



(November 9<sup>th</sup> 2017)

Re: RFP MNS HEAD 83-34

The following addendum supersedes information contained in the Instructions to Bidders issued for the RFP to the extent referenced. This Addendum forms part of the RFP documents and will be subject to all of the conditions set out in the contract conditions.

This Addendum # 3 contains 18 pages.

**A. Bidder's Questions (#) and Government's Responses (Bold).**

1. Please provide a complete list of tower sites that are available for use to install the radio base-station equipment and antennas? As additional sites will be required to meet the specifications of the RFP, are there supplementary locations that the MoNS can provide to the *Proponents* to construct the related infrastructure to support the radio network?

**There is no comprehensive listing of sites. During the site visits data on existing sites will be provided. As stated in the RFP, the selected vendor will have to determine where additional sites may be required in order to assure adequate radio coverage.**

2. The RFP mentions three types of sites, current government sites, rental sites and new construction. The RFP has an impressive set of standards specified for the physical infrastructure at these sites. Would you please confirm that the "rented sites" will be required to be upgraded to the current new standard?

**Rented sites will not have to be upgraded provided they are built to recent standards. Prior to renting sites the government will inspect them for adequacy**

3. Under section 6.1.2.6 *700MHz User Equipment Compatibility*, it states "*this band must be considered as a primary communication band for the proposed radio system*". Please verify the exact frequencies the MoNS has been authorised to use in the 700MHz spectrum?

**The RA has stated that 700 MHz is available for this project but exact frequencies have not yet been selected.**

4. Under section 6.1.4.3 *Portable Radio Equipment*, it states "*Output power shall be sufficient to achieve required coverage defined in Section 6.1.6, not be less than 4 watts*". The statement clearly defines the output power must not be less than 4 watts; however, the MoNS has also determined that a TETRA technology shall be provided by the successful proposer (*Section 6.1.5.1 General*). TETRA portable subscribers do not support high output power as required by the RFP, most TETRA subscriber have an output of 1W to 1.8Watts. Furthermore, in the non-TETRA 800 MHz band, the output power for portables is 3W maximum. Is 4 Watts of



**Addendum # 3**

(November 9<sup>th</sup> 2017)

subscriber output power the requirement?

- a. Is there an option to propose an alternative technology?
- b. Would the MoNS change the requirement for the output power to be 3 Watts?

**The listed power was stated for P25 which is an alternate technology. It is understood that the power levels of TETRA are lower and will be acceptable. Proponents may offer alternate technologies.**

5. Like Question 4 - Under section 6.1.4.4 Fixed Site Equipment Radio, it states "*Output power shall be sufficient to achieve required coverage defined in Section 6.1.6, and not to be less than 100 watts*". The MoNS has also determined that a TETRA technology shall be provided (*Section 6.1.5.1 General*). TETRA base stations do not operate with 100 Watts of output power.
  - a. Please confirm whether TETRA is a requirement, or 100 Watts of output power is a requirement?
  - b. Is there an option to propose an alternate technology that can provide higher output as defined?

**Regarding TETRA, see the answer to Question 4. Proponents may offer any alternative technology that can be evaluated by the Government. The key factor in this section is the ability of the radio sites to provide the required level of coverage.**

6. Under section 6.1.4.5 *Site to Site Connectivity*, proposers must provide solutions and costs for two options; using existing networking connectivity and implementation of a new microwave system.
  - a. Please list the microwave backhaul frequencies that they have been authorised to use by the Regulator Authority?
  - b. The Microwave links are stated to be 99.999% one way, and this will at least double the cost. Is this required if it is already in a ring protected?

**Microwave frequencies have not been determined. They will be based upon the selected vendor's designs and equipment. The reliability factor is an industry standard for public safety. With ring protection this level is available depending upon the type of connectivity. The proposed network design will be evaluated during the proposal reviews.**

7. Under section 6.1.9.2.1 *Requirements (Towers)*, please provide current structural engineering reports for the existing tower structures that are permissible to use at the established sites.

