



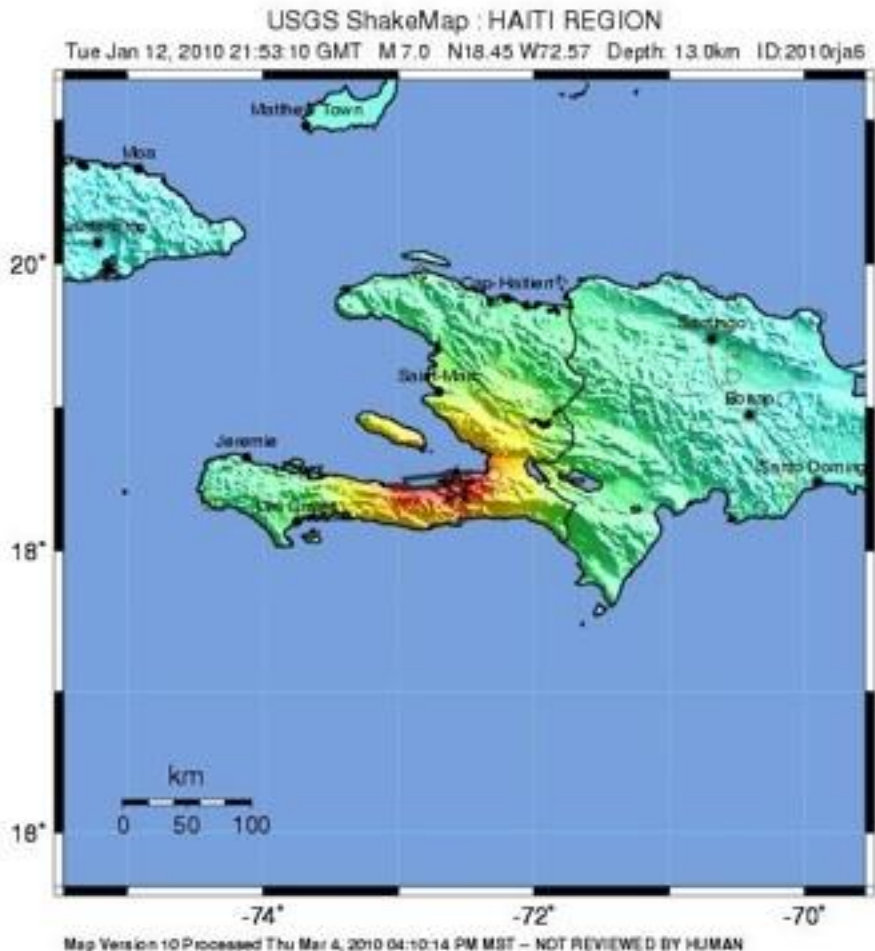
# Haiti Rural Broadband Connectivity Project Overview



# Timeline - Haiti

<b>Q4 2009</b> Needs Assessment	<b>Q1 2010</b> Disaster Response	<b>Q2 2010</b> Capacity Building	<b>Q3 2010</b> Launch Rural Network	<b>Q4 2010</b> Begin Scale Up
<ul style="list-style-type: none"> <li>EKTA Foundation requests that Inveneo lay groundwork for ICT deployment in Haiti</li> <li>NGO and ICT partner development</li> </ul>	<ul style="list-style-type: none"> <li>1/12: earthquake</li> <li>1/13: EKTA provides \$25K to re-establish connectivity for NGOs in Port-au-Prince</li> <li>1/20: WiFi broadband deployed via VSAT</li> <li>2/2: Long-distance terrestrial network completed, serving 25 NGOs through local ISPs, MultiLink &amp; Access Haiti</li> <li>2/28: Network transferred to local ICT company, Haiti Technology Group (HTG)</li> </ul>	<ul style="list-style-type: none"> <li>Local Haitian IT staff in Port-au-Prince trained</li> <li>Job opportunities created with HTG</li> <li>\$25K/month contributed to local economy through bandwidth purchases</li> <li>EKTA Foundation meets with Inveneo and other CGI partners in Port-au-Prince, visits sites and beneficiaries in rural areas</li> <li>4/10: EKTA provides \$50K catalyst grant to support Inveneo's new phase of work</li> </ul>	<ul style="list-style-type: none"> <li>Long-distance WiFi broadband deployed to NGOs in Léogâne area 7/22. 12 + NGOs by 9/1</li> <li>Planning &amp; deployment of connectivity in to start in rural areas:               <ul style="list-style-type: none"> <li>Outside Jacmel</li> <li>Mirebelais</li> </ul> </li> <li>Fundraising for full 6 region plan</li> <li>CGI, enterprises foundations</li> <li>USAID, IHRC, other large institutions</li> </ul>	<ul style="list-style-type: none"> <li>Train ICT staff in first rural areas deployed</li> <li>Finalize/secure funding for scale-up</li> <li>Sign up users of the network</li> <li>Begin measure of economic impact made including broadband purchases, jobs created, and NGO programs enabled</li> </ul>
<div style="border: 1px dashed black; padding: 5px; display: inline-block;"> <b>Phase 1</b> </div>			<div style="border: 1px dashed black; padding: 5px; display: inline-block;"> <b>Phase 2</b> </div>	

