

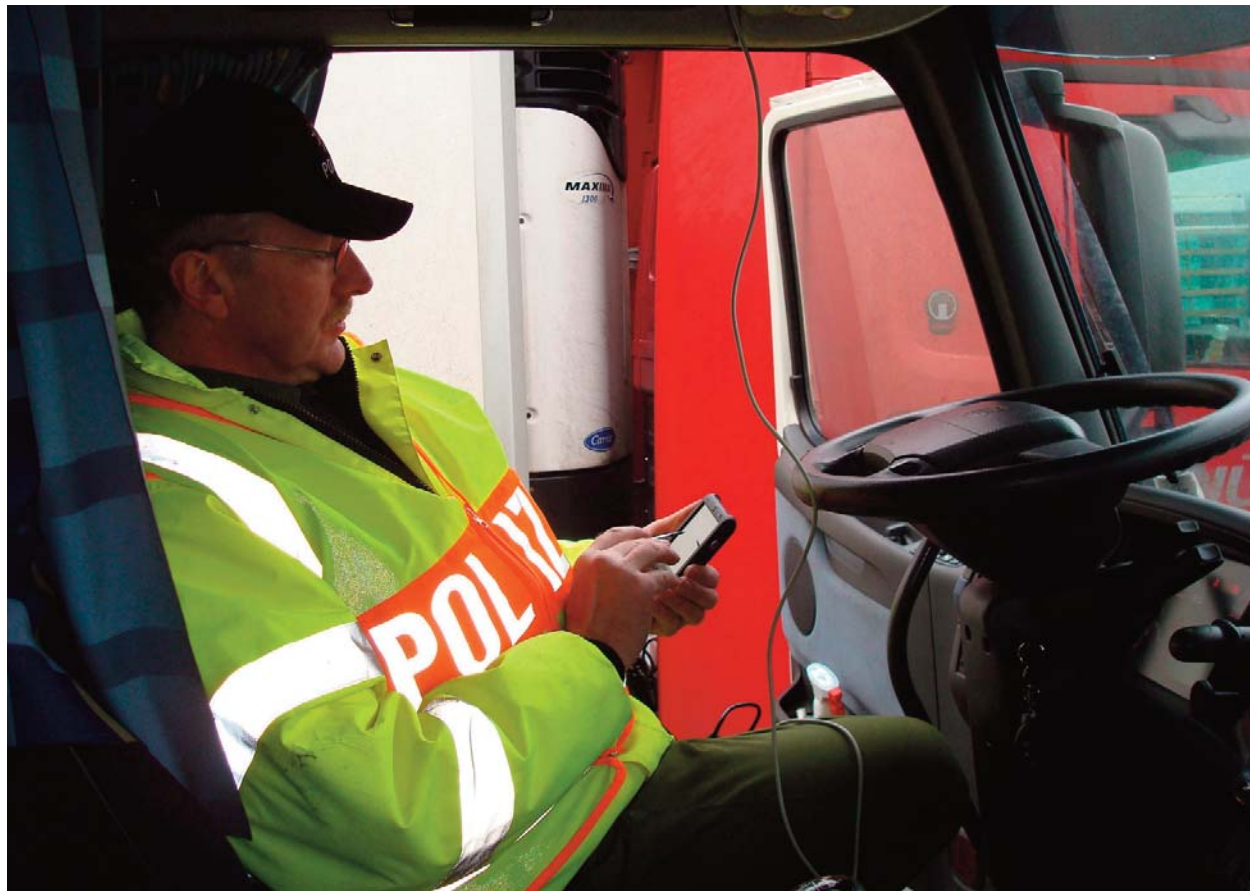
GERMANY

Lower Saxony Police Improve Road Safety with Handheld Vehicle Inspection System



"With the SoMo 650, we've found a solution that offers the required portability, yet with the durability, ease of use, expandability and secure data transfer options we need for this process."

– Frank Rex
Inspector
Lower Saxony Police



Many vehicle accidents result from drivers falling asleep at the wheel, and these accidents are especially devastating when a heavy truck is involved. To improve road safety, the European Union (EU) requires that all commercial trucks install a digital tachograph, a device that records precise, second-by-second vehicle data, including speed, mileage, driving periods, and rest times, over a period of 365 days. Tachographs not only help to increase safety by ensuring that drivers follow legal speed limits, work hours, and break times, but they also promote fair competition, provide proof of work, and supply valuable evidence in speeding and accident investigations.

Springcard smart card reader from Pro Active, and a handheld application from Softwarebüro Zauner and Partner, makes it possible even for police patrolling on motorcycles to download vehicle and driver information anywhere on the autobahn.

GETTING ORIGINAL VEHICLE DATA

All tachograph machines include a printer component, which can be used to print out a daily vehicle report during a police inspection. However, when serious traffic offenses or accidents occur and prosecution is required, these printouts are not adequate as legal evidence. Additionally, tachograph printouts do not report whether the driver has had any traffic violations.

“Socket is the only supplier of PDAs that provides a CompactFlash slot and works with the code we need.”

