

Technological tools to prevent counterfeiting risks in legitimate supply chains

CEPS - Digital Traceability in the Fight against Illicit Trade - Improving Rules and Practices
6 November 2017

Stéphanie Martin, DG GROW- Unit F5 - IP and fight against counterfeiting

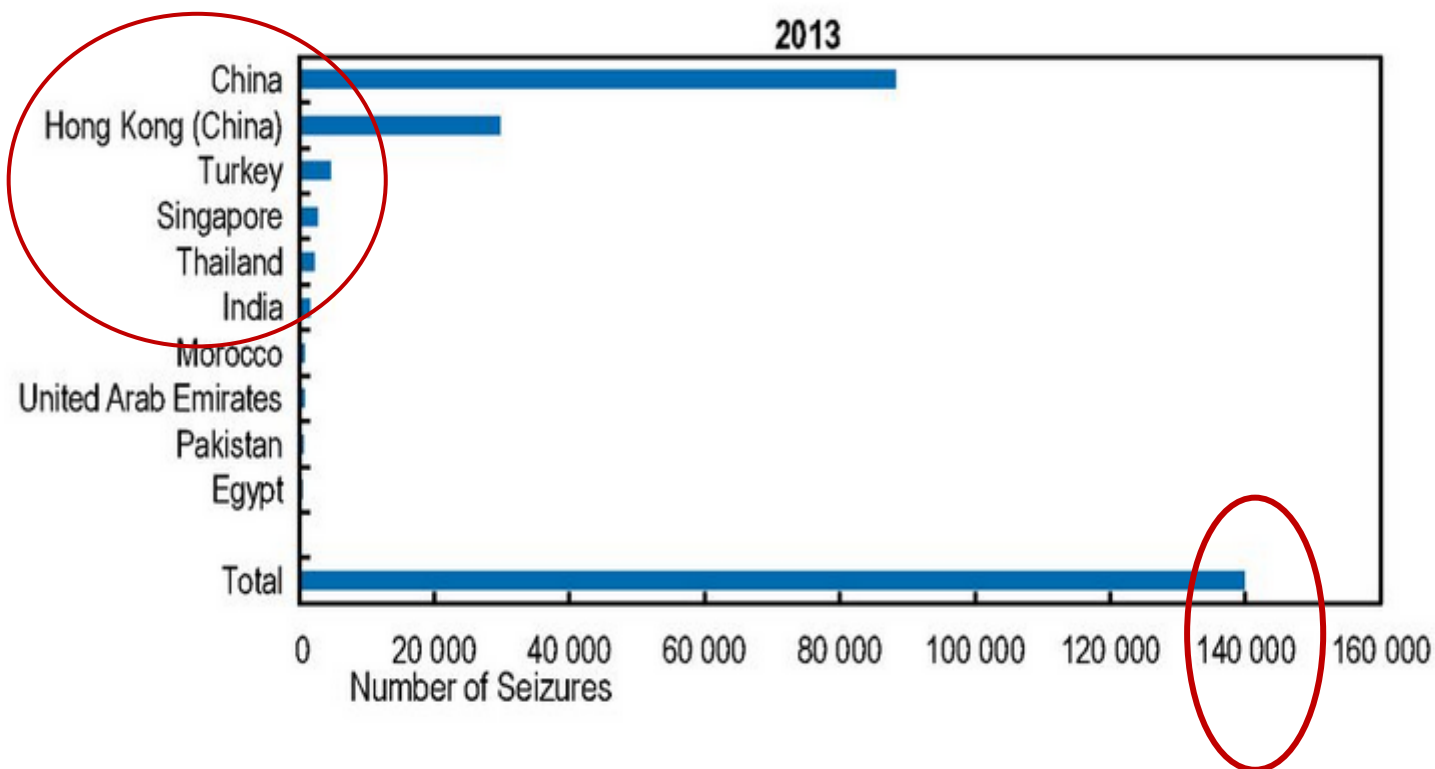
1. Key figures on counterfeiting and pirated products

1.1 International trade in counterfeit and pirated products (2013)

- International trade in counterfeit and pirated products represented up to **2.5% of world trade**, or as much as **USD 461 billion**.
- Counterfeit and pirated products amounted up to **5% of imports in the EU**, or as much as **EUR 85 billion**.

Source: OECD/EUIPO study on the Trade in counterfeit and pirated goods (2016)

1.2 Worldwide seizures of counterfeit and pirated goods: top provenance economies



Source: OECD/EUIPO *study on the Trade in counterfeit and pirated goods (2016)*

1.3 What are the sectors affected by counterfeiting?

ALL sectors are affected.



2. Supply chain integrity

2.1 Vulnerability of global supply chains

- Globalised supply chains have become *wider*.
- Many actors involved, several tiers: *fragmentation* and *little transparency*.
- This *opacity* increases drastically the *vulnerability* of supply chains.



2.2 Counterfeiting strategies affecting legitimate supply chains

- Counterfeiting is a lucrative activity **for criminal networks**.
- Such networks exploit legitimate **supply chains vulnerabilities**.

Infiltration

Counterfeit products penetrate the legitimate supply chain.

