including integrated Pre-paid voice and Data solution

Sample US Participation

iDIRECT

inmarsat

HUGHES

HARRIS

VIZADA

wildblue

GLOBECOMM

CapRock COMMUNICATIONS

SPACENET

Pre-Positioned Installers: GVF Certified VSAT Installer Database

- **Contacts for Approx. 1,000 Installers Worldwide**
- **Online, Public, Searchable Database**
- **1-For-1 Offer to UN, NetHope/NGOs**
- **Scholarship for Developing Nations**
- **Used for Rapid Installation Support After Haiti Earthquake**

In Conclusion…

Can GVF's Existing Online Directory and Installer Database Will Serve As a Clearinghouse for Disaster Preparedness & Development

- For the First Responders:
  - Registry & Database of providers, their services, and trained installers
  - Technical, business and other support services
  - Immediate access to communications services, systems and personnel
- For the Local Service Provider:
  - A channel to interface with first responders and development interests
  - International visibility through an easily-accessible Registry & Database
  - Proactive approach with minimal expenditure
- For the Medium/Long-Term Development Community:
  - Ready engagement with local and/or international development stakeholders
  - Most providers of pre-positioned solutions are supporting development applications
  - Easy transition from first response back to delivery of development applications

Thank You

Steve.Birnbaum@gvf.org

Opening minds, reaching out

Prospects & pitfalls

Sanjana Hattotuwa

ICT for peace foundation

enduring challenges

perceptions of the military and NGOs

Strong Angel III

Perceptions from 2006 still valid

NGOs and UN perceptions of US Military and other militaries:

Needs Improvement

Military hears, but does not listen.

Lack of humility.

Inadequate understanding of long-term peace-building.

Lack of gender sensitivity in the military's current approach to civilian interactions.

Overwhelming arrogance. Military often assumes that they know best.

Lack of officer accountability for irresponsible actions by enlisted.

A lack of doctrine and training in the military for cultural education.

Too many acronyms, don't speak the same language as everyone else.

Does Well

Military has a very necessary security function. They protect governments, international NGOs, and the local population.

By and large, the state military is well-trained and responsible.

Military has capacities to augment logistics (power & lift).

Military has communications capacities.

Military is good at logistics.

Military can be extremely sensitive to local issues on the ground.

Force protection for cordon sanitaire.

Strong Angel III

Perceptions from 2006 still valid

US Military and other militaries' perceptions of NGOs and UN:

Needs Improvement

NGOs are like a patchwork quilt; no one is the same. Very messy to work with.

Lack of appreciation for military's help and protection.

UN Bureaucracy.

Lack of coordination and communication among NGOs and the UN. Very disorderly.

NGOs are arrogant. They always think that they know better.

Does Well

NGOs have a lot of local knowledge about the region and culture.

Big networks and positive relations with the local population.

Good experience with staff rotation and lessons learned in the field.

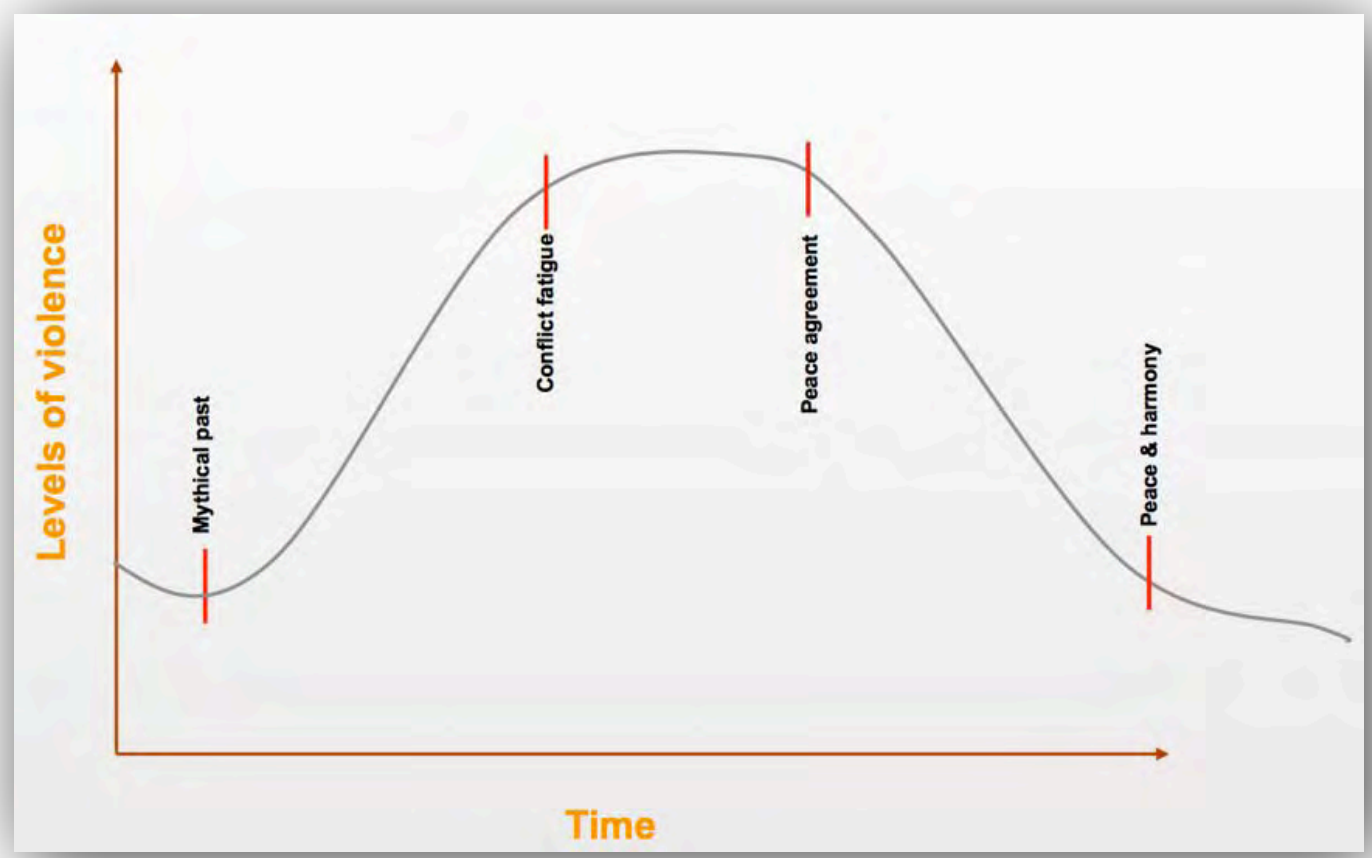
There are no "absolutes".

rebooting systemic thinking

changing underlying mindset

Eschewing the bell curve

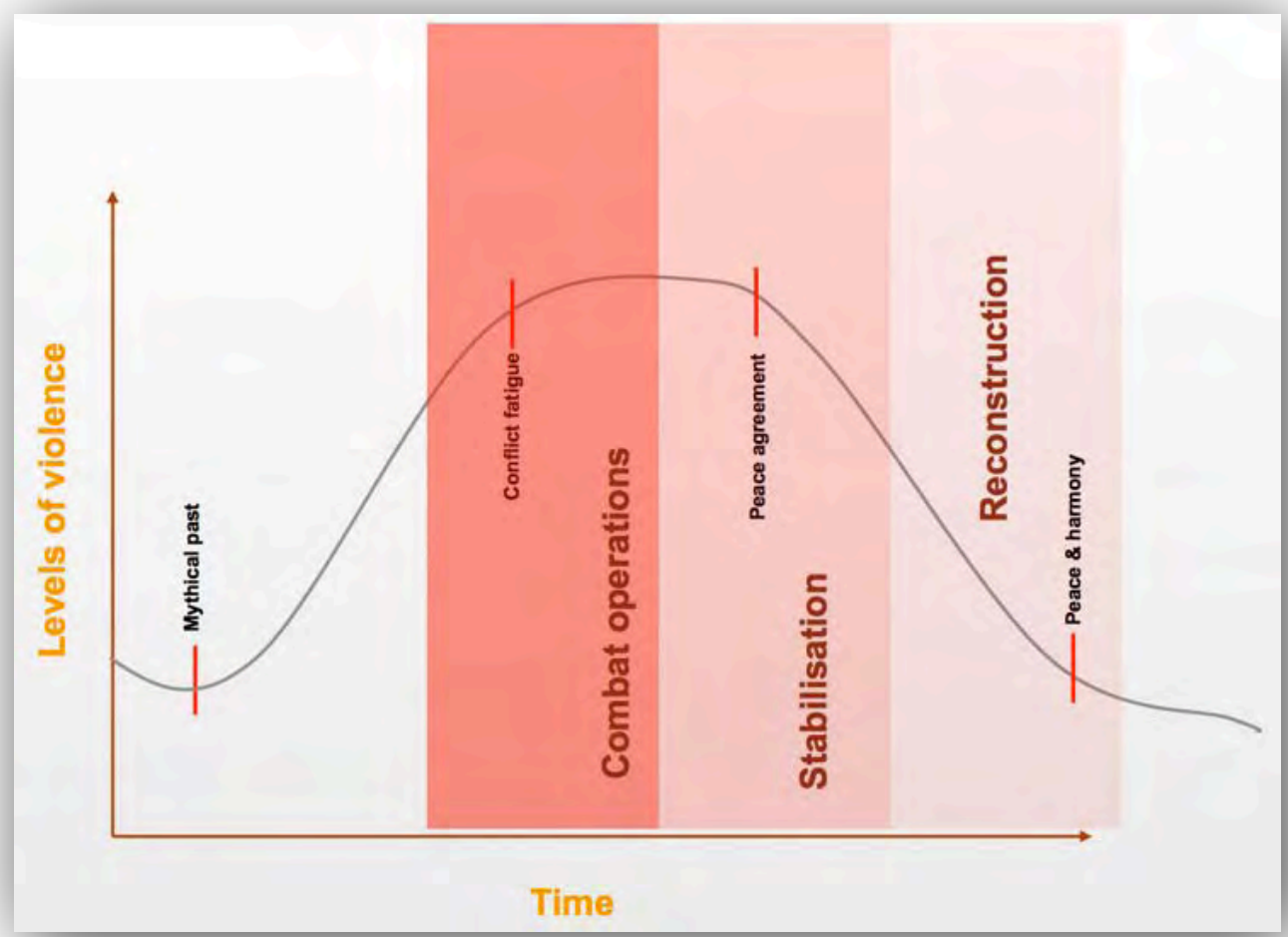
Old thinking stymies progress



ICT for peace foundation

Eschewing the bell curve

Old thinking stymies progress



ICT for peace foundation

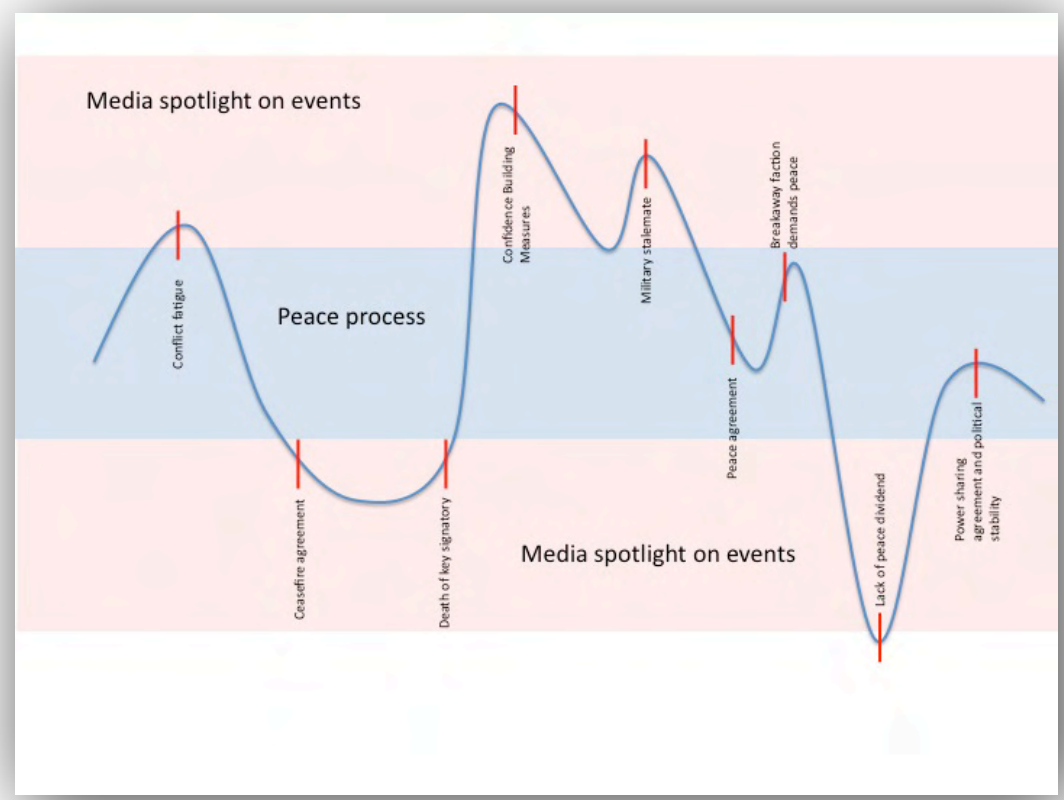
Reality in most CPEs

Complex Political Emergencies (CPEs) and relief work

ICT for peace foundation

Focus on process, not just spikes

Narrow band over time adds richness, full spectrum adds context

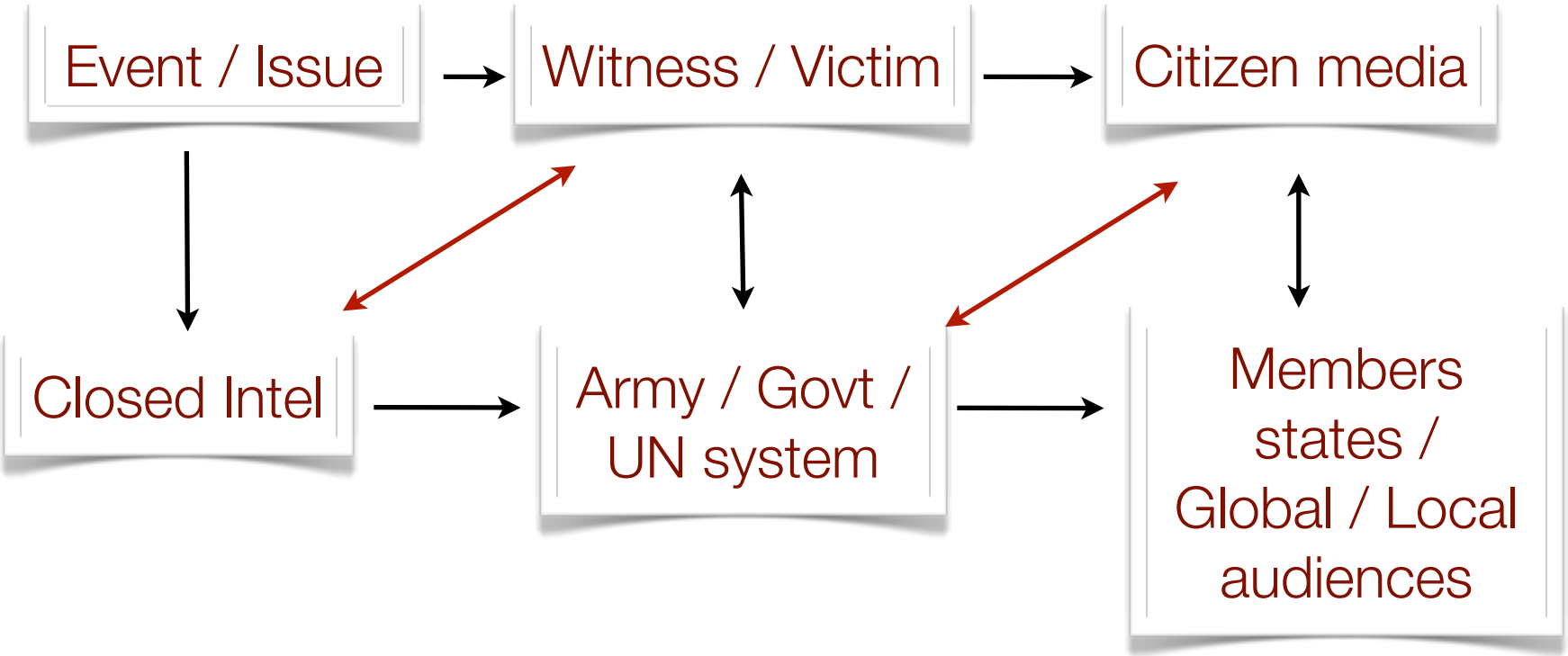


Local language(s)
Culture
Local actors
Diaspora
Hagiography and myth
Identity and power
Partisan politics
Regional power blocs
Inequity
Demographics (Youth)
Civic media
Verbal storytelling

