NASPI Scottsdale
Zero Trust when using GPS for Timing & Synchronization

US Government Executive Order 13905
issued 12 February 2020

4 April 2023
Daniel B. Burch- Sr Manager Business Development- North America
Backed by 75 years of know-how in network sync

✓ #1 - Industry’s first supplier of sync solutions
✓ #1 - The leader in resilient & assured PNT & packet-based timing
✓ #1 - Leading-edge technologies in defense-in-depth PNT cyberthreat protection, including multilayer detection, zero-trust multisource backup & multilevel fault-tolerant mitigation, aligned with these industry standards:

✓ #1 - The leader in field-proven, vendor-agnostic & intelligent sync network management
✓ #1 - Industry’s best complete portfolio of trusted sync services, from network design to installation to commissioning

The #1 trusted secure sync solution provider globally
Our timing product range by best-fit/cost application

**Ensemble Sync Director™ management**

**accessSync™**
- OSA SFb401 SyncPlug
- OSA 5405-I/O/MB/P

**OSAinside™**
- OSA 5400 SyncModule
- OSA SoftSync Linux

**edgeSync™**
- OSA 541x SyncJack™
- OSA 5412

**edgeSync+™**
- OSA 5420/21
- OSA 5422

**coreSync™**
- OSA 5430 NG GM/SSU
- OSA 5440 NG GM/SSU

**coreSync™**
- OSA 3300-HP optical Cs
- OSA 3350 optical Cs ePRC+
- 3230B Cs magnetic PRC/ePRC

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- O-RAN/edge DC
- Data center
- 911 call center
- Ground station
- Front/backhaul
- Core network
- Smart power grids
- Aviation radars
- Defense comm
- TV studio
- Financia l trading

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Satelles based on Iridium

**GPS Constellation**
- 24+ Satellites in 6 Orbital Planes
- 4 Satellites in each Plane
- 20,180 km Altitude, 55 Degree Inclinations
- Orbital speed 14,000 km/hr (9k mph)
- Orbital period 12 hours (2x/day)
- Different satellite in each plane every 3 hrs

**Galileo Constellation**
- 24+ Satellites in 3 Orbital Planes
- 8 Satellites in each Plane
- 23,222 km Altitude, 56 Degree Inclinations
- Orbital speed 13,200 km/hr (8k mph)
- Orbital period 14 hours (~2x/day)
- Different satellite in each plane every ~1.5 hrs

**Iridium LEO Constellation**
- 66 Satellites in 6 Orbital Planes
- 11 Satellites in each orbital plane, spaced 30° apart
- 781 km Altitude, Polar orbits (86.4 degrees)
- Orbital speed 27,000 km/hr (17k mph)
- Orbital period 100 minutes (14x/day)
- Different satellite in each plane every 9 min
Alternatives to GNSS (GPS)

MEETS UPCOMING “ZERO TRUST” GUIDELINES

SOLUTIONS

- ePRTC
- Low Earth Orbit
- Terrestrial
- Timing over Fiber
- Local RF Relay
- eLORAN
- Timing as a Service over ETH
- Timing Backup as a Service

Worldwide Coverage
Satelles STL Antenna
THE FIRST TIMING WHITEPAPER IN 2023 TO GO VIRAL!

Can you handle the TRUTH?

Establishing “Truth” in Network Synchronization
NETWORK TIMING & SYNCHRONIZATION IN AN UNTRUSTWORTHY WORLD
By Daniel B. Burch- Sr. Manager Business Development NA

For electronic copy of this popular whitepaper, see me at our both or email request to dburch@adva.com
Just say: TELL ME THE TRUTH

THANK YOU! dburch@adva.com