

DATADOT: The polka dots that criminals hate



Written by Annalise Kempen

Monday, 31 March 2008

There will probably never be enough deterrents against crime as criminals are highly creative in devising ways to work around traditional methods used by law-abiding citizens to protect their property. Therefore new technology is constantly developed aiming to have criminals think twice before illegally acquiring another person's property.

By Annalise Kempen

Background



Vehicle theft is one of the most common crimes in South Africa. According to SAPS statistics, 86 298 motor vehicles and motorcycles were stolen in our country during the 2006/2007 financial year, meaning that an average of 182 vehicles out of every 100 000 are stolen. Apart from this, more than 13 500 vehicles are hijacked annually. Although insurance companies require alarm systems, immobilisers and in some cases tracking devices to be fitted to our vehicles, these have not been sufficient enough to fight vehicle crime.

Stolen and hijacked vehicles are either exported, mainly to neighbouring countries or are resold locally, often after an "order" had been placed for a specific vehicle model and make. Many vehicles are used for spare parts and are sent to chop shops to be dismantled, changed and to have their identification numbers (VIN, chassis) removed. It is also no secret that criminals steal or hijack vehicles to commit other crimes, either using them as getaway cars or to ram onto cash-in-transit vehicles, or simply to show off to their friends. Some individuals also report their vehicles as stolen or hijacked as part of insurance fraud, so that they can have a claim paid out. Unfortunately there are many loopholes in the system, resulting in criminals being able to have stolen vehicles re-registered, making them unlikely to be detected as stolen or hijacked.

As it is no secret that the SAPS cannot fight crime on its own, the police has joined forces with Business Against Crime, the Vehicle Steering Committee, the South African Insurance Association and DataDot Technology SA to reduce vehicle theft. These organisations are striving to make vehicles more difficult to steal and divert offenders away from vehicle theft. Amongst others they want to close the regulatory and procedural loopholes that professional thieves currently exploit. From business' side they want to empower the police with the tools, technology and knowledge to easily identify and impound stolen vehicles and apprehend the criminals. Simultaneously fleet management, business owners, car rental companies and the general public must also be protected and educated regarding the tools and technology that are available to identify stolen vehicles and parts.



A technological solution with a difference

DataDot was introduced to South Africa in 2002 after Ian Allan had founded the technology in the USA. A DataDot is a very small high-tech polyester substrate particle suspended in a clear drying adhesive with a UV trace. Although it is the size of a grain of sand, each DataDot is laser-etched with an identification number, which is only visible through a special small scope.

DataDots are sprayed onto a vehicle using a special spray gun, without being visible to the naked eye. At least 10

000 dots are sprayed into and onto a vehicle in at least 88 different positions, rendering the vehicle and its components useless to vehicle thieves. Due to the fact that DataDots are sprayed onto virtually all components of a vehicle, it is impossible for thieves to remove all the dots from all the vehicle parts, including the engine, suspension and the vehicle's body parts. Thus, even if a stolen vehicle is resprayed or sent off to a chop shop, it will be impossible for the thieves to cover or remove all the DataDots. Yet, as there are at least 10 000 DataDots sprayed onto each vehicle the police will have no trouble to locate them and to check if the information that is displayed on the DataDot, corresponds with the information on the vehicle's licence disc.

South African application



As it is impossible for the police to check each vehicle that they come across in a roadblock, only suspicious vehicles are checked, such as when the licence disc and licence plate do not correspond or when the driver displays suspicious behaviour. This vehicle will then be pulled aside and a trained police official will start to inspect it, using the special scope, searching for DataDots. As said earlier these DataDots consist of either the vehicle's VIN (new vehicles) or a PIN number (applied to second-hand vehicles).

At least 4500 police officials from specialised units such as the Dog and Vehicle Safeguarding Units and members at border posts have been trained at the SAPS' Detective Academy at Hammanskraal in using this technology. The technology is not currently used by the Metro Police, but if their officers come across something suspicious they can request police assistance.

Approximately 242 000 South African vehicles have already been micro-dotted.

Consider micro-dotting your vehicle

Some of the advantages of having DataDots applied to your vehicle are that there is only a once-off cost of approximately R1000 to have it sprayed, thereby making it an affordable deterrent. There is no monthly subscription or renewal fee. DataDots themselves can neither be changed nor can the identity of the whole vehicle be altered. The national database makes your vehicle easy to recover and identified if stolen, as vehicles can be traced back to their original owners. Insurance companies often offer discounted premiums for vehicles that have been micro-dotted, as it helps to discourage the distribution and purchase of stolen vehicles and vehicle parts.

DataDot is not only available for new vehicles. When buying a previously owned vehicle the client can request the dealer to check on the system if a vehicle has been micro-dotted, thereby tracing its history and verifying its identification.

All new Toyota Quantum minibuses are covered with DataDots. According to statistics supplied by BAC and SAIA (SA Insurance Association) this has resulted in an 81% reduction in theft compared to vehicles in the same category, since this technology has been introduced to these vehicles. It has also resulted in a 91% improved recovery rate by the SAPS on these vehicles.



According to Derek Menday from DataDot, new SAPS vehicles are also being micro-dotted; so are new Nissan and BMW vehicles. Even vehicle renting companies such as Avis, Imperial and First Car Rental are using DataDot technology to mark their vehicle fleets.

To the man on the street, it may be difficult to immediately understand how micro-dotting a vehicle can reduce crime. In simple terms one can compare it to a person's DNA - we all have it, and we cannot change it, it is something we carry with us for our entire lives. If a DNA database existed with every South African citizen's DNA

profile on it, the police will have a far better probability to link perpetrators to crime scenes as some DNA traces, such as hair, are virtually always left at crime scenes. In the same way one can compare DataDots as being a vehicle's DNA. If all vehicles were micro-dotted, then the probability of criminals stealing or hijacking vehicles would be far less, as they would know that they'd be caught out once the police started checking the vehicle. The chop shop industry would also be dealt a severe blow as virtually all vehicle parts would be micro-dotted for life.



Micro-dotting our vehicles is a simple contribution that South African vehicle owners can make in assisting the SAPS to fight vehicle crime. It is a proactive approach to fighting vehicle crime and it will surely make the life of criminals a lot more difficult if all our vehicles get a DNA for life.

For more information visit www.datadot.co.za or contact them at 0861 DATA DOT.

Sources:

Interview with Derek Menday: DataDot South Africa on 4 February

2008.

<http://www.datadot.co.za> - accessed on 7 March 2008.

<http://www.saps.gov.za> - accessed on 7 March 2008.



Last Updated (Tuesday, 01 April 2008)

Close Window