



AFRICA



ASIA

*Global Pre-positioning of Satellite-
Enabled ICT for Disaster Preparedness &
Development
- Towards a New Template*

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Introducing the GVF

- **GVF is the global non-profit association of the satellite industry**
- **230 member companies**
- **All of the world's major satellite bandwidth suppliers and satellite equipment manufacturers**
- **Many local and international connectivity providers**
- **Collectively these companies and their contractors supply, install, maintain and operate >1 million stations throughout the world**

The GVF Value Chain

- **Most members maintain and operate “sustainably” ie. earn profits to keep local operations running**
- **This enables further global expansion and strengthens development**
- **Development such as to support :**
 - Banking and financial services
 - Agriculture and fishing
 - Health
 - Education
 - Oil, gas and mining operations
 - Mobile communications
 - Fibre and other last-mile (or many mile) extensions

An NETP Licensing Template for the Pacific --*GVF's High Level Vision for the Workshop*

- **Create a deliverable that will address/mitigate regulatory (incl. possibly spectrum coordination) delays for would-be satcom systems and service providers**
- **The deliverable would not only be applied in the Pacific Islands but would also be promoted (at least by the GVF, and hopefully the ETC) for use globally – through CITELE, CTU, ATU etc ...**

PACIFIC ISLANDS

The Next Decade

- **TEN ICT Factors Vital to the Pacific Islands**

..... for successful survival of the “Blue Continent”

1. Power
2. ICT infrastructure and access
3. Digital literacy
4. Affordability of ICT esp. Internet
5. Regional growth and development
6. A safe and secure ICT society
7. Job creation, new industries, outreach
8. **Coping with disasters**
9. e-applications, e-government
10. **A comprehensive regulatory template – self determined**

Role of the Private Sector

- *Pre-positioning of Satellite –based ICTs*

- **The brutal calculus of costs : financial and human**
- **Mitigation through the joint efforts of :**
 - United Nations' Aid Agencies
 - NGOs
 - Host nations
 - Military
 - Private Sector

The challenge of pre-positioning

- Has severely hampered public and private efforts for ICT solutions that are local to the disaster zone and can be quickly applied
- A key is to link the same pre-positioned systems so that they are not only used for disaster response but can be repurposed to achieve medium- and long-term objectives at a satisfactory level

Bringing in the broader global picture

- **A comprehensive global program**
- **No single organisation can cost-justify the investment in warehousing communication systems that are pre-positioned but remain under-utilised or unused until a disaster**
- **The challenge is overwhelming if on a global scale**
- **Related obstacles**
 - Pre-positioned systems need to be maintained
 - Locally trained technicians to be available and/or operate systems
 - Transitioning to medium/long term infrastructure with scale capability and locally operated commercial enterprise

A First Phase : A *GVF* Disaster Preparedness Registry

- **Inherent to the Value Chain**
- **GVF proposes to invite all GVF Members to voluntarily identify their systems, services and other resources that :**
 - Are currently operational
 - Can be re-purposed for use if/when necessary to support disaster-relief efforts
 - Their location (as closely as possible), and
 - Contact details

.... when a disaster occurs

- **UN, NGO and government disaster – response stakeholders are able to access the GVF Registry for free**
- **Identify systems and services available locally to help support disaster-response efforts**
- **Terms and conditions are subject to agreement between then responder and the supplier**
- **Solutions available from members potentially include**
 - **:**
 - Fixed and mobile satellite-based solutions
 - In tandem terrestrial systems eg. GSM, WiFi, WiMAX, fibre optic cable, pico and femto cells etc.

