

The Disaster-Preparedness Registry: How GVF Online Tools Can Facilitate Disaster Preparedness & Development

**Silvina Graziadio
GVF Representative, South America**

&

**Director de Marketing & Comunicaciones
Tesacom**

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**
 - Training: **VSAT Installation and...**
 - Preparedness: **GVF Registry & Installer Database**

Segments First Responders

Humanitarian

- Response to crises, including relief for natural and manmade disasters
- Rely heavily on telecommunications to coordinate Aid delivery
 - Mobile and semi-fixed satellite services
 - VHF and other legacy radio systems
 - Terrestrial mobile voice and SMS (if available)
- Missions last 1 or 2 weeks up to a few months, or sometimes longer
 - Search & rescue, security operations
 - Medical support, food, water & shelter

Development

- Support for economic, social and political development of countries
 - Post-disaster reconstruction projects
 - Sustainable development programs
- Telecommunications used for daily project management and to reach target populations where they live
 - Fixed line, VSATs, terrestrial mobile
- Programs last 1 to 5 years or longer
 - Infrastructure, transport, communications
 - Economic development, health, finance

The value chain

Identifies the industry's value chain with focus on the elements in which satcomms fits

Humanitarian Aid

Development Aid



Restore basic
communication,
remote medical
support

Field office
connectivity,
personnel security

Construction
project
management, site
security

Economic
development,
financial services,
healthcare

Satcomms Focus areas

The Challenge

- Financially Sustainable Pre-Positioning of...
 - Satcom Systems,
 - Satcom Services
 - Satcom Personnel
- That Can Be Applied in Co-ordination with Local Suppliers
- And That Can Be Repurposed to Support Medium-Long Term Development



The Satcom Tools: GMPCS

- Able to Be Procured in Advance of Disasters
- Pre-Positioning is Key
- Minimum of Training Needed



Globalstar
handset



Iridium
handset



Thuraya
handset



Inmarsat
handset

The Satcom Tools: Fly-Aways

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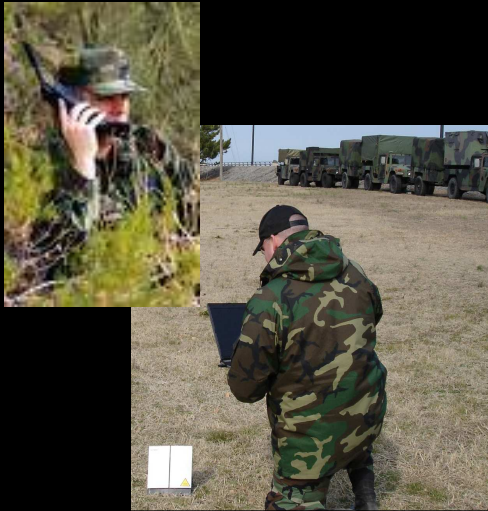
The Satcom Tools: VSAT



