



**STRONGER TRAINING AND INCREASED KNOWLEDGE FOR
BETTER ENFORCEMENT AGAINST WASTE & MERCURY**

Strategic Risk Analysis



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Agenda

- Objectives and scope
- Methodology
- Assessment of risks and trends in waste crime
- Recommendations for intelligence led inspections and investigations



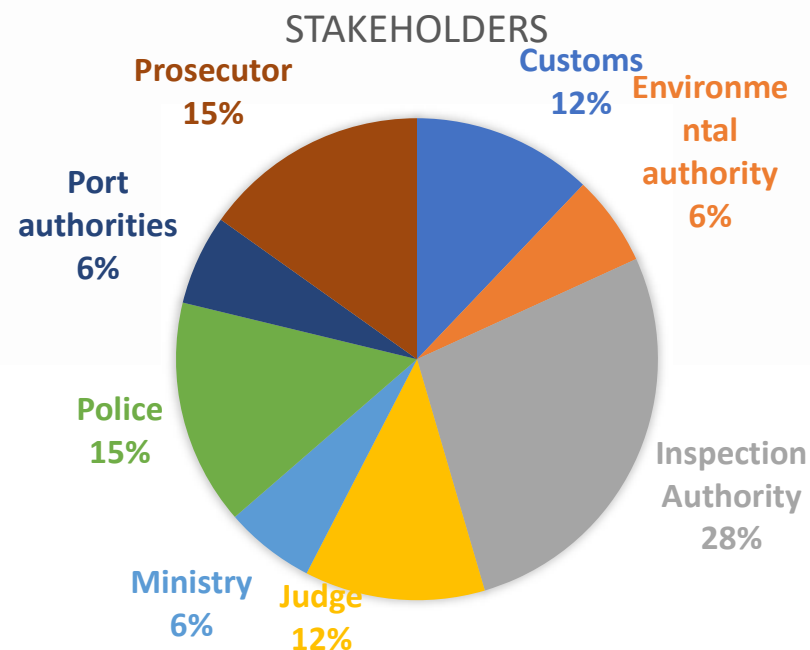
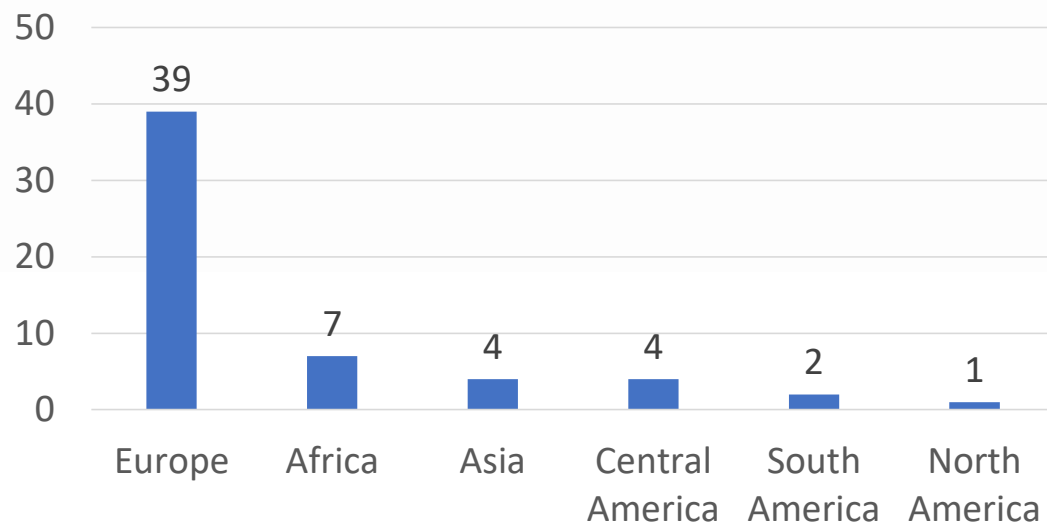
Objectives



