

PMD Requirements

Basic Starting Information

This is the information needed to generate a PMD concept. More questions will eventually follow this first stage but the answers to these basic questions are a good beginning. The principal issues for PMDs are the accelerations encountered through out mission and the conditions of demand (flow rate and quantity). These questions are designed to obtain this acceleration and demand information. Approximate information is much better than none at all.

1. What are the launch vehicles that are to be considered?
2. Please provide a sketch showing the approximate locations of the thrusters (include thrust direction), the tank(s), and the center of mass of the spacecraft.
3. What is the mass and inertia of the spacecraft?
4. What thrusters are being employed - thrust and ISP? OR provide acceleration and flow rate.
5. Describe maneuvers. (Which thruster are being used and for what purpose?) Provide approximate mission time line.
6. What is the maximum rotation rate?
7. Is there a deorbit/disposal burn? If so please describe.
8. Are there any unusual events for this mission (i.e. asteroid rendezvous, etc.)? If so please describe.