Know the Earth…Show the Way

Consolidated Lessons Learned from NGA sponsored crosswalk with Fed/Civ community

Presented on: 2 May 2006
TO: ASPRS sponsored Lessons Learned Working Group

Presenter: Peter Paquette

(703) 735-3530

Peter.j.paquette@nga.mil

▶ OVERVIEW

- ## What worked well?

  - Communication/Collaboration

  - Data Format

  - Discovery of imagery

  - Outreach Support

- ## Areas for Improvement

  - Data Standards

  - Architecture: (interface and capacity)
  - Tasking Processing Exploitation Dissemination Process
  - Data Format
  - Data Dissemination

► What worked well

- ## Communication/Collaboration:
  - NGA & USGS Teleconferences/notes
  - Subject Matter Experts on-line for services
  - Follow-up on actions timely
  - Partnerships with Vendors
  - Data sharing (licenses relaxed)

- ## Way Forward: Continue teleconferences in future disaster operations

Know the Earth…Show the Way

▶ **What worked well**

- ## Data Format*:*
  - GIS ready imagery format
  - Pan Sharpen Orthorectified GEOTIFF Product

- ## Way Forward*:*
  - The first clear image will be requested as a 16 bit NITF and a pan sharpened 8 bit GEOTIFF to be delivered as quickly as possible

  - Same image should be used to create an orthorectified pan sharpened GEOTIFF to be delivered as soon as possible

Know the Earth…Show the Way

► What worked well

- ## Discovery of imagery:

  - ### NGA's Website, Commercial Satellite Imagery Library, WARP Retrieval and query

  - ### USGS – EDC website (archive/dissemination)

    - Creating georeferenced browse images available for viewing or downloading

    - Posted imagery with 24 hours of collection

  - ### Vendors archives

- ## Way Forward: Continue improving search and discover websites/tools

Know the Earth…Show the Way

► What worked well

- Outreach support:
    - NGA's Commercial Imagery Reps
    - Vendors GIS Technical Support

- Way Forward: Continue outreach support in future disaster operations

► Areas for Improvement

- ## Data Standards:
  - Inconsistent Naming conventions
  - Vendor creates an image ID, NGA renames it to fit inside our archives, EDC renames it to fit in their archives variety FTP sites

- ## Way Forward: NGA provided Nextview vendors with Statement Of Work (SOW) outlining the standard naming convention for NextView data.

Know the Earth…Show the Way

► Areas for Improvement

- ## Architecture: (interface and capacity*)*

  - Some customers unable to get to NGA's website or couldn't download due to bandwidth capacity

  - Connectivity unreliable in the field.

  - Some customers require special interfaces to gain access to agencies systems

  - Volumetrics scaled to pipe size

- ## Way Forward: NGA working to provide streaming, chipping capability, and increasing bandwidth on both ends

Know the Earth…Show the Way

Areas for Improvement

- **Tasking Processing Exploitation Dissemination Process**
  - Manage Expectation with Timelines
  - Requirements flow during crisis
  - Collection Strategy
  - Prioritization of requirements
  - List of sources and products available

- **Way Forward:** Work In Progress

Know the Earth…Show the Way

► Areas for Improvement

- Data Format**:**

  - Converting to Orthorectified GEOTIFFs

  - JPEG 2000, Compression

  - Converting to 8 bits

  - Mosaic product

  - Processing level

  - Minimum metadata

- Way Forward: Work In Progress

Know the Earth…Show the Way

▶ **Areas for Improvement**

- **Data Dissemination*:***
  - Central Repository (unclassified)
  - File size (increase bandwidth)
  - Packaging for delivery (<2 gigs)
  - DVDs, Firewire, FTP sites
  - Delivery delays due to certain USPS restrictions
  - Time/Stamp Date important (Pre-post Katrina)
  - Not always timely due to processing
  - Delivery options for areas with little infrastructure
- **Way Forward:** Work In Progress

Know the Earth…Show the Way

QUESTIONS?

Know the Earth…Show the Way

NATIONAL GEOSPATIAL-INTELLIGENCE AGENCY ▼

➢ *Know the Earth…Show the Way* ➢➢ ➢