ICT for peace foundation

New information networks

Fluid, spontaneous, viral, short-term spikes, long tail



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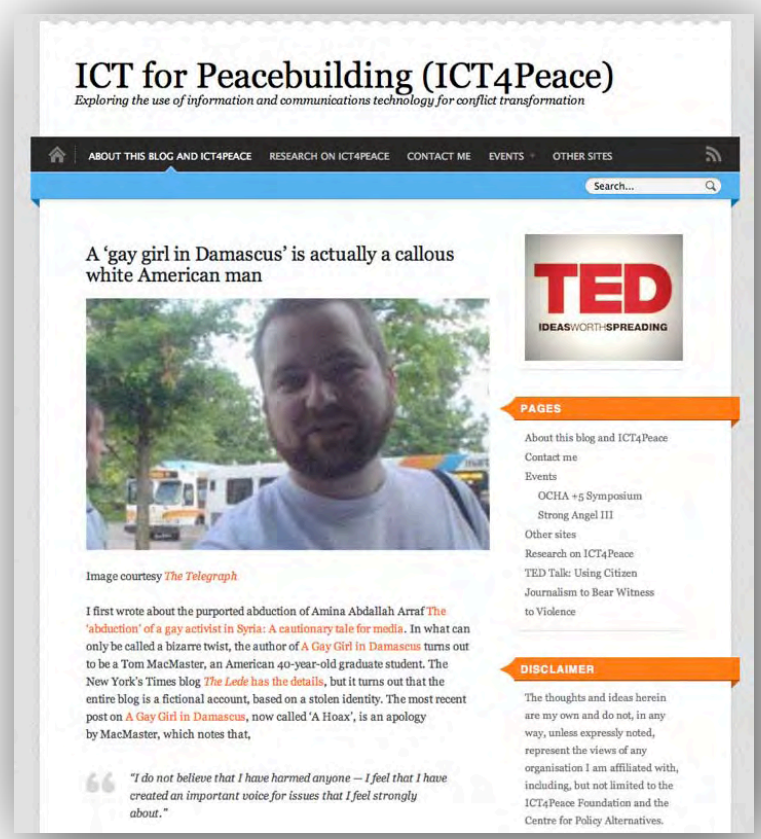
the usual pitfalls

tirades, cons, propaganda, duplication

A lesbian in Damascus

And other tall tales



ICT for Peacebuilding (ICT4Peace)

Exploring the use of information and communications technology for conflict transformation

ABOUT THIS BLOG AND ICT4PEACE | RESEARCH ON ICT4PEACE | CONTACT ME | EVENTS | OTHER SITES

Search...

A 'gay girl in Damascus' is actually a callous white American man

Image courtesy *The Telegraph*

I first wrote about the purported abduction of Amina Abdallah Arraf The 'abduction' of a gay activist in Syria: A cautionary tale for media. In what can only be called a bizarre twist, the author of A Gay Girl in Damascus turns out to be a Tom MacMaster, an American 40-year-old graduate student. The New York's Times blog *The Lede* has the details, but it turns out that the entire blog is a fictional account, based on a stolen identity. The most recent post on A Gay Girl in Damascus, now called 'A Hoax', is an apology by MacMaster, which notes that,

> *"I do not believe that I have harmed anyone — I feel that I have created an important voice for issues that I feel strongly about."*

TED IDEASWORTHSPREADING

PAGES

About this blog and ICT4Peace
Contact me
Events
OCHA +5 Symposium
Strong Angel III
Other sites
Research on ICT4Peace
TED Talk: Using Citizen Journalism to Bear Witness to Violence

DISCLAIMER

The thoughts and ideas herein are my own and do not, in any way, unless expressly noted, represent the views of any organisation I am affiliated with, including, but not limited to the ICT4Peace Foundation and the Centre for Policy Alternatives.

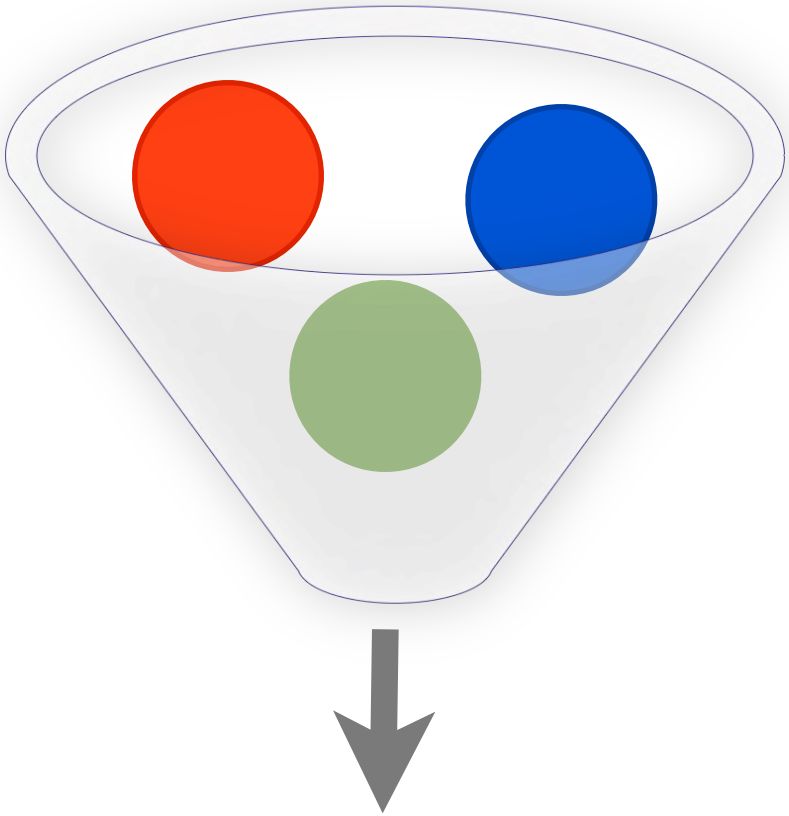
- Disinformation
- Misinformation
- Partial accounts
- Gaming the system
- Gender imbalance (e.g. rape reports in DRC)
- Lack of access leads to challenges in verification
- Multiple retweets mistaken for authenticity
- Anonymity online (esp. post-Norwegian terrorist attack)
- Machine translation / Lack of translation
- Little or no direct access
- Trauma
- Anxiety
- Fear
- Persecution
- Network infiltration and disruption
- Trust perceptions and authority markers
- Bias in mainstream media
- Bias in citizen media

ICT for peace foundation

some fundamentals

engaging torrents meaningfully

how do we know?



Traditional media

Citizen journalism / Digital, web based media

Trusted intelligence from UN system

Situational Awareness

human security approach

Human security is an emerging paradigm for understanding global vulnerabilities whose proponents challenge the traditional notion of national security by arguing that the proper referent for security should be the individual rather than the state. Human security holds that a **people-centered view of security** is necessary for national, regional and global stability.

more open, not more closed

Open content generation and sharing (e.g. wikis) help in environments with conflicting and unreliable data and after sudden onset disasters.

communicate effectively

Use the same networks that civil society uses to communicate aims, objectives, vital information.
Civilians will always suspect military domains.

tune in without subscribing more

Choice kills. Determine through robust analysis that is revisited often **what and who to listen to, when, why and how.** Use local knowledge and technology to increase signal to noise ratio.

go beyond UN, UN going beyond UN

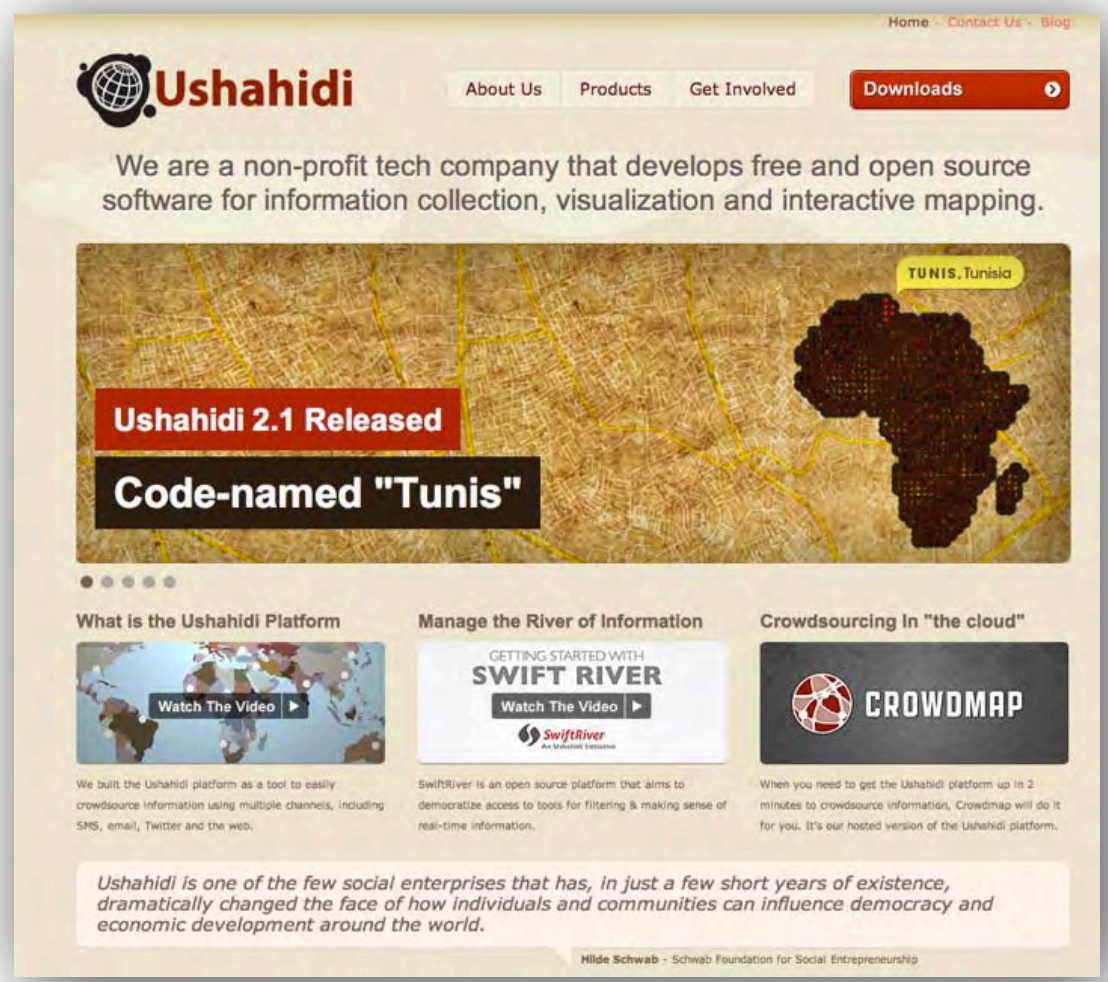
Durable solutions, community resilience and early warning stem from people on the ground, increasingly producing their own content. UN is there over long term, but also needs to engage with **hyper-local, web and mobile based, alternative narratives.**

some technology to help

engage information torrents meaningfully

Leverage crowd maps

Bounded, geo-fenced models help contextualise unbounded, larger inputs



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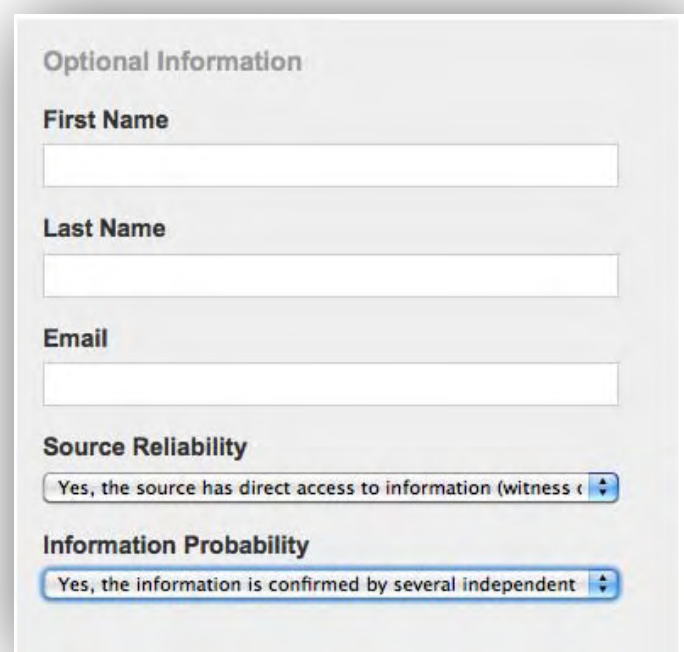
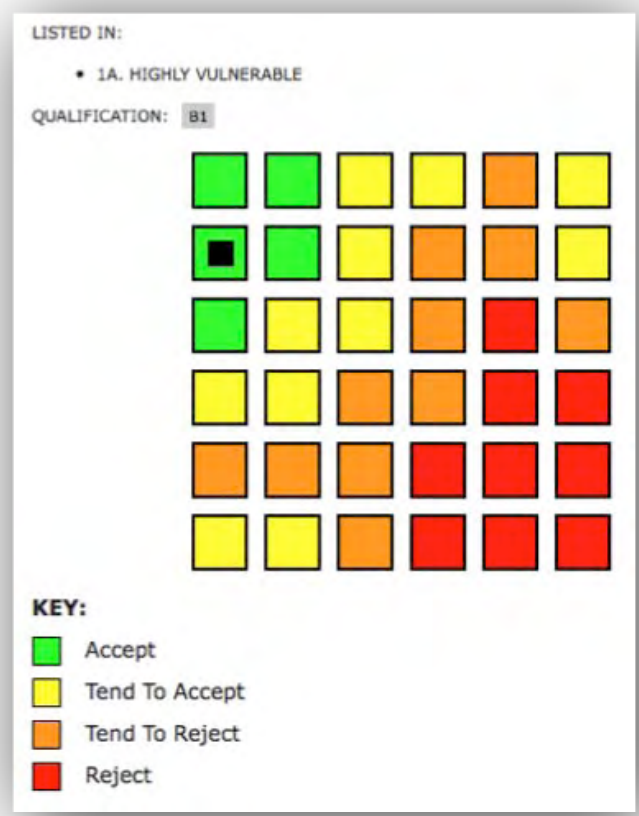
ICT4Peace Matrix plugin for Ushahidi

Source reliability / Information probability





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Leverage algorithms based on community intelligence

Open source / crowd powered curation tools

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Leverage existing social media verification guides