Example: Counterfeit products are made by the same manufacturer that is contracted to produce the authentic product.

Diversion

Products are diverted from the legitimate supply chain.

Example: Genuine parts or genuine products are stolen from the legitimate supply chain

2.3 The case of **electronic parts (1)**



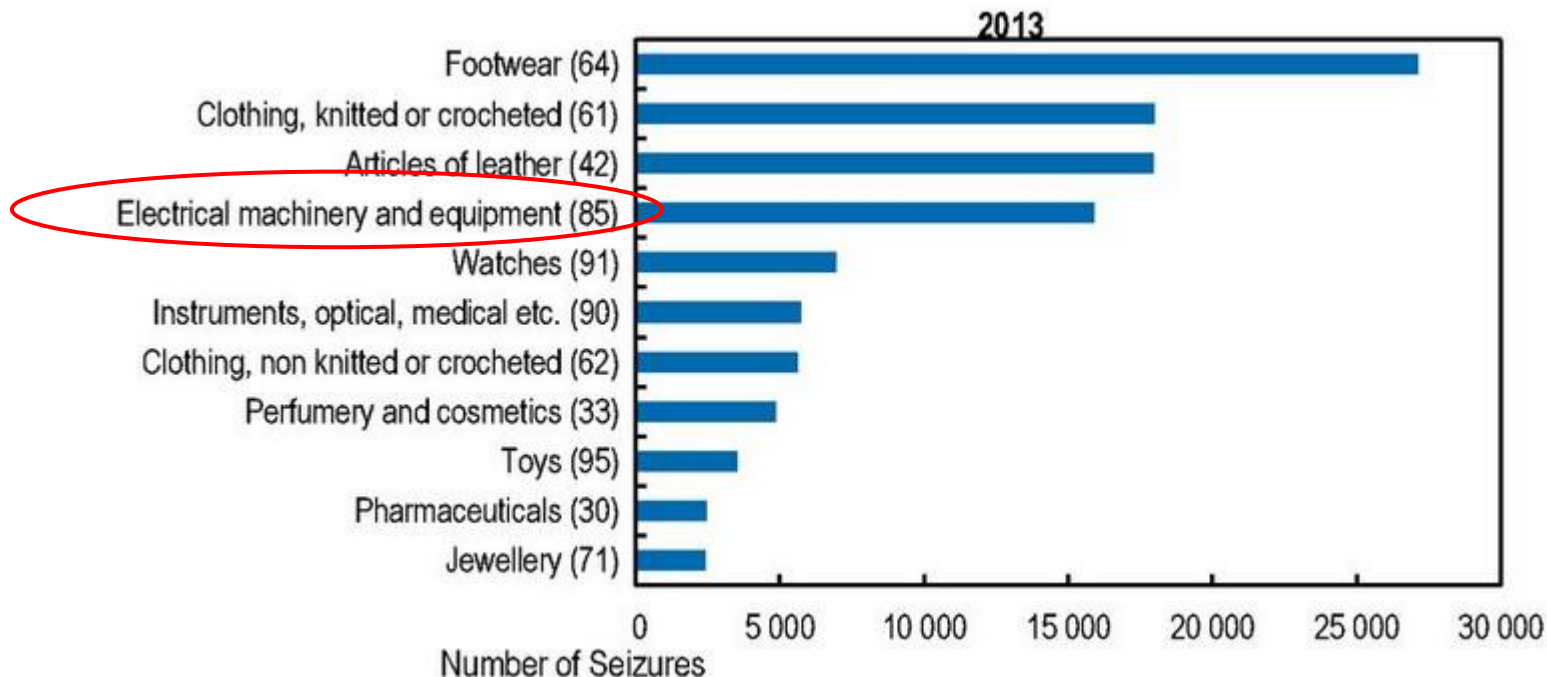
A "rising threat" according to the IEEE (Institute of Electrical and Electronics Engineers)- 2014 report



All the sectors are affected by infiltrated integrated circuits, **including the public defence supply chain.**

2.3 The case of electronic parts (2)

Worldwide seizures of counterfeit and pirated goods: top industries (by harmonised system codes)



2.3 The case of **electronic parts (3)**



PRESS RELEASE No 12/2017

03/07/2017

OLAF helps partners seize over one million counterfeit semiconductors in major Joint Customs Operation

Did you know that counterfeit components can hide in the electronic devices you use every day? These fake parts could not only harm your appliances, but hurt you!

To help keep European consumers safe, a major Joint Customs Operation, code-named Operation Wafers, co-ordinated by Dutch Customs with the support of OLAF, targeted counterfeit semiconductors imported into the EU from China and Hong Kong by post/express courier. In just two weeks, partners seized more than one million counterfeit devices such as diodes, LEDs, transistors and integrated circuits.

As the semiconductors in question were not produced by the genuine manufacturers, their incorporation into electronic products could have led to the failure of computer systems and caused serious malfunctions of sensitive infrastructures, whether civilian or military. As some of the counterfeit semiconductors seized could have been destined for the transport sector and ended up in cars or airplanes or could have made their way into hospitals as part of surgical instruments, their use could have endangered human lives. Moreover, the smuggling of counterfeit products causes serious financial damages to the European industry.