Satcom & The Strategic Plan

First 1-24 Hours

Disaster inventory
rescue
Command and
Control



First 24 -48 Hours

Humanitarian calling,
Rescue, recovery, news



First 3-30 days++

Restoration
Recovery operations



Increasing bandwidth requirements as response expands over time

'Pre-Positioning': What's Already There

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Enterprise

DCC

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



Carriers

Connecting South Africa

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



Broadband, ISPs

SpaceStream

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



Government

Kenya Post

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

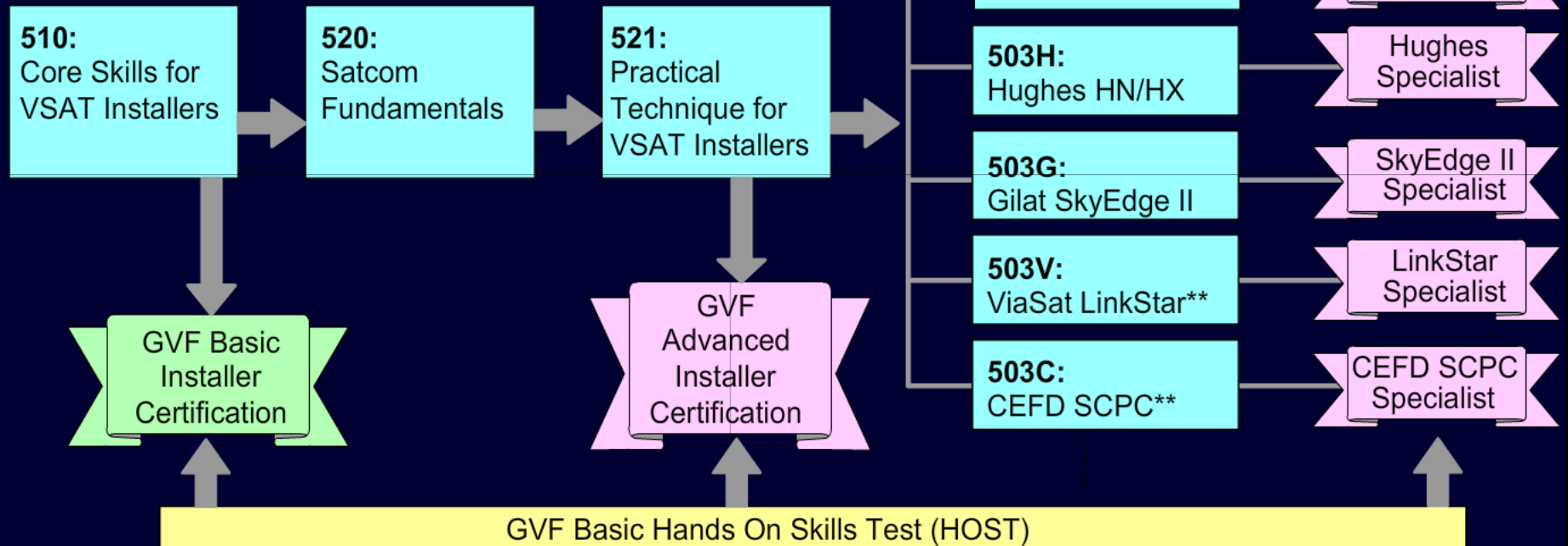


- Hundreds of Thousands of 'Pre-positioned' Systems
- Already 'Sustainable' Through Delivery of Services
- Most Are Being Used to Support Development Apps
- Contacts Available Through Searchable Directory
- Designation Is Being Added to Indicate Companies Willing to Stand-by as Pre-positioned System and Service Providers

GVF certification paths

GVF offers a sequence of VSAT installer training courses leading to certifications ranging from Basic to Advanced and various specialties. Click **NEXT** to learn more.

GVF10 GVF10Blue
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- Online interactive course with simulator exercises
- Hands-on or classroom session

- Certification with listing in private database only (accessible by satellite operators)
- Certification with listing in public and private databases (if desired)

- * Course in development
- ** Course planned



Exercise: find and peak

In this exercise you must **find** the satellite and perform the initial **peak in azimuth and elevation**. You may assume the following:

Your location is **128 deg E, 30 deg N.**

The satellite is at **154 deg E.**

The VSAT will use **V** downlink polarization.

Pointing angles from your look angle calculator:

Azimuth = 135, Elevation = 44, Pol = 37

Remember your steps:

1. Preset the polarization. Use the Quick Reference Sheet to help make sure you are turning the right way.
2. Preset your elevation.
3. Scan coarse az to find the satellite. Step elevation up and down and scan az again if needed
4. Peak it with the el and fine az adjusters.
5. Lock the coarse azimuth but leave the fine az, el, and pol locks loose.

When you are ready (or if you need a hint), click the **SHOW MY RESULTS** button to see how well you did. If you are having trouble, click the **HELP** button.

Pointing29
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The interface displays a 3D model of a satellite dish on a tripod. A signal meter in the top left shows 'Total power' at 74 and 'ID signal' at 5.6. A 'Signal ID Meter' and 'Gain' control are also present. A 'Compass' in the top right shows a reading of 124. The bottom control panel includes 'Viewpoint' (+/- buttons), 'Look at:' (Antenna, Az/EI, Feed), 'Show compass' (checked), 'Pencil mark', and 'Remove tool'.

? HELP

SHOW MY RESULTS

- **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**



Pre-Positioned Satellite-Based ICTs: GVF Certified Installers – Public Database

Global VSAT Forum, GVF: an association of key companies involved in the VSAT in... Page 2 of 3