Facebook for journalists | Twitter resources for media

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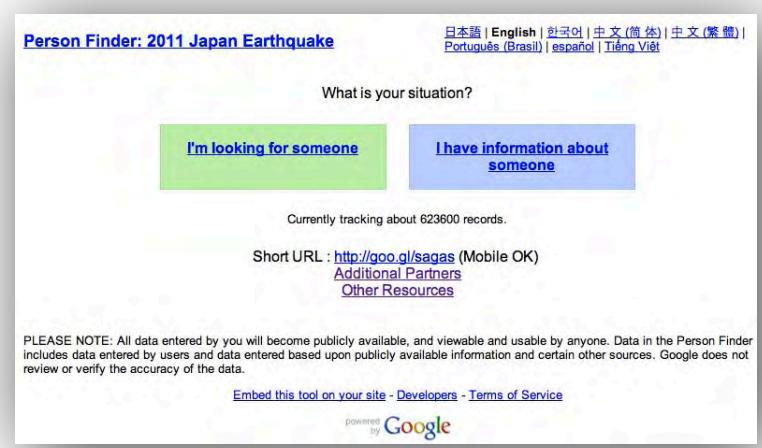
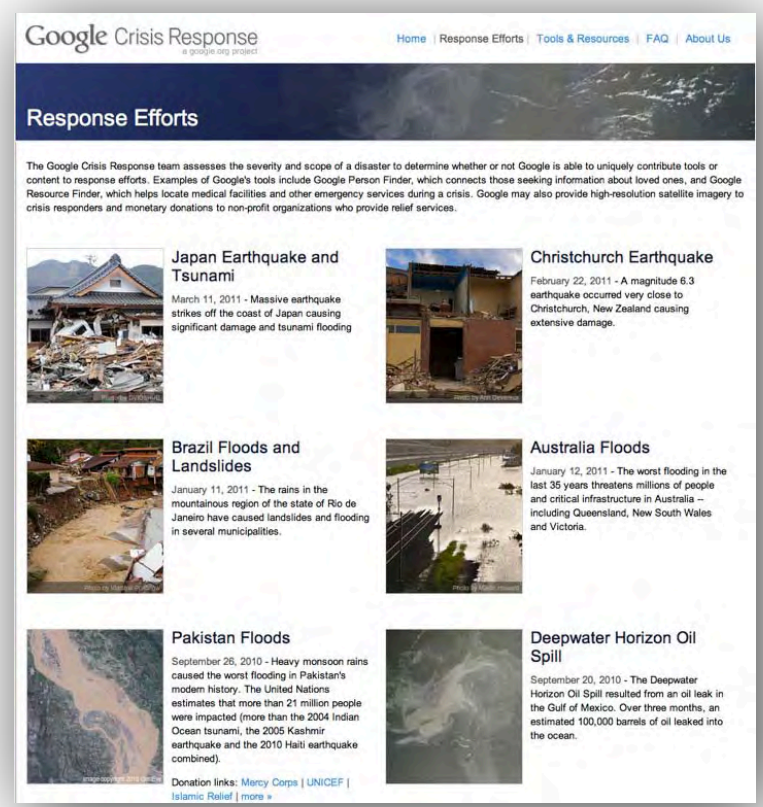
Leverage private enterprise

Use the reach and power of volunteers using private enterprise platforms





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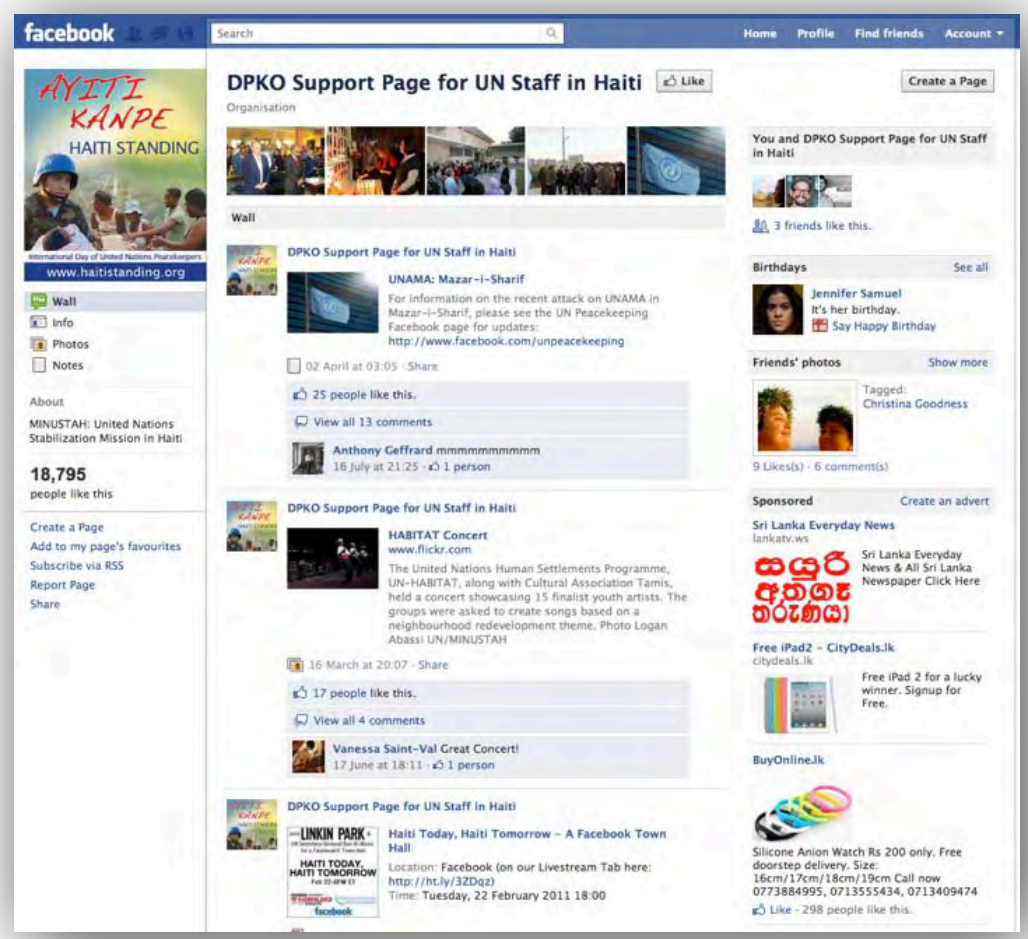
Leverage social networking

UN DPKO's approach to Facebook post-Haiti



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Leverage value-added curation

ICT4Peace Foundation CiM wikis

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Create a page
Upload files
Invite more people

FrontPage

last edited by Sanjana Hattotuwa 6 days, 1 hour ago

Page history

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Control access to this page
Copy this page
Check for plagiarism

ICT for peace foundation

Welcome to the ICT4Peace inventorisation wiki

ICT4Peace aims to enhance the performance of the international community in crisis management through the application of information Communications Technology (ICT) – technologies that can facilitate effective and sustained communication between peoples, communities and stakeholders involved in crisis management, humanitarian aid and peacebuilding. Crisis management is defined, for the purposes of this process, as civilian and/or military intervention in a crisis that may be a violent or non-violent with the intention of preventing a further escalation of the crisis and facilitating its resolution. This definition covers peace mediation, peace-keeping and peace-building activities of the international community. In bridging the fragmentation between various organisations and activities during different crisis phases, ICT4Peace aims to facilitate a holistic, cohesive and collaborative mechanisms directly in line with Paragraph 36 of the WSIS Tunis Commitment. For more information on ICT4Peace, please read this page.

The ICT4Peace Foundation through this wiki catalogues existing ICT tools and mechanisms – operational, legal and conceptual – geared towards conflict early warning, mitigation, transformation and post-conflict recovery. The inventorisation will include initiatives identified by the report on ICT4peace by the ICT4Peace Foundation, published in 2005, along with more recent examples from around the world in the use of ICT for conflict mitigation using PC's, mobile phones, the web and the Internet. This wiki will be constantly updated with new information and will is maintained by the ICT4Peace Foundation.

ICT for peace foundation
Libyan Unrest 2011

The 2011 Libyan uprising, sometimes called Gaddafi's War. Began as a series of protests and confrontations occurring in the North African state of Libya against Muammar Gaddafi's 42-year rule. The protests began on 15 February 2011 and have since become a widespread uprising that continues to the present. Inspiration for the unrest is attributed to the uprisings in Tunisia and Egypt, connecting it with the wider 2010–11 Middle East and North Africa protests. On 22

SideBar

ICT for peace foundation

Back to ICT4Peace Foundation site

The Impact of the Internet
Information Dissemination
Networking and Learning
Online Libraries

Early Warning and Conflict Prevention
Examples of ICTs and Web Platforms

Disaster preparedness, mitigation and adaptation
Examples of ICTs and Web Platforms

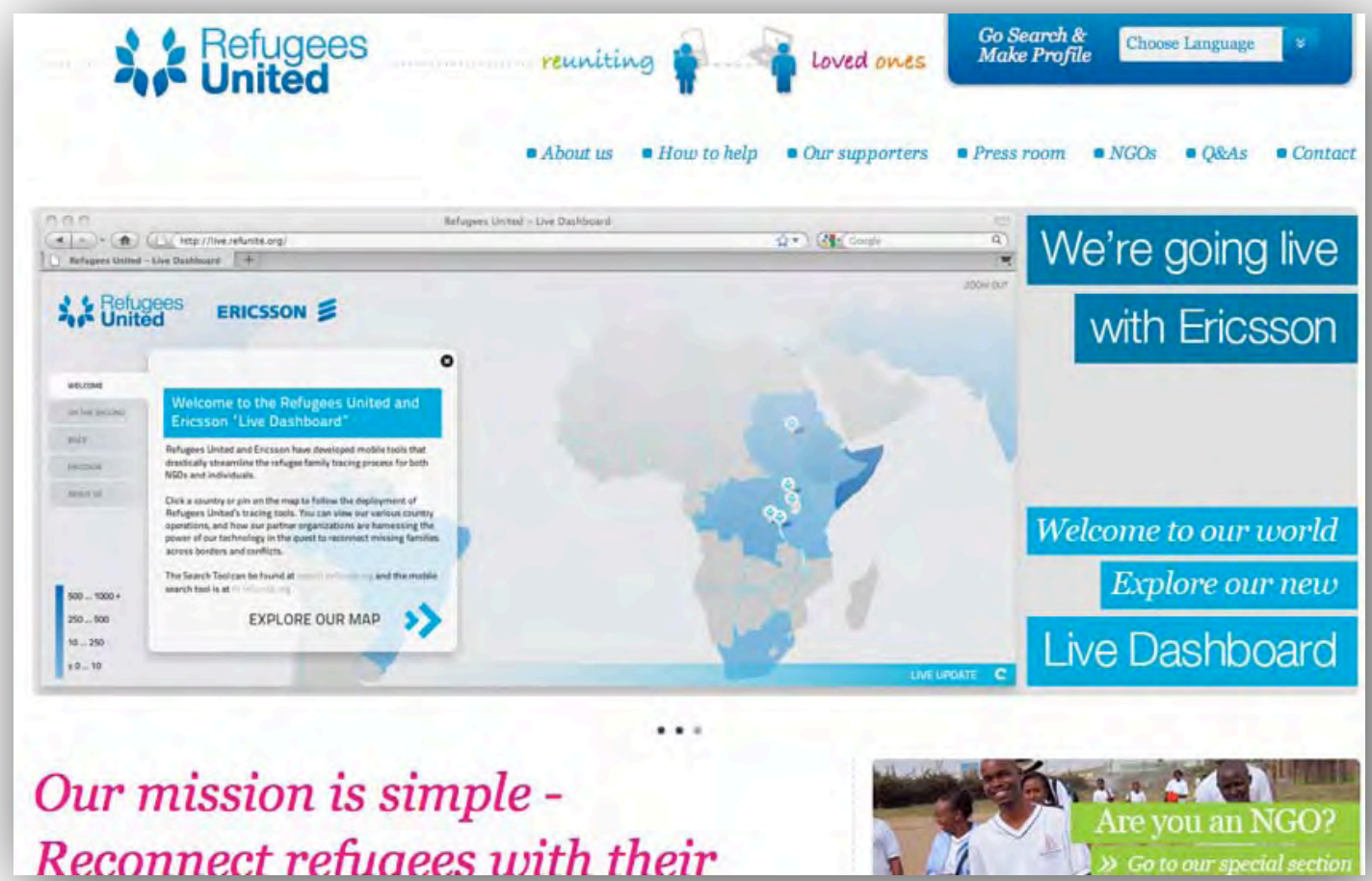
Operations and Support
Field-based Projects
Operational Support

Technical Development
Technical and Organisational Standards
Application Development

ICT for peace foundation

Leverage innovation

Use the reach and power of new groups with shared goals



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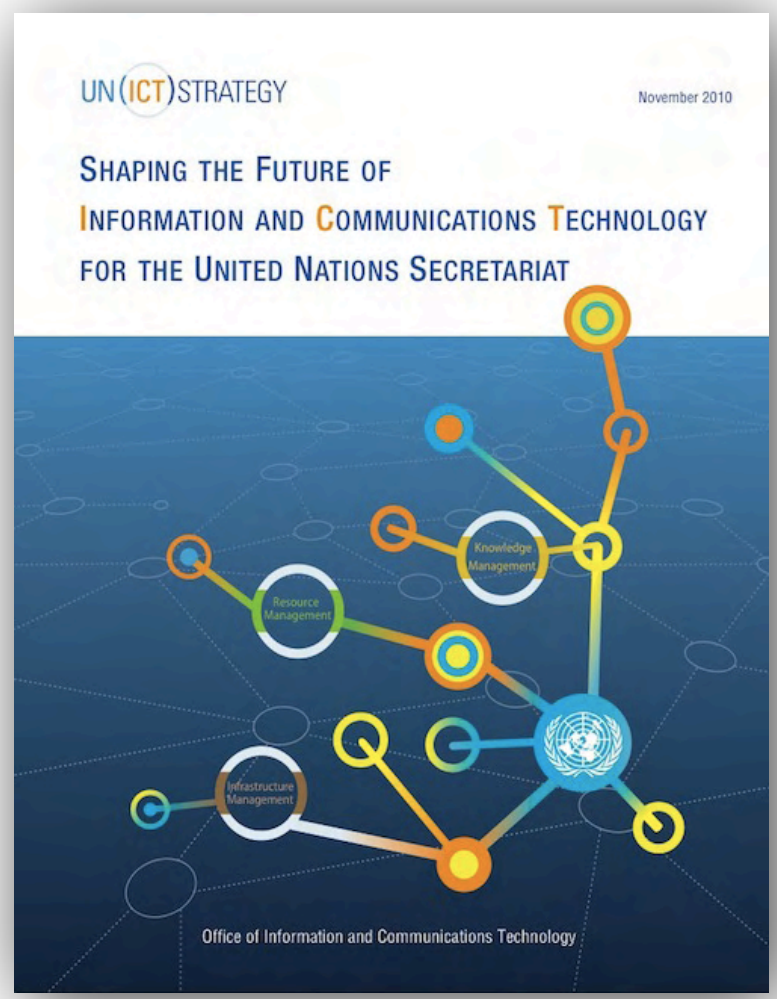
Leverage UN CiM strategy

Use the reach and power of UN system through UN CITO / OICT("Traditional")



