

**Invitation For Bid (IFB)**

**IFB No. 650123**

**ARE-ON Dark Fiber IRU**

**BID RELEASE DATE: August 4, 2017**

**BID DUE DATE: August 22, 2017**

**BID DUE TIME: 2:30 P.M. CDT**

**SUBMIT ALL BID TO: University of Arkansas**

**Business Services**

**Administration Building, Room 321**

**1125 W. Maple St**

**Fayetteville, AR 72701**

**Signature Required For Response**

Respondent complies with all articles of the Standard Terms and Conditions documents as counterpart to this IFB document, and with all articles within the IFB document. If Respondent receives the University’s purchase order, Respondent agrees to furnish the items and/or services listed herein at the prices and/or under the conditions as indicated in the IFB.

|  |  |
| --- | --- |
| **Vendor Name:** |  |
| **Mailing Address:** |  |
| **City, State, Zip:** |  |
| **Telephone:** |  |
| **Email:** |  |

**Authorized Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Typed/Printed Name of Signor: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Title: \_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**University of Arkansas**

**Arkansas Research and Education Optical Network**

**Dark Fiber IRU**

**Invitation For Bid 650123**

1. **Introduction/Scope**
   1. The Board of Trustees of the University of Arkansas, acting for and on behalf of the University of Arkansas, Fayetteville, is releasing this Invitation For Bid to supply an Indefeasible Right to Use (IRU) for dark fiber optic cable to select points in northwest Arkansas for the **Arkansas Research and Education Optical Network (ARE-ON)**.
   2. **Issuing Agency**

This Invitation For Bid (IFB) is issued by the Office of Business Affairs, University of Arkansas, Fayetteville (UAF). The University Purchasing Official is the sole point of contact during this process.

**Bidder Questions and Addenda**: Bidder questions concerning all matters of this IFB should be sent via email to:

Whitney Smith, Procurement Coordinator

Business Services

[wesmith@uark.edu](mailto:wesmith@uark.edu)

Questions received via email will be directly addressed via email, and compilation of *all* questions and answers (Q&A), as well as any revision, update and/or addenda specific to this IFB solicitation will be made available on HogBid, the University of Arkansas bid solicitation website: <http://hogbid/>. During the time between the bid opening and contract award(s), with the exception of bidder questions during this process, any contact concerning this IFB will be initiated by the issuing agency and not the Bidder. Specifically, the persons named herein will initiate all contact.

Bidders shall not rely on any other interpretations, changes, or corrections. It is the Bidder’s responsibility to thoroughly examine and read the entire IFB document and any Q&A or addenda to this IFB. Failure of Bidder to fully acquaint themselves with existing conditions or information provided will not be a basis for requesting extra compensation after the award of a Contract.

1. **Requirements/Specifications**
   1. Bidders shall provide pricing for a dark fiber indefeasible right to use (IRU) contract with a term of seven (7) years for a single fiber route having the endpoints as described below:  
      1. **Route:**  
           
         A-Endpoint: ARE-ON Fayetteville POP, 772 W. Discovery Way, Fayetteville, AR 72701 (meet-me fiber vault GPS coordinates: 36.041410, -94.171105)  
           
         Z-Endpoint: University of Arkansas, Don Tyson Center for Agricultural Sciences (TCAS), 1371 W. Altheimer Dr, Fayetteville, AR 72704
   2. Bidders shall provide a minimum of four (4) fiber strands for the fiber route.

