



ISS Research Institute Briefing to the BPRAC

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October 24, 2003



NGO Chronology

- Previous NGO Studies
 - October 1999 - Options for Managing Space Station Utilization, Swales Aerospace
 - December 1999 - Institutional Arrangements for Space Station Research, National Research Council
 - August 2000 - International Space Station Operations Architecture Study, Computer Sciences Corporation
 - June 2001 - NASA Internal Study
 - February 2002 - International Space Station Payload Operations Concept and Architecture Assessment Study (POCAAS), Computer Sciences Corporation
 - January 2003 - Utilization Management Concept Development Study, NASA



Authorization

Congressional Direction on Management of ISS Research:

- **FY 2003 Omnibus Appropriations Act (P.L. 108-7), signed into law on February 20, 2003, states:**

"NASA is authorized to proceed with establishment of a Non-Governmental Organization for International Space Station research: Provided, That no funds in this Act or any other appropriations Act may be expended for establishment of a Non-Governmental Organization that includes engineering and integration functions identified as Phase 2 in the Report of NASA's International Space Station Utilization Management Concept Development Study submitted on January 10, 2003."



Current Status

- NASA ISS Research Institute Statement of Work (SOW) Development Team, completed draft SOW August, 2003
 - Draft SOW released for comment September 9, 2003
 - Comments received October 8
- ISS Research Institute Procurement Development Team developing the draft Request For Proposal



Statement of Work Structure

- Institutional Management
 - Internal management of the Institute
- Research
 - Institute staff research
- Management Systems
 - Support systems, e.g. configuration management
- Strategic Planning
- Customer Support
- OBPR Science & Technology Solicitation & Selection
- Research Partnerships
- OBPR Research Prioritization
- Educational Outreach and Public Outreach
- Concept Studies
 - Assigned individually by NASA, scope of potential studies broad and flexible
- Guest Investigator Program
- Archive Management

