





# Multi-Source Geospatial Solutions – In Support of New Government Procurements

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# **Overview**



# New Contract Vehicles & New Harris Product Offerings:

- NGA CIBORG Initiative
  - NGA Commercial GEOINT Strategy
  - GSA SIN 132-41 (EO Solutions)
  - GSA Earth Observation (EO) Solutions BPA
  - GSA CUBE
- Harris Broker Service Offering
  - Direct Products
  - Preferred Partner Suppliers
  - Value-Added Products
  - Analytical Services

New Contract Vehicles and New Product Offerings to help Government Agencies (Federal/State/Local) find and procure a wide variety of geospatial products/services



# Commercial Initiative to Buy Operationally Responsive GEOINT (CIBORG)

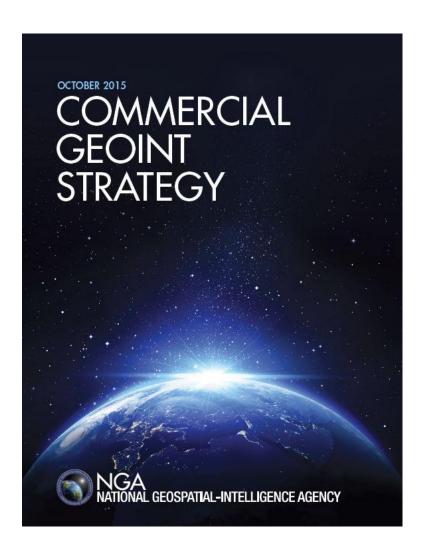
# Vision and purpose

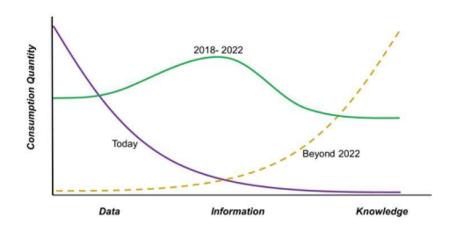
To provide efficient and responsive access to emerging commercially-available supplies of imagery, data, analytical capabilities and services

Approved for Public Release 16-493 NGA Industry Day Slides – 6/16/16

# **NGA – Commercial GEOINT Strategy**







### NGA goals:

- Embrace emergent commercial GEOINT capabilities: global coverage, rapid revisit rates, diverse spectral content, aggregation of open source content & growing analytic capabilities
- Explore, experiment, and evaluate commercial GEOINT data sources, analytic services, and knowledge building methodologies as they evolve
- Collaboration between NSG/ASG, Federal Civilian and Industry Partners

# Why is CIBORG a Collaboration with GSA?



- GSA is an established leader and innovator in government Acquisition
- Multiple Award Schedules provides access to commercial suppliers for government-wide use
- Increases flexibility for rapid procurement against dynamic requirements
- Encouraging competition in marketplace provides access to industry partners that can provide the commercial products, innovative services and solutions to support the government's needs
- Allows for US Government (DoD/IC and Fed-Civil) to procure commercially-available geospatial data, products, & services
- Complies with all DoD/IC and Federal Acquisition guidance & regulations
- Provides rapid entry for emerging suppliers/small businesses
- Expands options available to NGA's domestic & international end-users
- Increases value to US Taxpayer

# Why GSA IT-70?



- Largest IT contract vehicle in the government for commercial offerings
  - Over \$15B in IT procurements annually
  - Over 4700 contractors (>80% are small business)
- Potential 20 year Period of Performance (PoP); 5yr base w/ 3 options
- Gives Federal and Local government agencies a fast and efficient contract vehicle at fair and reasonable prices
- The solicitation on FebBizOpps, is open continuously and vendors can submit an offer or modification any time
- Blanket Purchase Agreements (BPAs) can be established which saves time & costs
  - NGA working w/ GSA to set-up Earth Observation (EO) Solutions BPA
- Currently 25 Special Item Numbers (SINs) or IT Categories of services and products
  - 132-41 newly set-up to support all Geospatial Products/Services

