Community Announcement Regarding Europa Lander Instrument Investigation Program Element Appendix

This community announcement is an advance notice of NASA's Science Mission Directorate (SMD) plan to release a Program Element Appendix (PEA) for the Third Stand Alone Missions of Opportunity Notice (SALMON-2) for instrument investigations for a Europa lander mission. This opportunity will solicit proposals describing the full lifecycle development and operation of instrument investigations. Proposed investigations will be evaluated and selected through a two-step competitive process, with approximately 10 proposals selected for Step 2. The Step 2 Phase A Concept Study will be capped at approximately twelve months and a \$1.5M (FY2018) budget per investigation. At the conclusion of these studies, NASA may downselect some concept studies to complete Phase A and subsequent mission phases.

Investigations will be limited to those addressing the following science objectives (listed in order of decreasing priority):

- 1. Search for evidence of life on Europa,
- 2. Assess the habitability of Europa via in situ techniques uniquely available to a lander mission, and
- 3. Characterize surface and subsurface properties at the scale of the lander.

NASA has yet to decide on the scope and implementation of a possible Europa lander mission. Current law directs NASA to plan for a Europa lander mission. However, the Administration's FY 2018 budget request does not support a Europa lander mission. All instrument investigations proposed in response to this PEA must focus on Europa and be compatible with a mission that lands on the surface and operates for approximately one month. NASA will hold an in depth workshop to provide the most current information available on the mission concept to proposers and allow them to pose questions directly (both in pubic and in private) to mission developers. This multiday workshop will take place in summer 2017.

Participation in this PEA will be open to foreign and domestic organizations (with the exception that foreign Principal Investigators and team members may not receive NASA funds, if selected). However, the following organizations will be prohibited from submitting proposals in response to the PEA: the Jet Propulsion Laboratory (JPL), Cornell Technical Services (CTS), and Arctic Slope Regional Corporation. These organizations will provide substantial support to the development and execution of the PEA. In particular, JPL personnel will support the development of the AO and documents in the Program Library, assess the accommodation of proposed instrument investigations, provide technical support to teams during Step 2, and participate in site visits during the Step-2 evaluation.

The time frame for the solicitation is intended to be:

Release of final PEA NLT August 2017 (target)

Mission Workshop Summer 2017

Preproposal conference. ~3 weeks after final PEA release

Proposals due ~90 days after PEA release

Concept study reports due June 2019 (target)

Down-selection September 2019 (target)

Launch readiness date TBD

NASA has not approved the issuance of the Europa Lander Instrument Investigation PEA and this notification does not obligate NASA to issue the PEA and solicit proposals. Any costs incurred by prospective investigators in preparing submissions in response to this notification or the planned Europa Lander Instrument Investigation PEA are incurred completely at the submitter's own risk.

Further information will be posted on the Europa Lander Acquisition Page at http://europalander.larc.nasa.gov/ as it becomes available. Questions may be addressed to Dr. Curt Niebur, Europa Program Scientist, Planetary Science Division, Science Mission Directorate, NASA, Washington, DC 20546; Tel.: (202) 358-0390; Email: curt.niebur@nasa.gov.