

NASA Advisory Council Recommendation

Participation of Planetary Protection Officer in Mission Planning and Design 2013-02-04 (SC-02)

Recommendation:

Planning and design of missions requiring implementation of planetary protection measures should be informed at the outset and through all mission stages by appropriate participation of the Planetary Protection Officer (i.e., a “seat at the table”).

Major Reasons for Proposing the Recommendation:

Meeting planetary protection standards can impose significant design, technical, and cost requirements on missions that visit extraterrestrial environments with biological potential. It is a principle of NASA planning that the earliest possible identification and incorporation of requirements into mission planning, design and implementation is the approach that minimizes mission risk and best controls project costs. Therefore planetary protection requirements should be an integral part of mission planning and implementation from the outset. As noted in NASA Procedural Requirement 8020.12D, projects can benefit from communication with the Planetary Protection Officer during pre-project activities, including to obtain preliminary mission categorization. Planetary Protection Officer participation during pre-project phases can also inform the evaluation of preliminary mission design alternatives to comply with planetary protection requirements.

Consequences of No Action on the Proposed Recommendation:

Later overlay of planetary protection measures and requirements can increase mission risk by requiring alterations at later mission stages, which are needlessly disruptive and costly.

NASA Response:

NASA concurs. NASA will explore how to implement this recommendation during new projects' formulation.