* 1. The fiber route shall be a complete dark fiber route in which there is a complete light path between the two endpoints on each fiber strand. All strands in the route shall be in the same cable sheath.
  2. The bidder shall extend its cable at the A-Endpoint (ARE-ON Fayetteville POP) into the designated ARE-ON “meet-me” fiber vault (GPS coordinates specified in Section 2.1.1 above) where there is an existing pre-terminated house cable already installed into the facility. ARE-ON will splice the IRU fibers into the existing house cable in the “meet-me” vault.
  3. The bidder shall extend its cable into and provide termination inside the facility at the Z-Endpoint (TCAS) in an industry-acceptable fiber distribution or patch panel. ARE-ON’s preferred fiber termination is LC/UPC.
  4. The bidder must coordinate with ARE-ON and the facility owner on the building penetration, route, placement, and location of fiber and termination points inside any facility where the bidder must construct new fiber to enter the facility.
  5. The bidder shall provide a map of the IRU fiber route, accurately representing the path that the fiber takes between the endpoints. The map shall also depict which portions of the cable route are underground and which are aerial and where intermediate connection points are located.
  6. The bidder shall provide the cable length between the endpoints of the fiber route. For routes where cable construction must take place to complete the order, an estimate of the cable length is permitted. The cable length must not exceed 40km between endpoints to avoid the need to insert light amplification equipment between the endpoints.
  7. The bidder shall be solely responsible for obtaining any special permitting or right-of-way required for construction, including, but not limited to, easements, city permits, franchises, highway department permits, and railroad crossing permits.
  8. The bidder shall not unreasonably restrict ARE-ON’s access to the IRU fiber at intermediate connection points (such as splice points) along the cable route.
  9. All fiber strands in the IRU fiber route shall meet the IRU Fiber and Acceptance Standards in Appendix I. The bidder shall attempt within reasonable means to repair or rehab fiber strands in the IRU fiber routes to meet the acceptance standards. AREON will accept an invoice for the IRU fiber route only after IRU Fiber Testing and Acceptance have been completed. ARE-ON shall solely be responsible for determining if the fiber meets the acceptance standards and if it will waive certain requirements if it can make operational use of fiber that is marginally below the acceptance standards.
  10. The bidder must maintain end-to-end fiber light loss not to exceed 15% above the baseline measurements at the time of fiber acceptance. For example, if the initial end-to-end loss on a span is 20.0 dB, then the span loss must not exceed 23.0 dB in the future. If the span loss exceeds this amount, the bidder shall work to reduce the loss to meet the maximum loss allowed.
  11. The bidder shall be a member of Arkansas One-Call (AOC) and shall provide complete detailed underground cable route information for the purpose of its Call Before You Dig program. In addition, the bidder shall perform or contract to perform all obligations under state and federal law for locating and marking its underground facilities upon request by AOC.
  12. Bidders shall provide a network operations center (NOC) with a toll-free telephone number that is available 24 hours a day, 7 days a week, including holidays, with qualified personnel to handle trouble reports from ARE-ON.
  13. Vendors shall provide prompt and continuous support for emergency situations until the issue is resolved or a mutually agreeable work-around solution is implemented.
  14. Vendors shall place no limits on the number of cases or trouble tickets that ARE-ON can submit to the NOC.
  15. Vendors shall provide an escalation procedure with appropriate levels of management contacts that ARE-ON at its option may initiate 24 hours a day, 7 days a week for critical outages.
  16. Vendors shall provide a Service Level Agreement (SLA) as a part of the Contract that details 24x7x365 NOC availability, maximum NOC response times, the escalation procedure, and reimbursements or credits to ARE-ON in the event of an outage or outages that render a fiber route unusable for an extended period of time.
  17. Vendors shall have a standard notification procedure to notify ARE-ON via email at least 48 hours in advance of scheduled maintenance and via email or telephone as soon as possible in the event of unscheduled or emergency maintenance that is impacting or may impact the availability of a fiber route.

1. **Proprietary Information**  
   Proprietary information submitted in response to this bid will be processed in accordance with applicable State of Arkansas procurement procedures. Documents pertaining to the bid become the property of the State and shall be open to public inspection subsequent to bid opening. Any proprietary information must be identified and sealed separately within proposal [include with Original and any required Copies].  
     