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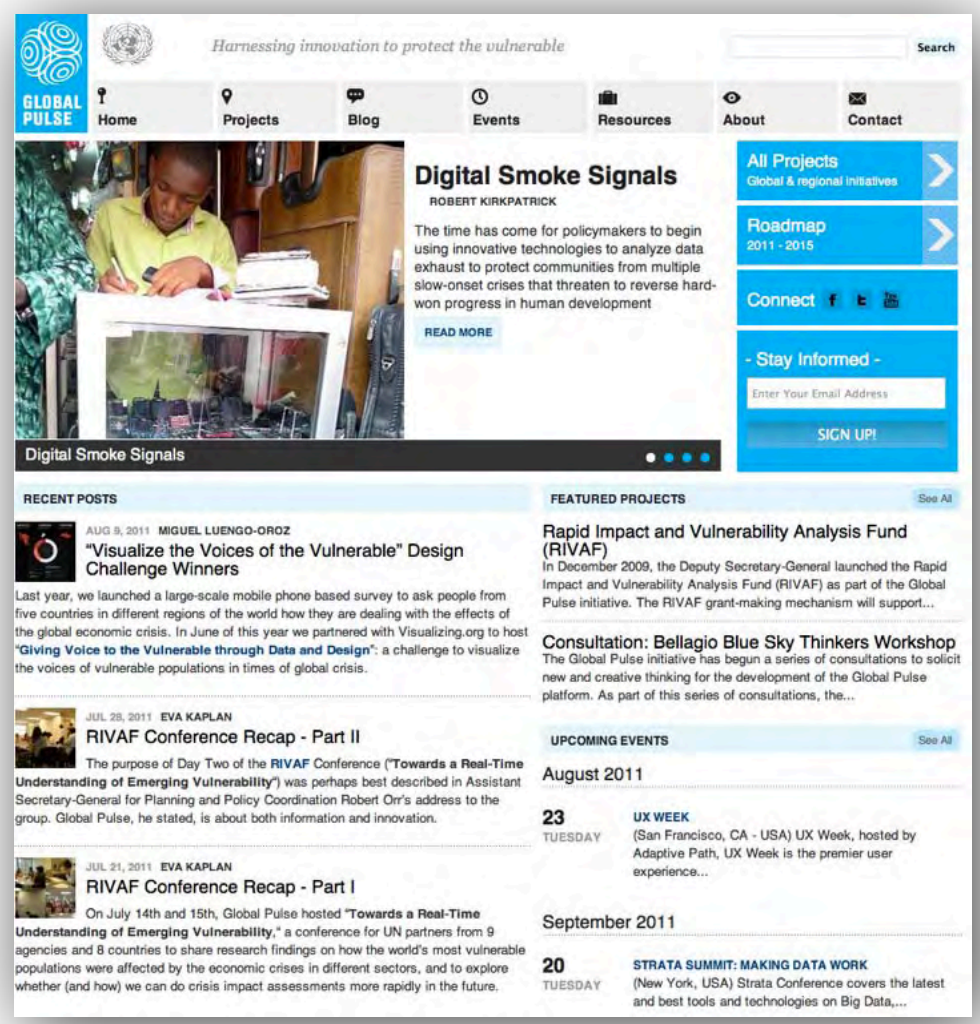
Leverage UN thought leadership

Use the reach and power of UN system ("Cutting edge / Technical")



ICT for peace foundation

thank you

Communicating for Strategic Effect

Bob Jensen
Acting Director, Office of External Affairs
Federal Emergency Management Agency, USA

National Defense University Senior Level Event
“Enhancing Information and Communication"
August 17, 2011 NDU, Washington DC

Today's Challenges

- 24/7 news cycle
- Shift in sources of information
- Explosion of new/social media
- Disaster/combat environment vs. normal life
- Viewing audience through American lens
- "UnStrategic" Communication
- Communication not seen as operational

FEMA Approach

- Communicating strategically
- External Affairs vs. Public Affairs
- Strategic media environment
- Tapestry of federal/state/local stories
- Proactive vs. reactive
- Changing the dialogue
- Press releases as secondary effort

Unified USG Messaging

- Organization from DC to the field
- Coordination/integration/synchronization
- One message/many voices
- Creating the USG story
- Supporting influencers / embedding media
- Prepping the infosphere / use of technology

Lessons Learned

- Ensure all key stakeholders informed
- Integration of efforts reduces blowback
- Proactive efforts win-win for us/media
- “Showing” the “Doing”
- Loudest message
- Use of technology as force multiplier
- Have a backup plan when technology fails

Lessons Learned

- Partner with key stakeholder groups
- Focus on special populations before event
- Comm technology is mission essential
- Leveraging expertise from all agencies
- Reaching all levels of audiences
- Imagery, timeliness and proactive outreach
- Training/prof development, often overlooked

Questions?

ISAF Telecom Advisory Team
Overview and Initiatives

Aug, 2011

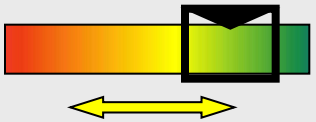
Larry Klooster
Senior Telecom Advisor
lawrence.klooster@afghan.swa.army.mil

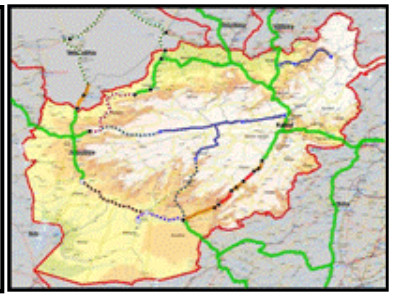
ICT Strategy & Scorecard for GIRoA

Terrestrial ICT Backbone

Terrestrial Wideband Links with Redundant Paths
Robust Internet Backbone
Development of Central Asian ICT Hub
Work has Slowed on Fiber Ring (Security)
Price of Internet Dropping

Rating

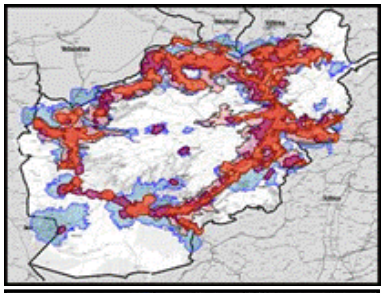




Wireless Cell Coverage

Restore 24 x 7 Cell Coverage
Primary Connectivity to Users Will be Wireless
Shutdowns More Frequent, Complex, and Destructive
Announced 3G Enhanced Services Licenses

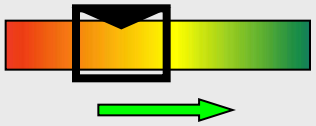
Rating

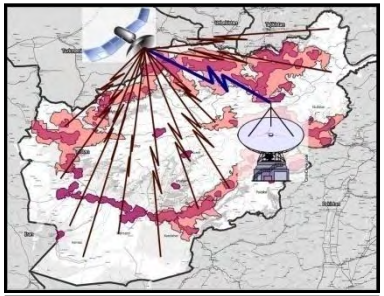


ICT to Support Extension of Legitimate Governance & Stability Ops

Extend Connectivity to Government- Kabul & Provinces
Privatization of AFTEL
Extend Wireless Services to Rural Areas
Extending Kabul City Fiber Connections to Institutions

Rating

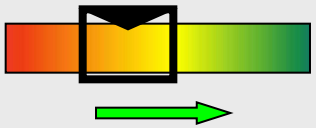




ICT to Support Socio-Economic Growth & Capacity Development

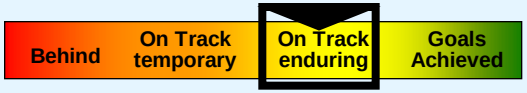
Increase Technical Capacity of ICT Personnel
Increase Ministerial Functional Capacity
Fostering/Promoting ICT Business Incubators
Facilitating Public-Private-Partnership

Rating



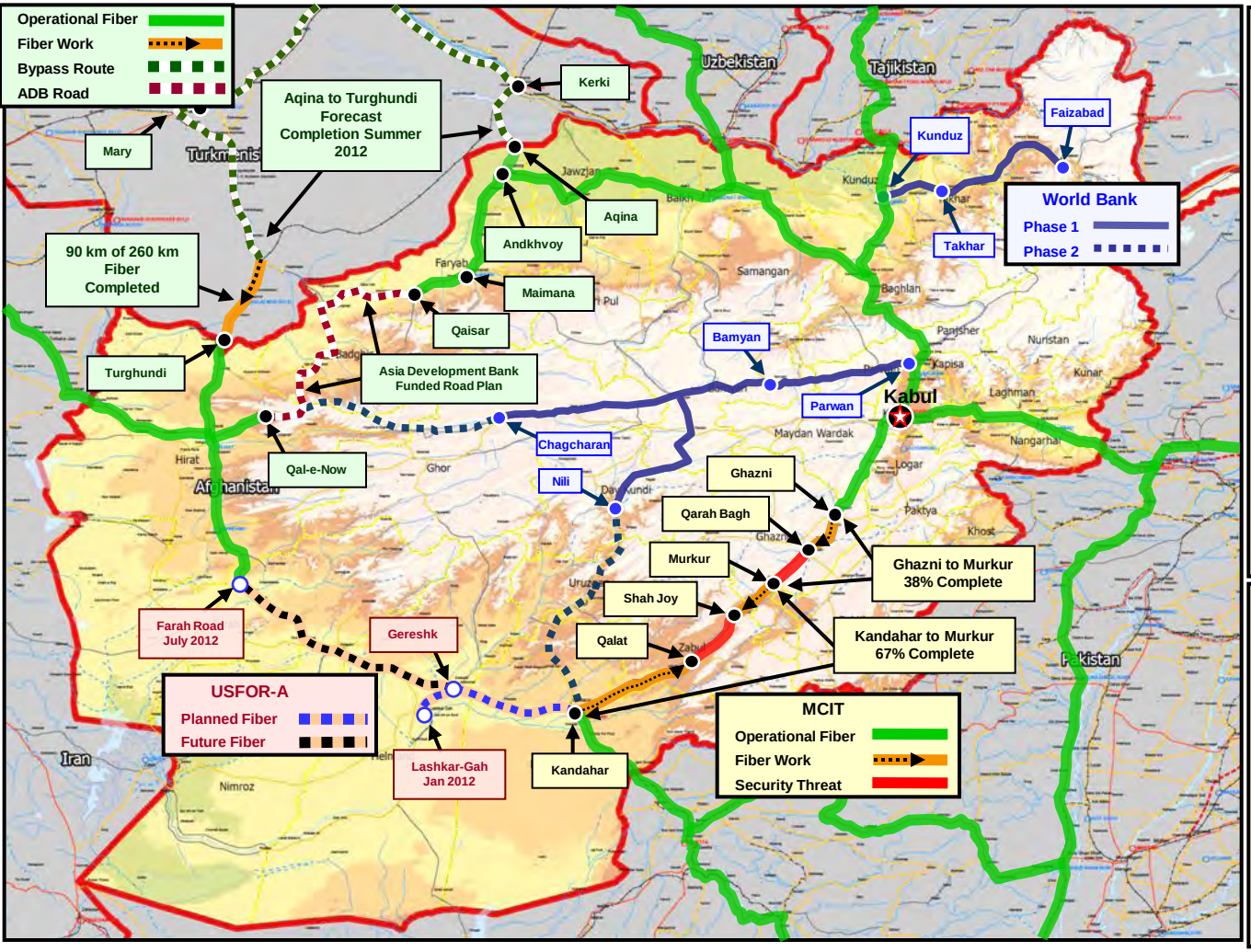
Legend for Slider Bars

Trend: = Change
Trend: = No Movement
Trend: = Negative Movement
Trend: = Positive Movement



Terrestrial ICT Backbone

Completion of Fiber Ring Funded



Strategy:

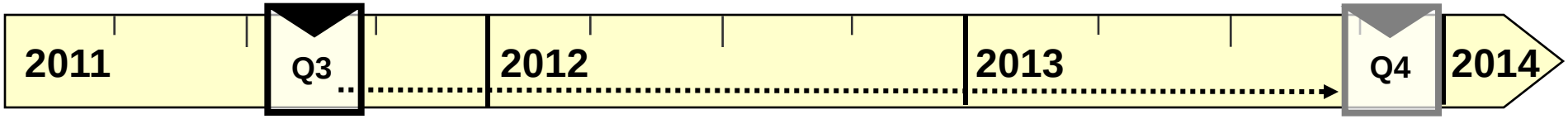
To Facilitate, Coordinate & Synchronize Programs from all Sources to Build Robust Broadband Terrestrial Networks, Extend Legitimate Governance and Support Tangible Socio-Economic Development

Establish Conditions to Enable 3G/4G Services and Broadband Internet Access. Components:

- Ring Road Expansion & Spurs
- International Gateway Access
- Center of Afghanistan Route
- National Internet Exchange

Status:

- Completion of Ring Funded- GIRoA, World Bank and USFOR-A
- World Bank Phase-1 Fiber Project will Finish by 2014 Transition
- World Bank to Coordinate with MCIT & MoPW to Plan and Fund Phase-2 Coincident with Road Construction



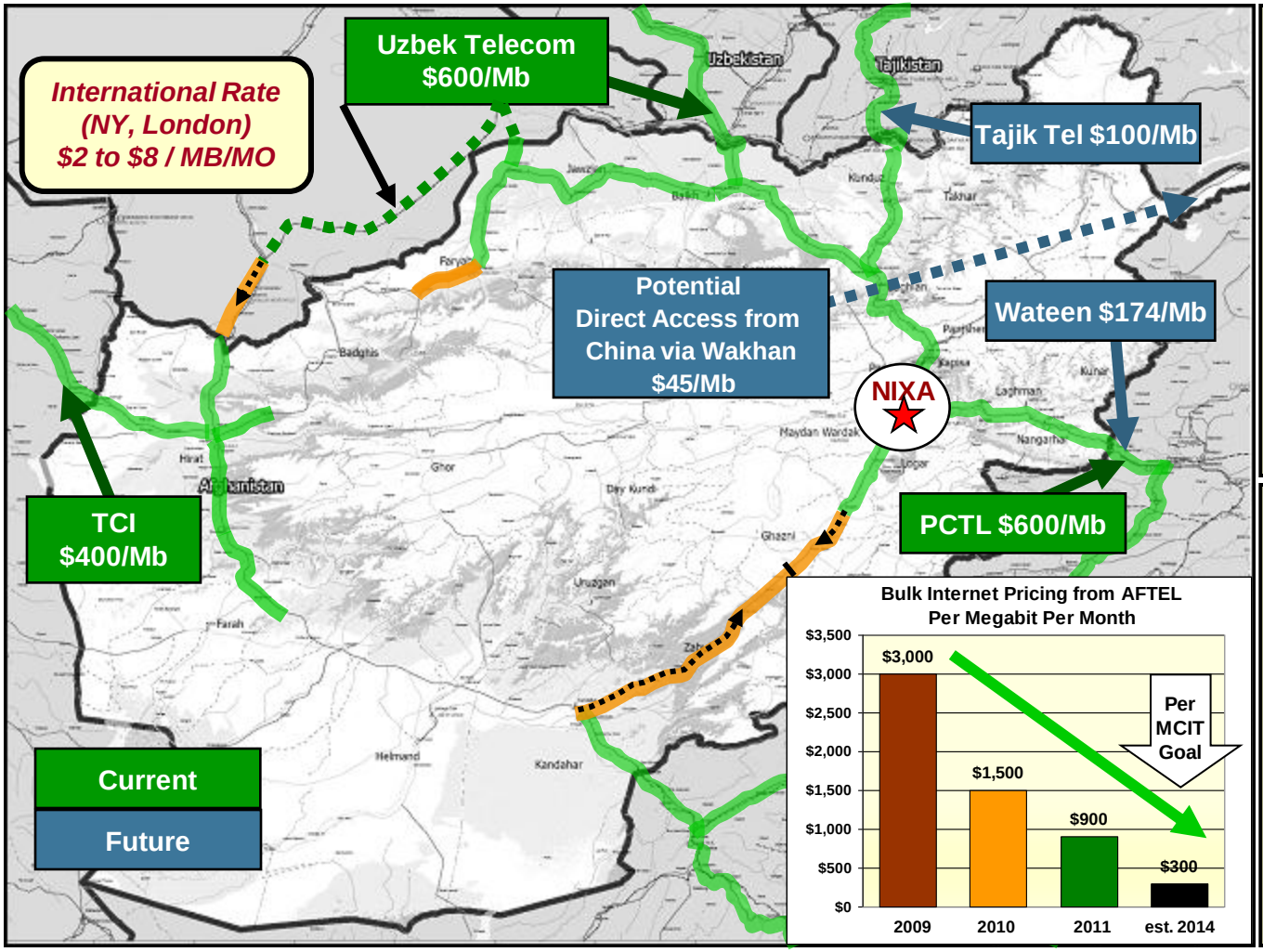
Terrestrial ICT Backbone

Expand Affordable Internet Connectivity

Goal-Increase Internet Penetration 20%+ by 2014

10% growth in Internet penetration equates to 1.34% growth in GDP*

**World Bank*

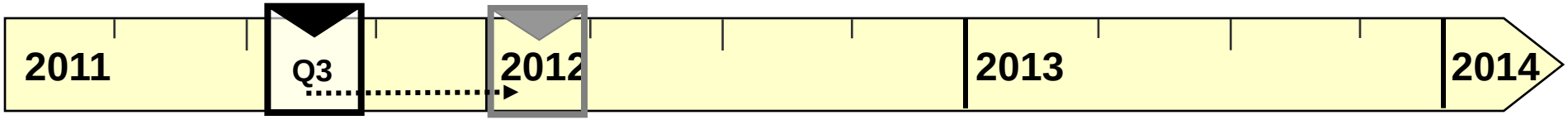


Strategy:

