The GEOINT Revolution

NGA-NRO Industry Advisory Working Groups

USGIF GeoINT Symposium 2016
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Working Groups
Agenda

• Working Group Introductions

• NRO-NGA Working Group Topical Discussions
  1. Software licensing & “Pay for Use” in an ICITE world (NRO)
  2. Software Terms of Reference & Open Source software governance (NRO)
  3. Requirements: What the government wants vs what industry can provide (NRO)
  4. Quality & clarity of acquisition documents (NGA)
  5. Communications in procurement (NGA)
  6. Innovation in procurement (NGA)
  7. Business Size Recommendations (NGA)

• RFP process timeline comparison: industry vs government (NGA)
  – Future Event

• Member engagement and next steps
What is an Industry Advisory Group?

Industry partners self-organizing to discuss matters of mutual concern and affecting the future business of the industrial base.

An IAG is...
- Volunteer-based
- Strategic in nature
- Objective (pros & cons)
- Open to participation
- Company-agnostic
- Problem-centric
- Focused on outcomes

An IAG is not...
- Sponsored by the government
- Restricted in participation
- Proprietary
- A pursuit/capture venue
- A shaping & positioning opportunity
- A venue to recommend products
- An open ended discussion forum

“Action Team” Deliverable-Based Approach
NASP IAWG
Mission, Charter & Objectives

• Mission: Help move NRO from vertical systems to mission platforms
  – Identify business models that will support government and industry objectives
  – Identify potential pitfalls and recommend potential solutions

• Charter: Provide expert industry resource and sounding board focused on Business aspects of emerging models to acquire software services
  – Ramifications of componentizing software applications,
  – Benefits accrued to the government & industry,
  – Intended and unintended consequences against the industry base,
  – Limitations and viability as a reasonable course of action

• Objectives:
  – Provide strategic industry input to a changing acquisition landscape
  – Provide an objective and neutral venue for discussing approaches to business models
  – Foster effective communication between government and industry leadership

Monthly Working Sessions on 4\textsuperscript{th} Tuesday
NGA AWG
Mission, Charter & Objectives

• Mission: Help NGA workforce to build flexibility into all acquisitions
  – Identify business models that will support government and industry objectives
  – Identify potential pitfalls and recommend potential solutions

• Charter: USGIF establishes its NGA Advisory Action Working Group (NAAWG) to bring together professionals from the government and industry, to foster procurement culture through bilateral discussions that advise, recommend and promote actionable ideas for improving the contract procurement process and consequences.
  – Improving procurement practices (issuance and evaluation of contract)
  – Assessing and mitigating impacts on Industry Health (e.g. loss of industry staff)
  – Driving efficient (timely, relevant, accurate, fair) procurement culture, acquisition landscape, and behaviors between NGA and Industry

• Objectives:
  – Provide strategic industry input to a changing acquisition landscape
  – Provide an objective and neutral venue for discussing approaches to business models
  – Foster effective communication between government and industry leadership

Monthly General Assembly Sessions on 1st Thursday
NRO Industry Advisory Working Group Topics

- Software licensing & “Pay for Use” in an ICITE world
- Software Terms of Reference & Open Source software governance
- Requirements: What government wants vs. what industry can provide
The Licensing Spectrum: What is a Viable “Pay for Use” Model?

**“Pay For Use”**
- Based on actual usage
- Metered or Tiered
- No long term commit
- No capital investment
- Support costs embedded
- Services separate
- ELA does not apply

**“Term” or “Flex”**
- Buyer ‘leases’ licenses for fixed term
- Priced by projected user/usage
- End of term govt owns/owes nothing
- Includes support & in-scope upgrades
- Services separate
- “Lease to Own” is problematic
- ELA may apply (term limited)

**“Perpetual”**
- Buyer owns & capitalizes
- Priced by projected user/usage
- IT53/300 capitalized investment
- Support & upgrades vary
- License + Support components
- Services separate
- ELA is viable option

“Unlimited” only applies to term & perpetual
Pay-For-Use Considerations: Implementation