**The site visits will be conducted at sites that are known to be available. Structural reports may not be currently available for all of them.**

8. Under section 6.4.5 *Subscriber Equipment Pricing: High-Tier Portables*, the second



(November 9<sup>th</sup> 2017)

specification states *"700/800MH operation (if 800 MHz is proposed)"*.

- a. Please confirm, is it a requirement for the system (and/or subscribers) to operate in both 700MHz and 800MHz?
- b. Does an 800MHz only system (and/or subscriber) meet the specification of the RFP?

**Depending upon proposed technology and frequency availability from the RA, the system may be required to operate on both 700 MHz and 800 MHz. An 800 MHz only system will be acceptable provided there are enough frequencies available.**

9. Under section 6.1.2.5 *Logging Recorder*, it states *"The MoNS presently utilizes a radio system logging recorder. This system records all radio, E9-1-1 trunks, and dispatch administrative phone traffic. Pricing for a new logging recorder is a requirement of this procurement"*.
  - a. What are the specifications for the traffic to be recorded?
  - b. What is the number of analog/digital/IP phone lines, retention period?
  - c. Is there any other information you have about these logging recorders?

**Specifications for logging recorder performance have not been defined. Police, Fire and 911 traffic must be recorded. See Section 6.1.2.5. Per the RFP the recorders must be able to record radio traffic by talkgroup, voice telephone traffic, and console information.**

10. Under section 6.1.4.3 *Portable Radio Equipment*, it states *"Portable radios, accessories, and batteries (used by the Fire Department) proposed must be Factory Mutual approved as intrinsically safe for the following hazardous environments: Class I and II Division I, groups C, D, E, F and G and non-incentive for Class I, Division 2, Groups A, B, C and D. As an alternative these units may meet A TEX, Cenlec or other approved standard"*. Please specify what is considered approved standard.

**An approved fire safety standard beyond FM, A TEX or Cenlec must be documented. The intrinsically safe requirement is only necessary for use while in hazardous environments, not for all user radios.**

11. Under section 6.1.4.3.2 *Unit location system*, it states *"Proposers must include the description and pricing for a unit location system that will interface with the MoNS CAD system and be capable of displaying the location of a unit on a monitor based upon the GPS signal being received"*,
  - a. How many units are to be considered?
    - i. What is the total fleet size?
    - ii. What is the maximum number of concurrent units at any time?
  - b. Is Automatic Personnel Location required as well, or just Automatic Vehicle Location?
  - c. Please advise the Make and Model of the CAD system (s).
  - d. Beyond plotting units on a map, what functionalities do you require in the GPS viewer system? Please provide a list of these sites.



(November 9<sup>th</sup> 2017)

- e. What are the interactions required between the GPS viewer and the MoNS CAD?  
Please list those and describe.
  - a(i). **The total number of radios is approximately 1000 units. A summary of user radios by agency is listed in the Bermuda Radio System Assessment and Recommendations Report now available for your review. See Section B of this Addendum.**
  - a(ii). **Radio traffic information is not available. There is little contention for access to the primary radio systems. The new system design should account for low speed data requirements of a location system.**
  - b. **All police and fire mobile and handheld radios must be GPS capable. Other users have yet to decide.**
  - c. **New World CAD system in use at the Police COMOPS**
  - d. **The location system should be capable of providing data to the CAD if the Police Department desires to use the data in the future for such activities as nearest unit dispatch. A complete unit location solution is required.**
  - e. **The versatility for users of the new GPS capabilities will be determined by each agency. Suffice it to state that the GPS/vehicle location system should be from a recognized manufacturer and integrator of such systems.**

12. Under section 6.1.6.4 *Coverage Acceptance Criteria*, it states "*In addition to drive testing, the MoNS will select a number of specific buildings, of key interest to the MoNS, for in-building audio quality testing. These buildings will be agreed to in the final contract*".

- a. How many buildings require in-building coverage?
- b. What are the characteristics (penetration loss, etc.) and coordinates of the buildings?

