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December 7, 2017

ADDENDUM #3 to the University of Florida Invitation to Negotiate ITN 18RL-111 Stadium Wireless Network Wi-Fi System solicitation scheduled to open on January 10th, 2018 3:00 PMET 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 November 30th, 2017 by 5:00 PM

This addendum shall be considered part of the Contract Documents for the above mentioned ITN 18RL-111 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

Rob Luetjen
Procurement Agent III

Please acknowledge receipt of Addendum #3 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

Stadium Wireless Network Wi-Fi System

ITN 18RL-111 Vendor Questions

1) Question: In Section 6 of "Mandatory Requirements". Will the University consider exceptions specifically to those "Mandatory" items, provided bidders give them specific alternative language in our proposal submission?
Answer: Provide itemized list of concerns with UF terms and conditions within your proposal under Tab 9

2) Question: Will the Wi-Fi system be used for more than the 8 home games a year? If yes, what are the other events?
Answer: The venue is and may be used for other functions throughout the year. Past events include: Spring Orange & Blue Game, Commencement and several meetings in the Touchdown Terrace / North End Zone and Skybox areas of the Stadium.

3) Question: Is there any integration with the download of the UF Mobile app and the Wi-Fi, 33 system?
Answer: Any mobile app should be made accessible by the proposed system. UF Mobile Apps should be accessible via the proposed system as well as any future UF mobile app that is made available that utilizes special add-ons such as replay, marketing offers, etc. [such an app does not currently exist]. Connection to use wireless should be independent of any specific app.

4) Question: What is Florida University's data privacy policy? Can share aggregated data be shared?
Answer: UAA / UFIT Security Response? UFIT policies regarding data privacy are listed here: https://it.ufl.edu/policies/information-security/ . The data collected by the installed Stadium WIFI system shall be sole property of the University Athletic Association and the University of Florida. The UAA Athletic Director and the UFIT CIO shall approve any use or sharing of this data.

5) Question: Under Phase 3 there is a reference to Section 4.5.4 Optimization and Tuning which does not exist in the main body of the ITN. Section 4 ends at 4.2.18. Should section 1.2.4 be referenced instead???
Answer: PHASE THREE: Wireless Start-Up, Testing and Optimization revise specification reference from Section 4.5.4 Optimization and Tuning to TAB 5: Section 5.1.4 Optimization and Tuning.

6) Question: Phase 4 has a reference to Section 4.6 Advanced WIRELESS Services which also does not exist in the main body of the ITN. Do we need to add any specifications regarding Advanced WIRELESS Services???
Answer: PHASE FOUR: Advanced Wireless Services revise specification reference from Section 4.6 Advanced Wireless Services to TAB 6: Advanced Wireless Services.

7) Question: For pricing purposes on doing a heat map and design: do you have CAD files?
Answer: Extensive CAD files will be made available to the successful system

provider in order to perform a detailed wireless survey. A small sample of available ACAD files are posted on the UF Dropbox site for the vendor to demonstrate design philosophy and strategy as part of the ITN response.

8) Question: Is it important to have APs that support 5GHz on all radios?
Answer: Yes.

9) Question: Is it important to have APs that have software switchable capabilities to allow going from 5GHz to 2.4GHz by a click of a button?
Answer: No.

10) Question: Do you plan on supporting 2.4GHz in the bowl area?
Answer: No [Design should be for 5GHz].

11) Question: Is it important for the APs to have the ability to support up to 8 internal radios for more density capabilities?
Answer: The design and solution provided should address the density needs. It is anticipated that various areas throughout the stadium will have various antenna and radio solutions.

12) Question: Should the AP be able to process all filters, application traffic and firewall rules at the edge of the network? So traffic doesn't get sent to the core areas for processing.
Answer: No.

13) Question: Is the U of F considering a solution that is distributed in nature, so as to not have a single point of failure if a centralized controller goes offline?
Answer: Yes.

14) Question: Are internal directional antennas important to provide more distance with coverage?
Answer: The design will dictate the use and specification of the appropriate wireless antenna.

15) Question: Is the U of F looking for an on premise or cloud management solution?
Answer: Either solution is acceptable as long as the capacity, coverage and advanced wireless services specified are met.

