

>/EU// **BLOCKATHON** >><  
CONNECT // CODE // CO-CREATE

# BLOCKATHON CHALLENGES



CUSTOMS



CONSUMER



LOGISTICS



RIGHTS  
HOLDERS

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## USING BLOCKCHAIN TO CO-CREATE THE FUTURE EU ANTI-COUNTERFEITING INFRASTRUCTURE

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Nowadays, people live within worldwide virtual communities, just a click away from producing, sharing, buying and enjoying an ever-increasing diversity of products. The online world relies on trust that:

- you'll get what you bought;
- your personal data won't be misused and diverted;
- you know who's behind what you purchase; and
- you'll receive the original product you ordered and paid for.

Consumers are more and more confused about whether a product is authentic or not. In 2017, 10 % of EU consumers (approximately 43 million citizens) were tricked into buying a fake product instead of a genuine one. This figure represents the size of the combined populations of Belgium, Bulgaria, Ireland, Greece and Portugal. Over three times more people, 35 % (approximately 150 million in total!), wondered whether the product they had purchased online was real or fake<sup>1</sup>.

It is apparent that free riders, criminal organisations and others involved in illegal activities use the potential of the virtual world for their personal gain, with no consideration for environmental, health and social standards, not to mention the safety and health of consumers. This illegal EUR 338 billion worldwide business<sup>2</sup> is growing.

We all face the risks of fakes and this is a concern for everybody, so we all have a stake in the game.

At a global level, the European Union is involved in diplomatic and economic efforts to fight against fake goods. The protection of intellectual property rights (IPR) is a cornerstone in this effort that helps to sustain creativity, innovation and entrepreneurship. Once an IPR has been registered, the product and its related brand are protected by the system, and the owner is then considered an 'IP rights holder'. This legal protection is then used by businesses, customs authorities, law enforcement, judiciary, courts of law and various other enforcement authorities that are active, within the legal and procedural constraints, in the fight against counterfeiting. Within this coalition, the European Union Intellectual Property Office (EUIPO) is a key player; as a European Union agency with a global focus, it is connected with its counterparts across the globe in the fight.

However, even with this strong coalition, it is simply impossible to track every package and every shipment entering into EU territory at the current time. There are huge challenges, such as the massive amount of goods transported in small parcels, the bureaucracy involved and all the protocols and processes to be followed in different countries.

Furthermore, there are many tools, solutions and ways to fight counterfeiting but they work separately, are centralised, with little synchronisation and there is no way to connect all the relevant players: the EU, intellectual property offices, governments, customs and other enforcement authorities, manufacturers, retailers, shipping companies, ports and airports and, above all, us – the citizens.

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1 - <https://euiipo.europa.eu/ohimportal/en/web/observatory/ip-perception-2017>.

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

In a nutshell, we need more synchronisation and decentralisation.

### **Could blockchain live up to the challenge?**

We need ways to be able to communicate what is true (authentic) and what has actually occurred throughout the entire supply chain: from the manufacturer through to the consumer. A secure, collectively shared truth. By doing so, everyone involved can help fight counterfeiting in a smarter and more effective way.

This is what the EUIPO, in collaboration with many other partners and organisations from both the public and the private sectors, is daring to explore. The aim is to link existing tracking solutions available in the market, as well as public databases of intellectual property, through a blockchain solution. The idea is to develop an infrastructure where anybody interested (producers, consumers, transport services, etc.) would be able to check the authenticity of any product openly and easily, as well as the possibility to alert rights holders to fakes. Perhaps one day you will be able to do all of this by just swiping your smartphone ... dreaming is allowed.

The EUIPO is launching the first-ever anti-counterfeiting blockchain competition in Europe and invites the brightest blockchain teams to take part in a 4-day Blockathon from 22 to 25 June, in the heart of the European Union in Brussels. The Blockathon will be held at AutoWorld, a museum housed in an emblematic location built during the industrial revolution and used for the International Exposition of 1897, at a time when society moved away from using horses to 'horseless carriages'. A perfect place to return to the future to unleash the potential of blockchain technology and to make history together!