Global VSAT Forum Certified Installers

Details	Student ID	Name	Organization	Country	Certification
Ⓞ	MTI_674080	MMASI, John	WORLD VISION TANZANIA	TANZANIA	Basic Advanced iDirect
Ⓞ	MTI_674083	PATRICK, Paul	World Vision	TANZANIA	Basic Advanced iDirect
Ⓞ	MTI_680274	SENI, Alex	Corporate Info Security Solutions (CISS)	Tanzania	Basic Advanced
Ⓞ	MTI_682954	SWEKE, James	NBC Ltd	Tanzania	Basic Advanced
Ⓞ	MTI_684204	SHEBIMARX, Suleiman	Finca Tanzania	Tanzania	Basic Advanced
Ⓞ	MTI_762231	PHAROUIK, Adam	International School of Tanganyika	Tanzania	Basic Advanced iDirect
Ⓞ	MTI_762232	MAKALE, Davis	Action Aod	Tanzania	Basic Advanced iDirect
Ⓞ	MTI_762236	MSELLE, Grace	WVI	Tanzania	Basic Advanced iDirect
Ⓞ	On file	AMANI, Amani	WWF Tanzania	Tanzania	Basic Advanced
Ⓞ	On file	BUZINGO, Matamo	TANESCO	Tanzania	Basic Advanced
Ⓞ	On file	PERUZ, Loni	TANESCO	Tanzania	Basic Advanced
Ⓞ	On file	HAULE, Upendo John	Tanzania Telecoms Co Limited	Tanzania	Basic Advanced
Ⓞ	On file	HEGGA, Hamisi	DATTEL Tanzania Ltd	Tanzania	Basic Advanced
Ⓞ	On file	MKIRAMWENI, Charles	Tanzania Civil Aviation Authority	Tanzania	Basic Advanced
Ⓞ	On file	MPLI, Goncalves G	Tanzania Civil Aviation Authority	Tanzania	Basic Advanced
Ⓞ	On file	NKIRAMWENI, Charles	Tanzania Civil Aviation Authority	Tanzania	Basic Advanced
Ⓞ	On file	PIUS, Emanuel	Tanzania Breweries	Tanzania	Basic Advanced
Ⓞ	On file	SHUJA, Madala	TANESCO	Tanzania	Basic Advanced
Ⓞ	On file	TENGA, Tabu	TANESCO	Tanzania	Basic Advanced
Ⓞ	On file	THOMAS, Charles	Tanzania Civil Aviation Authority	Tanzania	Basic Advanced
Ⓞ	MTI_658522	ARTUSHEVSKY, Denis	UNICEF	Tajikistan	Basic Advanced iDirect
Ⓞ	MTI_658536	AL MAALOUF, Samah	UNICEF	Syria	Basic Advanced iDirect
Ⓞ	MTI_952312	RAMI, Dakak	UNHCR	Syria	Basic Advanced
Ⓞ	MTI_374547	MAIN, Nigel	UNHCR	Switzerland	Basic Advanced
Ⓞ	MTI_658521	BHASKARAN, Deepak	UNICEF	SWITZERLAND	Basic Advanced iDirect

Showing 151 to 175 of 641 entries

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Global VSAT Forum, GVF: an association of key companies involved in the VSAT in... Page 2 of 3

Global VSAT Forum Certified Installers

Details	Student ID	Name	Organization	Country	Certification
Ⓞ	MTI_952321	IMBERTON, Stephane	UNHCR	SWITZERLAND	Basic Advanced
Ⓞ	On file	AYOUB, Elie	UN HCR	Switzerland	Basic Advanced
Ⓞ	MTI_896246	PETERSSON, Tord	Self employed	Sweden / Georgia	Basic Advanced iDirect
Ⓞ	MTI_658517	KARLSSON, Anders	Anders Karlsson	Sweden	Basic Advanced iDirect
Ⓞ	MTI_658520	JOHANSSON, Claes	TDC Sverige AB	Sweden	Basic Advanced iDirect
Ⓞ	MTI_892485	CHAMCHOI, Jens	Government	Sweden	Basic Advanced iDirect
Ⓞ	MTI_896239	JOHANSSON, Ake	MSB Sweden	Sweden	Basic Advanced iDirect
Ⓞ	MTI_896244	NYRELL, Peter	MSB	Sweden	Basic Advanced iDirect
Ⓞ	MTI_896245	JONEMARK, Robert	Eitel Networks	Sweden	Basic Advanced iDirect
Ⓞ	MTI_414790	SINGH, Kenneth	Agribent NV	Suriname	Basic Advanced
Ⓞ	MTI_479733	SOMMERHALDER, Rolf	CrossCom Engineering	Sultanate of Oman	Basic Advanced
Ⓞ	MTI_479732	CALVET, Pierre-Marie	UNHCR	SUISSE	Basic Advanced
Ⓞ	MTI_374706	AMER MUGHAL, Mohamed	RSAT FZE	Sudan Kenya UAE	Basic Advanced
Ⓞ	MTI_218044	HAMID, Wail	International Organization for Migration	Sudan	Basic Advanced
Ⓞ	MTI_272674	AYIK, Kwathi	South Sudan Host	Sudan	Basic Advanced
Ⓞ	MTI_368033	REUBEN, PAUL LADO	Intermation Organization for Migration	SUDAN	Basic Advanced iDirect
Ⓞ	MTI_374534	KHALIL, Abdalla	UNHCR	Sudan	Basic Advanced
Ⓞ	MTI_374543	TODOROVIC, Ivica	UNHCR	Sudan	Basic Advanced
Ⓞ	MTI_374546	MOTHA, Moses	UNHCR	Sudan	Basic Advanced
Ⓞ	MTI_479730	ABDI, Mause Mohamed	UNHCR	Sudan	Basic Advanced
Ⓞ	MTI_658523	MAHMOUD, Eshabi	UNICEF	Sudan	Basic Advanced iDirect
Ⓞ	MTI_669007	YASSIN, Abdulazim	MercyCorps	Sudan	Basic Advanced iDirect
Ⓞ	On file	ANDRESEN, Kjeld	UN HCR	Sri Lanka	Basic Advanced
Ⓞ	MTI_646067	MACDONALD, Neil	Snutcrak SL	Spain	Basic Advanced Examiner
Ⓞ	MTI_634546	GOLDEN, Christopher	Northrop Grumman	South Korea	Basic Advanced



