

Forest Guide Q & A

As of 29 January 2021

Following are vendor questions and answers provided as of 29 January 2021 for the NG9-1-1 Interoperability Oversight Commission’s Forest Guide Request for Proposals dated 20 November 2020. The RFP is available at <https://ng911ioc.org>. This document contains all questions and answers previously published.

Question	Answer
There are some NG9-1-1 requirements included in the RFP that the respondent cannot control; how should these be accounted for?	Respondents are encouraged to note requirements in the RFP that describe NG9-1-1 functions and interactions that cannot be fully complied with by the respondent, and to explain why such functions and interactions may be out of scope.
Is there an expected go live date for the production forest guide?	NIOC would like for the forest guide to be deployed as soon as possible. Proposals that demonstrate an ability to deploy a forest guide more quickly than other proposals will be favorably ranked. Proposers shall include a deployment schedule in their proposals. Proposals SHOULD be able to go live within one year of contract execution. Respondents MAY propose a phased ramp-up, such as with an early deployment of a single forest guide node, with increasing redundancy and resilience in later phases.
How can NIOC and NENA compel people to connect to the forest guide?	<p>Forest guides are part of the architecture consisting of routing trees promulgated by IETF and the NENA Development Group, and so interconnection of forest guides is required. There is significant community interest in supporting a common forest guide, and NENA/NIOC are providing that opportunity subject to independent governance by the community; accordingly, we are confident that this program will be a success even though no party can be forced to interconnect. Of course, the forest guide managed under this contract will have to interoperate with other forest guides, such as a regional forest guide deployed locally, or forest guides deployed internationally.</p> <p>Forest guides are expected to be primarily queried by state and regional LoST servers (which are the coverage regions with which they are configured), and emergency authorities responsible for state and regional ESNets have strong incentive to interconnect with the forest guide.</p>
Are one time and recurring costs separate?	Yes, as per the terms of the RFP proposers shall provide one-time capital expenses (CAPEX) and recurring annual operating expenses (OPEX).
Is there expectation that national forest guide only interconnects with state or regional ECRFs?	Yes, this is with the caveat that not all ESNets are statewide or managed by the state, and a state might have multiple

	<p>regions. This assumption is carried over from IETF. NIOC envisions up to 200 discrete ESInets in the United States.</p> <p>The forest guide promulgated under this RFP is expected to be configured with the coverage regions of the largest LoST trees in a region, which might be a state, region, or county, but there may be situations in which the forest guide promulgated under this RFP is queried by other entities (e.g., an originating carrier).</p>
<p>Is NIOC planning to commission only a single FG or also planning to commission regional forest guides under it?</p>	<p>NIOC plans to manage only a single forest guide. If respondents want to propose a means to provision local forest guides as a service to NG9-1-1 entities downstream, they are encouraged to describe this in their proposal. However, engaging those services will be the decision of state and local government.</p>
<p>Capacity is usually measured in requests per second. Could you please clarify whether this means that it shall have the capacity to service 100 <findService> queries and 100 other queries and interface requests per second or that it actually shall serve the requests simultaneously? Serving the requests simultaneously would imply that it needs to be able to serve 100 <findService> queries each 50ms (Availability Page 23) resulting in 2000 <findService> queries per second.</p>	<p>Please interpret this requirement to mean 100 requests per second as the highest possible expected volume of traffic. The forest guide is not intended to be queried as part of the initial call routing process and should only process queries when the local routing function fails to resolve. The scenario requiring the assistance of a forest guide should apply to a small number of 9-1-1 calls. For example, assuming 350 million 9-1-1 calls per year, even if every single call requires the help of a forest guide, on average that is only 11 queries per second with a normal distribution of calls (there are a little over 31 million seconds per year).</p>
<p>If a company does not provide a bid for the Forest Guide, is it still possible to respond to services/components mentioned in the optional requirements (e.g. LoST/FG Test Service)? If yes, what would be the correct way to do so?</p>	<p>Yes, vendors may, if they prefer, respond only to optional requirements. If so, all other provisions of the RFP apply, except in this case the technical and business proposal would not have information related to deploying a forest guide.</p>
<p>Does "CAPEX" mean a one-time charge from the operator to NIOC and does the term "OPEX" mean a recurring charge to NIOC?</p>	<p>Yes. CAPEX means non-recurring costs to NIOC to deploy a forest guide. OPEX means ongoing annual costs to operate the forest guide.</p>
<p>Can NIOC provide the actual pricing and business model in use for the PCA program as an example? After reading the PCA Procurement-report-NIOC-October-2020.pdf on the website, we would appreciate a more specific example. The above-referenced procurement report states "The fee schedule for the production PKI shall</p>	<p>The business model for the PKI is currently in draft. When completed it will be made available to the public.</p>

