UNITED STATES SOUTHERN COMMAND TECHNOLOGY APPROACHES FOR ENABLING MULTINATIONAL ACTIVITIES

US Southern Command
Science, Technology & Experimentation Division
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United States Southern Command's Science, Technology & Experimentation Division investigates, coordinates, executes, and reports on Science and Technology activities in support of the Command's missions; transforming plans, programs, and processes to improve their effectiveness and efficiency. It is responsible for the theater's Science and Technology program, Joint Capability Technology Demonstrations, International Research and Development activities, and Joint Experimentation Program.

SOUTHCOM S&T is focused on enabling partners to achieve more effective, collective mission effects in a multi-national, cross organizational environment.
Sharing and Collaboration in a Multinational, Unclassified Information Environment

Mobile APPs create/share “ground truth” GIS information

Create–Share–Enhance Communication & Collaboration

Work with international partners to understand requirements and develop sharable solutions

Create/ manage/ share GIS data for decision-making and response coordination

Multinational Radar Track DataSharing and Cooperation

Haiti Earthquake

2010 2011 2012 2013 2014
Enabling Technologies for Multi-national Activities

ISR
- Space-based Imagery
- Persistent Surveillance
- Small UAS
- Armored Vehicles
- Force Protection

Wide Area Sensing

Geospatial Mapping & Visualization

C4/SA
- Shared Situational Awareness
- Tactical Comms / Data Networks
- Water Purification / Renewable Energy
- Non-Lethal Systems
- Protection of Civilians

Source: Keeping Watch, A. W. Dorn, 2011
Rapid Open Geospatial User-driven Enterprise

“ROGUE”
Events, such as the earthquake in Haiti in 2010, demonstrated the need for fast, accurate location information in order to deliver supplies and needed assistance to the right place, at the right time.

- Where are the groups of people needing help?
- Who is in the area/coming to the area to help?
- What help is available and where is it located?
- What is the trafficability of the roads/bridges?

How can we get help to those in need?
Collaboratively develop geographic feature data, with traditional and non-traditional partners, by improving the ability of the OpenGeo Suite to ingest, update and distribute non-proprietary feature data utilizing open source software and open standards.

Initial Context
• Humanitarian Assistance & Disaster Relief (HA/DR)

Problem Set
• Numerous partners: military, inter-agency, non-governmental, international
• Common situational awareness of the environment is critical
• Responding organizations both need, and can provide a great deal of information
* Capability to create location information and
* Share the information among organizations
Pacific Disaster Center (PDC) DisasterAWARE

- Platform for Emergency Operations (EMOPS)
  - Worldwide hazard tracking & alerts

- ROGUE capabilities will augment DisasterAWARE
  - Enable use of Volunteered Geographic Information (VGI) with existing authoritative PDC information
  - Enable sharing among organizations
  - Provide open source option to lower cost of DisasterAWARE deployments to other countries
Questions?