   Note of caution: Do not attempt to mark the entire proposal as "proprietary". Do not submit letterhead or similarly customized paper within the proposal to reference the page(s) as "Confidential" unless the information is sealed separately and identified as proprietary. Acceptable proprietary items may include references, resumes, and financials or system/software/hardware manuals. Cost cannot be considered as proprietary.
2. **Invoicing**
   1. The contracted vendor shall be paid in a timely manner after acceptance of services by the University upon submission of properly itemized invoices. All invoices must be forwarded to ARE-ON, 534 W. Research Center Blvd, Suite 275, Fayetteville, AR 72701, and must also include the following additional information:  
      * 1. The complete name and address of the vendor.
        2. Invoice Date.
        3. Invoice Number.
        4. Purchase Order Number.
        5. Itemized listing/description of services, unit price and extended line total, for each item invoiced.
        6. Itemized taxes, fees, and levies.
   2. The University does not agree to pay interest charges or late fees on any amounts due to vendor.
3. **Pricing**
   1. The bidder must list the pricing on the Official Bid Price Sheet in the format provided and must include shipping, handling, and installation charges if applicable. Failure to submit the bid in this required format may result in disqualification.
   2. The pricing shall include two pricing options for a 7-year IRU for 4 strands of dark fiber for the single fiber route. The first option shall be a single non-recurring charge payable at acceptance (see Section 2.11). The second option shall be eighty-four (84) equal monthly recurring charges for the 7-year term of the agreement. Both payment options shall include any and all capital costs associated with the IRU and any construction costs required to place the cable and to terminate it at the endpoints. In addition, the pricing shall include the cost of a Service Level Agreement that covers the support and maintenance for the single fiber route over the 7-year term of the contract. Maintenance shall include, but not be limited to, OSP repairs, required cable moves, telephone support, cable locates, and other functions necessary to maintain acceptable optical service levels. ARE-ON will not be obligated to pay any costs not identified on the Official Bid Price Sheet.
   3. The bidder shall provide the number of days to deliver each IRU fiber route after receipt of the purchase order in the spaces provided on the Official Bid Price Sheet.
   4. Any cost not identified by the bidder but subsequently incurred in order to achieve successful operation of the system will be borne by the bidder.
4. **Sample of Contract**  
   Bidder should include sample of contract Terms and Conditions with their bid response, if applicable.
5. **Permits and Licenses**  
   Vendor shall, at its sole expense, procure and keep in effect all necessary permits and licenses required for its performance under this agreement, and shall post or display in a prominent place such permits and/or notices as are required by law.
6. **Bid Evaluation**  
   Bids will be awarded on an all-or-none basis, and as a result there will be no multiple vendor awards. All qualifying bids will be evaluated based solely on price as specified on the Official Bid Price Sheet. The University of Arkansas reserves the right to withdraw the IFB and to not make a final award if it is in the best interests of the University to do so. Bids not meeting the requirements specified in this IFB or received after the bid opening date and time will be rejected and removed from further consideration.
7. **Term Contract**  
   The term (“Term”) of this contract will be for a period of seven (7) years from the date of formal acceptance of the fiber. In the event of non-appropriation of funds necessary to fulfill the terms and conditions of this Agreement during any biennium period of the Term, the parties agree that this Agreement shall automatically terminate without notice.
8. **Contract Information**
   1. The University of Arkansas may not contract with another party:  
      1. For a period of time which continues past the end of a fiscal year unless the contract allows cancellation by the Agency Purchasing Official upon 30 days written notice whenever there are no funded appropriations for the contract.
      2. To pay any penalties or charges for late payment or any penalties or charges which in fact are penalties for any reason.
      3. To indemnify, defend, or hold harmless any party for any liability and damages.
      4. Upon default, to pay all sums to become due under a contract.
      5. To pay damages, legal expenses or other costs and expenses of any party.
      6. To continue a contract once the equipment has been repossessed.
      7. To conduct litigation in a place other than Washington County, Arkansas.
      8. To agree to any provision of a contract which violates the laws or constitution of the State of Arkansas.