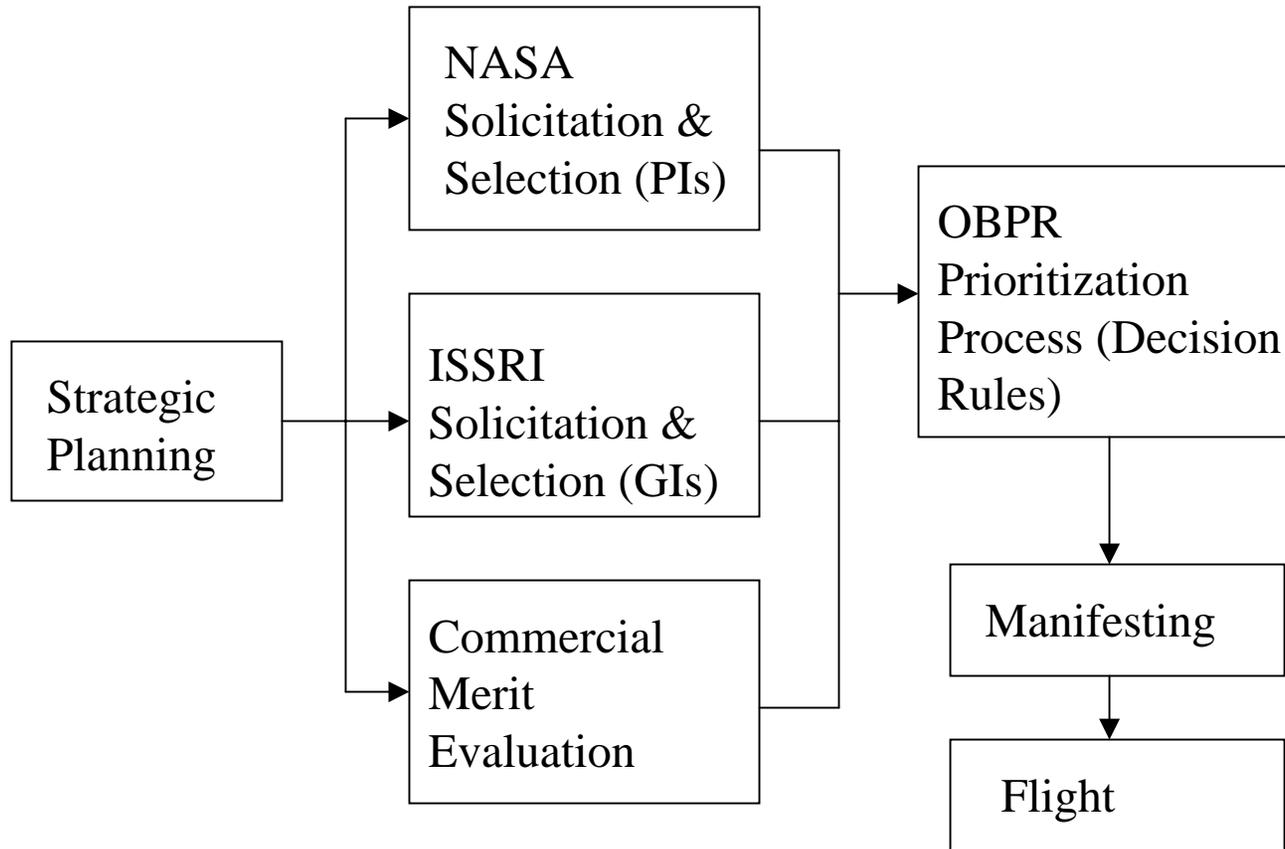


February BPRAC Recommendation

- NASA still needs to articulate more clearly the division of research management between OBPR and the proposed ISS-NGO as well as with other research institutes involved with OBPR. The manner in which NASA Headquarters intends to handle the NRA and grant selection processes for ground-based and flight research is a particular concern.



Simplified Research Flow





Proposed Division of Responsibilities

Strategic Planning

- ISSRI provides data and analysis to NASA and advisory committees as input into the strategic planning process
 - Seeks and coordinates community input for ISS related research planning
- NASA has full responsibility for strategic planning in concert with the advisory committee process
- ISSRI develops consolidated ISS utilization roadmap based on Enterprise roadmaps



Proposed Division of Responsibilities

Customer Support

- ISSRI provides “front door” for all potential users
 - Information source, help desk, connection to in-depth resources
- NASA provides customer support for PIs from selection through post-mission via Project Scientist, Project Manager, Payload Integration Manager
- ISSRI manages customer feedback process



Proposed Division of Responsibilities

Research Partnerships

- ISSRI provides new concept development support to potential commercial users
- Merit Evaluation Board for all commercial research on ISS
 - ISSRI manages the merit evaluation board process
 - ISSRI develops selection recommendations
 - NASA selects commercial research
 - Commercial research using OBPR allocations will then go through prioritization process
- ISSRI develops strategic partnerships linking the RPCs and industry
- ISSRI provides analysis of developing market trends
- RPC structure does not change, including contracts, reporting, and oversight



Proposed Division of Responsibilities

OBPR Research (Payloads) Prioritization

- ISSRI manages the new prioritization process
- External independent boards provide scoring
- ISS Program Scientist has oversight of the process
- ISSRI assesses alignment of prioritized list with NASA strategic objectives
- NASA/Payloads Office assesses feasibility of prioritized list against shuttle/ISS resource availability
- ISS Program Scientist presents final prioritized list to Enterprise Program Management Council (EPMC)
- ISSRI participates in EPMC deliberations
- EPMC makes final decision on prioritization



Proposed Division of Responsibilities

Educational Outreach and Public Outreach

- ISSRI develops a consolidated, cohesive EO/PO program (plans and implementation) for ISS utilization in coordination with enterprises, Office of Education, and Office of Public Affair; particularly at a national level
- NASA has responsibility for strategic direction of all EO/PO
- NASA Centers continue efforts on local level and for specific payload development projects
- NASA reviews all formal EO/PO products prior to release



