



**INFORMATION REQUESTED FOR THE ONLINE STEP 1: CONCEPT SUMMARY  
FORM FOR NLRA 2025-5: TECHNOLOGY ADVANCEMENT AND APPLIED  
RESEARCH LEVERAGING THE ISS NATIONAL LAB**

Concept summaries must be submitted electronically using the online concept summary portal. This document lists the information requested on the online concept summary form. Offerors are advised to work offline using the information contained in this document as a reference before entering information in the online form. Offerors must complete all sections of the online concept summary form. Required information is indicated with a “Yes” in the “Required” column.

| <b>Information Requested</b>       | <b>Required?</b> | <b>Description</b>   |
|------------------------------------|------------------|--|
| <b>PAGE 1</b>                      |                  |  |
| <b>APPLICANT INFORMATION</b>       |                  |  |
| <b>Type of submission</b>          | Yes              | Choices: New, Resubmission<br>For resubmissions, offerors should ensure they have reviewed and incorporated feedback from their previous submission.   |
| <b>Principal investigator (PI)</b> | Yes              | List a single principal investigator (PI) who is a U.S. person that will be responsible to the offeror’s organization for the scientific and technical direction of the project. CASIS can only accept proposals from and award projects to U.S. persons at U.S. entities. The offeror may have non-U.S. persons on the team as subcontractors or participants, but the PI and co-PI must be U.S. persons. |
| <b>Email</b>                       | Yes              | Provide the email address of the PI. An email address is required to submit a concept summary.   |
| <b>Phone</b>                       | No               | Provide the offeror’s telephone number.  |
| <b>PI Position/Title</b>           | No               | Provide the offeror’s position or title.   |
| <b>PI citizenship status</b>       | Yes              | A U.S. person is a natural person who is a lawful permanent resident as defined in 8 U.S.C. 1101(a)(20) or who is a protected individual as defined by 8 U.S.C. 1324b(a)(3). It also means any corporation, business association, partnership, society, trust, or any other entity, organization, or group that is incorporated to do  |

| <b>Information Requested</b>   | <b>Required?</b> | <b>Description</b>  |
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|  |                  | business in the U.S. It also includes any governmental (federal, state, or local) entity.   |
| <b>Country of citizenship</b>  | Yes              | Select the PI country of citizenship. If dual citizenship is held by the PI, please indicate the non-US country.  |
| <b>Project Type</b>  | Yes              | Choices: Flight, Ground, Other  |
| <b>Space Experience</b>  | Yes              | Indicate the PI's relative level of experience designing an experiment for space.   |
| <b>How did you hear about this research announcement? (Select one)</b>             | Yes              | Choices: ISS National Lab website, Email, News article, Advertisement, NASA, NSF, ISS Research and Development Conference, Other conference, Other (please describe):   |
| <b>PAGE 2</b>  |                  |   |
| <b>ORGANIZATIONAL INFORMATION</b>  |                  |   |
| <b>Organization legal name</b>   | Yes              | Provide the name of the institution/organization at which the PI is employed. (120-character limit)   |
| <b>Organization registration</b>   | Yes              | Choices: U.S. Entity, Non-U.S. Entity   |
| <b>In which state is the organization incorporated/based?</b>                      | Yes              | List the U.S. state in which the company is registered.   |
| <b>Organization type</b>   | No               | Choices: Commercial, Academic, Government, Nonprofit  |
| <b>Organization address</b>  | Yes              |   |
| <b>Organization Unique Entity ID</b>   |                  | Unique Entity IDs are issued by the U.S. General Services Administration (GSA) via the System for Award Management (SAM.gov). SAM registration is required to submit a Step 2: Full Proposal. If an offeror is unable to obtain a UEI in time for submission of the Step 1: Concept Summary, indicate the date for which one was applied. (15-character limit)  |
| <b>Is this research or technology subject to U.S. export laws and regulations?</b> | Yes              | U.S. export control laws and regulations include, but are not limited to, the requirements of the Arms Export Control Act, 22 U.S.C.2751- 2799, including the International Traffic in Arms Regulation (ITAR), 22 C.F.R. 120-130.; and the Export Administration Act, 50 U.S.C. app. 2401-2420, including the Export Administration Regulations, 15 C.F.R. 730-774; including the requirement for obtaining any export license or other approval. |