• When is pay-for-use appropriate?
  – Variable scale, shifting requirements, discovery phases
  – “If I can’t predict my requirements or workload, why would I pay for something I might not use?”
  – Elasticity and flexibility come at a “price per” premium, but no long term commitment

• When is pay-for-use not appropriate?
  – Stable, production systems with deterministic workloads
  – “If I know I’m steady state for 5 years, why pay by the hour?”
  – Capitalizing (buying) long term instances is more cost effective than pay for use (subscribing)

• Industry base considerations
  – Quality of Service requirements directly impact capitalization and staffing
  – Predicting required support levels is very difficult to get right
  – For companies gauged by backlog, pay for use has negative effect on projections
  – Valuations based on IP and products are fundamentally higher than services
  – “Revenue Recognition” for bundled software + services subject to Federal Accounting Standards Board practices
Software Acquisition Terms of Reference

Terms of Reference Action Team Objectives

- Misunderstandings:
  - Policy, definitions of OSS/COTS/GOTS (what it is, what it’s not), who uses it?
- Miscommunications:
  - “Open Software” vs “Open APIs” vs “Proprietary” vs “Closed”
- Government PM biases against paying for commercial licenses
Software Acquisition Terms of Reference

• Defines 227 terms and 198 acronyms including:
  – COTS, FOSS, FLOSS, GOTS, OSS
  – Components, Frameworks, Libraries, Modules
  – Enterprise License, Perpetual License, Subscription, and Term License
  – Maintenance, Service, Support
  – Commercial, Intellectual Property, Ownership, Proprietary, Public Domain, Rights

• Answers questions including:
  – What are the differences between Open Source components and Open Source systems or solutions?
  – What is the difference between Integration and Development?

• Continuing to define new terms and answer new questions
Open Source Governance

• Open Source Software (OSS) differences from proprietary software require special governance
  – **Support**: commercial, community, or internal
  – **Acquisition**: acceptable licenses, regulatory/agency compliance, valid procurement source, security testing, TCO
  – **Patch and Version Management**: track internal usage, single source for internal distribution, only current version in use
  – **Contribution and Community Engagement**: what to contribute, who engages community, how to engage community
  – **Reporting**: OSS specific metrics and measurements

Open Source Software Institute (OSSI) white paper on Governance of Open Source Software available at http://www.ossinstitute.org
Requirements:
Governments Needs vs. Industry Capabilities

• The government will receive the best overall value when:
  – Requirements align to industry capabilities, be they commercial, open source, or developmental
  – Requirements prioritization is reflected in RFP/RFQ (high to low; threshold-objective)

• When government requirements and Industry capabilities diverge, best value suffers:
  – “Over Asking”: viable alternatives may not receive credible consideration, development risk increased
  – “Under Asking”: capabilities are “left on the table”, requirements risk increased
  – Distinction between commodity commercial item vs. tailored solutions procurements

• To align requirements to industry capabilities, the government would, prior to RFI stage:
  – Perform market research to identify commercially available capabilities (including in-person dialog)
  – Identify and publish specific gaps between requirements and commercially available capabilities
  – Reflect capabilities and gaps in the RFI for industry comment and recommendations
Current Landscape: Industry-Government Interaction

- Challenge: Conveying state of practice, commercially available technology, and industry developmental capabilities in order to align requirements and industry solutions
- Issue: Most programs restrict industry interaction to RFI, Industry Day 1 on 1 meetings
- Impact: insufficient market research & industry interaction before a FRFP, resulting in:
  - Unnecessary requirements
  - Requirements that are expensive to acquire and maintain
  - Inadequate contract mechanisms
  - Increased development risk due to lack of Industry insight or IR&D opportunities
  - Confusing FRFP material resulting in poor responses from Industry and/or protests
- Government response to Industry to date: “post questions to the ARC”
  - Since proprietary and/or contractor acquisition strategy is not protected via ARC posting, Industry rarely post questions that could aid the acquisition
NGA Advisory Working Group Topics