**Specific buildings have not been defined as yet. In general, public buildings, large office buildings, hospital ER's and public safety facilities will be considered. It is understood that the radio system in itself may not provide coverage in many structures. The use of distributed antenna systems and Bi-directional amplifiers will be considered during the final design meetings with the selected vendor. The proposal must address these factors.**

13. Under section 6.1.15 *TRAINING*, it states "*Proposers shall be responsible for all direct or indirect costs of user, dispatcher, and manager level training, such as meeting rooms, travel, lodging and transportation for on-site and remote factory locations as necessary for MoNS and proposer's personnel*".

- a. How many radio users will need to be trained?
- b. How many console operators will need to be trained?
- c. For maintenance training, what number of people will be performing maintenance?
- d. As per question c, what are the roles and type of maintenance will they be performing.



(November 9<sup>th</sup> 2017)

**The training plan can include direct training as well as "train the trainer" sessions. Due to the limited number of dispatchers (console operators) it is likely that a training class for each dispatch shift will be required. A maintenance program or team has not been developed. Historically, system suppliers have good profile information for this data and can describe their capabilities in training as part of the RFP response.**

**14. Under Section 6.1.13.4 Maintenance**

- a. What are the internal and external SLA levels required to be maintained by the system?
- b. Is the Proposer or the MoNS responsible for managing that these internal and external SLA's are being met?
- c. Can you provide a responsibility matrix, a response time, an SLA expected on each of components within the system?
- d. The response time for major components is given as 30 minutes, given the geography a 1 hour maybe a more reasonable time.
- e. How many sites must we be capable of simultaneously providing this service?

**a. The level of the agreements will have to be negotiated as part of the final contract. The Government will determine at that time the extensiveness of the agreements.**

**b. During the warranty period the vendor is responsible. After the warranty period there will be an agreement developed with the vendor.**

**c. To be determined at contracting.**

**d. Change Section 6.1.13.1.2, second paragraph of the RFP from "Proposers will have qualified technicians available on-site, in response to a reported major service outage, within 30 minutes, 24/7/365" to 1 (One) hour.**

**e. That would be dependent upon the nature of the failure.**

**15. Under Section 6.1.13.4 Maintenance:**

- a. Is the Proposer responsible for recovering the system?
- b. Are we to provide system backup tools?

**a. Yes.**

**b. Yes**

**16. Under the Scoring Section 1.3 of the RFP it asks that the Bidders Referee's had a positive experience working with the contractor/supplier. The term **referee is not defined** in the bid, please define who will be the referee's or do they mean the reference's?**

**Referees are prior customers of the proponent that provide references on the proponent's performance in providing goods and services to the customers.**

**17. The coverage area in Section 6.1.6.2 Service Area is described as 95% coverage.**



(November 9<sup>th</sup> 2017)

- a. Is it the responsibility of the Proposer to install additional repeaters and systems until the coverage can be met?
- b. Is this performed at the cost of the Proposer?
- c. Is this likewise true for in-building coverage or is added on an as-needed "change order" as specified by the government.

**a. The proposed design must provide the 95% coverage requested. It will be tested as part of the Coverage Acceptance Testing Plan. If it does not, the vendor will be liable for improving coverage to that level.**

**b. The costs of the testing should be included in the proposal pricing.**

**c. Depending on the structure the in-building coverage may require change orders. It will be a discussion item for the selected vendor during contract negotiations.**

18. The Section 6.1.4.4 RFP mentions both propane and diesel as the fuel to be used for generators. Please clarify if it is both, either, diesel or propane?

**Diesel Fuel.**

19. BPS COMOPS has a generator installed are "the proposers" to supply an additional generator for the console or is the present generator sufficient?

**It will be up to the selected vendor to determine if the new system's electrical loading is within the capacity of the existing generator. If it is not the proposer must include an explanation along with pricing.**

20. In the Section 6.1.4.4 the Battery run times are ambiguous, please provide us with the exact specification either 4 or 8 hours.