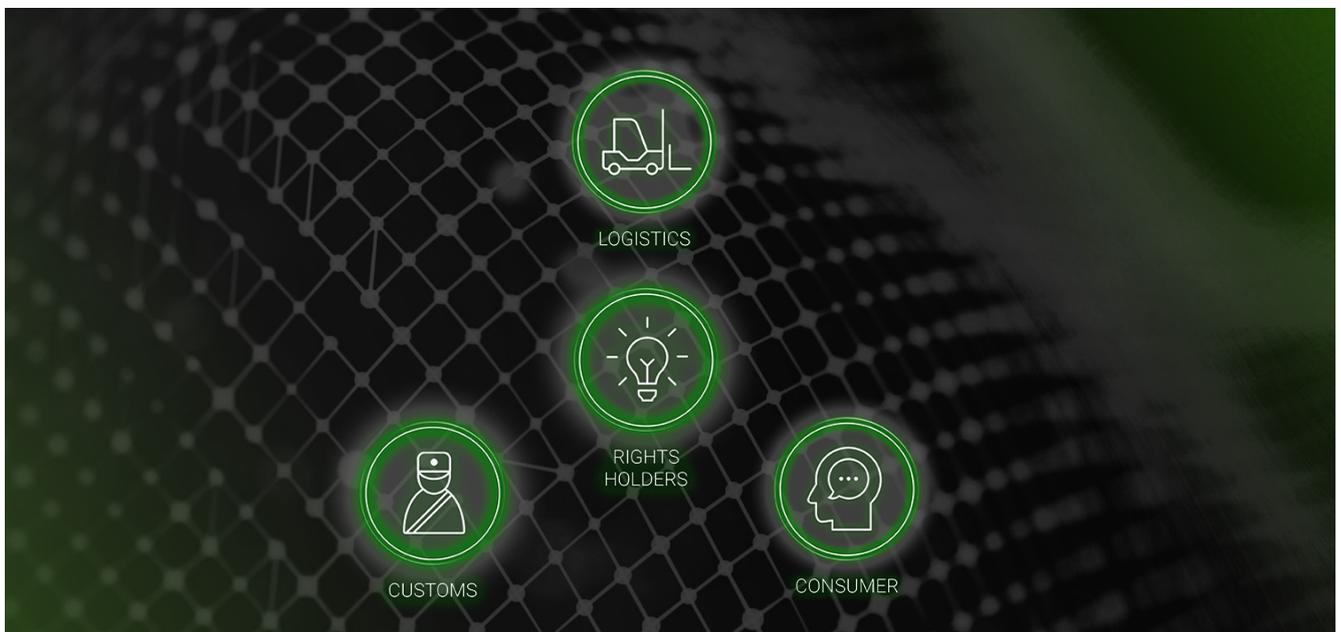
There will be 10 selected teams that will work together with leading institutions, domain experts, industry, government partners and technology companies to co-create relevant prototypes to address the anti-counterfeiting challenge and make the world a safer place.

Up for the challenge? [Apply here](#).

## INTRODUCTION TO THE CHALLENGES

Teams are invited to work on one, two or all of the challenges during the event. Each challenge has a different stakeholder approach to the interconnected challenge of fighting counterfeits:

1. Consumer
2. Customs
3. Logistics operators.



When addressing these challenges, teams should always remember one key player in the chain: the owner of the genuine product and intellectual property, also known as the 'rights holder'.

The rights holders are the alpha and omega of this chain, as they know whether the product is genuine and alert authorities to fakes derived from their product. They are present in all three challenges and all along the supply chain:

- For consumers, the rights holder is the source of goods ordered and the one to contact when there are any problems.
- For customs authorities, the rights holder advises when a product is fake or genuine and authorises the seizure of goods.
- For logistic operators, the rights holder is the client who trusts them with safe transport.

Rights holders must be able to assure the authenticity of the goods produced and sold, and, together with the logistic operators and customs authorities, have to manage safe shipment until delivery into the hands of the consumer.

*As such, teams should consider how and when to involve rights holders while developing their prototype.*



## CONSUMER CHALLENGE

*As a consumer, I do not want to buy fake products, and I know that behind fake products is a world of all kinds of misery, like child labour and unsafe working environments. I need the assurance and the tools to check whether a product is fake or legit.*

Today I often wonder if the website from which I have purchased the goods is legitimate and once I pay, I worry that the goods will not arrive or will turn out to be fakes.