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**PROJECT OVERVIEW AND ANTICIPATED BENEFITS**

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| <b>Title of Project</b>             | Yes | Provide a title for the proposed project. (120-character limit)  |
| <b>One-Line Project Description</b> | No  | In clear and concise layman’s terms, provide a sentence that summarizes the project. This is only for CASIS-internal use, not for release to the public or NASA. (300-character limit)   |
| <b>Key Words</b>                    | No  | Enter the most relevant words that describe the proposed project. (255-character limit)  |
| <b>Project Objectives</b>           | Yes | Describe the problem or issue being addressed—be sure to include the project relevancy to the ISS National Lab mission, why the proposed work requires microgravity or the space environment, and whether the project builds on prior ISS research. State the test objective and the starting and ending technology readiness level (TRL). List the key results expected from the project and the deliverables/products that could be created. Describe how the project’s outcome will further technological development in in-space production applications and ultimately lead to a commercial offering. (1,400-character limit) |
| <b>Rationale for ISS</b>            | Yes | Choices: Extended access to microgravity; Extreme environmental conditions; Unique vantage point; Other  |
| <b>Rationale for ISS - Comments</b> | Yes | Clearly describe where gravity is impeding progress on Earth, where space has been shown to produce relevant superior outcomes, and which properties are sought from in-orbit development. (1,000-character limit)   |

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| <b>Concept of Operations:</b>  | Yes | Provide a short description of the proposed project, focusing on the technical approach for the in-orbit experiment and how it links to the achievement of the project’s objectives. <ul style="list-style-type: none"> <li>• Provide a basic description of the project’s in-orbit requirements and experimental set-up.</li> <li>• Describe any specific hardware or in-orbit facilities necessary to support this project, if known.</li> <li>• Define the logistical support and payload return requirements.</li> <li>• Identify any preliminary discussions the offeror has had with an Implementation Partner, including evidence that the Implementation Partner can meet the proposed technical and schedule requirements.</li> <li>• If known, provide an in-orbit operations timeframe (i.e., desired launch date and flight duration).</li> <li>• Offerors anticipating the requirement for iterative microgravity studies are encouraged to generally describe those successive experiments. (Note: Only one flight experiment will be funded at a time.) (1,400-character limit)</li> </ul> |
| <b>Do you require assistance in identifying an Implementation Partner?</b> | Yes | Implementation Partners are organizations that work with the ISS National Lab to provide services related to payload development. If “yes” is selected, the ISS National Lab Operations team will reach out to you for assistance.  |
| <b>Scientific &amp; Technical Benefit</b>                                  | Yes | Describe the scientific and technical merits of the proposed project, including the value of the application and relevance to the goals of this research announcement; the value of the proposed application to the low Earth orbit (LEO) ecosystem, related terrestrial industry or industries, and public benefits; and the innovation of the approach and expected product performance relative to current state of the art. Document the PI’s success in the field of study, or for new investigators, demonstrate that the PI has appropriate experience and training or has partnered with a qualified co-investigator. (1,400-character limit)   |