**6.1.4.4 Battery run time should be 8 hours. There is also a typo in this paragraph. The 41 volts listed should be 48 volts**

21. RFP in Word Version - Would you please provide the RFP document in word version. This will greatly assist with our work plan.

**We cannot supply this document in Microsoft Word format because of formatting differences between computers. There are several software packages available that can convert the PDF into a MS Word document for cutting and pasting into the RFP response.**

22. RFP Deadline - We request extension to 28 February 2018 due to the complexity of the RFP and the need to consult with overseas vendors.



(November 9<sup>th</sup> 2017)

**Extension of the proposal submission deadline may be considered in the near future but the current submission deadline is not being changed at this time.**

23. Is MoNS looking to remain with a Motorola Solution or is this open to all manufacturers and providers?

**We are looking at all manufacturers.**

24. Is MoNS planning on rolling the new solution out in a phased approach?  
a. If so will the respondent be responsible for maintaining the existing system throughout the rollout?

**A phased approach is the most likely choice since no user can be shut down during a transition. The existing system will have to be maintained until cutover of the new system.**

25. Is MoNS looking to get continued use from its existing portable, mobile terminals and control centre equipment and infrastructures?  
a. If so what is the useful life of the existing equipment?

**Existing equipment has varying ages, models and features. It also uses incompatible technologies with any new system so we have not considered the useful life. It will be replaced upon acceptance of the new system.**

b. Will the respondent be expected to maintain the existing system to facilitate the continued use of the existing equipment?

**Existing user equipment will continue to be maintained as it currently is up to the time of transition.**

26. 6.1.12.1 - For effective FAT and SAT testing and acceptance will the respondent be installing consoles into different locations so that existing operations can run in tandem?

**That aspect has not been determined yet. This RFP requires that the vendor provide a transition plan. Dispatch equipment may be run in tandem at each location or sample new consoles set up just for testing.**

27. Is the respondent responsible to install and maintain mobile units into the plethora of vehicles ranging from police car, ambulances, and fire trucks?

**Installation of new radios is a requirement of the RFP. During the warranty period the vendor will be required to maintain the installed radios.**

28. Will MoNS provide towers for all the radio equipment?





(November 9<sup>th</sup> 2017)

**Proponents will be able to see the existing sites and determine their effectiveness. If additional towers are required the selected vendor will be responsible. The site visits included additional government locations for viewing. It is the responsibility of the proponent to design an acceptable radio system.**

**29.** Will the respondents be responsible for the cost of power to the radio equipment?

**Site power will be supplied by the Government. Interior power will be installed by the selected vendor.**

**30.** Will the respondent be responsible for supply and maintenance of generators?

**Pricing should be included for this requirement through the warranty period. This will be a topic of discussion during negotiations.**

**31.** Will the Regulatory Authority (RA) assign all necessary Frequencies including those currently assigned to private parties?

The RA will consider requests for assignments of spectrum as is within its remit to do so, and as per relevant legislation.

**32.** The RFP details all the ministries currently using the system. Is there a roadmap for further deployments to quangos, and multi-ministry collaboration such as the Emergency Measures Organisation?

**This issue is still under discussion.**

**33.** We note that there is no such capital plan for this Fiscal year, is this expected to be in FY budget 2019?

**Meetings will be taking place prior to contract award regarding funding**

**34.** Section 6.1.1.3 refers to CI department, please can this be defined.

**This relates to government offices that only have casual requirement for communications**

**35.** Section 6.1.9.1.1 – Refers to the requirement of a ‘bullet resistant’ building please define this requirement, is it the same definition as ‘bullet proof’ later on in the section?

**Yes - bullet resistance = bullet proof**





(November 9<sup>th</sup> 2017)

**36.** Can the references of the manufacturer acting as a subcontractor be used as the reference of the proponent?

**Yes as long as it is understood that the proponent remains responsible as the prime contractor.**

**37.** Can the question time be extended an additional week until November 7<sup>th</sup>? We assume there may be additional questions when the first batch of responses is delivered?

**No. There will not be any other Q&A time periods offered.**

**38.** Would it be possible to get a 4 week extension? Some of the questions/answers are key to refining the design of the radio network.

