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Police and business support Microdot technology

Vehicle theft is one of the most pervasive crimes in South African society. Due to the fact that many vehicles are hijacked, and the owners hurt or killed in the process, vehicle theft has become one of the single largest contributors to a negative image of the country as a lifestyle or investment option in the global village. To emphasise this point there were 12.9 thefts or hijackings per 1000 vehicles in 2004. In an effort to curb vehicle theft, scientists look to a new technology based on 'Microdots'.

A Microdot is a special polymr based device, which can carry a unique identification number.

Up to 10 000 of these little items can then be sprayed all over the vehicle, giving it a unique identity, and making it really difficult for criminal elements to remove them.

In 1997 the National Vehicle Crime (NVCP) project, approved by Cabinet and facilitated by Business Against Crime, began looking at ways of reducing vehicle theft. This was a very important time to consider these things as the rate of theft and hijacking had reached 17.5 vehicles per 1000 - the highest ever recorded.

To reduce the level of vehicle theft, a coordinated approach was adopted to disrupting the entire vehicle theft process - ranging from systems to make it difficult to actually steal the car, through systems to aid recovery and if this fails to make it difficult to sell the vehicle or its components.

Since its inception in 1997, the NVCP has initiated a number of interventions across both the private and public sectors, resulting in a year-on-year reduction in the actual number of motor vehicle thefts and hijackings since 1998. During 2004, as an example, a total of 96 390 vehicles were stolen and hijacked (the lowest since the new democracy) from the national vehicle population of 7 479 178, including the growth of almost 430 000 new vehicles and light commercials. Although this decline is welcome news for all of us, the current rates are still unacceptably high and the challenge will be to reduce them further.

Essentially the single most effective tool to limit vehicle theft is the actual identity of a vehicle. If a vehicle is stolen and it then becomes impossible to sell it, dismantle it and sell the parts or to export it, the financial incentive to steal vehicles will decline and so will theft rates.

Microdot Technology has been identified as the most promising means available of entrenching the identity of motor vehicles and its parts. Local and international statistics reveal that Microdot technology leads to a decrease of around 50 - 60% in the number of stolen and hijacked vehicles. Criminals consider Microdotted vehicles (which are identified by means of a sticker) and their components as "contaminated" making these vehicles less desirable for theft.

Microdot Technology is a relatively low cost identification technique with a once-off application cost between R 200 (at manufacture) to R 800 (if applied in the after-market) per vehicle. This, together with the benefits to safety and security of the vehicle owner, sets this technology apart from the others.

Protocols have been developed which govern the manufacture, supply and application of the microdots, and recommendations made insofar as the application of the technology to new and/or existing
vehicles.

These protocols include:

- Protocols and Service Level Agreements (SLA) between the service provider and the motor industry, as this applies to both the OEM and aftermarket user. The SLA determines the parameters for the fitment specifications, personnel training, vehicle verification processes and stock security;
- The Security Protocol governs the manufacturer of microdot processes, disposal of waste, distribution security and reclamation of faulty or unused microdots by the service provider; and
- As microdots are seen as a valuable tool for vehicle identification by the SAPS a Protocol for access by SAPS for data base information which facilitates identification of a vehicle by SAPS through the manufacturer's data base.

The success of the Technology critically depends on its widespread application to agreed makes of vehicles and the appropriate support by law enforcement agencies. The widespread application of the technology depends, on the other hand, on the support of vehicle owners, insurers and manufacturers.
In South Africa, the technology has received the support of the following:

- The South African Police Service (who have prepared their investigators in the use of the technology, and who has also recently required that all of their new vehicle purchases have been marked with the technology);
- the South African Vehicle Rental and Leasing Association (SAVRALA);
- The South African Insurance Association (SAIA, representing the short term insurance sector);
- The Banking Association (representing the banking sector);
- The Retail Motor Industry (RMI) representing the vehicle dealer sector; and
- The Automobile Association of South Africa.

The commercial trailblazing of the technology in South Africa has been led by DataDot SA, who are soon to be joined by other competitors. The stage is now set for a serious increase in momentum in this area in South Africa.

On the vehicle-manufacturing front, most vehicle manufacturers are taking a reactive approach by fitting Microdots at the request of customers (e.g. Toyota SA has included Microdots in their ToyotaCare product options and have announced that all its Quantum vehicles will be fitted with Microdots), and have yet to seize the initiative and include the technology as a standard option. It is only through such an approach that critical mass and the potential tipping point in the fight against vehicle crime will be achieved.

If this technology is regarded by the SAPS, the car rental industry and by the insurance industry as an important measure to fight motor vehicle crime and to protect their assets, then the many owners of uninsured motor vehicles should also regard this as an important measure to protect their assets.

This is especially relevant when taking into account that less than 30% of vehicles in South Africa are insured, and that most vehicles that are stolen in South Africa are older than 6 years and probably not financed or insured.

Business Against Crime South Africa recommends all motor vehicle owners to insist, upon buying a new motor vehicle, that it be fitted with Microdots. It is also strongly recommended that the owners of used motor vehicles consider dotting their vehicles.

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