



**Science Mission Directorate
Planetary Science Division**

**Plan for
2019 Planetary Mission Senior Review
(PMSR)**

September 2018

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Agenda

- Missions Subject to the 2019 PMSR
- Missions Excluded from the 2019 PMSR
- Panel Composition and Scope
- LRO and Mars Panels
- Senior Review Subcommittee
- Planetary Advisory Committee
- Notional Schedule
- Communications Plan



Missions Subject to the 2019 PMSR

- Lunar Reconnaissance Orbiter (LRO)
- Mars Atmosphere and Volatile Evolution (MAVEN)
- Mars Exploration Rover (MER – Opportunity)
- Mars Express (MEX)
- Mars Odyssey (MO)
- Mars Reconnaissance Orbiter (MRO)
- Mars Science Laboratory (MSL – Curiosity)



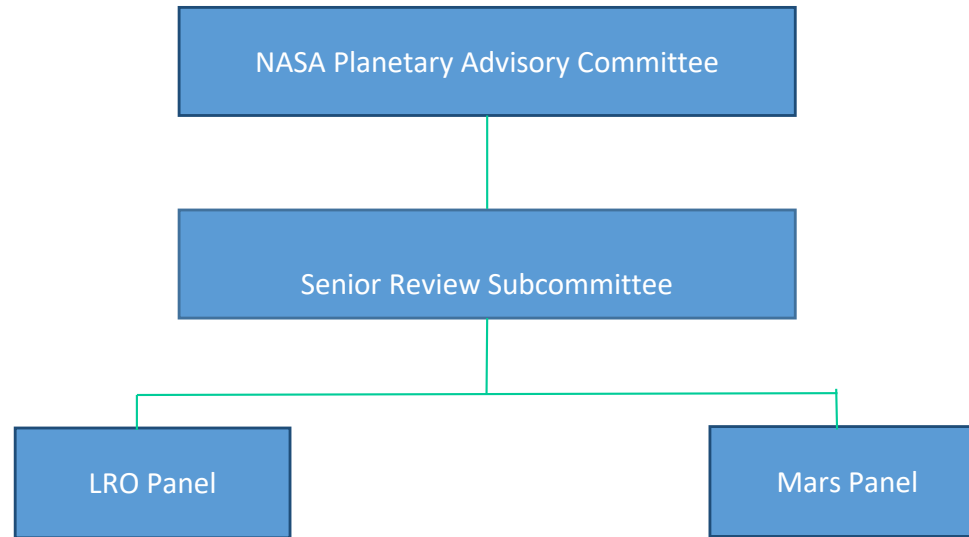
Missions Excluded from the 2019 PMSR

- InSight
 - Prime Mission extends to December 2020
 - Will participate in special Senior Review in spring/summer of 2020 to align with the 2022 PMSR
- Juno
 - New prime mission approved April 2018; ends at beginning of 2022
 - Will participate in special Senior Review in spring/summer of 2020 to align with the 2022 PMSR
- New Horizons
 - EM1 ends at end of 2021 (science ops run through April 2021 when the s/c reaches 50 AU)
 - Will participate in special Senior Review in spring/summer of 2020 to align with the 2022 PMSR
- OSIRIS-REx
 - Prime mission ends late 2023 with sample return to Earth
 - Potentially subject to 2022 PMSR depending on s/c and instrument health after sample return capsule release



2019 PMSR – Panel Composition and Scope

- Two panels report to a Senior Review Subcommittee established under the Planetary Advisory Committee (compliant with FACA).





2019 PMSR – LRO and Mars Panels

- LRO Panel
 - Separate from Mars Panel due to differences in scope and complexity of their operations
 - Evaluated on the basis of:
 - Scientific Merit
 - Value to Lunar Discovery and Exploration Program, and NASA's Exploration Campaign
 - Relevance and responsiveness to PSD and Agency strategic goals
 - Technical capability and cost reasonableness
- Mars Panel
 - Remaining six missions (MAVEN, MER, MEX, MO, MRO, MSL) are all part of the Mars Exploration Program
 - Evaluated on the basis of:
 - Scientific Merit
 - Value to the Mars Exploration Program
 - Relevance and responsiveness to PSD and Agency strategic goals
 - Technical capability and cost reasonableness
- Both panels may comment on any additional items in RFP, for example, promoting early career scientists, SPD-26, SMD Education Review, etc.



2019 PMSR – Senior Review Subcommittee

- Established under the Planetary Advisory Committee (PAC)
 - Operates in compliance with FACA rules
- Principal role:
 - Merge findings of LRO and Mars Panels
 - Rank missions based
 - Scientific merit
 - Value to relevant program
 - Relevance and responsiveness to PSD and Agency strategic goals
 - Technical capability and cost reasonableness
- Senior Review Subcommittee will provide draft recommendations/findings including the appropriate mix of:
 - Continuation of Projects at in-guide level up to end of FY22 max, with up to 6 months of science close-out;
 - Continuation of Projects with enhancements or reductions to their in-guide budgets;
 - Mission extensions beyond their prime mission phase, and/or
 - Termination of projects.
- Membership of Senior Review Subcommittee drawn from the LRO and Mars panels. Subcommittee Chair will provide draft recommendations/findings to the PAC for consideration and public deliberation, with a final report deliverable to the PAC.



2019 PMSR – Planetary Advisory Committee (PAC)

- Responsible for reviewing Terms of Reference (ToR) for the Senior Review Subcommittee
- PAC delivers a final report to NASA reflecting its formal recommendations
 - Includes an unedited copy of the Senior Review Subcommittee's report



2019 PMSR – Notional Schedule

- September 2018: PAC approves ToR for Senior Review Subcommittee
- October 2018: Establish Senior Review Subcommittee, including appointment of subcommittee members compliant with FACA
- November 2018: Draft call for proposals issued
- January 2019: Final call for proposals issued
- February 2019: Senior Review proposals due
- April-May 2019: Panels meet
- May 2019: Reports from panels due to Senior Review Subcommittee
- May 2019: Senior Review Subcommittee meets
- June 2019: Senior Review Subcommittee reports to PAC
- June 2019: PAC delivers formal recommendations to NASA



2019 PMSR – Communications Plan

- Memo documenting plan for 2019 PMSR, in addition to the ToR, and call for proposals will be posted on the PAC website hosted by the Lunar and Planetary Institute (LPI)
- Decisions briefed to SMD AA and others as appropriate before decisions are relayed to flight projects
- PSD Division Director (DD) will issue direction to each mission via a Letter of Direction
 - Those granted extensions will be given a plan and budget for FY20-22, with preliminary direction for FY23-24.
 - The Senior Review Subcommittee report, as well as the relevant Panel report, will be attached
- The PAC report, Senior Review Subcommittee Report, and both Panel Reports will be posted on the PAC website hosted by LPI
- The PSD DD will approve a white paper, “NASA’s Response to the 2019 Planetary Mission Senior Review,” and post it on the PAC website hosted by LPI
- Any missions proposed for termination will require a communications plan with Agency leadership, the Office of Communications, the Office of Legislative and Intergovernmental Affairs, and any other relevant stakeholders; NASA will comply with legal notification requirements