Procurement and Contracting Services

Request for
Terahertz Intensity Mapper (TIM)

ADDENDUM #1

Please mark all proposal submission envelopes with
the following information:

Sealed RFP # S112004
Due on July 24, 2020 no later than 3:00 PM, MST

The attention of Bidders submitting proposals for the subject Contract is called to the following Addendum. The revisions set forth herein, whether of omission, addition or substitution, are to be included in and form a part of the Proposal submitted.

Q1. Are international bidders required to complete the forms in Section 6.0?

A1. UArizona requires all vendors (both International and US-based) to complete the forms listed in Section 6.0.

Q2. What is a subcontractor vs supplier?

A2. Any entity (person, vendor or organization) that will be hired by the Primary Vendor to complete the scope of work quoted to the University of Arizona. Subcontractors may provide specialty work for services or fabricated components that contribute to the Primary Vendor's scope of work. A subcontractor does not apply to vendors for the purchase of supplies and materials. The Vendor shall ensure that all Subcontractors complete the forms in Section 6.0. This requirement applies to pre and post award.

Q3. Are consultants considered a Subcontractor?

A3. Yes.

Q4. Do references have to be U.S. based?

A4. References do not have to be U.S. based. We are looking for clients that the Vendor has performed similar jobs for of a similar scope and nature. The reference should be able to verify that the job was completed on time and within budget and were satisfied with the Vendor's performance.

Q5. Will we provide a copy of the slides?

A5. Yes, the Pre-proposal slides will be posted to the Procurement website as part of Addendum #1.

Q6. Should FEA include the mounting platform, and is it assumed to be rigid?

A6. The interface plate can be assumed to be rigid for the proposal, but we will provide a stiffness and/or a mechanical model by the time of the kickoff meeting.

Q7. Should the optical shape be set for operation at -12.5 C?

A7. The surface must meet the accuracy requirements at the operational temperatures listed. If thermal distortion away from ambient is shown to bring the surface outside of the specification, then it is allowable to build

the reflector with a thermal bias to ensure a correct figure in the operational range. A Finite Element Analysis must be presented to justify this offset and some extra qualification tests may be requested to validate the model.

Q8. Is the vendor responsible for thermal analysis?

A8. The Vendor should apply the specified gradients (data that was gathered on similar flights) that is provided in the technical specification to determine surface deformations and stresses. If the vendor provides justification and analysis showing smaller gradients are expected based on their design, UArizona will consider adjusting the requirements.

Q9. What is the length of the flight?

A9. 2 to 4 weeks

Q10. Should moisture absorption/desorption be considered?

A10. Yes, for composite designs absorption and desorption of moisture should be considered and addressed in the analysis and surface error budget.

Q11. Is all tooling part of the deliverables?

A11. Only special tooling is a deliverable. During the negotiations with the vendor it will be decided what constitutes "special tooling". Special tooling such as panel adjusters or any specifically designed tools required for the assembly, adjustment and operation of the telescope would be considered deliverable. Another example would be a mandrel specifically made for the project, could be considered "special tooling" that UArizona would like to retain in case it was needed for procurement of another unit. If there are cost savings associated with any "special tooling" not being a deliverable, the Vendor should identify that in their proposal.

Q12. Have you thought about moisture issues for composite structures?

A12. Yes, large changes in the structure are OK. There will be three (3) microns of water left at the top of the telescope. If vendors think this is a concern over the course of observation, then this should be reflected in the error budget as discussed in the Technical Specification.

Q13. Does the TIM Technical Spec contain the entire drawing package? Or, will additional details be provided? We are assuming it is complete and it is up to the selected vendor to do all the detailed design work.

A13. Yes the Technical Specification contains all the drawings as they stand. Additional details may be provided in response to any questions or clarifications that may be received as it relates to the RFP. We expect the Vendor will perform all work related to the RFP including the detailed design.

Q14. What is the desired material for the secondary mirror and what is the accuracy requirement?

A14. The secondary mirror is not part of this RFP. The secondary mirror will be provided by UArizona along with the actuator mechanism associated with it.

Q15. Has a vendor already been selected for the tubular structure for the balloon, sun shade, etc.? Is it possible to bid on that structure also

A15. The gondola (tubular structure) is not part of this RFP and not part of the UArizona bid package. We are willing pass along any names of potential vendors to our partners if we learn that structure is open for bid.

Corrections to RFP:

Technical Specification:

1. Page 1, 3rd paragraph, 2nd sentence, "In order to guarantee the thermal stability and meet the low mass requirement, the primary reflector surface shall consist of carbon fiber reinforced plastic (CFRP), aluminum machined panels or electro-deposited nickel panels mounted by means of adjusters onto a reflector backup structure (BUS) or it can be a monolithic CFRP reflector design." should be "In order to guarantee the thermal stability and meet the low mass requirement, the primary reflector surface shall consist of carbon fiber reinforced plastic (CFRP), aluminum machined panels or electro-deposited nickel panels mounted by means of adjusters onto a reflector backup structure (BUS) or it can be a monolithic CFRP or aluminum reflector design."

2. Section 7, Page 10, 1st paragraph, 1st sentence, "The reflector surface shall be either individual panels manufactured in machined aluminum or by replica technique based on electrodeposited Nickel or CFRP, or be a monolithic replica CFRP design" should be "The reflector surface shall be either individual panels manufactured in machined aluminum or by replica technique based on electrodeposited Nickel or CFRP, or be a monolithic replica CFRP or monolithic aluminum design."

3. Correction on TIM Technical Specification, Section 5, Table 2, Page 7. Change operating Temperature from -20 C to 0 C to -25 C to 0 C.

Statement of Work:
Section 5.13, DRL table, DRD No. 18, Compliance Matrix delivery date should be “PFDR” not “FCDR”.