• Quality and clarity of RFPs and terminology around acquisitions
• Communications in procurement: “issues and answers”
• Innovation Recommendations
• Business Size Recommendations
• RFP process timeline comparison: industry vs government
• Future Event
Quality/Clarity of RFPs & Terminology for Acquisitions

• Establish rules and guidelines for specifying requirements – focus on requirements quality criteria

• Check requirements before release – base decisions to release requirements on defined acceptance criteria

• Cross train with industry approaches, styles
  – Conduct a mock proposal exercise against draft proposal documents
  – Adopt the other perspective: invest in capture/proposal training similar to what Industry uses

• Establish an internal process to systematically decompose goals down to shall statements, metrics and targets
Communications in Procurement:

- Commit to fullest use of the U-ARC for RFP and RFI.
  - Commit to feedback from engagements across broadest business community (e.g., the U-ARC)

- Identify NGA points of contact who feedback to industry on submitted RFI responses

- Publish all RFP documents in MSWord with forms and tables via standard MSOffice applications in RFP packages

- Allow download/upload, printing of documents (pricing) at the ACE

- Define set(s) of industry engagement forums which meet Agency objectives (can be opportunity agnostic). Include Industry in pre-planning (Purpose/Objectives, Frequency, Invitees, Outcomes)
Innovation Recommendations:

• Provide unclassified version of all possible documents, plus example datasets, and a sanitized data service within the unclassified cloud DevOps environment

• Designate performance based contracts as the default acquisition strategy to emphasize Contractor accountability to deliver outcomes while incentivizing innovation and investment;
  – Require justification to use non-performance based contracts

• Explore tailored acquisition training beyond traditional DoD courses to include joint industry/government training as peer IC agencies have done"
Business Size:

• Enable maximum business participation by re-establishing clearance holding program for small business and newly graduated midsize.

• Enable maximum competition through an on-ramp approach for (empirically and formally) developing approved systems (accounting/EVM) after award

• Create an virtual mid-size business incentive
  – E.g. adopt more “midsize business” set aside approaches using existing FAR and NAICS (e.g. NAICS <1500 people, etc.)
  – Explore innovative ways to adjust small business utilization incentives so that midsize businesses remain viable subs (and primes)...this includes creating smaller programs that encourage large businesses to role under midsize businesses (or smalls).

• Support business to cross “chasm” successfully through mentor protégé programs
  – Large business mentoring medium businesses
  – Medium business mentoring small businesses
Acquisition Timeline

…and impacts to the business model…
Government Milestones & Industry Full Life-Cycle Activities

Industry Cost
- 15% Business Development
- 25% Bid & Proposal
- 5% Industry Activity

Industry Activity
- Pursuit Strategy
- Shaping
- Qualification
- Internal Review Opportunity/Cost Assessment
- Call Plan (Government & Government Customers)
- White Papers
- Competitive Analysis

Business Development
- Proposal (5% of $50 million)
- Data Entry
- Pre-Kick-off

Bid & Proposal
- Prepare to Protect
- Bidding
- Proposal

Every Amendment Costs & Risks Accumulate

The GEOINT Revolution
Future Event

• Campaign: “Industry-NGA Cultivating United Understanding (ICU2)”
  – NGA and USGIF/NAWG kicks off a series of mock or “mini-mocks” under a Training level campaign called ICU2 (pronounced I See You Too)
  – Outline a harmonization effort that mutually educates Industry and NGA in how we conduct and respond to the procurement and acquisition process

• Light ICU2 Mock procurement/acquisition series
  – Take various stages/phases of the timeline of the procurement/acquisition process and run a “mock ICU2” event

• High Level Mock or deep dive Mock
  – Cursory examination of entire process from industry and NGA perspectives
NASP IAWG Current Action Teams

• Software Business 101
• Software Licensing Decision Framework
• GOTS vs COTS “Make-Buy” Decision Drivers
• Requirements: What Govt Wants vs What Industry Provides
• General topics and issues related to C2S adoption

Come out and join a team...many hands makes light(er) work!
Discussion and Topics Ideas
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