

CEPS EVENT REPORT



Thinking ahead for Europe

Digital Traceability in the Fight against Illicit Trade: Improving rules and practices

Seminar organised by CEPS and MSL Group, 6 November 2017

Jeanne Metivier and Felice Simonelli*

Europol reported the seizure of €230 million worth of fake food and beverages on 25 April 2017, in a global ('OPSON') operation targeting food fraud. Five months later, Europol reported the seizure of more than \$51 million worth of potentially dangerous medicines sold by illicit online pharmacies. Such cases are increasingly common in the EU and confirm illicit trade as one of the most lucrative and least sanctioned organised crimes across the globe.

Illicit trade affects almost all sectors of the economy and all countries in the world. According to a recent study jointly conducted by the OECD and the EU Intellectual Property Office (EUIPO), international trade in counterfeit and pirated products accounted for \$461 billion and represented 2.5% of world trade in 2013. The situation in the EU is even more worrying: imports of counterfeits and pirated goods amounted to €85 billion and corresponded to 5% of total EU imports in 2013.¹

Illicit trade and counterfeiting impinge on all actors in the economy: they shrink the sales and revenues of affected companies; they reduce government revenue through tax evasion; they deceive and endanger consumers by enabling the sale of unhealthy and dangerous products; and they fuel crime and terrorism. By way of example, Nick Soper (spiritsEUROPE) observed that the illicit trade of wine and spirits costs about €1.3 billion a year to EU producers and causes tax losses of over €1 billion a year. Fake alcoholic beverages (based on methyl alcohol) produced in the Czech Republic killed over 50 people in 2012. Refilling genuine bottles with cheaper spirits is another issue that deceives consumers and breaches intellectual property rights.

Fighting illicit trade and counterfeiting is therefore urgent. In recognition of this, the seminar co-organised by CEPS and MSL Group brought together representatives of EU and international

* Jeanne Metivier is Associate Researcher and Felice Simonelli is Research Fellow at CEPS.

¹ OECD/EUIPO (2016), *Trade in Counterfeit and Pirated Goods: Mapping the Economic Impact*, OECD Publishing, Paris. <http://dx.doi.org/10.1787/9789264252653-en>

institutions and private business to debate digital solutions to enhance the traceability, authentication and international and stakeholder cooperation to tackle the issue.

EU regulatory requirements and technological progress to enhance the digitalisation of traceability and authentication

What tools are available to combat illicit trade and counterfeiting? What progress has been made on the digitalisation of traceability and authentication technologies? Do EU regulatory requirements favour the uptake of digital solutions?

Tracking, tracing, and authenticating products are among the main strategies deployed in the fight against illicit trade and counterfeiting. In a nutshell, tracking and tracing refer to locating products and determining both their origins and destinations. Authentication refers to the validation of products as genuine.

Nowadays, observed speaker Philip Allen (Essentra), a myriad of technical solutions exist to track, trace and authenticate products. These solutions differ in their levels of safety, visibility, and accessibility, as well as in their implementation costs. For instance, 2D barcodes offer low implementation costs and, in some cases, can be easily verified by consumers through their mobile phones. This technology may not offer the greatest safety, however, as 2D barcodes may be copied. Technologies that allow the direct printing or marking of the product, rather than printing a code onto a sticker that is then applied to the product, provide greater safety, although they may require adaptation of the production chain. For example, in the textile industry, security codes can be directly embedded in the thread itself. This technique is invisible and cannot be copied. Bottom line requirements for the use of new technological solutions in this area are that they leverage technical standards recognised internationally, remain cost-effective and simple to integrate, notably for SMEs, without slowing down production and supply chain processes.²

Progress has hence been made from a technical perspective to digitalise traceability and authentication techniques. Have EU regulatory bodies followed this trend? What are the current and future EU regulatory requirements for enhancing the digitalisation of traceability and authentication? A few EU regulatory requirements, addressing specific productions affected by fraud, counterfeiting and illicit trade, namely for food, feed, and ingredients through all stages of production, processing and distribution are already operational. Others are being addressed and are expected to be deployed soon, for example in the pharmaceutical and tobacco sectors.

