



THE BARRIER MODEL AS AN INSTRUMENT TO PREVENT AND TACKLE VEHICLE CRIME

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Since 2011, Europol has regarded organised property crime as a significant organised crime threat affecting virtually all European Union (EU) Member States (MS), necessitating concerted action. Consequently, the EU prioritised organised property crime in its second EU Policy Cycle among the top priorities of the EMPACT Operational Action Plan, wherein EUROPOL identifies motor vehicle crime as raising particular concerns.

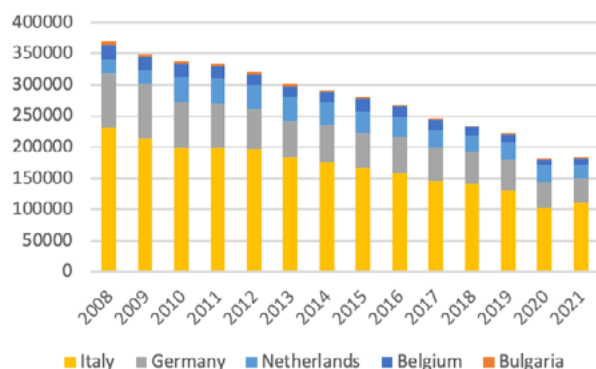
Motor vehicle crime comprises the theft of motor vehicles and the sale of stolen auto parts. Eurostat data shows that vehicle theft has decreased in the last ten years, and Europol also confirms that vehicle thefts went down by 40% between 2008 and 2018. On the other hand, the average value of stolen vehicles is increasing, and criminals started targeting expensive high-end cars. Organised crime groups increasingly use advanced ICT technologies to circumvent security systems to unlock the vehicle and ignite the engine. The growth of e-commerce in the EU also helps organised crime groups sell and ship stolen auto parts online more easily than ever before.

Against this backdrop, the European Network on the Administrative Approach (ENAA) has recognised and promoted the barrier model approach as a promising instrument to prevent and tackle organised crime. The Institute for International Research on Criminal Policy at Gent University (Belgium), in cooperation with the Centre for Crime Prevention and Safety (the Netherlands), the Center for the Study of Democracy and researchers from Italy, France and Germany, employed the barrier model to identify and suggest possible measures to tackle vehicle crime at national and EU level.

KEY POINTS

- Vehicle crime remains a significant organised crime threat affecting virtually Member States.
- ENAA has recognised and promoted the barrier model approach as particularly promising instrument to prevent and tackle organised crime.
- The barrier model approach is utilised to examine complex forms of crime by focusing on the logistical process underpinning it.
- The barrier model allows for determining possible signals and barriers that public and private partners can use to detect, prevent or disrupt criminal operations effectively.

Fig.1 Theft of a motorised vehicle



Source: (Eurostat, 2022).



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What is the barrier model approach?

The barrier model approach is utilised to examine complex forms of crime by focusing on the logistical process underpinning it. The barrier model approach starts by scrutinising the crime script and the logistical model utilised by the criminals to commit a crime. Utilising crime scripts allows for the identification of logistical process steps. A script accurately depicts the events, procedures, and steps criminals follow when committing a crime. It includes both preceding and subsequent events.

Once the logistical steps are identified, the approach prescribes the identification of facilitators and opportunities that make the crime possible. Drawing on this, the model allows for determining possible signals and barriers that public and private partners can use to detect, prevent or disrupt criminal operations effectively.

