LOS ANGELES REGIONAL INTEROPERABLE COMMUNICATIONS SYSTEM AUTHORITY

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SCOTT EDSON
EXECUTIVE DIRECTOR

SENT CORRESPONDENCE BY:
E-MAIL

June 8, 2023

ADDENDUM A
REQUEST FOR INFORMATION (RFI)
FOR PORTABLE RADIOS TO BE USED ON THE LOS ANGELES REGIONAL INTEROPERABLE COMMUNICATIONS SYSTEM (LA-RICS) LAND MOBILE RADIO (LMR) SYSTEM
RFI NO.: LA-RICS 018

This Addendum A clarifies information contained within the Request for Information (RFI) issued April 17, 2023, and also includes responses to questions received in writing from potential Respondents as well as questions asked and addressed at the Optional Conference, all of which is hereby incorporated as part of the solicitation document. Please note, questions received and responses provided at the Optional Conference are substantially similar in form, but may have been revised for purposes of clarity.

REVISIONS TO THE RFI

1. The following language under Section 1.2 (Purpose) of the RFI has been deleted and replaced with the following language whereby **blue text** is added verbiage and **red text** has been removed from the RFI. All other language under Section 1.2 remains as is.

   1.2 "…As part of this RFI, Respondents understand and acknowledge the Authority will require sample Radios (inclusive of software, accessories, etc.) be submitted for testing for compatibility pursuant to the requirements and testing criteria set forth in Exhibit A (Portable Radio Requirements Matrix) and Exhibit B (Portable Radio Testing Criteria) to this RFI. ***The Authority will contact Respondents to schedule delivery of the sample Radios to the Authority's Point of Contact per Section 2.3 of this RFI.*** ~~***The Authority requires Respondents to***~~ ***Additionally, Respondents shall provide, at no cost to the Authority, two (2) fully functional and compliant sample Radios (per Radio model) including all required cables, accessories and software necessary to allow programming and testing.*** ~~***with your firm's response to this RFI***~~ *The Authority will*

return the Radios to the Respondent once testing has been completed. However, Respondents should be aware that the Radios submitted may be damaged during the testing process. The Authority will not be liable or responsible for reimbursement of any costs for damaged equipment. Please refer to Section 3.6 (Portable Radios Required for Testing) of this RFI for specific Radio submission and Radio return information…"

2. The initial submission date for the Initial RFI Response has been extended to **June 26, 2023**. However, the RFI will remain open on a continuous basis until such time as the Authority, in its sole discretion, deems it appropriate to close. Accordingly, if Respondents are not able to submit their RFI Responses by the initial submission date, Respondents may submit anytime thereafter until such time as the RFI closes.

   In connection with this extension, Section 2.2 (RFI Timetable) of the RFI is deleted in its entirety and replaced with the following:

   2.2 RFI Timetable

   The following timetable is tentative for this RFI and is subject to change at the Authority's sole discretion. **It should be noted that this RFI will remain open on a continuous basis until such time as the Authority, in its sole discretion, deems it appropriate to close.** The timetable for the initial submission of RFI is as follows:

KEY EVENTS	DATE	TIME
Issuance of RFI	April 17, 2023	--
Optional RFI Conference (Section 2.6)	May 17, 2023	10:00 a.m.
Final Day to Submit Written Questions (Section 2.4)	May 22, 2023	5:00 p.m.
Initial RFI Responses Due (Section 2.5)	June 26, 2023	5:00 p.m.

3. The following language has been added to the end of Section 3.4 (Portable Radio Requirements Matrix):

   "Non-compliance with a Mandatory Requirement does not automatically disqualify a Radio from approval. The Authority would like to understand how and/or why a Radio does not comply with a particular requirement and is amenable to working with Respondents to find solutions to test and qualify a Radio for compatibility on the LA-RICS LMR System. As such, if Respondents cannot meet a "Mandatory" requirement, it should indicate so and why that is the case. Respondents are still

encouraged to submit an RFI Response even if the Radio being submitted for testing and consideration in response to this RFI does not comply with the Mandatory Requirements identified in Exhibit A (Portable Radio Requirements Matrix)."

4. The following language under Section 3.6 (Portable Radios Required for Testing) of the RFI has been deleted and replaced with the following language whereby **blue text** is added verbiage and **red text** has been removed from the RFI. All other language under Section 3.6 remains as is.

"3.6 ***The Authority will contact Respondents to schedule delivery of the sample Radios to the Authority's Point of Contact per Section 2.3 of this RFI. Additionally,*** *Respondents shall provide, at no cost to the Authority, two (2) fully functional and compliant samples* ***per Radio model*** *including all required cables, accessories, and software necessary to allow programming and testing****~~, with your RFI response~~****. For example, if a Respondent is submitting two (2) different Radio models (Model A and Model B) for testing on the Authority's LMR System, then the Respondent should be submitting a total of four (4) sample Radios, two (2) of Radio Model A and two (2) of Model B…"*

5. The following language under Section 3.8 (Submission Instructions) of the RFI has been deleted and replaced with the following language whereby **blue text** is added verbiage and **red text** has been removed from the RFI. All other language under Section 3.8 remains as is.

3.8 "…Pursuant to Section 3.6 (Portable Radios Required for Testing), ***the Authority will contact Respondents to schedule delivery of the sample Radios to the Authority's Point of Contact per Section 2.3 of this RFI. Additionally,*** *Respondents shall provide, at no cost to the Authority,* ***two (2)*** *fully functional and compliant samples* ***per Radio model*** *including all required cables, accessories, and software necessary to allow programming and testing****~~, with your RFI response~~****."*

6. Exhibit A (Portable Radio Requirements Matrix) is deleted in its entirety and replaced with Attachment 1, Exhibit A (Portable Radio Requirements Matrix), to this Addendum A for RFI No. LA-RICS 018. Respondents are to use and submit the revised Exhibit A (Portable Radio Requirements Matrix) attached to this Addendum A with their RFI response. A writable version of Exhibit A in Word format is provided in this Addendum A as well.

7. Exhibit B (Portable Radio Testing Criteria) is deleted in its entirety and replaced with Attachment 2, Exhibit B (Portable Radio Testing Criteria), to this Addendum A for RFI No. LA-RICS 018.

IMPORTANT REMINDERS

Respondents are encouraged to submit an RFI Response even if the Radio being submitted for testing and consideration in response to this RFI does not comply with the Mandatory Requirements identified in Exhibit A (Portable Radio Requirements Matrix). Non-compliance with a Mandatory Requirement does not automatically disqualify a Radio from approval. The Authority would like to understand how and/or why a Radio does not comply with a particular requirement and is amenable to working with Respondents to find solutions to test and qualify a Radio for compatibility on the LA-RICS LMR System.

The PowerPoint Presentation (Attachment 3) and conference sign-in sheet (Attachment 4) are both attached to this Addendum A and are posted and available for download on the County of Los Angeles (County) Internal Services Department (ISD) website as well as the LA-RICS website. As a reminder, Respondents are responsible for reviewing the entire RFI package in its entirety and to submit the requisite documents in its RFI Response.

QUESTIONS AND RESPONSES

1. **QUESTION:** On Exhibit A, is the Requirement regarding the Radio with Top Display mandatory because certain agencies like Public Works or other agencies' personnel do not require or desire that feature and may want a less expensive Radio that will perform exactly the same on the LMR System. If this requirement is not mandatory, it opens the door to include more Radios.

   RESPONSE: Requirement C.7.e is no longer a mandatory requirement. Please refer to the revised Requirement C.7.a to C.7.e contained in the revised Exhibit A (Portable Radio Requirements Matrix) attached to this Addendum A. Please be sure to use and submit the revised Exhibit A (Portable Radio Requirements Matrix) attached to this Addendum A in response to this RFI.

2. **QUESTION:** Where would the testing of the Radios take place? At the LA-RICS headquarters or offsite? Respondent would like to know in order to prepare its resources for testing.

   RESPONSE: Testing will be performed at the County Internal Services Department (ISD) facility located at 1110 N. Eastern Avenue, Los Angeles, CA 90063, unless otherwise specified. Authority personnel and ISD technicians in concert with the Respondents' teams will perform various tasks such as programming Radios, test Radios, and troubleshoot Radios that may not be passing testing requirements.

3. **QUESTION:** What is the expected duration of the Radio testing?

RESPONSE: The Authority estimates testing is expected to take place within two (2) days, one (1) day to start and conduct partial testing and one (1) day to complete testing and achieve closeout per Radio model submitted. Testing is likely to be no longer than one (1) week but may be up to ten (10) days. If necessary, theAuthority will coordinate with Respondents to schedule testing, especially if Respondent personnel will be needed to complete testing. Please note that testing is expected to take place Mondays – Thursdays and the Authority will work with Respondents sequentially.

4. **QUESTION:** Does the Authority want the sample Radios submitted at the same time the RFI Response is delivered?

   RESPONSE: No, Respondents are no longer required to submit sample Radios with their RFI Response. The Authority will reach out to Respondents to schedule delivery of the Radios for testing. Please refer to the revised RFI and accompanying Exhibit A (Portable Radio Requirements Matrix) and Exhibit B (Portable Radio Testing Criteria) attached to this Addendum A.

5. **QUESTION:** The RFI states requires that the product (Radio) is currently shipping and available, meaning no future products will be considered. If Respondent anticipates a product to be on horizon, should the Respondent submit an RFI Response?

   RESPONSE: Please refer to Exhibit A (Portable Radio Requirements Matrix) and Exhibit B (Portable Radio Testing Criteria), Requirement A.8. Although prototypes will not be accepted, Respondents should inform the Authority that a new product is expected to be released to the public in the near future and that the Respondent intends to submit an RFI Response when the product is released. Respondent should also inform the Authority if current model is coming to end of production life and the new replacement model is on its way to the market.

6. **QUESTION:** The RFI looks like the Authority is looking for an RFI Response from manufacturers. Is it the Respondent's understanding that the Authority is looking to the manufacturers to submit an RFI Response with the sample Radios for this RFI versus submission by an authorized Radio dealer/supplier? Can a Radio manufacturer submit an RFI Response but indicate to the Member Agencies who are manufacturers local authorized dealers/suppliers? Programming, warranty, and other services can be provided by the dealers/suppliers as opposed to the manufacturer. Also, there are certain attestations that only an Original Equipment Manufacturer (OEM) can provide so it would be helpful to have the OEM's and partners/dealers at the product testing.

   RESPONSE: The Authority encourages dealers to work with the manufacturers to submit their equipment as a united front. The intent is to test and approve a certain

product once to avoid duplicative efforts by the Authority and Respondents. If multiple dealers submit the same Radio, the Authority will notify the dealers and encourage them to determine which dealer or manufacturer will represent the Radio.

Certain manufacturers may want to work directly with the Authority whereas other manufacturers may want to Manufacturers and their dealers should coordinate who will submit an RFI response to prevent duplicate submissions.

7. **QUESTION:** If the Authority wants two (2) Radios submitted with the RFI Response, does the Authority also want software, system keys, chargers, cables, etc., and technical support if the Authority requires assistance from Respondents' personnel to program the Radios? Respondents' would like a better understanding of when Respondent staff will need make itself available for testing.

RESPONSE: Pursuant to Sections 1.2 (Purpose), 3.6 (Portable Radios Required for Testing), 3.8 (Submission Instructions), and Requirement A.4 of Exhibit A and Exhibit B:

"The Authority will contact Respondents to schedule delivery of the sample Radios to the Authority's Point of Contact per Section 2.3 of this RFI. Additionally, Respondents shall provide, at no cost to the Authority, two (2) functional and compliant sample Radios (per Radio model) including all required cables, accessories and software necessary to allow programming and testing."

Additionally, the intent is for the Authority to receive RFI Responses which will require adequate time to understand how many Radios are submitted for testing and then the Authority will reach out to each Respondent to coordinate and schedule testing with the Respondent's technical team and Authority/County personnel. The Authority does not expect Respondents to keep their technical staff on standby but instead the Authority will work with each Respondent ahead of time to ensure all parties can manage their resources accordingly.

8. **QUESTION:** Is it true that the anticipated return of the Radios back to Respondents suggests that it will occur immediately after testing as the Authority does not want keep the Radios longer than necessary to evaluate the Radios.

RESPONSE: That is correct, assuming there are no technical issues found during testing. For example, if a new firmware needs to resolve an issue, the Authority will work with the dealer/manufacturer on such occasion and hold on to the equipment.

9. **QUESTION:** If the RFI Response submission date is June 12, 2023, then can Respondents reasonably expect their Radios returned within approximately thirty (30) days after testing?

RESPONSE: Please refer to the response to Question No. 4 of this Addendum A. Approximately thirty (30) days is a reasonable expectation in regards to the timeline between delivery of the radios and testing. The Authority understands the Radios are expensive and would like to return them after testing.

10. **QUESTION:** On Exhibit A (Portable Radio Requirements Matrix), what is the expectation for the Radio Cost? There are many answers to that question.

    RESPONSE: The Authority's intent was for Respondents, to the extent they can, provide a cost based on the functionality that Radio has, whether deemed Mandatory by the Authority or not. The Authority is seeking the Radio cost on an information basis only.

11. **QUESTION:** For Radios with a fully-loaded option that meets all the RFI Requirements, there is a list price, a contract vehicle specific pricing, NASPOs, etc. A Respondent may have a contract vehicle in place with an Authority's Member Agency and the Member Agency may want to leverage that pricing to procure Radios. How would a Respondent submit their pricing with the various pricing models it may have?

    RESPONSE: The Authority welcomes Respondents Radio pricing in any and all formats, including but not limited to different tiers and discounts. The pricing Respondents provide may be used by Member Agencies to budget for potential Radio procurements, but discounts that may be available from the Respondents are welcomed for informational purposes.

12. **QUESTION:** RFI No. LA-RICS 018 is seeking pricing for information only as opposed to a Request for Quotation (RFQ) which would request the actual pricing quotations. Typically, RFIs do not include a pricing component so Respondents would more direction on how to respond to the pricing information section in Exhibit A of the RFI.

    RESPONSE: Please see the Response to Question No. 11. A general cost of the Radios would assist Member Agencies in budgeting for potential Radio procurements.

13. **QUESTION:** Some outside agencies would want to demo the equipment (Radios) again. Would Authority require a demo again?

    RESPONSE: The Authority will let the Member Agencies know which Radios work safely on the LMR System. If an agency requests an additional Radio demonstration, the agency and Respondent can work directly on this.

14. **QUESTION:** If a Respondent would like to introduce a new Radio, will the new product have to undergo the testing process?

    RESPONSE: Yes, the Authority must ensure all Radios work safely on the LMR System.

15. **QUESTION:** Will the Radios that are on the approved list be the only Radios used on the LMR System?

    RESPONSE: Yes.

16. **QUESTION:** Regarding the pricing component, do Respondents need to include speaker mics, chargers, some Radios require certain encryption, multi-key which changes the price. How does the Authority want Respondents to contemplate these additions in their RFI Responses?

    RESPONSE: Detailed information such as line-item pricing would be passed on to Member Agencies for informational purposes only. If an agency is looking for a Radio with certain particular options, it would be helpful if the Radio options are priced accordingly, but again for informational purposes only.

17. **QUESTION:** Instead of putting a line item for the cost of a Radio, can Respondents submit documentation similar to a line-item cost sheet as an attachment to the RFI Response?

    RESPONSE: Yes, the Authority encourages Respondents to provide any documentation, inclusive of pricing, either as an attachment or in the Other Respondent Information section of an RFI Response, that would give the Authority's Member Agencies a general baseline for the cost of the Radios for informational purposes only.

    It should be noted, however, there is no guarantee of purchase of Radios as this RFI's purpose is gather information only. If a Member Agency has a need for one (1) or more of the approved Radios, then the agency will undergo its own procurement process to obtain the Radios.

18. **QUESTION:** For out-of-the-box testing and technician familiarization, does the Authority's team have a standard channel line-up for Respondents to pre-program the sample Radios with or can Respondents pre-program the Radios with standard business licensed itinerant frequencies?

    RESPONSE: Due to confidentiality concerns, upon receipt of this Addendum A, Respondents will need to request in writing for a copy of the Motorola Codeplug or

submit their own form with pertinent information needed for programming the radios, to the RFI's Point of Contact, Melissa Saradpon, at Melissa.saradpon@la-rics.org.

19. **QUESTION:** No matter what Radio cost is provided in the RFI Response; it will not be representative of the budgetary number that has any meaning for any Member Agency. Respondent suggests a published list price for the Radio cost.

