



Proposal Evaluation

| | |
|------------------------------|------------------------|
| | Proposal |
| | Organization |
| | Evaluator |
| | Line of Business |
| | Technology Development |
| Science & Technology | |
| Implementation Feasibility | |
| Operations & ISS Utilization | |
| Business & Economic | |
| STEM Engagement & Outreach | NOT RELEVANT |
| WEIGHTED TOTAL | |

Summary of Evaluation:

The overall rating for this proposal is ENTER ADJECTIVAL RATING

Strengths:

Weaknesses:

| ISS National Lab Science & Technology Panel - Proposal Evaluation Rubric | | | | | | | | TOTAL SCORE, % | | |
|--|-----|---|--|--|--|--|--|-----------------------------------|----------------|--|
| Proposal Organization | | 0 | | | Evaluator | | 0 | | 0.0 | |
| | | 0 | | | Line of Business | | Technology Development | | | |
| | | Non-Compliant (=0) | Poor (=1) | Fair (=2) | Good (=3) | Very Good (=4) | Excellent (=5) | Sci Panel Score | Weighted score | |
| Clearly defined science/technology question addressing expected advancement(s) | A-1 | No science or technology maturation question posed. | Science/technology question is posed in a general manner. | Science/technology question is specific. Existing state of the art and/or current TRL is discussed. | Question is specific and addresses at a minimum relevance and achievability. Technology maturation defines current state of the art or TRL. | Question is specific, measurable, achievable, and relevant. In addition, technology maturation defines starting and ending TRL. | Question is specific, measurable, achievable, relevant, and time-based. In addition, technology maturation defines starting and ending TRL and steps to achieve advancement. | | 0.00 | |
| Compelling nature and priority of the science or technology objectives | A-2 | Science or technology objectives not stated | Science or technology objectives are clearly stated but may lack compelling basis. No evidence is provided to substantiate priority. | Stated objectives are not prioritized but represent a somewhat compelling line of investigation or technology maturation approach. | Stated objectives are a compelling investigation/technology maturation and are internally prioritized. | Stated objectives are highly compelling and directly related to organizationally documented priority investigation/technology maturation. | Stated objectives are directly related to high-priority science or technology objective as documented in external strategy (decadal surveys, agency SKGs, or corporate strategy) | | 0.00 | |
| Innovation, multidisciplinary integration, and novelty of approach | A-3 | No evidence of innovation, multiple disciplines or novelty provided | The proposal provides at least one novel or innovative factor. | The proposal has no novel investigation or innovative technology but leverages at least two disciplines. | The proposal provides a somewhat novel line of investigation or a innovative technology within a discipline. | The proposal provides a substantially novel line of investigation or a unique innovative technology, leveraging at least two disciplines. | The proposal represents a novel line of investigation or unique technology through integration of multiple disciplines. | | 0.00 | |
| Programmatic value of proposed project | A-4 | The project likely overlaps with other efforts and is not unique. | | N/A | The project includes unique science or technology progress but is not coordinated with other planned missions. | The project includes unique science or technology progress and is coordinated with at least one other project. | The project includes unique science or technology progress in the context of other ongoing and planned missions and may be related to other elements of the ISS National Lab portfolio. | | 0.00 | |
| Likelihood of science or technology advancement success | A-5 | The project is highly unlikely to achieve success, and/or there is no identification of mission requirements. | | The project may achieve scientific investigation or technology maturation goals and objectives with high risk. Mission requirements are minimal. | The project may achieve scientific investigation or technology maturation goals and objectives with moderate risk. Mission requirements are generic and provide little guidance for appropriate development. | The project may achieve scientific investigation or technology maturation goals and objectives with medium-low risk. Mission requirements are well-stated and provide some guidance for appropriate development. | The project is likely to meet the scientific investigation or technology maturation goals and objectives. The mission requirements are appropriate for guiding development and ensuring success. | | 0.00 | |
| Merit of data results/analysis plan | A-6 | No information provided about data analysis plan | Data analysis is incomplete and/or missing significant evidence that collected data is capable of assessing outcomes. | The data analysis plan provides some evidence that results can be assessed (post-mortem) but lacks clarity. Little confidence that data can be used to influence execution of the project. | Data collected appears to be adequate to assess scientific investigation/technology maturation success (post-mortem). Proposer has plans for presentation of results (consistent with IP constraints). | Data collected appears to be adequate to assess scientific investigation/technology maturation success (post-mortem), and analysis allows monitoring of during execution of the project. | Data collected is fully adequate to assess scientific investigation/technology maturation success (post-mortem), and analysis allows monitoring of during execution of the project. Proposer has plans for broad presentation of results (consistent with IP constraints). | | 0.00 | |
| Scientific basis and justification for exploitation of microgravity, the extreme environments of space, or the unique vantage point of the ISS | A-7 | No basis for microgravity, the space environment, or the unique ISS vantage point evident in the proposal | Basis provided for microgravity, the space environment, or the unique ISS vantage point, but the full value of the project could be achieved by alternate means (e.g., sounding rocket). | N/A | Basis provided for microgravity, the space environment, or the unique ISS vantage point, but some project objectives could be achieved by alternate means (e.g., sounding rocket). | N/A | The scientific investigation/technology maturation can only be achieved through a well-substantiated requirement for microgravity, the space environment, or the unique ISS vantage point. | | 0.00 | |
| | | | | | | | | Science Panel Summary | | |
| | | | | | | | | The overall scientific Strengths: | | |
| | | | | | | | | Weaknesses: | | |

