

## COMBATTING SMUGGLING NETWORKS: A STRATEGIC APPROACH FOR CUSTOMS AUTHORITIES

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### Abstract

This article explains the structure of smuggling networks and challenges they pose to customs authorities using Lithuania as one of examples. Smuggling networks are complex, adaptive, and often operate through decentralized systems that use encrypted technology, flexible logistics, and support from local communities. These networks create serious risks for customs by avoiding taxes, moving illegal goods such as drugs or counterfeit products. Not only does this harm customs authorities and national economies, but it also puts public health and safety at risk. Their resilience is often supported by socio-economic conditions in border regions, where smuggling may be seen as a legitimate income source. In 2024 alone, the Office of Lithuanian Customs launched investigations into 145 smuggling cases, showing the scale and urgency of the issue. For this research literature analyses and statistical analyses have been used. Based on these analyses, the paper presents three main strategies that customs authorities could use to fight smuggling networks: strengthen national legislation, improve intelligence and data sharing and strengthen national cooperation. These strategies are effective because they reduce smuggling risks, strengthen the capacity of customs authorities, and improve coordination in detecting and preventing illegal trade.

**Keywords:** customs, customs authority, customs operations, illegal trade, smuggling networks.

### Introduction

The reason to fear smuggling networks is because they affect the effective functioning of customs and excise systems, particularly when we talk about countries like Lithuania, where geographic and political factors favor cross-border crime. These networks directly work through a systematic arrangement that threatens the effectiveness and reliance of customs against revenue generating for the government by depriving it from its due share in terms of smoothing export import assistance leading to money laundering. This paper attempts to analyze the smuggling network and activity threat structure in the customs and excise activity field of Lithuania with special attention to indications of possible strategies customs can employ in a causal way.

**Research object** – The structure and influence of smuggling networks on customs and excise operations.

**Research aim** – To analyze the structure and operational strategies of smuggling networks and propose effective enforcement strategies to customs to reduce smuggling threats.

**The following objectives have been set to achieve the aim:**

1. To examine the organizational structure and operational methods of smuggling networks in Lithuania
2. To explain theoretically the concept of smuggling networks and analyze key threats and risks smuggling networks pose to customs and excise operations.
3. Explore the strategies proposed for customs authorities to effectively reduce the threats and risks posed by smuggling networks in order to ensure the collection of customs duties.

**Research methods applied:** Document analysis, systematization of information, analysis of scientific literature, graphical visualization, case studies.

### Results and discussions

#### Organizational Structure and Operational Strategies of Smuggling Networks in Lithuania

The organizational structure and operational strategies of smuggling networks in Lithuania are characterized by adaptability to local conditions and international links, reflecting the complex nature of trafficking activities. Such networks tend to operate on decentralized models, which ensure their flexibility and resilience to law enforcement interventions. Activities in other countries that essentially correspond to the structure of international trade networks, including smuggling networks, where they primarily act as transit and destination points for illicit goods (Aziani et al., 2019). This trend is also observed in Lithuania, where geographical factors and socio-economic conditions influence smuggling routes and methods.

Smuggling networks in Lithuania are well-organized, using advanced technology and logistic planning to make sure that the goods pass without detection. For instance, Vijayan et al. (2022) also pointed out, it is not uncommon for the local communities to have a productive predisposition towards contraband, an indicator that these practices are becoming normalized to certain socio-economic contexts. Such normalization can lead to an atmosphere in which smuggling becomes not only accepted but treated as a legitimate form of economic activity, making it harder for law enforcement

officers to operate. Furthermore, Duijn et al. (2015) admit that the cooperative nature of these smugglers is also what makes these networks so resilient against law enforcement; creating new avenues for smuggling once some are disrupted, Bish et al., (2024) says that the primary players in these networks are frequently unseen, and distanced from actually carrying out the smuggling, making them harder to identify and prosecute. In addition to a decentralized structure, these networks are also very horizontal, adapting with ease to the other working tactics of law enforcement. This decentralized element allows for the formation of hierarchies among smugglers in a more localized way, with vertical (as opposed to horizontal) coordination — as demonstrated by Campana (2018). This framework both enables smugglers to evade law enforcement and encourages intra-smuggler competition, which in turn pressures groups to innovate smuggling techniques and routes. The advanced technologies, including for example encrypted communication and digital payment systems, also help the operational advantage and security for these networks. Customs authorities and law enforcement agencies need to use traditional methods of doing their work but also face the community with its socio-economic issues as well to deter Lithuania from smuggling's reach.

Additionally, the links between smuggling networks and the local economy are an important factor to consider. Hlovor (2018) notes that smuggling is often perceived as a legitimate means of generating income by those living near borders, which complicates law enforcement efforts and highlights the need for a comprehensive approach to border management that takes into account the economic circumstances of local communities. This link between smuggling activities and local economic conditions highlights the importance of customs authorities engaging with these communities to foster cooperation and increase the effectiveness of anti-smuggling measures.