    RESPONSE: The Authority understands the cost provided in the RFI Responses by Respondents may not represent what the actual costs may be for Member Agencies and agrees that Respondents can provide a caveat suggesting the cost is a generic price and Member Agencies can reach out to the Respondent or its partners for actual pricing whatever it may be. Again, this information is being requested for informational purposes only.

20. **QUESTION:** The PowerPoint presentation was missing an RFQ for the Member Agencies in between them receiving the authorized list of approved Radios and them procuring Radios. If a Respondent has a list, Respondent may go out to bid and get the best possible price for a Radio on the list.

    RESPONSE: This RFI is for informational purposes only and to inform Member Agencies which Radios are approved for use on the LMR System. If a Member Agency is going out to bid or is obtaining quotes, that Member Agency will undergo its own procurement processes separate and apart from this RFI.

21. **QUESTION:** LA-RICS is a Member Agency. What will LA-RICS do to procure its own Radios? Will LA-RICS go out to bid?

    RESPONSE: Each Member Agency will procure their own Radios via their own procurement processes for their own specific telecommunication needs. At this point, LA-RICS will not be procuring Radios on behalf of its Member Agencies. LA-RICS is currently intending to operate on a "bring your own Radio" for use on the LMR System and, therefore, LA-RICS will let Member Agencies know which Radios are acceptable for use on the System by providing the list of approved Radios. In the event the Authority elects to procure Radios at some later date, the Authority will issue a procurement accordingly, separate and apart from this RFI.

22. **QUESTION:** Does LA-RICS use Radios on its System for its technicians or its personnel?

    RESPONSE: Yes, LA-RICS uses Radios on its LMR System, but currently does not yet know if it will procure its own Radios. In the event the Authority elects to procure Radios at some later date, the Authority will issue a procurement accordingly, separate and apart from this RFI.

23. **QUESTION:** There's no accounting for Member Agencies prospective number of Radios for potential procurement. It's difficult to provide a price based on the number of Radios as that number is unknown.

    RESPONSE: The Authority understands there can be certain factors that can affect pricing. The Authority suggests that Respondents list their pricing as they see fit to give an agency a general idea of the Radio's price with the understanding that qualifiers such as bulk quantities, system options, procurement processes, etc. may affect the actual cost of the Radios. This information is being sought for informational purposes only and there is no guarantee of the purchase of Radios as this RFI's purpose is gather information only.

24. **QUESTION:** Is there an agreement to accept the loan of certain equipment, goods, and/or services on a gratis basis regarding the sample Radios. The Authority has an existing agreement whereby Radios are loaned for testing on a gratis basis. Is this RFI related to that agreement as there is no exhibit or addendum to that agreement? Is the language in the RFI sufficient to protect the Respondent and the Authority regarding any potential damage to the Radios?

    RESPONSE: The RFI explicitly states in Section 1.2 (Purpose); Section 3.6 (Portable Radios Required for Testing); Requirement A.4 in Exhibit A and Exhibit B; that the Authority will not be liable or responsible for reimbursement of any costs for damaged equipment. Furthermore, this RFI has no nexus to any existing agreements related to loaned equipment used for testing on a gratis basis.

25. **QUESTION:** Will the Authority open the Radios and opening the encryption module to determine if it serializes the keys and tampered with? It is a FIPS requirement.

    RESPONSE: Please refer to Exhibit B (Portable Radio Testing Criteria) to understand how the Authority will be testing the Radios per Requirement. If a Radio has encryption, the Authority will work with the Respondent to test the Radio to ensure the encryption works with the LMR System pursuant to the requirements found in Section G (Encryption) of Exhibit B. Where applicable, Respondents are required to submit compliance certification to show Radio meets Requirement No. A.7.j of Exhibit B.

26. **QUESTION:** If the encryption module in the Radio is FIPS 140-3, Level 3, Tamperproof; is the NSA Certification or will the Authority load a key and open up the Radio and attempt to get the key out of the encryption module?

    RESPONSE: Please refer to Exhibit B (Portable Radio Testing Criteria) to understand how the Authority will be testing the Radios per requirement. There are certain requirements Respondents have already performed testing on and the

Authority would like a copy of the certification instead having to perform the test again.

27. **QUESTION:** To elaborate on the question regarding pre-programming, when will LA-RICS provide trunking information so Respondents can pre-program the Radios before submitting the RFI Response?

    RESPONSE: Please refer to the Response to Question No. 18 of this Addendum A.

28. **QUESTION:** Will questions related to the RFI be addressed on an individual basis or will all the questions be compiled and addressed in one (1) correspondence?

    RESPONSE: All the questions received and responded to at the May 17, 2023 conference, and questions received up until May 24, 2023, are compiled and addressed in this Addendum A. If additional questions related to the RFI are received after May 24, 2023, the Authority may issue a subsequent addendum. The goal is to issue any addenda related to the RFI prior to the newly extended to June 26, 2023 initial RFI Response submission date.

29. **QUESTION:** Understanding each Member Agency will procure their own Radios, will LA-RICS be involved in the procurement?

    RESPONSE: The RFI, the RFI Responses, and the list generated of approved Radios will be used as a tool to convey to Member Agencies which Radios they can use on the LMR System as well as the associated points of contact and general cost for informational purposes only. However, please note procurement processes and guidelines may vary between Member Agencies.

30. **QUESTION:** Understanding that the Authority is the point of contact for matters related to the RFI, can Respondents communicate with Member Agencies directly?

    RESPONSE: The Authority cannot prevent Respondents from communicating directly with Member Agencies regarding the purchase of Radios, however, it is the intent that only Radios that have been properly vetted and approved by the Authority may be used on the LMR System.

31. **QUESTION:** Is the focus only on portable Radios and not on mobile Radios?

    RESPONSE: Yes. At this time, the Authority is focusing on portable Radios only.

32. **QUESTION:** Twenty-five (25) entities are LA-RICS Member Agencies. Are these entities contracted to absolutely go with LA-RICS? Can the entities opt out of LA-RICS or the LMR System?

RESPONSE: The Authority has held off onboarding agencies while completing the LMR network buildout. The P25 trunked network is now completed and the Authority has received a large number of inquiries from agencies to become subscribers.

33. **QUESTION:** In regards to including the Radio cost in Exhibit A (Portable Radio Requirements Matrix), can Respondents attach pricing sheets or other documentation to provide examples of its pricing for each Radio model.

RESPONSE: Please refer to the Response to Question No. 17 of this Addendum A.

34. **QUESTION:** Is NFPA 1802 a requirement for the RFI?

RESPONSE: NFPA 1802 has been added as Requirement No. A.7.q on Exhibit A (Portable Radio Requirements Matrix) and Exhibit B (Portable Radio Testing Criteria) to the RFI, both attached to this Addendum A.

35. **QUESTION:** In regards to Section 1.2, is it a requirement that the two (2) evaluation Radios be current production units that are shipping today?

RESPONSE: Please refer to the Response to Question No. 5 of this Addendum A.

36. **QUESTION:** Is printing front and back admissible? If so, is front and back considered 1 page or 2?

RESPONSE: Respondents may print on the front and back of pages in their RFI Responses with front and back considered pages 1 and 2, however, it is important to note that pursuant to Section 3.8 (Submission Instructions), in addition to the two (2) printed copies [one (1) original and one (1) copy], Respondents are required to submit electronic copies on a Universal Serial Bus (USB) drive.

37. **QUESTION:** Is the Authority's technical team available to meet with Respondents to dig deeper into requirements as it pertains to noncompliant Radios?

RESPONSE: If a question regarding a Radio requirement cannot be resolved via email, the Authority's technical team will endeavor to meet (virtually, telephonically, or in-person) with Respondents to review requirements related to noncompliant Radios. Respondents can reach out to the RFI's Point of Contact to request a meeting.

38. **QUESTION:** Is Buy American a requirement?

RESPONSE: At this time, Buy American is not a requirement in the RFI; however, Member Agencies may have differing procurement requirements which may include the Buy American Act.

39. **QUESTION:** In regards to Section 3.6 of the RFI, is this the correct shipping address for sample Radios to be delivered: Attention: Melissa Saradpon LA-RICS Project, 2525 Corporate Place, Suite 100, Monterey Park, CA 91754.

    RESPONSE: That is the correct shipping address. Also, please include "RFI No. LA-RICS 018" on the RFI Response.

40. **QUESTION:** In regards to Exhibit A (Portable Radio Requirements Matrix), Requirement B.15, if the Radio has less than 3,000 combined frequencies/channels/talkgroups, does this eliminate vendors from submitting a Radio to LA RICS for approval on the system?

    RESPONSE: Requirement B.15 of Exhibit A (Portable Radio Requirements Matrix) is asking Respondents to demonstrate the programming template is supported by and its capabilities with 3,000 combined frequencies/channels/talkgroups used as an example. Additionally, Respondents are encouraged to submit an RFI Response even if their Radio does not comply with the Mandatory requirements. Indicate why the Radio does not comply. The Authority would like to understand how and/or why a Radio does not comply and is amenable to working with Respondents to find solutions to test and qualify a Radio for compatibility on the LA-RICS LMR System.

41. **QUESTION:** With respect to Section 3.8 of the RFI, this section states, "one original (1) and (1) printed copy…" This appears to indicate an original signature is required. Please confirm this requirement and provide guidance on where the signature should be placed?

    RESPONSE: A wet signature is not required, however, if a Respondent wishes to provide a wet signature, it may do so on the Cover Page and/or Corporate Overview and Executive Summary of the RFI Response.

42. **QUESTION:** When will the Authority provide trunking information so we can preprogram the Radios before submitting?

    RESPONSE: Please refer to the Response to Question No. 18 of this Addendum A.

43. **QUESTION:** If available, can the Authority provide a Motorola code plug with the TGs needed for testing for code plug creation accuracy?

RESPONSE: Please refer to the response to Question No. 18 of this Addendum A.

44. **QUESTION:** In Exhibit A (Portable Radio Requirements Matrix), Requirement I.13 requiring a hardware-based security key with the Radio programming software to program Radios? How does one respond if the Radio programming software supports hardware-based, software-based, or both mechanisms?

RESPONSE: Exhibit A (Portable Radio Requirements Matrix) is only asking to **identify** if their software has any hardware-based security key program equipment. Respondents can state how they implement their security keys as a supplemental clarification in their response.

45. **QUESTION:** Over the past three (3) years, the Los Angeles County Sheriff's Department (LASD) suggested/directed the Contract Cities obtain Radios for use on the present Analog System that also encompassed the ability to transition to the LA-RICS System when the System is deployed. A number of Contract Cities complied and have purchased Radios that adhere to the direction of LASD. Since there was no formal product acceptance required, will those Cities that purchased this product be allowed to re-program those Radios and use them on the System? Here is the criteria as prescribed by LASD:

- All new Radios that contract cities purchase must have the following features:
  1. P25 phase II trunking
  2. AES Encryption also FIPS compliant
  3. UHF (450 MHZ – 520 MHZ)
  4. UHF (700 MHZ), (Highly Recommended)

- Contract cities must provide:
  1. Encryption cable from Radio to the Motorola KVL key loader
  2. Display MDC1200 AID# on user display (Highly Recommended)

- LARICS will supply the contract cities Radio vendor:
  1. LARICS system key
  2. Trunking ID for each Radio

- Sheriff Radio Service will:
  1. Supply Radio vendor all the channel information needed to write two zones of information (current and New)
     a. Typical Current zone
        i. Lakewood Dispatch 14
        ii. Lakewood L-TAC 3
        iii. Simplex 1
        iv. A-TAC 4

v. Mutual Aids 1 thru 5

b. Typical New Zone
   i. Lakewood Dispatch 14
   ii. Lakewood L-TAC 3 (Trunk Encrypted)
   iii. Charlie DIR (Direct Encrypted)
   iv. Lakewood Metro (Trunk Encrypted)
   v. Operations DIR (Direct Encrypted)
   vi. A-TAC South (Trunk Encrypted)
   vii. South 1 (Trunk Encrypted used as an alternate A-TAC channel)
   viii. South 2 (Trunk Encrypted used as a Tactical/Utility channel)
   ix. Mutual Aids 1 thru 5
   x. Common LARICS (Trunk Encrypted)

2. Load encryption keys into supplied Radios at the Sheriff Radio Service's location.
3. Give Radio vendor enough MDC1200 AID numbers to meet city number of Radios.

RESPONSE: This is an LASD requirement to operate with them. If any entity has already procured a Radio and would like to use it on the LMR System but the Radio has not been tested and approved by LA-RICS by any entity (manufacturer or dealer), then that entity will need to submit an RFI Response and have that Radio tested and approved for use on the LMR System.

46. **QUESTION:** Should the demo equipment be submitted with the RFI Response, or should we provide "Demo equipment is standing by, ready to be shipped. Please provide an address and contact and the equipment will be shipped ASAP."

RESPONSE: Please refer to the Response to Question No. 4 of this Addendum A.

ADDITIONAL INFORMATION

The deadline to submit the initial RFI Responses has been extended to June 26, 2023, by 5:00 p.m. PST. Respondents who wish to respond to the RFI and submit Radios for testing after the initial RFI Response submission deadline may do so for as long as this RFI remains open.

As a reminder, Respondents are responsible for reviewing the RFI package in its entirety and to submit the requisite documents with its RFI Response.

If you have any questions regarding this Addendum A, contact Ms. Melissa Saradpon at (323) 881-8289 or melissa.saradpon@la-rics.org.

Sincerely,

SCOTT EDSON
EXECUTIVE DIRECTOR

Attachments

PORTABLE RADIO REQUIREMENTS MATRIX

The Los Angeles Regional Interoperable Communications System (LA-RICS) Authority (Authority) seeks to generate a list of handheld portable and mobile two-way radios and associated accessories that are compatible with the LA-RICS Land Mobile Radio (LMR) System via this Request for Information (RFI). The resultant list may be used by any Member Agency to compare and procure Portable Radios that are compatible and operate on the LMR System. Pursuant to the RFI, the Authority will test any equipment and/or software submitted for compliance with any-and-all specifications included in this Exhibit A (Portable Radio Requirements Matrix) and Exhibit B (Portable Radio Testing Criteria).

This Exhibit A (Portable Radio Requirements Matrix) shall be completed and provided for EACH proposed Portable Radio (Radio) model. Please refer to Section 3.4 (Exhibit A – Portable Radio Requirements Matrix) of the RFI, which states in relevant part:

"Where the Respondent believes that the requirement or question does not apply to a particular Radio offered by the Respondent, "Not/Applicable" should be placed in the "Response" field. Two (2) columns are provided for Respondent feedback and other information.

The "Comply" column has two purposes. First, the Authority identified certain requirements as "Mandatory" in red text to indicate that the line item is a mandatory minimum requirement for a Radio for use on the LMR System. Non-compliance with a Mandatory Requirement does not automatically disqualify a Radio from approval. The Authority would like to understand how and/or why a Radio does not comply with a particular requirement and is amenable to working with Respondents to find solutions to test and qualify a Radio for compatibility on the LA-RICS LMR System. As such, if Respondents cannot meet a "Mandatory" requirement, it should indicate so and why that is the case. Respondents are still encouraged to submit an RFI Response even if the Radio being submitted for testing and consideration in response to this RFI does not comply with the Mandatory Requirements identified in Exhibit A (Portable Radio Requirements Matrix).

If "Mandatory" is NOT indicated in a particular line item, that functionality and/or feature is NOT Mandatory. In addition, for all the questions, Respondents shall provide a "yes" or "no" response in that "Comply" column regarding the question posed for that row in the matrix.

The "Response" column shall expand the "yes" or "no" response in the "Comply" column providing clear yet concise background information. Additional specific instructions are provided in the Exhibit that will aid Respondents in describing how their Radios meet the requirements."

