September 2, 2020

Addendum #3

RFP 20-044 GATEWAY GREEN LIGHT (GGL) PHASE 6 – PE PACKAGE C
IMPLEMENTATION OF EMERGENCY VEHICLE PREEMPTION
CMAQ-5414(634)

Pre – Proposal Meeting Q and A

Question: Can you please provide the model number of the Cradlepoint modems that the vehicles plan to use in the future?”

- We are currently using the following modems:
  - Calamp Vanguard 5530
  - Cradlepoint IBR-900

- Some of our agencies provide their own routers, we just supply the SIM and pay for the airtime. They are as follows….

- St Charles City Fire Dept.:
  - Internal laptop modem (single backup unit, they hope to install a Cradlepoint IBR-900 “soon”)
  - Cradlepoint IBR-900

- County Ambulance owns a high percentage of modems installed in SCCAD Units, confirmed by SCCAD:
  - Sierra Wireless OMG 2000
  - Sierra Wireless MG90

Question on Section 5.2 Vehicle Interface section 6: Could you please clarify “The Vehicle shall provide GPS geo-locating with the following data requirements:”

1. Is this data already available from the County’s current “Central Square” module(s), or is the successful bidder expected to provide additional hardware to provide this data?

2. If “Central Square” modules currently installed on the vehicles are already providing this information, and there is an update rate: <1 sec, could you provide us the transmit rate to us?
1. It is capable of sending location data however the previous vendor solution we reviewed required specifics that were not realistic with the equipment we had and therefore we elected to use vendor provided equipment and only use our modems for a data connection point to allow their device to access communicate using our router’s broadband connection.

2. After reviewing the settings on the IBR900 GPS is in seconds not milliseconds, that said if it will accept 0.25, we would have to test the concept… I don’t believe it works if I recall. I reviewed the specs manual and did not find these details. I will look for other documentation for this model. I attempted to connect to the TSS Cradlepoint via Netcloud and it appears the TSS test router has been reset or the or the remote connect password has change. I confirmed in our Level I passwords the device connection admin password but that failed. I did confirm the variant we ordered in the past was IBR900-1200M-B this according to the spec sheet is FirstNET ready and includes support for band 14.

GPS information available below:

GPS:
- GPS Protocols: TAI and NMEA 0183 V3.0
- Satellite channels: Maximum 55 channels, simultaneous tracking
- Concurrent standalone GPS, GLONASS, Beidou and Galileo
- 1 Hz refresh rate
- Accuracy:
  - < 2 m: 50%
  - < 5 m: 90%
  - Horizontal: < 2 m (60%); < 5 m (90%)
  - Altitude: < 4 m (50%); < 8 m (90%)
  - Velocity: < 0.2 m/s
- Acquisition (measured with signal strength = -145 dBm):
  - Hot start: 1 second
  - Warm start: 29 seconds
  - Cold start: 32 seconds
- Sensitivity:
  - Tracking: -160 dBm (tracking sensitivity is the lowest GNSS signal level for which the device can still detect an in-view satellite 50% of the time when in sequential tracking mode)
  - Acquisition (standalone): -145 dBm (acquisition sensitivity is the lowest GNSS signal level for which the device can still detect an in-view satellite 50% of the time)
- Operational limits: Altitude < 6000 m or velocity < 100 m/s (either limit may be exceeded, but not both)
Firms shall sign this Addendum as acknowledgment and return it with their qualifications.

**RFP ADDENDUM**

Addendum #3

Dated____________________

We, the undersigned, acknowledge the receipt of the above addendum, as dated.

By: ______________________

Title: ____________________

Company: __________________

Date: _____________________