16) Question: Is mounting the APs under the seats in the bowl an option?
Answer: Yes.

17) Question: Are there any mounting restrictions?
Answer: The proposed solution will need to meet code and be reviewed and approved by the UAA / UF Project Managers. No installations that interfere with site lines shall be approved. Note the reference in the specification to using concealing techniques where needed to provide an aesthetically pleasing solution. All proposed installations will need to be reviewed and drawings approved by the UAA / UF Project Managers. Refer to UF Design Standards listed here: http://www.facilities.ufl.edu/forms.html . In addition, UF committee reviews and approvals may be required (see: http://www.facilities.ufl.edu/committees.html) and will be coordinated by the Project Manager.

18) Question: Has a penetration test been performed/will be performed to show the dBm loss from under the concrete to above in the bowl area?
Answer: Any RF testing shall be performed by the successful design team if needed.

19) Question: What is the required RSSI level for each area?
Answer: The design team should address this dependent on use, coverage and density needed. [min. -68dBm].

20) Question: How many concurrent devices are expected to be on the network during games or events?
Answer: Reference Addendum 2 which projects a 60% concurrent usage rate.

21) Question: How many SSIDs will be used?
Answer: It is anticipated that multiple SSIDs will be in use Day One (up to 8).

22) Question: Can you provide existing MDF, IDF, remote network cabinet locations?
     a.   How many IDFs and distances back to MDF/etc.
Answer: A list of the current telecom rooms and entrance facilities are shown on drawings posted on the UF Dropbox site (under ITN Addendum Info folder). It is anticipated that new IDFs, outdoor enclosures, and other mounting options will be needed to fulfill the design requirements for this project. The final proposed design should address the network layout and infrastructure.

23) Question: Using any existing network infrastructure equipment or all net new?
     a.   If yes, what, how many, versions, modules installed, power
Answer: Due to the anticipated volume of network services needed for this service, new electronics should be estimated.

24) Question: Using existing cabling or all net new?
Answer: No existing cabling is available for this new service, estimate new cabling to meet the project requirements. Existing pathways and cable trays may be used.

25) Question: Will all IDF's home run back to the MDF or will there be intermediate connections back to MDF?
Answer: This will be dependent on the solution providers design.

26) Question: What's the connectivity from the stadium to the rest of UF?
Answer: UFIT Network diagrams for the Stadium are shared for reference only. Dual core connections located in the South End Zone mezzanine Telecom Room S110 (TR01A).

27) Question: Internet connectivity existing or new, where is the DMARC?
Answer: As part of a turnkey solution, consider internet connectivity as new. An option may be presented as well if able to leverage any existing UFIT network connectivity. The main demarc for the Stadium for UFIT network is located in South End Zone Mezz Telecom Room (TR01A / Room S110 / Building 0155). Several existing service providers provide various connections in the Stadium including AT&T, Cox Cable, FLR, GRUCom and Verizon. Directly contact the service provider of your choice to coordinate network connectivity.

28) Question: What is/will be the internet speed(s) and physical connections?
Answer: As part of the wireless design the proposed solution should describe the connection and broadband speed needed to successfully deliver the services listed in the specification.

29) Question: Redundant internet? Multiple ISPs?
Answer: As a turnkey solution provide ISP connection and then consider UFIT network connectivity as the redundant provider.

30) Question: Security requirements - Firewalls, encryption, PKI, IPS/IDS, MFA, RADIUS, DOT1x?
Answer: Yes.

31) Question: Will there be any other networks running at stadium in parallel?
Answer: Yes the University Athletic Association and the University of Florida both have networks installed throughout the facility that serve administration areas as described in the specification.

32) Question: Sharing services with other networks? I.e. - internet, internal services (DNS, AD,DHCP,PKI,etc)|
Answer: Dependent on final solution. The Stadium Wi-Fi solution should be designed to handle anything needed for game day needs (fans, press) and future options of concessions, sport shop, etc.

33) Question: How much of the existing physical infrastructure is available or allowed to utilize?
Answer: The current network infrastructure serves primarily administration areas and does not cover the Stadium spaces in the density described in the specification. It is anticipated that all network infrastructure will be new.