— Klaus Gross
Project Manager/Sales
Softwarebüro Zauner and Partner

“With digital tachographs, you can create a daily printout with a special form, but this form is not reliable for lawsuits,” explained Klaus Gross of Softwarebüro Zauner and Partner, who provided the solution to the Lower Saxony police. The software development and consulting company is a member of the Socket Vertical Industry Partner (VIP) program, which specializes in effective mobile solutions for key vertical markets.

In order to more effectively enforce traffic regulations, the police of Lower Saxony in northwest Germany have equipped highway officers with a handheld system that enables them to access data not only from the tachograph device mounted inside a vehicle, but also commercial driver’s cards, which are embedded with a microchip for storing vehicle and driver data. The portable system, which features a Socket SoMo® 650 handheld computer,

For sounder legal evidence, original data files must be extracted from the tachograph machine and driver’s card. Many police agencies in the EU use a smart card reader and/or a specially approved data device to download this information to a laptop or desktop PC, where the files can be analyzed and aggregated to create a complete legal case.

However, the Lower Saxony police wanted a more portable solution for use at both inspection checkpoints and by officers on motorcycle patrol. "On the normal street side inspection, or with a motorbike policeman, a laptop is simply too big," Gross remarked.

A PORTABLE SOLUTION

The Lower Saxony police have deployed more than 100 units of the handheld solution for roadside truck inspections. Now, after an officer stops a truck, he plugs the Springcard smart card reader into the top of the SoMo and reads data from the driver's card. Pro Active, the manufacturer of the smart card reader, is a member of the Socket Third-Party Accessory Recommendation (STAR) program, which certifies hardware accessories for the SoMo.

After reading the driver's card, the officer enters the truck and connects the SoMo to the tachograph with a cable. The software application from Softwarebüro Zauner and Partner analyzes the vehicle and driver data and checks for violations. A complete case can be created on the PDA, which can later be converted to Word or Excel format and emailed to other government authorities to calculate traffic fines or determine other legal actions.

CHOOSING THE RIGHT DEVICE

When Softwarebüro Zauner and Partner first developed a handheld solution and needed a PDA, they chose a consumer-grade device from a leading manufacturer. However, this PDA, like many consumer-grade devices, stopped including a CompactFlash card slot, forcing Softwarebüro Zauner and Partner to seek a new platform.

"The manufacturer of our first PDA changed their technical platform by eliminating the CompactFlash interface needed for the smart card reader. Socket is the only supplier of PDAs that provides a CompactFlash slot and works with the code we need," Gross explained. Government regulations forbid the use of *Bluetooth*® wireless technology for transferring tachograph data, making the CompactFlash interface the most practical option for a PDA-based solution.

However, it is not simply the CompactFlash slot that makes the SoMo the right choice for the solution.



A Springcard smart card reader plugs into the SoMo to read the smartchip in a driver's card

"Socket products are robust and offer many technological possibilities."

*— Klaus Gross
Project Manager/Sales
Softwarebüro Zauner and Partner*

"Socket products are robust and offer many technological possibilities," Gross stated.

Officers of the Lower Saxony police also appreciate the features of the SoMo device. "Our policemen need to be very flexible and precise during street side controls to do an efficient job," said Frank Rex, an inspector with the Lower Saxony police.

"With the SoMo 650, we've found a solution that offers the required portability, yet with the durability, ease of use, expandability and secure data transfer options we need for this process. Socket is constantly advancing the solution so we don't have to switch to another device on a long-term basis," Rex remarked.

Besides Lower Saxony, Softwarebüro Zauner and Partner will be providing the handheld solution to 10 other federal states of Germany. Several other countries in the EU are also already deploying or testing the system with their police.



Tachograph vehicle unit

CUSTOMER AT A GLANCE

- Organization: Lower Saxony Police
- Headquarters: Hannover, Germany
- URL: www.polizei.niedersachsen.de
- Primary business: Police agency for the federal state of Lower Saxony

PARTNER AT A GLANCE

- Organization: Pro Active
- Brand: SpringCard
- Founded: 2000
- Headquarters: Palaiseau, France
- URL: www.springcard.com
- Primary business: Manufacturer of smart card readers/writers

PARTNER AT A GLANCE

- Organization: Softwarebüro Zauner and Partner
- Founded: 1981
- Headquarters: Heusenstamm, Germany
- URL: www.zamik.de
- Primary business: Developer of software for government, transportation, and manufacturing applications

CHALLENGE

Access data from digital tachographs and driver's cards with a portable device

SOLUTION

- Socket SoMo 650 handheld computer
- Springcard CompactFlash smart card reader/writer from Pro Active
- ZA PDA solution with software from Softwarebüro Zauner and Partner
- Cable for connecting SoMo to tachograph vehicle unit



RESULTS

- Ability to create a complete legal case with reliable data by accessing original files from tachograph vehicle units and drivers' smart cards
- Portability of system makes it usable for officers at inspection checkpoints and on motorcycle patrol
- Expandability of device enables a variety of connection options
- Durability of device withstands rigors of daily use outdoors



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