For each Radio Type, choose among the following types (More than one option may apply to a single Radio):

RADIO INFORMATION	DESCRIPTION
Radio Name:	
Radio Manufacturer:	
Radio Model Number:	
Radio Type:	
Radio Class {1,3}:	
Radio Frequency/Bands Supported:	
Radio Firmware/Software Version:	
Radio Processor Type and Speed:	
Radio Storage Capacity (include volatile and non-volatile storage and memory):	
Radio Dimensions (in inches):	
Radio Weight (in ounces):	
Cost of Radio (Including all functionality/features the Radio complies with pursuant to this Compliance Matrix which was completed by the Respondent)	

PORTABLE RADIO REQUIREMENTS MATRIX				
ITEM	**DESCRIPTION**	**MANDATORY (If Indicated)**	**COMPLY "YES" OR "NO"**	**RESPONSE**
A. GENERAL REQUIREMENTS				
A.1	Respondent acknowledges the LA-RICS LMR System is an APCO Project 25 (P25) Phase 1 and Phase 2 compliant system that uses a Motorola Astro P25 Multi Zone Simulcast System 7.18. In addition, LA-RICS LMR System uses an Analog Voice Simulcast Radio System LMR for mutual aid and analog communications.			
A.2	**Respondent who wishes to submit radios pursuant to this RFI has not been:** **a. Debarred within the last five (5) years by any public agency in the United States;** **b. Barred at any time, for reasons of national security, by any agency of the federal government, from bidding on a contract, participating in an auction for frequencies, or receiving a grant; or** **c. Identified at any time, as a security threat, or potential security threat, to the United States, by any agency in the federal government or any committee or subcommittee of Congress.**	Mandatory		
A.3	**All equipment being tested must be fully compatible and capable of operating on LMR System infrastructure as identified in this RFI.**	Mandatory		

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ITEM	**DESCRIPTION**	**MANDATORY (If Indicated)**	**COMPLY "YES" OR "NO"**	**RESPONSE**
A.4	**The Authority will contact Respondents to schedule delivery of the sample Radios to the Authority's Point of Contact per Section 2.3 of this RFI. Additionally, Respondents shall ~~Respondents must~~ provide, at no cost to the Authority, two (2) fully functional and compliant sample Radios including all required cables, accessories, and software necessary to allow programming and testing~~., with your RFI response.~~** Note that equipment used for testing may be damaged in the process. The Authority will not be liable or responsible for reimbursement of any costs for damaged equipment. Sample Radios and accessories shall be submitted ~~with its RFI Response~~ to Melissa Saradpon pursuant to Section 3.8 (Submission Instructions) of the RFI.	Mandatory		
A.5	Sample Radios may be tested to ensure compliance with any-and-all specifications in this RFI. The Radio may be tested, and must be fully compliant, where applicable, with the following industry standards:	Mandatory		
	a. APCO Project 25 (P25) Phase 1	Mandatory		
	b. APCO Project 25 (P25) Phase 2	Mandatory		
	c. U.S. Military MIL-STD-810G			
	d. IEC Standard 60529 IP68 Rating			
	e. TIA/EIA 603	Mandatory		
	f. TIA/EIA-102	Mandatory		
	g. FCC CFR Title 47 Part 80			
	h. FCC CFR Title 47 Part 90	Mandatory		
	i. FIPS PUB 197 AES Standard			
	j. FIPS PUB 140-3 Level 3 Standard			
	k. U.S. Dep. Of Defense WGS 84			

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ITEM	**DESCRIPTION**	**MANDATORY (If Indicated)**	**COMPLY "YES" OR "NO"**	**RESPONSE**
A.6	All technical and/or industry standards referenced in this document must refer to the most current version as defined by the relevant governing body of that standard as of the date of this RFI. All standards must be defined by the applicable governing body and should be obtained by the Respondent directly from the governing body's website or the most current documentation provided by the governing body.	Mandatory		
A.7	Radio must be certified compliant with the Department of Homeland Security (DHS) P25 Compliance Assessment Program (CAP). Respondent must provide the appropriate Declaration of Compliance and a Summary Test Report from a DHS P25 CAP accredited independent testing laboratory with this RFI response and demonstrate the following P25 operations work on the Radio:	Mandatory		
	a. P25 Phase 1 Common Air Interface Conventional Subscriber Unit Performance (P25-CAB-CAI_TEST_REQ Section 2.1.1.1).	Mandatory		
	b. P25 Phase 1 Common Air Interface Trunked Subscriber Unit Performance - FDMA (P25-CAB-CAI_TEST_REQ Section 2.1.1.2).	Mandatory		
	c. P25 Phase 2 Common Air Interface Trunked Subscriber Unit Performance - TDMA (P25-CAB-CAI_TEST_REQ Section 2.1.1.3).	Mandatory		
	d. P25 Phase 1 Common Air Interface Conventional Subscriber Unit Interoperability (Direct Mode) (P25-CAB-CAI_TEST_REQ Section 2.1.3.1).	Mandatory		
	e. P25 Phase 1 Common Air Interface Conventional Subscriber Unit Interoperability (Repeat Mode) (P25-CAB-CAI_TEST_REQ Section 2.1.3.2).	Mandatory		

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ITEM	**DESCRIPTION**	**MANDATORY (If Indicated)**	**COMPLY "YES" OR "NO"**	**RESPONSE**
A.7 (cont'd)	f. P25 Phase 1 Common Air Interface Conventional Subscriber Unit Interoperability (FNE with DMC – Repeat Mode) (P25-CAB-CAI_TEST_REQ Section2.1.3.3).	Mandatory		
	g. P25 Phase 1 Common Air Interface Trunked Subscriber Unit Interoperability - FDMA (P25-CAB-CAI_TEST_REQ Section 2.1.3.4).	Mandatory		
	h. P25 Phase 2 Common Air Interface Trunked Subscriber Unit Interoperability - TDMA (P25-CAB-CAI_TEST_REQ Section 2.1.3.5).	Mandatory		
	i. P25 Enhanced Full Radio Vocoder (IMBE and/or AMBE +2 TIA-102.BABG).	Mandatory		
	j. When optioned with P25 Advanced Encryption Standard (AES) 256 Encryption (TIA-102.CACD and CAB section 2.3.10 and FIPS PUB 197 Advanced Encryption Standard).	Mandatory, when optioned		
	k. LARICS System Registration and Site Affiliation (TIA-102.CACD Section 2.3.1 and 2.3.5).	Mandatory		
	l. LARICS Group Call (TIA-102.CACD and CAB Section 2.3.2).	Mandatory		
	m. LARICS iCall/Unit-to-Unit Call/Private Call (TIA-102.CACD and CAB Section 2.3.3).	Mandatory		
	n. LARICS Manual, Automatic and Site Adjacency Roaming (TIA-102.CACD).	Mandatory		
	o. LARICS Emergency Call Cancel and Alarm (TIA-102.CACD, CABC-C and CAB section 2.2.7, 2.3.7, 2.3.8 and 2.2.7).	Mandatory		
	p. LARICS Radio Unit Inhibit, Disable and re-enable (TIA-102.CABC-C section 2.2.20).	Mandatory		
	q. NFPA 1802			

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ITEM	**DESCRIPTION**	**MANDATORY (If Indicated)**	**COMPLY "YES" OR "NO"**	**RESPONSE**
A.8	No prototype products will be accepted. All Radios must be commercially available for immediate shipment as configured and specified in this RFI. Future planned or upcoming releases information will be acceptable, but not evaluated.	Mandatory		
A.9	Identify if there is any detailed documentation specifying all changes and/or modifications to standard product catalog equipment for the purposes of complying with any specifications or standards referenced in this RFI.			
A.10	Respondents must provide the technical specifications for the Radio and affiliated frequency bands to include:	Mandatory		
	a. Frequency Bands	Mandatory		
	b. Operating temperature	Mandatory		
	c. Transmit power	Mandatory		
	d. Receiver Sensitivity (12db SINAD TIA/EIA 603)	Mandatory		
	e. Receiver Digital Sensitivity (TIA/EIA-102)	Mandatory		
	f. Selectivity (TIA/EIA 603)	Mandatory		
	g. Digital Adjacent Channel Rejection	Mandatory		
	h. Radio Channels and Zone capacity	Mandatory		
	i. Radio Dimensions and weight	Mandatory		
	j. Frequency stability	Mandatory		
	k. Power Consumption in Transmit and in standby	Mandatory		
	l. Analog Adjacent Channel Rejection	Mandatory		
	m. Spurious Emissions	Mandatory		
	n. Spurious Response	Mandatory		
	o. Intermodulation	Mandatory		
	p. Audio interfaces and levels	Mandatory		
	q. Transmit Modulation Limiting for 12.5KHz	Mandatory		
	r. Modulation Fidelity (TIA/EIA 102A)	Mandatory		
	s. Transmit Rise Time	Mandatory		
	t. Transmit low and high-power Rating	Mandatory		

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ITEM	**DESCRIPTION**	**MANDATORY (If Indicated)**	**COMPLY "YES" OR "NO"**	**RESPONSE**
A.10 (cont'd)	u. FM Hum and Noise for 12.5KHz channels	Mandatory		
	v. Transmit Radiated Emissions	Mandatory		
	w. Transmit Emissions Designator	Mandatory		
B. HARDWARE REQUIREMENTS				
B.1	Radio housing (case) is constructed with a high quality, high impact shock-resistant and long-wearing used by public safety operators.			
B.2	Identify if the Radio is in compliance with MIL-STD-810G standards for operation in extreme and rugged environments.			
B.3	Identify if the Radio is in compliance with IEC Standard 60529 IP68 Rating immersion standards or if the Radio is water resistant (i.e. rain and water hose spray resistant).			
B.4	Identify if the Radio is a sealed internal housing, allowing it to retain its immersion and/or water-resistant rating when the outer housing is cracked or otherwise compromised.			
B.5	Identify if the Radio display has high resistance to scratching and impact.			
B.6	Identify if Radio displays are clearly legible when viewed from multiple angles.			
B.7	Identify if the Radio has a display with multi-color backlighting on its front face.			
B.8	Identify if display panels comply with all terms of Sections C (ERGONOMICS), and F (USER INTERFACE) of this Exhibit A, contained herein.			

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ITEM	**DESCRIPTION**	**MANDATORY** (If Indicated)	**COMPLY "YES" OR "NO"**	**RESPONSE**
B.9	Identify if the Radio has an integrated GPS option and/or any external GPS attachments. The GPS antenna definition must show if it is internal or external to the Radio. If Radio has GPS, the Respondent must demonstrate how it transmits GPS location data via P25 conventional and/or digital trunking-enabled communications systems. If the Radio has GPS, the Radio must demonstrate how it operates within regards to Section K (GPS SPECIFICATIONS) of this Exhibit A, contained herein.			
B.10	Identify if the Radio has an integrated Bluetooth transceiver option within its internal hardware. If so, the Respondent must provide the Bluetooth transceiver information to include use near-field out-of-band pairing for secure operation and transfer of security keys.			
B.11	If the Radio has an integrated Bluetooth, the Respondent must demonstrate how the Radio automatically and quickly it connects to the Bluetooth accessories, without a requirement for menu navigation, once initial setup is completed.			
B.12	Identify if the Radio is equipped with a tri-axis accelerometer option, the Respondent must demonstrate if the sensor can be enabled or disabled through software the Respondent. The demonstration must include integrated support for "Man Down" functionality. "Man Down" must demonstrate if it's capable of triggering emergency notification and sending user ID and GPS location over the air to the LA-RICS LMR System.			

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ITEM	**DESCRIPTION**	**MANDATORY** (If Indicated)	**COMPLY "YES" OR "NO"**	**RESPONSE**
B.13	Identify if the Radio has a remote speaker and/or microphone connector. If so, the Respondent must demonstrate how to secure and latch the assembly so it cannot be removed inadvertently. The Respondent must identify if it is equipped with a secondary fastener to secure the remote speaker-microphone.			
B.14	Identify if the Radio has options for a desktop base station, vehicle chargers, and desktop chargers. The Respondent must demonstrate how they are used and how they operate. The Respondent must demonstrate if they seat correctly and effortlessly within an appropriate desktop base station, desktop charger (120VAC) and vehicle charger (12VDC) with smart battery charging support.			
B.15	The Respondent must demonstrate what the programming template is supported by and its capabilities. (e.g. the Radio is capable of supporting a single unified programming template of no less than 3,000 combined frequencies/channels/talkgroups.).	Mandatory		
B.16	Radio hardware must be capable of operation on Frequency Division Multiple Access (FDMA), Time Division Multiple Access (TDMA), and APCO Common Air Interface (CAI) enabled systems. Radio must be fully compatible with P25 Phase 1 and Phase 2 operation. Identify if Phase 2 is an option or standard feature.	Mandatory		
B.17	Identify if the Radio has options to support 9600 baud P25 data messaging with any pre-defined data messages for a canned response. The Respondent will define their operational parameters and demonstrate how they are used.			

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ITEM	**DESCRIPTION**	**MANDATORY (If Indicated)**	**COMPLY "YES" OR "NO"**	**RESPONSE**
C. ERGONOMICS				
C.1	The Respondent will identify if the Radio's front face has a multi-color LCD display and define its operational perimeters (e.g. supports no less than four (4) lines and no less than fourteen (14) alphanumeric characters per line in addition to two (2) lines of notification icons. The front display is capable of visually notifying users of incoming calls, potential emergencies, and system events such as low battery, out-of-range).			
C.2	Identify if the Radio has options to support a back-lit front face with an alphanumeric keypad compatible and suitable for use with text messaging, channel searching, and soft key/interface operation.			
C.3	Identify where the Radio's Push-To-Talk (PTT) button is located on the Radio.			
C.4	Identify if the Radio and/or handset has an option for programmable buttons. Identify if these buttons are capable of being programmed with the following features at a minimum: squelch, keypad lock/unlock, and scan nuisance/delete.			
C.5	Radio must be equipped with a programmable talk-around/repeat-direct switch which must be easily accessible.	Mandatory		
C.6	Identify if the Radio has an internal microphone on both the front and rear panel. The Respondent will demonstrate that both microphones transmit audio with the same clarity and volume regardless of the Radio's orientation to the user.			

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ITEM	**DESCRIPTION**	**MANDATORY (If Indicated)**	**COMPLY "YES" OR "NO"**	**RESPONSE**
C.7	Respondent must identify if the Radio top panel is equipped with, all of the following:			
	a. Power/volume knob	Mandatory		
	b. Channel selector knob	Mandatory		
	c. A multifunction programmable switch with no less than three (3) positions	Mandatory		
	d. A programmable concentric switch with a minimum of two (2) positions	Mandatory		
	e. Multi-color backlit top display panel	~~Mandatory~~		
C.8	Demonstrate if the top panel display can clearly identify emergency activation button by changing the display color.			
C.9	Identify if the Radio emergency activation button is programmable with multifunction support.			
C.10	Demonstrate if the top panel knobs, buttons and switches are individually identifiable by feel. Respondent will identify these traits such as knob size, shape and texture that allow the user to identify a function by its feel.			
C.11	Demonstrate how many channels/frequencies are accessible from the top panel channel selector knob.			
C.12	Identify if the Radio top-mounted display panel offers:			
	a. User-selectable display			
	b. Programmable backlight with color selections (i.e., green, red, yellow/amber)			
	c. Line of text with alphanumeric characters capable of zone/channel information and visual notifications of incoming calls, potential emergencies, and system events (e.g., battery indicator, P25 signal strength)			

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ITEM	**DESCRIPTION**	**MANDATORY (If Indicated)**	**COMPLY "YES" OR "NO"**	**RESPONSE**
D. TRANSMISSION AND RECEPTION				
D.1	The Respondent must identify the number of Radio frequency bands the Radio is capable of operating on and identify the frequency band combination(s).	Mandatory		
	a. Single Band			
	i. VHF 136MHz – 174MHz			
	ii. UHF 380MHz – 520MHz			
	iii. 700 764-776MHz & 794-806MHz			
	iv. 800 806-825MHz & 851-870MHz			
	b. Dual Band			
	i. VHF 136MHz – 174MHz			
	ii. UHF 380MHz – 520MHz			
	iii. 700 764-776MHz & 794-806MHz			
	iv. 800 806-825MHz & 851-870MHz			
	c. All Bands			
D.2	Radio must be capable of operating on narrow (12.5 KHz) channel bandwidth during analog and digital modes, under conventional and trunked operation.	Mandatory		
D.3	Identify if the Radio is capable of operating on VHF and define minimum and maximum wattage (e.g. five (5) Watts maximum and one (1) Watt minimum transmit levels).			
D.4	Identify if the Radio is capable of UHF and define minimum and maximum wattage (e.g. four (4) Watts maximum and one (1) Watt minimum transmit levels).			

PORTABLE RADIO REQUIREMENTS MATRIX				
ITEM	**DESCRIPTION**	**MANDATORY** (If Indicated)	**COMPLY "YES" OR "NO"**	**RESPONSE**
D.5	Identify if the Radio is capable of operating on 700/800 and define minimum and maximum wattage (e.g. three (3) Watts maximum and one (1) Watt minimum transmit levels).			
D.6	Identify if the Radio is capable of operating on VHF. If so, identify the reception sensitivity under analog operation in the VHF band of at least 0.25 Uv measured conductively in accordance with TIA/EIA 603 standards under nominal conditions.			
D.7	Identify if the Radio is capable of operating on UHF. If so, identify the reception sensitivity under analog operation in the UHF band of at least 0.25 uV measured conductively in accordance with TIA/EIA 603 standards under nominal conditions.			
D.8	Identify if the Radio is capable of operating on 700/800. If so, identify the reception sensitivity under analog operation in the 700/800 band of at least 0.25 uV measured conductively in accordance with TIA/EIA 603 standards under nominal conditions.			
D.9	Identify if the Radio is capable of operating on VHF. If so, identify the reception sensitivity under digital operation in the VHF band of at least 0.25 uV measured conductively in accordance with TIA/EIA IS 102.CAAA standards under nominal conditions.			
D.10	Identify if the Radio is capable of operating on UHF. If so, identify the reception sensitivity under digital operation in the UHF band of at least 0.25 uV measured conductively in accordance with TIA/EIA IS 102.CAAA standards under nominal conditions.			

