



A.O. Simplification Workshop Requirements Feedback

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Retain Highly Successful Elements



- Retain Foundational Tenets
 - Focus on Science Discoveries
 - Science Responsible to Control Requirements & Manage Cost/Risk
 - Maintain Frequent Launch Manifest
 - Continue Partnership between NASA Center / Science / Industry
 - Maintain Two-Step Process (retain nature of each step)
 - Continue Competitive Mission Selection
- Retain Recent Features
 - Cost Cap in Constant Year Dollars
 - Eliminate Cost Profile (or make less constraining than Cap)
 - NASA HQ Responsible for LV Cost Risk after Downselect for Flight
 - Maintain Time between AO and Proposal Due Date (90 days)
 - Retain Expanded Step 2 Process (9 months, \$2M)

Consider Several Minor Adjustments



- Page Count
 - Consider Modest Expansion (but not more than 10%)
- Reference Specific Launch Vehicle, Capability, and Cost
 - Allow Proposing Team to Design to Specific Launch Vehicle
- Green Proposal Products
 - Consider Electronic Submittal (without hard copy delivery)
- Format for Proposals
 - Consider Reorganizing Science / Implementation Sections (Reference Subsequent Viewgraphs)

Eliminate Confusing Redundancies



- Section D.2.a (Science Implementation, p. B-5)

“instrumentation design/flight heritage”

“preliminary description of each instrument . . . characteristics (which shall be considered as requirements on the flight system) must include mass, power, volume, data rate(s), . . .”

- Section G.1 (Mission Implementation, p. B-8)

“Heritage and maturity of . . . instruments”

- Section G.15 (Mission Implementation, p. B-9)

“For each instrument provide . . . instrument mass (include breakouts), data, power demand (peak, average, standby)

Redundant Instrument Information



- Problems
 - Multiple entries of same information
 - Uses up valuable page count
 - Leads to potential inconsistencies, which Reviewers strongly criticize
 - Confuses proposers about which section should receive the emphasis (evaluation concern)
 - Even slight changes in instrument engineering characteristics must be flagged as changes to Science in the Step 2 CSR
- Recommendations
 - Ask for instrument engineering characteristics (mass, volume, power, data) only in Sect. G.15 where System implementation is described, and not also in D.2.a (Sci. implementation)
 - Retain science-relevant info in section D.2.a (e.g., heritage / maturity; block diagrams; spatial / energy / temporal resolutions; calibration)
 - Remove instruments from G.1 (heritage)

Science / Implementation (Step 2)



- Problems
 - Currently, any changes to both sub-sections of D (Science) must provide traceability and be explained
 - Many details of instruments and implementation are logically upgraded or refined during the Study, yet do not reduce capability to meet science objectives
 - These changes create a burden of low-value documentation tracking
- Recommendations
 - Place only Section D.1 under change control since it is Science Objectives, Requirements and the Baseline and Performance Floors that should not be allowed to be changed
 - Section D.2 should continue to be evaluated independently anyway as part of Implementation assessment
 - NASA may wish to treat Science Team changes otherwise, and place that information (D.2.d) as a separate section (e.g., D.3)