Proposed Guest Investigator Program

- The Institute will develop concepts for and manage Guest Investigator programs which may consist of several types
 - Manage specific flight hardware and the research conducted with it after NASA completes initial primary objectives
 - Manage research programs to utilize archived data and/or samples
 - Manage research programs to optimize use of available commercial hardware



Proposed Division of Responsibilities

Guest Investigator Program

- ISSRI manages assigned GI projects end-to-end from planning, solicitation, and selection to post flight or the completion of an archive study
- GI grants are with the ISSRI, not NASA
- ISSRI provides full customer support for GIs
- ISSRI is a RIO equivalent for GI Program
- NASA provides engineering integration into carrier and integrated operations



Proposed Division of Responsibilities

Archive Management

- ISSRI manages assigned archives including archive operations and data and sample dissemination
- OBPR intends to have ISSRI manage OBPR ISS research archives
 - Most likely will include complimentary shuttle archives as well
 - Policies and requirements of biological archive are under review, resulting archive is intended to be managed by ISSRI



Proposed OBPR PI Solicitation & Selection

Function	OBPR Role	ISSRI Role
Development of Research Announcements	Process owner, develops and approves NRAs	Collects community input, provides recommendations for research content
Proposal Evaluation	Process owner, contracts with NPRS to manage logistics, selects panels, monitors peer panels	Recommends panel members, monitors peer panels with OBPR
Selection Recommendations	Partners with ISSRI to develop recommendations, develops and presents final recommendations to	Partners with OBPR to develop recommendations
Selection	Source Selecting Official OBPR SSO makes final selections	None



Proposed OBPR GI Solicitation & Selection

Function	OBPR Role	ISSRI Role
Development of Research Announcements	Provides recommendations for research content	Process owner, develops and approves ISSRI research announcements
Proposal Evaluation	Recommends panel members, monitors peer panels with ISSRI	Process owner, selects panels, monitors peer panels
Selection Recommendations	Partners with ISSRI to develop recommendations,	Partners with OBPR to develop recommendations, develops and presents final recommendations to
Selection	None	ISSRI selecting official makes final selections



Relationship to Other Institutes

- The Statement of Work does not require any specific form of relationship between the ISSRI and other existing Institutes
- ISSRI offerors may form working relationships with any other Institute as appropriate for their organization and proposal
- NASA will not change its formal arrangements with any existing Institutes, but encourages working relationships with the ISSRI
- Propose to address relationships with other Institutes elsewhere in the Request for Proposal



Comments to the Draft SOW

- 26 sets of comments were received for the Draft SOW
 - 8 potential offerors
 - 4 advisory committee members
 - 2 international
 - 2 current institutes
 - 10 individuals
- Comments ranged from very supportive to very concerned
- Many requests for clarifications and recommendations for modifications ranging from scope of work to specific language
- Common concerns: potential conflict of interest, source of funding, lack of international interfaces
- Clarification for the numerous misinterpretations will be addressed soon on the website
- Comments are currently under review by the Procurement Development Team



Recent Progress & Next Steps

- Request for Information (RFI) released for public comment
– Responses received June 2, 2003
 - Statement of Work reviewed internally
 - Released draft Statement of Work for public comment
– Responses received October 8, 2003
 - Release draft RFP for public comment
 - Industry Briefing
 - Release RFP
 - Contract start
- Apr 25, 2003
- June & Aug 2003
- Sept 9, 2003
- Dec/Jan 2003
- Jan/Feb 2004
- Jan/Feb 2004
- Oct/Dec 2004



SpaceResearch.nasa.gov

RTRBO

Backup



“Since a major share of the funds and people are devoted to the construction, maintenance, and operation of the spacecraft and related systems, most of the continuing attention of NASA at various levels can naturally be expected to be devoted to its operation, unless steps are taken to put the scientific component in a special, highly visible organization with a status commensurate with its importance to the productivity of the ST.”

National Academy of Sciences

“Institutional Arrangements for the Space Telescope”