The challenge remains, as in 2024 alone, 145 smuggling cases were investigated (Office of Lithuanian Customs, 2024). In particular, 79 cases of narcotics and psychotropic substances were investigated — substances that are frequently associated with organized crime groups and constitute a grave threat to public health. Increase the drug smuggling indicates to improve intelligence and inter-agency cooperation to effectively destroy these networks.

The investigations also included 49 cases involving excise goods, mainly the smuggling of tobacco products. This smuggling, apart from causing huge loss of revenue by way of no payment of tax to the state exchequer, is also responsible for large-scale proliferation of spurious and unregulated products in the market. Previous studies highlighted broader economic impacts of illegal tobacco trade, including its implications for legitimate businesses and public health efforts to reduce smoking prevalence.

Moreover, according to the Office of Lithuanian Customs (2024), a total of 17 cases of cash smuggling were recorded last year; usually, cash is connected with financing illegal actions such as: drug and human trafficking. One of the biggest problems for customs authorities is that cash can cross borders without any declaration, allowing criminal organizations to operate more easily and undermining the integrity of financial systems.

The complexity of these types of smuggling cases illustrates the need for holistic customs enforcement. This could involve strategies such as the use of creative tech-based risk assessment tools, better training for customs enforcement or making more intergovernmental partnerships with security forces. With the Office of Lithuanian Customs Criminal fighting against these types of smuggling networks, harming such illicit activities will become less rampant to public safety and economic stability.

In summary, the structure and patterns of smuggling networks in Lithuania are influenced by local socio-economic conditions, international connections and flexible logistics strategies. Understanding these dynamics is essential to develop effective anti-smuggling measures that address both the methods used by smugglers and the socio-economic environment in which they operate.

**Concept of smuggling networks**

Smuggling started in the reign of Edward I (late 13th century) when a Customs duty was placed on the export of wool, which was in great demand in Europe. The initial duties were small, but as the Hundred Years War progressed in the 14th century, the tax increased to fund troops and further fighting. Over time, smuggling networks have evolved into complex, international operations that pose a significant threat to the integrity of customs and excise systems around the world. In order to understand the significance and importance of smuggling networks in the flow of goods, the scientific literature was analyzed (see Table 1).

**Table 1.** Definitions of smuggling networks

Authors	Definitions
Mirzaei et al., 2021	The smuggling of goods refers to illegal operations that are monitored and intercepted by law enforcement officials.
Kostiana, 2022	Tobacco smuggling poses a significant threat to economies, leading to losses for legal companies and highlighting the inadequacy of punitive measures against such illegal activities.
Meymand, 2024	The smuggling of health goods, particularly counterfeit medicines, is exacerbated by a lack of effective mechanisms for combating illegal circulation at both national and international levels
Achilli and Tinti, 2019	Smuggling networks often involve transnational alliances that facilitate the movement of goods and people, with implications for financing terrorist activities

The information in the table 1 reveals the importance of smuggling networks. Mirza et al. (2021) define smuggling as an illegal activity that is actively monitored by law enforcement agencies, highlighting the challenges that authorities face in combating this activity. Speaking about illegal tobacco trade, Kostiana (2022) highlights the high economic impact of tobacco smuggling, which not only threatens the financial stability of legal business, but also highlights the inadequacy of the current criminal measures to combat such illegal trade. In the context of health goods, Meymand (2024) points to

the increasing volume of counterfeit medicines, which is exacerbated by ineffective national and international prevention and enforcement mechanisms. In addition, Achilli and Tinti (2019) explore the link between people smuggling and terrorism, suggesting that transnational alliances of smugglers can facilitate the financing of terrorist activities. All these perspectives suggest that smuggling networks are not purely criminal organizations – they are closely linked to wider economic, legal and security systems. Minimizing their impact requires a consistent and well-thought-out action plan.

Organized criminal groups earned between 426 and 652 billion dollars annually from the smuggling of illegal goods and services (United Nations Office on Drugs and Crime, 2020). These illegal activities cover various sectors such as drug trafficking, human trafficking, counterfeit goods and arms smuggling.

In addition to the loss of revenue, smuggling poses a significant threat to national security and public safety. Many smuggling operations are linked to organized crime syndicates that engage in other illegal activities such as drug trafficking, human trafficking and arms smuggling.

Smuggling also undermines trade enforcement, particularly with regard to counterfeit goods. From luxury goods to pharmaceuticals, these counterfeit goods pose a direct threat to consumer safety, public health, and legitimate industry. For example, counterfeit medicines can pose serious health risks, while counterfeit electronics or car parts can cause accidents or breakdowns. According to the Organisation for Economic Co-operation and Development (OECD, 2021), the global trade in counterfeit and pirated goods reached \$464 billion in 2019, representing 2.5% of global trade.