- Reduce Wholesale Cost of Internet
- Increase Access to Populace
  - -Fiber: Expansion
  - -Wireless: 3G & 4G
- Increased Utilization/Effect:
  - •Government = Efficiency and Transparency
  - •Business= Accelerated Growth
  - •Education = Access to Global Knowledge

Status:

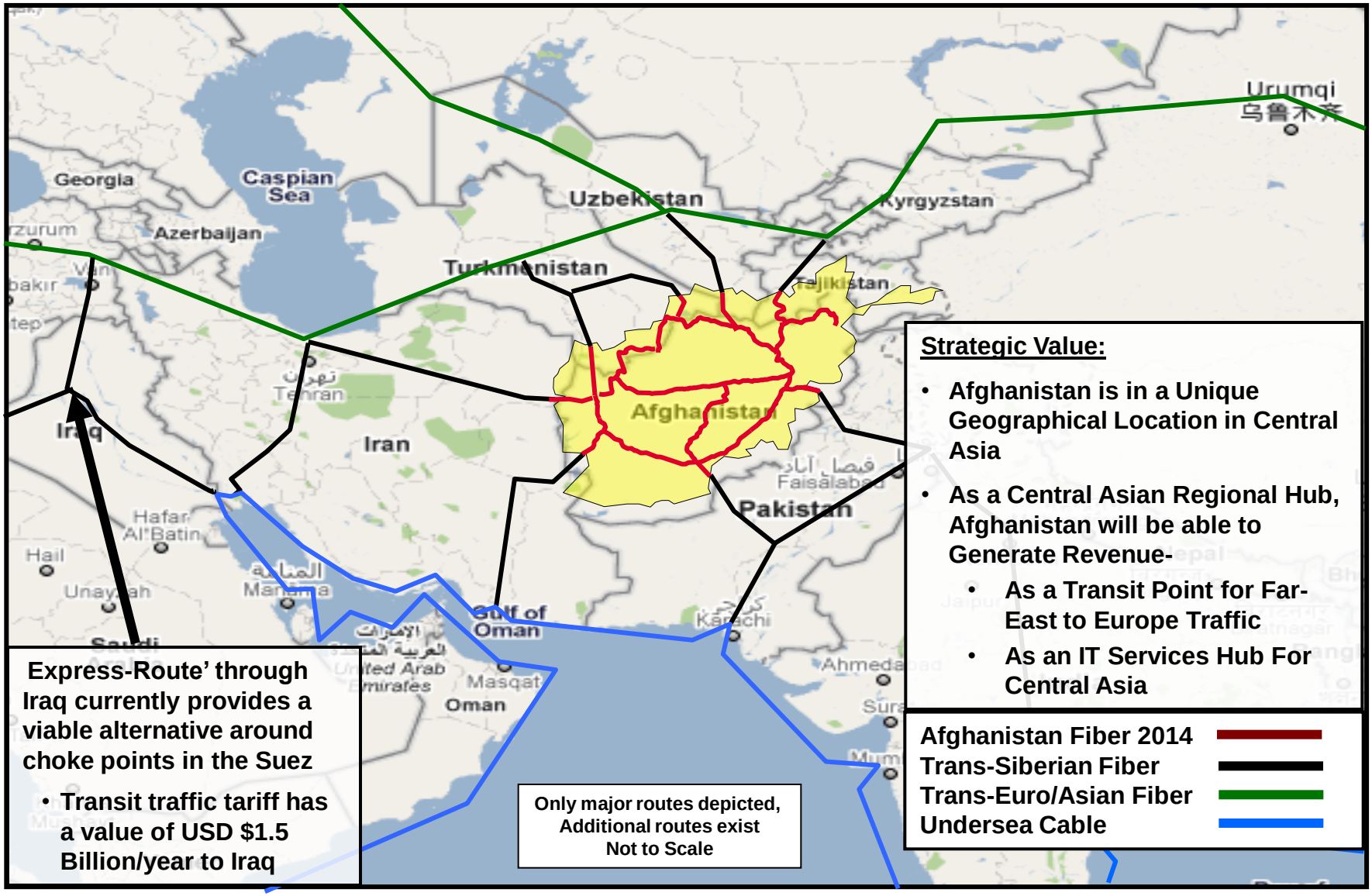
- Costs have been Reduced as Result of Competition- $3000 to $900/Mb ('09 to'11)
- Reducing Need for Traffic to Exit Afghanistan, via:
  - Internet Exchange (NIXA)
  - Introduction of Net Services. i.e., Google, Wiki, Content Caching
- Sept 2011-Initial IXP Capability



Terrestrial
ICT
Backbone

ICT End-State

Afghanistan: Central Asian ICT Hub

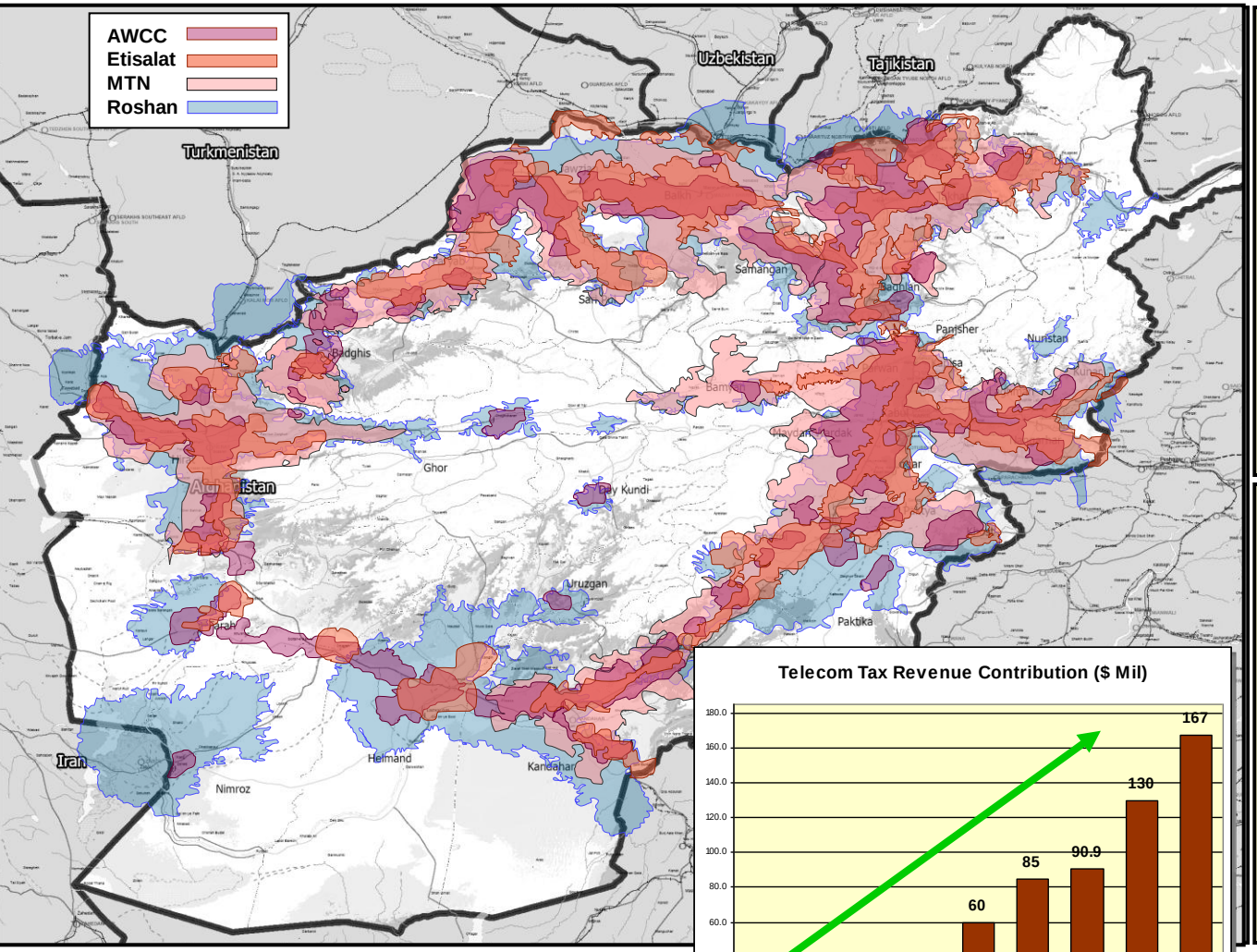


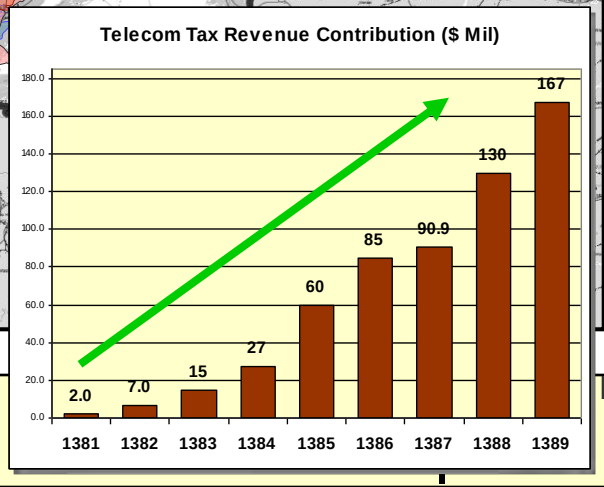
A Central Asian ICT Hub is Key to a Modern-Day ICT Silk Highway

Wireless
Cell
Coverage

Cellular Industry Background

Major Effort Restoring 24x7 Cellular Coverage





Strategy:

- Provide the Environment to Allow the Cellular Sector to Continue Growth
- Restore 24x7 Operations
  - Strategy: Security, protected systems insurgents cannot impact, Competition.
  - Programs: ECCS, CFSOCC, ANSF & AFTEL Initiatives
- Extend Service to Rural areas
- Leverage as a Cross-Sector Enabler
- Facilitate Migration to 3G/4G

Status:

- Five National Cell Companies
  - AFTEL (State-Owned)
  - AWCC, Roshan (arrived first)
  - MTN, Etisalat (Multi-national)
- 16.2 Million Subscribers Covering >80% of the population
- $167 Mil to Tax Revenue (1389)
- Fastest Growing Legitimate Industry <100K in 2003 to 16.2M users in 2011
- Trend-more shut downs, more destructive reprisals

2011 | **2012** | **2014**

ICT Socio-Economic Development

Strategy – Increase Socio-Economic Development Through. . .

Programs for Economic Growth

USAID
Mobile Money
Micro-Finance
and Payments

TFBSO
Information
Technology
Incubator Program

World Bank
ICT Village
And Incubator

MCIT
ICT Village

Human Capacity Developing

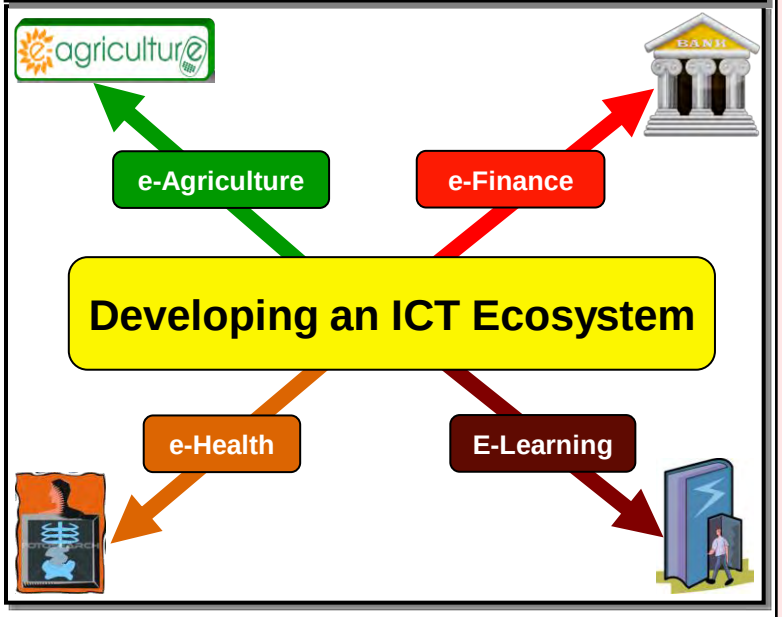
Universities
Herat, Kabul, ICTI,
American University
Of Afghanistan (AUAF)

AUAF
Prof Dev Institute,
CISCO, Microsoft certs
ICDL

Cisco-Academy
Certifications

EMB/ISAF/AID
Ministry CIO
Development,
USTTI and Others

ICT- Enabling Socio-Economic Growth



Private Sector Company Engagement

Cisco & Microsoft
Capacity
Development

Google
Web Caching
Web Search
Web Entry-point

Akamai
Content Distrib.,
Streaming Media

ESRI
Common GIS
Architecture

Professional & Organizational Development

ICT Collaboration Conferences

Mobile Money Institute

National ICT Alliance of Afghanistan (NICTA)

National ISP Association of Afghanistan (NISPA)

Core ICT Infrastructure

- National Fiber Optic Ring
- MCIT National Internet Exchange (NIXA)
- MCIT Kabul City Fiber Ministry Connect
- Wireless Cellular Infrastructure

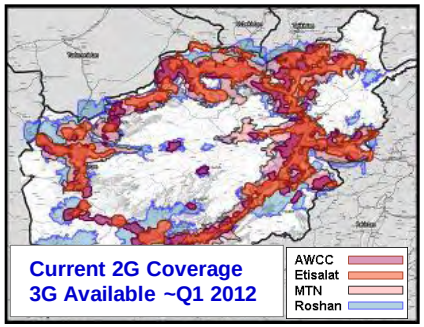
Synchronizing Participants- MCIT, TF-BSO, World Bank, ISAF, USEMB, USAID, ADB. . .