   2. A party wishing to contract with the University of Arkansas should:  
      1. Remove any language from its contract that grants to it any remedies other than:
      * The right to possession
      * The right to accrued payments
      * The right to expenses of deinstallation
      * The right to expenses of repair to return the equipment to normal working order, normal wear and tear excluded.
      * The right to recover only amounts due at the time of repossession and any unamortized nonrecurring costs as allowed by Arkansas law.
      1. Include in its contract that the laws of the State of Arkansas govern the contract.
      2. Acknowledge in its contract that contracts become effective when awarded by the Agency Purchasing Official.
   3. The University of Arkansas may contract with another party:  
      1. To accept the risk of loss of the equipment and pay for any destruction, loss or damage of the equipment while the University has such risk, when the extent of liability for such risk is based upon the purchase price of the equipment at the time of any loss and the contract has required the University to carry insurance for such risk.
      2. To lease any equipment for a period of time which continues past the end of a fiscal year provided that, in the event funds are not appropriated for the equipment described in the agreement, the Agency Purchasing Official may, upon thirty (30) days written notice to the vendor/lessor, cancel the agreement regarding that equipment for which no appropriations are made, or, in the event that there are no funded appropriations from which payment can be made for the Agency Purchasing Official may upon thirty (30) days written notice to the vendor/lessor, cancel this agreement as to that equipment for which there are no funded appropriations from which payment can be made for the equipment.
9. **Agreement Authority**  
   Vendor shall perform all services as an independent contractor and shall discharge all of its liabilities as such. No acts performed or representations made, whether written or oral, by the contractor with respect to third parties shall be binding to the University.
10. **Termination**  
    The agreement shall terminate seven (7) years from the date of formal acceptance of fiber meeting the Fiber Testing and Acceptances standards as provided in Appendix I. Upon award, the agreement is subject to cancellation, without penalty, either in whole or in part, if funds are not appropriated. In no event shall such termination by the University as provided for under this section give rise to any liability on the part of the University including, but not limited to, claims of vendor for compensation for anticipated profits, unabsorbed overhead, or on borrowing. The University’s sole obligation hereunder is to pay vendor for products and/or services ordered and received prior to the date of termination.
11. **Governing Law**  
    The parties agree that this contract, including all amendments thereto, shall be construed and enforced in accordance with the laws of the State of Arkansas, without regard to choice of law principles. Consistent with the foregoing, this contract shall be subject to the Uniform Commercial Code as enacted in Arkansas.
12. **Disputes**  
    The vendor and the University agree that they will attempt to resolve any disputes in good faith. Subject to the provisions on sovereign immunity herein, the vendor and the University agree that the State of Arkansas shall be the sole and exclusive venue for any litigation or proceeding that may arise out of or in connection with this contract. The vendor acknowledges, understands and agrees that any actions for damages against the University may only be initiated and pursued in the Arkansas Claims Commission. Under no circumstances does the University agree to binding arbitration of any disputes or to the payment of attorney fees, court costs or litigation expenses.
13. **Indemnification**  
    Vendor agrees to indemnify and hold harmless the University and its officers and employees from any claim, damage, liability, injury, expense, or loss, including defense cost and attorney’s fees arising out of contractor’s performance under this Agreement or as a consequence of the existence of this agreement.
14. **Limitations of Liability**  
    Vendor acknowledges that, under Arkansas law, the University may not enter into a covenant or agreement to hold a party harmless or to indemnify a party from any damages.
15. **Time is of the Essence**  
    Contractor and University agree that time is of the essence in all respects concerning this contract and performance hereunder.
16. **Survival**  
    The terms, conditions, representations, and warranties contained in the agreement shall survive the termination of this contract.
17. **Invalidation of Contract**  
    Consistent failure to meet sufficient service will invalidate the contract. It will be cancelled and assigned to the next lowest bidder.

