

## **Unex and Microsec Announce Global Partnership to Make V2X Communication Safer**

November 12, 2020- V2X (Vehicle-to-Everything) system provider [Unex](#) has announced a new partnership with [Microsec](#), a V2X security expert, to deliver a secure and robust V2X communication.

Connected vehicles pave the way for safer roads and future autonomous vehicle deployments. Vehicle-to-vehicle (V2V) and vehicle-to-infrastructure (V2I) communication (known as V2X) allows vehicles to communicate with each other and everything around them. In V2X traffic environments, plenty of messages are transmitted at the same time, and the role of V2X security is to assure that all participants' communications are in secure and trusted operations.

Microsec offers [Public Key Infrastructure \(PKI\)](#) background that provides security infrastructure (V2X certificates) for vehicle manufacturers, vendors, roadside and onboard unit developers, transportation and smart city infrastructure operators. By issuing certificates to road users, Microsec is delivering the trust component for the secure and reliable message exchange among vehicles and roadside equipment.

Unex's second-generation V2X products contain [V2X System-on-Modules](#), [On-board units](#) and [Roadside units](#), also Unex [V2Xcast®](#), a highly integrated and modular framework that provides V2X communication and supports V2X application deployment on stand-alone OBU/RSU or application hosts with flexibility and scalability. In order to have trusted communications, Unex V2X devices need a security infrastructure to secure every message. This is where the PKI system comes in, PKI systems issue certificates to verified participants. Certificates are used to prevent unauthorized users from sending or modifying the messages. The cooperation is focused on the seamless application of bootstrapping, enrolment and acquisition of certificates between V2Xcast® and Microsec's C-ITS Credential Management System (CCMS).

Through the collaboration, both companies strengthen each other in the V2X ecosystem. The joint solution is an enabler that accelerates the safety deployment of road traffic management such as collision avoidance and hazard detection,

emergency brake, and truck platooning. "V2X technology is still evolving, the non-line-of sight feature helps road traffic to be safer and smarter, however, wireless communication also raises concerns about tampered or fake data. This is why security and authenticity issues are things that we must face. Unex is focusing on V2X device products, and thanks to Microsec's CCMS solution, we can provide a ready-to-use V2X solution to accelerate the deployment. I am happy that Unex has achieved another milestone." said JY Ou, Unex VP R&D.

"Microsec has launched an initiative to provide European CCMS compliant PKI for the early users. The Microsec V2X PKI system provides certificates for secured C-ITS (Cooperative Intelligent Transport Systems) communication supported by a dedicated user portal. Unex has used this opportunity to fine-tune the "security on" device functions with signed messages. They have also helped us with valuable UX feedbacks." said Gabor Monori, Microsec Business development executive.

**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 Microsec**

Microsec Ltd. is a mid-sized qualified trust service provider (QTSP) and a PKI technology expert independent software vendor (ISV). Regarding only V2X-related associations, the company is a member of the European Telecommunications Standards Institute (ETSI), the CAR 2 CAR Communication Consortium (C2C-CC), the 5G Automotive Association (5GAA) and the OmniAir Consortium, and also actively participates in the work of these organizations. The firm has partnerships with notable V2X-related manufacturers and test sites as well. To learn more about Microsec, please visit <https://www.microsec.hu/en>