# **GSA IT Schedule 70 Structure**





### Hardware/Products

132-3: Leasing of Products

132-4: Daily/Short Term Rental

**132-8:** Purchase of New Equipment

**132-9:** Purchase of Used or Refurbished Equipment

**132-12**: Maintenance of Equipment, Repair Services and/or Repair/Spare Parts



### Software

**132-32:** Term Software License

**132-33:** Perpetual Software License

**132-34:** Maintenance of Software as a Service



### Services

132-40: Cloud Services

132-41: Earth Observation (EO) Data and Services

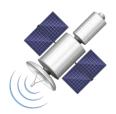
132-50: Training Courses

**132-51:** Information Technology Professional Services

132-52: Electronic Commerce and Subscription Services

132-53: Wireless Services

**132-55:** Commercial Satellite Subscription Services



### COMSATCOM

132-54: COMSATCOM Transponded Capacity

132-55: COMSATCOM Subscription Services



### Identity, Credential, and Access Management (ICAM)

132-60A: Electronic Credentials, Not Identity Proofed

132-60B: Electronic Credentials, Identity Proofed 132-60C: Digital Certificates,

Incl. ACES

**132-60D:** E-Authentication Hardware Tokens

**132-60E:** Remote Identity and Access Managed Svc.

**132-60F:** Identity and Access Mgt. Prof. Svc.

**132-61:** PKI SSP Program **132-62:** HSPD-12 Product

and Svc. Components

132-100: Ancillary Supplies and/or Services 132-99: Introduction of New IT Services and/or Products

# **GSA 132-41: Earth Observation Solutions**



Provides geospatial earth observation technologies, products, and services to include, but not limited to ground, satellite and aerial based sensor data and imagery; worldwide digital transmission, internet, data, and video services and products through various networks, platforms, and applications. Offerings include global coverage, imagery, archive storage and distribution, monitoring, basemaps (mosaics), and earth observation solutions for accurate, mission critical information for uses to include, but not limited to, environmental, agriculture, meteorology, forestry, fish & wildlife habitats, disaster response and recovery, defense, maritime, mapping, humanitarian support, transportation, and public safety.

Includes direct-downlink and delivery services including ground and mobile ground terminals, direct access service, direct to cell phones, ships, and aircraft. Provides solutions based on commercially available dedicated, shared, or on-demand satellite resources and associated terrestrial components and/or airborne constellation/platforms including Unmanned Aerial Systems (UAS). This includes, but not limited to, ground, satellite-based or airborne communications, sensor data, imagery and geospatial collected or derived services and/or products. Sensor data includes electro-optical; synthetic aperture radar; Hyperspectral; LiDAR, geomagnetic field; gravity field, thermal, sonar, and all other current and emerging technologies.

Includes remote sensing and analytic software products, software applications, software data management and analysis, and cloud applications. The full range of end-to-end data services are in the scope of this SIN to include, but not limited to, <u>advanced data analytics</u>, <u>crowdsourcing</u>, <u>change detection</u>, <u>alert notification</u>, <u>machine learning</u>, <u>and emerging technologies and solutions</u>.

# What is The CUBE?



### The CUBE will:

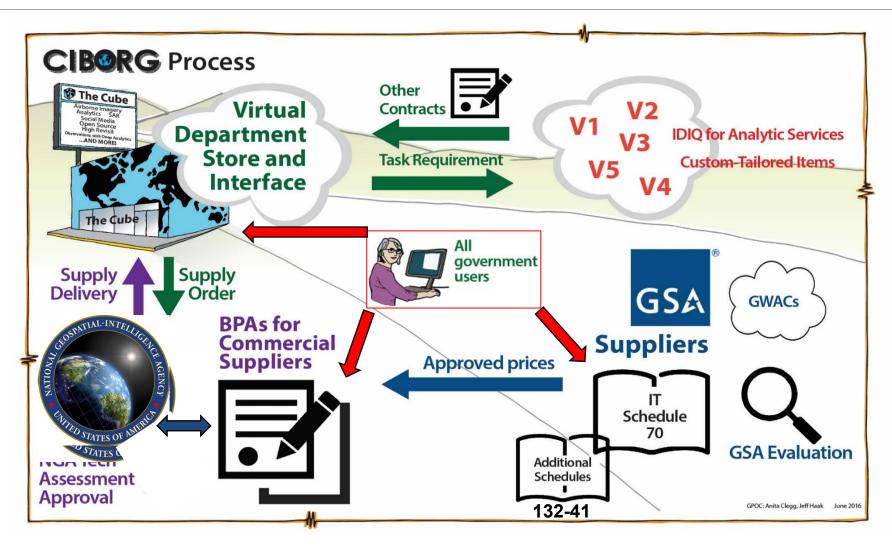
- ✓ Be the delivery mechanism to support a multi-purpose community of interest clearinghouse service delivery across NGA and the geospatial service-sector.
- ✓ Enable a single interface for the geospatial community of interest.
- ✓ Contain data that is commonly shared between the geospatial community and the community of service providers.
- ✓ Provide for discovery tools and predictive analytic tools
- ✓ Be governance based. It will be developed, operated and maintained by GSA in support of NGA and other government entities.
- ✓ Initially this will be through Schedule 70 Blanket Purchase Agreements (BPAs).
- As the CUBE matures, it will provide potential suppliers an ability to make available business responses in a near real time transaction
- The CUBE becomes the ordering/tracking/inventory/library for USG agency purchases

