



# **HAITI UPDATE**

## **FEDERAL COMMUNICATIONS COMMISSION OPEN MEETING**

### **International Bureau and Public Safety and Homeland Security Bureau**

**February 18, 2010**





# SNAPSHOT

- 7.0 Earthquake at 4:53 PM, Tuesday, January 12
- 230,000 deaths and over 700,000 displaced; 511,400 people have left earthquake-affected areas in and around metropolitan (would have been more catastrophic if it had occurred during business hours)
- Destruction of entire neighborhoods
- Infrastructure was under-developed before the earthquake and many sectors were devastated in the aftermath
- Immediately after earthquake only one communications network was operational and it went dead from lack of fuel after about 15 hours





# FCC ACTIVITIES

- Staff from IB and PSHSB immediately involved in rescue and recovery efforts
- FCC first agency to contact Conatel and begin to provide assistance
- Daily work with the USAID “Haiti Telecommunications Task Force” (OSTP, State, DoD, Southcom, NCS, NTIA, etc.)
- Coordination with CITELE, the ITU and NGOs
- Identification of needs and possible resources to meet those needs (e.g., broadcasters)
- Technical analysis and expertise
- Regular reports and updates on Haiti telecom sector
- FCC In-Country Teams
  - Conducted Project Roll Call
  - Assessment of telecom sector





**FCC Roll Call Team  
Accomplishments  
In Haiti  
January 18 – 31, 2010**



# PROJECT ROLL CALL



- Developed in aftermath of Hurricane Katrina
- Identifies wireless communications systems operational status prior to or following major disasters
- Provides reports for:
  - Public Safety Land Mobile Radio (LMR)
  - State and Local Government emergency command and control
  - Commercial Wireless (cellular)
  - Broadcast
- Reports assist in organizing and targeting Federal emergency communications response







# OBJECTIVES



- Support FEMA's Mobile Emergency Response Support (MERS) Team and Urban Search and Rescue efforts
- Provide spectrum monitoring support and interference resolution to FEMA, US Southern Command, and Conatel
- Provide operational and logistical support to the FCC Assessment Team



# DEPLOYMENT



<b>January 16</b>	<b>Deployed to Homestead Air Reserve Base</b>
<b>January 18</b>	<b>Arrived in Haiti</b>
<b>January 18-27</b>	<b>Conducted Roll Call Activities</b>
<b>January 28</b>	<b>Departed Haiti via Santo Domingo, Dom Rep</b>
<b>January 31</b>	<b>Arrived safely home</b>



## Roll Call Team

- Juan Silva (PSHSB)
- Richard Lee (PSHSB)
- Joe Husnay (EB Norfolk)



# ACCOMPLISHMENTS



- Provided spectrum monitoring and interference resolution for FEMA MERS and U.S. Search and Rescue teams
- Provided RF spectrum scans, lists of active/inactive LMR frequencies, and cellular coverage maps for Conatel
- Established initial contact with Conatel Director General
- Assisted the Director General in FCC/USAID teleconferences
- Provided liaison between Director General to Ambassador Locke's USAID infrastructure restoration team
- Provided operational support for FCC Assessment team.







# ANSWERING THE CALL





# HAITI COMMUNICATIONS SECTOR ASSESSMENT TEAM

- Immediate response to request by Conatel's DG in coordination with USAID.
- Assessment team was deployed January 25-31, 2010.
- U.S. Team – 6 members, included two private sector experts – plus 3 Roll Call team members.
- Mission: evaluate status of Haiti's communications infrastructure and services.





