

## **Enabling Intermodal Container Intrusion Detection**

### **AVANTE CONTAINER TRANSPORT SECURITY SYSTEM**

**AVANTE provides web-based 24/7 end-to-end tracking services of cargo using its RFID ZONER™-RELAYER™ container security devices, carrier-based and yard based fixed site communication links and association of personnel badges to provide cargo container visibility and security management:**

- Leasing a set of SMART-TRAKKER™ consists of one set of RFID ZONER™-RELAYER™ container security devices (two ZONER™-CTID tags and one RELAYER™-CTOR), three personnel ZONER™-SSID badges, and one carrier-based communicator RELAYER™-CTCR (equipped with GPS, GPRS and SATCOM).
- Optional fixed site installation of networks of nodal and real-time locating system of RELAYER™-RTLS readers along the supply chain.
- Flexible service charges based on scheduled regular reporting and real-time exception reporting. This cost effective supply chain security system and visibility solution does not require capital investment. Return of investment (ROI) in using this patented transport security system is immediate and can be tailored to your specific requirements.

By using the signal strength attenuation characteristics intrinsic to the steel intermodal container box for container security management, two or more active ZONER™ RFID tags placed inside the intermodal container coupled with a RELAYER™ RFID reader placed on the outside of the intermodal container can monitor not only door openings but also cut holes as small as a few square inches. The communication between the ZONER™ RFID tags inside the container and the RELAYER™ RFID reader attached to the outside containers and the ability to record the message of any exceptions such as excessive variation of signal strengths over an extended period of time (more than few seconds) will indicate the opening of a door or cut hole. The presence or absence of “talks” between the ZONER™ RFID tags and RELAYER™ RFID readers provide documentation and proof of any potential tampering in real-time.

Inspection of containers for container security management is not only labor intensive and but it is not particularly effective when such containers have already arrived at our seaports with weapons-of-mass destruction.