- **Objective:** broad assessment of risks and trends in the illegal trade and management of problematic waste streams and mercury-added products.
 - Risks and trends: types and quantities of waste illegally traded, routes, modus operandi and criminal actors involved.
- **Target Audience:** enforcement authorities (strategic decision making).
- **Focus on flows from/to and within Europe** (specifically to Eastern Europe and to Africa)
- **Covering waste crime in:** 2018, 2019, 2020

- Literature review
- Questionnaires: 57 questionnaires were collected, participants from 39 countries
- Interviews: 15 interviews, participants from 11 countries

Region of the respondents





Types of waste illegally traded



- Most reported: e-waste, ELVs & plastics
- Same frequency of types of waste reported in 2018, 2019, 2020.

Waste types reported with selection	2018	2019	2020
E-waste	23	21	17
End-of-Life Vehicles (ELVs)	17	13	11
Plastics	17	11	12
Mercury	8	6	6
Metal	6	3	4

Waste types reported under other waste	2018	2019	2020
Oils (derivatives)	4	4	4
Paper waste	3	3	3
Tyres/spare vehicles parts	3	3	3
Construction and demolition waste	3	3	3
Household waste (mixed)	3	3	3
Treated wood	3	3	3
Used lead acid batteries	3	3	3
Asbestos	1	1	1
End-of-Life Ships	1	1	1
Recyclables	1		
Rubber	1		
Soil	1		
Textile	1		
Waste printing toner	1		
Liquid hazardous waste		1	
Medical waste			1
Solid Recovered Fuel			1
Cyanide			1



Quantities of waste illegally traded



Questionnaires

Number of cases of illegal waste trade annually.

- 0-10 cases (26 respondents)
- 10-50 cases (8 respondents)
- More than 50 cases (6 respondents)

In total minimum of:

- In 2018: 1300 tonnes (total estimate of 23 respondents).
- In 2019: 1400 tonnes (total estimate of 28 respondents).
- In 2020: 1400 tonnes (total estimate of 24 respondents).

Literature

- Estimated 25% of EU shipments are non-compliant & all exported notified was 20.9 million tonnes in 2018 from the EU (European Commission, 2020)
- roughly 5 million tonnes of non-compliant waste shipped annually.
- Other estimates ranging from 10% to 33% of illegal shipments are non-compliant



Number of cases of illegal management/disposal



Questionnaires

- 0-10 cases annually: 19 respondents
 - 21-50 cases annually: 2 respondents
 - > more than 50 cases: 6 respondents
- Number of cases reported in 2018, 2019 and 2020 almost the same.

- In total 38 origin countries reported & 50 destination countries of illegal waste exports. In total 62 different countries reported.
- Number of cases reported in 2018, 2019 and 2020 almost the same.
- More details on routes per waste type.