**No. There will not be any other Q&A time periods offered.**

**39.** 6.1.1. General

Please clarify the number of users that the system needs to be dimensioned for and which is an estimated distribution of the users throughout the coverage area.

**The system currently has approximately 1000 users. See the table included in the Consultant's report. System should be scaled for 50% growth.**

**40.** Please clarify how many users will be using GPS positioning and the desired refresh rate for the GPS position.

**A final quantity has not been determined. The RFP requires all radios to be GPS capable**

**41.** 6.1.3 Interoperability:

Please clarify the number of radio interfaces with each 3rd party network and which type of radios need to be connected. Is it responsibility of the bidder to provide the 3rd party radios for the audio patch or will the MoNS provide those radios?

**The quantity of interfaces has not been determined. The third party user radios have not yet been discussed. It should not impact the proposal since the radio pricing is on a per unit basis.**

**42.** 6.1.2.5 Logging Recorder & 6.1.5.2.7

Please clarify the audio feeds and type of interface to be recorded that are not part of the Radio Network (i.e. Telephone extensions). We also noted 3 separate replay positions. Please confirm 3 are required.



(November 9<sup>th</sup> 2017)

**Specifications for logging recorder performance have not been defined. Police, Fire and 911 traffic must be recorded. See Section 6.1.2.5. Per the RFP the recorders must be able to record radio traffic by talkgroup, voice telephone traffic, and console information. The quantity of replay positions can be discussed with the selected vendor during contract negotiations**

**43. 6.1.2.8.1 Encryption & 6.1.5.2.6 Voice Encryption**

TEA2 algorithm is reserved for European Countries within the Schengen area. Please confirm that TEA3 (reserved for Public Safety Organizations outside the Schengen area) is acceptable.

**TEA3 is acceptable**

**44. 6.1.2.8.2 Conventional Backup**

TETRA standard radios are not capable of operating in analog conventional mode. They use a prescribed Direct Mode. Please clarify if this requirement does not apply to TETRA standard compliant equipment. TETRA mobile and portable radios can act as digital repeaters for DMO operation.

**Direct mode is acceptable for TETRA.**

**45. 6.1.4.1 General: Mixed Mode modulation format, analog operation.**

TETRA Base station/ repeaters cannot support mixed-mode modulation formats. Please confirm that this requirement does not apply to TETRA standard compliant equipment.

**This requirement does not apply to TETRA equipment**

**46. 6.1.4.2 Mobile radio equipment:**

Does the transceiver need to be IP67 or only the console being the transceiver IP54. If IP67 needed is this requirement applicable for all radios or only the marine environment ones, if so how many?

**All handheld radios must be protected from blowing dust and blowing rain. Fully hermetically sealed is NOT a requirement.**

**47. Can you please clarify the concept of multi-band radios? There are no TETRA radios capable of multiband operation but wide band radios typically within 20MHz/50MHz.**

**This RFP also addressed P25 technology. TETRA radios do not have to meet this requirement.**

**48. Can you please clarify the concept of controlling several radios with one control head/transceiver? This is not possible with TETRA standard radios.**



(November 9<sup>th</sup> 2017)

**This is a general requirement that generally relates to mobile radios in certain types of emergency response vehicles. It will be waived for TETRA mobile radios**

**49. 6.1.4.3 Portable radio equipment:**

Can you please clarify that the output power of the portable radios shall be sufficient to achieve the required coverage but the minimum 4W requirement does not apply to TETRA standard compliant equipment?

**The listed power was stated for P25 which is an alternate technology. It is understood that the power levels of TETRA are lower and will be acceptable. Proponents may offer alternate technologies. The important characteristic here is that the talk back capabilities of a handheld radio are a primary consideration relating to system coverage.**

**50. 6.1.4.3.1 GPS incorporation:**

Can you please clarify for dimensioning purposes an estimation of how many users will be incorporating GPS and what is the desired refresh time for the GPS position

**The total number of radios is approximately 1000 units. A summary of user radios by agency is listed in the Bermuda Radio System Assessment and Recommendations Report now available for your review. See Section B of this Addendum.**

**51. 6.1.4.3.2 Unit location system:**

Can you please clarify the interface with MoNS CAD System? Does the radio system need to provide access to a database with the GPS position for the MoNS CAD System or does the bidder need to provide a complete solution with visualization maps independent of the MoNS CAD System?