| ISS National Lab Operations and ISS Utilization Panel - Proposal Evaluation Rubric | | | | | | | TOTAL SCORE | | |
|--|-----|--|--|---|---|--|--|-------|---|
| Proposal Organization | | 0 0 | | | Evaluator | 0 | 0.0 | | |
| | | Line of Business | | | Technology Development | | | | |
| | | Noncompliant (=0) | Poor (=1) | Fair (=2) | Good (=3) | Very Good (=4) | Excellent (=5) | Score | Weighted score |
| ISS potential hazards and plans for mitigation are identified | C-1 | No discussion of ISS hazards. | ISS hazard identification is discussed with no reference to any specific hazards. | Specific potential ISS hazards are acknowledged, but the list is incomplete. No Implementation Partner involvement discussed (if relevant). | Potential ISS hazards are clearly and completely identified, and Implementation Partner role in mitigation efforts is only generally discussed (if relevant). | Potential ISS hazards are clearly and completely identified with relevant basis. Hazard mitigation role (Implementation Partner or internal) is well-defined within the context of the effort. | Potential ISS hazards are clearly and completely identified with relevant basis. Hazard mitigation activities (Implementation Partner or internal) are identified, scheduled, and costed. | | 0.00 |
| Installation and operations impacts on ISS crew time are defined and sustainable | C-2 | No crew time estimates provided. | Crew time estimates are listed, but lack detail or are unsupported and/or unrealistic. | N/A | Detailed crew time estimates are provided but represent a burden to the ISS or lack realism. | N/A | Crew time estimates for installation and operation are reasonable, realistic, detailed, and credible. | | 0.00 |
| Operational status and suitability of support equipment, logistics, and consumables | C-3 | No discussion of support equipment, logistics, and consumable information is provided (if relevant). | Some operational status deficiencies of relevant support equipment, logistics, and consumables are identified. | N/A | Detailed operational status deficiencies of relevant support equipment, logistics, and consumables are identified but lack realism. | N/A | Detailed support equipment, logistics, and consumable information is provided (if relevant) and is credible, including any ground analysis of return samples. | | 0.00 |
| Mass, volume, power, and interface requirements are defined and sustainable | C-4 | No discussion of mass, power, or ISS interface requirements. | Mass, power, interface, and downmass (if relevant) requirements are discussed in a general way without supporting budgets or basis of estimates. | N/A | Mass, volume, power, interface, and downmass (if relevant) requirements are clearly identified and substantiated by relevant budgets but may represent a burden to the ISS or lack realism. | N/A | Mass, volume, power, interface, and downmass (if relevant) requirements are clearly identified and substantiated by relevant budgets. Project needs are sustainable by ISS operations. | | 0.00 |
| Regulatory policies (e.g., biomedical, human tissue, Earth observation, etc.) are identified and addressed | C-5 | No information on regulatory compliance is provided. | The need for regulatory compliance (e.g., biomedical, human tissue, Earth observation, etc.) is identified but may be missing one or more items. No plans are provided. | N/A | Regulatory policies (e.g., biomedical, human tissue, Earth observation, etc.) are correctly identified. Compliance plans are general or unreasonable. | N/A | Regulatory policies (e.g., biomedical, human tissue, Earth observation, etc.) are identified and reasonable, and timely plans for regulatory approval are provided. | | 0.00 |
| Data collection/downlink plan is defined and sustainable | C-6 | No data collection or downlink information is provided. | Data collection plans are general with no specific data transmission rates or volumes. There is no detailed mapping from data collection to scientific investigation, technology maturation, or STEM engagement. | N/A | Data collection and downlink plans are identified (as applicable) and support the scientific investigation, technology maturation, or STEM engagement objectives but may not be sustainable by the ISS. | N/A | Data collection and downlink plans are identified (as applicable) and sustainable by ISS services. Data collection plans support the scientific investigation, technology maturation, or STEM engagement objectives. | | 0.00 |
| Offramp/completion criteria are defined and consistent with ISS operations sustainability | C-7 | No offramp/completion criteria are provided. | Completion information is provided as a single path without consideration of offramp scenarios. | N/A | Criteria are identified for offramping and/or completion. No allowance for alternative scenarios is provided. | N/A | Criteria are identified for offramping and/or completion. Proposer identifies both continuation and disposal alternatives. | | 0.00 |
| | | | | | | | | | Ops Summary of ISS The overall ISS utilization: Strengths: Weaknesses: |