PORTABLE RADIO REQUIREMENTS MATRIX				
ITEM	**DESCRIPTION**	**MANDATORY (If Indicated)**	**COMPLY "YES" OR "NO"**	**RESPONSE**
D.11	Identify if the Radio is capable of operating on 700/800. If so, identify the reception sensitivity under digital operation in the 700/800 band of at least 0.25 uV measured conductively in accordance with TIA/EIA IS 102.CAAA standards under nominal conditions.			
D.12	Identify if the Radio is capable of operating on VHF. If so, identify if the transceiver is compliant with FCC CFR Title 47 Part 80 for Maritime Services. If so, Respondent must submit certification of compliance with this RFI response.			
E. AUDIO SPECIFICATIONS				
E.1	Provide minimum and maximum audio output power in watts.	Mandatory		
E.2	Identify if Radio is equipped with a Digital Signal Processing (DSP) algorithm designed specifically for background noise reduction.			
E.3	Identify if Radio is capable of background noise cancellation. Background noise cancellation profiles must be user selectable.			
E.4	Identify if the Radio has an automatic gain control to automatically adjust volume level to compensate for differences in voice level and operating environment.			
F. USER INTERFACE				
F.1	Identify if the Radio allows for the creation of multiple user-selectable profiles for the customization of lighting options, programmable buttons, audio levels, tones, and voice annunciations.			
F.2	Identify if the Radio alias can be user configurable via the keypad and if this feature allows for the unique identification of multiple users of the same Radio on different shifts.			

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ITEM	**DESCRIPTION**	**MANDATORY** (If Indicated)	**COMPLY "YES" OR "NO"**	**RESPONSE**
F.3	Identify if Radio is capable of an emergency activation feature. Identify if the emergency activation feature can be initiated by pressing a programmer-defined emergency button on the Radio. Activation of this feature must cause the Radio to immediately change to a pre-determined, programmer-defined analog or digital conventional channel or trunked talkgroup. The emergency transmission will use the configuration and parameters of the designated emergency channel or talkgroup, not the channel or mode of operation of the selected frequency/talkgroup prior to emergency trigger activation. The emergency activation feature must be fully functional regardless of current operating mode of the Radio (e.g., digital/analog, direct/repeated).			
F.4	Identify if Radio allows custom zone creation by the programming of designated blank zones, permitting user assignment of any accessible channel via the Radio keypad to meet each individual user's needs.			
F.5	Identify if the Radio is capable of customizable voice annunciations to provide audible announcement of, at a minimum, channel selection, direct/repeated mode, scan on/off, keypad lock on/off, and emergency activation.			
F.6	Identify if the Radio allows the user to search and select a channel or talkgroup by name with the alphanumeric keypad.			

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ITEM	**DESCRIPTION**	**MANDATORY (If Indicated)**	**COMPLY "YES" OR "NO"**	**RESPONSE**
F.7	Identify if the Radio offers a consolidated contact list and, if capable, identify how many contacts it can store with the ability to store at least five (5) different addresses (one (1) conventional unit ID, two (2) different trunking IDs, and two (2) different phone numbers) per contact. Identify and demonstrate that the contact information can be searched and retrieved.			
G. ENCRYPTION				
G.1	When optioned, Radio must be capable of supporting both software and hardware based multi-key encryption for digital communications.	Mandatory, when optioned		
G.2	Identify if the Radio meets or exceed FIPS PUB 140-2 Level 3 standards for tamper-proofing and physical security of the encryption module. If certified, the Respondent must provide certification of compliance from a National Voluntary Laboratory Accreditation Program (NVLAP) accredited laboratory with this RFI response.			
G.3	When optioned, Radio must be equipped with AES-256 encryption in accordance with FIPS PUB 197 Advanced Encryption Standard.	Mandatory, when optioned		
G.4	Identify if the Radio supports Over-The-Air Rekeying (OTAR) in accordance with TIA-102 APCO P25 standards for OTAR to allow remote refresh or replacement of encryption keys.			
G.5	Identify if the Radio allows a user-initiated OTAR keyset changeover command (e.g. allowing the user to initiate an OTAR on a Radio which has not yet received updated encryption keys).			

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G.6	Identify if the Radio is capable of the key-lost-key function to allow the user to request a new key in the event that the Unique Key Encryption Key (UKEK) has been lost.			
G.7	Identify if the Radio is capable of being configured for infinite UKEK retention.			
G.8	Identify if the Radio is capable of being configured for infinite Traffic Encryption Key (TEK) retention.			
G.9	Identify if the Radio supports P25 TIA 102.AACE Link Layer Radio authentication to prevent unauthorized cloned Radios from using the system.			
G.10	Identify if the Radio supports encrypted Radio to Radio packet data transmission and reception in accordance with FIPS PUB 197 Advanced Encryption Standard.			
H. SOFTWARE				
H.1	Radio must comply with all TIA-102 APCO P25 standards for voice and data transmission on trunking and digital systems.	Mandatory		
H.2	Radio must be compliant with P25 standard failsoft mode on the LA-RICS LMR System in the event of system component failure or degradation, without user intervention.	Mandatory		
H.3	Identify if the Radio supports user aliases and identify if they can be remotely updated.			
I. PROGRAMMING				
I.1	Identify if the programming software and Radio management software is capable of remote Radio management programming software.			

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ITEM	**DESCRIPTION**	**MANDATORY (If Indicated)**	**COMPLY "YES" OR "NO"**	**RESPONSE**
I.2	All applicable programming and Radio management software must be provided with an enterprise-wide license, allowing unrestricted and unlimited use by the agency for the full deployment lifecycle of the Radios.	Mandatory		
I.3	All applicable programming and Radio management software updates, including, but not limited to, programming interface, firmware updates, and any hotfixes must be made available by the Radio manufacturer for direct, unrestricted download to all agency's programming computers via the internet 24/7 at no additional cost to the Authority and/or agency. All updates must be made available in this way for the full deployment lifecycle of the Radio.	Mandatory		
I.4	Identify if the Radio's integrated programming and Radio management software can manage Radio templates or profiles in a database that can track each individual configuration file on a per-Radio basis.			
I.5	Identify if the Radio's integrated programming and Radio management software can allow for scheduling of updates, and allow for database reporting features, including system-generated reports on the completion status of individual Radio updates.			
I.6	All programming software must be installable and fully functional from any Authority-designated programming computer without requiring access to the internet.	Mandatory		
I.7	Identify if programming software is not restricted in by any Digital Rights Management (DRM) component irrespective of Internet connectivity.			

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ITEM	**DESCRIPTION**	**MANDATORY (If Indicated)**	**COMPLY "YES" OR "NO"**	**RESPONSE**
I.8	Programming software must be compatible with Microsoft Windows and support the latest versions to include Windows 10 and 11 (32 bit and 64 bit). Programming software must support future versions of Windows, as they become available, at no additional cost to the Authority and/or agency.	Mandatory		
I.9	Identify if the Radio's programming software allows the option to program Radios via Wi-Fi or the traditional wired direct connection method.			
I.10	Identify if programming software has an interface that can be loaded on a remote computer to allow direct connection to a PC via cable, and full programming functionality over the secure landline network.			
I.11	Identify if the Radio can be pre-configured by the Respondent to connect to a specified internal agency's Wi-Fi network and retrieve all initial programming, firmware, and setup files upon initial power up.			
I.12	Identify if the Radio can use Dynamic Host Configuration Protocol (DHCP) for Internet Protocol (IP) connections.			
I.13	Identify if the Radio programming software uses a hardware-based security key program for the Radios on LA-RICS LMR System.			
I.14	If a programming hardware-based security is required, the Respondent must provide software allowing the Authority and/or agency the ability to generate additional hardware-based security keys as needed at no additional charge.			
I.15	Programming software must be capable of managing multiple Radio templates or profiles which store Radio firmware, channel, talkgroup, and other individual Radio configuration information.	Mandatory		

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ITEM	**DESCRIPTION**	**MANDATORY (If Indicated)**	**COMPLY "YES" OR "NO"**	**RESPONSE**
I.16	Identify if the Radio programming software is capable of reading and copying Radio templates or profiles to new templates or profiles via "drag and drop" GUI functionality.			
I.17	Identify if programming software allows a template or profile to be shareable across multiple Radios and any changes to the template must be automatically applied to all affected Radios.			
I.18	Identify if the Radio programming software is capable of batch programming Radios simultaneously per programming client. Identify if the Radio programming software is capable of updates to Radio firmware, talkgroups, channels, and configuration data.			
I.19	Identify if the Radio programming software can allow the flexibility of scheduling batch programming and identify the minimum and maximum Radios per programming client. Identify if the Radio programming software allows scheduled batch programming over wireless batches in succession with no delays or incompatibilities with the LA-RICS LMR System or agency's private network WiFi.			
I.20	All Radios being programming via WiFi and/or all Radios being programmed via wireless systems must not interfere with LA-RICS LMR trunked systems operations.	Mandatory		
I.21	Identify if a Radio being programmed over wireless system can be done with no user intervention and with no key or button manipulation required on the Radio, **OR** requires user intervention (button press acknowledgement) to complete the programming. Identify if both options are available to the Radio programmer and if each is selectable on a case-by-case basis.			

PORTABLE RADIO REQUIREMENTS MATRIX				
ITEM	**DESCRIPTION**	**MANDATORY (If Indicated)**	**COMPLY "YES" OR "NO"**	**RESPONSE**
I.22	Identify if a Radio being programmed is capable of receiving Respondent firmware updates over the wireless system, and if the firmware file is fully downloaded and assembled, the Radio allows the option of prompting the user to install firmware, **OR** auto-installing firmware updates with no user intervention. Identify if both options are available to the Radio programmer and if each is selectable on a case-by-case basis.			
I.23	Identify if the Radio has programmable buttons on the Radio and if they are capable of being programmed remotely via wireless system.			
I.24	Identify if the Radio has programmable management software that is capable of communicating with the Radios over USB, Wi-Fi, and the wireless system using Radio's serial numbers.			
I.25	Identify if the Radio programming and management software database allows multiple programming clients to access the database simultaneously.			
I.26	Respondent must provide a licensed and fully functional sample copy of all Radio programming and Radio management software for the purposes of testing the software compatibility with the existing LA-RICS software and LMR System and validation of functionality in accordance with these specifications.	Mandatory		
J. TEXT MESSAGING SERVICE				
J.1	Identify if the Radio can send and receive free-form alphanumeric individual and group text messages via the alphanumeric keypad.			

PORTABLE RADIO REQUIREMENTS MATRIX				
ITEM	**DESCRIPTION**	**MANDATORY (If Indicated)**	**COMPLY "YES" OR "NO"**	**RESPONSE**
J.2	Identify if the Radio can send and receive predetermined (canned) text messages (e.g., "reroute", "arrived", "acknowledged").			
J.3	Identify if the Radio can send group messages simultaneously rather than serially (one at a time).			
J.4	Identify if the Radio is capable of automatically receiving system-generated group messages.			
J.5	Identify if the Radio can allow all message metadata and content.			
J.6	Identify if the Radio can provide an audible alert and notification icon to notify the user of a received text message or call alert page. Identify if this feature is programmer configurable and user-selectable.			
K. GPS SPECIFICATIONS				
K.1	Identify if the Radio can transmit and receive GPS coordinates over the LA-RICS LMR trunked system for mapping. If so, identify if the GPS features are in full compliance with the following industry standards:			
	a. TIA-102.BAJA-A			
	b. TIA-102.BAJB-A			
	c. TIA-102.BAJC-A			
	d. TIA-102.BAEA-C			
	e. TIA-102.BAJD			
	f. WGS 84			
K.2	Identify if the Radio is capable of allowing the transmission of GPS location services data on any or all of the following event triggers:			
	a. At a predetermined time interval			
	b. On each PTT activation			

PORTABLE RADIO REQUIREMENTS MATRIX				
ITEM	**DESCRIPTION**	**MANDATORY** (If Indicated)	**COMPLY "YES" OR "NO"**	**RESPONSE**
K.2 (cont'd)	c. On each PTT activation after a set time interval without GPS data			
	d. On emergency activation			
	e. On "Man-down" status			
	f. Periodically (short time interval)			
	g. When distance travelled exceeds a threshold since last check-in			
	h. In response to a query from the data host system (i.e., dispatcher terminal)			
	i. When crossing a host configurable boundary line			
	j. When entering a host configurable geo-fence area			
K.3	Identify if the Radio is capable of supporting dynamic GPS polling, which must allow the Radio to provide current GPS location data to the dispatcher upon their request.			
K.4	Identify if the Radio is capable of supporting GPS packet data over both digital conventional and trunked P25 systems.			
K.5	Identify if the Radio is compatible with P25 GPS standards.			
K.6	Identify if the Radio can support geo-fencing for automatic talkgroup assignment and/or system steering. Identify if geo-fencing can be configurable by the dispatcher to allow the alteration of geo-fencing assignments to deployed Radios remotely.			
K.7	Identify if geo-fencing functionality is offered by programmable notifications, display color changes, and voice announcement triggers.			

PORTABLE RADIO REQUIREMENTS MATRIX				
ITEM	**DESCRIPTION**	**MANDATORY (If Indicated)**	**COMPLY "YES" OR "NO"**	**RESPONSE**
L. ANALOG SIGNALING FORMAT				
L.1	Identify if Radio is fully capable of operating with the MDC-1200 analog signaling format. Identify if Radio is capable of encoding and decoding MDC-1200 signaling, including emergency signaling.			
L.2	Identify if Radio is capable of muting the received MDC-1200 signaling burst to prevent the tone being audible to the user.			
L.3	Identify if the Radio is capable of supporting MDC-1200 enhanced ID range. (e.g. Radio must support a five-digit decimal unit ID up to and including 65,534).			
L.4	Identify if the programming software is capable of allowing MDC ID to be entered in either decimal or hexadecimal format.			
L.5	Identify if the Radio programming software can support multiple (no fewer than five [5]) independent MDC-1200 configurations/profiles. Identify if each individual MDC-1200 configuration/profile offers the following options at a minimum:			
	a. MDC burst at key up or de-key			
	b. Configurable delay at MDC burst send			
	c. PTT ID sidetone on/off			
	d. PTT ID sidetone short/long			
	e. MDC system and acknowledge pretime			
	f. Repeater access pretime			
	g. Radio inhibit			
	h. Radio check			
	i. Canned message via MDC			

PORTABLE RADIO REQUIREMENTS MATRIX				
ITEM	**DESCRIPTION**	**MANDATORY (If Indicated)**	**COMPLY "YES" OR "NO"**	**RESPONSE**
L.5 (cont'd)	j. User ability to create an alias for MDC ID (e.g. the user can enable/disable the ID via programming software or front panel)			
M. BATTERIES				
M.1	Each Radio must be provided with two (2) Original Equipment Manufacturer (OEM) produced lithium-ion or lithium-polymer chemistry batteries. The included batteries must be rated at a minimum capacity and include batteries for an OEM high capacity.	Mandatory		
M.2	Identify if the battery assembly meets MIL-STD-810F standards for operation in extreme and rugged environments.			
M.3	Respondent must provide certification with this RFI response of the batteries operating temperature range (e.g., -30°C to +50°C).	Mandatory		
M.4	Respondent must provide certification with this RFI response of the battery's relative humidity properties (e.g., operates at 90% at +50°C for a minimum of eight (8) hours).	Mandatory		
M.5	Identify if the battery has an electrical short prevention mechanism for all charging contacts that remain visible while the battery is attached to the Radio.			
M.6	Identify if the battery includes the following:			
	a. A one (1) year manufacturer's warranty from delivery date.			
	b. If the warranty covers all manufacturer's defects and/or deficiencies of construction, including premature cell degradation, in accordance with these specifications.			

