



Policy Considerations Related to NASA's Moon to Mars Architecture

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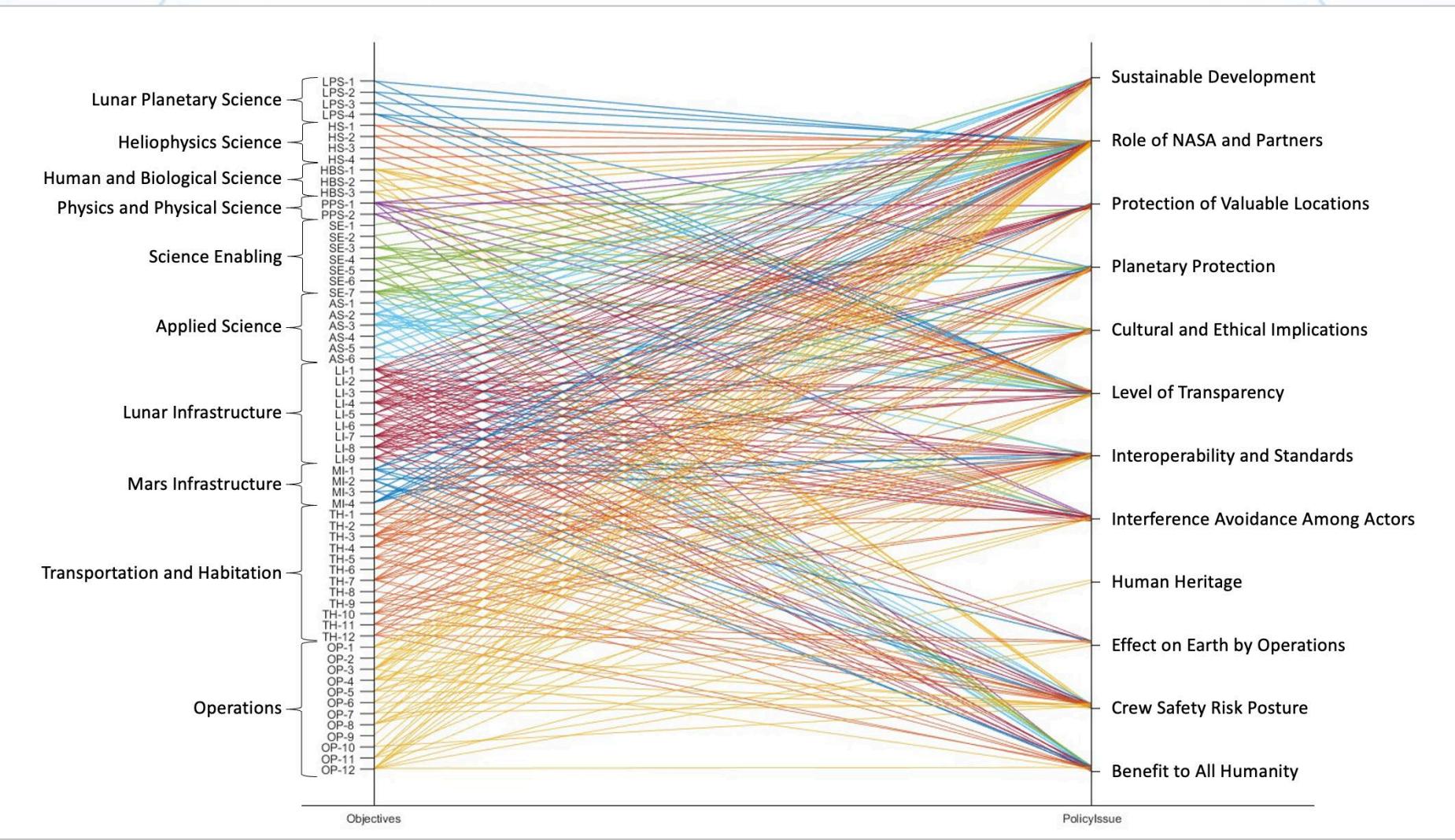
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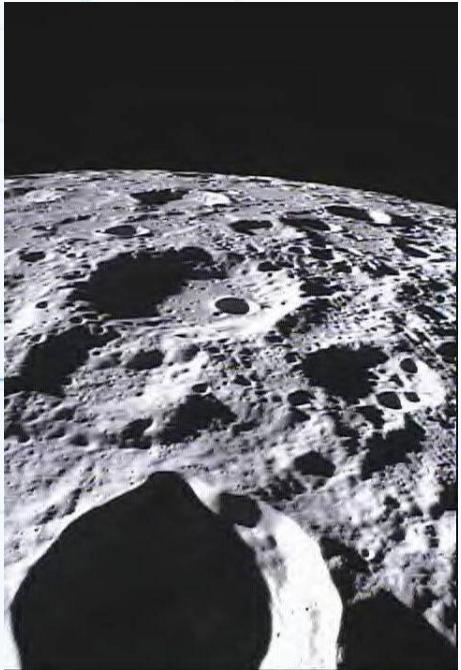
Humans to Mars Summit

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Interconnections Between Policy Considerations



Sample Collection of Policy Considerations



Protection of Valuable Locations

Image of far side of the Moon taken by NASA MoonKam onboard the Ebb spacecraft,
Credit: NASA/Caltech-JPL/MIT/SRS

Transparency

Bhavya Lal, associate administrator for technology, policy, and strategy at NASA Headquarters speaks during a NASA briefing on the Artemis I Moon mission.
(Image credit: NASA/Bill Ingalls)



Planetary Protection

Planetary protection engineers working on Martian rock containment tubes.
Credit: NASA/JPL-Caltech

Role of NASA and Partners

Colombian Vice President and Foreign Minister Marta Lucía Ramírez (left) signs the Artemis Accords as NASA Deputy Administrator Pamela Melroy looks on at NASA headquarters in Washington, D.C., on May 10, 2022. (Image credit: NASA/Aubrey Gemignani)



Example Policy Considerations Raised in M2M Objectives



A Single Objective: A lunar quiet zone (M2M Objective Physics and Physical Science-1)

- Policy considerations are flagged **6 times** across:
 - Role of NASA and partners
 - Interference avoidance among actors
 - Protection of valuable locations
 - Level of transparency
 - Benefit to all nations
 - Social and ethical considerations



Objective Category: Lunar Infrastructure (M2M Objectives LI-1 to LI-9)

- Across all 9 lunar infrastructure objectives, policy considerations are flagged **72 times**.
- Lunar infrastructure flags many policy considerations due to:
 - Operations on relatively small geographic areas
 - Numerous potential actors/stakeholders
 - Potentially limited resources involved



Top two photos, credit: Vladimir Vustyansky; bottom photo, credit: SpaceX



Next Steps



Photo credits: NASA





Thank you, any questions?