

## **Cybersecurity Profile for the Responsible Use of Positioning, Navigation and Timing (PNT) Services**

*Response from Satelles, Inc. submitted by Christina Riley, Vice President of Commercial PNT  
Reference: NISTIR 8323*

### **ALTERNATIVE PNT ADOPTION**

The initial wave of solutions for resilient PNT have graduated from the R&D phase and are now commercially available. The organizations that offer these solutions are very likely still investing in R&D to enhance or expand those solutions, but such R&D may not be the subject of published research. Government agencies should promote the fact that industry solutions exist today and should migrate their focus from sponsored R&D to sponsoring the implementation and adoption of those existing solutions that can immediately address society's needs.

For example, Federal government sponsorship of market adoption would deliver several benefits: (1) immediate improvement of PNT resilience, (2) acceleration of market adoption of a variety of PNT solutions, (3) market-driven pricing reductions due to accelerated adoption, and (4) more rapid technological advancements through organic R&D that is driven by market needs and commercial competition.

By taking actions, such as this, it will help the nation's national critical infrastructure (NCI) providers put the appropriate solutions in place. We strongly encourage the implementation of a pilot program in which the government purchases solutions from a variety of resilient PNT vendors that have such solutions available today. This would not only initiate market adoption by the NCI providers but also push it to happen much faster. Mitigating NCI vulnerabilities sooner rather than later will improve our national resilience.

### **PNT PROFILE ADVOCACY**

Satelles has been a supporter of Executive Order 13905, "Strengthening National Resilience through Responsible Use of Positioning, Navigation, and Timing Service," since it was issued in February 2020. The full scope of the PNT Profiles weren't fully known at the time, but in the months since then you have done a great job to define what the foundational PNT Profile is, explain what it does, and provide guidance about how to use it. You have also laid the groundwork for the development of sector-specific profiles that will deepen the levels of preparedness and protection.

While Satelles and the other PNT companies aren't in the same position as critical infrastructure owners and operators when it comes to following the guidance of the profiles, we are here to provide them with an alternative form of PNT to back up GPS/GNSS. What's more, it's the PNT service providers and user equipment manufacturers that have the frontline customer engagement to aid in the awareness and adoption of the cybersecurity guidelines that have been prepared.

We can help NIST promote the profiles. In fact, Satelles is prepared to help spread the message and continue the conversation against the backdrop of the foundational PNT Profile when it is released in February. And, of course, these efforts will complement our contributions to the Conformance Framework.