PORTABLE RADIO REQUIREMENTS MATRIX				
ITEM	**DESCRIPTION**	**MANDATORY (If Indicated)**	**COMPLY "YES" OR "NO"**	**RESPONSE**
M.6 (cont'd)	c. If the battery maintains a charge of 85% or more of nominal capacity for the first year of use, and if not is it subject to warranty replacement.			
	d. If all warranty repairs and replacements, and all associated shipping costs are borne by the Respondent.			
M.7	Identify if the battery has an internal electronic circuitry to enable intelligent battery management.			
M.8	Identify if the battery management has the following features:			
	a. Capacity monitoring			
	b. Automatic reconditioning			
	c. Charging, discharging, and reconditioning history of the battery			
	d. Over-the-air battery monitoring to provide all above information			
M.9	Identify if the battery management that can utilize a single platform for intelligent battery management.			
M.10	Identify if the battery management is Intelligent capable of communicating with an OEM manufactured smart charger which is capable of reconditioning the battery as needed to maximize battery life.			
N. REQUIRED ACCESSORIES				
N.1	Each Radio must include a compatible OEM manufactured single slot battery charger with the following features:	Mandatory		
	a. Identify if Charger is compatible with other after-market batteries			

PORTABLE RADIO REQUIREMENTS MATRIX				
ITEM	**DESCRIPTION**	**MANDATORY (If Indicated)**	**COMPLY "YES" OR "NO"**	**RESPONSE**
N.1 (cont'd)	b. Identify if Charger is compatible with standard 120V AC power			
	c. Identify if Charger includes all required cords, cables, and power supplies			
	d. Identify if Charger has an access port for computerized remote battery management			
	e. Identify if Charger allows user-selectable charging for quick, standard, or reconditioning charging modes			
	f. Identify if Charger allows user-cancellation of reconditioning charge mode once started			
	g. Identify if Charger provides status indicators for the following: power on, charging, reconditioning, battery temperature, charger malfunction, and bad battery			
	h. Identify if Charger is capable of charging the battery while it is still attached to the Radio.			
	i. Identify if Charger is capable of charging the battery while it is detached from the Radio.			
N.2	Each Radio must include a compatible OEM manufactured Remote Speaker/Microphone (RSM) with the following features:	Mandatory		
	a. Identify if RSM is corded (not cordless) and if the cord is straight or coiled, or if both are available.			
	b. Identify if RSM connector is compatible with the Radio without requiring any additional adapters			
	c. Identify if RSM has a locking feature to prevent removal without a tool			
	d. Identify if RSM is highly impact resistant			

PORTABLE RADIO REQUIREMENTS MATRIX				
ITEM	**DESCRIPTION**	**MANDATORY (If Indicated)**	**COMPLY "YES" OR "NO"**	**RESPONSE**
N.2 (cont'd)	e. Identify if RSM PTT button is made of a resistant material (e.g. a ruggedized, polymer-like substance, and not be degraded by UV radiation or environmental factors under normal operation)			
	f. Identify if RSM PTT button is easily accessible and located on the left side panel when looking at the face of the RSM			
	g. Identify if RSM includes a replaceable rotating clip that allows attachment to a uniform epaulet			
	h. Identify if RSM includes a non-threaded 3.5mm earphone jack with attached cover			
N.3	Each Radio must include a compatible OEM manufactured antenna for the appropriate banded Radio (e.g. single or multi-band antenna) with the following features:	Mandatory		
	a. Antenna must support all frequencies and Radio ranges listed within this RFI			
	b. Antenna must be engineered for maximum performance on single or multi-band Radios in the VHF/UHF/700/800MHz & GPS Radio spectrums			
	c. Antenna connector must be compatible with the Radio without any additional adapters			
	d. Antenna sheathing must be ruggedized material			
	e. Antenna must not be rigid and must be the most flexible variety compatible for use in accordance with the above requirements			
N.4	Identify if each Radio includes a compatible OEM manufactured holster for carrying the Radio attached to a duty belt. Identify if the belt holster includes the following features:			

PORTABLE RADIO REQUIREMENTS MATRIX				
ITEM	**DESCRIPTION**	**MANDATORY (If Indicated)**	**COMPLY "YES" OR "NO"**	**RESPONSE**
N.4 (cont'd)	a. Identify if holster is constructed of leather or of a ruggedized, polymer-like substance			
	b. Identify if holster holds the Radio in place by friction fit without requiring a holding strap			
	c. Identify if holster is attachable to a belt by means of an included detachable belt clip			
	d. Identify if Radio side panel controls is easily accessible while in the holster			
	e. Identify if holster allows the Radio to be easily attached or removed without causing the RSM to loosen or detach from the Radio			
O. WARRANTY				
O.1	Identify if Radio includes a Warranty as follows:			
	a. One (1) year manufacturer's warranty.			
	b. Identify if Warranty covers all manufacturer's defects and/or deficiencies of construction.			
	c. Identify if all warranty repairs and replacements, and all associated shipping costs are borne by Respondent.			
O.2	Identify if Respondent provides as-needed direct telephone access to manufacturer's factory technical staff, without requiring intermediary (call center) technical support escalation, to address any emergency Radio issues or software bugs that may impact first responder safety. Identify if this support is provided, at a minimum, without restriction during manufacturer's normal business hours, with no additional costs.			

PORTABLE RADIO TESTING CRITERIA

The Los Angeles Regional Interoperable Communications System (LA-RICS) Authority (Authority) seeks to generate a list of handheld portable and mobile two-way radios and associated accessories that are compatible with the LA-RICS Land Mobile Radio (LMR) System via this Request for Information (RFI). The resultant list may be used by any Member Agency to compare and procure Portable Radios that are compatible and operate on the LMR System. Pursuant to the RFI, the Authority will test any equipment and/or software submitted for compliance with any-and-all specifications by using the testing criteria and parameters in this Exhibit B, Portable Radio Testing Criteria, whereby each Radio will be demonstrated, inspected, analyzed, and tested against.

PORTABLE RADIO TESTING CRITERIA		
ITEM	**DESCRIPTION**	**TEST METHOD**
A. GENERAL REQUIREMENTS		
A.1	Respondent acknowledges the LA-RICS LMR System is an APCO Project 25 (P25) Phase 1 and Phase 2 compliant system that uses a Motorola Astro P25 Multi Zone Simulcast System 7.18. In addition, LA-RICS LMR System uses an Analog Voice Simulcast Radio System LMR for mutual aid and analog communications.	Respondent Declaration
A.2	**Respondent who wishes to submit radios pursuant to this RFI has not been:** **a. Debarred within the last five (5) years by any public agency in the United States;** **b. Barred at any time, for reasons of national security, by any agency of the federal government, from bidding on a contract, participating in an auction for frequencies, or receiving a grant; or** **c. Identified at any time, as a security threat, or potential security threat, to the United States, by any agency in the federal government or any committee or subcommittee of Congress.**	Respondent Declaration
A.3	**All equipment being tested must be fully compatible and capable of operating on LMR System infrastructure as identified in this RFI.**	Respondent Declaration

PORTABLE RADIO TESTING CRITERIA		
ITEM	**DESCRIPTION**	**TEST METHOD**
A.4	**The Authority will contact Respondents to schedule delivery of the sample Radios to the Authority's Point of Contact per Section 2.3 of this RFI. Additionally, Respondents shall ~~Respondents must~~ provide, at no cost to the Authority, two (2) fully functional and compliant sample Radios including all required cables, accessories, and software necessary to allow programming and testing~~., with your RFI response~~.** Note that equipment used for testing may be damaged in the process. The Authority will not be liable or responsible for reimbursement of any costs for damaged equipment. Sample Radios and accessories shall be submitted ~~with its RFI Response~~ to Melissa Saradpon pursuant to Section 3.8 (Submission Instructions) of the RFI.	Inspection
A.5	Sample Radios may be tested to ensure compliance with any-and-all specifications in this RFI. The Radio may be tested, and must be fully compliant, where applicable, with the following industry standards:	
	a. APCO Project 25 (P25) Phase 1	Compliance Certificate Inspection
	b. APCO Project 25 (P25) Phase 2	Compliance Certificate Inspection
	c. U.S. Military MIL-STD-810G	Compliance Certificate Inspection
	d. IEC Standard 60529 IP68 Rating	Compliance Certificate Inspection
	e. TIA/EIA 603	Compliance Certificate Inspection
	f. TIA/EIA-102	Compliance Certificate Inspection
	g. FCC CFR Title 47 Part 80	Compliance Certificate Inspection
	h. FCC CFR Title 47 Part 90	Compliance Certificate Inspection
	i. FIPS PUB 197 AES Standard	Compliance Certificate Inspection
	j. FIPS PUB 140-3 Level 3 Standard	Compliance Certificate Inspection
	k. U.S. Dep. Of Defense WGS 84	Compliance Certificate Inspection

PORTABLE RADIO TESTING CRITERIA		
ITEM	**DESCRIPTION**	**TEST METHOD**
A.6	All technical and/or industry standards referenced in this document must refer to the most current version as defined by the relevant governing body of that standard as of the date of this RFI. All standards must be defined by the applicable governing body and should be obtained by the Respondent directly from the governing body's website or the most current documentation provided by the governing body.	Respondent Declaration
A.7	Radio must be certified compliant with the Department of Homeland Security (DHS) P25 Compliance Assessment Program (CAP). Respondent must provide the appropriate Declaration of Compliance and a Summary Test Report from a DHS P25 CAP accredited independent testing laboratory with this RFI response and demonstrate the following P25 operations work on the Radio:	
	a. P25 Phase 1 Common Air Interface Conventional Subscriber Unit Performance (P25-CAB-CAI_TEST_REQ Section 2.1.1.1).	Compliance Certificate Inspection
	b. P25 Phase 1 Common Air Interface Trunked Subscriber Unit Performance - FDMA (P25-CAB-CAI_TEST_REQ Section 2.1.1.2).	Compliance Certificate Inspection
	c. P25 Phase 2 Common Air Interface Trunked Subscriber Unit Performance - TDMA (P25-CAB-CAI_TEST_REQ Section 2.1.1.3).	Compliance Certificate Inspection
	d. P25 Phase 1 Common Air Interface Conventional Subscriber Unit Interoperability (Direct Mode) (P25-CAB-CAI_TEST_REQ Section 2.1.3.1).	Compliance Certificate Inspection
	e. P25 Phase 1 Common Air Interface Conventional Subscriber Unit Interoperability (Repeat Mode) (P25-CAB-CAI_TEST_REQ Section 2.1.3.2).	Compliance Certificate Inspection
	f. P25 Phase 1 Common Air Interface Conventional Subscriber Unit Interoperability (FNE with DMC – Repeat Mode) (P25-CAB-CAI_TEST_REQ Section2.1.3.3).	Compliance Certificate Inspection
	g. P25 Phase 1 Common Air Interface Trunked Subscriber Unit Interoperability - FDMA (P25-CAB-CAI_TEST_REQ Section 2.1.3.4).	Compliance Certificate Inspection
	h. P25 Phase 2 Common Air Interface Trunked Subscriber Unit Interoperability - TDMA (P25-CAB-CAI_TEST_REQ Section 2.1.3.5).	Compliance Certificate Inspection
	i. P25 Enhanced Full Radio Vocoder (IMBE and/or AMBE +2 TIA-102.BABG).	Compliance Certificate Inspection
	j. When optioned with P25 Advanced Encryption Standard (AES) 256 Encryption (TIA-102.CACD and CAB section 2.3.10 and FIPS PUB 197 Advanced Encryption Standard).	Demonstration

PORTABLE RADIO TESTING CRITERIA		
ITEM	**DESCRIPTION**	**TEST METHOD**
A.7 (cont'd)	k. LARICS System Registration and Site Affiliation (TIA-102.CACD Section 2.3.1 and 2.3.5).	Demonstration
	l. LARICS Group Call (TIA-102.CACD and CAB Section 2.3.2).	Demonstration
	m. LARICS iCall/Unit-to-Unit Call/Private Call (TIA-102.CACD and CAB Section 2.3.3).	Demonstration
	n. LARICS Manual, Automatic and Site Adjacency Roaming (TIA-102.CACD).	Demonstration
	o. LARICS Emergency Call Cancel and Alarm (TIA-102.CACD, CABC-C and CAB section 2.2.7, 2.3.7, 2.3.8 and 2.2.7).	Demonstration
	p. LARICS Radio Unit Inhibit, Disable and re-enable (TIA-102.CABC-C section 2.2.20).	Demonstration
	q. NFPA 1802	
A.8	No prototype products will be accepted. All Radios must be commercially available for immediate shipment as configured and specified in this RFI. Future planned or upcoming releases information will be acceptable, but not evaluated.	Respondent Declaration
A.9	Identify if there is any detailed documentation specifying all changes and/or modifications to standard product catalog equipment for the purposes of complying with any specifications or standards referenced in this RFI.	Inspection
A.10	Respondents must provide the technical specifications for the Radio and affiliated frequency bands to include:	Inspection
	a. Frequency Bands	Demonstration
	b. Operating temperature	Demonstration
	c. Transmit power	Demonstration
	d. Receiver Sensitivity (12db SINAD TIA/EIA 603)	Demonstration
	e. Receiver Digital Sensitivity (TIA/EIA-102)	Demonstration
	f. Selectivity (TIA/EIA 603)	Demonstration
	g. Digital Adjacent Channel Rejection	Demonstration
	h. Radio Channels and Zone capacity	Demonstration

PORTABLE RADIO TESTING CRITERIA		
ITEM	**DESCRIPTION**	**TEST METHOD**
A.10 (cont'd)	i. Radio Dimensions and weight	Demonstration
	j. Frequency stability	Demonstration
	k. Power Consumption in Transmit and in standby	Demonstration
	l. Analog Adjacent Channel Rejection	Demonstration
	m. Spurious Emissions	Demonstration
	n. Spurious Response	Demonstration
	o. Intermodulation	Demonstration
	p. Audio interfaces and levels	Demonstration
	q. Transmit Modulation Limiting for 12.5KHz	Demonstration
	r. Modulation Fidelity (TIA/EIA 102A)	Demonstration
	s. Transmit Rise Time	Demonstration
	t. Transmit low and high-power Rating	Demonstration
	u. FM Hum and Noise for 12.5KHz channels	Demonstration
	v. Transmit Radiated Emissions	Demonstration
	w. Transmit Emissions Designator	Demonstration
B. HARDWARE REQUIREMENTS		
B.1	Radio housing (case) is constructed with a high quality, high impact shock-resistant and long-wearing used by public safety operators.	Inspection
B.2	Identify if the Radio is in compliance with MIL-STD-810G standards for operation in extreme and rugged environments.	Demonstration
B.3	Identify if the Radio is in compliance with IEC Standard 60529 IP68 Rating immersion standards or if the Radio is water resistant (i.e. rain and water hose spray resistant).	Demonstration

PORTABLE RADIO TESTING CRITERIA		
ITEM	**DESCRIPTION**	**TEST METHOD**
B.4	Identify if the Radio is a sealed internal housing, allowing it to retain its immersion and/or water-resistant rating when the outer housing is cracked or otherwise compromised.	Inspection
B.5	Identify if the Radio display has high resistance to scratching and impact.	Demonstration
B.6	Identify if Radio displays are clearly legible when viewed from multiple angles.	Inspection
B.7	Identify if the Radio has a display with multi-color backlighting on its front face.	Inspection
B.8	Identify if display panels comply with all terms of Sections C (ERGONOMICS), and F (USER INTERFACE) of Exhibit A, contained herein.	Inspection
B.9	Identify if the Radio has an integrated GPS option and/or any external GPS attachments. The GPS antenna definition must show if it is internal or external to the Radio. If Radio has GPS, the Respondent must demonstrate how it transmits GPS location data via P25 conventional and/or digital trunking-enabled communications systems. If the Radio has GPS, the Radio must demonstrate how it operates within regards to Section K (GPS SPECIFICATIONS) of this Exhibit A, contained herein.	Inspection / Testing / Analysis
B.10	Identify if the Radio has an integrated Bluetooth transceiver option within its internal hardware. If so, the Respondent must provide the Bluetooth transceiver information to include use near-field out-of-band pairing for secure operation and transfer of security keys.	Inspection / Demonstration / Analysis
B.11	If the Radio has an integrated Bluetooth, the Respondent must demonstrate how the Radio automatically and quickly it connects to the Bluetooth accessories, without a requirement for menu navigation, once initial setup is completed.	Demonstration
B.12	Identify if the Radio is equipped with a tri-axis accelerometer option, the Respondent must demonstrate if the sensor can be enabled or disabled through software the Respondent. The demonstration must include integrated support for “Man Down” functionality. “Man Down” must demonstrate if it’s capable of triggering emergency notification and sending user ID and GPS location over the air to the LA-RICS LMR System.	Demonstration

