June 27, 2018

**ADDENDUM #1** to the University of Florida Invitation to Negotiate ITN 19RL-101 External Wide Area Network, Support and related Services solicitation scheduled to open on July 12th, 2018, 3:00 PM ET at the University of Florida, Elmore Hall Conference Room, Radio Road, Gainesville, Florida.

This addendum consists of:

- Responses to written questions submitted by the “Schedule of Events” deadline of June 20th, 2018 by 5:00 PM

This addendum shall be considered part of the Contract Documents for the above mentioned ITN 19RL-101 as though it had been issued at the same time and incorporated integrally therewith. Where provisions of the following supplementary data differ from those of the original document, this addendum shall govern and take precedence. All other terms, conditions, and regulations will apply.

Sincerely,

Rob Luetjen
Procurement Agent III

Please acknowledge receipt of Addendum #1 by signing below, and returning this addendum with your proposal. Failure to include addendum with your proposal may result in rejection.

______________________________  ______________________________
Signature      Company Name

______________________________  ______________________________
Company Address     City/State/Zip

*The Foundation for The Gator Nation*
An Equal Opportunity Institution
1) **Question:** Is it acceptable to submit 2 or more separate products/solutions from the same vendor that meet/exceed the requirements?
**Answer:** Yes

2) **Question:** For Section 1.2.1, in “Highly desired” features, is it acceptable to submit additional features that would be desirable and apply to Next Generation Border Routers?
**Answer:** Please include any features that could be desirable or a possible future trend in relation to border routers.

3) **Question:** In Section 1.2.1, are the performance evaluation criteria (marked with a “[3]”) to be submitted in the initial written response? Or will these be measured only during the tests with the full feature test environment? If the criteria are expected to be submitted with the initial written response, what environmental factors (# of routes, # of ACLs, etc.) should be used to quantify the performance?
**Answer:** All specifications marked with a [3] will be tested utilizing Spirent TestCenter. UF would like to understand the scalability capabilities of the product/solution in relation to specifications marked with a [3].

4) **Question:** In Section 1.2.1, can you provide more details around the “Virtual Router capability” in “Highly desired” features?
**Answer:** This is the ability to virtualize the router functionality on the platform and run multiple instances that are separate and distinct from each other. Each virtual router instance would have its own control plane, data plane, and have the ability to fully utilize the software and hardware capabilities of the platform. Please include any virtualization capabilities currently available or planned for the platform.

5) **Question:** In Section 1.2.1, can you provide more details around the “Support for disabling any vendor locking of optics”?
**Answer:** UF desires the flexibility to use non-vendor (i.e. third party) supplied optics.

6) **Question:** In Section 1.2.1, can you provide more details around the “Container/VM/Plug in module support”?
**Answer:** This is the ability of the platform to host other applications or services within a separate Container, VM, or Plug in module that is external to the primary functionality of the platform. An example would be a monitoring or analytics application, such as perfSONAR.

7) **Question:** In Section 2.2, please clarify what would qualify as a most responsive vendor?
**Answer:** A company who is quick to react to, responsive and who is open to suggestions, and provides the best solution according to the evaluation criteria (section 2.1).

8) **Question:** In referencing Exhibit 1, IPOP Topology Diagram, is it required to support existing interfaces as captured in the topology on the new routers???
Answer: The topology diagram (Exhibit 1) depicts UF’s current border router implementation and does not necessarily express the future design. It is included as a reference point of current infrastructure and services. The submitted platform should support a variety of optical interfaces as specified in section 1.2.1 Technical Specifications.

9) **Question:** Please advise what parameters will suffix the answer for following; like Gigabit/s or something else.
   - Fast RIB to FIB/TCAM programming [3]
   - Hitless ACL TCAM programming [3]
   - Port mirroring without performance impact to traffic [3]

   **Answer:** All specifications marked with a [3] will be tested utilizing Spirent TestCenter. Using a suite of test within the Spirent TestCenter, UF will be able to evaluate such items as the time it takes to program the FIB, program acls, and the effect, if any, there is on production traffic. UF would like to understand the scalability capabilities of the product/solution in relation to specifications marked with a [3].

10) **Question:** Is UF requiring the vendor to include all migration services based on the solution approach the vendor defines in the ITN response?

   **Answer:** UF is requesting an optional quote on Attachment A for a turnkey implementation. Please include a SoW for the optional professional services within Tab 4 of your response.

11) **Question:** Please elaborate more on the evaluation process and timelines after proposal submittal?

   **Answer:** Following submittal, proposals will be evaluated according to the evaluation criteria shown in the document (section 2.1). Following the initial evaluation, the timeline will be based on mutual agreement between UF and the vendors chosen to move forward to the negotiation/testing phase.

12) **Question:** What is the anticipated award date of this project and the time line for testing and deployment?

   **Answer:** The award date is dependent on the number of proposals received and the contractors chosen to participate follow up discussions along with UF’s full feature testing environment will dictate when a possible award will be made. A tentative time line for testing would include fall 2018.

13) **Question:** Is use of QSFP28-DD and QSFP+ in addition to QSFP28 acceptable?

   **Answer:** Yes, UF is interested in QSFP28-DD; specifically, its capabilities as one of the options to move beyond 100G. QSFP+ is of less importance in UF’s border router since UF’s bandwidth demands have out-paced QSFP+ capabilities.

14) **Question:** Please clarify/elaborate on highly desirable requirement? Container/VM/Plug in module support [1]

   **Answer:** This is the ability of the platform to run other applications or services within a separate Container, VM, or Plug in module that is external to the primary functionality of the platform. An example would be a monitoring or analytics application, such as perfSONAR.
15) **Question:** Please clarify, In the ITN UF refers to “XML is an API” on page # 6 & 12 in the short list. Please confirm XML as an API, Our system supports NetConf and gRPC as API’s. It is our understanding that XML is not an API rather an encoding format. Please confirm if this is UF understanding as well.

**Answer:** XML can indeed be used as the foundation for an API. “XML APIs” tend to be simple XML encoded schemas which are transmitted to the device using either “raw” methods (opening a socket) or via SSH. We are currently using such an API in production. An XML API is only one of many possible API solutions which also include NETCONF, RESTCONF and gRPC.