



# Insurance Industry Standards for Vehicle Tracking

Industry Research Whitepaper

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## BERG INSIGHT WHITEPAPER

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Published in cooperation with  
TelematicsUpdate in June 2006



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Industry research whitepaper

# Insurance industry standards for vehicle tracking

Incentives and requirements from insurance companies is the key driver behind the growing demand for vehicle tracking and recovery solutions. Advanced tracking systems can reduce the insurance risk for premium cars by improving the chances of recovering the vehicle in case of theft. Insurance companies have two options when seeking to create incentives for customers to adopt improved safety and security systems. One is to award customers who install approved security systems with lower insurance premiums. Another is to require a tracking device to be installed on certain models or vehicles exceeding a certain value. Insurance industry organisations in several European countries have developed national industry standards for approval of vehicle tracking devices in order to give guidance to their customers regarding the choice of car security systems. Certification processes for approved tracking are currently being maintained in Belgium, the Netherlands, Norway and the UK. This is a summary of the standards in Belgium and the Netherlands and the UK.

## Belgium

Belgium has for many years been highly exposed to vehicle theft. The country has been a favourite target for international organised criminal gangs because its small size enables a car thief to escape across an international border within an hour of seizing a vehicle. High incidence of car theft and numerous highly publicised carjacking incidents in recent years have contributed to creating public awareness of the serious risks related to vehicle crime. The concentration of political, economical and military institutions to the country obviously also create a demand for high security. When satellite based vehicle tracking and recovery systems were first introduced, Belgium immediately became a major market. Insurance

companies quickly incorporated the latest technology in their security requirements for top of the line car models. Assuralia, the Belgian insurance industry organisation, created a standard approved GPS/GSM vehicle tracking systems designated CJ-02 in 2002. At the beginning of 2005, a dozen vendors offered CJ-02 approved systems on the Belgian market. The installed base of active systems is around 20,000 units.

**Figure 1: Assuralia CJ-02 approved vehicle tracking systems (February 2006)**

Company	System(s)
Ames Tracking	SA-TRA CJ02-A, SA-TRA CJ02-1
BF Engineering	Securysat TC-35, Securysat IS35
Cobra Automotive Technologies	Cobra Connex, GPA 4
CSAT	KFT MK01ALL A1/2/2 TS
De Maeyer	Sat 4.2
Eureca Benelux	Satplus Eureca CJ2 A/I
European Car Protection	Eurosat Easy
EDC	ViaSat Easy 4.2 A/I, Sat4Cars 2829 A/I/IR
Tronic	MetaSystem Metasat 4
Mobile Data Solutions	GPSSM-Safecrash A/I
VOS	Mastersat 01/02
Wevada	Translocator, Autrack Security, Carstop X Sat

Source: Assuarlia

EDC, the distributor of Viasat in the Benelux region, is the leading provider of vehicle tracking and recovery systems in Belgium. Viasat is available with two service packages – Security and Confort – costing € 399 and € 540 respectively per year. Both packages include alarm monitoring and emergency assistance in the whole of Europe. Additionally, the Confort package includes technical and medical roadside assistance. Besides Viasat, EDC also offers a less sophisticated system Sat4Cars for € 299 per year. Viasat vehicle hardware cost € 945 or € 999, compared to € 595 or € 686 for Sat4Cars. The more expensive models feature

infrared driver identification. Cobra Automotive Technologies is represented in Belgium by Tronic. Tronic offers Cobra Connex with three service packages costing € 249, € 299 and € 399 per year respectively. The hardware cost € 799 or € 1,099, depending of model.