In addition, smuggling networks are increasingly exploiting or combining technology and digital platforms to operate illegal business. In this digital era, e-commerce development has given a boost to smuggling, as counterfeit products are now shipped and exchanged worldwide through the internet. According to the World Customs Organization (2022) (WMO), this trend has greatly increased during the COVID-19 pandemic, as there was a sudden active online market searching for counterfeit protective equipment, and even medicines and vaccines. The dark web, cryptocurrency, and encrypted communications allow for the ease of smuggling networks to run illicit operations worldwide which creates challenges regarding law enforcement efforts in tracking down such behaviors.

### **Strategies for customs authorities to effectively reduce the threats and risks posed by smuggling networks**

International Smuggling Syndicates are serious threats to national security, economic stability and public health. As in many countries around the world, these networks benefit from gaps in local regulation and reverse logistics are commonplace — often with a surprising level of acceptance that makes widespread enforcement difficult. In response to these difficulties, customs administrations should take an integrated approach reflecting new legal, intelligence and international cooperation realities. In this paper we highlight three fundamental strategies customs authorities can follow to mitigate the threat posed by smuggling networks: making national legislation more strict, improving intelligence and creating international cooperation networks.

Combating smuggling and its crime requires a solid legal framework. A similar conclusion is made by Bondarenko and Utkina (2023), regarding the insufficient legal provision of Karate and in particular its elements under martial law with a proposal for adjustment. Defining the conditions of smuggling and penalties associated with them, customs administration can achieve a deterrent effect on potential offenders. Additionally, these legal frameworks must be regularly updated to keep pace with the changing methods of smugglers. It covers the problem of counterfeit goods smuggling — one that has become increasingly common in the European Union (Gwardzińska & Chackiewicz, 2022). Aligning laws with changing smuggling trends also strengthens the scope of enforcement by customs authorities to improve their efforts in curbing not only the number of incidents but also the extent of smuggling itself.

Getting hold on all the secret information is among the key factors in smuggling avoidance. According to Liempt & Sersli (2012), with the aim of justifying all resources and technologies that are being devoted in battle against these threats, there is an urgent need for a scientific discourse migration and smuggling. The customs have thus decided to invest in advanced data analytics and surveillance technologies that help them. In fact, predictive modeling is used to allow customs agents to target high-risk shipments for inspection thus improving efficiency and the chance that contraband will be detected. Establishing a clear culture of information sharing across federal and local government agencies can also unify situational awareness, leading to more organized responses in the event of smuggling. It fortifies enforcement actions with intelligence, and helps build a larger understanding of the smuggling landscape.

Due to the transnational nature of smuggling networks, international cooperation is crucial for effective enforcement. Partnerships: Customs authorities need to partner with the counterparts of other nations in sharing intelligence, best practices and resources. Developing and implementing consented inter-agency measures to reduce smuggling capacity is one of the main points. That includes joint operations, training exercises and some kind of international database that tracks smuggling behavior and trends. In addition, international cooperation can help to align legal systems so that it is more difficult for smugglers to take advantage of gaps between countries. This collaborative approach allows customs authorities to form a collective response to smuggling networks, significantly enhancing their overall enforcement capabilities.

All in all the threats these smuggling networks pose needs an entire coordinated response from customs authorities as outbreaks of a disease such as the coronavirus can be devastating. Customs agencies can address the smuggling threat effectively through strengthening legal frameworks, enhancing intelligence capabilities and collaboration within international and local partners. These approaches enhance enforcement and also lead to economic security and public safety. Smugglers, as with all criminals, are especially devoted to the cause and constantly modify their approaches in order to work around whatever processes customs authorities devise for their protection.

## Conclusions

Smuggling networks in Lithuania involved adaptable, dynamic, decentralized structures and arrangements with complex logistics to evade customs and excise duties. They play on the local socio-economic context: community support in border areas, etc.; while also benefiting from global networks that provide sustainability even under pressure to deliver. Modern technology, encrypted communication and agile operating methods enhance their resilience. A customs response, both tactical and socio-economic to the drivers of this smuggling enterprise will be required to address these poorly concealed structures.

The nature of smuggling networks are multi-layered systems of adaptation to our shared economic and technological environment that challenge customs and excise authorities in abundance. The networks operate across most sectors: at the heart of everything from fake goods and illegal drugs, to humans as a commodity that present specific risks to public safety, economic stability and national security. Even the rise of e-commerce and encrypted digital has merely assisted smugglers in evading being halted from attaining larger scales. This indicates that a counter strategy from global partners needs to be multi-pronged, wherever technology is supported and tailored legislation helps in dismantling smuggling networks while minimizing their impact on international trade.

It is important that customs authorities work together as part of a strategic approach to address the multi-faceted threat posed by international smuggling networks. Strengthening national legislation can reach out to more potential wrongdoers in the broad depths of a smuggling organization. Improved intelligence sharing data held across various agencies and honing in on specific targets means we have better enforcement focused on increasing detection rates. Customs authorities also communicate with each other to enhance joint operations, intelligence and legal responses. These strategies serve as walking the tightrope between protecting economic interest, health and providing much-needed reinforcement of customs agencies to help provide efficiency in securing some semblance of customs revenue.

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