34) Question: Space in existing TR closets?
Answer: If available – see Telecom Room notes floor plan PDFs. Provide new enclosure / locations to house wireless services electronics as needed.

35) Question: Existing pathway-tray / conduits?
Answer: Cable tray and existing pathways may be used. Use will require UAA / UFIT project manager approval prior to use.

36) Question: Existing fiber, existing network cables?
Answer: Yes as described above the existing network serves administrative use throughout the facility.

37) Question: Wireless design requirements?
  a. Take rate : **Answer: 60%**
  b. Client signal level: **Answer: minimum of -68 dBm**
  c. Client throughput: **Answer: 3 MB**
  d. Application
      i. Bandwidth, SNR requirements : **Answer: 10MB ; SNR Target 25 dBm**

38) Question: Please list all excluded areas per section
Answer: Building 0157: Exclude UAA and UF Office Areas on Ground Floor through 4th Floor. Administrative areas are out of scope.

Building 0155: Ground Floor and First Floor office areas are out of scope. Gator Room is in scope per specification and floor plans provided.
Building 0158: Ground Floor through Fourth Floor office areas (generally these are rooms located on the East side area of the building).
Building 0160: 2nd floor staff offices are out of scope.
Refer to marked-up TR floor plans, which designates areas where UAA / UFIT currently provide wireless services.

39) Question: Is upgrading existing office Wi-Fi part of this scope?
   Answer: No.

40) Question: Is all floor at Heritage hall included in this scope?
   Answer: No. 2nd Floor is out of scope (UAA staff office area).

41) Question: What is the existing POS system?
   Answer: The sport shops are run by Follet and on their network. They use WinDss. Centerplate is the vendor for the concessions. They currently do not have a POS in the football stadium but utilize Appetize App at other venues.

42) Question: What is the Existing ticketing system?
   Answer: Ticketmaster (Archtics).

43) Question: For hardware, are you just looking for description at this time or are you also looking for estimated quantities?
   Answer: In order to prepare the turnkey costs the estimated equipment quantities will be required.

44) Question: Can you explain section 6.1.7 - what is UF looking for, does UF have rights to rebroadcast the video?
   Answer: Answer: The consideration is that this app will potentially utilize video available in replays or other pushed content in the stadium venue only. Please Describe and provide application functionality for advanced wireless services in the TAB 6 response section. This section should reference the capability of the respondent and show previous venue applications deployed.

45) Question: What is to total expected guest capacity per area?
   Answer: See Addendum #2 for seat count by section.

46) Question: Are Restroom, stairwells, elevators and mechanical room's part of the coverage area?
   Answer: Yes for restroom, stairwells and elevators.

47) Question: What method is being used to authenticate clients to the wireless network (non-visitor SSID)?
   Answer: The proposal should include various options recommended for providing connectivity. Currently, UFIT network uses Radius 802.1x PEAP

48) Question: Do you want each access point to be connected via Ethernet port and console port?
   Answer: No.

49) Question: Can you provide a schematic of the box/housing that the DAS antennas are currently installed in?
Answer: This is proprietary to the DAS service provider.

50) Question: Is there one MDF or multiple?
Answer: There are two main entrance areas to the Stadium – one is located near Gate 4, Room 147 (TR01C) and SEZ MEZ Telecom Room (South End Zone Mezzanine TR Room S110 (TR01A)).

51) Question: Redundant internet connections? Multiple ISPs involved or one ISP
Answer: As part of the turnkey solution provide an ISP solution and then consider UFIT network connectivity as the redundant provider.

52) Question: What is the Public IP Scheme and is it assigned an AS or will BGP be required?
Answer: If internet connectivity provided as part of the solution provide AS. If UF provides as an option, transport will be provided by UF.

53) Question: Is there a specific LAN IP scheme that is needed and or allocated for this project?
Answer: IP scheme should be determined through the vendor as part of their design solution.

54) Question: Any routing protocols in use today that we have to integrate with, Internal as well as external (BGP/OSPF/etc)?
Answer: Proposed turnkey solution design should stand on its own. If network provided by UFIT then OSPF.