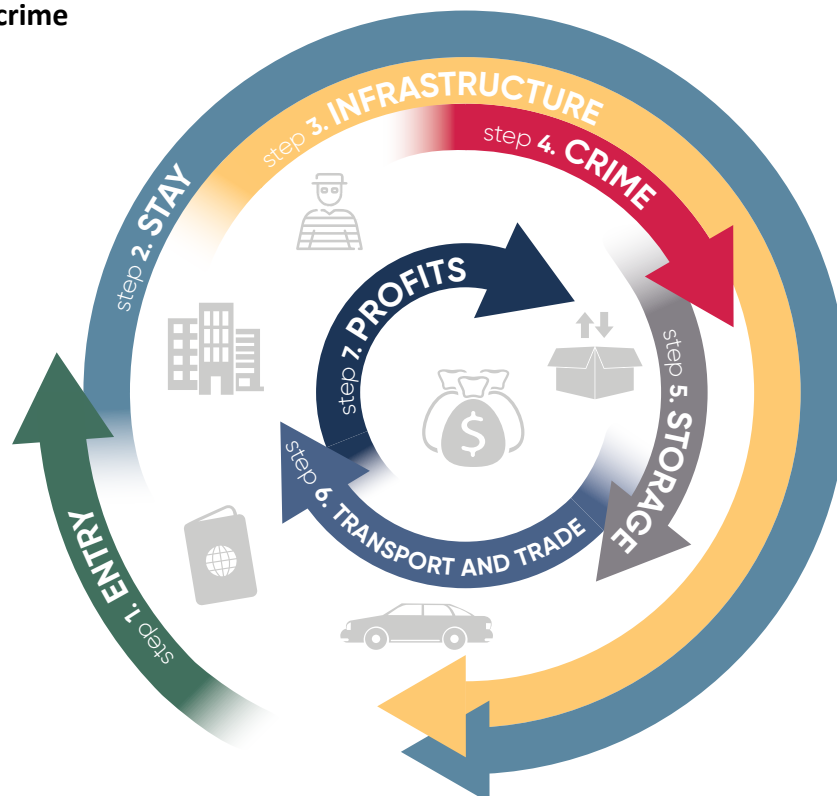
The employment of the barrier model enhances the investigative process by directing attention and analysis towards criminal activities through administrative and financial perspectives. The adoption of this model has led various government stakeholders to recognise their pivotal role in countering serious and organised crime.

Applying the ‘Barrier model’ to vehicle crime in the EU

The first stage of the ‘barrier model’ application is crime script analysis of vehicle theft. The crime script analysis implementation to vehicle crimes in Belgium, Bulgaria, Germany, Italy, France and the Netherlands established seven different steps in the commission of the crime: **1) Entry** – foreign criminals enter a particular country; **2) Stay** – locations where criminal networks reside; **3) Infrastructure** – how criminals successfully exploit the public infrastructure to commit theft; **4) Crime** – how criminals commit the crime; **5) Storage** – the location and/or method by which thieves conceal stolen vehicles (or parts) before transporting and selling them; **6) Transportation and trade** – how criminals sell and/or export stolen vehicles (and/or parts); **7) Profits** – how criminals profit from the stolen automobile (and/or parts). However, not all seven steps applied to the six countries in focus. For example, Bulgaria’s Entry, Stay and Infrastructure steps were irrelevant. Conversely, in some countries, additional Pre-crime and Post-crime steps were identified.

The second stage of the ‘barrier model approach’ is identifying opportunities, signals, facilitators, partners and barriers for each of the identified seven steps in the commission of crime.

Fig. 2 Steps in commissioning organised vehicle crime



Source: CSD

Examples from the application of the barrier model in Belgium, Bulgaria, Italy, Germany, France and the Netherlands

