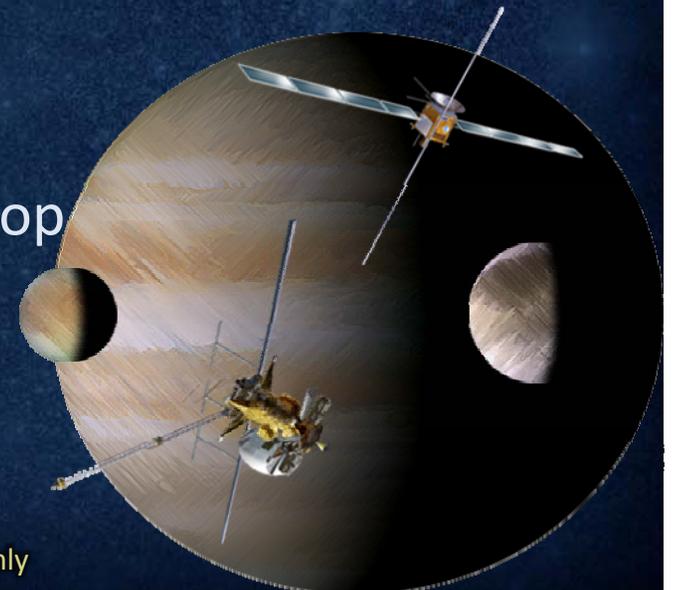




AO Draft Policies and Plans

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Overview of the Announcement of Opportunity

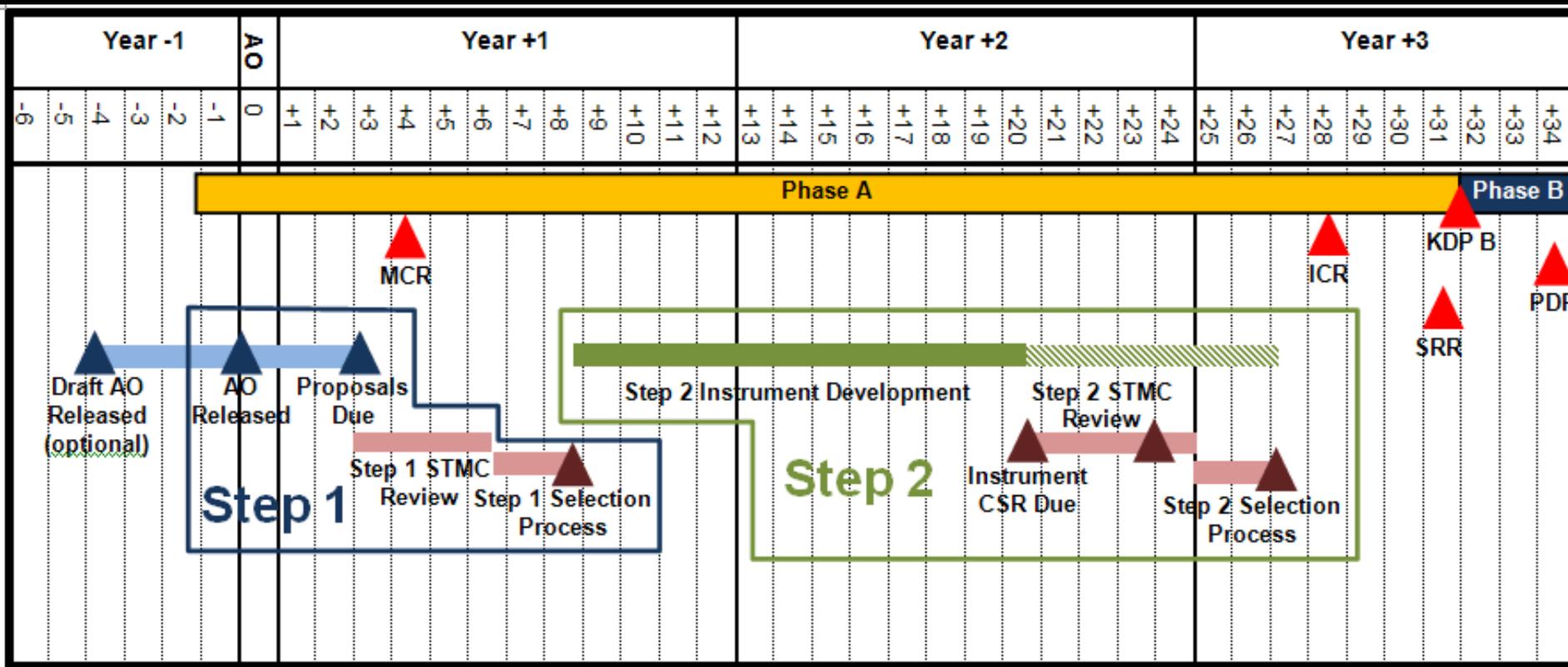


- JEO instruments will be solicited via a NASA Announcement of Opportunity (AO)
 - The AO will be prepared by the HQ Program Scientist and managed by NASA HQ
- AO is currently in DRAFT as language, policies, and parameters are finalized
 - All interested parties have the opportunity to provide input
- The AO will follow the organization and content of the Solar Probe Plus instrument AO to the extent possible, covering standard content including
 - an overview of the mission and its science objectives
 - policies applicable to the solicitation
 - requirements and constraints
 - proposal submission information
 - proposal evaluation and selection information
- AO is targeted for release in early CY11 with proposals due 3 months later
 - A Pre-Proposal Conference will be held after AO release to provide clarifications

