Questions and Responses to State of Vermont Request for Proposals "State-Owned Wireless Network Operator" issued August 23, 2018. This document, issued September 12, 2018, includes responses to all questions submitted by the due date, September 10, 2018.

1. What are the annual gross roaming revenues from the sites and what are the annual payments (or other compensation) that PSD has received from the previous operator during the last 5 years of the contract (2014-2017, Year to Date 2018)?

The VTA leased the equipment to Vanu CoverageCo under three agreements. The PSD became the successor in interest in these lease agreements. Under the terms of these agreements some of the lease payments could be waived in certain circumstances, for instance if revenue targets were not met. In any event, no lease payments were ever received by the VTA or the PSD.

2. How is the PSD compensated for the sites? Is there a percentage of roaming revenues paid to PSD?

The only financial compensation for the sites to the PSD is the lease payments. In a general sense the public is compensated by the presence of wireless service in rural areas that otherwise would not be served.

3. Are the current roaming agreements for use of the entire network as a whole or based on specific sites.

The PSD is not in possession of the roaming agreements between Vanu CoverageCo and its roaming partners. It is the PSD understanding that the roaming agreements allow connectivity from sites throughout the state of Vermont, but that Vanu CoverageCo was required to obtain site-specific authorization to commission CRANs.

4. What is the structure and how much is the payment for E911 access service?

The PSD is not in possession of the agreements between Vanu CoverageCo and its location services processing provider. It is the PSD understanding that these services are provided on a per-site basis.

5. What is the structure/arrangement of the current spectrum usage for the network and how long is the current agreement for? Is the existing arrangement assignable to the new operator?

The PSD is not in possession of the agreements between Vanu CoverageCo and its spectrum provider. It is the PSD understanding that the agreement generally provided access to spectrum only where the carrier does not offer coverage using its facilities, and that the consideration for this lease was in part based on preferential roaming terms. The PSD has no information about whether the spectrum holder would assign the lease or enter a separate lease to a new partner.

6. Who pays for backhaul on the current network?

Under the current operating model Vanu CoverageCo is responsible for all operating costs, including backhaul.

7. Does the backhaul vary per site or is there a single blanket deal?

The PSD is not in possession of the agreements between Vanu CoverageCo and its backhaul providers. It is the PSD understanding that Vanu CoverageCo has arrangements with several different Internet service providers to facilitate the backhaul service from the remote sites over the Internet. It is the PSD understanding that generally these services are priced at the standard rates for these services.

8. Who owns the utility poles that the equipment is on? Were the current sites installed on new utility poles or on poles owned by others (pre-existing utility poles)? Are there any recurring pole attachment fees; and if so, what is the recurring annual expense?

The CRAN devices are installed on existing utility poles under pole attachment tariffs of the Vermont pole owning utilities. The PSD is not in possession of financial information about the pole attachment costs. Respondents should consult the pole attachment tariffs of pole owning utilities.

9. Would PSD be open to a phase out of the current equipment and replacement with different equipment and/or technology?

The RFP states that respondents are invited to offer alternative proposals.

10. Are the existing and proposed sites the only possible locations? Would the PSD be open to expanding coverage throughout the State on Right-of-Ways using various other means – small cells, DAS, towers (assuming no additional cost to State)?

Generally the purpose of the project is to improve the availability of mobile wireless coverage in the state. The identified locations have been demonstrated to lack coverage from major wireless carriers. The PSD would entertain any project proposals that expand coverage where no coverage currently exists from major wireless carriers.

11. When does Covergeco's contract end and will it terminate upon desolation of the company?

On August 22, 2018 the PSD sent a letter to Vanu CoverageCo alleging violations of the lease terms and stating an intent to terminate the lease agreements. The lease agreements afford the company 60 days to cure the violations.

12. Does Vanu provide network management services? Was/is that paid by Covergeco or PSD?

The PSD has no information about whether Vanu CoverageCo provided network management services. It is the PSD understanding that the company had the ability to remotely monitor the sites, so long as the backhaul service and the remote site was operational. If the services were provided, it was at the company's expense.

13. What is known about the current status of the network in terms of installed operational sites? Is the current network being actively monitored and by who?

It is the PSD understanding that all CRANs have been shut down, both for electricity and backhaul, and that the switching service has been terminated as well.

14. Does PSD has an inventory of spare radios (in additional to planned units)?

In addition to the 193 deployed units, the PSD has an inventory of 227 CRAN units stored in Montpelier. Of these, 79 were previously deployed and it is unknown if they are operational. Of the 148 boxed units,

only 129 are complete; 19 lack the radio component. It is the PSD intent to have all units put into service so strictly speaking there are no "spares".

15. Is PSD open to service arrangements other than individual carrier roaming?

The intent of the project is to improve availability of mobile wireless coverage in areas presently lacking such coverage. The PSD would entertain any project proposals that expand coverage where no coverage currently exists from major wireless carriers.

16. Of the 30 installed but not commissioned, are they ready to be commissioned - is backhaul and power provided?

The PSD has no information about these sites, other than the location and serial numbers of the CRANs. It is the PSD understanding that it was Vanu CoverageCo practice to not incur the expense of deploying CRANs until electricity and backhaul were installed.

17. 2.1 "seeks a partner to operate an existing wireless network" This statement needs clarification as the former network is no longer considered a 'network'.

The term "network" was used loosely to refer to the set of installed CRAN micro cell devices. The RFP broadly seeks a partner to operate this equipment, or in the alternative, offer a different solution to provide similar coverage.