Regarding IP enforcement, in July 2014 the European Commission adopted a dedicated plan with ten specific actions to reduce the economic harm resulting from commercial scale IP infringements. It also encourages all stakeholders involved in the value chain for any IP-intensive product to exercise due diligence to avoid IP infringements. Furthermore, the European Commission organised a workshop on supply chain integrity on 5 June 2015. As underlined by Stephanie Martin (DG GROW), globalised supply chains have become wider,

² Coalition Against Illicit Trade (2017), [Implementing digital solutions to address the issue of cross border illicit trade](#), CAIT.

fragmented and opaque, which increases their vulnerability. Indeed, criminal networks can infiltrate (i.e. bring counterfeit products into the legitimate supply chain) and divert (i.e. steal genuine products from the legitimate supply chain) these supply chains. The European Commission also ran an online consultation from December 2015 to April 2016 on this subject.

Recently, the European Commission has worked on an IP Package, which should be adopted by the end of 2017. The IP Package contains a report on the Evaluation of the IPR Enforcement Directive (IPRED) 2004/48; a communication providing guidance on certain provisions of IPRED; a communication outlining measures to fight against IP infringements; a communication outlining an EU approach to Standard Essential Patents (SEPs); and an overview of the functioning of the MoU on the sale of counterfeit goods over the internet. The goal of the IP Package is to promote a holistic approach for private and public stakeholders to secure supply chains. In 2016, the Joint Research Centre also released a Technical Report that focuses on tools and devices available to combat counterfeiting and illicit trade.³

The European Commission is also reflecting on the use of blockchain technology as a tool to combat illicit trade and counterfeiting. Blockchain technology allows the storage and transmission of digital information in a secure manner as it requires the use of cryptographic keys for authentication and transaction authorisation. As highlighted by Ms Battista (DG CONNECT), blockchain transactions offer traceability through the decentralised register of ownership. As a result, information recorded on blockchain cannot be deleted. Using blockchain technology could thus improve products' traceability. The Joint Research Centre is exploring potential opportunities provided by blockchain technology to protect supply chains under the #Blockchain4EU project. Moreover, the EUIPO launched a series of conferences on this topic, and in 2018 will hold the *Blockaton*, a competition that will gather experts to find solutions to track and trace original goods in blockchain. Companies such as Alibaba, Walmart, and Nestlé are also investing in blockchain to better track genuine products and verify their authenticity.

Addressing the detection and removal of illegal content online represents another challenge to combat illicit trade. In this respect, the European Commission outlined principles and safeguards to identify and remove illegal content, as well as to avoid illegal content reappearing online. Furthermore, participants in a European Commission Stakeholders' Dialogue signed a non-binding MoU that aimed to reinforce cooperation among stakeholders to reduce the sale of counterfeit goods via e-commerce platforms.

Progress in understanding the opportunities and drawbacks of using new digital techniques, such as blockchain, to track, trace and authenticate products is still required. At any rate, any regulatory requirement should be future-proof and account for fast-paced technological change in the field as well as for the ability of fraudsters to adapt quickly to new solutions. Rules should accompany rather than drive innovation. In this respect, while continuing to explore the potential uses of digital technologies in the fight against illicit trade and counterfeiting, EU

³ Baldini, G. and E. Cano Pons (2016), [Enforcers and Brand Owners' empowerment in the fight against counterfeiting](#), Publications Office of the European Union.

regulatory bodies should set flexible rules allowing relevant stakeholders to seek technical solutions that are fit for specific sectors and can be progressively improved.

Removing barriers to foster international and stakeholder cooperation

Since illicit trade affects almost all sectors and countries in the world, global cooperation is required between all public and private actors in the economy to counteract this crime. What barriers currently impede such cooperation? Which solutions are available to reduce these barriers and to enhance international and stakeholder cooperation?