PORTABLE RADIO TESTING CRITERIA		
ITEM	**DESCRIPTION**	**TEST METHOD**
B.13	Identify if the Radio has a remote speaker and/or microphone connector. If so, the Respondent must demonstrate how to secure and latch the assembly so it cannot be removed inadvertently. The Respondent must identify if it is equipped with a secondary fastener to secure the remote speaker-microphone.	Inspection
B.14	Identify if the Radio has options for a desktop base station, vehicle chargers, and desktop chargers. The Respondent must demonstrate how they are used and how they operate. The Respondent must demonstrate if they seat correctly and effortlessly within an appropriate desktop base station, desktop charger (120VAC) and vehicle charger (12VDC) with smart battery charging support.	Demonstration
B.15	The Respondent must demonstrate what the programming template is supported by and its capabilities. (e.g. the Radio is capable of supporting a single unified programming template of no less than 3,000 combined frequencies/channels/talkgroups.).	Demonstration
B.16	Radio hardware must be capable of operation on Frequency Division Multiple Access (FDMA), Time Division Multiple Access (TDMA), and APCO Common Air Interface (CAI) enabled systems. Radio must be fully compatible with P25 Phase 1 and Phase 2 operation. Identify if Phase 2 is an option or standard feature.	Demonstration
B.17	Identify if the Radio has options to support 9600 baud P25 data messaging with any pre-defined data messages for a canned Identify if the Radio has options to support 9600 baud P25 data messaging with any pre-defined data messages for a canned response. The Respondent will define their operational parameters and demonstrate how they are used.	Demonstration
C. ERGONOMICS		
C.1	The Respondent will identify if the Radio's front face has a multi-color LCD display and define its operational perimeters (e.g. supports no less than four (4) lines and no less than fourteen (14) alphanumeric characters per line in addition to two (2) lines of notification icons. The front display is capable of visually notifying users of incoming calls, potential emergencies, and system events such as low battery, out-of-range).	Inspection / Demonstration
C.2	Identify if the Radio has options to support a back-lit front face with an alphanumeric keypad compatible and suitable for use with text messaging, channel searching, and soft key/interface operation.	Inspection / Demonstration

PORTABLE RADIO TESTING CRITERIA		
ITEM	**DESCRIPTION**	**TEST METHOD**
C.3	Identify where the Radio's Push-To-Talk (PTT) button is located on the Radio.	Inspection
C.4	Identify if the Radio and/or handset has an option for programmable buttons. Identify if these buttons are capable of being programmed with the following features at a minimum: squelch, keypad lock/unlock, and scan nuisance/delete.	Inspection / Demonstration
C.5	Radio must be equipped with a programmable talk-around/repeat-direct switch which must be easily accessible.	Demonstration
C.6	Identify if the Radio has an internal microphone on both the front and rear panel. The Respondent will demonstrate that both microphones transmit audio with the same clarity and volume regardless of the Radio's orientation to the user.	Inspection / Demonstration
C.7	Respondent must identify if the Radio top panel is equipped with, all of the following:	
	a. Power/volume knob	Inspection
	b. Channel selector knob	Inspection
	c. A multifunction programmable switch with no less than three (3) positions	Inspection / Demonstration
	d. A programmable concentric switch with a minimum of two (2) positions	Inspection
	e. Multi-color backlit top display panel	Demonstration
C.8	Demonstrate if the top panel display can clearly identify emergency activation button by changing the display color.	Inspection
C.9	Identify if the Radio emergency activation button is programmable with multifunction support.	Demonstration
C.10	Demonstrate if the top panel knobs, buttons and switches are individually identifiable by feel. Respondent will identify these traits such as knob size, shape and texture that allow the user to identify a function by its feel.	Inspection / Demonstration
C.11	Demonstrate how many channels/frequencies are accessible from the top panel channel selector knob.	Demonstration
C.12	Identify if the Radio top-mounted display panel offers:	

PORTABLE RADIO TESTING CRITERIA		
ITEM	**DESCRIPTION**	**TEST METHOD**
C.12 (cont'd)	a. User-selectable display	Demonstration
	b. Programmable backlight with color selections (i.e., green, red, yellow/amber)	Demonstration
	c. Line of text with alphanumeric characters capable of zone/channel information and visual notifications of incoming calls, potential emergencies, and system events (e.g., battery indicator, P25 signal strength).	Demonstration
D. TRANSMISSION AND RECEPTION		
D.1	The Respondent must identify the number of Radio frequency bands the Radio is capable of operating on and identify the frequency band combination(s).	
	a. **Single Band**	Testing / Analysis
	i. VHF 136MHz – 174MHz	Testing / Analysis
	ii. UHF 380MHz – 520MHz	Testing / Analysis
	iii. 700 764-776MHz & 794-806MHz	Testing / Analysis
	iv. 800 806-825MHz & 851-870MHz	Testing / Analysis
	b. **Dual Band**	Testing / Analysis
	i. VHF 136MHz – 174MHz	Testing / Analysis
	ii. UHF 380MHz – 520MHz	Testing / Analysis
	iii. 700 764-776MHz & 794-806MHz	Testing / Analysis
	iv. 800 806-825MHz & 851-870MHz	Testing / Analysis
	c. **All Bands**	Testing / Analysis
D.2	Radio must be capable of operating on narrow (12.5 KHz) channel bandwidth during analog and digital modes, under conventional and trunked operation.	Testing / Analysis
D.3	Identify if the Radio is capable of operating on VHF and define minimum and maximum wattage (e.g. five (5) Watts maximum and one (1) Watt minimum transmit levels).	Testing / Analysis

PORTABLE RADIO TESTING CRITERIA		
ITEM	**DESCRIPTION**	**TEST METHOD**
D.4	Identify if the Radio is capable of UHF and define minimum and maximum wattage (e.g. four (4) Watts maximum and one (1) Watt minimum transmit levels).	Testing / Analysis
D.5	Identify if the Radio is capable of operating on 700/800 and define minimum and maximum wattage (e.g. three (3) Watts maximum and one (1) Watt minimum transmit levels).	Testing / Analysis
D.6	Identify if the Radio is capable of operating on VHF. If so, identify the reception sensitivity under analog operation in the VHF band of at least 0.25 Uv measured conductively in accordance with TIA/EIA 603 standards under nominal conditions.	Testing / Analysis
D.7	Identify if the Radio is capable of operating on UHF. If so, identify the reception sensitivity under analog operation in the UHF band of at least 0.25 uV measured conductively in accordance with TIA/EIA 603 standards under nominal conditions.	Testing / Analysis
D.8	Identify if the Radio is capable of operating on 700/800. If so, identify the reception sensitivity under analog operation in the 700/800 band of at least 0.25 uV measured conductively in accordance with TIA/EIA 603 standards under nominal conditions.	Testing / Analysis
D.9	Identify if the Radio is capable of operating on VHF. If so, identify the reception sensitivity under digital operation in the VHF band of at least 0.25 uV measured conductively in accordance with TIA/EIA IS 102.CAAA standards under nominal conditions.	Testing / Analysis
D.10	Identify if the Radio is capable of operating on UHF. If so, identify the reception sensitivity under digital operation in the UHF band of at least 0.25 uV measured conductively in accordance with TIA/EIA IS 102.CAAA standards under nominal conditions.	Testing / Analysis
D.11	Identify if the Radio is capable of operating on 700/800. If so, identify the reception sensitivity under digital operation in the 700/800 band of at least 0.25 uV measured conductively in accordance with TIA/EIA IS 102.CAAA standards under nominal conditions.	Testing / Analysis
D.12	Identify if the Radio is capable of operating on VHF. If so, identify if the transceiver is compliant with FCC CFR Title 47 Part 80 for Maritime Services. If so, Respondent must submit certification of compliance with this RFI response.	Testing / Analysis

PORTABLE RADIO TESTING CRITERIA		
ITEM	**DESCRIPTION**	**TEST METHOD**
E. AUDIO SPECIFICATIONS		
E.1	Provide minimum and maximum audio output power in watts.	Testing / Analysis
E.2	Identify if Radio is equipped with a Digital Signal Processing (DSP) algorithm designed specifically for background noise reduction.	Demonstration
E.3	Identify if Radio is capable of background noise cancellation. Background noise cancellation profiles must be user selectable.	Demonstration
E.4	Identify if the Radio has an automatic gain control to automatically adjust volume level to compensate for differences in voice level and operating environment.	Demonstration
F. USER INTERFACE		
F.1	Identify if the Radio allows for the creation of multiple user-selectable profiles for the customization of lighting options, programmable buttons, audio levels, tones, and voice annunciations.	Demonstration
F.2	Identify if the Radio alias can be user configurable via the keypad and if this feature allows for the unique identification of multiple users of the same Radio on different shifts.	Demonstration
F.3	Identify if Radio is capable of an emergency activation feature. Identify if the emergency activation feature can be initiated by pressing a programmer-defined emergency button on the Radio. Activation of this feature must cause the Radio to immediately change to a pre-determined, programmer-defined analog or digital conventional channel or trunked talkgroup. The emergency transmission will use the configuration and parameters of the designated emergency channel or talkgroup, not the channel or mode of operation of the selected frequency/talkgroup prior to emergency trigger activation. The emergency activation feature must be fully functional regardless of current operating mode of the Radio (e.g., digital/analog, direct/repeated).	Demonstration
F.4	Identify if Radio allows custom zone creation by the programming of designated blank zones, permitting user assignment of any accessible channel via the Radio keypad to meet each individual user's needs.	Demonstration
F.5	Identify if the Radio is capable of customizable voice annunciations to provide audible announcement of, at a minimum, channel selection, direct/repeated mode, scan on/off, keypad lock on/off, and emergency activation.	Demonstration

PORTABLE RADIO TESTING CRITERIA		
ITEM	**DESCRIPTION**	**TEST METHOD**
F.6	Identify if the Radio allows the user to search and select a channel or talkgroup by name with the alphanumeric keypad.	Demonstration
F.7	Identify if the Radio offers a consolidated contact list and, if capable, identify how many contacts it can store with the ability to store at least five (5) different addresses (one (1) conventional unit ID, two (2) different trunking IDs, and two (2) different phone numbers) per contact. Identify and demonstrate that the contact information can be searched and retrieved.	Demonstration
G. ENCRYPTION		
G.1	When optioned, Radio must be capable of supporting both software and hardware based multi-key encryption for digital communications.	Demonstration
G.2	Identify if the Radio meets or exceed FIPS PUB 140-2 Level 3 standards for tamper-proofing and physical security of the encryption module. If certified, the Respondent must provide certification of compliance from a National Voluntary Laboratory Accreditation Program (NVLAP) accredited laboratory with this RFI response.	Compliance Certificate Inspection
G.3	When optioned, Radio must be equipped with AES-256 encryption in accordance with FIPS PUB 197 Advanced Encryption Standard.	Demonstration
G.4	Identify if the Radio supports Over-The-Air Rekeying (OTAR) in accordance with TIA-102 APCO P25 standards for OTAR to allow remote refresh or replacement of encryption keys.	Demonstration
G.5	Identify if the Radio allows a user-initiated OTAR keyset changeover command (e.g. allowing the user to initiate an OTAR on a Radio which has not yet received updated encryption keys).	Demonstration
G.6	Identify if the Radio is capable of the key-lost-key function to allow the user to request a new key in the event that the Unique Key Encryption Key (UKEK) has been lost.	Demonstration
G.7	Identify if the Radio is capable of being configured for infinite UKEK retention.	Demonstration
G.8	Identify if the Radio is capable of being configured for infinite Traffic Encryption Key (TEK) retention.	Demonstration
G.9	Identify if the Radio supports P25 TIA 102.AACE Link Layer Radio authentication to prevent unauthorized cloned Radios from using the system.	Demonstration

PORTABLE RADIO TESTING CRITERIA		
ITEM	**DESCRIPTION**	**TEST METHOD**
G.10	Identify if the Radio supports encrypted Radio to Radio packet data transmission and reception in accordance with FIPS PUB 197 Advanced Encryption Standard.	Demonstration
H. SOFTWARE		
H.1	Radio must comply with all TIA-102 APCO P25 standards for voice and data transmission on trunking and digital systems.	Respondent Declaration
H.2	Radio must be compliant with P25 standard failsoft mode on the LA-RICS LMR System in the event of system component failure or degradation, without user intervention.	Demonstration
H.3	Identify if the Radio supports user aliases and identify if they can be remotely updated.	Demonstration
I. PROGRAMMING		
I.1	Identify if the programming software and Radio management software is capable of remote Radio management programming software.	Testing / Analysis
I.2	All applicable programming and Radio management software must be provided with an enterprise-wide license, allowing unrestricted and unlimited use by the agency for the full deployment lifecycle of the Radios.	Inspection
I.3	All applicable programming and Radio management software updates, including, but not limited to, programming interface, firmware updates, and any hotfixes must be made available by the Radio manufacturer for direct, unrestricted download to all agency's programming computers via the internet 24/7 at no additional cost to the Authority and/or agency. All updates must be made available in this way for the full deployment lifecycle of the Radio.	Inspection
I.4	Identify if the Radio's integrated programming and Radio management software can manage Radio templates or profiles in a database that can track each individual configuration file on a per-Radio basis.	Testing / Analysis
I.5	Identify if the Radio's integrated programming and Radio management software can allow for scheduling of updates, and allow for database reporting features, including system-generated reports on the completion status of individual Radio updates.	Testing / Analysis

PORTABLE RADIO TESTING CRITERIA		
ITEM	**DESCRIPTION**	**TEST METHOD**
I.6	All programming software must be installable and fully functional from any Authority-designated programming computer without requiring access to the internet.	Testing / Analysis
I.7	Identify if programming software is not restricted in by any Digital Rights Management (DRM) component irrespective of Internet connectivity.	Testing / Analysis
I.8	Programming software must be compatible with Microsoft Windows and support the latest versions to include Windows 10 and 11 (32 bit and 64 bit). Programming software must support future versions of Windows, as they become available, at no additional cost to the Authority and/or agency.	Testing / Analysis
I.9	Identify if the Radio's programming software allows the option to program Radios via Wi-Fi or the traditional wired direct connection method.	Demonstration
I.10	Identify if programming software has an interface that can be loaded on a remote computer to allow direct connection to a PC via cable, and full programming functionality over the secure landline network.	Demonstration
I.11	Identify if the Radio can be pre-configured by the Respondent to connect to a specified internal agency's Wi-Fi network and retrieve all initial programming, firmware, and setup files upon initial power up.	Demonstration
I.12	Identify if the Radio can use Dynamic Host Configuration Protocol (DHCP) for Internet Protocol (IP) connections.	Testing / Analysis
I.13	Identify if the Radio programming software uses a hardware-based security key program for the Radios on LA-RICS LMR System.	Testing / Analysis
I.14	If a programming hardware-based security is required, the Respondent must provide software allowing the Authority and/or agency the ability to generate additional hardware-based security keys as needed at no additional charge.	Testing / Analysis
I.15	Programming software must be capable of managing multiple Radio templates or profiles which store Radio firmware, channel, talkgroup, and other individual Radio configuration information.	Testing / Analysis

PORTABLE RADIO TESTING CRITERIA		
ITEM	**DESCRIPTION**	**TEST METHOD**
I.16	Identify if the Radio programming software is capable of reading and copying Radio templates or profiles to new templates or profiles via “drag and drop” GUI functionality.	Demonstration
I.17	Identify if programming software allows a template or profile to be shareable across multiple Radios and any changes to the template must be automatically applied to all affected Radios.	Testing / Analysis
I.18	Identify if the Radio programming software is capable of batch programming Radios simultaneously per programming client. Identify if the Radio programming software is capable of updates to Radio firmware, talkgroups, channels, and configuration data.	Testing / Analysis
I.19	Identify if the Radio programming software can allow the flexibility of scheduling batch programming and identify the minimum and maximum Radios per programming client. Identify if the Radio programming software allows scheduled batch programming over wireless batches in succession with no delays or incompatibilities with the LA-RICS LMR System or agency’s private network WiFi.	Testing / Analysis
I.20	All Radios being programming via WiFi and/or all Radios being programmed via wireless systems must not interfere with LA-RICS LMR trunked systems operations.	Testing / Analysis
I.21	Identify if a Radio being programmed over wireless system can be done with no user intervention and with no key or button manipulation required on the Radio, **OR** requires user intervention (button press acknowledgement) to complete the programming. Identify if both options are available to the Radio programmer and if each is selectable on a case-by-case basis.	Demonstration
I.22	Identify if a Radio being programmed is capable of receiving Respondent firmware updates over the wireless system, and if the firmware file is fully downloaded and assembled, the Radio allows the option of prompting the user to install firmware, **OR** auto-installing firmware updates with no user intervention. Identify if both options are available to the Radio programmer and if each is selectable on a case-by-case basis.	Demonstration
I.23	Identify if the Radio has programmable buttons on the Radio and if they are capable of being programmed remotely via wireless system.	Demonstration
I.24	Identify if the Radio has programmable management software that is capable of communicating with the Radios over USB, Wi-Fi, and the wireless system using Radio’s serial numbers.	Demonstration

