



TRANSBAY JOINT POWERS AUTHORITY

REQUEST FOR PROPOSALS No. 18-02 TWO-WAY RADIO SYSTEM

QUESTIONS & ANSWERS: Set No. 2

A participant in the May 8 WebEx and site walk provided the attached signal strength readings from tests conducted during the site walk.

1. ***Q: Regarding the radio frequencies (RF), there are two RF pools, one for public safety clients and one for business/industrial clients. Who will be using the radios and who will be the licensee?***

A: The FCC is responsible for managing and licensing the electromagnetic spectrum for commercial users and for non-commercial users including state, county, and local governments. The TJPA will be the licensee and is not a public safety entity. Respondents should include the appropriate license in their proposals. The required RF range is provided in the RFP.

2. ***Q: Will the radio users be employed by the TJPA?***

A: Radio users will be contractors working under agreements with the TJPA. The TJPA will own, operate, control, manage, and distribute the radios.

3. ***Q: Could Boingo give a high-level overview of the DAS?***

A: Boingo is installing five amplifiers/five remote units distributed throughout the transit center. The remote units are manufactured by SOLiD. There are 20 antennas. The frequencies covered are 380–512 MHz. It is assumed that the DAS receives the signal directly from a hard line to the Boingo BIU. There are a small head end, one sub-rack, and five fibers for the remotes in the transit center.

4. ***Q: Will the DAS cover all six levels, including the below grade levels?***

A: Yes, all levels will be covered.

5. ***Q: Is the bus storage facility covered by the DAS?***

A: The bus storage facility is separate from the transit center and is not covered by the DAS. Vendors must install any infrastructure needed to operate the radios at the bus storage facility.

6. ***Q: Is the bus ramp guard booth covered by the DAS?***

A: Yes, the bus ramp guard booth is covered.

7. ***Q: RFP 18-02 QA question 3 response states that the target radio coverage is 95% for the DAS. If the DAS or BDA system don't provide 95% coverage how will it be remedied?***

A: Boingo is obligated to provide 95% coverage throughout the transit center. Any areas found to have less than 95% coverage should be brought to the TJPA's attention and will be addressed with Boingo.

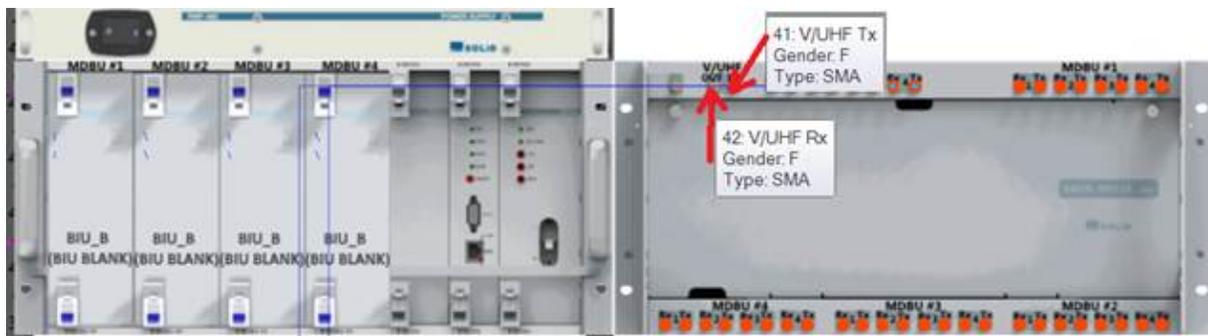
8. ***Q: At whose cost will modifications to the DAS be made?***

A: Responsibility for any modifications will be determined at the time. A lack of coverage due to limitations of Boingo's DAS would likely be Boingo's responsibility.

9. ***Q: Boingo will certify that the DAS provides 95% coverage and Responders to RFP 18-02 are only providing hardware to link to DAS, correct?***

A: Yes. For clarification, Boingo will provide the 95% coverage for the downlink only. The uplink coverage depends on the radio handset power. Refer to the following diagrams for additional information.

UHF BIU ports:



BIU power range:

Part properties

Category: Active DAS
Subcategory: Chassis
Type: Filter
Status: **Approved**
Manufacturer: SOLID
Model: BIU_C

Description: Base Station Interface Unit - For use with Rel. 6 Base Station Interface Unit (Includes: MCPU, MPSU, MCDU)

Image:

Show connectors

Properties

All-link Add Subparts

Attenuation_MDBU#4_Rx4	0.00 dB
Attenuation Range	0:30 dB
Attenuation step size	0.50 dB
[0728-0776 MHz]	
Attenuation_MDBU#1_Tx1	0.00 dB
Attenuation_MDBU#1_Tx2	0.00 dB
Attenuation_MDBU#1_Tx3	0.00 dB
Attenuation_MDBU#1_Tx4	0.00 dB
Attenuation_MDBU#2_Tx1	0.00 dB

.....