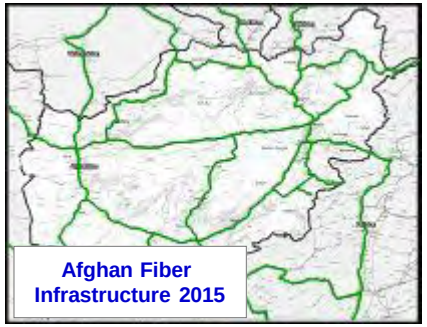
Socio-Economic Growth / Wireless Cell Coverage

Socio-Economic Development

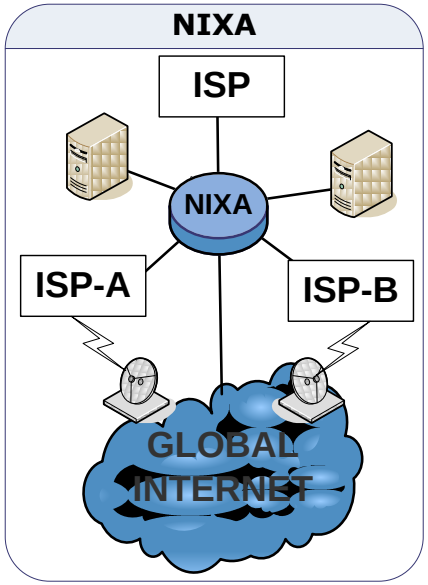
Growing the ICT Economic Sector

1 Access Infrastructure: *3G and Fiber*



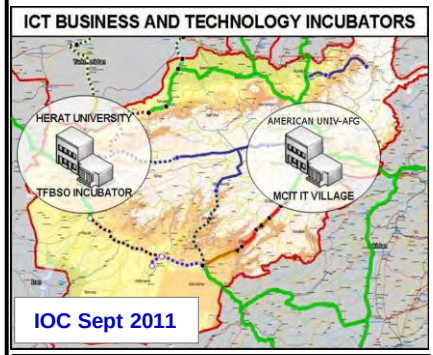


2 Internet Infrastructure: *National Internet Exchange of Afghanistan*



IOC September 2011 (3 ISP's)

3 Business Infrastructure: *Incubation, Capacity Development* 4



Strategy:

To Provide ICT Infrastructure and Services as a Basis for Growth Across all Economic Sectors:

- **Build ICT Business Infrastructure**
  - Internet Exchange (NIXA)
  - Enhanced User Access (3G)
  - Lower Cost, Higher Quality
- **Increase ICT Coverage & Penetration**
  - Enhanced Services (Mobile Broadband)
- **Foster ICT Business & Technology Incubation**
  - Application Development (E-Gov)
  - Employment Opportunity (Local Talent)

Status:

1 **Access Infrastructure**
- MCIT 3G Offering – Award 1 Dec 11

2 **Internet Infrastructure**
- Installation of Internet Exchange (Sept)
- Executing ISP Exchange Agreements
- Connecting ISP's to Exchange

3 **Business Infrastructure**
- Developing ICT Business Incubators (2)
- Opportunities for Mobile Applications

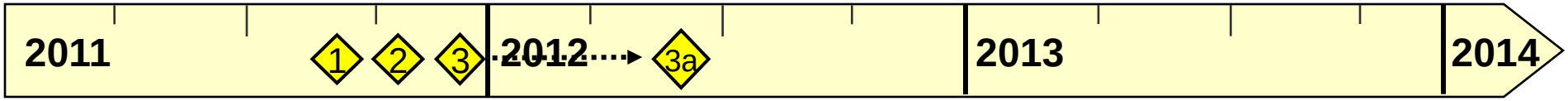
4 **Capacity Development (IT Training)**
- ICT Institute - 50/Yr
- AUAF - 60/Yr & Prof Dev Inst
- MCIT/WB - Target 1500 5/Yrs
- Herat University - 50/Yr

"Less than 4% of Afghans have Internet Access, However 55% of Afghans have Mobile Phones and 85% have Mobile Phone Access"

-MCIT

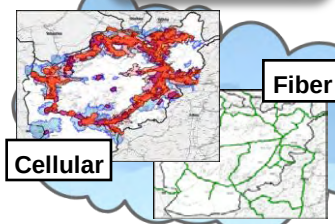
"For Every 10% Increase in Internet Penetration, there is a Corresponding 1.34% increase in Gross Domestic Product."

-World Bank



ICT Impact on Economic Growth

Access Infrastructure



- 3G Introduction/Rollout
- National Fiber Ring Completion
- Microwave Tower Build Out
- Satellite Nets (VCN Expansion)

Government Environment

- Policy
- Regulation
- Licensing
- Taxes

Business Environment

- Facilities- Power and Connectivity
- Angel and Institutional Investors
- Financing
- Channeled Opportunities

Status:

Access Infrastructure- On Track
- 3G Tender Released (1 AUG), Award (1 DEC), Rollout (Q1-2012)

Internet Infrastructure-
- 27 ISP Exchange Agreements (15 SEPT)
- Commission Internet Exchange (1 OCT)
- 3 ISP's Connecting to Internet Exchange (1 OCT)

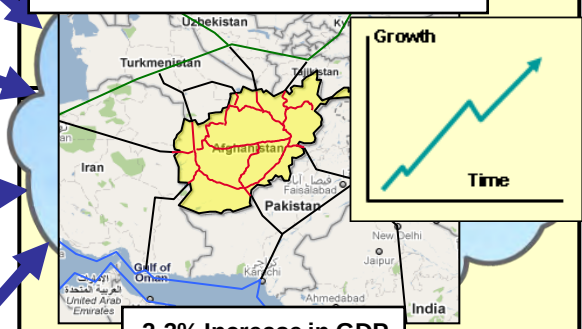
Business Environment-
- TFBSO/WB Collaboration on Herat Incubator
- TF-BSO Investor Conference (9 SEPT)

Government Environment-
- WB Funding- 4 Consultants to Assist MCIT
- TAT- Dedicated 1 Advisor to Mentor MCIT

Capacity Development (IT Training)-
- Stand up Cisco Academy (Q1-2012)

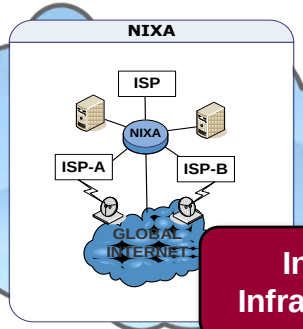
GDP Growth

20% Increase in Internet Penetration



2-3% Increase in GDP

Internet Infrastructure



- **Infrastructure**
  - Connectivity & Services
- **Interconnect Agreements**
  - Etisalat, Rana, New Dunia, AFTEL,
  - AfghanCyber, NetZone
- **Fiber to ISP's**
- **Enhanced Services**

Capacity Development

Cisco Academy

University Relationships

University Programs

- ICT Degree Program
- Professional Development Programs
- Focused Education
- Business Skill Development
- Technical/Vocational Training

2011 | 2012 | 2013 | 2014

Exchange Agreements

3G

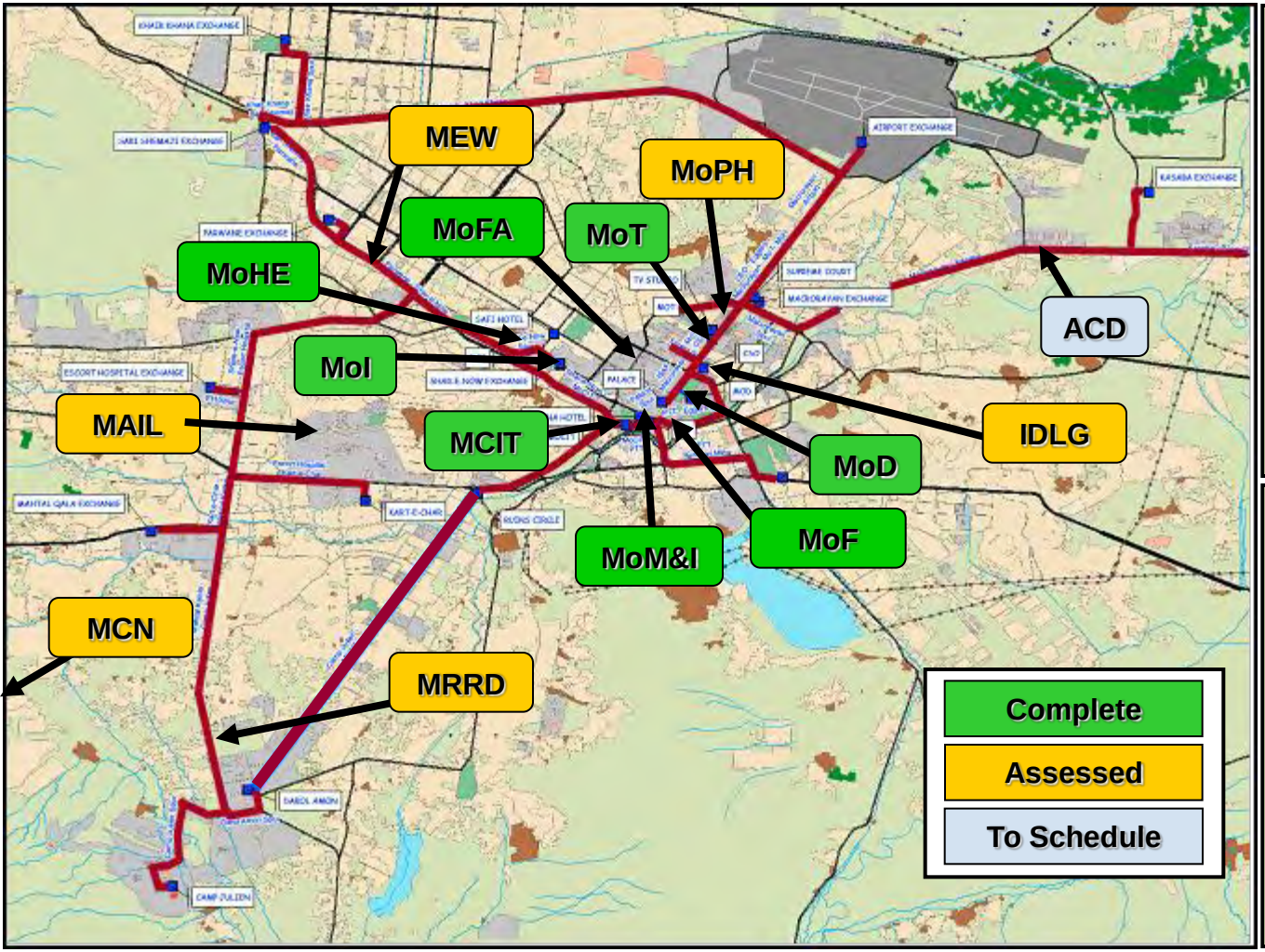
ICT Village

Back Up

Extend
Legitimate
Governance

Ministerial Connectivity

Kabul City Fiber Project



Strategy:

Provide Broadband Connectivity and Enhance the Infrastructural Capacity of each Ministry

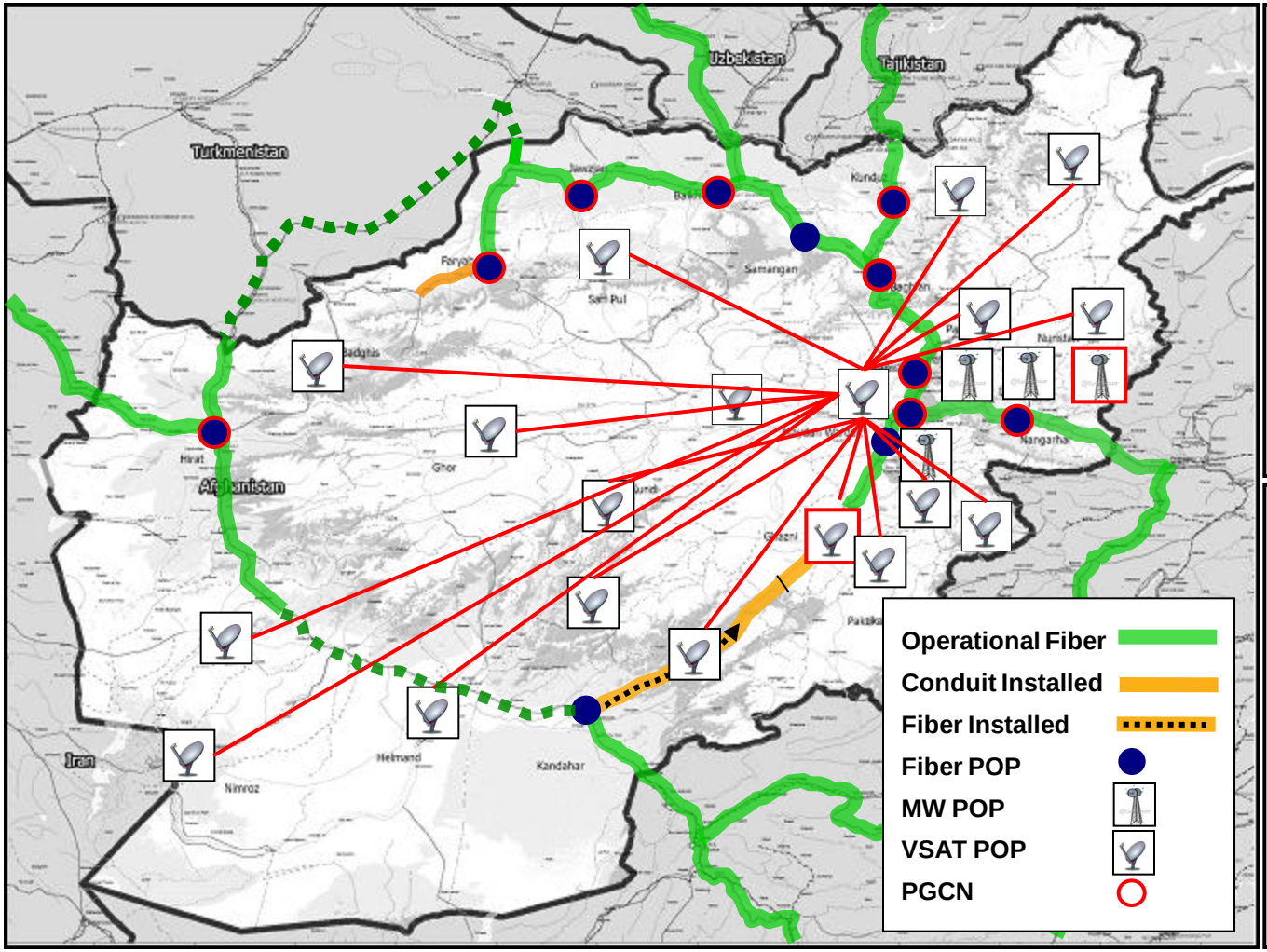
- **Start in Kabul, Expand to Provinces and Districts**
- **Bring Each Ministry to Common Standard for Connectivity and Capacity**
- **Ensure Sustainment Factors**

Status:

- **Assessing each Ministry & Institution (34 of 40)**
- **All Ministries Have Legacy Broadband (DSL/Fiber/WiMax)**
- **Prioritizing Ministries for Fiber Upgrade Based on:**
  - **Ministry Role**
  - **Proximity to Fiber**
  - **Existing Infrastructure**
  - **Capacity to Utilize**

2011 | **Q3** | **2012** | **2013** | **2014**

Provincial Government Connectivity



Strategy:

Provide Robust Connectivity to Provincial Governor and Government Offices

- Migrate Satellite Connectivity to Terrestrial
- Build Infrastructure to Support e-Afghanistan
- Private Sector Solution

Enable Environment for Improved Governance and e-Gov Services

Status:

34 Provincial Capitals have Backbone Connectivity:

- 12 OFC, 4 MW, 18 VSAT

Provincial Government Communications Network (PGCN)