Portions extracted from: NGA Industry Day Slides – 6/16/16

GSA plans to release The CUBE RFQ for Systems Integration later in 2018

# CIBORG-GSA-BPA-CUBE Overview





# What is Expected from Industry?



- GEOINT data, products, and services that support government users in formats produced for commercial customers
- Establish and/or update relationships with GSA, via Schedules
  - Geospatial Products must be listed on 132-41 and approved in order to bid on upcoming EO Solutions BPA
- Offer competitive prices
  - GSA pricing required to be below commercial pricing
  - Allows for discounts for larger quantities
- Create APIs that enable Machine-to-Machine interfaces
- Offer flexible and/or varied <u>licensing</u> options that enable sharing with domestic & international Government partners
  - Single Agency, DoD/IC, Fed-Civil, State/Local/Tribal, USG-wide, USG + Foreign Partners, and/or Unlimited Rights
- Keep schedules up to date with new product offerings & prices
- Collaboration and Partnerships to facilitate Broker Product/Service Offering

Portions extracted from: NGA Industry Day Slides – 6/16/16 and 2017-18 EO BPA RFI's

## **EO Solutions BPA**



- RFI released in July 2017 (follow-up RFI's in 11/17 and 1/18)
- Future program for any government agency (Federal, Local/State, Tribal) to purchase geospatial data and services from qualified down-selected vendors
- Product offerings will be available to any government agency via GSA
- Two specific categories
  - Pool One (Minimally Processed Data & Services)
  - Pool Two (Analytic Services)
- Suppliers must have approved product offerings on GSA SIN 132-41 in order to bid
- Preference given to Broker service trusted suppliers who can offer portfolio of products/services
- Pricing and product offering options need to defined (not labor rates)

