INTEGRITY Security Services (ISS) and Unex Collaborate to Deliver Secure V2X Communications for Smart Infrastructure and Connected Vehicles

December 2, 2020- Unex, a leading provider of V2X (Vehicle-to-Everything) systems, and INTEGRITY Security Services (ISS), an embedded security solution expert, a wholly owned subsidiary of Green Hills Software LLC., have announced a new partnership in an effort to advance safer and smarter transportation. The partnership focus on ensuring all vehicles and roadside equipment can reliably exchange authenticated messages.

V2X is emerging as a key component in the rapid rise of connected and autonomous vehicles. Exchange of information and communication between vehicles and roadside infrastructure is the basis of smart traffic and transport systems. However, similar to other wireless technology, security issues are primary concerns in V2X. For example, hackers may tamper or send fake messages. Such attacks include fake red-light violation and traffic chaos attack, which might lead to traffic accident and traffic jam.

Secure V2X communications require the technology of digital signatures including Public Key Infrastructure (PKI) service for issuing certificates and credential management services of end entity for signing and verifying signatures. Signatures and certificates ensure the integrity of message content and authenticate the identity of the senders. The ISS Security Credential Management System (SCMS) for securely delivering V2X and C2X digital certificates is the only SCMS purpose built to be secure and scale to meet the needs of today's largest transportation fleets, networks & eco-systems. The ISS product name for their SCMS is the Certificate Management Service (CMS) and it was designed to meet the latest Government and Industry standards, delivering vehicle-to-anything (V2X) and European car-to-anything (C2X) certificates to automotive and smart city product manufacturers and operators worldwide. ISS raised the first and to date only North American Root Certificate ensuring interoperability and security across any vehicle or device provisioned by the ISS CMS.

Unex's builds a highly integrated V2X ecosystem from modules to on-board unit and roadside unit systems. Moreover, Unex V2Xcast® technology shortens development

cycle for accelerated V2X deployment globally, greatly reduce the barriers to entry for all industries. To ensure the integrity and safety of communications, Unex have teamed up with ISS to mitigate any privacy risks. With ISS Security Credentials Management System (SCMS), V2Xcast® is able to manage bootstrapping, enrolment and acquisition of certificates and send protected messages.

V2X continues to thrive, delivering huge benefits to road users. Infrastructure-to-vehicle communication such as Work Zone Warning (WZW) informs drivers of upcoming events. Forward Collision Warning (FCW) warns drivers of imminent collision. "Unex's product lineup and V2Xcast software stack enable a range of V2X applications. ISS's expertise in V2X PKI benefits Unex to deliver secure, reliable, two-way authenticated messages among vehicles and roadside equipment. With this partnership, we look forward to a more sustainable, safer and smarter urban mobility." said JY Ou, Unex VP R&D.

"As an ISS CMS Certified Partner UNEX is ensuring their product's security and interoperability in any V2X and C2X network." said David Sequino, ISS Co-Founder & President. Sequino went on to say; "This partnership provides pre-integrated, secure intelligent transportation elements allowing for safer, smarter urban mobility networks."

About Unex Technology

Unex provides wireless communication in modular technology building blocks, including Wi-Fi, Vehicle-to-Everything (V2X), and Internet of Things (IoT). Unex has been working with various cross-domain partners to drive V2X deployment worldwide. Further, with the Unex innovative V2Xcast® and global V2X solutions, Unex is enabling connected ecosystem which will remain scalable and relevant in the years to come. To learn more about Unex, please visit https://unex.com.tw/

About INTEGRITY Security Services

INTEGRITY Security Services (ISS) was established to provide best practice embedded security products and infrastructure solutions for protecting smart devices from cyber security attacks. End-to-end automotive solutions range from ECU cryptographic platforms to large-scale public key management systems.
To learn more about ISS, please visit www.ghsiss.com