PORTABLE RADIO TESTING CRITERIA		
ITEM	**DESCRIPTION**	**TEST METHOD**
I.25	Identify if the Radio programming and management software database allows multiple programming clients to access the database simultaneously.	Demonstration
I.26	Respondent must provide a licensed and fully functional sample copy of all Radio programming and Radio management software for the purposes of testing the software compatibility with the existing LA-RICS software and LMR System and validation of functionality in accordance with these specifications.	Demonstration
J. TEXT MESSAGING SERVICE		
J.1	Identify if the Radio can send and receive free-form alphanumeric individual and group text messages via the alphanumeric keypad.	Demonstration
J.2	Identify if the Radio can send and receive predetermined (canned) text messages (e.g., “reroute”, “arrived”, “acknowledged”).	Demonstration
J.3	Identify if the Radio can send group messages simultaneously rather than serially (one at a time).	Demonstration
J.4	Identify if the Radio is capable of automatically receiving system-generated group messages.	Demonstration
J.5	Identify if the Radio can allow all message metadata and content.	Demonstration
J.6	Identify if the Radio can provide an audible alert and notification icon to notify the user of a received text message or call alert page. Identify if this feature is programmer configurable and user-selectable.	Demonstration / Testing / Analysis
K. GPS SPECIFICATIONS		
K.1	Identify if the Radio can transmit and receive GPS coordinates over the LA-RICS LMR trunked system for mapping. If so, identify if the GPS features are in full compliance with the following industry standards:	
	a. TIA-102.BAJA-A	Compliance Certificate Inspection
	b. TIA-102.BAJB-A	Compliance Certificate Inspection
	c. TIA-102.BAJC-A	Compliance Certificate Inspection

PORTABLE RADIO TESTING CRITERIA		
ITEM	**DESCRIPTION**	**TEST METHOD**
K.1 (cont'd)	d. TIA-102.BAEA-C	Compliance Certificate Inspection
	e. TIA-102.BAJD	Compliance Certificate Inspection
	f. WGS 84	Compliance Certificate Inspection
K.2	Identify if the Radio is capable of allowing the transmission of GPS location services data on any or all of the following event triggers:	
	a. At a predetermined time interval	Compliance Certificate Inspection
	b. On each PTT activation	Compliance Certificate Inspection
	c. On each PTT activation after a set time interval without GPS data	Compliance Certificate Inspection
	d. On emergency activation	Compliance Certificate Inspection
	e. On "Man-down" status	Compliance Certificate Inspection
	f. Periodically (short time interval)	Compliance Certificate Inspection
	g. When distance travelled exceeds a threshold since last check-in	Compliance Certificate Inspection
	h. In response to a query from the data host system (i.e., dispatcher terminal)	Compliance Certificate Inspection
	i. When crossing a host configurable boundary line	Compliance Certificate Inspection
	j. When entering a host configurable geo-fence area	Compliance Certificate Inspection
K.3	Identify if the Radio is capable of supporting dynamic GPS polling, which must allow the Radio to provide current GPS location data to the dispatcher upon their request.	Compliance Certificate Inspection
K.4	Identify if the Radio is capable of supporting GPS packet data over both digital conventional and trunked P25 systems.	Compliance Certificate Inspection
K.5	Identify if the Radio is compatible with P25 GPS standards.	Compliance Certificate Inspection
K.6	Identify if the Radio can support geo-fencing for automatic talkgroup assignment and/or system steering. Identify if geo-fencing can be configurable by the dispatcher to allow the alteration of geo-fencing assignments to deployed Radios remotely.	Demonstration

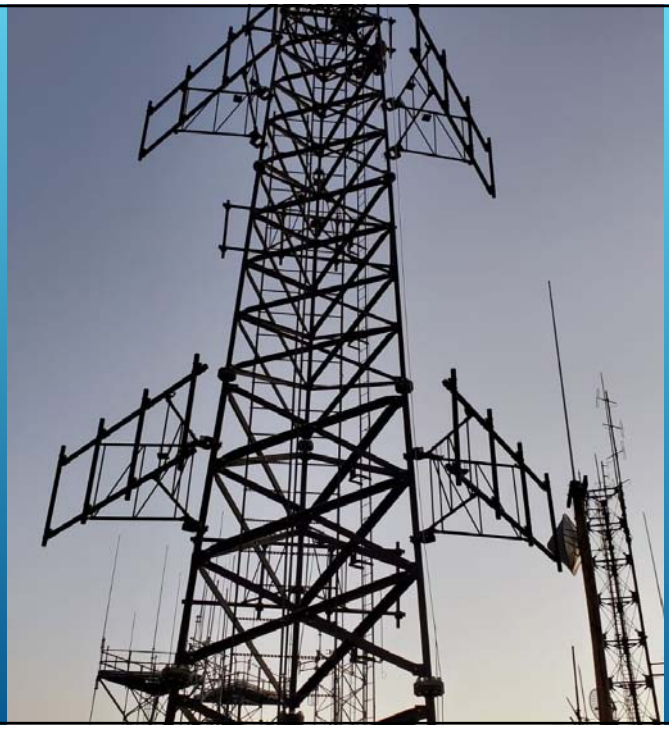
PORTABLE RADIO TESTING CRITERIA		
ITEM	**DESCRIPTION**	**TEST METHOD**
K.7	Identify if geo-fencing functionality is offered by programmable notifications, display color changes, and voice announcement triggers.	Demonstration
L. ANALOG SIGNALING FORMAT		
L.1	Identify if Radio is fully capable of operating with the MDC-1200 analog signaling format. Identify if Radio is capable of encoding and decoding MDC-1200 signaling, including emergency signaling.	Demonstration
L.2	Identify if Radio is capable of muting the received MDC-1200 signaling burst to prevent the tone being audible to the user.	Demonstration
L.3	Identify if the Radio is capable of supporting MDC-1200 enhanced ID range. (e.g. Radio must support a five-digit decimal unit ID up to and including 65,534).	Demonstration
L.4	Identify if the programming software is capable of allowing MDC ID to be entered in either decimal or hexadecimal format.	Testing / Analysis
L.5	Identify if the Radio programming software can support multiple (no fewer than five [5]) independent MDC-1200 configurations/profiles. Identify if each individual MDC-1200 configuration/profile offers the following options at a minimum:	Testing / Analysis
	a. MDC burst at key up or de-key	Testing / Analysis
	b. Configurable delay at MDC burst send	Testing / Analysis
	c. PTT ID sidetone on/off	Testing / Analysis
	d. PTT ID sidetone short/long	Testing / Analysis
	e. MDC system and acknowledge pretime	Testing / Analysis
	f. Repeater access pretime	Testing / Analysis
	g. Radio inhibit	Testing / Analysis
	h. Radio check	Testing / Analysis
	i. Canned message via MDC	Testing / Analysis

PORTABLE RADIO TESTING CRITERIA		
ITEM	**DESCRIPTION**	**TEST METHOD**
L.5 (cont'd)	j. User ability to create an alias for MDC ID (e.g. the user can enable/disable the ID via programming software or front panel)	Testing / Analysis
M. BATTERIES		
M.1	Each Radio must be provided with two (2) Original Equipment Manufacturer (OEM) produced lithium-ion or lithium-polymer chemistry batteries. The included batteries must be rated at a minimum capacity and include batteries for an OEM high capacity.	Inspection / Testing / Analysis
M.2	Identify if the battery assembly meets MIL-STD-810F standards for operation in extreme and rugged environments.	Demonstration
M.3	Respondent must provide certification with this RFI response of the batteries operating temperature range (e.g., -30°C to +50°C).	Compliance Certification Inspection
M.4	Respondent must provide certification with this RFI response of the battery's relative humidity properties (e.g., operates at 90% at +50°C for a minimum of eight (8) hours).	Compliance Certification Inspection
M.5	Identify if the battery has an electrical short prevention mechanism for all charging contacts that remain visible while the battery is attached to the Radio.	Testing / Analysis
M.6	Identify if the battery includes the following:	
	a. A one (1) year manufacturer's warranty from delivery date.	Inspection
	b. If the warranty covers all manufacturer's defects and/or deficiencies of construction, including premature cell degradation, in accordance with these specifications.	Inspection
	c. If the battery maintains a charge of 85% or more of nominal capacity for the first year of use, and if not is it subject to warranty replacement.	Compliance Certificate Inspection
	d. If all warranty repairs and replacements and all associated shipping costs are borne by the Respondent.	Information Only
M.7	Identify if the battery has an internal electronic circuitry to enable intelligent battery management.	Demonstration

PORTABLE RADIO TESTING CRITERIA		
ITEM	**DESCRIPTION**	**TEST METHOD**
M.8	Identify if the battery management has the following features:	
	a. Capacity monitoring	Demonstration
	b. Automatic reconditioning	Demonstration
	c. Charging, discharging, and reconditioning history of the battery	Demonstration
	d. Over-the-air battery monitoring to provide all above information	Demonstration
M.9	Identify if the battery management that can utilize a single platform for intelligent battery management.	Demonstration
M.10	Identify if the battery management is Intelligent capable of communicating with an OEM manufactured smart charger which is capable of reconditioning the battery as needed to maximize battery life.	Demonstration
N. REQUIRED ACCESSORIES		
N.1	Each Radio must include a compatible OEM manufactured single slot battery charger with the following features:	Inspection
	a. Identify if Charger is compatible with other after-market batteries	Inspection
	b. Identify if Charger is compatible with standard 120V AC power	Demonstration
	c. Identify if Charger includes all required cords, cables, and power supplies	Inspection
	d. Identify if Charger has an access port for computerized remote battery management	Inspection
	e. Identify if Charger allows user-selectable charging for quick, standard, or reconditioning charging modes	Demonstration
	f. Identify if Charger allows user-cancellation of reconditioning charge mode once started	Demonstration
	g. Identify if Charger provides status indicators for the following: power on, charging, reconditioning, battery temperature, charger malfunction, and bad battery	Inspection
	h. Identify if Charger is capable of charging the battery while it is still attached to the Radio.	Demonstration

PORTABLE RADIO TESTING CRITERIA		
ITEM	**DESCRIPTION**	**TEST METHOD**
N.1 (cont'd)	i. Identify if Charger is capable of charging the battery while it is detached from the Radio.	Demonstration
N.2	Each Radio must include a compatible OEM manufactured Remote Speaker/Microphone (RSM) with the following features:	
	a. Identify if RSM is corded (not cordless) and if the cord is straight or coiled, or if both are available.	Inspection
	b. Identify if RSM connector is compatible with the Radio without requiring any additional adapters	Demonstration
	c. Identify if RSM has a locking feature to prevent removal without a tool	Inspection / Demonstration
	d. Identify if RSM is highly impact resistant	Demonstration
	e. Identify if RSM PTT button is made of a resistant material (e.g. a ruggedized, polymer-like substance, and not be degraded by UV radiation or environmental factors under normal operation)	Inspection
	f. Identify if RSM PTT button is easily accessible and located on the left side panel when looking at the face of the RSM	Inspection / Demonstration
	g. Identify if RSM includes a replaceable rotating clip that allows attachment to a uniform epaulet	Inspection / Demonstration
	h. Identify if RSM includes a non-threaded 3.5mm earphone jack with attached cover	Inspection
N.3	Each Radio must include a compatible OEM manufactured antenna for the appropriate banded Radio (e.g. single or multi-band antenna) with the following features:	
	a. Antenna must support all frequencies and Radio ranges listed within this RFI	Testing / Analysis
	b. Antenna must be engineered for maximum performance on single or multi-band Radios in the VHF/UHF/700/800MHz & GPS Radio spectrums	Testing / Analysis
	c. Antenna connector must be compatible with the Radio without any additional adapters	Inspection
	d. Antenna sheathing must be ruggedized material	Inspection

PORTABLE RADIO TESTING CRITERIA		
ITEM	**DESCRIPTION**	**TEST METHOD**
N.3 (cont'd)	e. Antenna must not be rigid and must be the most flexible variety compatible for use in accordance with the above requirements	Inspection
N.4	Identify if each Radio includes a compatible OEM manufactured holster for carrying the Radio attached to a duty belt. Identify if the belt holster includes the following features:	
	a. Identify if holster is constructed of leather or of a ruggedized, polymer-like substance	Inspection
	b. Identify if holster holds the Radio in place by friction fit without requiring a holding strap	Demonstration
	c. Identify if holster is attachable to a belt by means of an included detachable belt clip	Demonstration
	d. Identify if Radio side panel controls is easily accessible while in the holster	Demonstration
	e. Identify if holster allows the Radio to be easily attached or removed without causing the RSM to loosen or detach from the Radio	Demonstration
O. WARRANTY		
O.1	Identify if Radio includes a Warranty as follows:	
	a. One (1) year manufacturer's warranty.	Respondent Declaration
	b. Identify if Warranty covers all manufacturer's defects and/or deficiencies of construction.	Respondent Declaration
	c. Identify if all warranty repairs and replacements, and all associated shipping costs are borne by Respondent.	Respondent Declaration
O.2	Identify if Respondent provides as-needed direct telephone access to manufacturer's factory technical staff, without requiring intermediary (call center) technical support escalation, to address any emergency Radio issues or software bugs that may impact first responder safety. Identify if this support is provided, at a minimum, without restriction during manufacturer's normal business hours, with no additional costs.	Respondent Declaration



THE LOS ANGELES REGIONAL INTEROPERABLE COMMUNICATIONS SYSTEM (LA-RICS) AUTHORITY WELCOMES YOU TO THE CONFERENCE

REQUEST FOR INFORMATION (RFI) FOR PORTABLE RADIOS TO BE USED ON THE LA-RICS LAND MOBILE RADIO (LMR) SYSTEM

RFI NO. LARICS-018

MAY 17, 2023

LA-RICS

Mute your microphone and turn off camera. Turn cell phones off or place on silent.

Sign in if you are in person or virtually via the Teams chat. Provide Name, Company, Email, Phone No.

Questions may be asked during presentation and/or during the Q&A. Type your questions in the meeting chat. Official responses will be issued via written addendum.

Sign-In Sheet will be posted on LA-RICS website post conference and attached via addendum.

LA-RICS

ATTACHMENT 3

CONFERENCE AGENDA

1. Introductions
2. Point of Contact
3. LA-RICS Background
4. LMR System
5. RFI Objective
6. RFI Schedule of Events
7. RFI Response Format
8. Exhibit A (Portable Radio Requirements Matrix)
9. Exhibit B (Portable Radio Testing Criteria)
10. Portable Radios Required for Testing
11. RFI Response Submission
12. Presentations + Demonstrations
13. Reminders
14. Questions + Answers
15. Closing

INTRODUCTIONS

- **Ted Pao**, Technical Lead (LA-RICS & LASD)
- **Scott England**, Technical Lead (LACoFD)
- **Lieutenant Robert Weber**, Operations Lead (LA-RICS & LASD)
- **Melissa Saradpon**, LA-RICS Contract Analyst

POINT OF CONTACT

(Section 2.3 of RFI)

All contacts and communications regarding this RFI or any matter relating thereto must be in writing and mailed or e-mailed to the Authority's point of contact (Authority's RFI Contact) at:

Melissa Saradpon
Phone: 323.881.8289
Email: Melissa.Saradpon@la-rics.org

WHAT IS LA-RICS?

(Section 1.0 of RFI)

A California Joint Powers Authority (JPA) comprised of member agencies throughout the County of Los Angeles region, including the County of Los Angeles and other independent cities and agencies.

- City of Avalon
- City of Azusa
- City of Bell
- City of Cerritos
- City of Claremont
- City of Compton
- County of Los Angeles
  - LASD
  - LACoFD
- City of Covina
- City of Glendora
- City of Hawaiian Gardens
- City of Inglewood
- Inglewood Unified SD
- City of Irwindale
- City of La Puente
- City of La Verne
- City of Lynwood
- City of Maywood
- City of Pasadena
- City of Rancho Palos Verdes
- City of San Fernando
- City of Sierra Madre
- City of Signal Hill
- UCLA
- City of West Covina

ATTACHMENT 3

WHAT IS LA-RICS?

(Section 1.0 of RFI)

Currently building out a Land Mobile Radio (LMR) System to provide interoperable public safety communications to the region.