# Phase 1 - Emergency NGO Connectivity



PERCEIVED SHAKING	Not felt	Weak	Light	Moderate	Strong	Very strong	Severe	Violent	Extreme
POTENTIAL DAMAGE	none	none	none	Very light	Light	Moderate	Moderate/Heavy	Heavy	Very Heavy
PEAK ACC (%g)	<.17	.17-1.4	1.4-3.9	3.9-9.2	9.2-18	18-34	34-65	65-124	>124
PEAK VEL (cm/s)	<0.1	0.1-1.1	1.1-3.4	3.4-8.1	8.1-18	18-31	31-60	60-115	>115
INSTRUMENTAL INTENSITY	I	II-III	IV	V	VI	VII	VIII	IX	X

- **Before the earthquake,** Inveneo began to lay groundwork for ICT in Haiti with EKTA Foundation
- **1 day after the earthquake,** NetHope asked Inveneo to re-establish connectivity in Port-au-Prince to serve NGOs; EKTA Foundation provided \$25K
- **6 days after the earthquake,** Inveneo was on the ground with 3/4 of a ton of ICT equipment
- **8 days after the earthquake,** Internet connectivity to 8 major NGOs re-established in via Long-distance WiFi and VSAT
- **14 days after the earthquake,** connectivity transitioned to terrestrial broadband provided by local ISPs
- **35 days after the earthquake,** network completed serving 18 NGOs, 35 locations, support by local ICT company
- **120 days after the earthquake,** transitioned network to Nethope and local ICT company



## NGOs Served



## Why NGOs need connectivity:

- Logistical coordination of rescue, relief, and redevelopment services
- Mapping & topographical information
- HQ < > field communication
- Media outreach
- Reporting to funders
- Communication with staff, including security & safety issues

## Local Network Delivery Partners



Haiti Technology Group

# Phase I: The WiFi Port-au-Prince Network





## Program Overview

- Deploy economically sustainable broadband to unserved areas
- Serve Organizations with high quality broadband
- Partner with local ISPs and entrepreneurs to build local delivery capacity and financial opportunity
- Enable more rapid rebuilding and a path to rural economic opportunity
- Deliver short term results in 12 - 18 months