# COMMUNICATIONS ASSESSMENT TEAM -- ACTIONS

- Met with over 25 individuals in communications sector
  - Government of Haiti: Conatel, Haitian National Police, Ministry of Public Works, Transport and Communications
  - Communications providers (e.g., wireless, wireline, ISPs, broadcasting)
  - NGOs (e.g., Inveneo)
  - USAID representatives
- Toured damaged facilities and inspected equipment





# COMMUNICATIONS ASSESSMENT TEAM -- MEMBERS

- Mindel De La Torre (IB)
- Bill Lane (PSHSB)
- Bob Nelson (IB)
- Salomon Satche (OET)
- Richard Lee (PSHSB)
- Juan Silva (PSHSB)
- Joe Husnay (EB)
- Mike Castillo (AT&T)
- Curt Machado (Verizon)







# ASSESSMENT TEAM KEY FINDINGS

## OVERVIEW

*Many communications systems are operational; some destroyed; most providers still have challenges such as personnel (dead, injured, homeless), and damaged facilities and equipment.*







# ASSESSMENT TEAM KEY FINDINGS



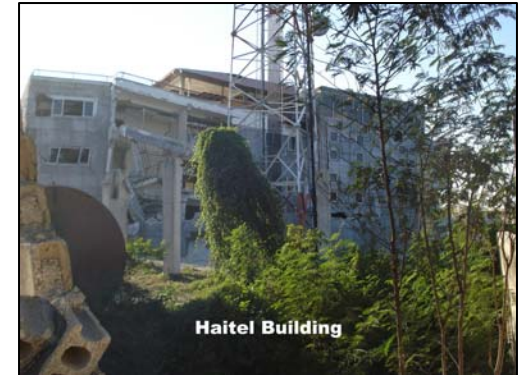
## Wireline

- **Pre-earthquake:** State-owned monopoly Teleco; in 2009 -- 108,000 telephone lines (per ITU); government of Haiti and businesses were primary users. Viettel offer to purchase pending.
- **Post-earthquake:** Total loss of access capability to wireline infrastructure as a result of destruction of Teleco HQ and other facilities.





# ASSESSMENT TEAM KEY FINDINGS



## Wireless

- **Pre-earthquake:** 3 major providers: Comcel/Voilà, Digicel and Haitel; 2,500,000 cell phones were active in Haiti; 3 out of 10 Haitians had a cell phone.
- **Post-earthquake:**
  - Substantial re-building efforts by the companies since the earthquake
  - Now, nearly 100% to pre-earthquake levels – new equipment has replaced destroyed sites.
  - Increased congestion, especially for international traffic





# ASSESSMENT TEAM KEY FINDINGS

## Submarine Cable

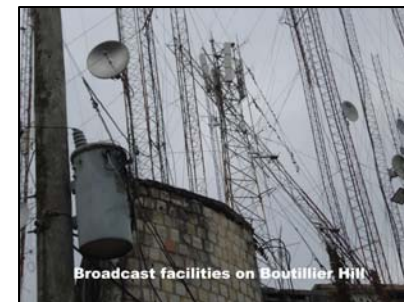
- **Pre-earthquake:** one to Haiti, one to Dominican Republic (ARCOS cable), and traffic from it to Haiti via microwave
- **Post-earthquake:** submarine cable to Haiti totally damaged at landing site (in Teleco building); cable in Dominican Republic functional





# ASSESSMENT TEAM KEY FINDINGS

## Broadcasting



- Pre-earthquake:
  - AM/FM Radio: approximately 50 stations
  - TV: approximately 18 stations
- Post-earthquake:
  - AM/FM Radio: about 30 stations operating
  - TV: 6 stations operating
- Substantial damage to several stations and equipment
- Crucial information outlet for Haitians – much public service over surviving stations











# ASSESSMENT TEAM KEY FINDINGS

## Internet Service Providers (ISPs)

- **Pre-earthquake:** 5 ISPs; 1M Internet users; *de minimis* broadband services.
- **Post earthquake:** Access Haiti (largest ISP) operating at 90% capacity domestically, 100% capacity re international traffic (via Dominican Republic); social media used extensively post-earthquake.





# ASSESSMENT TEAM KEY FINDINGS

## Long-Haul

- **Pre-earthquake:** Long-haul microwave primary means of outbound international traffic Haiti (wireless, ISP and data transmission services) from Haiti to the ARCOS cable landing facility in the Dominican Republic.
- **Post-earthquake:** Little damage and no change.