GSA plans to release the RFQ for the EO Solutions BPA within the near future

# **EO BPA: Pool One Subcategories**



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,	Subcategory - 1 - Electro-Optical (EO) panchromatic imagery	Subcategory 23 - Sonar data	
0 :	Subcategory - 2 - EO multispectral imagery	Subcategory 24 - Radio Frequency Signal Detection data	
	Subcategory - 3 - EO hyperspectral imagery	Subcategory 25 - Spectrometer Readings are data	
)	Subcategory - 4 - EO short-wave infrared (SWIR) data	Subcategory 26 - Precision Positioning System signal data	
ĺ	Subcategory - 5 – EO full motion video (FMV) data	Subcategory 27 - Platform Sensor data	
	Subcategory - 6 - Thermal infrared radiation (IR) FMV data	Subcategory 28 - Database data	,
	Subcategory - 7 - Visible infrared radiation (IR) FMV data	Subcategory 29 - Basic Foundation GEOINT (FG) data	i
	Subcategory - 8 - EO Wet Film is data	Subcategory 30 - Pan-sharpened or panchromatic sharpened images	
	Subcategory - 9 - Light Detection and Ranging (LIDAR) data	Subcategory 31 - Orthorectified imagery	i
	Subcategory 10 – Space-Based Persistent Infrared Sensors data	Subcategory 32 - An ortho-mosaicked image	i
	Subcategory 11 - Synthetic Aperture RADAR (SAR) imagery	Subcategory 33 - Geodetically Controlled Stereo Images	
	Subcategory 12 - SAR moving target indicator (MTI) data	Subcategory 34 - Digital Elevation items	
	Subcategory 13 - Planning and Scheduling data	Subcategory 35 - Trends from Open Sources Data Sets	
• • • •	Subcategory 14 - Human Geography (HG) data	Subcategory 36 - Derived/processed data maps and vector datasets Subcategory 37 - Visualization Services	i
	Subcategory 15 - Open Source content	Subcategory 38 - Vector Data Set Generation	
5	Subcategory 16 - Geo-located Social Media data	Subcategory 39 - Historical Image Scanning	: 
	Subcategory 17 - Geo-located Open Source data	Subcategory 40 - Thermal	
_	Subcategory 18 - Open Source Commercial Studies data	Subcategory 41 - Crisis and Emergency Services	
7			
)	Subcategory 19 - Geo-located Voluntary Information	Subcategory 42 - LIDAR Point Clouds and LIDAR 3-D Cloud data sets	
::: •	Subcategory 20 - Crowdsourced data	Subcategory 43 - Feature/Web/Map/Image Services	
	Subcategory 21 - Geomagnetic Field data	Subcategory 44 - Multiple levels of radiometrically-corrected imagery	

Harris is planning to support diverse product offering with partner network

Subcategory 45 - Data as a Service (DaaS)

Subcategory 22 - Gravity Field data

# **EO BPA: Pool Two Subcategories**

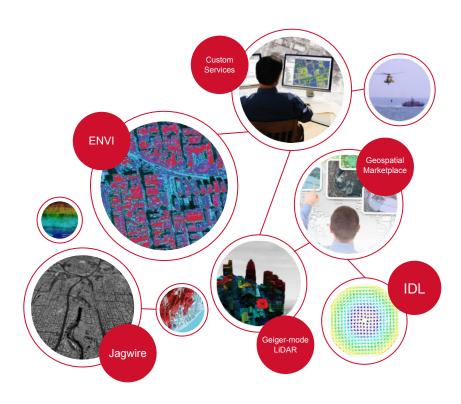


Sub-Categories	Description
Subcategory - 1 - <mark>Un-named Objects</mark>	Un-named Objects are representations of physical objects and the activities of physical objects of interest to consumers, such as equipment, facilities, organizations, activities, events, and issues
Subcategory - 2 - Change Detection Services	Change Detection Services where the vendor provides a product and/or service to identify and describe comparable differences between images of the same geographic location at different time intervals or under varied conditions.
Subcategory - 3 - <mark>Space Based Persistent</mark> Infared Sensors	Space-Based Persistent Infrared Sensors/EO/Radar Trajectory Data refers to using Space-Based Persistent Infrared Sensors, EO, or Radar data to describe the course of a measured variable over age or time. A trajectory or flight path is the path that a moving object follows through space as a function of time. The object might be a projectile or a satellite. For example, it can be an orbit—the path of a planet, an asteroid, or a comet as it travels around a central mass.
Subcategory - 4 - Observations as a Service	Observations as a Service (OaaS)where the vendor provides observations (information gleaned from viewing, interpreting, and analyzing a primary source) on a customer-specified schedule and/or from a customer-specified primary data source
Subcategory - 5 - Feature Extraction	Feature extraction where the vendor offers a product and/or service that enables the management of a large set of data and delivers an output that captures visual context of images for indexing and retrieval
Subcategory - 6 - Named Features and Objects	Named Features and Objects refers to vector features and objects (geographic objects with vector geometry) and frequently used geographic data types, well suited for representing features with discrete boundaries, such as streets, states, and parcels. A feature is an object that stores its geographic representation, which is typically a point, line, or polygon, as one of its properties (or fields) in the row.
Subcategory - 7 - Human Geography	Human Geography (HG) data is a major field of Geography that is centrally concerned with the ways in which place, space, and environment are both the condition of and the consequence of human activities. HG studies human presence, patterns, and activities within the context of their physical environment.
Subcategory - 8 - <mark>Maps/Charts</mark>	Maps/Charts. A chart, especially a nautical chart, has special unique characteristics including a very detailed and accurate representation of the coastline, which takes into account varying tidal levels and water forms, critical to a navigator. A map emphasizes land forms, including the representation of relief, with shoreline represented as an approximate delineation usually at mean sea level.
Subcategory - 9 <mark>- Analysis as a Service</mark>	Analysis as a Service (AaaS) is GEOINT knowledge that is the product of geospatial analysis to include analysis of imagery, other geospatial data, Open Source data, and other non-traditional sources of geospatially enabled data. AaaS consists of reporting based on combined information or information linked over time to include – but not limited to – finished analytic reports, baseline reports, trends over time, and forecasting
Subcategory - 10 - Observations as a Service	Observations as a Service (OaaS) is GEOINT information consisting of non-analytic structured observations derived from the review of imagery and other non-traditional sources of geospatially enabled data. GEOINT Observations are information about some activity, event, or location at a point in space and time. Each observation can consist of a number of fields or attributes.
Subcategory - 11 <mark>- Data as a Service</mark>	Data as a Service (DaaS) is geospatially enabled structured data to include – but not limited to – raw or partially processed pixels, commercial imagery, and georeferenced text or images.

