National Aeronautics and Space Administration



NASA and the COSPAR PPP

Dr. Frank Groen NASA Office of Safety and Mission Assurance

Presented to Committee on Planetary Protection Fall 2023 Meeting October 20, 2023



sma.nasa.gov

NASA and the COSPAR Planetary Protection Panel (PPP)





> Zorzano et al., The COSPAR Planetary Protection Requirements for Space Missions to Venus.

> NASA endorsed decision to not change policy for missions to Venus at this time.

Ollson-Frances et al, The COSPAR Planetary Protection Policy for missions to Mars: ways forward based on current science and knowledge gaps

NASA endorsed call for continued research to close knowledge gaps and science-based tailoring of approaches for specific missions to achieve a transparent and responsible process to enable mission concepts that advance standards and practices.



NASA Support of Planetary Protection Policy Restructuring Initiative

> Restructuring and modernization is necessary to enhance utility as an international standard

- Improve clarity of the document
- Trace guidelines to clearly stated fundamental PP objectives
- > Enable evolution of planetary protection, including human spaceflight, and capture lessons learned
- Make guidelines current and hardware agnostic
- Consider and engage commercial operators
- Revisit approaches to promote transparency



> NASA recognizes importance of COSPAR's Planetary Protection Policy to scientific and public interests

International standard is needed to reduce risk of unwanted events, motivate collective action, and promote transparency

> Policy restructuring initiative promises to clarify goals, principles, and assumptions

Necessary step towards recognition of advanced mission concepts and planetary protection practices

> Collaboration through the Panel is vital to development of PP measures for crewed missions to Mars

Leveraging knowledge gap workshop series to promote and coordinate R&TD efforts

Engagement for timely and enabling policy development for challenging missions