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| <b>Business &amp; Economic Benefit</b>  | Yes | Describe the business and/or economic benefits if the project is successful, including how this research in LEO will lead to a disruptive product or service, who will use that product, and best estimates of how much revenue realistically will be generated from it, or as a result of it, and in what timeframe. Identify the organization that will commercialize the resulting product and/or application and describe how the commercialization efforts will be funded. (1,400-character limit) |
| <b>PAGE 4</b>   |     |   |
| <b>PROJECT BUDGET</b>   |     |   |
| <b>Estimated Project Costs and Funding</b>                                    |     | On this page, provide a budgetary estimate for the project and sources of funds to cover those costs. Enter all cost figures into the unlocked cells in the table. All funds must be entered in real dollar amounts. The total from all funding sources (Line Item 8) must equal the total project funding required (Line Item 3). The budget may be amended if the offeror is invited to submit a Step 2: Full Proposal.   |
| <b>1. Project Costs</b>   | Yes | Project costs are those direct costs and indirect costs (e.g., overhead (OH) and general and administrative (G&A), or finance and administrative costs (F&A)) to manage the project.  |
| <b>2. Implementation Partner (Mission Integration &amp; Operations) Costs</b> | Yes | IP costs are the costs for an Implementation Partner to make a payload flight ready. IP services include the design, development, integration, in-orbit capabilities and facilities, and assistance required to complete NASA Verification and Validation (V&V) activities.   |
| <b>3. Total Project Funding Required</b>                                      | N/A | This is the estimated cost to complete the project. This will be the sum of Line Items 1 and 2 and is automatically calculated. The value of this Line Item must equal the value in Line Item 8 (Total from All Funding Sources).   |
| <b>Funding Sources</b>  |     |   |
| <b>4. Funds Provided by PI's Organization</b>                                 | Yes | This refers to the funds that the offeror's organization is contributing directly to the project. It does not include in-kind contributions (see Line Item 7).  |

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| <b>5. Funds Requested from CASIS (5a + 5b)</b>  | N/A            | This is the total amount of funding the offeror is requesting from CASIS to cover any shortfall in project expenses. This will be the sum of Line Items 5a and 5b and is automatically calculated. The amount must be less than or equal to Line Item 3 (total project funding). The value for Line Item 5 will be zero (\$0) if the applicant is not requesting CASIS funding.  |
| <b>5a. Project Funding Requested from CASIS</b>   | Not Applicable | For this solicitation, offerors may not request funding from CASIS exclusive of Implementation Partner costs (see Line Item 5b).   |
| <b>5b. Implementation Partner (Mission Integration &amp; Operations) Funding Requested from CASIS</b> | Yes            | This is the amount of funding the offeror is requesting from CASIS to cover Implementation Partner costs. Implementation Partners contract directly with CASIS.  |
| <b>6. Funds Provided by Other Sources</b>   | Yes            | This is the total contributions from sources outside of the offeror's organization other than funds requested from CASIS. These may include other government grants and SBIRs, academic or commercial partnerships, etc. Offerors should indicate in their response to the Budget and Funding Sources field if they have secured the funds from other sources or have simply requested the funds. CASIS recommends that applicants secure such external funding when possible. |
| <b>7. In-Kind Contributions</b>   | Yes            | This value should include the estimated value of any facilities, hardware, or support services provided by the offeror's institution to support the project.   |
| <b>8. Total from All Funding Sources (must = Line Item 3)</b>   | Yes            | This will be the sum of Line Items 4 through 7 and is automatically calculated. The value of this Line Item must equal the value in Line Item 3.   |

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| <b>Budget and Funding Sources</b>  | Yes | <ul style="list-style-type: none"> <li>• If the project is receiving funds from an external source, identify the organization and funding amount.</li> <li>• Does the offeror require support from the ISS National Lab to identify potential investors or to obtain additional funding?</li> <li>• Does the offeror or any funding partners have the intent, resources, or experience to develop and/or commercialize project outcomes?</li> </ul> |
| <b>Attachment (Maximum 1 file)</b> | No  | Only one file (in PDF format) may be attached. Attach only useful, supplemental information. Possible examples include, but are not limited to, the PI's biographical sketch and references cited.  |
| <b>Additional Comments</b>         | No  | In the space provided, enter any additional narrative needed to describe the proposed project. (1,000-character limit)  |