**Figure 2: SCM Class 4/5 approved vehicle tracking devices (February 2006)**

Company	System(s)
Armada	V300
Autonorm	Guardian Gold
Autovision	MetaSystem GPA 1000/1100
ASN Technologies	KFT MK01ALL A1/2/2 TS
AVL Systems	KFT MK01ALL A1/2/2 TS
Car Systems Benelux	Starsystem 1
Clifford Electronics	Cobra Connex, Tracenet
Eureca Benelux	Retrosat F1/F2, Satlite 1.0/2.X, Satplus S3
European Datacomm	Viasat Easy 4.2 A/I, Sat4Cars 2829 A/I/IR
Followit	1.X
Mechatrak	Massey Ferguson
Micpoint	Eagle Eye VCG2
Mobile Red	Mobile Red 1/2
My-Bodyguard	X-Trace
Navtrak	AEM4000DCU MET ADR
Rho-Delta	GT-SAT 10
RS Safety Systems	Easy Trace
TDSL Nederland	BF Engineering Securysat
Tecnocon	Retrever
Vai GPS System	HI-VAI
Vecos	VTRACE 1000
Volvo Cars Nederlande	On-Call

Source: SCM

## The Netherlands

Since 1997, the Dutch Foundation for Tackling Vehicle Crime (AVc), the public-private umbrella for all organisations involved in vehicle crime, has the main responsibility in developing a policy that tries to prevent vehicle theft. The partners include ministries, police, public prosecutor, insurance companies, car branch and the register authority. AVc has its own executive agency which coordinates and executes the projects as formulated in a long term program. The targets of the foundation are to reduce vehicle crime by means of prevention and by supporting the public partners in investigations. Since the start of the foundation the results are minus 33 percent theft of matriculated vehicles, minus € 125 million loss for insurers and minus 20 percent theft of mopeds and bicycles. Between 2000 and 2005 the number of passenger car thefts declined from 25,187 to 13,844. Theft of commercial vehicles decreased during the same period from 5,463 to 4,070, while motorcycle thefts increased from 1,696 to 1,765.

AVc achieved positive results by introducing a six parts program comprising technical prevention, trade, international cooperation, streamlining, monitoring and communication. The main activities for technical prevention are the promotion of immobilisers in older cars, the promotion of the use of tracking and tracing systems in new cars and the use of tags in mopeds and bicycles. Moreover the foundation supports the certification of all of these techniques as well as the procedures around them. Vehicle security systems for the Dutch market are certified by SCM (Dutch Institute for Certification of Vehicle Security Systems). SCM was founded in the early 1990s by the Dutch Insurance Association in order to maintain the quality control of antitheft systems for passenger cars. Later on the working area has been expanded to trucks, motorcycles and in 2002 plant and earth moving machinery. SCM maintains a classification system comprising five classes of electronic vehicle security systems:

- **Class 1: Immobilisation system** – An electronic system with at least one integrated automated two circuit immobiliser (ignition plus another system).
- **Class 2: Alarm system** – Immobilisation system same as Class 1 plus perimeter and motion detection with optical and acoustical signalling (lamps and sirens).

- **Class 3: Alarm system** – Same as Class 2 plus sabotage signalling, emergency power supply and towing detection.
- **Class 4: Tracking system** – Same as Class 1 plus satellite positioning and communication link with authorised ARC.
- **Class 5: Tracking system** – Same as Class 3 plus satellite positioning and communication link with authorised ARC.

Class 1 immobilisation systems are compulsory for new cars since 1998 in new cars. The obligation of insurers for a SCM 4/5 tracking system is generally € 75.000, but there are insurers that handle the worth of € 55.000. At the end of 2005, around 11,000 Dutch car owners had installed vehicle tracking systems. More than 20 companies offer certified SCM Class 4/5 tracking systems in the Netherlands, as shown in Figure 2 above.

## United Kingdom

The UK records the highest incidence of car theft in Western Europe. According to the latest available public figures 282,816 cars were stolen in England, Scotland and Wales in 2003. Vehicle crime in the country is however on the decline at a yearly rate of more than 10 percent. Newer cars are at least risk to be stolen thanks to sophisticated security measures. National standards for vehicle security systems are managed by Thatcam (The Motor Insurance Repair Research Centre) that was established in 1969 by British Insurers. Currently 31 motor insurance companies are members of the organisation.