# **Harris Geospatial Solutions**



- From sensors and software to actionable information, our solutions and products help you make informed decisions – when and where they are needed.
  - Innovative Geiger-mode LiDAR sensor designed for wide-area and high density collections
  - Off-the-shelf and custom solutions for advanced geospatial analysis
  - Tools for hosting and managing distributed data processing in a high-performance computing environment
  - An online marketplace that puts the best commercially available geospatial data and imagery at your fingers.
  - Value-added services (VAS) that give you actionable information.



Harris offers mix of minimally processed data, VAPs, and analytical services to support GSA Pool 1-2

# Harris Geospatial Marketplace







### **Product Generation Data and Content Management** • Improved currency through content-centric mgt. Data Management, Ingest (Jagwire, Active Catalog) • E-Commerce, Online Geospatial marketplace Hosted Archive / Retrieval · Operational image quality assessment & monitoring **Automated Processing** • 40 million sq. mi. of imagery processed yearly · Advancing One Object One Time capability • Elevation Extraction to source pixel resolution Petabytes of sub-meter Elevation processing **Product Generation** >2 million data sets / mo to users worldwide · Producing dynamic GEOINT content for two-thirds of the world **Analytics & Knowledge Services** Enhanced SW Tools (ENVI, ENVI LiDAR, SARScape)

Knowledge Defense / Intel

Domain



- Civil



Utilities. Energy



Intl.



**Maritime** 



Land Mgmt

### Harris offers multi-source brokering, quality improvement and value added services

for creating derivative works

Information Products

· Analytics and Services Provide Actionable

# Harris Geiger-Mode LiDAR: Data & Product Services



On GSA, Harris offering the following w/ Tier-Level volume discounts:

- Calibrated Point Clouds (2-8-20-30ppsm)
- Final USGS QL1-2 Products

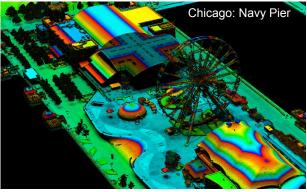
Large area, high density collection leads to expanded multi-use opportunities in support of GSA Pool 1

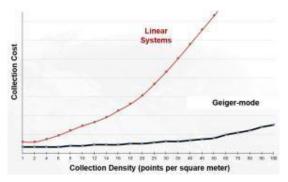
### Advantages:

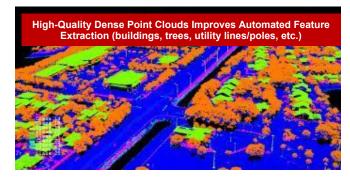
- ✓ Greater Collection Rate
- ✓ Lower Cost Collections
- Lower SWaP
- ✓ Wide Area Mapping
- ✓ Greater Point Density
- ✓ Multi-Look Collection











