Best Practices for Tsunami and Other Coastal Hazards Community Preparedness and Readiness Workshop,
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• Where are we?
  – 100 miles west of Barbados
  – 21 miles south of Saint Lucia
  – 68 miles north of Grenada
  – In hurricane alley
  – Positioned in part of the fastest shipping lanes in the region
  – On the Caribbean Tectonic Plate
SVG: Who are we

• The Gem of the Antilles
• 107,000 people of mixed descent
• A sovereign country since 1979
• A place where voluntarism still lives on though weak
• A country that is willing to learn
Hazards that can affect SVG

- Tsunami?
  - No significant impacts recorded
- Earthquakes?
  - Yes
- Volcanic Eruptions?
  - 1902, 1971, 1979
  - Submerge Volcano Kick em Jenny
- Hurricanes
Hazards Cont’

• Sea level rise (climate change, global warming)?
  – Steady and certain over the last 30 years
  – Loss of many acres of lands and livelihood

• Winter Storms
  – Scores of boats destroyed through the years, except in 2008 when advance information allowed for early warning and effective action.
Hazards Cont’

• Storm Surge
  – Hurricane Janet, 1955
  – Hurricane Lenny, 1999
  – Hurricane Ivan, 2004
  – Hurricane Dean, 2007
Hazards of SVG: Volcanic
Hazards of SVG: Volcanoes

Potential for Tsunamis?
Strategies and Programs to Address Problems Stated

- Disaster Risk Reduction Initiatives are rolled out from the Comprehensive Disaster Management Strategy for the Caribbean
  - Vulnerability Assessment, hazard and Risk Mapping being done with assistance of USAID/COTS. Includes assessment and mapping of major trading areas
Strategies and Programmes

- Structural Mitigational works to protect exposed infrastructures along the coast
  - Langley Park River and Sea Defense Project
  - Layou Sea Defense Project (World Bank)
Community Mobilisation and Preparedness Programme

• Ongoing outreach programmes
  – Begin with hazard and risk mapping at the community level
  – Establishment of Community Disaster Management Groups
  – Training
  – Public Education
  – Project Development (Disaster mitigation, Poverty Alleviation, Gender Balancing)
Investment in Scientific Monitoring and Forecasting

• Seismic Monitoring Network close to being TsunamiReady
• Emergency Broadcast Protocol in place
• National network of HF radios in place
• Now signing on to the Earthquake Readiness program
  – School readiness to be part of this program
• Transferability of CADM Project to other areas
New Technology on the Table

• DataFM Emergency Alert Radio
  – The DataFM system, using RDS (Radio Data System) technology, is a multi use, point to point communication system that provides early emergency warning that is geographic and demographic specific. The system utilizes a code architecture that allows messages to be sent to specific users (demographic) or specific locations (geographic)
  – RDS allows text display of up to 16000 characters
Interoperability

• DataFM offers interoperability which is the ability of one government agency to communicate with another government or other agency *in real time*
How Does It Work?

1. When a crisis emerges, the authorized person inputs an alert message, addressed to designated receivers (geographic and/or demographic). The message input is via an internet computer connection and by other means when the internet is not available.
How Does It Work?

2. The message is relayed to DataFM control center (there are several with servers located in USA and the Caribbean).

3. The message is then transmitted to Telstar Satellite which holds a geosynchronous orbit over the Western Hemisphere.
How Does It Work?

4. Once the satellite receives the message, it is transmitted to the system host transmitter (FM Radio Station using a side band).

5. The transmitting station then sends the message to designated receivers on the ground.

6. There is no limit to the number of receivers that can be distributed.
Why can DataFM be an ally of TsunamiReadiness

1. It uses existing FM networks. All stations in an area can be installed with an encoder to allow transmission using each radio station’s side band frequency.

2. The system will not crash from overload as do land lines and cell phones.

3. The system has an annoying alert tone that will wake the dead.

4. The system is relatively inexpensive to install.
Challenges

- Most of our FM radio stations run on automation from midnight this early morning.
- Although we have laws to provide for mandatory evacuation, we still urge voluntary evacuation. It is difficult to gauge what peoples’ reaction to an evacuation order will be.
Probably the Greatest Challenge

- Data Availability
- Data Collection
- Lack of synchronization of data collection, storage, distribution methods
- Agencies that still believe that hugging and holding on to data/information makes them powerful
Challenges

• Cultural practices, livelihoods and old habits have people returning to vulnerable coastal areas even after relocation packages were offered in the past.
• Documenting and reporting of initiatives and successes not part of our tradition.
• Getting the political directorates fully on board has proven to be challenging at times.
Opportunities

• A national move to establish local government has possibilities for local alert and mobilization.
• Peoples’ resilience to bounce back is incredible.
• Telecommunication companies are willing to be more meaningfully engaged.
• Memorandum of understanding with Cable TV carrier to be exploited.
• Our international Partners with renewed energy and commitment.
THANK YOU