| ISS National Lab Business & Economic Impact Panel - Proposal Evaluation Rubric | | | | | | | | | TOTAL SCORE, E |
|--|-----|---|--|--|---|--|---|------------------|--|
| Proposal Organization | | 0 0 | | | | Evaluator 0 Line of Business Technology Development | | 0.0 | |
| | | Noncompliant (=0) | Poor (=1) | Fair (=2) | Good (=3) | Very Good (=4) | Excellent (=5) | Econ Panel Score | Weighted score |
| Project outcomes can be deployed to serve sizable addressable markets (scalability) | D-1 | No discussion of planned market impact is provided. | Addressable market is undefined or is highly uncertain or negligible. | Addressable market for the proposed solution/product are identified but with little substantiation of market potential. | Addressable market for the proposed solution/product are identified, with discussion of factors for market scalability. | Addressable market for the proposed solution/ product provides some documented market potential (TAM of \$100 million or higher). | Addressable market for the proposed solution/ product provides documented significant market potential (TAM of \$1 billion or higher). | | 0.00 |
| Project outcomes are leverageable across other applications, customers, or needs | D-2 | No discussion of planned market impact is provided. | Outcomes are focused on a single application, need, or customer with no ability to leverage outcomes for multiple markets, applications, and/or customers. | Outcomes have some potential to address more than one application, need, customer, and/or market. | Outcomes may be leveraged for either multiple markets, multiple applications, or multiple customers. | Outcomes may address two or more applications, needs, customers, and/or markets. | Outcomes may address multiple applications, needs, customers, and/or markets. | | 0.00 |
| Project results in technology/products/ solution innovation and/or market disruption | D-3 | No discussion of planned market impact is provided. | No evidence is provided that target markets are in any way impacted, or that substantive new market opportunities are created. | Some evidence that the project results will be seen as innovative and attractive to markets. | The project represents a unique innovation that may disrupt markets. Potential market share is unclear. | The project represents a unique innovation that will likely disrupt markets. Products will have documented potential for competitive advantage to win at least a single-digit percent market share. | The project represents a unique innovation that will likely disrupt markets. Products will have significant competitive advantage and have high potential to win significant (10% or more) market share. | | 0.00 |
| Project leads to incremental revenue after completion | D-4 | No information on revenue expectations is provided. | Revenue expectations are stated but unsubstantiated or unlikely to be achieved at material scale. | Project revenue expectations are stated but not substantiated; however, it is reasonable to expect some revenue. | Project revenue expectations are well substantiated and are expected and likely to be material; however, the potential outcomes could vary broadly and/or the results will require 10 years or more to be realized. | Project revenue expectations are well substantiated. The project is expected and likely to result in incremental revenues of \$10 million or more per year, achieved within 7 years. | Project revenue expectations are well substantiated. The project is expected and likely to result in incremental revenues of \$50 million or more per year, achieved within 5 years. | | 0.00 |
| Sufficient internal/partner resource commitment is available | D-5 | No information is provided on resource commitments. | 50% or less of the full project costs are funded. No evidence is provided of internal or partner capability to commercialize. | 75% or less of the full project costs are funded. There is some discussion of how access to necessary commercialization resources may be achieved. | Project funding is fully established and documented in one or more commitment letters. There is some discussion of how commercialization resources may be achieved. | Project funding is fully available and documented in one or more commitment letters. The funding needed to complete commercialization are discussed in a credible way but may not be fully quantified and addressed. | Project funding is fully available and documented in one or more commitment letters. The funding needed to complete and commercialize the results are discussed, with significant additional, quantifiable, and capital sources identified. | | 0.00 |
| Project has feasible commercialization and customer engagement | D-6 | No commercialization capability is provided. | Low probability that project results will be advanced or deployed. There is no evidence of customer interest or engagement. | Some probability that project results will be advanced or deployed, as documented by customer interest or engagement. | Proposal provides some understanding of customer capabilities, with a defined commercialization market, leading to a moderate probability of further advancement or deployment. | Proposal provides a strong understanding of customer capabilities, with a defined commercialization strategy, as documented in reported business plan items. | Proposal provides a strong understanding of customer capabilities, with a well defined commercialization strategy. Sufficient financial/operational plan details are provided in concert with a well-defined business plan. | | 0.00 |
| | | | | | | | | | Economic Panel Summary The overall business Strengths: Weaknesses: |

