NXP Completes Field Trial with Over 100 Military Vehicles – Reveals Effectiveness of RFID Technology for Vehicle Identification

July 13, 2016

NXP UCODE DNA with cryptographic authentication provides exceptional security for vehicle identification; works in distances up to 12 meters and at speeds up to 150 km/h

EINDHOVEN, Netherlands, July 13, 2016 (GLOBE NEWSWIRE) -- NXP Semiconductors N.V. (NASDAQ:NXPI), Tönnjes and Kirpestein B.V. today, after 12 months of testing in various weather conditions, with over 100 assorted military vehicles and at different speeds, presented the results of the first field trial with IDePLATEs (license plates). The field trial confirmed the secure, robust, effective, and reliable use of RFID technology for vehicle identification. In this collaboration, NXP provided embedded technology in the license plates, Tönnjes integrated the system and Kirpestein manufactured the license plates and provided project management support.

A photo accompanying this announcement is available at http://www.globenewswire.com/NewsRoom/AttachmentNg/fe90a8ec-4cce-4495-bed1-907977d6d8cd

The trial started in 2015 and took place at the military base in Oirschot, the Netherlands. Cars and trucks were equipped with IDePLATEs and IDeSTIXs (windshield labels) with integrated passive RFID chips. Authorized reading units, mounted on a gantry, continuously read the privacy protected unique chip IDs on the license plates and windshield labels of passing vehicles.

"Different challenges were overcome with the field trial," said Koert Kirpestein, owner and general manager of Kirpestein BV. "Many military vehicles are equipped with additional metal cladding and grits which caused interferences for RFID tag antennas. The major challenge was to ensure a reliable identification and verification of IDePLATE and IDeSTIX even with those vehicles. The trial enabled optimizing the results by securing the interaction between hardware and software. These adjustments ensured a secure verification even at high speeds."

The RFID chips in the field trial used the latest long-range crypto technology developed by NXP Semiconductors, UCODE DNA. UCODE DNA applies the latest security standards, works with cryptographic authentication – even over distances of up to 12 meters and at a speeds up to 150 km/h. Bringing security to passive long range RFID, the UCODE DNA tag IC combines exceptional long-range contactless performance with cutting-edge cryptographic security implementation for tag authentication.

"NXP is committed to offering solutions that include security features. The UCODE DNA chips are designed to reveal identity information to authorized parties only. The chips send identity information in highly secured transmissions so that only RFID readers, stationary or handhelds, which have access to the corresponding secret cryptographic keys, can decipher this information," said Maurice Geraets, managing director of NXP Netherlands. "With this technology, only authorized readers can monitor which cars are driving where."

"The successful results of the field trial have already led to large scale implementation of the applied chips in electronic license plates projects in South America. Especially as the solution fully supports a privacy respective implementation that respects privacy for all cars, and as the costs of equipping cars with electronic license plates are relatively getting lower, electronic license plates are ready for large scale deployment in Europe," said Olaf Renz, managing director Tönnjes. "When cars are equipped with these electronic license plates, new business opportunities can also be developed. If car drivers would authorize their parking garage service provider, fees for parking can be charged automatically. Similarly, the technology can be used for tamper proof vehicle registration and identification, traffic management and access control."

For more information: www.nxp.com/products/identification-and-security/smart-label-and-tag-ics/ucode-dna:MC_1436185909808.

About NXP
NXP Semiconductors N.V. (NASDAQ:NXPI) enables secure connections and infrastructure for a smarter world, advancing solutions that make lives easier, better and safer. As the world leader in secure connectivity solutions for embedded applications, NXP is driving innovation in the secure connected vehicle, end-to-end security & privacy and smart connected solutions markets. Built on more than 60 years of combined experience and expertise, the company has 44,000 employees in more than 35 countries and posted revenue of $6.1 billion in 2015. Find out more at www.nxp.com.

About Tönnjes
As the leading supplier of security license plates and vehicle identification solutions, Tönnjes focuses on the costumer specific development of international vehicle registration systems to protect vehicle registration and identification against manipulation, fraud and theft. With the latest technologies Tönnjes develops modular systems and individual complete solutions, which fulfill specific security, organizational and logistics requirements. Further information on www.toennjes.com.

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About Kirpestein
Kirpestein is the leading manufacturer of embossed license plates in the Netherlands. They deliver license plates for vehicle registration within 24 hours. In the field of electronic vehicle identification Kirpestein, Tönnjes and the Dutch authorities work closely together to fight fraud and manipulation. Further information on www.kirpestein.nl.

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