THE LMR SYSTEM

(Section 1.0 of RFI)

1. The Digital Trunked Voice Radio Subsystem (DTVRS) utilizes both UHF T-Band and 700MHz spectrum to provide an APCO Project 25 (P25) Phase 1 and Phase 2 compliant interoperable public safety communications to the Los Angeles County region.
2. Analog Conventional Voice Radio Subsystem (ACVRS) channels are separated into simulcast cells for analog operations throughout LA County: Countywide, North County, South County, West County, and East County.
3. Los Angeles Regional Tactical Communications System (LARTCS) include four (4) analog Countywide mutual aid radio bands, two (2) channels on Low Band, five (5) channels on VHF, five (5) channels on UHF, and five (5) channels on 800Mhz band.
4. Narrowband Mobile Data Network (NMDN) include twenty-two (22) UHF 22Kb radio channels that provide low speed data for CAD operations to vehicles in cellular dead spots or where cellular services are down.
5. LMR System will consist of fifty-eight (58) sites across the Los Angeles County region. While the RFI is focusing on P25 operations, Respondents are welcome to highlight their Radios should they work on the other LA-RICS Subsystems.

ATTACHMENT 3

RFI OBJECTIVE

(Section 1.2 of RFI)

Understand the capabilities of the current telecommunications market for handheld portable radios (Radios) and supporting ecosystems.

Ensure safe compatibility and operating capability on the LMR System infrastructure utilizing features currently installed and used by the Authority.

RFI OBJECTIVE

(Section 1.2 of RFI)

Authority will share list of tested and approved Radios for use on the LMR System with Member Agencies.

Member Agencies can decide which LA-RICS compatible Radios best suit their communications needs.

Submit RFI Response → Test Radios → Share List of Approved Radios to Members → Members Procure Approved Radios → Members Use Radios on LMR System

RFI SCHEDULE OF EVENTS

(Section 2.2 of RFI)

- RFI Issuance – April 17, 2023 ☑
- RFI Conference – May 17, 2023 ☑
- Last Day to Submit Questions – May 22, 2023, 5:00 pm
  (for the initial RFI response submission)
- Initial RFI Responses Due – June 12, 2023, 5:00 pm
  (RFI will remain open on a continuous basis until Authority deems it appropriate to close)

LA-RICS

RFI RESPONSE FORMAT

(Section 3.1 of RFI)

1. **Cover Page** (Section 3.2)
2. **Corporate Overview / Executive Summary** (Section 3.3)
3. **Exhibits** (Sections 3.4 and 3.5)
   - Exhibit A (Portable Radio Requirements Matrix)
   - Exhibit B (Portable Radio Testing Criteria) – Information Only
4. **Other Respondent Information** (Section 3.7)
5. **Portable Radios Required for Testing** (Section 3.6)

LA-RICS

EXHIBIT A (Section 3.4 of RFI)

PORTABLE RADIO REQUIREMENTS MATRIX

- Respond to each line item on the matrix.
- Respondents need to submit a separate matrix for **EACH PORTABLE RADIO MODEL** it is submitting in response to the RFI.
- Two (2) versions of the matrix are available: PDF (included in RFI) and a separate writable Word version.
- Each matrix shall be provided in a separate electronic file (one each in PDF and Word versions). Each file shall include the following in its title:
  - LA-RICS Portable Radio RFI Exhibit A (Portable Radio Requirements Matrix) Response
  - Respondent's Organization Name
  - Radio Name and Model Number

EXHIBIT A (Section 3.4 of RFI)

PORTABLE RADIO REQUIREMENTS MATRIX

PORTABLE RADIO REQUIREMENTS MATRIX

ITEM	DESCRIPTION	MANDATORY (If Indicated)	COMPLY "YES" OR "NO"	RESPONSE
A. GENERAL REQUIREMENTS				
A.1	Respondent acknowledges the LA-RICS LMR System is an APCO Project 25 (P25) Phase 1 and Phase 2 compliant system that uses a Motorola Astro P25 Multi Zone Simulcast System 7.18. In addition, LA-RICS LMR System uses an Analog Voice Simulcast Radio System LMR for mutual aid and analog communications.			
A.2	Respondent who wishes to submit radios pursuant to this RFI has not been: a. Debarred within the last five (5) years by any public agency in the United States; b. Barred at any time, for reasons of national security, by any agency of the federal government, from bidding on a contract, participating in an auction for frequencies, or receiving a grant; or c. Identified at any time, as a security threat, or potential security threat, to the United States, by any agency in the federal government or any committee or subcommittee of Congress.	Mandatory		
A.3	All equipment being tested must be fully compatible and capable of operating on LMR System infrastructure as identified in this RFI.	Mandatory		

- **MANDATORY** – Authority determined requirement as a mandatory minimum requirement.
- **COMPLY** – Respondents shall indicate "yes" or "no" if Radio complies with a requirement, in particular, Mandatory requirements.
- **RESPONSE** – Respondents can expand on their "yes" or "no" response. Also, indicate "Not Applicable" where appropriate.

ATTACHMENT 3

EXHIBIT A (Section 3.4 of RFI)

PORTABLE RADIO REQUIREMENTS MATRIX

PORTABLE RADIO REQUIREMENTS MATRIX CATEGORIES

A. General Requirements	B. Hardware Requirements	C. Ergonomics	D. Transmission + Reception	E. Audio Specifications
F. User Interface	G. Encryption	H. Software	I. Programming	J. Text Messaging Service
K. GPS Specifications	L. Analog Signaling Format	M. Batteries	N. Required Accessories	O. Warranty

EXHIBIT B (Section 3.5 of RFI)

PORTABLE RADIO TESTING CRITERIA

- Sets forth the criteria and methodology the Authority will use to test the Radios Respondents submit in response to the RFI.
- Exhibit B (Portable Radio Testing Criteria) informs Respondents how the Authority will test Radios for safe compatibility on the LMR System.
- No action required in RFI response submission. Exhibit B is informational only.

ATTACHMENT 3

EXHIBIT B (Section 3.5 of RFI)
PORTABLE RADIO TESTING CRITERIA

PORTABLE RADIO TESTING CRITERIA		
ITEM	DESCRIPTION	TEST METHOD
B.4	Identify if the Radio is a sealed internal housing, allowing it to retain its immersion and/or water-resistant rating when the outer housing is cracked or otherwise compromised.	Inspection
B.5	Identify if the Radio display has high resistance to scratching and impact.	Demonstration
B.6	Identify if Radio displays are clearly legible when viewed from multiple angles.	Inspection
B.7	Identify if the Radio has a display with multi-color backlighting on its front face.	Inspection
B.8	Identify if display panels comply with all terms of Sections C (ERGONOMICS), and F (USER INTERFACE) of Exhibit A, contained herein.	Inspection
B.9	Identify if the Radio has an integrated GPS option and/or any external GPS attachments. The GPS antenna definition must show if it is internal or external to the Radio. If Radio has GPS, the Respondent must demonstrate how it transmits GPS location data via P25 conventional and/or digital trunking-enabled communications systems. If the Radio has GPS, the Radio must demonstrate how it operates within regards to Section K (GPS SPECIFICATIONS) of this Exhibit A, contained herein.	Inspection / Testing / Analysis
B.10	Identify if the Radio has an integrated Bluetooth transceiver option within its internal hardware. If so, the Respondent must provide the Bluetooth transceiver information to include use near-field out-of-band pairing for secure operation and transfer of security keys.	Inspection / Demonstration / Analysis
B.11	If the Radio has an integrated Bluetooth, the Respondent must demonstrate how the Radio automatically and quickly it connects to the Bluetooth accessories, without a requirement for menu navigation, once initial setup is completed.	Demonstration
B.12	Identify if the Radio is equipped with a tri-axis accelerometer option, the Respondent must demonstrate if the sensor can be enabled or disabled through software the Respondent. The demonstration must include integrated support for "Man Down" functionality. "Man Down" must demonstrate if it's capable of triggering emergency notification and sending user ID and GPS location over the air to the LA-RICS LMR System.	Demonstration

Testing methods are as follows:

- Compliance Certificate Inspection
- Demonstration
- Demonstration Analysis
- Inspection
- Testing / Analysis
- Respondent Declaration
- Information Only

PORTABLE RADIOS (Section 3.6 of RFI) REQUIRED FOR TESTING

- Provide, at no cost, to the Authority **TWO** fully functional and compliant samples **PER RADIO MODEL**.
- Radios should be accompanied with all required cables, accessories, and software to allow programming and testing, all on a gratis basis, **WITH YOUR RFI RESPONSE**.
- Provide a shipping tag with the Radios for the Authority to utilize when returning Radios back to Respondents.
- Authority is not liable or responsible for reimbursement of any costs for damaged equipment or any costs related to Respondent presentations, demonstrations, and/or functionality demonstrations to test the Radios.

ATTACHMENT 3

RFI RESPONSE SUBMISSION

(Section 3.8 of RFI)

RFI Responses shall include the following:

- One (1) original printed response,
- One (1) printed response copy,
- One (1) electronic version in both Microsoft Word and Adobe PDF formats on a Universal Serial Bus (USB) drive, **AND**
- Sample Radios – Two (2) Radios per model

The RFI Response should be delivered to the following:

LA-RICS Project
2525 Corporate Place, Suite 100
Monterey Park, CA 91754
Attention: Melissa Saradpon
RFI No. LA-RICS 018

PRESENTATIONS + DEMONSTRATIONS (Section 3.6 of RFI)

- Authority may, at its sole discretion, invite Respondents to provide a non-competitive presentation, demonstration, functionality demonstration, and/or testing component for information gathering purposes only.
- Administered by Authority and/or its partners (Authority personnel, LASD, LACoFD, LA County Internal Services Department, etc.)
- Authority will coordinate with Respondents, should the need exist, based on number of Radio models submitted.
- Respondents should have their technical teams available to participate in presentation/demonstration.

REMINDERS

It is in all Respondents' best interests to read the RFI in its entirety. This presentation does not, in any way, replace Respondents' need to read and understand the RFI in its entirety.

RFI is solely for informational and planning purposes. There is no commitment of future solicitations or contracts. Authority reserves its rights to use the information from RFI responses to develop future solicitations.

QUESTIONS + ANSWERS

- **Type questions in the meeting chat if you are joining via the Teams platform.**
- **If you are calling into the conference, please ask your questions verbally.**
- If you have a question after the end of this conference, please submit any question(s) via email to the RFI Point of Contact.
- **Final day to submit questions** (for the initial RFI response) **deadline is May 22, 2023, at 5:00 p.m. PST**
- Your question(s) will be addressed via issuance of an addendum which will be posted on County of Los Angeles Bid Posting website, www.la-rics.org, and will be distributed to Respondents that participate in this RFI conference.

CLOSING

REMINDERS

- Be sure to sign-in via hardcopy (in-person) or via Microsoft Teams chat. This will ensure any new or updated information is received in a timely manner.
- Last day to submit questions for initial RFI response – 05/22/2023, 5:00 pm PST.
- Initial RFI response submission date – 06/12/2023, 5:00 pm PST.
- Any contact or communication (mailed/emailed) to RFI Point of Contact.
- Submit two (2) Radio samples per Radio model.
- Authority makes no commitment of a future solicitation and/or contract.
- RFI will remain open on a continuous basis until the Authority deems it appropriate to close.

Thank you for attending the conference.

LA-RICS

LOS ANGELES REGIONAL INTEROPERABLE COMMUNICATION SYSTEM (LA-RICS) AUTHORITY PORTABLE RADIOS TO BE USED ON THE LA-RICS LAND MOBILE RADIO (LMR) SYSTEM RFI NO. LA-RICS 018

CONFERENCE SIGN-IN SHEET

Wednesday, May 17, 2023, 10:00 a.m.
LA-RICS Project Team Headquarters
2525 Corporate Place, Suite 200
Monterey Park, CA 91754
Large Conference Room

COMPANY NAME/TITLE	NAME OF PERSON IN ATTENDANCE	EMAIL ADDRESS (Not applicable if previously provided)	CONTACT INFORMATION (Not applicable if previously provided)
BASSETT COMM. — FOR JVC KENWOOD EFJ JOHNSON	CRAIG BASSETT (Print Name) Clay E. Bassett (Signature)	craig@bassettcom.com	(714) 393-1314 (Telephone Number) (818) 766-8917 (Fax Number)
Foothill Comm	Kenji Laster (Print Name) (Signature)	Kenji E Foothill Communications.com	626-744-9292 (Telephone Number) (Fax Number)
BK Technologies	Gary Lopez (Print Name) (Signature)	clopez@BKTechnologies.com	661-219-5468 (Telephone Number) (Fax Number)
L3 Harris	Craig Inouye (Print Name) (Signature)	Craig.Inouye@L3Harris.com	310-283-3027 (Telephone Number) (Fax Number)

ATTACHMENT 4

LA-RICS

LOS ANGELES REGIONAL INTEROPERABLE COMMUNICATION SYSTEM (LA-RICS) AUTHORITY PORTABLE RADIOS TO BE USED ON THE LA-RICS LAND MOBILE RADIO (LMR) SYSTEM RFI NO. LA-RICS 018

CONFERENCE SIGN-IN SHEET

Wednesday, May 17, 2023, 10:00 a.m.
LA-RICS Project Team Headquarters
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Large Conference Room

COMPANY NAME/TITLE	NAME OF PERSON IN ATTENDANCE	EMAIL ADDRESS (Not applicable if previously provided)	CONTACT INFORMATION (Not applicable if previously provided)
L3 Harris	Rehan Muzaffer Print Name Signature	Rehan.Muzaffer@L3Harris.com	310-228-8473 Telephone Number Fax Number
LASD	SALOMON PEREZ Print Name Signature	SPEREZH@LASD.ORG	(213)269-0167 Telephone Number Fax Number
LASD	NICHOLAS JOHNSTON Print Name Signature	NJJOHNST@LASD.ORG	213-219-2992 Telephone Number Fax Number
	Print Name Signature		Telephone Number Fax Number

ATTACHMENT 4

LA-RICS

LOS ANGELES REGIONAL INTEROPERABLE COMMUNICATION SYSTEM (LA-RICS) AUTHORITY PORTABLE RADIOS TO BE USED ON THE LA-RICS LAND MOBILE RADIO (LMR) SYSTEM RFI NO. LA-RICS 018

CONFERENCE SIGN-IN SHEET

Virtual Sign-In Sheet

Wednesday, May 17, 2023, 10:00 a.m.
LA-RICS Project Team Headquarters
2525 Corporate Place, Suite 200
Monterey Park, CA 91754
Large Conference Room

COMPANY NAME/TITLE	NAME OF PERSON IN ATTENDANCE	EMAIL ADDRESS (Not applicable if previously provided)	CONTACT INFORMATION (Not applicable if previously provided)
Motorola Solutions, Inc.	Jeff Ashton Print Name (Virtual Sign-In) Signature	jeff.ashton@motorolasolutions.com	954-605-3762 Telephone Number Fax Number
Commline Inc.	Jeff Fukasawa Print Name (Virtual Sign-In) Signature	jeff.fukasawa@commlineinc.com	Telephone Number Fax Number
L3Harris/Dailey-Wells	Gary Kimmerle Print Name (Virtual Sign-In) Signature	gary@dwcomm.com	714-404-5719 Telephone Number Fax Number
L3Harris/Dailey-Wells	Michael Priolo Print Name (Virtual Sign-In) Signature	mpriolo@dwcomm.com	213-810-6113 Telephone Number Fax Number

ATTACHMENT 4

LA-RICS

LOS ANGELES REGIONAL INTEROPERABLE COMMUNICATION SYSTEM (LA-RICS) AUTHORITY PORTABLE RADIOS TO BE USED ON THE LA-RICS LAND MOBILE RADIO (LMR) SYSTEM RFI NO. LA-RICS 018

CONFERENCE SIGN-IN SHEET

Virtual Sign-In Sheet

Wednesday, May 17, 2023, 10:00 a.m.
LA-RICS Project Team Headquarters
2525 Corporate Place, Suite 200
Monterey Park, CA 91754
Large Conference Room

COMPANY NAME/TITLE	NAME OF PERSON IN ATTENDANCE	EMAIL ADDRESS (Not applicable if previously provided)	CONTACT INFORMATION (Not applicable if previously provided)
L3Harris/Dailey-Wells	James Reid Print Name (Virtual Sign-In) Signature	jhr@dwcomm.com	210-896-0383 Telephone Number Fax Number
	Print Name Signature		Telephone Number Fax Number
	Print Name Signature		Telephone Number Fax Number
	Print Name Signature		Telephone Number Fax Number

ATTACHMENT 4