In Conclusion...

GVF's Existing Online Directory and Installer Database Can 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

Tesacom: A GVF-Member's Case Studies



Satcom for Disaster *Preparedness*

Mission

- *To provide integrated communications solutions, “right there” where they are needed.*



*Rather than supplying technology and services it is working **with** the user **in their premises** providing **solutions** to their operation needs.*



*Providing a **solution** is helping the user get rid of a problem*

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Tesacom: Unique position in the regional Satellite Market

www.gvf.org



Tesacom Competitive Advantages	Argentina	Brazil	Chile	Paraguay	Perú	Panamá	Uruguay	Venezuela
Regulatory Compliance	✓	✓	✓	✓	✓	✓	✓	✓
MSS Local Customer Support	✓	✓	✓	✓	✓	✓	✓	✓
Local Billing	✓	✓	✓	✓	✓	✓	✓	✓
Local Technical Support	✓	✓	✓	✓	✓	✓	✓	✓
Local Stock	✓	✓	✓	✓	✓	✓	✓	✓
Local O&M and NOC capability	✓	✓	✓	✓	✓	✓	✓	✓
MSS Organization	✓	✓	✓	✓	✓	✓	✓	✓
Vertical Market	ALL	ALL	ALL	ALL	ALL	ALL	ALL	ALL

Local Customer Support

- ✓ 7 x 24
- ✓ Spanish / Portuguese / English
- ✓ Free of charge call with SAC from TESACOM MSS Handheld (Globalstar, Iridium or IsatPhone Pro) to NOC TESACOM