**The location system should be capable of providing data to the CAD if the Police and Fire Departments desire to use the data in the future for such activities as nearest unit dispatch. A complete unit location solution is required.**

**52. 6.1.4.3 Control Station Equipment**

Can you please clarify that the output power of the control station radios shall be sufficient to achieve the required coverage but the minimum 15W requirement does not apply to TETRA standard compliant equipment?

**The listed power was stated for P25 which is an alternate technology. It is understood that the power levels of TETRA are lower and will be acceptable provided that these control stations provide acceptable performance on the radio system. Proponents may offer alternate technologies.**

**53. 6.1.4.4 Fixed Site Equipment Radio**



**Addendum # 3**

(November 9<sup>th</sup> 2017)

Can you please clarify that the output power of fixed site equipment radios shall be sufficient to achieve the required coverage but the minimum 100W requirement does not apply to TETRA standard compliant equipment?

**The listed power was stated for P25 which is an alternate technology. It is understood that the power levels of TETRA are lower and will be acceptable. Proponents may offer alternate technologies.**

**54. 6.1.5.2.4 System Control.**

Please define the interface of the new 911 system or confirm that the requirement is not applicable for this RFP.

**To clarify this requirement consider it to mean that the console audio must interface to the proposed logging system.**

**55. 6.1.7.3.5 Headset Jack Configuration**

Please define the brand of the telephone system that the consoles need to interface with and the protocol supported.

**The telephone system is an Avaya IP based system.**

**56. Please clarify the desired operation for this requirement**

**This information is not currently available.**

**57. 6.1.7.4.2 System Interfaces**

Please clarify this requirement and provide an example in the context of the new digital system.

**This refers to console control of third party radios such as the marine VHF-FM base stations. The configuration information refers to standard off the shelf interface hardware used by many dispatch stations world-wide. This allows the IP based consoles to control analog systems such as the marine VHF stations.**

**58. Please provide a detailed sketch of the Marine radio control and operation required.**

**Not available.**

**59. Please provide a sketch detailing the conduits that run between COMOPS and the Prospect Site. Include specification of any fibre installed.**

**Not available**



(November 9<sup>th</sup> 2017)

**60.** Please provide a sketch detailing any extant fibre connectivity between COMOPS and the Fire Dispatch Centre.

**Not available**

**61.** 6.1.9.1.1 Building Design Considerations, please clarify that the door must be bulletproof.

**Yes.**

**62.** Under section 6.1.15 Training, please clarify how many attendees for each type of training and how many sessions per user group are needed.

**Training requirements are generally specified by the vendor. The proposal must include the vendor's plan for training of Government personnel.**

**63.** Would it be possible to get a 4 week extension? Some of the questions/answers are key to begin the design of the radio network.

**Not at this time.**

**64.** 6.1.7.5 Console Furniture:

Due to the lack of physical bodies allowed at the site visits, will an additional visit be allowed at both COMOPS locations to see what is currently being desired and used for furniture?

**The Consultant Report has photographs of COMOPS and Fire Dispatch.**

**65.** It is also customary to get some idea from the users as to their desires and needs for new furniture layout.

**Generally this information is provided when a vendor has been selected. It should not impact the proposal submission. If any information is available regarding this issue it will be provided in an additional Addendum**

**66.** Is it possible to get a layout of the room where consoles will reside?

**See answer to Question 64 above.**

**67.** If not allowed to visit Comm Op's what are the specific requirements for furniture?

**There will be no additional site visits. See the answer to Question 64.**

**68.** Can we get a listing of equipment that will be staying in service at each console position?



(November 9<sup>th</sup> 2017)

**Not known at this time. For proposal purposes consider any equipment not directly related to the radio aspects to be remaining.**

**69.** Can we get some information on what type of interface is available for Avaya telephone interface?

**The Avaya phone system is an IP based system.**

**70.** Will short messaging or alternative method be allowed for stat alerting and door closures? Two-Tone is not supported in Tetra.