Electrical

Impedance	50.00 Ohm
Maximum average power	10.00 dBm
Minimum Input Power	-20.00 dBm
Power Consumption	7.50 W

Generic

Construction Cost	0.00 \$
Cost	0.00 \$
Id override	
Inventory #	
Original layout pictogram color	■ Color [A=255, R=0, G=0, B=0]
Part type override	
Replacement layout pictogram color	■ Color [A=255, R=0, G=0, B=0]
Show In Report	True
Support automatic attenuation	True

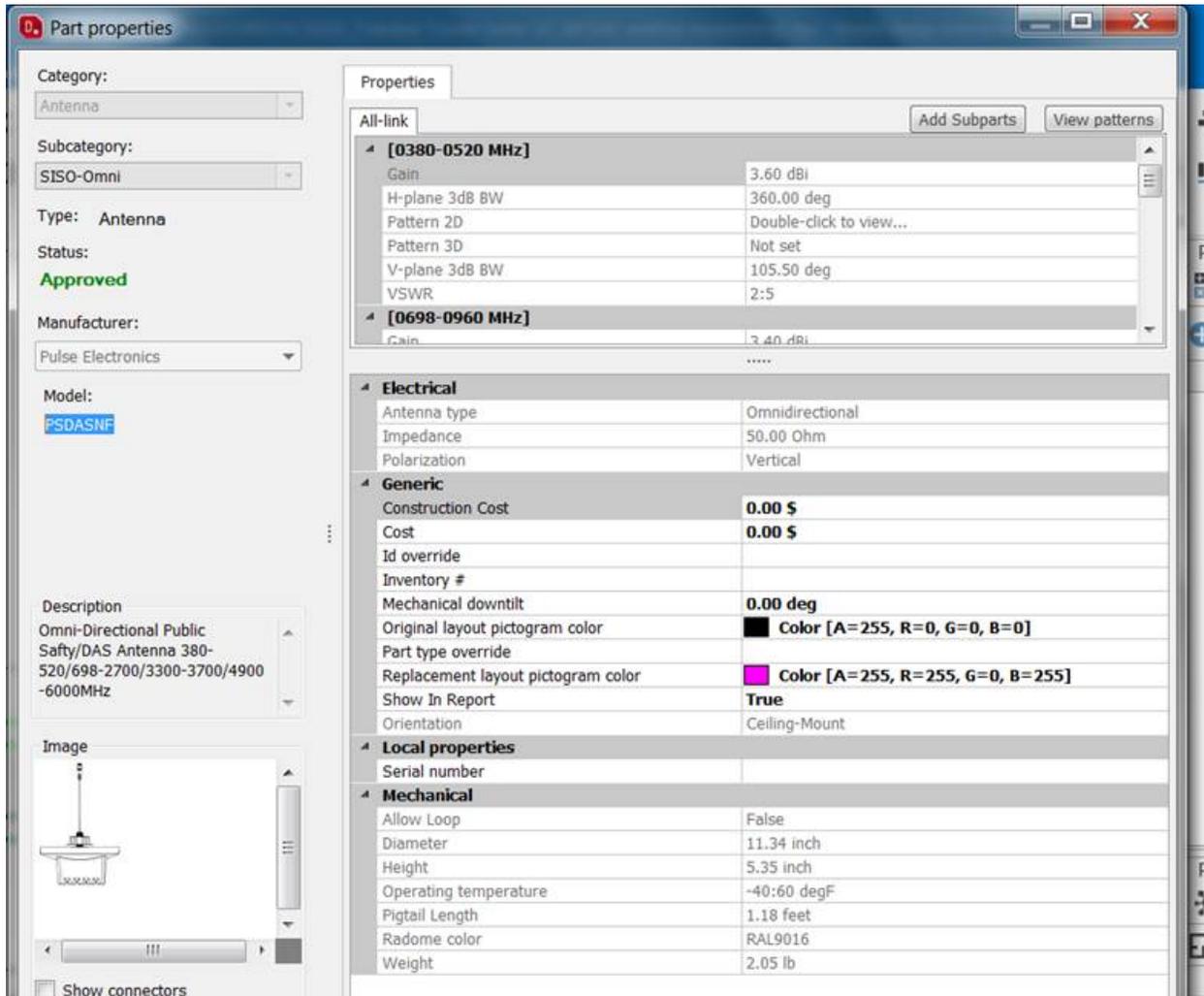
Local properties

Serial number	
---------------	--

Mechanical

Direction is Inverted	False
Depth	17.70 inch
Height	8.75 inch
Rack Space	5U
Weight (fully loaded)	49.27 lb
Width	19.00 inch

