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| **(Company Name)**  **<TITLE>**  **Solicitation No: <2016-16R-01>**  **Sources Sought / RFI Response** | | |
|  | **Prepared for:**  BANC3, Inc. on behalf of  U.S. Army CERDEC Night Vision and Electronics Sensors Directorate (NVESD) |  |
| **Name of Offeror:**  Submitted On : | | |
| This request for information is for planning purposes only; this is not a request for quotations or proposals. No solicitation document exists and a formal solicitation may or may not be issued by the Government as a result of the responses to this RFI. Neither the Government or BANC3 will be liable for payment of any response preparation expenses | | |

**Response Requirements**

**Please provide the following Point of Contact information:**

***Company:***

***Address:***

***Point of Contact:***

***Phone Number:***

***Fax Number:***

***E-mail Address:***

***DUNS Number:***

***CAGE Code:***

REQUEST FOR INFORMATION: THIS IS NOT A SOLICITATION: BANC3, INC. is not obligated to make an award as a result of this request. This Request for Information (RFI) is for informational purposes only; this is not an Invitation for Bids (IFB), a Request for Proposal (RFP), or Request for Quotation (RFQ). No solicitation document exists and a formal solicitation may or may not be issued by BANC Inc. as a result of the responses to this RFI. BANC3 Inc. will not be liable for payment of any response preparation expenses and is in no way obligated by the information received. Any costs incurred by interested companies in response to this announcement will NOT be reimbursed. The information provided may be used by the Army in developing a Performance Work Statement, Statement of Objectives and/or Performance Based Specification (s). Interested parties are responsible for adequately marking proprietary or competition sensitive information contained in their response.

**Dual Band (MWIR/LWIR) Anti-reflection Thin-film and Nanostructure Optical Coatings**

BANC3, Inc. on behalf of the U.S. Army Night Vision and Electronics Sensors Directorate (NVESD) is searching for sources of infrared thin-film and nanostructure optical coatings. Banc3 will host an “Industry Day” with a presentation of the current issues from an NVESD representative on November 15, 2016 for those parties interested in a more in-depth discussion of the problems or for those who would like to ask questions prior to responding. Interested parties can schedule a one on one discussion with the NVESD representative after the presentation. Please indicate within a week of receiving the RFI if you plan to attend the Industry Day Briefing.

BANC3 is interested in extremely high transmission for simultaneous dual-band, i.e. mid-wave infrared, long-wave infrared (MWIR/LWIR), antireflection thin-film, and nanostructure optical coatings. For the purposes of this RFI, the MWIR wavelength region is defined as 3-5 µm and the LWIR wavelength region is defined as 7-12 µm. The Army system that utilizes dual-band focal plane arrays necessarily has a large number of optical elements due to the system’s field of view requirements. Reducing the number of optical elements and lenses in the system is not an option. Current capability for this system has an average of 98% transmission in each of the MWIR and LWIR bands for each surface. This value is insufficient for system requirements. For example, if the number of optical surfaces through the system is 34 and the transmission through each band is 98% (0.98) on each surface, the amount of signal getting through the system is then (0.98)34 ≈ 50%. Increasing the transmission from 98% to 98.5% will then increase the overall system transmission to ~59.8%. BANC3 is seeking information from those suppliers who can achieve better than 98.5% average transmission in the MWIR and LWIR bands simultaneously and/or those who can achieve this value with minor or even significant process improvements.

**Technical Approach Narrative (maximum 10 pages)**

Interested parties are asked to report on their current technology and/or their plans for design/process improvement in a maximum 10-page narrative. The RFI response should identify and prioritize the technical risks in achieving this level of transmission in both bands (MWIR/LWIR) simultaneously, particularly with regard to meeting transmission performance goals while maintaining environmental durability on low-index substrate materials like barium fluoride (BaF2). Highly durable diamond-like carbon coatings and other substrate materials including germanium, gallium arsenide, zinc selenide, zinc sulfide, and amorphous materials in the AMTIR and IRG families must also be addressed. Consideration should also be given to the approximate size of the optics and radius of curvature, which are roughly from 1" to 6" diameter and 20 mm radius of curvature to infinite radius. The response should include an adequate description of the proposed coating technology as well as evidence of the current achievable results. The results could be in the form of measured transmission spectral data of the responder’s most recent fabrication of dual-band thin-film or nanostructure optical coatings (transmission vs. wavelength plots). Where available, include durability/environmental testing parameters for same coating in which spectral performance is claimed. The respondent is also encouraged to include a short description of the standard test methods used to obtain the data for both the performance and environmental testing. The respondent may include a plan for process improvements believed to improve current or predicted dual band spectral transmission and/or durability. In order to pursue a focused successful research investment strategy, respondents are encouraged to include their assessment and list of technical barriers, risks and challenges in rank order from most difficult to least difficult in achieving the goals detailed in this RFI. PLEASE DO NOT SUBMIT ANY PRICING OR COST INFORMATION WITH SUBMISSION. Submission is due by close of business no later than **November 30th 2016 to BANC3 Point of Contacts listed below.**

**Submit RFI To:**

[Contracts@Banc3.com](mailto:Contracts@Banc3.com)

**Questions:**

Technical questions should be addressed to:

Mr. Michael Rafailov

[michaelrafailov@Banc3.com](mailto:michaelrafailov@Banc3.com)

609-917-4741 or 609-759-1900 x403

**Point of Contact:**

Contractual questions should be addressed to:

Mr. William Meckel

[WilliamMeckel@Banc3.com](mailto:WilliamMeckel@Banc3.com)

609-759-1900 Ext. 227

**Data Rights**

It is desirable that data be received with unlimited rights to the Government. However, it is recognized that proprietary data may be included with the information provided. If so, it is the responsibility of the interested party submitting data to clearly mark such proprietary information and clearly separate it from the unrestricted information as an addendum. No classified data shall be provided via email.