I hear of occasions when fake products were bought without the buyer being aware; in the case of pharmaceuticals or machine parts, this has sometimes had tragic consequences.

Every time I buy online, I want to be sure of the product's authenticity and then to track its delivery simply and with the assurance that everyone involved in the transport is legal. I need to be able to trust all the parties involved and have further certainty when the goods arrive that I have not been cheated.

THE FUTURE ...

### **Reliable**

Imagine if the goods I buy online could be guaranteed to be authentic and their shipment to my door could be ensured.

### **Authentic**

In future, when I receive the product I can simply validate its authenticity using my own favourite and trusted application and I should never have to pay for a fake product again. Never again should I have to suffer the disappointment of receiving fake goods.

### **Connected**

Imagine if I could detect a fake with my mobile device and with a simple tap I could report fake goods to the rights holder. What if I were to get feedback on the results of my reporting saying: 'Thanks to you, we have traced the source of the fake product.'



## CUSTOMS AUTHORITY CHALLENGE

I am working to intercept counterfeit products. I look for a smarter way of doing our important job, which stops criminality by keeping fake products out of the European Union. Right now we can only check a small percentage of all goods coming in; can we increase this number or make sure that the small percentage selected successfully targets the counterfeits?

For the customs authorities, there are far more packages and shipments crossing the border than can be checked. We work hard to use our data, experience and knowledge to effectively target the shipments and packages to check and intercept them.

When a shipment arrives, we have to assess its risk; the better the assessment, the better we can target our checks.

There are many documents to handle such as customs declarations, cargo manifests, bills of lading and commercial invoices. Having great data and systems is one of the keys to efficiency. The quicker we can scan and verify shipments, containers and parcels, the better.

Providing I can match the data, I can use databases such as the EUIPO's Enforcement Database to identify potential infringements and if there are doubts I can raise a suspicious case to notify the rights holder. If I receive an application for action (AFA) from the rights holder with all the relevant product and logistics information I can be authorised to take appropriate steps, such as seizure of goods.

THE FUTURE ...

### **Automated**

Imagine if the authenticity of parcels, even entire shipments could be proven. Imagine if the documentation accompanying a shipment could be automatically scanned and verified.

### **Faster**

What if the processes and supporting data were so reliable and trusted that they could be fast tracked through customs' checks.

### **Targeted**

Imagine a world where unverified movements of goods became the minority and risk assessment could target counterfeit activity with a high degree of success.

### **Interconnected**

Imagine a seamless interconnected trusted network where customs authorities, rights holders and logistics operators could share data and a common protocol for fast decision-making and actions against the counterfeiters.



## LOGISTICS OPERATOR CHALLENGE

I want the products I deliver to be legit and do not want to be a part of criminal activity. I want to be protected from handling dangerous fake products, which jeopardise my business and the people I deliver to.

As a logistics operator, I am a key link in the supply chain. My clients are rights holders of all shapes and sizes. I want the best service for my clients; I don't support free riders or organised crime.

My business is dependent on my reputation to deliver reliably, quickly and cost effectively.

Trucks or storage facilities that are held for inspection cause delays and any seizures damage my reputation. I want to be able to reassure consumers and authorities that my business can be trusted.

Given the numbers of companies that can be involved in this global logistical network I want to have great communications with those upstream and downstream. When I receive goods to store or move I want to be sure these are safe and authentic.

As an ethical employer I want to safeguard my employees; they should not have to be concerned about their safety nor held under any suspicion. They can be proud to play their part in a trusted distribution system.

### THE FUTURE...

#### Shared

Imagine if all movements of products could be tracked from location to location, passing from one operator to another and that these validated routes were automatically shared with the other person in the chain.

#### Certain

Imagine that I could be sure of the authenticity of all the goods I receive and that there is no chance of handling fake goods. What if at every step in the supply chain the journey could be traced with a safe handover between the operators involved.

#### Trusted

Imagine a relationship with customs built on trust and transparency and that the goods I transport are considered legitimate. There would be no reason to inspect our facilities or trucks.

#### Secure

What if I, as an ethical operator, could guarantee top quality, safe and reliable service for clients? What if my employees would never have to suffer the inconvenience or risk of handling illegal goods?



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