**It will be up to the proponents to address this issue in the proposal. If additional hardware is required for control it must be included in the proposal.**

**71.** “6.1.12.2 Parallel Implementation” it states, “the Proposer must remove all existing system equipment, inclusive of any surplus antenna system components and equipment, as directed by the MoNS.” For costing purposes, please provide more details as to the existing equipment and antennas that it is referring to? Is this equipment owned by the MoNS?

**This section references MoNS owned equipment. No further information is currently available.**

**72.** How many talk groups are required by the MoNS? Please confirm how many talk groups are assigned to each Government agency.

**No talkgroup plans have been developed yet.**

**73.** The MoNS requirement is to own the desired radio infrastructure in the 700/800MHz band; please provide the list of licensed frequencies that the Bermuda Regulatory Authority has authorized the MoNS to use?

**See the answer to Question 31 above.**

**74.** Under section “**6.1.9.2.1 Requirements**” it states, “Any new towers proposed shall be a **self-supporting structure** having an overall height to be determined by the Proposer”. For cost purposes, can the “self-supporting structure” requirement be omitted from the RFP? In some instances, a guyed tower maybe more suitable and considerably more cost effective.

**Self-supporting towers require less land area. If a proponent can document the benefits of a guyed tower at a specific location it will be considered by the evaluation team.**

**75.** Under section “**6.1.10.3 Parking Areas**” it states, “Proposers shall provide, outside each new fenced site, adequate space for parking and turnaround for two pick-up trucks. The area shall be cleared, sterilized, and covered with 6 inches of graded aggregate base course, compacted by roller.” This is a very detailed specification, and may not be obtainable unless the Government



(November 9<sup>th</sup> 2017)

has the available land. Can this specification be removed from the RFP, or changed to “where practical”?

**Add "where practical" to this requirement**

**76.** Under section “**6.1.10.5 Submittals for existing sites**” it states, “Proposers must include drawings for all existing sites”, please provide details on the existing sites such as recent tower surveys, existing building drawings, electrical, grounding plans, site layout and/or any other relevant documentation?

**The drawings referred to are the updated drawings with the new equipment. If original drawings are used they must be updated to show the new equipment. If there are no original drawings available the proponent must prepare a site drawing.**

**77.** Please provide dimensional drawings of the two dispatch centers (Fire Dispatch and Comops) that includes the existing layout, and any required changes to the existing floor plan.

**The selected vendor will be provided with drawings to assist in the new designs as required.**

**78.** On page 91, under the “**Control Point (System Controller) Facilities**” the pricing schedule has a line item for the “ISSI Interface to legacy radio networks”.

- a. Is an Inter Subsystem Interface (ISSI) a requirement of the RFP?
- b. If so, please provide details as to which system(s) require this interface?
- c. Or, is a non-ISSI interface acceptable?

**There is no ISSI requirement for this project.**

**79.** On page 94, “**CELLULAR CONNECTIVITY**” the documents request pricing, but it is not clear of the requirement; please provide more detail as to their requirements for this feature? Or, is this a means for suggestions from the Proponents?

**The cellular connectivity is an option to the system. The pricing request should be considered as a best estimate price.**

**80.** Under section “**6.1.6.1 General**” it states, “A. Portable subscriber units with shoulder microphones and waist-mounted radios must be the normal configuration considered for the purpose of coverage design. Both talk-out and talk-back- coverage analyses must use these





(November 9<sup>th</sup> 2017)

parameters.” Please confirm the shoulder microphone used under test will be the “Shoulder Mic with Antenna” (from Page 95, under “SUBSCRIBER UNIT OPTION COSTS”).

