

Kenya identifies automobiles by using RFID technology from Germany

TÖNNJES C.A.R.D. provides over three million vehicles with high tech windshield labels

Bremen, February 2017. Almost 47 million people are registered citizens of Kenya. However, the government has no backed record on the total number of car owners on Kenya's streets. As a consequence, the state misses out on tax revenues that are essential to enhance the country's traffic infrastructure. The Kenyan National Transport & Safety Authority (NTSA) wants to change this situation. Its aim is to create a nationwide vehicle register. For that reason, the German based company TÖNNJES C.A.R.D. supplies Kenya with about 3.3 million windshield labels that entail an integrated UCODE® DNA RAIN RFID chip from NXP® Semiconductors. The technology allows the secure identification and authentication of vehicles. Over the next three years, all Kenyan car owners are obligated to switch to the new technology. "We have several projects in Africa. However, the partnership with the NTSA is an important milestone for our company. We do not just deliver the UCODE DNA based RFID windshield labels, we also help and advise the authorities during the implementation of the system", explains Jochen Betz, Managing Director of TÖNNJES C.A.R.D. The central automobile database, called traffic information & management system (TIMS), is planned to be fully updated and vetted until 2020.

"We are excited that our latest RAIN RFID UHF chip technology, which includes cryptographic authentication, is enabling Kenyan government to securely identify their vehicle population, boost their tax revenue and support the safety of their traffic network," said Markus Staeblein, VP and General Manager of NXP's Secure Mobility and Retail business.

In addition to the stickers for the windshield, the IDeTRUST® security solution is also part of the partnership between TÖNNJES C.A.R.D. and the Kenyan government. The system gives users the ability to identify vehicles using their smartphone. In case of traffic or access controls, the IDeTRUST® verification app decrypts the data from the tag and verifies vehicle details like the car plate number, the car's colour or information on the vehicle owner. "This way thefts and misuses become a lot more difficult, because anyone with a smartphone can instantly see, whether the vehicle is registered with the correct license number or not", Jochen Betz explains. Stripping off the tag, for example to obscure a car theft, is impossible. Jochen Betz: "IDeSTIX® is a double secured system. On the one hand the label destroys itself when being removed from the windshield. On the other hand information on the UCODE DNA chip is protected by cryptography following highest functional security standards. This technology is provided by our business partners NXP and Kathrein, specialists in secure RAIN RFID chip technology and RFID reading equipment."

With the nationwide introduction of the RFID-Windshield label and the IDeTRUST® verification system, Kenya is using only a part of the solutions offered by TÖNNJES C.A.R.D. The portfolio also includes IDePLATE®, a microchipped number plate, mobile and stationary readers with identification software as well as IDeSTIX®, electronically readable labels. In addition to secure vehicle identification, a range of other possible applications can be realized using all solutions offered by TÖNNJES C.A.R.D. Even well-developed toll or traffic control systems can be improved by increasing their detection accuracy. "We see good opportunities for the deployment of our system, particularly in countries that are currently developing a new or more efficient vehicle management scheme", comments Jochen Betz.



With the windshield label IDeSTIX® by TÖNNJES C.A.R.D. vehicles can be identified in Kenya.
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