

Putting a Price Tag on Underreported Cargo Theft in Europe

How Much is REALLY Stolen Every Year?

INTRODUCTION

The Big Unknown

Sizeable efforts have been made to estimate the value of the total annual loss of all cargo stolen while transiting European Union (EU) roads. However, as long as the theft of freight is categorized as a subset of other types of crime, cargo crime will remain a vast grey area, the magnitude and economic impact of which can only be estimated.

The first highly notable effort was made by the European Parliament (EP), which in July 2007 published a study on “Organized Theft of Commercial Vehicles and Their Loads in the European Union.”¹ This study, using data from 2003 to 2006, concluded that “... the total loss of value can be estimated at more than €8.2 billion each year” for the entire EU, which at the time included 27 member states. Our estimate focuses on today’s EU member states, minus Malta (due to a lack of data): a total of 27 countries (EU-27)².

The estimated loss figure of €8.2 billion has been the only official statistic available to quantify the scale of cargo theft to policymakers and stakeholders. Even today, almost a decade later, the €8.2 billion figure remains the primary statistic quoted by industry, law enforcement agencies, and media when it comes to quantifying the economic impact of cargo crime in the European Union.

While the 2007 study was significant at the time, the FreightWatch International Supply Chain Intelligence Center (FWI SCIC) revisited the subject and reviewed European loss-value estimates for three reasons.

The first is that FWI SCIC now has increased accessibility to more and better European incident data. Second, the quality of the cargo crime intelligence that FWI SCIC can draw from has substantially improved over the past few years, thanks to help and insight from a growing number of European Law Enforcement Agencies, with whom FWI SCIC has developed professional relationships.³ This added value makes it possible to better understand geographic and commercial patterns of criminal behaviour within and across national borders, and has allowed FWI SCIC to make valid ‘bottom-up’ estimates of individual target countries. Third, the cargo crime landscape in Europe has worsened since 2007. Even though freight traffic has actually decreased since 2004 due to the economic crisis, threats to the supply chain are substantially higher today almost everywhere in the EU than they were 10 years ago. Criminal groups have also become better organized and more capable of operating across Europe than they were a decade ago.

Consequently, FWI SCIC decided to combine the most recent data, and its best cargo theft intelligence, to update the €8.2 billion figure and provide a more accurate and rationalized estimate of cargo theft in the European Union.

Estimated Loss Value in EU-27 in 2013
€11.6 billion

METHODOLOGY

FWI SCIC does not seek to supplant the contribution of the 2007 EP study, but rather to update and, where possible, improve the components used at the time by the authors. To realistically estimate the number of in-transit freight thefts across the EU-27, FWI SCIC extracted the general risk rate from the aforementioned EP study (1 incident per 10,000 'short trips' and 1 incident per 5,000 'long trips') and applied several proprietary risk factors and variables, alongside European Commission road transport statistics for 2013 (reference year).

THE FIVE CORE COMPONENTS OF THE CALCULATION ARE:

1 The Number of Loaded Road Trips Undertaken (LT1, LT2).

This estimate represents the total number of paid freight movements on the road in the European Union during 2013. It is divided into 'short' <300km (LT1) and 'long' >300km (LT2) trips, as EU data does not provide data points for '600km trips' as hypothesised in the 2007 EP study.

2 The Average Risk of Incidents Occurring Across the Road Transport Industry (TR1, TR2).

This ratio represents the probability that a road shipment will fall victim to cargo theft. This ratio is an update of the one taken from the 2007 EP study under the assumption that it is sufficiently accurate. In the 2007 study, the ratio for 'short' trips was 0.0001 (TR1), the ratio for 'long' trips was 0.0002 (TR2).

3 The Cargo Crime Risk for the Countries in Question (CR).

In order to appropriately assess today's individual and specific cargo crime risks in each of the EU-27, FWI SCIC reviewed and, where necessary, revised the TR1 and TR2 ratios, by applying its own proprietary risk analysis to each of the 27 countries concerned. For this purpose, FWI SCIC utilized a large variety of quantitative and qualitative sources that were not available for the 2007 study, which we believe strengthens the study's comprehensiveness and accuracy.

4 The Estimated Number of Cargo Thefts (CT).

5 The Average Loss Value Recorded by FWI SCIC (LV).

This is a conservative estimate qualifying the average loss value recorded for 2013. The estimated loss average value in the EU was approximately €91,000.

THE NEW ESTIMATE

$$(TR1 * CR) * LT1 + (TR2 * CR) * LT2 = CT$$

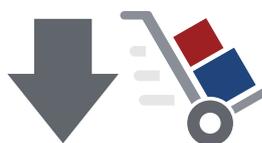
$$CT * LV = X$$

Having researched and calculated the aforementioned five components, and applied them in the formulas $(TR1*CR)*LT1 + (TR2*CR)*LT2 = CT$ and $CT*LV = X$, the FWI SCIC has projected that the estimated market value of all types of goods stolen from road transport in the EU-27 in 2013 was approximately **11.6 billion**, or roughly 0.1% of the EU's GDP at that time. This estimate is **41%** higher than the one made in 2007.

€11.6 BILLION in stolen goods in 2013
41% HIGHER than 2007

The increased loss value mirrors the constantly rising theft risk that all supply chains face throughout Europe, and particularly in a number of key hot spots, which were highlighted in the recent *FreightWatch International's European Cargo Crime Threat Assessment 2014-2015*⁴. Of specific note are the Lombardy, Apulia and Campania regions in Italy, Paris and the wider Ile-de-France region in France, the East to West and North to South transit motorways in Germany, Belgium, and The Netherlands, as well as some regions in Spain, the United Kingdom, Poland, Ukraine and Russia.