# Harris Geospatial Data Partners



Satellite Imagery Providers	Aerial Imagery Providers	Other Geospatial Data Providers
21AT	BlueSky	Aerial-Maritime (AIS-ADSB)
Aquila Space / Astro Digital	Eagle Aerial Imaging	Collins Bartholomew
Airbus Defense & Space (+ DEMs) <sup>G</sup>	EagleView / Pictometry G	CompassCom (GCPs) G
BlackSky Global G	Harris (Geiger LiDAR) G	Digital Stakeout (social media)
Maxar Tech. (DigitalGlobe, MDA)	Hexagon / Valtus	Garmin / Delorme (vectors)
Eagle Aerial Imaging	Intermap Technologies (+ DEMs)	EastView Geospatial (maps/vectors)
e-GEOS	Landiscor Aerial Information	EGS Technologies (telco. clutter)
ESA (Sentinel)	NearMap	ESRI (vectors + misc. data partners)
EarthStar Geographics (15m)	Sanborn G	eXactEarth/Harris (AIS) G
ImageSat International	Verisk / Geomni	US Fed-Civil (NASA/USGS/USDA)
Planet / BlackBridge / Terra Bella G	Vexcel Imaging / NICB	Hart Energy / Rextag (O&G)
RESTEC / JAXA (Japan)	9	LandInfo (maps/vectors)
Satellogic	Data Partners (New &	LeadDog Consulting (city - vectors)
SI Imaging Services	Existing): Please notify us to update agreements for	Pitney Bowes / Maponics (vectors)
UrtheCast / Deimos + Pan-Geo G	GSA offering	PLW Modelworks (3D models)
VRICON (+DEM) G		TomTom (road vectors)
<u>LEGEND</u> : = Known/Planned GSA Product Pricing		WhiteStar (O&G)

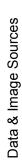
### Harris has a diverse set of partner agreements (updating commercial to include government pricing for GSA)

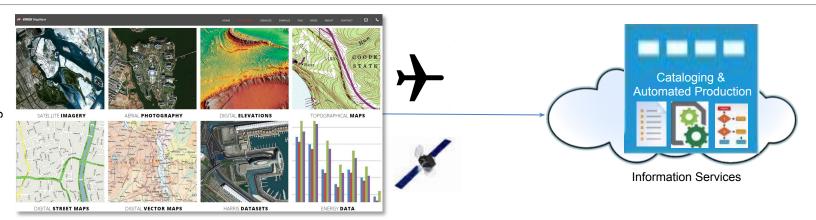
- Linking data holdings from data providers into Harris IntelliEarth Observer Platform via API (for those who offer it)
- Plans to offer Broker Service to represent and offer minimally processed data (GSA EO BPA Pool 1)
- Plans to offer additional value-added products and analytical services (GSA EO BPA Pool 1-2)

Harris offering geospatial data products and value-added services from >40 partners

# Harris IntelliEarth Observer Platform







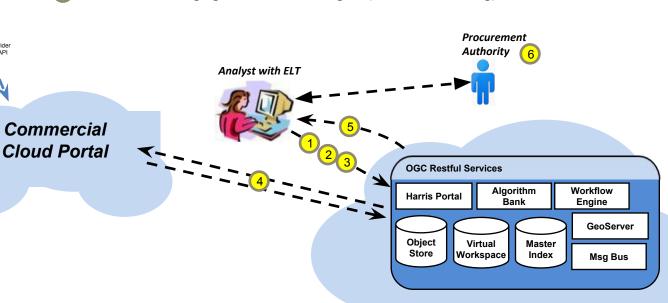


# **IntelliEarth Observer Platform**



# 1) Broker Data Service Offering

- 1 User browses Harris portal. Analyst opens search application and searches enterprise to discover available imagery or other data sources
- 2 Analyst selects available imagery or other data provided by the marketplace
- GSA BPA provides a method to purchase selected imagery or data
- 4 Imagery or other data retrieval initiated from the commercial data providers
- 5 Imagery or other data downloaded by user stored in a S3 Bucket or Open Data Store
- 6 Track, and manage government user rights (based on licensing) and transactions