55) Question: Besides the wireless infrastructure components, will there be any IOT or other devices utilizing this network?
Answer: Yes, the assumption is that wireless services will become more pervasive and additional technologies will use this infrastructure (RFIDs, beacons, cameras, etc.).

56) Question: Concrete Core – In order to place AP's in the stadium seating area, cores through the concrete and conduit will be required. Does the concrete have high tensile cables in the structure and will concrete need to be x-rayed before coring?
Answer: Yes. All concrete boring will be approved by UAA Project Manager. No core boring is available at lower levels (ground). These structures have been constructed at different times and will have different rebar/cable patterns to contend with; x-rays will be required before coring and possibly review and approval by a structural engineer to provide guidance on some core locations.

57) Question: Is there a SM fiber backbone within the stadium MTR/TR infrastructure (Existing fiber, existing network cables)? If so, please provide a vacant SM/MM fiber count.

Answer: There is fiber installed for networking use to serve the administrative areas (not in scope). Due to the significant network build out required to provide this service, the fiber will most likely need to be new. Existing pathways and cable trays may be used for installation.

58) Question: Is there space in existing MTR/TR closets?
Answer: A few existing locations may accommodate some equipment.

59) Question: Is there existing pathway-tray/conduits?
Answer: Yes.

60) Question: Is it the responder's responsibility to create new communications rooms if needed?
Answer: Yes.

61) Question: For management and other backend platforms that are specific to the stadium deployment, where will those systems be placed? In an existing UF Data Center? Or connected to the Stadium network?
Answer: Dependent on final design. Either space will be available for consideration.

62) Question: Are there any UPS sizing requirements, or is that left to the responder to determine?
Answer: The sizing standard is 30 minutes.

63) Question: Are there any requirements for acceptable switching oversubscription ratios? Or is that something that needs to be recommended?
Answer: Design dependent; make recommendations.

64) Question: If possible, are you planning to use any existing UF management platforms for the stadium network?
Answer: Should be provided as part of turnkey solution.

65) Question: Drawings/Floorplans provided outline many areas like offices, study rooms, elevators, Facilities areas, storage areas etc. for example "heritage Hall" floorplans show office areas, study room, storage areas, elevators etc. whereas Slide 10 "Overview of Project" states UAA and UF administrative and office areas are not required for the coverage. Can drawings/floor plans be provided with Markings for Areas for definite coverage, bleed over and exclusions?
Answer: See mark-ups of building floor plans designating Telecom Room spaces [in UF Dropbox info folder].

66) Question: Are there any spare fiber strands that will be available in the IDFs? If so how many?
Answer: No.

67) Question: Which kind of Fiber is there SM or MM? All strands are Spliced and terminated on a Patch Panel and are all tagged and labelled?
Answer: See UFIT network diagram for reference. New fiber should be considered since additional Telecom Rooms / locations / enclosures are anticipated to be needed to deliver this service.

68) Question: Is any conduit is required as part of the solution for the Ethernet runs from the IDFs to the APs (Access Points)? Or is Plenum adequate?
Answer: Plenum is acceptable for cable trays and above ceiling locations. Conduit must be run when exposed.

69) Question: Is Union Labor required?
Answer: No.

70) Question: Are any wired ports required? If yes, how many?
Answer: Allow 10% per switch for future use.

71) Question: Will the channel plan (frequencies, etc.) be provided before final submittal to avoid interference between existing UF & UAA Wi-Fi systems?
Answer: Yes – it should be part of the Test and Acceptance plan.

72) Question: Are there are requirements to use specific contractor labor? Small or Disadvantaged Business, etc?
Answer: No

73) Question: Are sub-contractors required to have a Florida Contractor's License?
Answer: Where license worked is required must have a valid license to do work in the State of Florida.

74) Question: Will an additional site visit be available?
Answer: Yes – See Addendum #2.

75) Question: How can a contractor guarantee design against "future" FCC mandates if they are unknown at time of implementation? Please clarify the term "guarantee".
Answer: Guarantee system installed is FCC compliant and state mitigation plan if interference issues.