The seizures were facilitated by the close co-operation between OLAF, Europol and the customs authorities of the 12 Member States (*) involved, who worked together with members of the European Semiconductors Industry Association (ESIA). The latter provided extensive training sessions to the participating customs authorities and reacted promptly to identify the suspected counterfeit semiconductors.

**July 2017: EU Joint
Customs Operation
"Wafers"**

**Over 1 million
counterfeit electronic
devices imported from
China and Hong Kong
by post/express courier
were seized in only 2
weeks.**

3. What is the European Commission's response to the problem?

3.1 Previous initiatives

**Action Plan on
IP
enforcement**

5 June 2014

**Online
consultation**

December 2015-
April 2016

**Workshop on
supply chain
integrity**

5 June 2015



3.2 Next steps: IP package measures to enhance **supply chain integrity** (2017)

Purpose: Promote a **holistic approach for private and public stakeholders** to secure supply chains based inter alia on:

- Due diligence of all supply chain actors
- Integration of IP in standards (new ISO 20400 "sustainable procurement")
- Best practices (codes of conducts, Know Your Supplier strategies, risk assessment processes, etc.)
- **Promotion of technologies for track and trace and authentication.** → JRC Technical Report "*Enforcers and brand owners' empowerment in the fight against counterfeiting*" (2016)

4. Blockchain: a new tool for the fight against counterfeiting?

4.1 Blockchain and supply chain security

Existing applications:

Diamond sector: Prevent fraud and the infiltration of "blood diamonds".

Food sector: Trace food across the supply chain.

Timber sector: Ensure transparency of timber records.

4.2 What about blockchain and counterfeiting?

Joint Research Centre: ongoing project
#Blockchain4EU

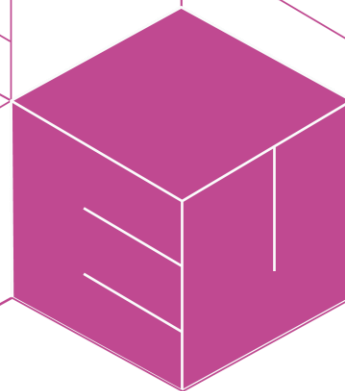
EUIPO:

Conferences/Seminars with experts – Last one on
26-27 October 2017

Blockathon - 2018

#BLOCKCHAIN4EU

Blockchain for Industrial Transformations



#BLOCKCHAIN4EU

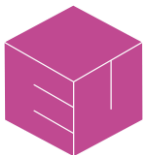
[AA JRC x GROW]

Forward looking sociotechnical exploration of existing, emerging and potential applications of Blockchain and other Distributed Ledger Technologies (DLTs).

Main focus on industrial / non-financial sectors

across specific areas:

- > **supply chains and logistics**
- > energy management
- > **intellectual property**
- > **authentication and certification systems**
- > digital manufacturing/fabrication
- > ...



#BLOCKCHAIN4EU

[Project Phases]

Phase I – Context and Stakeholder Mappings

> Desk-based Research + Literature Review + Interviews

Phase II – Stakeholder and Expert Workshops

> Co-creation Workshops (July, **November 2017** and January 2018)

Phase III – Final Outputs

> Final Report + Final Event (**March 2018**)

Horizontal Phase – Dissemination and Feedback

> EU Policy Lab Blog + Connected Groups + Social Media + Media Outreach



#BLOCKCHAIN4EU

[Workshop A]



An event to remember – BlockKathon (2018)



ONE EVENT

10 TEAMS of the best coders in the world

Competing to find solutions to:

**TRACK AND TRACE ORIGINAL GOODS IN
BLOCKCHAIN**

One jury - Many solutions

**Collaboration of all the stakeholders in building
future solutions to the problems of today**



Many thanks for your attention!

Contact:

Stephanie.martin@ec.europa.eu

For further information:

OECD/EUIPO study on the Trade in counterfeit and pirated goods (2016)

[https://euipo.europa.eu/tunnel-web/secure/webdav/guest/document_library/observatory/documents/Mapping the Economic Impact study/Mapping the Economic Impact en.pdf](https://euipo.europa.eu/tunnel-web/secure/webdav/guest/document_library/observatory/documents/Mapping_the_Economic_Impact_study/Mapping_the_Economic_Impact_en.pdf)

Communication "Towards a renewed consensus on the enforcement of Intellectual Property Rights: An EU Action Plan" COM (2014) 392

<http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52014DC0392&from=EN>

Video of the Workshop on Due diligence in supply chains (2015)

<https://www.youtube.com/watch?v=GSaXD5z9b84>

Report on the public consultation on due diligence and supply chain integrity for IP protection (2016)

http://ec.europa.eu/growth/content/public-consultation-due-diligence-and-supply-chain-integrity-intellectual-property-0_en

JRC Technical report "Enforcers and brand owners' empowerment in the fight against counterfeiting"

<http://publications.jrc.ec.europa.eu/repository/bitstream/JRC104204/kjna28400enn.pdf>