OPAG Issue 6: In Science Evaluations, Use Goals/Objectives/Investigations Documents Generated by the “AG”s (Assessment/Analysis Groups) as a Complement to Decadal Survey Science Objectives

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• **A clear and concise statement of the issue addressed**

To aid reviewers in their assessment of competed mission proposals, usually an AO refers to compliance with the most recent Decadal Survey as the baseline for traceability of proposed mission scientific objectives. However, the Decadal Survey typically covers a very broad array of objectives that encompasses a wide range of investigations, with little information on the priorities among and details of such investigations. Moreover, these investigations span all degrees of difficulty, from those that could reasonably be accomplished with small missions to those that could only succeed via flagship missions. Thus, given the lack of detail on goals, objectives, and investigations provided in the Decadal Survey, reviewers of Discovery proposals not intimately involved with the current state of exploration for a target under review may be left confused, and may end up choosing missions that poorly satisfy the priorities of the relevant Assessment/Analysis Groups, as espoused in each of their Goals, Objectives, and Investigations documents.

• **An articulate and compelling rationale for why the chosen issue would be significant to a wide range of proposers**

Finding a means to provide reviewers with the latest “state of the field” against which to assess the science merit of proposals helps assure the best use of NASA funds for planetary exploration.

• **A discussion of the impact of not resolving the issue;**

Evaluating proposals without using the Goals/Objectives/Investigations documents generated by the Assessment/Advisory (“AGS”) may not lead to selection of the scientifically best missions.
• **Suggested pathway(s) to resolve the issue**

This recommendation is that the published Goals, Objectives and Investigations prepared by the various NASA Assessment/Advisory Groups be taken into consideration in the evaluation process of AO responses as a complement to the Decadal Survey. These Assessment/Advisory Group reports may also be used to clarify the relative priorities within a set of competing proposals that is aimed at the same target of investigation.

• **A discussion of the potential impacts of the suggested solution(s)**

The published Goals, Objectives and Investigations formulated by the various NASA AGs have undergone extensive review within the AGs and have also been promulgated and reviewed within the broader science community. These objectives are often aligned with the Decadal Survey, but are typically much more detailed, thus helping to clarify the fields of interest that may be inherent in a complex target of study. The AG recommendations will greatly aid reviewers in their assessment of the relative importance of proposals that may be submitted for the same target of investigation, providing increased fidelity in the selection process.