76) Question: "At a minimum, for 802.11ac wireless, the proposed system must deliver a data rate of .5 to 1mb to each person at the stadium's full capacity (88,548 people)." Please clarify if you mean a rate of 0.5 to 1 MB per second for each person.
Answer: See Addendum #2.

77) Question: Most School Districts participate in the FCC e-rate program and have specific requirements for competitive bid services from eligible e-rate service providers. Is e-rate service provider eligibility a requirement of this ITN?
Answer: No

78) 'Question: The University may presume that any proposal is a best and final offer.' Without a physical site survey does the University expect the best and final offer from a 'preliminary' predictive survey?

Answer: Vendors selection is based on criteria listed in ITN. Our understanding is that the purpose of this solicitation is to down select vendors for the next round. Can you please confirm? Answer: Vendor selection is based on criteria listed in ITN, a short list will then be created.

79) Question: Exhibit B and 2.6 appear to conflict. Is this an all or nothing award or a potential multi-vendor award?
Answer: One vendor responsible to coordinate and deliver the solution and services listed.

80) Question: EEO/AA. Can UF accept a vendor's existing standard EEO/AA policies, provided those policies do not conflict with the Agreement's Terms and Conditions.
Answer: They can be accepted provided they meet UF's minimum requirements.

81) Question: Insurance Requirements. Can UF accept different insurance coverage if the vendor's standard insurance policy exceed the Agreement's coverage requirements?
Answer: Yes

82) Question: In Appendix #6 of the UF Telecommunications Standards, paragraph A.2 Horizontal Cabling states "Only use approved low-voltage cabling contractors listed here: http://net-services.ufl.edu/infrastructure/. Will the selected integrator be required to use one of the four listed cabling vendors for this project?
Answer: Yes – the Low Voltage Contractor must be preapproved by UF / UAA.

83) Question: Section Brand Name or Acceptable Alternates, it states that alternate products can be used. We could not locate a designated manufacturer in the documentation provided. Is there a preferred manufacturer for equipment or structured cabling products?
Answer: Commscope is basis of design for most recent UF and UAA projects.

84) Question: The drawing package did not include a set of elevations. Can elevation drawings be provided?
Answer: Elevations and much more detailed drawings will be made available upon vendor selection.

85) Question: Are there any upload data rates that bidders should use in their calculations?
Answer: See Addendum #2.

86) Question: Does UF have any information on student attendance rates and if they are concentrated in a specific student section?
Answer: Student seating section is typically concentrated in Sections 27/28 through 43/44 located on the East side of the Stadium.

87) Question: Is UAA interested in a having this network managed by a vendor? If so, what level of outsourced management?

Answer: Per 1.2 Scope of Work, Paragraph 1: "Provide all viable solution offerings for the University's consideration." A managed network option is a viable option if it meets the specifications and guidelines stated.

88) Question: Is public internet access required or will UAA provide? If required, bandwidth requirements?
Answer: Yes, provide as part of turnkey solution. Bandwidth will be determined by final design and recommendations.

89) Question: Is the vendor only responsible to provide the power requirements and UAA will provide appropriate power, receptacles, etc. as required?
Answer: Vendor will be required to install and extend any power needs and usage.

90) Question: Does UAA have a requirement for spare components? If so, what are quantity or percentage of spares by component?
Answer: Warranty and maintenance will be covered with parts warranty and replacement for the first 12 months after acceptance.

91) Question: Is there a seating chart available that lists capacities by section (e.g. section 1 35 seats wide 45 rows)?
Answer: See Addendum #2.

92) Question: Will the University be providing firewall services?
Answer: This is dependent on final design. Provide as part of the turnkey solution.

93) Question: How many ticket offices are there?
Answer: Ticket offices are located at Gates 1, 13 with will call service on West side.

94) Question: How many public entrance gates are there?
Answer: Refer to plans. 18 gates of entry.

95) Question: Due to the holiday season, can the due date for proposals be extended by fourteen (14) days?
Answer: No, not at this time

96) Question: SECTION 6.1.7 - Solution Expectations Per our review of the ITN, this request could be interpreted two ways:

- To provide a wireless solution that is capable of supporting these needs (which is what we believe you are asking for) or
- To not only provide the wireless solution, but a mobile app capable of creating an incredible and unique fan experience, which could not only address game day, but before the game, during the game and after the games

Which of the above is correct?