Barriers to international and stakeholder cooperation arise from the diversity between countries, sectors and actors affected by illicit trade and counterfeiting. This is not only about diverging rules as different jurisdictions may adopt different legal solutions, which could impinge on cross-border communication and coordination. It is also about the use of agreed technical standards to ensure the interoperability of the systems and processing of information across countries and operators involved, from production to retail. In addition, it concerns limited human and financial resources. For instance, public authorities in different countries may not have the same financial resources or skilled staff to devote to the fight against illicit trade and counterfeiting. SMEs usually have fewer resources and human capital than large companies to protect their intellectual property rights when pursuing internationalisation strategies. Large companies also face major obstacles, however, especially in those countries where they export via third parties or when they are required to monitor long and complex, global value chains.

Georg Roebing (OLAF) identified four main solutions to removing barriers to international and stakeholder cooperation. First, broad international agreements to combat illicit trade and counterfeiting could be adopted by several countries. Although international agreements would foster international cooperation, negotiations of such agreements take time, effort, and generally include compromises so that the final agreement does not necessarily reflect the initial idea behind them. Second, Memoranda of Understanding (MoU) or other non-binding agreements could facilitate cooperation, but due to their non-binding nature, such agreements may not be as effective in combating illicit trade and counterfeiting. Third, a country could legislate domestically to prevent illicit trade and counterfeiting and work to convince other countries to adopt comparable rules. Finally, public and private stakeholders could cooperate to set rules and address problems in specific sectors, but this approach is not suited to all sectors.

Currently, there is only one common global legal framework for IPR enforcement, the trade-related aspects of intellectual property rights (TRIPS), as observed by Viggo Elter (WCO). In addition, the Protocol to Eliminate Illicit Trade in Tobacco Products is the first protocol to the WHO Framework Convention on Tobacco Control (WHO FCTC), and a new international agreement aimed at reducing the illicit tobacco trade, should enter into force within the next few months.

Meanwhile, the European Commission is placing great emphasis on customs and stakeholder cooperation. For instance, the European Anti-Fraud Office (OLAF) cooperated on a joint pilot project with DHL Express to combat illicit trade and counterfeiting. In this project, customs

authorities identified shipments as suspected counterfeits, allowing Express operators to intercept shipments before customs clearance. In 20% of the cases, the IPR holder confirmed the counterfeit and took measures against it. However, in the remaining cases, the IPR holder either did not confirm the counterfeit or was not willing or able to act against it. Cezary Sowinski (DHL Express) called for increased cooperation between customs authorities and private stakeholders in the fight against illicit trade involving small consignments. Following the identification of shipments containing suspected counterfeit good via big data solutions, his company reported such shipments to customs authorities. While shipments destined for the USA were seized by the U.S. Customs and Border Protection (CBP), those destined for European member states were released and sold on the European market. This approach risks de facto legalising a new form of illicit trade based on small (and frequent) infringements via e-commerce platforms. While logistics companies welcome joint projects with customs authorities because these projects are very efficient (with a 100% hit rate), they regret not receiving additional feedback from customs authorities once they report shipments of suspected counterfeit products.

All speakers agreed that any cooperation should always include three types of stakeholders: right-holders, customs authorities, and intermediaries (importers, e-commerce platforms, delivery companies). Each one plays an important role in fighting illicit trade. Indeed, right-holders are experts in identifying counterfeit goods and are best positioned to monitor their value chains. Customs authorities are competent in enforcing rules, conducting risk assessments, and seizing counterfeit items.

Finally, intermediaries such as delivery companies contribute to maintaining the integrity of supply chains and can assist customs authorities by providing them with information on each shipment and by intercepting suspect shipments. Cooperation between these three entities would make each step of the procedure (from identification of suspected merchandise to the removal of such products from the market) more effective and efficient. To render this possible, it is critical to agree on international traceability and authentication standards, while encouraging competition and innovation for the development and adoption of new leading-edge solutions that can beat criminal techniques. Yet the jury is still out when it comes to the best way to increase and foster cooperation among stakeholders. In this respect, the MoU appears to be losing its appeal and new forms of cooperation need to be devised soon, based on reinforced mutual trust among honest economic operators and public authorities.