<p>be available at https://ng911ioc.org/finances.", but at this time it is not.</p>	
<p>Would NENA provide a budgetary cost amount it expects for administering the FG contract annually?</p>	<p>NENA and NIOC do not have a pre-determined operational cost for the forest guide. The net cost to NENA and NIOC should be zero, absent any costs for administration, as NIOC-governed programs must be revenue-neutral. Respondents are encouraged to provide innovative business models. Note that business models that generate a lot of revenue will be more expensive to the public safety community and will be scored negatively.</p>
<p>Since the Forest Guide does not have any mandates for usage nor usage minimums, what would NENA/NIOC do if revenues cannot be received to recover the cost of the investment over 5 years? Would or could NENA/NIOC decommission the service? Is there a risk for the Contractor chosen to lose all or a portion of their investment?</p>	<p>The NENA board of directors has undertaken the financial risk of paying for the deployment of the forest guide. The selected vendor, NIOC and NENA must all work together in good faith to make the program a success. Since international standards require integration with a forest guide, we are confident that the program will be a success, but there is a risk of failure. If the program proves to be financially unsustainable it may be terminated by NIOC or the NENA board.</p>
<p>Regarding the fourth bullet, "...NIOC's "open books" financial policies, meaning total expenses reimbursed to the operator SHALL be public knowledge", is there an expected level of detail that must be met or is it based on what we would invoice NENA/NIOC to cover OPEX or CAPEX reimbursements?</p>	<p>The exact level of detail has not been determined as the business models for the PKI and the forest guide are obviously incomplete. However, NIOC's intent is to provide sufficient detail for the public to identify the exact costs incurred by managing the programs, including what is paid to vendors, NIOC staff costs and any additional administrative overhead, and additionally NIOC's total revenue collected to offset said costs.</p>
<p>What is the term of the FG contract intended to be?</p>	<p>The anticipated contract period is an initial three-year contract with the option to extend indefinitely, in increments to be determined.</p>
<p>Would NIOC/NENA consider giving respondents an opportunity to ask clarifying questions after the round of Q&A is released on 1/29/2021?</p>	<p>Yes. Vendors may ask additional questions prior to February 5 and will receive answers by February 12.</p>
<p>Due to the technical nature of the RFP and the short timeline between the response to questions and the due date, would NIOC/NENA consider an extension to the RFP due date, e.g., 2 weeks or 30 days?</p>	<p>Yes. The proposal window is extended by four weeks and proposals are due March 15.</p>
<p>Question 1. Pg. 1, 2nd bullet – "revenue-neutral funding" Can it be assumed that this project's continuance will be contingent on NENA securing adequate funding via</p>	<p>The NENA board has made a commitment to fund capital costs for establishing a forest guide independent of outside funding, including federal funding. NIOC will reimburse the NENA board its initial investment and then will operate the</p>

<p>the Federal Government in the future? What funding level is expected to be available initially (one year?)?</p>	<p>forest guide according to a business model negotiated with the incumbent with a revenue-neutral mandate.</p>
<p>Question 2. Pg. 1, 1st bullet – “open-source software” Is this request in regard to ‘optional’ parameter that the base software to be used for the entire Forest Guide solution? It would likely be necessary to develop proprietary code in order to meet all needs of this RFP. Would the NIOC object to a proprietary source of code for this reason?</p>	<p>Note that this is an optional requirement. That said, solutions that employ open-source software in whole or in part are desired, as are proposals where any required original source code is open source.</p>
<p>Question 3. Pg. 1, 4th bullet – “EPRC” Will the owner/operator of the EPRC work with the selected vendor to provide integration support so that the selected vendor’s FG solution will be able to interface with the EPRC?</p>	<p>Note that EPRC integration is an optional requirement. That said, NENA has an existing program for third party companies to integrate into the EPRC via its API and will use a similar approach should a vendor propose integration with the EPRC.</p>
<p>Question 4. Pg. 17, 2nd paragraph – FG peering Would the expectation of the vendors US FG solution peering with Canadian and other US external FGs be contingent on additional funding to expand the program in the future or would this ability be required at the time of the initial startup?</p>	<p>Forest guide peering is required eventually and should be included in the cost proposal. However, it should be listed as a separate and discrete line item.</p>
<p>Question 5. Pg. 18, 3rd paragraph – FG peering Would the expectation of the vendor’s US FG solution peering with Canadian and other US-external FGs be contingent on those entities providing ‘coverage’ data directly to the US FG vendor solution, or via the NENA/NIOC? Would this exchange of data need to be established from the beginning of the US FG implementation?</p>	<p>Peering with other forest guides is subject to governance and approval by NIOC. However, any technical implementation will be handled by the selected vendor.</p>
<p>Question 6. Pg. 20, last paragraph – EPRC Integration Will the EPRC vendor provide a copy of the existing PSAP boundary data for initial use in the FG implementation? Would this data come from NENA/NIOC or the vendor directly?</p>	<p>NENA will make EPRC boundaries available to the selected vendor if the vendor demonstrates a justifiable use case (e.g., such as to provision initial boundaries for routing purposes). However, it is noted that ultimately forest guide boundaries SHALL be maintained via LoST-sync with participating LoST tree roots and peering forest guides.</p>