**APPENDIX I**

**IRU Fiber Testing and Acceptance Standards**

1. All splices should be performed with an industry-accepted fusion-splicing machine.
2. Splices shall be qualified with an Optical Time Domain Reflectometer (OTDR) using bi-directional averaging. The profile alignment system or light injection detection system on the fusion splicer may not be used to qualify splices. Connector (pigtail) splices shall be qualified with a 1km or longer launch reel.
3. Span loss measurements shall be qualified using an optical power meter and calibrated light source. Measurements shall be taken bi-directionally and averaged for an overall fiber span loss measurement.
4. After end-to-end (site-to-site) connectivity on the fibers has been established, bi-directional span testing shall be performed. These measurements must be made after all splice cases are closed. Connectors shall be cleaned as necessary to ensure accurate measurements are taken.
   1. Span loss measurements at 1550nm shall be recorded using an industry-accepted calibrated light source and optical power meter pair. Continuity testing (checking for "frogging") shall be done on all fibers. Span loss measurements shall be performed bi-directionally. Span loss results shall be provided for both directions on each fiber.
   2. Bi-directional OTDR traces of every IRU fiber shall be provided. These measurements shall represent the current cable. Industry accepted standard OTDR traces in EXFO or Belcor format shall be provided on all traces, unless another OTDR format is agreed to by both parties. Launch reels of 1km in length or longer shall be used for the span OTDR traces of bare fiber. Launch reels of 1km in length or longer shall be used for span OTDR traces of connectorized fiber.
      1. OTDR traces that indicate an optical return loss greater than -45dB at the OTDR to launch reel interface or greater than -40dB at the launch reel to fiber terminal patch panel interface shall be invalid for test evaluation and must be retested once the interface optical return loss issue is resolved. (Warnings of “High insertion loss” or “Live fiber detected” indications from the OTDR during testing may indicate this condition.)
   3. Spans with average losses exceeding 0.30 dB/km shall be analyzed with an OTDR to develop a fiber rehab plan. Patches and fusion splice events with high loss shall be identified and best effort attempts shall be made to reduce the loss at these points to bring the average end to end loss below 0.30 dB/km. (See sections 5.2 and 5.3 below for splice loss standards.) Note: Splices performed by ARE-ON and cable lengths provided by ARE-ON will be excluded from these measurements.
   4. All testing shall be conducted at 1550nm.
   5. OTDR traces shall be saved in a standard file naming convention.
   6. Span loss measurements may be provided in Excel spreadsheet or another tabular format.
   7. One complete set of measurements with all traces on CD-ROM or USB thumb drive shall be submitted.
5. The connector and splicing standards:
   1. The objective loss value of the connector and its associated splice shall be 0.50 dB or less. This value does not include the insertion loss from its connection to the fiber distribution panel.
   2. The objective splice loss for each fiber within a span shall be an average bi-directional loss of 0.10 dB or less for all splices. For example, if a given span has 10 splices, each fiber shall have a total bi-directional loss (due to the 10 splices) of 1.0 dB or less. Individual bi-directional loss values for each splice shall be reviewed for high losses, which may indicate splice instability.
      1. The objective of an individual splice is 0.3 dB or less.
   3. The aforementioned standards in sections 5.1 and 5.2 are objectives, not the basis for acceptance. The acceptance standard for each fiber shall be an average bi-directional installed loss of 0.30 dB/km or less across each span.
      1. Any fiber with an individual splice with a bi-directional splice loss greater than 0.6 dB shall be remediated to reduce the splice loss below 0.6 dB and the fiber retested before the fiber will be accepted.
   4. Optical return loss shall be no greater than -45dBm for UPC connectors, -50dBm for APC connectors, and -55dBm for splices. Optical return loss per event shall be evaluated from the bi-directional OTDR traces obtained for section 4.2.
6. The entire fiber optic cable system containing the IRU fibers shall be properly protected from foreign voltage and grounded with an industry-accepted system.
7. Connectors shall be either SC-UPC or LC-UPC with conventional single mode glass. (ARE-ON prefers LC/UPC connectors for IRU fiber demark points – except at established meet point splices.)

**University of Arkansas**

**Arkansas Research and Education Optical Network**

**ARE-ON Dark Fiber IRU**

**IFB No. 650123**

**Official Bid Price Sheet**

Bidder must provide pricing information according to the instructions in Sections 2.1 and 5.0. Bid Price is the line item cost over the 7-year term of the Agreement to be paid either as a single up-front non-recurring charge *or* as a monthly recurring charge.

**Item Description Bid Price**

1 **Route**: ARE-ON Fayetteville POP to University of Arkansas  
Don Tyson Center for Agricultural Sciences, Fayetteville.  
  
**Payment Option 1**: Single non-recurring charge, to include  
the cost of the IRU and all maintenance over the 7-year term  
of the contract \_\_\_\_\_\_\_\_\_\_\_\_  
  
**Payment Option 2**: Monthly recurring charge, to include  
the cost of the IRU and all maintenance over the 7-year term  
of the contract (84 equal monthly payments) \_\_\_\_\_\_\_\_\_\_\_\_  
 (per month)

Cable length: \_\_\_\_\_\_\_\_\_\_ feet.

Number of days to deliver after receipt of order: \_\_\_\_\_\_\_\_\_\_ days.