Answer: It is to do both and clearly states that as per Exhibit B as well. Provide base costs and estimate costs for each add-on feature for a total project cost.

97) Question: If it is the latter, then would you like us to provide you an overview of the mobile fan engagement solution and back end marketing analytics that IBM offers as a solution but only provide pricing for the wireless components. Mobile Device Integration: Propose a complete solution as described in the ITN that includes the necessary backend system capable of delivering streaming video/data to mobile devices (smartphones/tablets). This shall include a mobile app or a set of programming tools to create a unique game-day fan experience. The solution should address:

- Live video
- Replays
- Statistics
- Scores
- Weather
- Way finding
- Ad revenue streams
- Surveys / Feedback
- Concessions
- Social Media Experiences

Answer: Yes – this response should be addressed in TAB 6.

98) Question: Will the buried/aerial/suspended conduit infrastructure within the stadium be available to bidders to use as part of the new Wi-Fi infrastructure coverage architecture?
Answer: Existing pathways and cable trays may be used if space allows.

99) Question: Will there be a charge for any of use of those conduits and pathways leveraged?
Answer: No.

100) Question: Will UF expect a fully Managed Services platform for winning bidder to operate? Will UF personnel have Service Management responsibilities for of any aspect of the services platform once deployed?
Answer: Bring forward the best option of what it would look like to have vendor manage or if handing off management.

101) Question: Will UF support and control all aspects of the permitting process for any work performed in the stadium, or adjacent grounds for conduits, for the related infrastructure?
Answer: Yes – all permitting will follow UF processes.

102) Question: Will there be a requirement to small MBE/WBE sub contractors for a required percentage of work share for the new Stadium services infrastructure?
Answer: No

103) Question: Will UF require on site personnel from the proposed Program Teams supporting the infrastructure deployment?
Answer: State in Tab 2 how you plan to support this project.

104) Question: Will UF allow for Prime bidders to leverage partners for sub-contractor delivered components of the overall solution infrastructure?
Answer: Yes

105) Question: Does UF require certain work share percentages for a prime if they leverage a sub-contractor model to performing service for the infrastructure build?
Answer: No, not for this project.

106) Question: Does UF require local business participation for prime bidder solution submitted? If so, what percentage of work share of the overall project work load - would be required?
Answer: No, not for this project.

107) Question: Is it the responder's responsibility to create new communications rooms if needed?
Answer: Yes.

108) Question: Is the University planning to use any existing UF management platforms for the stadium network?
Answer: Dependent on proposed solution. As turnkey, provide as part of solution. As part of an integration to UF network, UFIT will integrate to management.

109) Question: What is the minimum level / desired level of security to protect the stadium network from the outside?
Answer: As part of a turnkey offering, provide and specify recommended security solution. Describe security solutions provided another venues.

110) Question: What are wireless coverage capacity requirements on the actual Steve Spurrier-Florida Field itself (not counting the stadium seating areas), such as user counts and bandwidth per user?
Answer: No wireless coverage anticipated for the field area itself.

111) Question: What frequencies are used for the coach communication systems on the field?
Answer: There is a range that differs from game to game.

112) Question: Please confirm the term (in months) of the management and maintenance portion of the agreement after install is completed and accepted?
Answer: 12 months of support and maintenance.

113) Question: How should taxes be quoted in our proposal?
Answer: UF is tax exempt, certificate will be available upon request

114) Question: Are labor rates required to be fully burdened?
Answer: Yes…the labor rate that should be quoted is the rate that UF will receive an invoice for

115) Question: During maintenance period, does vendor need to provide on-site break-fix resources during repairs, or will UF provide on-site resources which are guided by vendor?
Answer: Vendor is required to maintain and repair equipment on-site during the first 12 months after acceptance.

116) Question: Is the form UF contract negotiable for minor changes?
Answer: Provide itemized list of concerns with UF terms and conditions within your proposal under Tab 9