18. The quantity of sites provided, in the RFP request, indicates a total of 193. 156 were identified as "Operational" and 37 as "Planned". Is there any documentation that any, or all, of these locations have been deployed/installed, or actually active?

The 156 locations marked as "Operational" were formally commissioned. This process included in-field acceptance testing for each site, including a commissioning report verifying that the sites were operational at the time of commissioning, prepared by PSD staff. The remaining locations were identified as installed through field inspections by PSD staff in May, 2018. There is no documentation about the status other than that the CRANs were physically installed on the poles at the locations listed.

19. Please confirm that the sites listed in the back of the RFP are actually 'Operational' and passing traffic.

The sites listed as "Operational" were commissioned and at one point were operational and passing traffic. It is our understanding that none of the CRANs are presently operational.

20. 2.3, is the installed service to be "continued" or 'restored'?

Section 2.3 states "As its first priority, the PSD seeks continued wireless service in the areas presently served by the commissioned sites." The residents of the areas surrounding commissioned sites have come to rely on the service so in a general sense the PSD would prioritize proposals that would continue to serve these areas as opposed to serving other areas. It is the PSD understanding that none of the sites are operational, so strictly speaking service would have to be restored.

21. 2.6.1 Please define the terms "direct and indirect extension of service"

Section 2.6.1 states "Each proposal should relate whether the Partner proposes to offer direct, or indirect extension of service in the areas." Direct extension would be the expansion of coverage of a carrier's network directly serving its own retail customers. Indirect extension would be through offering coverage and arranging access to this service by consumers through roaming agreements using a model like the one employed by Vanu CoverageCo.

22. 2.10.4 Need information on what a "Resiliency Point" is and the details/specifications of the backup power system being requested to interface with.

The ten sites listed with the prefix 180- have uninterruptable power supply systems. These systems are designed to offer 200 watts of continuous power (either 110 volts AC or 24 volts DC). They have 1200 amp-hour battery backup (sufficient for about 5 days at 200 watts) and 2500 peak wattage solar power panels to charge the batteries.

23. 2.10.5 Are the EDA-funded sites to be treated as the VT DPS sites as a single network project to manage? Can they be upgraded to 4G LTE/VoLTE and still be in compliance?

The EDA grant provided funding for the acquisition and installation of the CRANs at specific locations. Permission from the EDA would be required to move the equipment different locations, upgrade the equipment, or deploy wireless service through alternative methods.

24. 2.10.8 As written this needs more clarification. "obtain and maintain interconnection with the handset radio signals in the CMRS frequency blocks licensed by the FCC sufficient to carry the equipment operating on the frequencies licensed to national mobile services carriers in Vermont."

Generally the PSD believes that to operate the CRANs, a respondent would need to obtain a license to access appropriate CMRS spectrum.

## 25. 2.10.0 is 4G LTE/VoLTE an acceptable alternative to GSM and CDMA?

It is the PSD understanding that the majority of subscribers in Vermont do not presently have handsets that support VoLTE, and that major wireless carriers do not offer VoLTE throughout Vermont. It is also the PSD understanding that major wireless carriers do not support VoLTE in roaming agreements with other carriers. The PSD would prefer a solution that offered VoLTE in addition to GSM and CDMA. The paramount requirement for the project is to provide access to E-911 to the maximum number of consumers. It is the PSD understanding that a VoLTE-only solution would not be accessible to consumers with handsets that do not support VoLTE. The PSD is open to considering a VoLTE-only solution, if the respondent can demonstrate that the positions above are incorrect.

26. 2.10.10 "assume control and begin operating the state-owned system within 90 days of execution of the agreement" Even with state assistance, not mentioned in the RFP, this will take more than 90 days.

The PSD notes that it will take time to negotiate and execute a final agreement after vendor selection. The PSD recognizes the complexity of the project and that additional time may be necessary to achieve complete operation. Nevertheless the PSD expects respondents to make every effort to meet this requirement to the greatest extent possible. 27. Footnote of reference to Vanu/CoverageCo/West contract requires state to provide a copy for review.

Footnote 3 states "Pursuant to 47 C.F.R 20 and 30 V.S.A. 7055(d), CMRS providers must comply with E-911 "Phase II" locational accuracy requirements. VanuCoverCo contracts with West for E-911 location processing services." The PSD does not have access to Vanu CoverageCo contracts with its vendors.

28. Please provide details for the Commercial Power and Backhaul for each site to include the current status.

It is the PSD understanding that commercial power and backhaul services have been discontinued for all sites.

29. Please provide the network services information, who controls the BSC and Central Office.

The PSD has no information about how Vanu CoverageCo provided network services or who controls the BSC or Central Office. It is the PSD understanding that Vanu CoverageCo contracted with Globecom for switching.

30. Please provide the status of E911 Phase 2 for each site.

The PSD has no site-specific information. The PSD has been informed by the Vermont E-911 Board that VanuCoverageCo has an E-911 Phase II deployment plan and that it is in compliance with that plan.

31. Please provide the requirements of a performance bond.

The PSD would require a performance bond in the amount of the payments to be made by the PSD.

32. Does 4G LTE and VoLTE services meet the state's definition of either "CMRS and Cellular voice and text"?

See question above regarding VoLTE.

33. Can a respondent provide 'macro-based' solution versus the current small-cell solution?

The RFP encourages respondents to offer alternative proposals.