

# CoPP Meeting December 2025: The Moon-to-Mars (M2M) Pivot in Planetary Protection

- CoPP appreciates the briefings from OPP, NASA personnel, and other experts on the strategic and scientific pivot in PP policy to enable human and robotic missions to Mars.
- CoPP better understands the “paradigm shift” that PP policy for missions to Mars requires, including:
  - Developing performance-based frameworks that address, among other things, the PP issues raised by humans as potential “vectors” for forward and backward contamination;
  - Identifying ways to sufficiently close PP knowledge gaps for Mars missions;
  - Utilizing, as appropriate, lunar activities to inform PP approaches for Mars missions (M2M strategy); and
  - Disseminating lessons learned from PP scientific, policy, and engineering work on Mars Sample Return.
- CoPP will:
  - Reflect on OPP’s forthcoming white paper on PP and crewed missions to Mars;
  - Monitor how lunar missions support PP science, engineering, and policy for Mars missions informed, among other things, the forthcoming NASEM lunar report; and
  - With NASA’s intent to develop a unified NPR for robotic and crewed missions, follow the implications for PP policy of developments in:
    - U.S. government thinking about the authorization and supervision of novel space activities; and
    - Private sector interest in, initiatives focused on, and potential innovations regarding M2M and planetary missions.

# CoPP Meeting December 2025: The Pivot, Science, and Risk Assessment/Management

- CoPP appreciates the briefing on the NASEM study report *A Science Strategy for the Human Exploration of Mars* by the study co-chairs. In light of OPP's ongoing efforts on PP policy for Mars missions, CoPP will:
  - Study the report closely for its PP implications, particularly its recommendation regarding the urgent need for the evolution of PP policy to enable science during human missions (e.g., new approaches, such as “human exploration zones”); and
  - Follow NASA's efforts to update its PP requirements and standards to address crewed missions to Mars.
- CoPP will follow and, as appropriate, contribute to OPP's work on advancing risk assessment and management methodologies for human and robotic missions to and from Mars. Such contributions could include developing scientific consensus and probabilistic tools to support PP approaches that enable such missions.