Key advantages of this solution



- **Immediate access to global infrastructure**
 - Pre-positioned resources in hundreds of thousands of locations
- **Existing linkage with development**
 - Systems /services already promoting local development
- **Local participation**
 - Local companies are often unknown to first responders
- **Immediate access to qualified technicians**
 - GVF existing database of hundreds of VSAT installers throughout the world which can be linked in
- **Re-purposing for development**
 - “leave behind” infrastructure to seed commercial opportunity
- **Rapid online implementation and Coordination**
 - Registry can be operational globally within 2-3 months. Existing partnerships of NGOs, UN aid agencies, and stakeholder groups

Further collaboration

- **GVF looks forward to further developing collaboration on this initiative**



Crisis Connectivity Charter

GVF BRINGS TOGETHER

- → Largest satellite operators from every major region
- → Biggest providers of satellite network equipment
- → Key value-added resellers (i.e. satellite network licensees)

Satellites and disaster relief

REACH

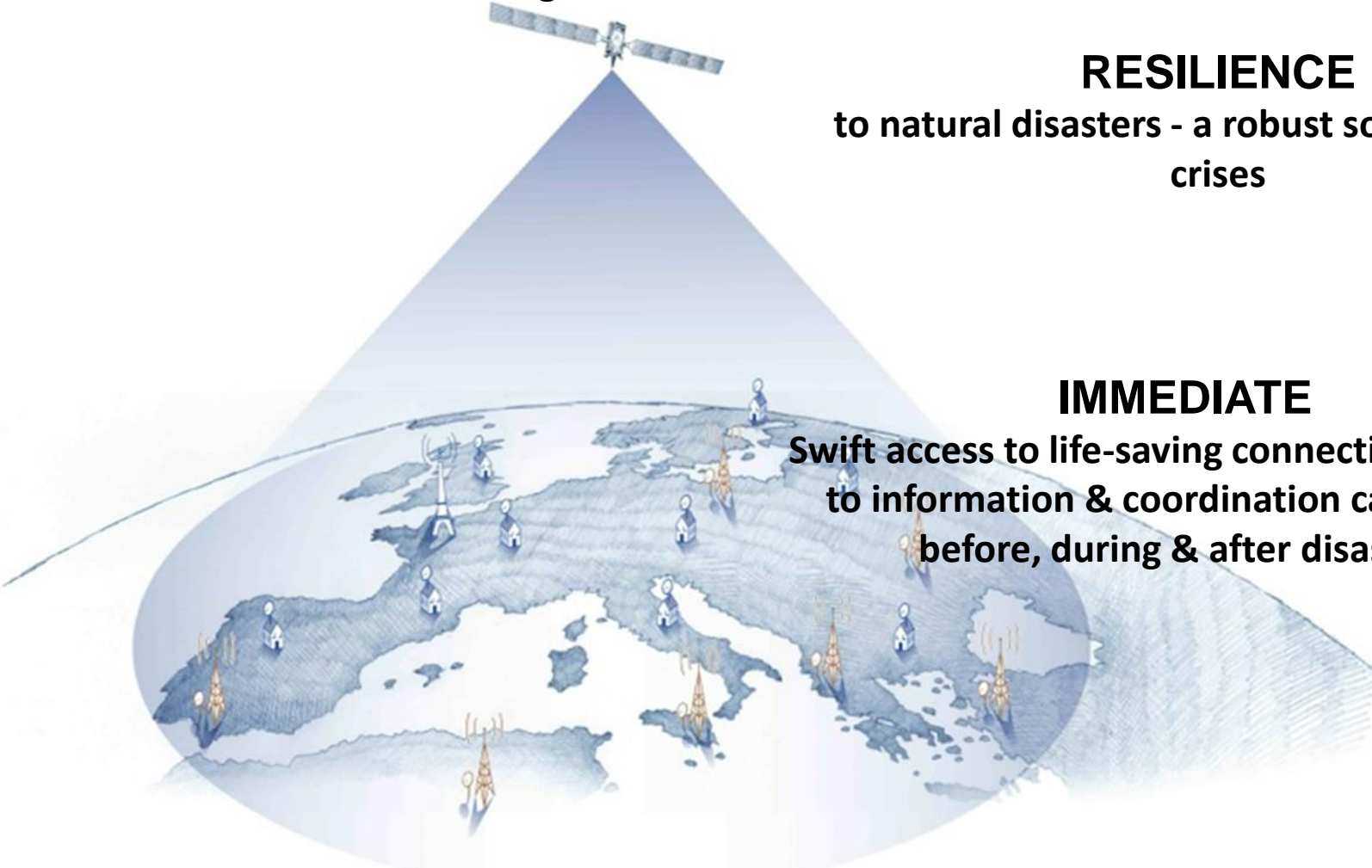
areas that other technologies cannot reach

