Phone-based Low-cost Unattended Ground Sensor (PLUGS)

27 July-24 October 2018

Develop low-cost unattended, ground sensor utilizing a smart phone as the solution. Conceptual use case is an Android based capability that allows any Android based phone to be used to collect the data of interest and report the activity back utilizing either WiFi or cellular network. The capability will allow for passive infrared, seismic, magnetic, photo, video, audio, with GPS tracking of the device, communications both within a cellular network and WIFI for data exfiltration. Lastly, the ability to display data in a common open geospatial display interface with alerts (ESRI is an option). The capability must work in conjunction with up to five smart phones and will be required to incorporate all of the above, allowing for tip and que to activate sensors and report the data.

Judging Criteria

- Top priority is for all sensors to work in conjunction with each other rather than operating as standalone sensors
- Sensor data collection and transmission to management console represented in an intuitive graphical display
- Working dashboard where admin can manage mobile devices
- Sensors report information back through the dashboard
- Intuitive and easy to train end user / admins

Challenge Winners

- 1st place: Integrated Secure - $10,000
- 2nd place: Augmented Engagement - $7,500
- 3rd place: Software Logistics, LLC - $5,000
- 4th place: AFTAC - $2,500