JAMAICA’S
Major Event Situational Awareness System (MESAS)
DAISJamaica V.1 is the first of two MESAS Information Visualization and Analysis Tools (IVAT) to provide Jamaican Disaster and Emergency Management authorities at all levels with appropriate Situational Awareness (SA) within three hours after major events such as destructive hurricanes or earthquakes.

**SITUATIONAL AWARENESS**

DAISJamaica V.1 is intended to reduce the post-event period of uncertainty to hours so that life-saving and life-sustainment priorities decisions are taken on the basis of SA level 2 (Comprehension) rather than Level 1 (Perception).
DAISJAMAICA V.1 DATA COLLECTION
Immediately after an event, designated reporters at the community level using the DAISReporter1 Tool send, either by internet or cellular, a number of impact related messages for their area of responsibility. Similarly, designated reporters at the various Critical Infrastructure (CI) establishments such as police and fire stations, hospitals and key health facilities, schools etc. send impact messages using the appropriate DAISReporter1 template for their respective sectors. Data collection tools are applications developed for:

- Windows and Mac computers
- BlackBerry
- Samsung Tablets
- iPads

DAISJAMAICA V.1 ANALYSIS TOOL
Impact messages from community and CI reporters are collated, updated and displayed either in community mode (area information) or CI mode (point information). Data filters as well as a polygon function enhance the analysis process.
**DAISJamaica V.1 Characteristics**

**FLEXIBLE**

DAIS runs on individual computers and does not necessarily require server support. It functions in countries or localities where authorities have limited or no IT capability. In cases where the IT support is more robust, the MESAS/DAIS could be linked to local and national platforms.

**RESILIENT**

Non dependence on server support and IT specialists makes DAIS very resilient. For example, in the event of a major earthquake DAISJamaica is immediately operational regardless of the status of EOCs and their IT capabilities.

**ADAPTABLE**

DAIS uses a simple geo-referenced database and its various functionalities are based on open source software that can be adapted to the operational particularities of different users. DAIS is adaptable to client operational and procedural requirements whether they be national or local emergency response authorities.

**INFORMATION CONTINUUM**

DAIS will be supplemented and linked to DANAVisual and both will feed event impact information to a consequence management system.
**Rationale**

Both initial and continuing post-even SA are dependent on the ability to provide the proper context to impact, damages and needs information. The context is provided by having Pre-Event SA, also essential for both Preparedness and Mitigation. Thus pre-event baseline information is a key element of DANAVisual.

**Purpose**

The purpose of DANAVisual is to streamline the post disaster information gathering system making it more efficient and effective. It caters to the three types of damage assessment as well as the initial and continuous needs assessment streams. All the necessary reporting templates are contained in the reporting tool.

**Description**

DANAVisual is the second Information Visualization and Analysis Tool (IVAT), which with DAIS makes up the components of Jamaica’s Major Event Situational Awareness System (MESAS). DANAVisual will be server supported and include advanced reporting tools (applications) on tablets.
MODULAR APPROACH

The development of DANAVisual is modular. Technical requirements for the rural community module for Jamaica has been completed. Baseline and damage reporting are an integral function of Community Emergency Response Teams (CERT).

COMMUNITY RESILIENCE

MESAS provides a national framework for the myriad of community resilience projects in Jamaica by standardizing through the use of common tools the CERTs pre and post event functions.

COLLABORATIVE APPROACH

EMGI is developing MESAS in collaboration with ODPEM. Highlights of the arrangement include:

- Source Code based on “Open Sources”
- “License-free” arrangement; ODPEM retains right to source codes for future modifications
- EMGI retains rights to adapt code for other clients.
- Knowledge transfer by using local
MESAS WAY FORWARD

Jamaica’s implementation of MESAS is proceeding. DAISJamaica V.1 has been deployed and Community and Critical Infrastructure reporters are being identified, trained and equipped.

- The next key step is to replace DAISJamaica V.1 commercial database with an open source code to facilitate database updates. This will result in deployment of DAISJamaica V.2.
- DANAVisual conceptual development is on-going. Deployment is anticipated to start in 2015 depending on identification of partners and sponsors.
- Finally, DAISJamaica V.2 and DANAVisual will be linked to a consequence management system meeting Jamaica’s operational realities.

DAIS

- DAIS V.1 and Reporter Tools are available for adaptation to other National Disaster Organizations’ requirements.
- ODPEM is seeking partner/sponsor to fund conversion of DAISJamaica V.1 to V.2 and make the source code available to partner(s) (No license fees).
- DAIS users could collaborate in the development of Reporter applications for additional platforms.
- DAIS users could collaborate in the development of the DAIS App on iPAD.

DANAVISUAL DEVELOPMENT

ODPEM is seeking partner(s)/sponsor to:

- Develop additional DANAVisual Modules
- Standardize damage assessment templates regionally.
- Standardize needs assessments
- Establish a Centre of Excellence to support structural damage

CONTACTS FOR ADDITIONAL INFORMATION

HGlaze@odpem.org.jm
r.gonzalez@emgiconsulting.com