	ENTRY	STAY	INFRASTRUCTURE	CRIME	STORAGE	TRANSPORT & TRADE	PROFITS
Opportunities	Open borders in Schengen Area: There is no border control in the EU, easy and anonymous entry. (Belgium)	Assistance provided by community networks to third-country nationals in finding jobs and accommodation. (Italy)	The lack of automated traffic surveillance, namely license plate recognition cameras, benefits MOCGs. (Germany)	Vulnerabilities of keyless technology – thieves use relay attacks and key reprogramming to unlock and drive off with stolen vehicles. (Bulgaria)	Stolen cars are easy to conceal by using temporary storage in containers, which also reduces the risk of geolocation. (the Netherlands)	Harbours equipped with roll-off ports. Some harbours like Marseille remain essential in the transport of stolen vehicles. (France)	Cash-intensive economy and massive grey sector – the extensive use of cash in everyday transactions and the grey economy greatly facilitate the laundering of illicit proceeds. (Bulgaria)
Signals	Luxury cars are registered in countries where rental prices are lower than in the destination country. (France)	Use of vehicle with temporary license plates (“WW”) (France)	Stolen or falsified license plates. (the Netherlands)	Possession of locksmith and jamming equipment, immobiliser sets by unlicensed persons. (Italy)	Night-time activity at car repair shops, car dealerships and storage facilities. (Belgium)	Damaged door locks or a smashed side window could be signals for the transport of stolen vehicles. (Germany)	Display of unjustified income. (Bulgaria)
Facilitators	Car rental companies. (Belgium)	Fellow compatriots who reside in the country and help with arranging accommodation. (the Netherlands)	Expeditors responsible for the organisation of vehicle shipment in harbours. (France)	Criminal associations that provide the know-how and (ICT) tools to carry out motor vehicle thefts and/or false documentation for IDs or cars. (Italy)	Malicious car repair shops. (Belgium)	Facilitators for the resale of car parts are online platforms such as eBay, Allegro and Alibaba. (Germany)	Money transfer services, i.e. Western Union and Money Gram. (Belgium)
Partners	Car rental companies can detect signals such as false documentation or straw men. (Belgium)	Lodging/ accommodation providers. (the Netherlands)	Customs authorities could play a role in countering the export of stolen vehicles. (France)	State Traffic Police, State Police and Local Police are key actors that can increase the patrolling of known high-risk areas. (Italy)	Landlords of lock-up garages and warehouses. (the Netherlands)	The harbour police and water police of the federal states, as well as Frontex, act as partners in detecting and preventing shipments. (Germany)	Obligated reporting entities may improve collaboration with FIU to flag and report suspicious transactions more effectively. (Bulgaria)
Barriers	Development of regulations that enable and facilitate data sharing between LEA and the private sector. (Belgium)	Verifiable registration of tenants and visitors. Use of digital night register. (the Netherlands)	Automated traffic surveillance, namely license plate recognition cameras (APNR systems). (Germany)	Reinforce the collaboration with online traders and better control or prohibit access to virgin keys, jamming, and relay systems on the legal market. (France)	Mechanism for cooperation between the Communications Regulation Commission, telecoms, police and citizens to identify and tackle illegal signal jamming. (Bulgaria)	Mandatory vehicle and seller identity verification in second-hand car trade businesses and online platforms. (Belgium)	Increased parallel financial investigations and cooperation between Fiscal Police, State Traffic Police, State Police and anti-mafia district directorates (DDA and DDAs). (Italy)

The five building blocks of the barrier model

- Opportunities - Opportunities are conditions that enable the crime commission.
- Signals - Signs or hints that indicate possible criminal activity.
- Facilitators - Persons/parties who can aid perpetrators, either consciously or unconsciously. Parties from both the legal and illegal world can be facilitators.
- Partners - Public or private stakeholders possessing first-hand knowledge about the problem and/or powers to tackle it.
- Barriers - possible measures to prevent or counter crime.

What's next

The barrier model approach is useful for analysing organised vehicle crime and identifying practical measures for prevention and counteracting. The case studies in six EU countries provided valuable recommendations for its future implementation, which should be considered by all law enforcement or other authorities that decide to apply it:

- Identifying and cooperating with all critical private and public stakeholders is essential to identify feasible and effective 'barriers.'
- Prioritising and implementing identified 'barriers' should consider the direct and indirect impact on citizens and businesses.
- The barrier model approach requires periodic review, evaluation and update of the introduced measures.
- Organised vehicle crime is cross-border, and effective prevention and countering require EU level measures. That is why national authorities in the EU should work together toward a common EU barrier model.



V-BAR seeks to analyse the dynamics of the **criminal markets of motor vehicle theft and stolen vehicle parts** in the EU. Based on logistical analyses of these markets in 6 EU Member States, V-BAR will develop a **European barrier model** of organised vehicle theft and stolen vehicle parts.