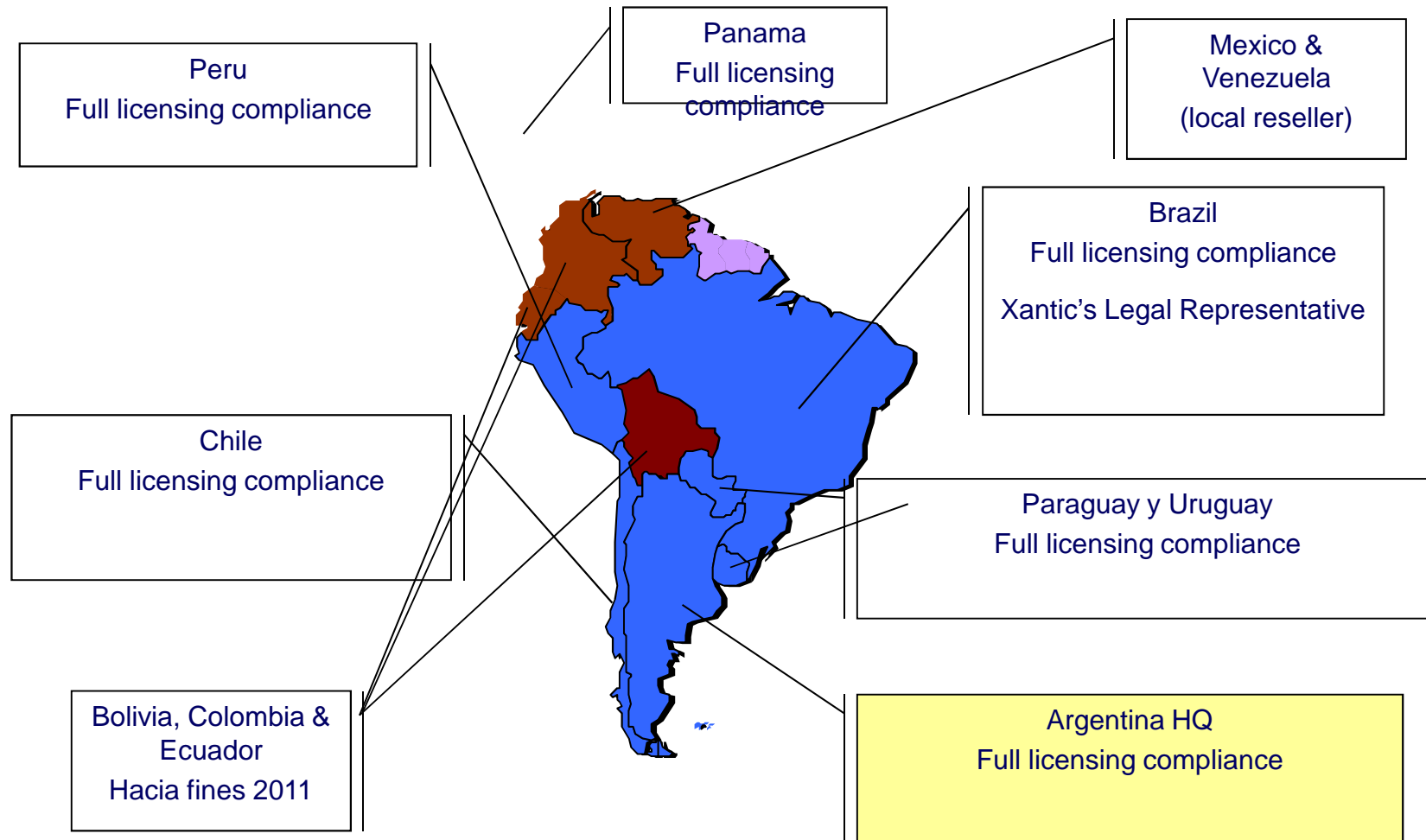
Local Technical Support



Field Support

Local Stock

Tesacom: Regional Presence and Full Regulatory Compliance



Peru 2006 Earthquake Lesson Learned

- Inmarsat and Iridium capacity to support surge in demand
- NOC monitoring
- Channel prepared to support customers
- Communication with user groups
- Local Stock of Iridium handhelds
- Local Field Support for VSAT deployment



El 15 de Agosto del 2007 el Departamento de Ica sufrió un terremoto de magnitud 7.9 en la escala de Richter y de una duración de más de dos minutos lo que ocasionó la destrucción de poblados enteros como Cañete, Chincha y Pisco entre otros, en esos momentos cuando la población le había perdido todo y no contaba con luz ni agua y se encontraba incomunicada, la ayuda no tardó en llegar, TESACOM estuvo ahí donde nos necesitaban...



Arriba: Campamento de la Secretaría del Volcano y uno de los puntos de ayuda y distribución al pueblo afectado por el terremoto.

Izquierda: Junto con las Organizaciones de ayuda llegó Tesacom para mantener una comunicación de calidad entre la zona afectada y el resto del mundo.



Arriba: El equipo de Tesacom también colaboró en la ayuda directa a los pobladores.

Izquierda: No solo los escombros de las edificaciones hacían difícil el traslado de ayuda, los vientos huracanados con arena, conocidos como Paracas hacían imposible el movilizarse y dificultaba la respiración.

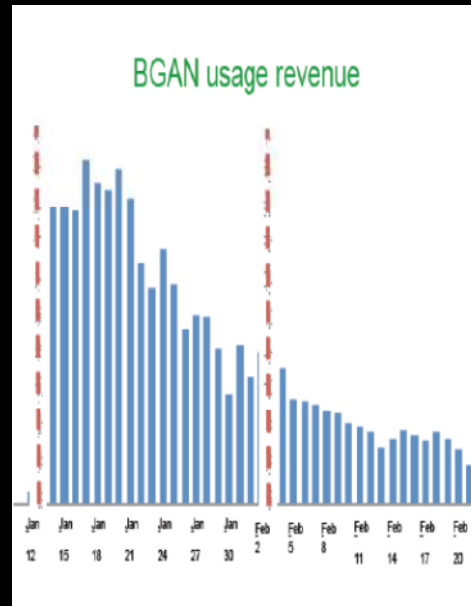
Haiti Earthquake

Lessons Learned

- Capacity to support surge in demand
- NOC monitoring of Haiti spot beam
- Channel prepared to support customers
- Communication with user groups
- Improved coordination among NGOs
- First-in responders and media well trained



