

Working Group I Outbrief



Ground System Architectures Workshop Driving Innovation for Enterprise Integration

February 23–March 3, 2022 | Virtual Event

Leveraging New Space for Ground System Enterprise Evolution

Co-Chairs:

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Working Group Purpose

This Working Group is formed to:

- *Establish a collaborative forum among experts and decision makers*
- *Discuss and evaluate the evolution of future ground systems*
- *Identify disruptive trends affecting the traditional ground system models*
- *Assess/Reassess the role of commercial services in ground systems*

2022 Session Goals

For GSAW 2022, Working Group has aimed to:

- *Engage a broad range of government agencies, industry, and international partners involved in ground system enterprise*
- *Assess the role of commercial services in the future satellite ground enterprise and their potential impacts on current business models*
- *Reimagine the government/contractor dynamics and exploring transformational technology and services that will impact the status quo*
- *Evaluate strategic business practices of government agencies such as acquisition practices, regulatory changes, and cultural transformations*
- *Assess how changes in these business practices may enable exploitation of relevant commercial technology and business services effectively, affordably, and securely.*

Presenters/Panelists

- Panelists

Mauro Pecchioli - Multi-Mission Infrastructure Programme Manager, ESA/ESOC

Costin Radulescu – Program Chief Engineer, Multi-mission Ground Systems and Services Program, NASA/JPL

*Richard (Greg) Marlow – Director Office of Satellite and Product Operations
NOAA/NESDIS*

Steve Kitay – Senior Director, Azure Space at Microsoft

Hank Tseu – Senior Software Architect at OneWeb

Sarah Mineiro –Senior Director for Space at Anduril

Sheryl Olguin – Senior Project Lead, Aerospace

Key Points

- Agencies are transitioning from mission stovepipes to common applications and Shared services
- Agencies needs are still driven by tight requirements and a low appetite for risk
- When tackling Enterprise Ground Solutions, it is not clear yet what the right balance is between building multi-mission capabilities vs. building mission specific support from a toolkit of common services
- Cultural transformation will take a while, both from an operational & acquisition practices perspective
- Use of standards and repeatable design patterns enables interoperability across service provider offerings
- Launch license processes need greater transparency and to be more responsive to stakeholder needs

Conclusions

- The significant conclusion emerging from the discussion was that we need to rethinking the way agencies and industry engage
- There is benefit for both agencies and providers to engage earlier in the acquisition cycle
- Although agencies need to be the thought leaders in defining the need, they should not work so hard upfront to study the problem & specify solutions, but should allow for discovery & innovation through pilots and demonstrations
- More focused acquisitions will enable technology agility and smaller (lower risk) innovation cycles