Enabling Interoperability by Enterprise Formation

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Session Goals

• Inform the participants of the progress and challenges being made by different organizations using different approaches to enterprise formation and interoperability
  – ESA
  – USSF
  – Commercial

• Offer participants an opportunity to ask questions and offer suggestions to address the challenges cited
Presenters/Panelists

Thanks to all the Panelists!!

- Anthony Walsh, Operations Data Systems Manager, ESA
- Lt Col Nathan Terrazone, Enterprise Ground Services DevSecOps and Mission Integration Branch Chief, USSF
- Gerry Simon, Chief Architect, Parsons Mission Solutions
- Don Sather, Technical Fellow, The Aerospace Corporation
Key Points
Significant challenges exist

• Key challenges are similar for all groups even though the approaches taken to formation have many differences
• Challenges:
  – *Breaking down cultural barriers*
    • “My program is different…. And it’s mine….“ Getting programs to focus on enterprise as part of their mission
  – *Managing complexity and Scale*
    • How do we develop an infrastructure and processes that can manage several dozen assets today which could be several thousand in a few years?
  – *Funding (or the lack thereof)*
  – *Application of the right standards in the right way*
    • Need for standards that scale
    • Support the end user/mission – developing & understanding requirements
• Recognize and act like the enterprise is an essential part of each mission as opposed to a separate “add-on”

• Cultural Challenge (includes Funding and Standards Challenges)
  – Have an organizational structure and personnel that actively supports an enterprise as opposed to just missions
  – Structure funding processes and allocations to foster enterprise as part of the missions – may involve changing the way we appropriate funding
    • Funding can drive behavior – especially on the short term
  – Entity/Organization required to recognize and enable synergy between programs that can’t talk to each other due to classification differences
  – Use and enforcement of well documented standards/interfaces in contracts to help guide Contractor behavior
  – Consider dictating the journey as opposed to the destination – especially if the exact destination is uncertain
    – **Constant & consistent** leadership pressure required to re-steer mission-centric (enterprise-phobic) thinking

• Complexity and Scale Challenge
  – Automate where prudent – drive out touch labor where possible
  – Re-examine trade off allocations between S/C and ground functions to enable better use of ground resources
  – Re-examine ground CONOPS
  – Partition the problem into manageable pieces
    • “Don’t bite off more than you can chew”, “Don’t try to eat the elephant all at once”

**Conclusions**

*The task is daunting but not impossible*