# What Rural Connectivity Can Enable

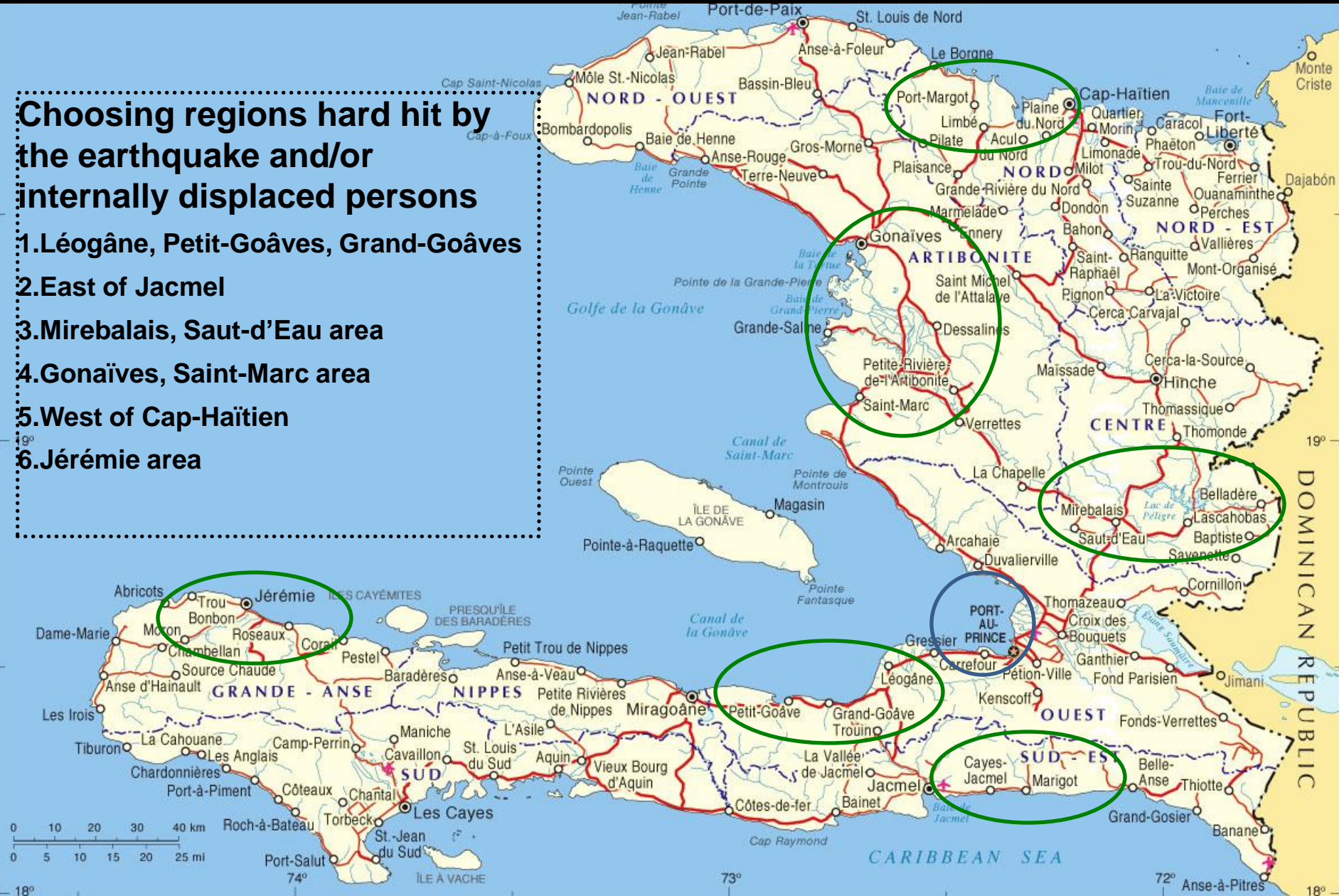




# Phase 2 - Rural Broadband Network Regions

Choosing regions hard hit by the earthquake and/or internally displaced persons

1. Léogâne, Petit-Goâves, Grand-Goâves
2. East of Jacmel
3. Mirebalais, Saut-d'Eau area
4. Gonaïves, Saint-Marc area
5. West of Cap-Haïtien
6. Jérémie area





## **Deliver high quality broadband Internet Access**

- 6 key regional areas, starting with Leogane, East of Jacmel and Mirabelais
- Reach 20 population centers within these regions

## **Using an innovative, economically sustainable approach**

- Innovative, low-cost WiFi technology
- Local entrepreneurship model
- Serving un-served areas, previously hard to reach with traditional economic model

## **Building durable, local capacity for delivery**

- Partner with 2 - 4 local ISPs
- Build capacity for up to 40 in-region ICT entrepreneurs

## **Serving all types of “enterprise” organizations**

- First, identify NGOs as network anchor tenants
- Provide access to others including healthcare, local government, education

## **Delivering results** (early estimates based on pilot results)

- Deployment in 12 - 18 months of funding
- Reaching 200 + NGOs
- Delivering technology to enable faster rebuilding and a path to rural economic development
- Driving \$120,000 monthly into the local ICT economy

**a 10% higher broadband penetration in any given year is correlated with a 1.5% increase in labor productivity over the following five years\***

# Phase 2 - Significant Progress

## Fundraising Progress

- \$1.1M Goal
- \$135,000 in catalyst grants (\$50,000 EKTA, \$50,000 ORR, \$25,000 Aruba, \$10,000 Zerodivide)
- Targeting CGI, Foundations for catalyst grants and bi-lateral/multi-lateral organizations for scale-up

## Network Progress

- Leogane link established late July (epicenter of earthquake)
- Within 6 weeks, serving 12+ NGOs
- Habitat for Humanity, Canadian Red Cross, German Red Cross, IFRC, IFEWA, Save the Children, All Hands, Notre Dame Hospital, Swiss Red Cross, WFP, others
- These NGOs are the major NGOs focused on rebuilding

## Driving Economic Opportunity

- Contracts to be signed soon
- \$300 - \$1000 each monthly
- Already driving about almost \$100,000 annually to local ISPs





# Phase 2 - An Investment in Haiti's Future



Item	Description	Total
Leadership	Program Director	\$121,500
On-Location	Housing, Security, Transport	\$104,000
Partner Program	Entrepreneur training, support	\$131,250
Deployment	NGO ident., network deployment, support	\$675,938
ISP Services	Initial subsidies for NGO bandwidth	\$60,000
<b>Total</b>		<b>\$1,092,688</b>