Fundamen Technolog In-Space P STEM Engagement and Outreach

| | 2 | 3 | 4 | 5 |
|-------|------|------|------|------|
| A-1 | 0.2 | 0.2 | 0.2 | 0 |
| A-2 | 0.2 | 0.1 | 0.15 | 0 |
| A-3 | 0.25 | 0.15 | 0.1 | 0 |
| A-4 | 0 | 0.1 | 0.1 | 0 |
| A-5 | 0.1 | 0.25 | 0.25 | 0 |
| A-6 | 0.15 | 0.1 | 0.1 | 0 |
| A-7 | 0.1 | 0.1 | 0.1 | 0 |
| A-TOT | 1 | 1 | 1 | 0 |
| B-1 | 0.2 | 0.2 | 0.2 | 0.25 |
| B-2 | 0.2 | 0.15 | 0.2 | 0.2 |
| B-3 | 0.05 | 0.15 | 0.15 | 0.15 |
| B-4 | 0.1 | 0.15 | 0.15 | 0.15 |
| B-5 | 0.15 | 0.1 | 0.1 | 0.25 |
| B-6 | 0.2 | 0.15 | 0.05 | 0 |
| B-7 | 0.1 | 0.1 | 0.15 | 0 |
| B-TOT | 1 | 1 | 1 | 1 |
| C-1 | 0.1 | 0.1 | 0.1 | 0.1 |
| C-2 | 0.25 | 0.25 | 0.25 | 0.2 |
| C-3 | 0.1 | 0.15 | 0.15 | 0.1 |
| C-4 | 0.2 | 0.2 | 0.2 | 0.2 |
| C-5 | 0.1 | 0.1 | 0.1 | 0.1 |
| C-6 | 0.1 | 0.1 | 0.1 | 0.25 |
| C-7 | 0.15 | 0.1 | 0.1 | 0.05 |
| C-TOT | 1 | 1 | 1 | 1 |
| D-1 | 0 | 0.1 | 0.2 | 0 |
| D-2 | 0 | 0.1 | 0.2 | 0 |
| D-3 | 0 | 0.2 | 0.1 | 0 |
| D-4 | 0 | 0.2 | 0.1 | 0 |
| D-5 | 0 | 0.2 | 0.2 | 0 |
| D-6 | 0 | 0.2 | 0.2 | 0 |
| D-TOT | 0 | 1 | 1 | 0 |
| E-1 | 0 | 0 | 0 | 0.2 |
| E-2 | 0 | 0 | 0 | 0.1 |
| E-3 | 0 | 0 | 0 | 0.2 |
| E-4 | 0 | 0 | 0 | 0.1 |
| E-5 | 0 | 0 | 0 | 0.1 |
| E-6 | 0 | 0 | 0 | 0.2 |
| E-7 | 0 | 0 | 0 | 0.1 |
| E-TOT | 0 | 0 | 0 | 1 |
| F-1 | 0 | 0 | 0 | 0 |
| F-2 | 0 | 0 | 0 | 0 |
| F-3 | 0 | 0 | 0 | 0 |
| F-4 | 0 | 0 | 0 | 0 |
| F-5 | 0 | 0 | 0 | 0 |
| F-6 | 0 | 0 | 0 | 0 |
| F-TOT | 0 | 0 | 0 | 0 |