FWI SCIC believes that the estimated loss figure would have registered higher had freight volumes not fallen approximately 20% between 2004 and 2013 as a result of the EU economic crisis.



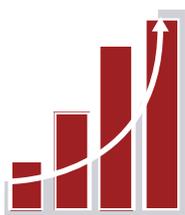
Freight Volumes

DECREASED 20%

due to the economic crisis from 2004–2013

CALL TO ACTION

Why Loss Values Matter



Cargo crime is **STEADILY RISING** throughout the European Union

Cargo crime is steadily rising throughout the European Union and beyond, as more and more criminals, many of them linked to international organized crime, recognize the ease at which large volumes of sought after goods can be stolen. The economic crisis in Europe has further added to the problem, as it has driven the opening of new illegitimate and semi-legitimate supply chains and markets for stolen goods.

A true understanding of the cargo theft problem in Europe is as incomplete as the preventative measures taken by supply chain stakeholders. Here lies a core problem: too many freight thefts remain unreported by industry and/or are not properly recorded by law enforcement, meaning that official and reliable statistics on overall theft and specific theft types are statistically non-existent in most European countries. As a result, the magnitude of the problem is difficult to grasp, and even more difficult to communicate to decision-makers who could, if they realized the actual magnitude of threat, make combatting freight theft a priority.

Therefore, it is time to better quantify cargo theft and to conceptualize it for what it actually is: a serious crime with significant economic impact, not a criminological footnote. Putting a price tag on the huge damage cargo criminals do to the European economy every year—**€11.6 billion**—is an important first step in this direction.



IN DAMAGE TO THE EUROPEAN ECONOMY



This FWI SCIC study hopes to serve as an advisory for supply chain security managers and the wider industry. Gaining a better understanding of the European cargo crime landscape and stepping up security programs will help to mitigate risks and prevent thefts. As FWI SCIC has previously stated, the threat is getting worse, criminal tactics are changing fast, and theft/loss numbers continue to increase year-over-year.

If the estimated loss value in 2013 stood at €11.6 billion, the problem in 2015/2016 can be predicted to be worse. Adding the massive number of Thefts from Facilities (warehouse, company burglaries, robberies—approximately 22% of FWI SCIC incidents in 2013), which are not covered by this estimate, reveals that the true scale of cargo theft may be even greater.

€11.6 BILLION

+ THEFTS FROM FACILITIES

true scale of cargo theft may be even greater



Opportunity remains to strengthen cargo security. High-value shipments are routinely left idle in unsecured parking areas. Route planning is still not common. Even though shipments cross well-known, high-risk areas, some carriers omit or simply refuse to comply with agreed security protocols. And now, a growing number of transport orders are sub-contracted via online load boards to unknown and sometimes fraudulent carriers. Product owners, forwarders, and carriers can often lose sight of their cargo while it is in transit. When a theft occurs, there can be tremendous financial losses in profitability, tarnish to brand image, increases in insurance costs, diminished customer loyalty, and many other tangible business costs.

While profit margins are certainly tight across the logistics/transport sector, it is beyond debate that the implementation of industry best practices (e.g., standards such as TAPA FSR/TSR), along with electronic freight tracking and monitoring programs, will save significantly more in the long run than the initial investment needed to put these security measures in place. A careless attitude toward freight security can lead to an increase in crime and further losses. It is more imperative than ever that the industry take a serious look at the viability and security of the European supply chain.

About FreightWatch International

FreightWatch International (FWI) is a leading provider of global logistics security services, offering tracking and monitoring solutions that provide organizations with cargo security, transparency, and supply chain integrity from origin to destination. Using real-time visibility technology and a layered solutions approach, organizations can actively monitor their cargo anywhere in the global supply chain to mitigate the risks associated with theft, spoilage, counterfeiting and more. With operations across the globe, FWI is uniquely positioned to deliver services regionally across diverse supply chains.

FWI is part of Sensitech Inc., a leading provider of supply chain visibility solutions. These solutions enable global leaders in the life sciences, food and industrial markets to track and monitor assets across the supply chain to protect the integrity of temperature-sensitive products. Sensitech is an ISO 9001:2008 company based in Beverly, Massachusetts, with more than 35 sales, service and distribution locations around the world. Sensitech is a part of UTC Climate, Controls & Security, a unit of United Technologies Corp. (NYSE: UTX), a leading provider to the aerospace and building systems industries worldwide.

More information about FreightWatch International is available at www.freightwatchintl.com

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¹ Van den Engel, A.W., & Prummel, E. (2007). *Organized Theft of Commercial Vehicles and Their Loads In the European Union*. Study requested by the European Parliament's Committee on Transport and Tourism and published by the European Parliament's Directorate General Internal Policies of the Union in July 2007.

² Austria, Belgium, Bulgaria, Cyprus, Croatia, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, and United Kingdom.

³ Including the Dutch Landelijk Team Transportcriminaliteit (LTT), the UK's National Vehicle Crime Intelligence Service (NaVCIS), the French OCLDI, German Regional Landeskriminalämter, the Spanish Guardia Civil, the Belgian Federal Police or the Swedish Police, among others.

⁴ Available on <http://www.freightwatchintl.com/intelligencecenter/securityreports/european-cargo-crime-threat-assessment-2014-2015>.

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