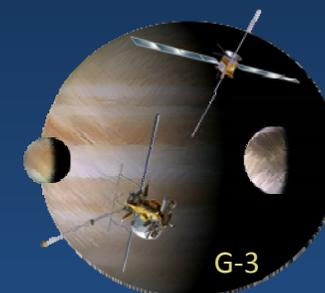




Schedule for the AO



- All dates are notional and fixed relative to AO release date
- Release of draft AO is optional





Input to the Announcement of Opportunity

- The Science Office of Mission Assessments (SOMA) will provide input at HQ's request that is limited to:
 - the Step 1 evaluation process and Step 1 evaluation criteria (both of which will be documented in the AO)
 - technical aspects and impacts of AO policies
 - the guidelines and requirements for the Step 2 formulation effort
- The firewalled pre-project office will provide input at HQ's request that is limited to:
 - the mission concept (covered in a standard PIP prepared by the Project Office with appropriate information extracted and summarized in the AO)
 - technical aspects and impacts of AO policies
 - the guidelines and requirements for the Step 2 formulation effort
 - Documentation for the Program Library





Opportunities for Community Input

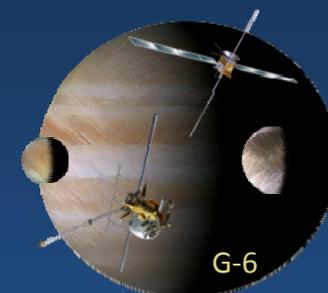
- Community feedback on this topic is essential to both a successful acquisition and a successful mission
- Opportunity for *discussion* is during public meetings (e.g., this workshop and the September OPAG meeting)
 - All presentations are intended to provide ample opportunity for questions and discussion
 - You may also submit written questions at any time that will be discussed at the end of each day
- After public meetings *feedback* can also be sent directly to the Program Scientist via email (curt.niebur@nasa.gov)
- At the appropriate time a Q&A opportunity will be provided on the procurement website
 - All responses will be publicly posted
- A pre-proposal conference will be held after the AO is released to provide clarifications





AO Issues and Mitigations

- Following slides describe some of the major issues to be resolved by the AO
- Potential mitigations are provided to inform proposers of possible AO requirements and to stimulate discussion
 - These potential mitigations reflect draft policies under consideration for the AO
 - Community input will be considered when finalizing the content of the AO
 - Proposers are responsible for reading the final AO, which will provide the final governing policies and requirements for all proposals





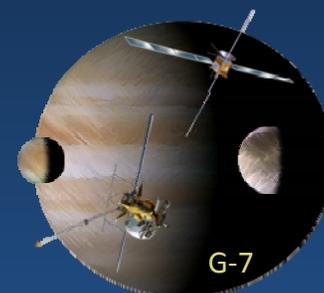
Long-Lived Mission

Issue: Formulation to end of mission spans >19 years, too long a time for an unchanging team roster

Possible Mitigation Policy: Project and Science Team must anticipate personnel turnover to replace vacancies and rejuvenate the team

Possible AO Requirements:

- Succession planning required for key staff (e.g., deputies)
- Regular rotation of people on and off Science Team
- Plans to capture and retain corporate knowledge and capabilities over time (e.g., training programs)





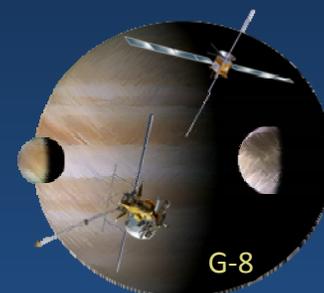
Data Access (1)

Issue: The data volume and operational pace of the mission will exceed the Science Team's ability to "turn around" the science to support operations

Possible Mitigation Policy: Science community involvement can provide additional workforce to examine data and propose observation targets

Possible AO Requirements:

- Rapid calibration and release of low level data products
- Early validation and release of data processing tools and algorithms
- Data access tools for broader community





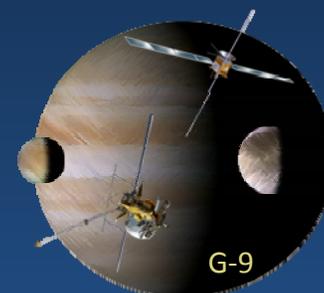
Data Access (2)