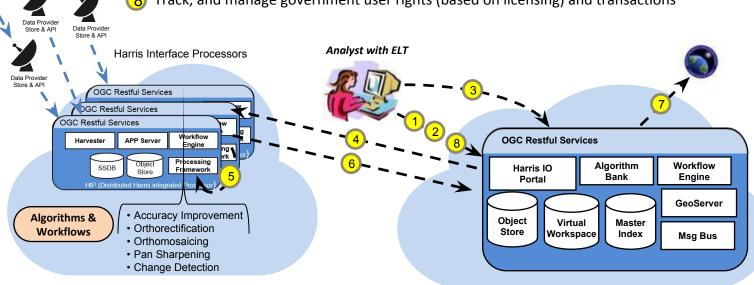
Data Provide

# IntelliEarth Observer Platform



# 2) Value-Added Processing Broker Service Offering

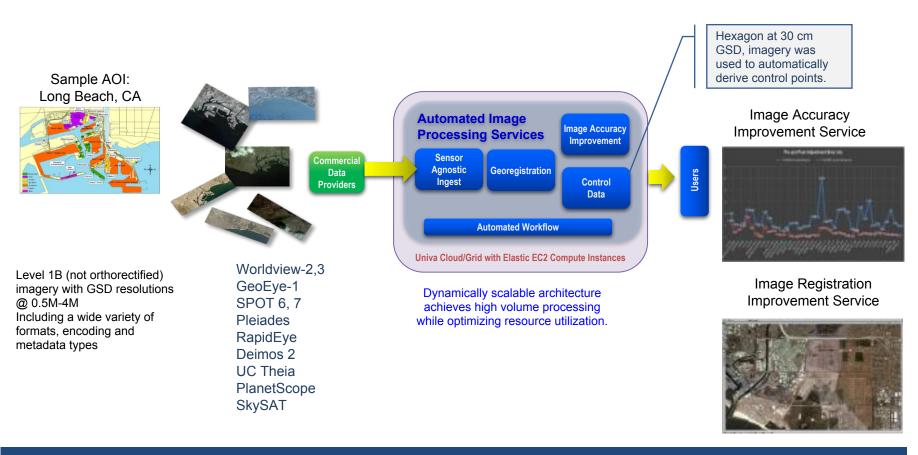
- 1 User authenticates govt user into enterprise. Analyst sets up an AOI to run Knowledge Services
- 2 Analyst Defines the Features, Objects of Interest, and Alerts
- 3 Analyst selects an algorithms, inputs parameters and initiates processing workflow
- Workflow delegates processing to distributed nodes, co-located with data providers
- 5 Imagery is normalized and transcoded to NITF 2.1 and analytics are run
- 6 ATR results populate database
- 7 User views alerts within the dashboard
- 8 Track, and manage government user rights (based on licensing) and transactions



# **Automated Image Processing Services**



<u>Objective</u>: Provide an automated image processing service to improve the accuracy of imagery data from multiple commercial satellite and small sat imagery providers:



Additional services include automated elevation extraction and orthomosaics

# **ENVI Analytical Services**



### On GSA, Harris offers the following ENVI related solutions:

- Desktop Software Licenses
- ENVI Cloud Based Service Licenses
- ENVI Analytics Runtime Services

### Full suite of desktop licenses and cloud-enabled analytic algorithms, workflows & services

### Image Analysis Workflows

- Support >70 data formats for most satellite and airborne sensors
- Support multispectral, hyperspectral, LiDAR, SAR, thermal, and FMV
- Workflow automation, spectral processing, and advanced algorithms
- Scalable cloud deployment for large-scale enterprise solutions

### **Proposed GSA Analytics Runtime Services**

### **Anomaly Detection**

Search an image for statistical and spectral distinctions from the background landscape

### Classification

Classify terrain automatically or with user defined specifications

### **Image Registration**

Improve the georeferencing of an image w/ RPC or rigorous model processing – or improving accuracy using other control

### Lidar 3D Model Processing

Prepare 3D Data for Geospatial Analysis, Identify and Extract 3D Features of Interest, Refine 3D Feature Extraction Results, Export Realistic Products and Layers

### Viewshed Analysis

Perform a line of site analysis

### **Feature Extraction**

Find features of interest using parameters based on spatial, spectral, & textural details

### Change Detection

Look for areas of change by comparing two images from different dates using band ratio or feature index techniques

### **Thematic Change**

Perform change detection between two classification results

### **Atmospheric Correction**

Convert radiance into reflectance for multispectral and hyperspectral imagery

### Vegetation Indices

Create maps using burn difference indices to determine the extent of damage from forest fire or use the flood index to determine flood damage.