Thatcam has defined a number of categories for vehicle security devices ranging from combined alarms and immobilisers through to after-theft tracking systems and Q Class – non-categorised aftermarket devices. In each category, third party security products have been evaluated against "The British Insurance Industry's Criteria for Vehicle Security", using specific tests to indicate the effectiveness of the product. The product listing is updated as new security systems are judged to have successfully complied with the criteria. Each product is subject to a review after 12 months.

**Figure 3.12 –Thatcham CAT 5 and Q Class approved vehicle tracking systems**

Company	System(s)	Thatcham category
BT Redcare	BT TrackIT	CAT 5
Cobra Vehicle Security	Cobra 2111, Cobra Trak5	CAT 5
	Cobra Trak Q, Cobra Trak Q Attivo	Q Class
Eagle Eye	Gold, Platinum	Q Class
IRIS Automotive	IRIS 600 SVT	CAT 5
KFT	MK 01 Family	Q Class
Laserline	Lasertrax	CAT 5
Matrix Telematics	Matrix 5	CAT 5
	Active, InterActive	Q Class
MetaSystems	Meta GPA800	Q Class
NavTrak	Proactive ADR	CAT 5
	Standard	Q Class
Porsche Cars GB	Porsche Vehicle Tracking System	CAT 5
RDM	Auto-TXT	CAT 5
Securicor	Trakbak	Q Class
Siemens DataTrack	Trakbak	Q Class
Tag Guard	Locator	CAT 5
Thales Telematics	Thales CAT 5	CAT 5
Trafficmaster	RAC Trackstar 5	CAT 5
	RAC Trackstar, RAC Trackstar Plus	Q Class
Tracker	Echo I/II	CAT 5
	Retrieve, Monitor, Horizon	Q Class
T Trac	T Trac	CAT 5
TrackM8	T2002	CAT 5

Source: Thatcham



At the beginning of 2006, Thatcham had defined six categories of vehicle security devices:

- **Category 1** – Electronic alarm and immobiliser.
- **Category 2** – Electronic or electromechanical immobiliser.
- **Category 3** – Mechanical immobiliser.
- **Category 4** – Wheel locking device.
- **Category 5** – After-theft systems for vehicle recovery.
- **Q Class Systems** – Aftermarket non-categorised systems.

Thatcham Category 5 (CAT 5) was introduced in December 2003 as the British insurance industry requirements for vehicle tracking and remote immobilisation systems based on GSM/GPS. The first systems became commercially available in September 2004. Car owners can earn up to 15 percent lower insurance rates by installing a CAT 5 system. Many UK motor insurers require a CAT 5 system on certain models, normally with a value of £ 40,000 (€ 59,000) or more. At the beginning of 2006, Thatcham estimated there were only a few thousand CAT 5 systems in use in the country. The CAT 5 requirements include the following specifications:

- GSM transmitter hidden within the vehicle.
- Transmitter activated automatically at time of unauthorised vehicle movement, and continuously monitored via GPS satellites until a recovery can be made.
- Vehicle securely guarded from time of recovery, and then delivered back to client.
- Ability to remotely immobilise the car once it is stationary.

- Monitoring operated via 24 hour secure operating centre with Europe-wide coverage and 24 hour police response agreement.
- System will recognise that a theft is occurring, even if the keys are taken with the car.

Thatcham Q Class is a general category for non categorised aftermarket vehicle security systems. Listed devices include alternative alarm systems; marking systems; data recording systems; paging, location, ID and signalling systems; uprated locking devices and image recorders. No tests need to be passed in order to receive Q Class accreditation. Thatcham simply ensure the system performs as claimed, demonstrates the potential for loss reduction, is reliable and durable, and can be installed safely and securely into the vehicle. Several less advanced vehicle tracking systems are listed under this category.



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