Issue: The highly anticipated data from this flagship mission will result in analysis by the community lasting decades and must be promptly delivered in a durable, ready to use form

Possible Mitigation Policy: Standard NASA data rights policy with clearly written data plan, schedule, and requirements

Possible AO Requirements:

- Rapid calibration and release of low level data products
- Automated calibration and validation pipelines
- Timely PDS delivery of high level data products and tools
- Proposal teams encouraged to address this issue in new and innovative ways





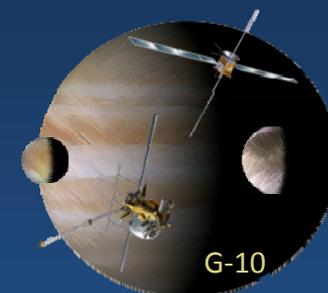
Multi-Instrument Science

Issue: JSDT intentionally defined science goals, objectives, and investigations that are inherently multi-disciplinary, requiring multiple instruments to fully address them, but NASA formally solicits science investigations requiring a single instrument

Possible Mitigation Policy: Investigation Scientists will be individually selected based on proposed multidisciplinary science using more than one instrument

Possible AO Requirements:

- Instrument teams and Investigation Scientists will need to work together broaden science content and capabilities of the instruments





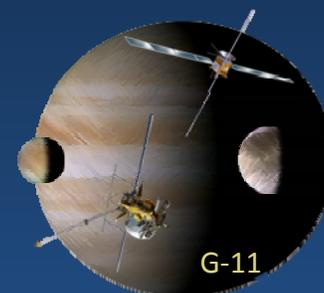
Validity of Cost Estimates

Issue: JEO instruments face unique challenges that create significant uncertainty in their cost estimates at Step 1

Possible Mitigation Policy: Realization that cost estimates will change between Step 1 proposal and Step 2 Concept Study Report

Possible AO Requirements:

- Allow proposers to defend cost estimates without a priori cost caps on individual instruments
- Commit to cost estimates at end of Step 2 rather than Step 1
- Maintain a strong focus on cost realism as opposed to cost magnitude





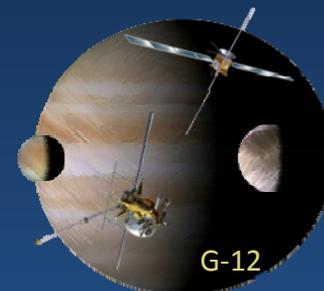
Expectations for Step 2 Effort

Issue: Proposer's plan for the Step 2 formulation effort will be an important criterion during Step 1 selection

Possible Mitigation Policy: The AO must make clear NASA's expectations for the Step 2 effort

Possible AO Requirements:

- AO must provide a robust draft of NASA's expectations and requirements for this effort
- AO must provide a draft of the CSR outline and evaluation criteria, which will be finalized at the Step 2 kickoff after feedback from selected teams





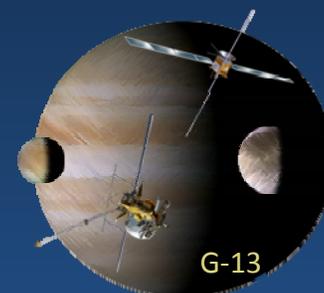
Instrument Suites

Issue: Suites combining multiple instruments may offer resource savings but can greatly complicate both the selection and development processes

Possible Mitigation Policy: Allow proposers to determine their own strategy with the knowledge that NASA will review the suite as a whole

Possible AO Requirements:

- Given the expected proposal response, NASA does not have the resources to perform multiple evaluations of each proposal
- NASA reserves the right to make partial instrument suite selections





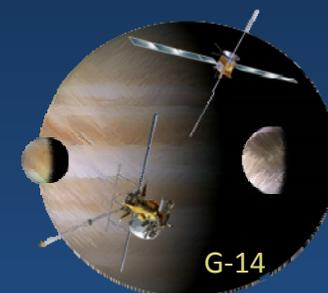
Staffing Review Panels

Issue: Proposal team sizes continue to grow despite NASA admonishments, depleting the pool of conflict-free reviewers and endangering the quality of the peer review process

Possible Mitigation Policy: Proposal teams must be kept small and proposals persuasively describe the key development roles for all Co-Is

Possible AO Requirements:

- Presence of unsupported Co-Is will result in a negative finding from the evaluation panel(s)
- NASA reserves the right to make partial team selections
- Instrument team members focus on development phase





Summary

- Issues presented here are a small sampling of those to be finalized in the AO
- The possible mitigations policies and associated requirements reflect draft content of the AO which is still under discussion
 - Proposers are responsible for reading the final AO, which will provide the final governing policies and requirements for all proposals