<p>Question 7. Pg. 22, 1st bullet – “supporting geographies that are not NG9-1-1 ready” What does this mean for the selected vendor that the FG needs to support any data during transition? Can more specifics be provided for this requirement?</p>	<p>The intended requirements are:</p> <p>Where the query is for a location that falls outside of any provisioned boundaries, forest guide queries SHALL return a result indicating that the location falls outside of provisioned boundaries.</p> <p>When the forest guide is provisioned with data, it shall report gaps as called for in the RFP.</p> <p>The forest guide shall support service boundaries that return non-SIP URIs where it is known that only legacy 9-1-1 service is available; for example, an ESInet intended to serve 80 counties, but where only 60 counties have NG9-1-1 service right now. These service boundaries should have a service URN of “urn:service:sos” and a “tel” URI. Contents of the tel URI to be determined.</p>
<p>This section states: “The RESPONDENT must provide references as outlined earlier in this RFP.” We were unable to find any details for providing references except in this section. Is there a form that NIOC could provide for the references to fill out? If not, could the number of references, format for the references, information to be provided as part of the references, etc., be provided?</p>	<p>The RFP will be amended to read:</p> <p>“The RESPONDENT must provide references in writing describing a previous engagement with the proposed program team principals and/or the company itself. References may come via the RESPONDENT or may come from the party providing the reference. References must be received on before the deadline for delivering proposals.”</p> <p>There are no additional specifications for formatting of references.</p>
<p>In the section Technical Proposal, it states, “The RESPONDENT shall include a proposed business model...” and in section Price/Fee Proposal it states: “In the Price/Fee portion of their bid, RESPONDENTS are asked to propose a business model...” Does NIOC want the proposed business model to appear in both sections of the response or just one?</p>	<p>The technical proposal shall describe technical and operational aspects of the proposed business model, and the price/fee proposal shall include financial aspects of the proposed business model. Pricing information shall NOT be included in the technical proposal, including any pricing, revenues and expenses associated with the proposed business model.</p>
<p>Is there a document specifying the Certifications and Assurances to be signed NIOC can provide? If not, could NIOC explain what the respondent is being asked to certify and assure?</p>	<p>The Certification and Assurance is intended to be a cover letter or equivalent demonstrating proof that the proposal is approved by someone with authority to act on behalf of the company to enter into business and that the respondent will honor the terms of the RFP, subject to the terms of a contract to be negotiated with the awardee. For example, a cover letter signed and dated by the company president or an account executive stating the above.</p>

	There are no additional specifications for formatting of the letter of submittal.
Because of the short timeline for the response and the very technical nature of the RFP, would NIOC consider allowing one or two additional attendees from each respondent at the mandatory Pre-Bid Conference?	The RFP states that each company may send a maximum of three (3) delegates to the pre-bid conference. In response to this request, NIOC removes the cap on the maximum number of individuals allowed to attend. All individuals must register their contact info with NIOC prior to the pre-bid conference as outlined in the RFP. NIOC reserves the right to deny attendance to any individuals beyond the three delegates provided for in the RFP at its discretion; for example, if NIOC determines a company has requested an excessive number of delegates.
Does the proposing company have to be in the United states? If not, are there certain requirements for foreign companies?	At this time it is not anticipated that there will be any restrictions on where a vendor must be headquartered or domiciled, however there may be technical requirements such as that facilities are US and/or Canada-based when the proposed solution is implemented. NIOC will clarify technical restrictions, if any, at its January meeting.