RESILIENCE

to natural disasters - a robust solution during crises

IMMEDIATE

Swift access to life-saving connectivity - access to information & coordination capabilities before, during & after disasters



Crisis Connectivity Charter

- A PARTNERSHIP



OCHA



• WHY: Increase in number & impact of crises around the world – natural & unique ability of satellite solutions to help

• BENEFITS: More effective & efficient private sector contribution / predictability / tool with which to garner further support & raise awareness in the global community

- → Framework for partnership between satellite industry, governments & humanitarian sector
- → Quick deployment of satellite communications solutions in humanitarian aid or disaster situations
- → Defines the way to supply equipment, services & solutions before, during, & after a disaster
- → Ensures better coordination between all actors involved in disaster relief

Goals of the Charter

- **Information sharing - allowing satellite operators to assist the ETC in supporting humanitarian responders, governments & affected communities in an efficient manner**
- **An industry-led mechanism - can be triggered by the ETC to invoke a coherent, predictable, scalable & principled end-to-end satellite-based solution**
- **Training & capacity building - ensuring the humanitarian community, local experts, governments, & response ow to use the equipment**

Implementation - Pre-Disaster

- → **Clear Points of Contact (POC):** for each satellite operator to facilitate the coordination of solutions
- → **Coordination:** a central mapping of resources & proposed solutions from each operator to leverage existing resources and assets more efficiently
- → **Operator-to-Operator Support:** pre-identified assets, e.g. teleports, that could be shared during a disaster to support efforts in ETC's high-risk countries
- → **Preparedness:** support for simulations organized by governments, humanitarian stakeholders to test implementation mechanism

Implementation - Time of Disaster *Satellite. Solutions. The World.*

- **Step 1**
- ETC triggers Charter by calling for a conference call of all Charter Signatories
- Confcall to take place within 12 hours
- ETC informs Charter Signatories of context & requirements
- Charter signatories commit to reaching an accord on which pre-planned response(s) to recommend to the ETC
- If no pre-planned response has been identified, then Step 2 will be activated
- **Step 2**
- Charter Signatories investigate available resources & agree on most suitable response(s)
- Charter Signatories hold second conference call with the ETC within 48 hours of the triggering the Charter & recommend Plan of Action

Implementation - Other Aspects

- **End-to-end solutions - ensuring full operational capabilities for satellite network up to Ethernet port of modem; ETC takes over for all LAN network issues behind modem**
- **Full logistical support - by ETC from Dubai Humanitarian Response Depot or within country of response (storage, transport to disaster areas, transport within disaster areas, importation - licensing, return transport to storage & exportation**
- **Training - Satellite operators to follow Training Schedules for First Responders of the Humanitarian Community to train & capacity build First Responders on specific equipment to be deployed**
- **Pre-planned responses - identified by the Charter Signatories, including coverage, bandwidth/speeds, volume limits, equipment**

Licensing : related work within the APT

- **APT Policy and Regulatory Forum for the Pacific PRFP-10**
- **Free circulation of terminals**
- **Common licensing framework**
- **Similar efforts in Europe CEPT, Africa ATU, Americas CITEL**
- **APT Strategic Plan**
- **Lead up to Meeting of ICT Ministers in 2019 – MOU ?**

... and finally PITA ... has a role ?

- **A good informal venue to socialise ideas amongst a mixed community of policy makers/regulators and the broad stakeholder base :**
 - Encourages Pacific self help
 - Practicalities of useful networking inside and outside the meetings
 - Close ear to the ground with APT, ITU and activities in other regions
 - Commercial networking attracts industry
 - Assist with the evolution of the NETP ?
 - Put some resources into the NETP ?

Output

- **Focused on Results**
- **Predictable Response**
- **Greater awareness & collaboration**
- **End-to-end connectivity**

 **More Lives Saved**

- **Thank You**

THANK YOU THANK YOU