Antenna used:



10. **Q:** *Is the antenna model in the drawings previously provided what is currently being installed?*

A: Yes.

11. **Q:** *Will stairways and elevator shafts have 95% coverage from the DAS?*

A: Stairways and elevators are not required to have 95% DAS coverage. There will be some coverage.

12. **Q:** *Are radio vendors required to provide 95% radio coverage in the stairwells and elevator shafts?*

A: The goal is to have the radios work in the stairways and elevators, but the TJPA recognizes that some radio calls may be dropped. Remedies for unacceptable levels of dropped or reduced radio service will be addressed when the incident occurs.

13. ***Q: Please explain the certification method that Boingo will use to verify DAS coverage?***

A: Boingo will use a continuous wave test, sending an imaginary signal from its head end and conducting a walk test with an RF scanner to validate the downlink signal throughout the transit center.

14. ***Q: Will radio vendors need agreements with Boingo?***

A: No, the radio vendor will only have an agreement with the TJPA.

15. ***Q: How much power can be handled by the DAS?***

A: See the information provided in response to question 9 above.

16. ***Q: How many inputs are expected?***

A: One input (one signal) is expected.

17. ***Q: What are the ten talk groups?***

A: Channels/talk groups are needed for security, engineering, janitorial, TJPA and the asset manager Lincoln Property Company, and special events; each area may need more than one channel.

18. ***Q: Will the bus storage facility need the same channels?***

A: Yes, the bus storage will have the same channels.

19. ***Q: RFP mentions a separate maintenance agreement, will there be one? Can TJPA provide a copy of the Model Maintenance Agreement?***

A: There will not be a separate maintenance agreement. The language “and a separate maintenance agreement” on page 3 in RFP 18-02 Section 1.0 is deleted.

20. ***Q: The RFP specifies a 3-year warranty on all equipment. Is Boingo’s warranty that long?***

A: Yes, Boingo’s warranty extends for more than three years.

21. ***Q: It was stated that the term of the agreement will be three years with the option to extend for two (2) additional one (1) year terms, where is that noted? Attachment 2. Model Agreement, Section 2. Term of the Agreement states that the term will be five years with the option to extend for two years.***

A: The term of the Agreement is intended to be three years with the option to extend for two additional one-year terms. The language in Attachment 2. Model Agreement, Section 2. Term of the Agreement will be revised.

22. ***Q: What power supply is available at the bus storage facility?***

A: For the TJPA bus storage facility, power supply is available in a utility building located within the project site at the corner of Second and Stillman streets with spare 120VA power circuits.

23. Q: Will backlit LCD displays be acceptable in lieu of LED displays?

A: Yes, backlit LCD displays are acceptable.

24. Q: Who can provide the IP addresses for the system? It is anticipated that five IP addresses will be needed.

A: The TJPA will provide IP addresses as needed.

25. Q: Are there backup power supplies for the DAS and Respondent's systems?

A: No, there are no backup power supplies for these systems. A backup power supply is not required; however, Respondents are free to include pricing for backup power supplies in their proposals.

26. Q: How many radio users are likely to be using the radios at any one time?

A: About 35 radio users may be using radios at the same time.

27. Q: Are the vehicle and bike ramps to the lower concourse required to have radio coverage?

A: Only the vehicle ramp is required to have radio coverage.

28. Q: There is no Bid Bond form included in the RFP. Can TJPA provide a standard bid bond form?

A: A bid bond is not required for this procurement.

Attachment 6 - Transit Center Levels

Casual UHF Signal Testing

Transmitter site is Approximately 1000' north of the Transbay terminal project. Signal is shadowed by Salesforce Tower. Antenna height Approx 450'. Transmitter at approx. 25W into 2-bay di-pole antenna with 3 degree down-tilt. Receiver is Motorola XPR 7550e with standard antenna. All levels are approximate.

Signal levels are likely to be lower after construction is complete. Testing performed 5-08-2018.