# ASSESSMENT TEAM KEY FINDINGS



## Satellite

- **Pre-earthquake:** Some reliance on satellites for redundancy; many receive-only earth station antennas at hotels and larger homes (for reception of satellite TV networks).
- **Post-earthquake:**
  - most earth station facilities unaffected and operational;
  - utilization of mobile satellite facilities in Haiti skyrocketed (one FCC-licensed MSS provider had 18,000% increase in utilization; FCC authorized additional frequencies to the carrier to limit potential call blocking);
  - carriers with earth station facilities that did not previously have capacity on a satellite network have since purchased such capacity.





# ASSESSMENT TEAM KEY FINDINGS

## Land-Mobile Radio

- **Pre-earthquake:** Haitian National Police (HNP) system has a hub on Gonave Island, and repeater on Boutillier Mountain; covers Port-au-Prince area and other police sites.
- **Post-earthquake:** trunking system for the National Police heavily damaged; not functioning; the US Coast Guard is working with the HNP to resolve these issues.





# ASSESSMENT TEAM

## KEY FINDINGS

### Public Safety

- **Pre-earthquake:** public safety services (police, fire, emergency medical) served by two National Police call centers; TELECO routed both centers via hard line connections and wireless carriers connected to the centers via TELECO routing;
- Various numbers assigned for emergency services in Haiti: 113 – United Nations; 114 and 122 – Police; 118 – Red Cross; 112 – fire ); rarely used
- **Post-earthquake:** Just days ago, a temporary system was implemented to re-route calls to the police via the commercial wireless carriers; emergency calling for the other #s remains nonfunctioning.







## Telecom Sans Frontieres

- Telecom Sans Frontieres (TSF) was the first entity into Haiti (the day after the earthquake) to provide emergency telecommunications services to the United Nations, the Haitian Government and other NGOs.
- TSF has covered highly affected districts in Petion-ville, in Delmas and in Port-au-Prince city center and has been now been deployed to the South Jacmel region and Leogane.
- As of February 3, over 5500 families have benefited from TSF free calls. The United States, Canada, Europe and the Dominican Republic are the main calling destinations.





## No Good Deed.....

Haitian and U.S. carriers provided free phone service after the earthquake

- strained the already overtaxed and damaged network in Haiti

A company implemented long-distance WiFi access to connect relief agencies to the Internet

- initially aroused suspicion among the Haitian ISP companies that this was a competing service

Neighboring operator in the Dominican Republic was invited by the President of Haiti to assist but created an operation that grew from 3 to 30 cell sites

- caused interference to one of the Haitian cell operators as they were reconstituting their system





# MAJOR FCC ACCOMPLISHMENTS TO DATE

- Deployed 2 teams to Haiti
- Provided spectrum monitoring and interference resolution for FEMA MERS and U.S. Search and Rescue teams
- Provided RF spectrum scans, lists of active/inactive LMR frequencies, and cellular coverage maps for Conatel
- Deployed Stephanie Dabkowski (EB) and Anthony Burgos (EB) to SOUTHCOM for frequency management assistance
- Deployed Allan Manuel (PSHSB) and Tom Sullivan (IB) to USAID for assistance and close coordination
- Completed Haiti Communications Sector Assessment Report with short term and long recommendations to USAID
- FCC signed cooperation agreement with Conatel





# MAJOR FCC ACCOMPLISHMENTS TO DATE

- Deployed Dante Ibarra (IB) and Cara Grayer (IB) to CITELE for international coordination
- Issued 83 waivers representing 716 TV/radio noncommercial educational stations to do fundraising for Haiti
- Issued STAs
- Provided technical review of police emergency calling proposal
- Facilitated information sharing and partnering regarding mobile banking, telemedicine, and fuel issues
- Informed public of FCC activities (press releases, “Helping Haiti” blog)
- Provided support regarding specific spectrum issues





# FCC's NEXT STEPS

- Send Team III to Haiti to provide support to Conatel
- Continue to work with USAID re recovery efforts
- Take steps to implement cooperation agreement with Conatel
- Provide technical and regulatory expertise – in country and from U.S.
- Provide analysis of particular issues
- Identify needs and explore possible resources to meet the evolving needs of Haiti communications sector
- Issue reports and provide information to the public









# Our Friends at Conatel