- Connectivity to Government Center Offices (WiMax)
- Provides Voice, Data & VTC

Additional Communications Provided by Carriers & ISP's

2011	Q3	2012	2013	2014

24 x 7 Cellular Scorecard

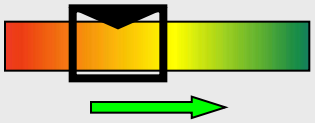
Expeditionary Cellular Services

IOC 5 May 2011; Currently 20 Sites but most with logistics problems affecting system reliability

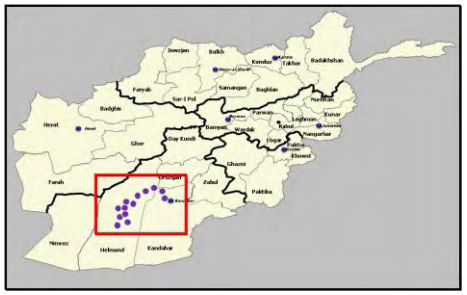
Initially Emergency Calling Only

FOC Delayed to end of July

Rating



Trend



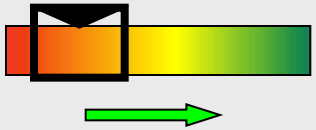
CFSOCC ALP/VSO Cellular Solution

Focus is Emergency Services

Program has been re-set to align with hybrid solution

2 sites, mid to late - Zabul Province

Rating



Trend

ANSF Cellular Services

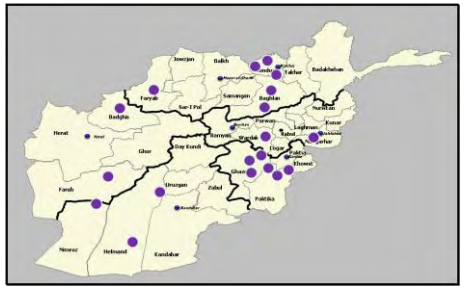
Focus is Emergency Services

Awaiting Oversight Decision at NTM-A on 25 July

Support to IJC OP OMID Effort

IOC: 7 Sites 1 Oct 2011 (schedule and funding at risk)

New Baseline



GIRoA / AFTEL GSM

FOCUS is Populace Services leveraging TDF Sites

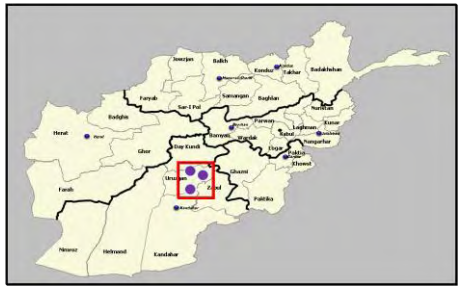
Awaiting GSM Switch Implementation at MCIT/AFTEL

Increase Capacity of Technical Personnel

Increase Ministerial Capacity

Rating

New Baseline



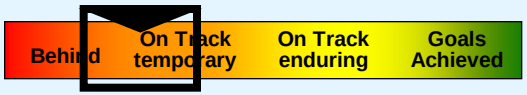
Legend for Slider Bars

Trend: New Task = New Baseline

Trend: = No Movement

Trend: = Negative Movement

Trend: = Positive Movement



ICT SUPPORT TO CRISIS OPS

Bosnia, Kosovo

UN and ITU Elements

Iraq

Afghanistan

Haiti

Myanmar

Larry Wentz

Senior Research Fellow

CTNSP, NDU

wentzl@ndu.edu, lwentz@verizon.net

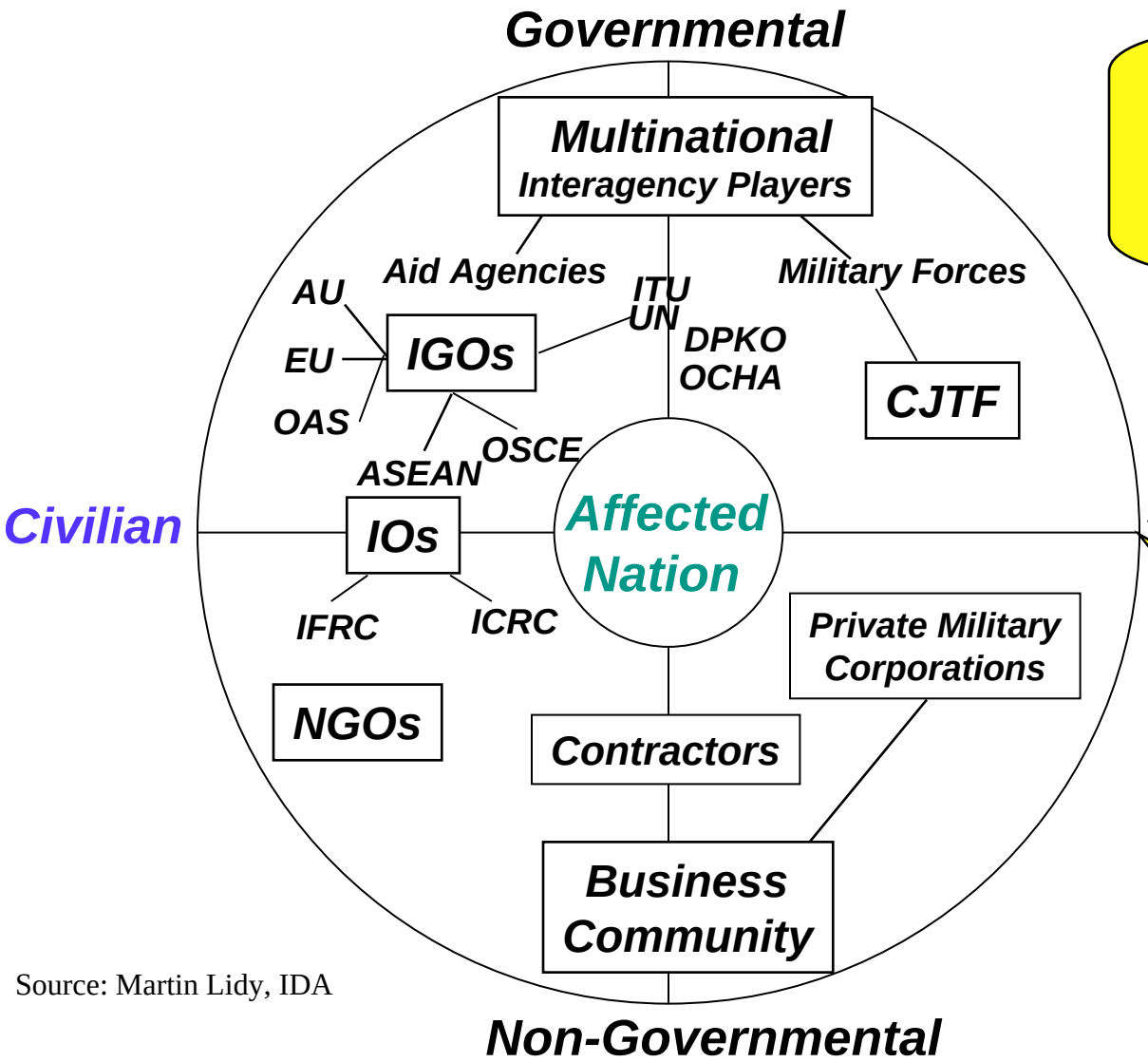
Information Communications Technology Needs to be <u>Viewed</u> and <u>Treated</u> as

“Essential Service”

“Critical Infrastructure”

“The Engine” of Socio-Economic Growth

Likely Global Partners During HA/DR and Stability Ops



Source: Martin Lidy, IDA

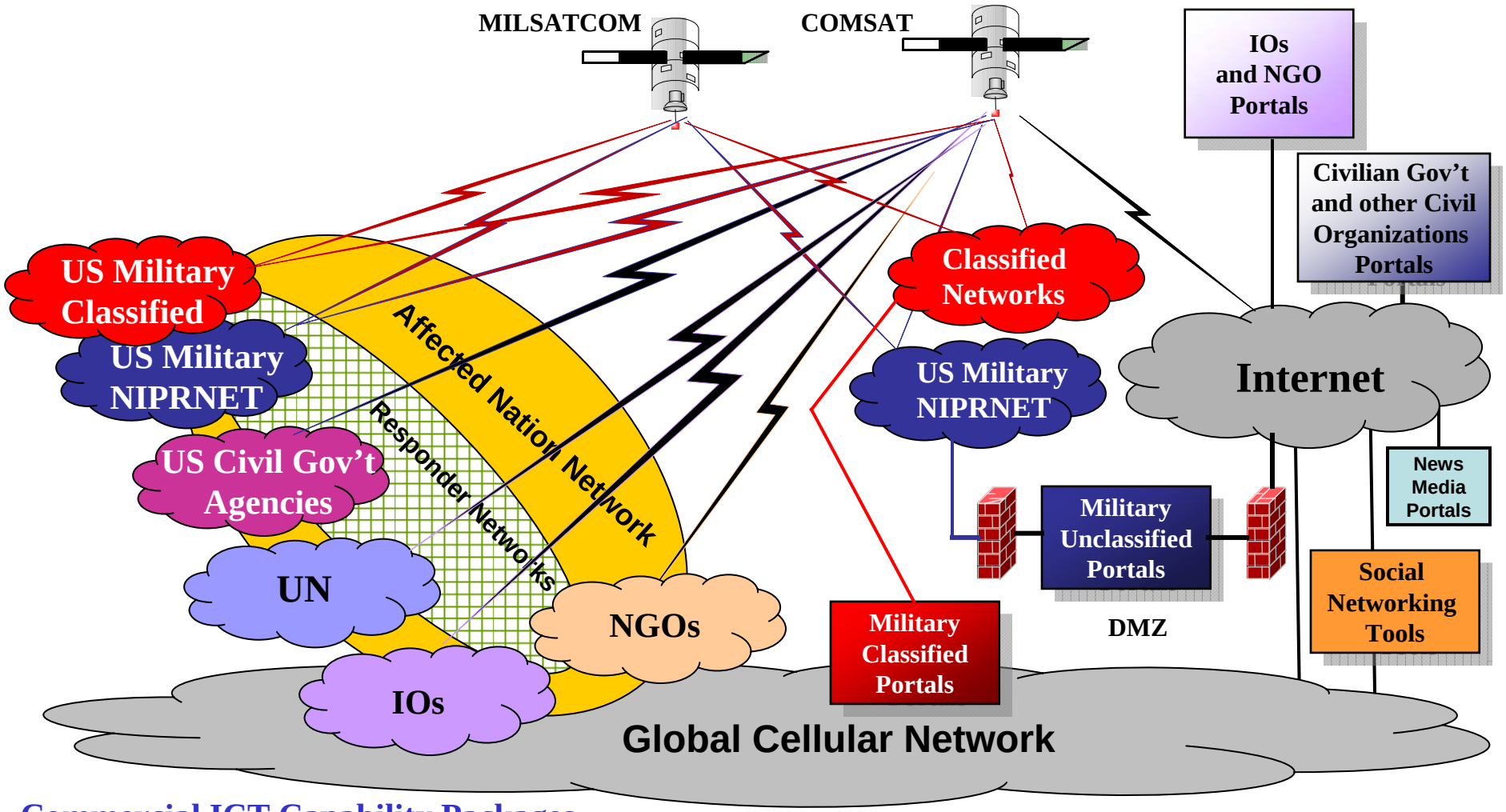
(1) Partners have different responsibilities, authorities, and capabilities and expectations and agendas

(2) Roles of Partners vary

- ***Based on cause and urgency of operation***
- ***Over time as conditions change***

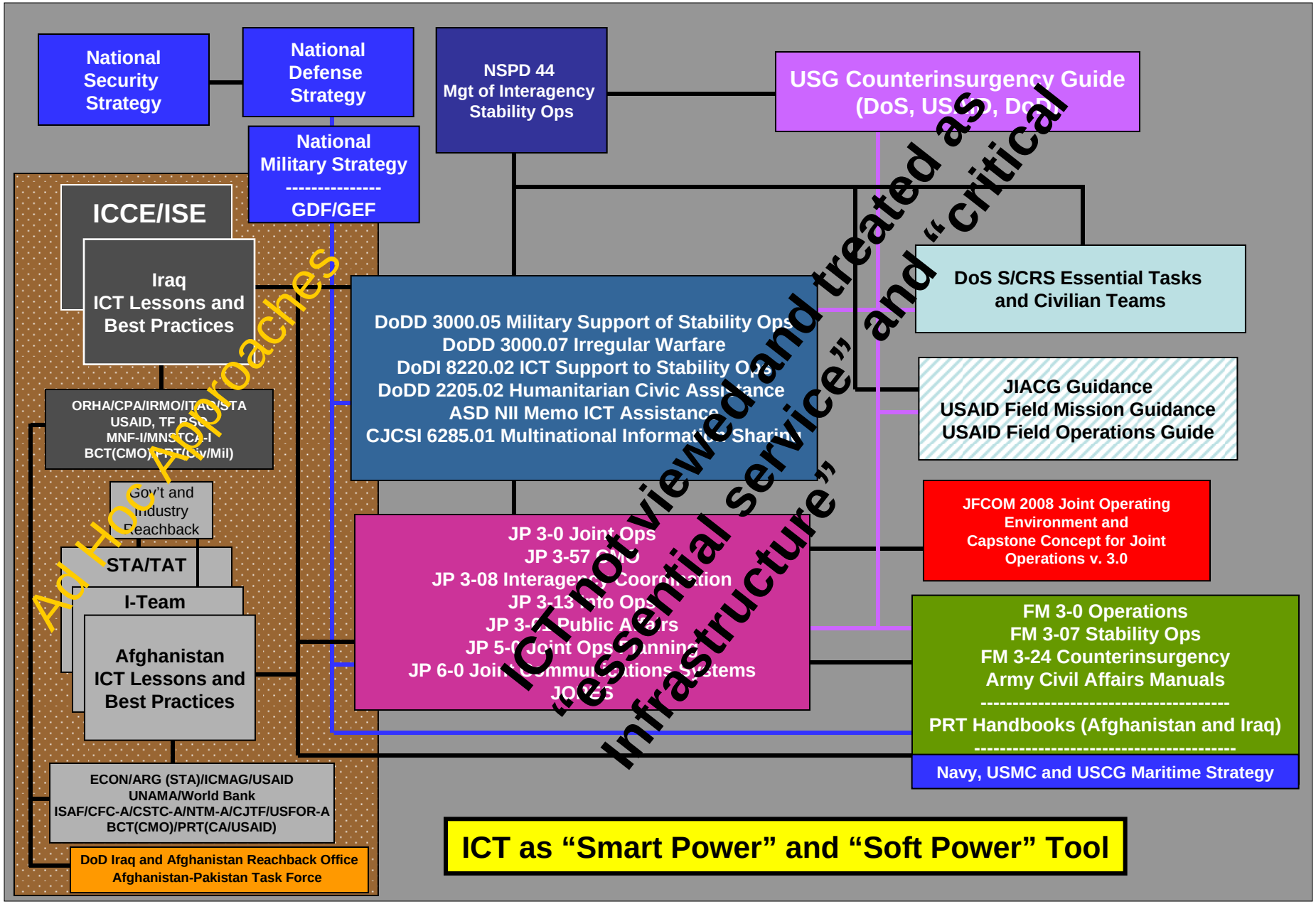
Default Civil-Military HA/DR ICT Baseline

Internet and portals, wikis and Web 2.0 and social networking tools are the "default" civil-military collaborative information environment and commercial SATCOM, satphones, BGAN, VSAT, wifi, wimax, cell phones/SMS,GPS, and radios (HF/VHF/UHF) the primary means of access and local/regional/international communications



