

**Jet Propulsion Laboratory**  
California Institute of Technology



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June 20th 2003

Attention: Proposer

Subject: Request for Proposal (RFP) No. MTO-62503  
Mars Exploration Program Mars Telecom Orbiter Spacecraft Design Studies

The Mars Exploration Program (MEP) is a NASA Space Science program for the exploration of Mars. The MEP Office at the Jet Propulsion Laboratory (JPL) is exploring the feasibility of developing program infrastructure assets to increase science data return from Mars using an orbiting telecommunications and navigation relay satellite. Because of the much shorter distances over which these relay links operate relative to the Earth-Mars distance, relay through an orbiter can greatly increase data return and reduce the mass, volume, power and energy storage requirements of landed or atmospheric probes. In addition, these same relay link radio signals can be used to provide Mars-relative navigation and position information for incoming spacecraft.

Enclosed is a RFP for Spacecraft Design Studies for the Mars Telecom Orbiter. Your organization is invited to submit a response to the RFP. JPL intends to award up to three (3) contracts, at a total fixed price not to exceed \$200,000 each for this three month design study work effort. The results of this study will have bearing on how the MEP will proceed with a mission in the 2009 launch opportunity. Assuming JPL receives approval to proceed with the 2009 mission, JPL intends to issue a second RFP for a full and open competition for the Mars Telecom Orbiter spacecraft. It is hoped that study participants will ultimately propose on the implementation contract for the Mars Telecom Orbiter. Participation in this procurement for spacecraft design studies will not be a requirement for participation in any follow on procurement.

Contract award(s) pursuant to this RFP are contingent on the existence of a valid task order for this work under the JPL-NASA prime contract.

The undersigned JPL procurement representative must receive proposals no later than 3:00 p.m., local time, on July 11, 2003. Questions concerning this RFP should be directed to the undersigned at (818) 354-2158; e-mail [Geoffrey.A.Pomeroy@jpl.nasa.gov](mailto:Geoffrey.A.Pomeroy@jpl.nasa.gov)

The cost and technical results of this study will have bearing on the decision of the MEP to proceed with a planned mission in the 2009 launch opportunity.

Sincerely,

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Geoffrey Pomeroy  
Subcontract Manager

Enclosures:

RFP  
Specimen Contract, Exhibit 1 to the Specimen Contract  
JPL Form 2384  
JPL Form 0549-1