

AIAA Cislunar Ecosystem Task Force (CETF)

Overview

June 16, 2023

AIAA Cislunar Ecosystem Task Force – BLUF

➤ Networking – “Team of Teams” Approach

- *Association of Associations – Professional Societies Collaboration*
- *Private Sector Driven – Coordination across Corporate Investments & Priorities*
- *Academic Engagement – Workforce of the Future, Align R&D*
- *Consortium Collaboration – Leverage Centers of Excellence (ISAM, LSIC, LEAG, Private)*
- *FFRDC/UARC – Independent, Objective Technical Depth and Breadth*
- *USG – Mission Focus, Technology Development, Policy/Strategy/Regulatory*

➤ Approach – “Master Planning methodology”

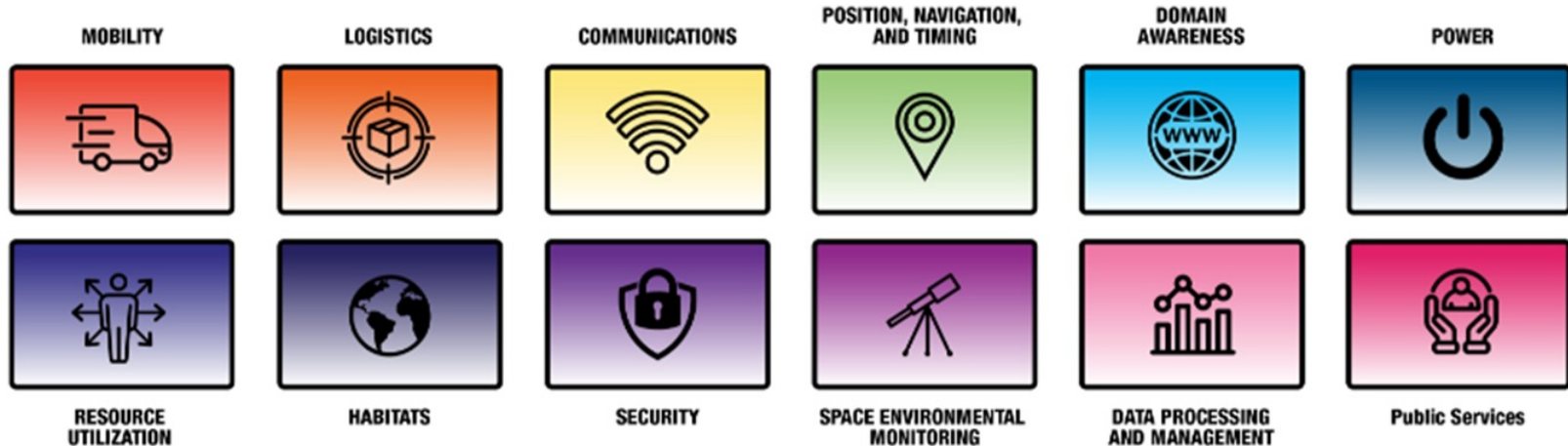
➤ Outcome – Advancing U.S. space capabilities in the National Interest in a timely manner

- *Sustainable Cislunar Ecosystem development, deployment, operations*
- *Rationalized & Prioritized Investment Decisions (Public & Private)*

National Space Policy – Guiding Light

- Extend human economic activity into deep space by establishing a permanent human presence on the Moon, and, in cooperation with private industry and international partners, develop infrastructure and services that will enable science-driven exploration, space resource utilization, and human missions to Mars. - [National-Space-Policy.pdf](#)

sustainable cislunar ecosystem composed of 12 infrastructure/service layers

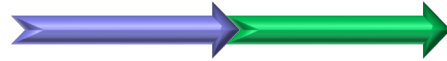


Charting a Course For a “Sustainable Cislunar Ecosystem”

- Vision: *The United States, its allies, and partners lead to foster a peaceful, prosperous, secure, sustainable cislunar ecosystem advancing humankind’s economic, scientific, and cultural interests in space and on Earth.*
- Strategy: Enable a robust ecosystem in cislunar space acting to:
 - Set a vision of future state to help align the space enterprise
 - Leverage and enable commercial solutions
 - Harmonization on key areas of stakeholder actions (interoperability requirements, standards, norms, risk acceptance, domain awareness, in-space testbeds, common infrastructure, STEM education, etc.)
 - Attract like-minded partners and allies
 - Harmonize investments to maximize impact and ensure U.S./allies/partner leadership
 - Identify key areas essential to meet exploration, scientific, national security, and commercial interests
- Tactics: Cislunar Master Planning, Networking, Harmonization

Working Group – *Products & Outcomes*

Products



Outcomes

- Taxonomy, SWOT, Risks
- Technology & Capability Maturation
- Mission Scenarios
- I/F Layer Roadmap(s)
- Reference Architecture inputs

- *“Advancing U.S. space capabilities in the National Interest”*
- Operational Cislunar Capabilities
- MVP Enterprise/Ecosystem
- Sustainable Business Models