**The shoulder microphone will be with antenna.**

**81.** During the tour we were shown several sites, including Somerset police station which do not meet the specification as described in the RFP. Will the Government be upgrading these sites, or will they need to be upgraded as part of the RFP?

**Sites that do not meet the RFP specifications will have to be upgraded as part of this procurement.**

**82.** In sites with subpar generation: Who will be upgrading and maintaining the generator? Is the responder responsible for the upgrade to the generator and monitoring? Is the responder responsible for monitoring future operations?

**The selected vendor will be upgrading the generator. The vendor will be responsible for maintenance during the warranty period. After the warranty period the Government will be responsible for the generator.**

**83.** During the tour we were shown two control operations one at the Fire Department and one at the Police Headquarters. There was some discussion about a combined operation, can you specify;

- a. How many command centers should be planned for in the response?
- b. Which government buildings can be used for these command centers?
- c. The workflow of the command center including, fire, police, ambulance, and camera monitoring.
- d. It is conceived that RFP bidders are to design this workflow.

**a. One Police and One Fire Center should be considered for this response.**

**b. The selection of alternate centers has not been made.**

**c-d. Workflow will not be a responsibility of the selected vendor.**

**84.** For the Government Buildings and design for the consoles, is the upgrade of the Command Center included as part of the RFP?

- a. If so, please provide architectural, electrical, and preferred future floor layout
- b. Is the furniture to be included as part of the upgrade?

**The proponent should provide console pricing to replace the existing consoles. The need for replacement furniture is being addressed and if it is to be included it will be part of a future addendum. The need for a console for the Command Center has not been specifically addressed.**

**85.** How many consoles will be required for other operations?

- a. Prisons
- b. Parks



(November 9<sup>th</sup> 2017)

- c. Works and Engineering
- d. Marine and Ports (RCC)
- e. Etc....

**No other consoles are required at this time.**

**86.** Will the EMO have an emergency console in another location?

**No other consoles are required at this time.**

**87.** How many consoles will be in field command units? Please supply the specification of these units.

**No other consoles are required at this time.**

**88.** Steve Cosham mentioned a document that described the requirements for operations, please provide this document he is referring to.

**It is not known which document he referred to. There is no need for having operational documentation for this RFP.**

**89.** Should we provide a Total Cost of Ownership of the different financial models that might apply to this type of system? There are many different operational models in the world and we could give examples of the relative expected costs.

**YES. Although system total cost is a key factor in this procurement, having alternative payment options may assist the Government in developing a long term financial plan.**

**90.** Questions to your responses - We requested (email of 12 Oct) and you approved (email of 15 Oct) submitting questions in reply to your answers to our first round of questions. (I stated your responses to our questions will generate additional questions). As your first set of responses will be available to us on 2 Nov, what is the date of the next deadline for submitting our questions?

**At this time there are no plans for future questions.**

**91.** Will the MoNS accept a different available primary frequency band for primary radio operations other than 700/800 MHz if it meets or exceeds the performance requirements?

**The RFP requires 700 MHz or 800 MHz. It also allows alternative proposals. If you wish to use another frequency range you may submit an additional proposal for that range.**

**92.** Interim Cellular partial interface: what is meant by this, voice or data applications?



**GOVERNMENT OF BERMUDA**  
Ministry of National Security

(RFP MNS HEAD 83-34)

**Addendum # 3**

(November 9<sup>th</sup> 2017)

**Cellular interface would link the radio system into the cellular network. This would provide a voice path.**

**93. Back up Consoles : Why are three (3) references needed for back up dispatcher applications?**

**The "backup consoles" are software applications that could be used on devices such as laptop computers. The references are to validate the performance of the application.**

**94. How many recorder replay positions need access to the audio files, how many need access to what audio sources?**

**That requirement has not been addressed. For bidding purposes consider one replay or playback position.**

**B. Additional Information**

**Access to The Consultant report to the Ministry of National Security entitled "Bermuda Radio System Assessment and Recommendations Report" will be provided in Addendum 4 to follow.**

END OF ADDENDUM #3