Commercial ICT Capability Packages

Stability and Reconstruction Ops: Policy and Doctrine

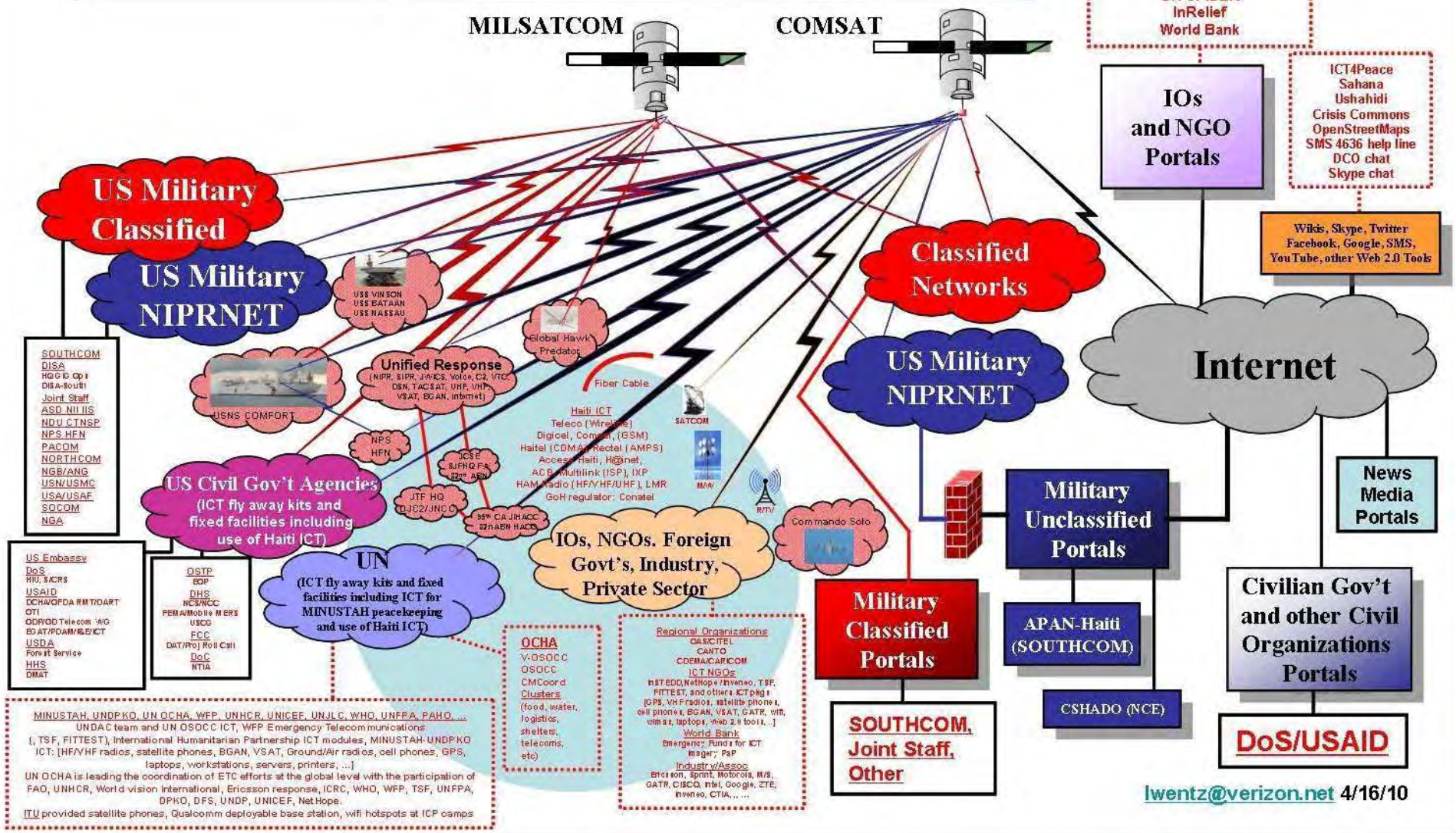


Observations

- Lack shared understanding of participants roles, responsibilities and capabilities (Gov’ts, Military, IOs (UN, ITU, ..), NGOs,.. Affected Nation)
- Ad-hoc and reactive USG and International ICT response actions
- ICT responses stove-piped and organization and people culture driven
- Lack agreed ICT vision, strategy, and plan
- No USG lead agency for ICT
- Lack ICT “thought leadership” and “strategic thinking”
- No institutionalized arrangement to meet needs of ICT support for HA/DR and Stability and Reconstruction Ops

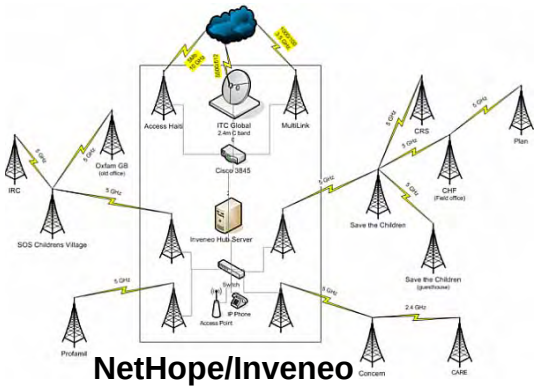
Civil-Military Haiti ICT Support Snapshot (working draft v1.12)

Internet and portals, wikis and Web 2.0 and social networking tools are the "default" civil-military collaborative information environment and commercial SATCOM, satphones, BGAN, VSAT, wifi, wimax, cell phones/SMS,GPS, and radios (HF/VHF/UHF) the primary means of access and local/regional/international communications



lwentz@verizon.net 4/16/10

Haiti: Information Communications Technology (ICT) Observations



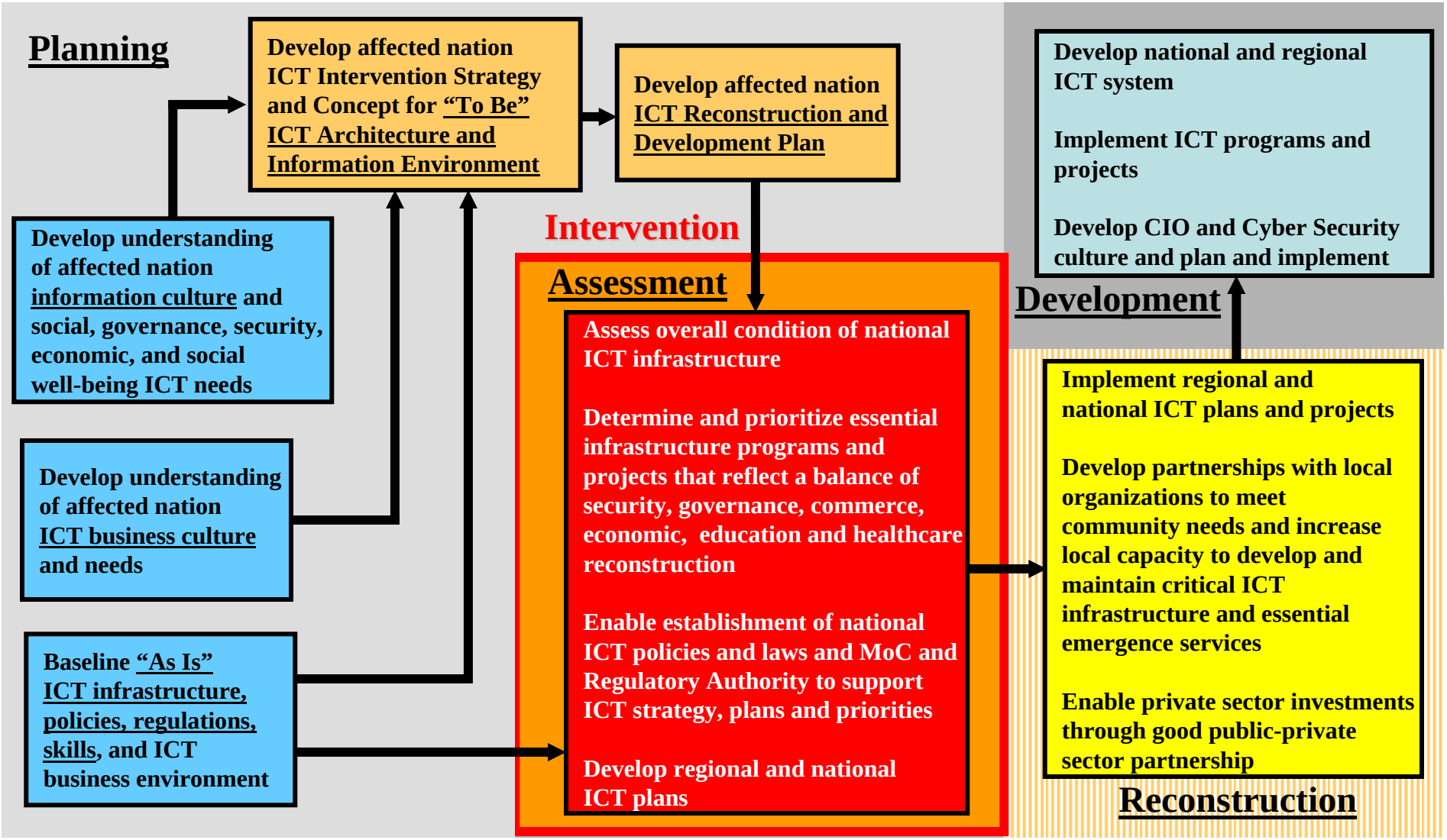
NetHope/Inveneo

- Civil-military collaboration, coordination and information sharing better than observed in past responses
- Non-Traditional and Ad Hoc approaches added value—**Regional telecom associations (OAS/CITEL) and US organizations (FCC, DHS)**, response management teams, coordination centers, open information sharing portals, imagery sharing
- International community response to help recover telecom sector and civilian social networking support unprecedented

But…….

- **ICT** not treated as an "**essential service**" and "**critical infrastructure**"
- Lack agreed **International response** (and supporting USG) strategy, plan, architecture and processes for ICT
- ICT implementation stove-piped and organization and people culture driven
- Lack understanding of responder and affected nation information culture and ICT business culture and governance
- No broad assessment of responder ICT needs and needs of other sectors such as healthcare
- No visible thought leader focused on uses of ICT as an enabler of cross-sector recovery and reconstruction
- Implementing new technologies during a disaster can be problematic
- Responders overwhelmed by the volume of information available

Stability Ops and Reconstruction: ICT Business Model Example

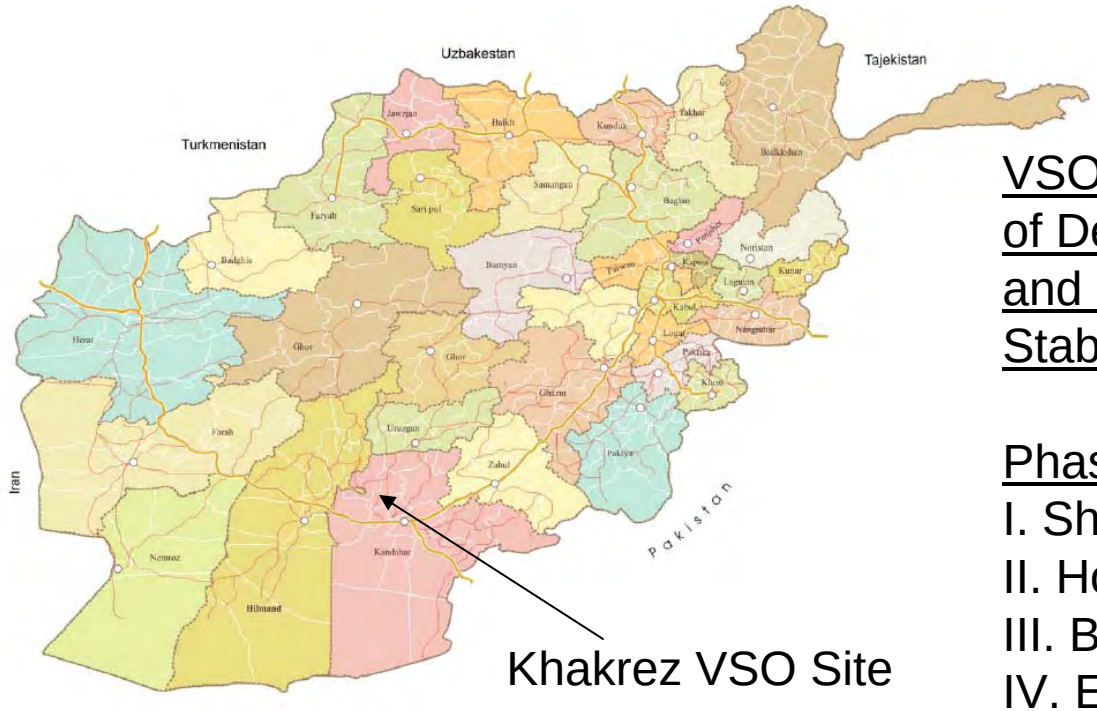


Examples Ad Hoc Approaches

- US Embassy Senior Telecom Advisors (Iraq, Afghanistan)
- Afghan Reconstruction Group, Iraq Reconstruction Management Office, …
- Iraq: Iraq Communications Coordination Element and Infostructure and Strategic Engagement
- Afghanistan: I-Team, ISAF Senior Telecom Advisor and Telecom Advisory Team

Village Stability Ops

Bottom-up Counterinsurgency



<u>VSO: An Integrated System of Development, Governance, and Security to Establish Stability</u>

<u>Phases</u>

I. Shape
II. Hold
III. Build
IV. Expand and Transition

<u>JADE-A</u>

Provide greater information sharing between the Government of the Islamic Republic of Afghanistan (GIRoA), Afghan National Security Forces (ANSF), International Security Assistance Force (ISAF), the Afghan people, and other Mission partners in support of Security and Stability Operations. Serve as a means for information exchange between underserved rural and urban areas and the rest of the nation. The common Information exchange medium is the Internet.

JADE-A
AWCC
Khakrez VSO Site
Kohsan
Zinda Jan
Hirat
Injil
Kushki Kuhna
Qadis
Jawand
BADGHIS
Chaghcharan
Chishti Sharif
Karukh
Obe
Tulak
Farsi
Lal Wa Sarjangal
Yakawlang
Bamyan
Panjab
CENTRAL HIGHLAND REGION
Markazi Bihsud
Waras
BAMYAN
Day Kundi
Kijran
URUZGAN
Shahidi Hassas
Musa Qala
Dihrawud
Tirin Kot
Kajaki
Nesh
Ghorak
Shah Wali Kot
Mizan
Qalat
ZABUL
Shahjoy
Nawa
Naw Zad
Sangin
Khakrez
Nahri Sarraj
Maywand
Arghandab
Kandahar
Daman
Lashkar Gah
Panjwayi
KANDAHAR
Spin Boldak
Shorabak
Reg
Qala-I-Kah
Anar Dara
Dishu

Khakrez JADE-A

District Governor

National Director Security

<u>Challenges</u>
Power
Sustainment
Language
Illiteracy
Security
Transportation
Training
Logistics support
Test before deployment

ANP

Doctor

ANA

SUNDIAL
2261
0213610

Way Ahead

- Designate and incorporate into USG policy or equivalent

INFORMATION COMMUNICATIONS TECHNOLOGY
to be
Viewed and Treated as an
"<u>Essential Service</u>" and
"<u>Critical Infrastructure</u>"

- Establish a USG framework for International crisis response ICT vision, strategy, business process and plan and designate agency lead and support roles

- Institutionalize arrangement to provide civilian led senior leadership and capabilities to focus on public/private ICT sector recovery and use of ICT as a cross-sector enabler of socio-economic development and capacity development
  - Senior Civilian (SES or equivalent) led
  - Interagency, IO, NGO, and host country focused
  - Clear USG focal point for ICT "thought leadership" and "strategic thinking"

- For Stability Ops, build on lessons from the **ISAF Senior Telecom Advisor and Telecom Advisory Team** experience in Afghanistan