Haiti earthquake



Haiti Timeline

Before January 12th

- Handful of users in Haiti

January 12th

- 5pm – Quake strikes
- 7pm – Heads-up to Iridium channel team

January 13th

- Haiti generating more daily traffic than Africa

January 14th

- Haiti generating more daily traffic than USA

January 15th

- Haiti generating more traffic than Afghanistan



Chile Earthquake

Lessons Learned

- Inmarsat capacity to support surge in demand
- NOC monitoring
- Local and Regional Stock (logistics!)

América Economía Online, 08/05

08/05/2010 - 12:53 TECNOLOGÍA

Terremoto en Chile: prueba a medias para la tecnología de las empresas



El diagnóstico es que al gobierno y empresas no les falta tecnología, pero sí la organización que se necesita detrás para usarla.

Tras el terremoto en Chile, las empresas se dieron cuenta de que necesitan asegurar que sus operaciones puedan seguir tras un gran desastre. Y la tecnología tiene mucho que ver con eso.

JUAN PABLO RIOSECO

Compartir 4 5  

Hasta el 27 de febrero, el gerente general en Chile del proveedor de equipos de comunicación satelital Tesacom, Javier Bustamante, estaba acostumbrado a vender cerca de 30 teléfonos satelitales al mes. Pero luego del terremoto que ese día sacudió la zona centro sur de Chile, la demanda cambió. Y mucho. Sólo en la primera semana de marzo vendió 110 equipos. Y el día 10 estaba esperando un embarque con 70 más, de los cuales tenía comprometidos casi 60.

“Empresas que no eran de nuestro mercado objetivo, como *retailers*, bancos y universidades, han adquirido nuestros teléfonos”, dice Bustamante, cuyos principales clientes son pesqueras, mineras e instituciones del Estado, como las Fuerzas Armadas.

Rio de Janeiro Floods

Lessons Learned



End-user requirements

Solutions and applications



Customers: First Responders, IGOs, NGOs

Customers: IGOs, NGOs, Private Contractors

Restore basic communication, remote medical support

Field office connectivity, personnel security

Construction project management, site security

Economic development, financial services, healthcare

IP Radio Bridge, Telemedicine Mobile Exam Kit

Frontline Communicator, Geographic Information System

Multi-user Mobile Office, Video Surveillance

Data Collection Device, Remote ATM/PoS

Tesacom Resources: Working With the *GVF Disaster Preparedness Registry*

- **BGAN**
 - Simultaneous voice and data communications
 - Connecting critical applications, including Telemedicine
 - Access to information systems for situational awareness
 - Easy deployment
- **IsatPhone Pro**
 - Portable voice and SMS communications
 - GPS to text supports input to information systems
- **Iridium 9555**
 - Mobile voice and SMS communications
 - Coordination of search and rescue, Aid delivery
 - True global coverage
- **VSAT**
 - Flexible Bandwidth options
 - Fly away options
 - Connecting critical applications, including Telemedicine and cyber places



Support

End-user tool kit

- **Training**
 - Process and schedule
 - Training materials
 - Train the trainer
 - User tips & tricks
 - Hands-on, terminals off the shelf
- **Terminal maintenance program**
 - Checklist and schedule
 - Coordinate with training
 - Working hardware
 - Firmware and software
 - Peripherals and accessories
- **Aid working group**
 - Dialogue on requirements
 - Feedback on service
 - Sharing best practices
 - Response coordination



Conclusion & Next Steps

- GVF, CITELE and Other Disaster-Preparedness Stakeholders Are Already Partners
- GVF Proposes to Co-ordinate with CITELE on the Disaster Preparedness Registry
- This will Provide Opportunities for Relief and Development Organisations to Leverage Private Sector Assets More Effectively
- This will Enable More Effective Disaster Preparedness, Response and Development Throughout the Americas

Thank You!

GVF: David.Hartshorn@gvf.org

GVF: Steve.Birnbaum@gvf.org

TESACOM: yferrette@tesacom.net

TESACOM: graziadio@tesacom.net