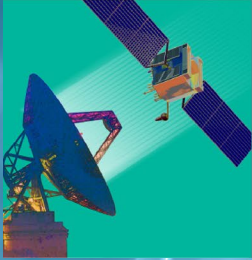


Working Group A Outbrief



Ground System Architectures Workshop Driving Innovation for Enterprise Integration

February 23–March 3, 2022 | Virtual Event

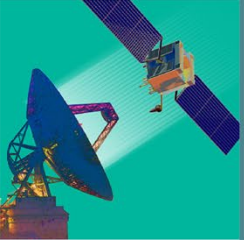
Driving Innovation to Form An Enterprise

*Lead:
Donald Sather,
The Aerospace Corporation*

February 28, 2022

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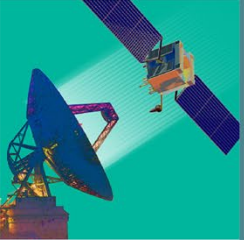
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Session Goals

- Present approaches being employed by different organizations/communities in forming enterprises where innovation can flourish
- Develop a list of common challenges
- Discuss methods that can be employed to address some of the challenges

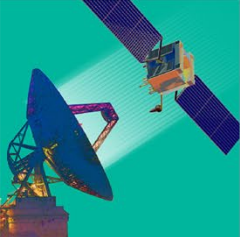
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Presenters/Panelists

- Theresa Beech – NASA
- Mauro Pecchioli – ESA
- Jeff Demetrelis – Aerospace
- Gerry Simon - Parsons Technology

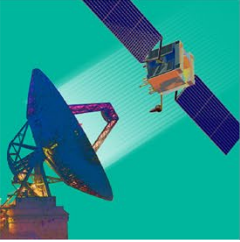
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Key Points

- Enterprises take time and effort to form
 - *Evolve over time*
 - *Roadmaps should be developed early in the development cycle to ensure intent is met*
- Too much initial specificity often invokes a negative response from programs & is probably the wrong level anyway
- Finding early enterprise adopters is difficult
 - *Low risk smaller missions could be considered*
- Common challenges to enterprise formation include:
 - *“Selling” the enterprise approach to programs*
 - *Funding the enterprise*
 - *Balancing program needs with enterprise needs*
 - *“Right sizing” level of enterprise specification*
 - *Issues with regard to sharing data*
 - From a data sharing perspective
 - From a security perspective

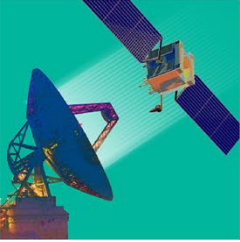
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Conclusions

- “Selling” the enterprise to programs
 - *Sell the benefits of an enterprise - better willing participants than forced*
 - Possible decreased O&M
 - Possible avoidance of vendor lock-in
 - Possible economies of scale
 - Later adopters can leverage experience & products from earlier adopters
 - *Sustained, persistent support/attention of senior leadership required*
 - *Use of knowledgeable & empowered personnel to make decisions and have meaningful discussions required*
 - *Ensure alignment between enterprise development and individual program schedules*
 - *Incentivize/reward adopters – especially early ones*
 - Possibly offer additional funding to the early programs that adopt the enterprise construct
- Funding
 - *Enterprise needs a positive business model before work begins forming one*
 - Will require investment to start the enterprise
 - May take years for payback
 - *“Tax” programs or provide an enterprise funding line*

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Conclusions

- Balancing Program/Enterprise needs
 - *Leadership needs to define enterprise objectives (i.e. why are we forming one?)*
 - *Help programs to understand they are stakeholders in the enterprise – not an “add-on”*
 - The enterprise exists to help programs be successful as well as meet its own goals
 - *Constant communication between programs and the enterprise for fixes and future planning is essential*
 - Enterprise needs to be responsive to programs
 - Programs need to feel that they have a voice in governance & are heard
- “Right sizing” level of enterprise specification
 - *Starting at too low a level could lose programs support and is probably the wrong place to start*
 - Start high level and work down over time
 - *Start with messaging & data standards and, if needed, work down from there*
- Sharing data from a sharing perspective
 - *Start high level (perhaps messaging & data) and work down over time*
- Sharing data from a security perspective
 - *No good answers here, fertile ground for investigation*

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