### **Terrain Analysis**

Model flood zones, predict wildfire behavior, mud or snow slide potential, or other impacts of natural disasters.

### **Object Detection**

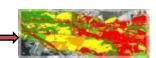
Identify defined objects using spatial, spectral and/or textural characteristics













# **Harris Deep Learning Services**



On GSA, Harris is looking to offer the following Deep Learning solutions:

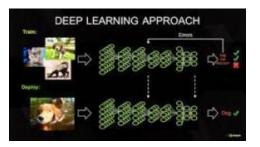
- Features, Objects (Things & Conditions)
- Classifier Libraries
- Knowledge-based Analytical Services

### Geospatially enabled deep learning classifier libraries and analytical services

# Machine Learning for Enterprise GEOINT Analytics

- Harris has been working on the application of Deep Learning to GEOINT problems for 5 years
- Multimillion dollar Internal Research and Development investment in the last three years
- Commercialization is in process

### Train



Production Ready Classifier Libraries



Service Enabled Production Enterprise



### **GSA Schedule for Access To Libraries**

# Deep Learning Service Engine Run time license to support production analytics libraries Run time license to support production analytics libraries Run time license to support production analytics libraries Storage tanks, Sports Stadiums, Athletic Fields, Smokestacks, Cooling Towers, Clouds, Swimming Pools, Buildings, Paved Roads, Overpasses, Tollbooths, Landcover Classification Training Services Provides a training environment and engineering services to build new classifiers LiDAR Classifier Libraries 3D objects (signals, crossings, boxes, poles, buildings, rooftops) Motion Imagery Ground Weather Classifier Library Wet Roads, Ice, Rain

# Harris Machine Learning: Example Projects

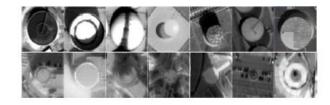


### **Things**

- Airplanes
- Airports
- Ballparks
- Basketball courts
- Cemeteries
- Golf courses
- Dams
- ·Highways and cloverleaf
- Power plants
- Toll booths
- Storage tanks
- Wind turbines
- · Open pit and strip mines
- Playgrounds
- Racetracks
- Shopping malls
- Stadiums
- Swimming pools
- Crops
- Tennis courts
- Water towers

### Conditions

- Damage volume
- ·Damage type, e.g.
- ·Flood
- Infrastructure
- Environmental (e.g.trees uprooted)
- Fire
- Road condition
- Roof condition
- Construction progress
- •Business of a place (airport, parking lot)
- Repair progress
- •Presence or absence of a "resource" like a hospital
- Presence of pest infestation (spider mites)
- Coal piles
- Vehicles for staging (disaster)
- Livestock location
- Active wells
- •Building sighting (why build a gas station if 20 are already there)
- Habitat quality/type/location
- Trailer park conditions—land acquisition
- ·Shipping—amt of containers, locations inside a warehouse





Need to Assess Thing/Condition that needs to be identified/extracted and then train classifiers with the preferred source data options best suited to utilize

# **Summary: GSA Procurement Considerations**



- Assess your needs:
  - What platform / sensor type / phenomenology is best for what applications
    - o spatial vs. spectral vs. temporal vs. price
  - Minimally Processed Data vs. VAP's vs. Analytics
  - Experimental data/services for new applications, quick-react contracting, monitoring services, etc.
- GSA Procurements
  - IT-70: Thousands of approved existing suppliers
  - SIN 132-41 and EO Solutions BPA: Geospatial data products, analytics & services
  - CUBE: The repository for commercial data procured from EO BPA
    - Data may already be procured with USG-wide license or simply need license uplift

### Take-Aways:

- GSA contract vehicles should be fast and easy to use
- Allows for direct contracting with preferred and qualified vendors or drive competition
- NGA's CIBORG initiative has helped drive more Geospatial data products and services to be listed on GSA (132-41) than ever before
- GSA pricing offered to Government agencies must be lower price than commercial offering
- Harris is offering Broker Service with over 40 different data partners (and growing)
- Harris is continuing to invest in our Multi-Source Data Platform and connecting with Harris Machine Learning and ENVI Analytics capabilities

