| Title: NA ALMA 2014 Study Proposal Form - Template | Author: W. Randolph | Date: 01 May 2013 |
|--|---------------------|--------------------------|
| NA ALMA Development Doc. No. T – 001.00 | | Revision: 0.0 |



North American ALMA Science Center



Development Upgrades of the Atacama Large Millimeter/submillimeter Array (ALMA)

Study Proposal Form - Template

| Prepared by | Organization | Date |
|-------------|----------------------|---------------|
| W. Randolph | NA ALMA Dev. Program | 05 April 2013 |

| Approvals (Name and Signature) | Organization | Date |
|--------------------------------|--------------------|------|
| A. Wooten | NAASC | |
| P. Jewell | NA ALMA Operations | |

| Released by (Name and Signature) | Organization | Date |
|----------------------------------|----------------------|------|
| W. Randolph | NA ALMA Dev. Program | |

Change Record

| Version | Date | Reason |
|---------|-------------|-----------------|
| 0.0 | 01 May 2013 | Initial Release |
| | | |
| | | |

Delete this entire page from your submitted Study Proposal.



North American ALMA Science Center



Development Upgrades of the Atacama Large Millimeter/submillimeter Array (ALMA)

Study Proposal Form

STUDY PROPOSAL TITLE: PRINCIPAL INVESTIGATOR:

Institution:

Address:

PI CONTACT INFORMATION:

Telephone Number

Email address

1.0 CO-Investigator(s) and Collaborating Institution(s)

Name Institution Email / Telephone

2.0 SUBCONTRACTORS

N.B. Obtain Company and/or Institution authorization to be proposed as a subcontractor prior to completion and sign-off of this Proposal Form.

2.1 Company/Institution:

Address:

Subcontracted parts and/or services:

3.0 STUDY PLAN

3.1 Science Case

Insert the scientific rationale and anticipated benefits of the proposed Study.

3.2 Study Overview

Insert a brief description of the proposed Study and intended outcomes; including prototype hardware, software, etc.

3.3 Study Scope

Insert an explanation of the scope/scale and planned research method of the Study. Describe Study objectives, assumptions, working theories, or approaches that will be used, and state hypothesis.

3.4 Study Measures of Success and Risk

Describe the measures of success for this study. Include an assessment of the likelihood that the proposed method and approach to the Study will further the state of the art. Describe the process to be used to address experiment prioritization, evaluate experiment results, and to modify the approach/redirect experiments.

3.5 Study Deliverables

Study deliverables must include:

- Monthly "4-square" Progress, Final, and Outcome Reports Insert a brief definition of any additional study deliverables:
 - (e.g., project plans, test plans, review documentation, etc.)
 - Prototype (hardware, software, etc.)

3.6 Site Location Impact Statement (if applicable)

Insert a brief description of any new facilities, significant modifications to existing facilities, or use of NRAO facilities, that are required.

4.0 LEVEL OF EFFORT AND COST BREAKDOWN

The Offerer shall estimate the level of effort (unit of measure = $\underline{\mathbf{F}}$ ull $\underline{\mathbf{T}}$ ime $\underline{\mathbf{E}}$ quivalent) to be deployed by the Offerer and Collaborating Institutions/Subcontractors (Table 1.0, items 1 through 4) until completion of the proposed Study, as well as the corresponding total cost to be incurred by the Offerer (Table 2.0).

Note the expected contribution from the North American ALMA Development Program in Table 3.0.

4.1 Period of Performance:

Define the anticipate period of performance (twelve months maximum).

4.2 Level of Effort:

Table 1.0; Offerer's Labor Estimate.

| Item | Labor Category | FTE |
|------|----------------|------|
| 1 | Science | |
| 2 | Engineering | |
| 3 | Management | |
| 4 | Other | |
| | Total Labor | 0.00 |

4.3 Cost Breakdown:

The total Award Pool for the FY2014 Call for Development Study Proposals is \$1.0M. The total Award Pool amount (\$1M) will fund all NA ALMA Partnership Study Proposals. Maximum cost allowance for an individual Study Proposal is \$200K.

Table 2.0; Offerer's Cost Estimate.

| Item | Cost Category | USD |
|------|----------------------|------|
| 1 | Labor | |
| 2 | Materials & Services | |
| 3 | Travel | |
| 4 | Miscellaneous | |
| | Total Cost (\$) | 0.00 |

Table 3.0; Total Cost of Study.

| Study Participants | USD |
|--|------|
| Expected contribution from the NA ALMA Development Program | |
| Offerer's Total Cost | |
| Total Cost of Study (\$) | 0.00 |

5.0 Delivery Schedule and Terms of Payment

The Offerer shall note the time (in elapsed months from Study commencement) for completion of each Milestone and shall propose a payment schedule in accord with the proposed Milestones.

Table 4.0; Study Milestone and Payment Schedule.

| Item | Study Milestone | Time of Completion | Payment (USD) |
|-----------------------------|---------------------------------|---------------------------|------------------|
| 1 | Milestone 0: Study commencement | T ₀ | |
| 2 | Milestone 1: | T ₀ + x months | |
| 3 | Milestone 2: | T ₀ + y months | |
| 4 | Milestone n: | T ₀ + z months | |
| TOTAL FIRM FIXED PRICE (\$) | | 0.00 | |

6.0 COMMITMENT

Having read all documents listed in and annexed to the Call for Development Study Proposals, and having assessed the situation and the nature and difficulties of the proposed services, the undersigned hereby offers the "insert Study Title here" in accordance with the provisions of the present Call for Development Study Proposals and, if awarded the Agreement, undertakes to carry out the work required according to best trade practices, within the prescribed time limits, and at the price set out in this Proposal Form.

| Name: | | |
|--------------|------|------|
| | | |
| Institution: | | |
| | | |
| Signature: | | |
| | | |
| Date: | | |