



Option Development Process

Partitioning Criteria

- ISS Strategic Vision
- Guiding Principles
- Utilization Mgmt Objectives

Functional Models

- A. NASA
- B. S/T/C 'leadership'
- C. B + sustaining payloads
- D. C + developing payloads
- E. D + msn mgmt/integrated ops
- F. E + engineering
- G. B + msn mgmt/integrated ops
- H. G + engineering

Business Models

1. Single, Full and Open Contract
2. Non-Profit Institute
3. Cooperative Agreement
4. Space Act Agreement
5. State Corporation
6. Government Corporation
7. Cooperative Association
8. Government Sponsored Enterprise
9. NASA Division (baseline)
10. FFRDC

Options

- A1, A2, A3...etc.
- B1, B2, B3...etc
- .
- .
- H1, H2, H3...etc.



Functional Models Overview

	A	B	C	D	E	F	G	H
	NASA CI	S/T/C Lead	+ Sust. Plds	+ Dev. Plds	+ MM/Ops	+ Eng.	B + MM/Ops	G + Eng.
0) Define, Develop and Implement Policy and Strategic Plans		-	-	-	-	-	-	-
1) Management of Research Utilization (parts A & B)								
1) Management of Research Utilization (part C)								
2) Preparing and Allocating Budgets								
3) Selecting and Prioritizing Research								
4) Establishing Payload/Experiment Requirements and Feasibility								
5) Developing Cost, Schedule, and Risk Assessments								
6) Developing and Qualifying Flight Research Systems								
7) Maintaining and Sustaining Flight Research Systems								
8) Developing Ground Systems								
9) Maintaining and Sustaining Ground Systems								
10) Constructing Ground Facilities								
11) Maintaining Ground Facilities								
12) Certifying Safety of Research Flight and Ground Systems		-	-	-	-	-	-	-
13) Managing Missions and Allocating Services (part A)								
13) Managing Missions and Allocating Services (part B)								
14) Integrating User Mission – Analytical								
15) Integrating User Missions - Physical		-	-	-	-	-	-	-
16) Integrating User Missions - Operational								
17) Conducting Research & Analysis and Disseminating Results		-	-	-	-	-	-	-
18) Educating and Reaching Out to the Public (including industry)								
19) Recommending ISS Pre-Planned Product Improvements								
20) Managing Archival of Research Samples, Data, and Results								



Functional Models Overview

	A	B	C	D	E	F	G	H
Inherently/Appropriately Governmental 0. Define, Develop and Implement Policy and Strategic Plans 12. Certifying Safety of Research Flight and Ground Systems 15. Integrating User Missions - Physical		-	-	-	-	-	-	-
PI Specific 17. Conducting Research & Analysis and Disseminating Results	-	-	-	-	-	-	-	-
S/T/C Leadership 1. Management of Research Utilization (part A & B) 2. Preparing and Allocating Budgets 3. Selecting and Prioritizing Research 5. Developing Cost, Schedule, and Risk Assessments 13. Mission Management and Operations (part A) 18. Educating and Reaching Out to the Public (including industry) 19. Recommending ISS Pre-Planned Product Improvements 20. Managing Archival of Research Samples, Data, and Results								
Sustaining Payloads 7. Maintaining and Sustaining Flight Research Systems 9. Maintaining and Sustaining Ground Systems								
Developing Payloads 4. Establishing Payload/Experiment Requirements and Feasibility 6. Developing and Qualifying Flight Research Systems 8. Developing Ground Systems								
Mission Management and Operations 1. Management of Research Utilization (part C) 13. Managing Missions and Allocating Services (part B) 16. Integrating User Missions - Operational								
Engineering 14. Integrating User Mission – Analytical								
Option Unique 10. Constructing Ground Facilities 11. Maintaining Ground Facilities		-	-	-	-	-	-	-



Options Down-Select

	A NASA	B S/T/C Lead	C + Sust. Plds	D + Dev. Plds	E + MM/Ops	F + Eng.	G B + MM/Ops	H G + Eng.
1 For-Profit Contract	A1	B1	C1	D1	E1	F1	G1	H1
2 Non-Profit Institute	A2	B2	C2	D2	E2	F2	G2	H2
3 Cooperative Agreement	A3	B3	C3	D3	E3	F3	G3	H3
4 Space Act Agreement	A4	B4	C4	D4	E4	F4	G4	H4
5 State Corporation	A5	B5	C5	D5	E5	F5	G5	H5
6 Government Corporation	A6	B6	C6	D6	E6	F6	G6	H6
7 Cooperative Association	A7	B7	C7	D7	E7	F7	G7	H7
8 Government Sponsored Enterprise	A8	B8	C8	D8	E8	F8	G8	H8
9 NASA Division (baseline)	A9	B9	C9	D9	E9	F9	G9	H9
10 FFRDC	A10	B10	C10	D10	E10	F10	G10	H10

-  Not applicable
-  3- Not a Binding Agreement
-  4- NASA doesn't fund Space Act Agreements
-  5- State/Federal conflict considerations
-  7- Not a Binding Agreement
-  8- Privately Owned
-  1- Perceived conflict of interest regarding profit motive with S/T/C Leadership role



Option Down-Select Process

80 Options

- Review of various industry analyses (i.e. Swales, etc.) to distill advantages/disadvantages of candidate Business models
 - Applied advantages/disadvantages against Functional models for high-level feasibility assessment

29 Options

- Refined application of Business model advantages/disadvantages against Functional models

22 Options

- Developed detailed definition of Option variations based on functional breakdowns
- Conducted analysis of advantages/disadvantages for each variation to create “best case” Option

4 Options



Selected Options for ISS Utilization

- NASA Reinvention
- Non-Profit Institute
- Government Corporation
- Federally Funded Research and Development Center (FFRDC)