

Enclosure 3: Performance Budget and Margin Information

1.0 Provide numerical information on Observatory Mass, Power, and Propulsion budgets in the format below, to as low a level as practical. Calculations of Margin against Requirement may be “rolled up” as appropriate. Identify groups of items that are root summed squared or otherwise averaged when rolled up. Provide summary of uncertainty factors used.

A. Current Best Estimate	B. Uncertainty Factor	C. Expected Estimate	D. Requirement	E. Margin
System				
Sub System				
Unit/Box (as appropriate)				

Definitions:

- A. Current Best Estimate - Today’s estimate of the parameter
- B. Uncertainty Factor – Contingency allocation based on maturity of item
- C. Expected Estimate – Current Best Estimate x Uncertainty factor
- D. Requirement - capability or allocation of resource to that parameter
- E. Margin - (requirement- expected estimate)/requirement

2.0 Timelines and budgets (below) should be included in a contractor provided format. Each budget should include a margin against the requirements. Identify groups of items that are root summed squared or otherwise averaged when rolled up. If contingency or uncertainty factors are incorporated, provide summary.

- Data package and VDP processing and delivery throughput and latency budget
- On-board data recorder budget
- Ground data system processing, storage, communication (RF and ground) budget
- Pointing knowledge error budget
- 1Gs and 1Gt Geolocation error budget
- Signal to Noise ratio budget
- Stray Light budget
- Band-to-Band Registration error budget
- Cloud Cover Assessment error budget
- Pixel to Pixel non-Uniformity budget
- Radiometric Accuracy Budget