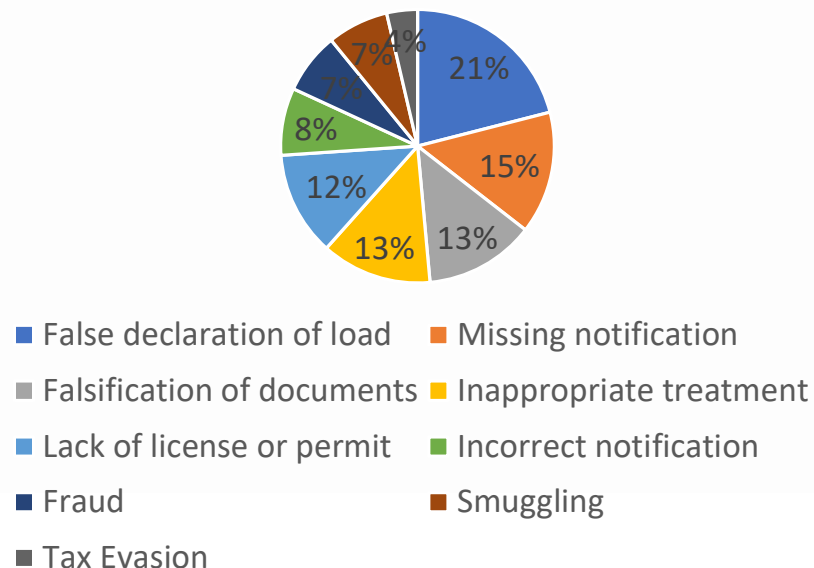
Modus operandi



Modus Operandi

- A false declaration of the load or falsification of documents is the most used modus operandi in the illegal trade in waste. Other important modus operandi are a missing notification or an incorrect notification.
- Inappropriate treatment or a lack of a permit/license are the most common violations in the illegal disposal and management of waste.
- Fraud, smuggling and tax evasion were also important crime types linked to the illegal trade and disposal of waste.

Times reported by the respondents





Criminal actors



Companies

- Involvement of companies: criminal structures are overlapping with business structures
- Waste criminals were found in all sectors of the waste value chain (legal operators): including traders, buyers, transporters, exporters, freight forwarders and other service providers.

Links to other crimes

- Forgery of documents
- Money laundering
- Incidental cases (of suspicions) where there are links to drugs, but not structural (interview)



Involvement of Organised Crime



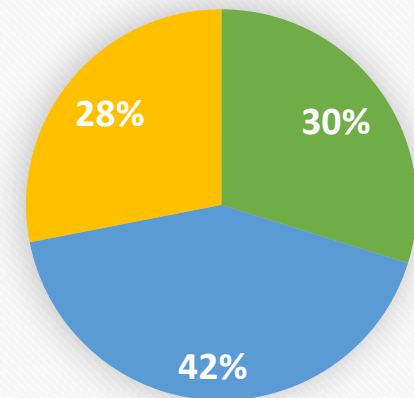
Questionnaires:

- Involvement of organised crime (Palermo Convention)
- 30% yes, 40% no and 30% no response
- Organised crime groups were reported to operate in Germany, Austria, Italy, Czech Republic, Poland, the United Kingdom, Belgium, Turkey and countries in Asia.

Follow up interviews:

- Suspicions of OCGs but no evidence.
- Involvement of OCGs, but not according to certain definitions.

Involvement of OCGs in the illegal trade or management of waste



■ Yes ■ No ■ No Response



Case Study Organised Crime



Illegal waste trafficking group from Poland

- OCG from Poland and Czech Republic
- Company in Poland with permits accepted hazardous waste from legal companies and institutions for a low price, lower than competitors.
- Including in 2019 import of 2800 containers, containing ~350 000 liters of illegal chemicals
- Instead of proper disposal it was:
 - Mixing municipal waste with hazardous waste and filling holes in the ground with it (e.g. sand extraction sites).
 - Collection of liquid hazardous waste in containers and metal drums, removal of waste codes, transport to warehouses to abandon the waste.



Case Study Organised Crime



Illegal waste trafficking group

- Documents were falsified
 - Mixed waste with hazardous declared as non-hazardous
 - Drums declared as a different chemical product.
- Authorities from Poland and Czech Republic were investigating the case.
- 20 persons arrested.
- All properties were searched: documentation, valuable goods and drugs seized.
- The case was going to court.





Trends and Risks: e-waste



Routes:

- **Most reported routes** from Europe to West-Africa and from West to Eastern Europe. Top destinations include Nigeria, Senegal, Ghana and Poland, Czech Republic, Bulgaria, Romania.
- **Increase** reported in the illegal trade in e-waste is reported to Africa and specifically to Liberia and the Gambia.
- Examples **other destinations**: Spain (from North America), United Arab Emirates (from Europe).

Modus operandi

- Most often false declaration as **used** electrical and electronic equipment or used good.
- E-waste is often **mixed with household waste** with false declaration, e.g. recyclable plastic
- A newly reported modus operandi was that e-waste is exported from the second-hand and charity stores to **textile recyclers**, who export it abroad.

OCGs

- Three respondents from the questionnaire reported OCGs are involved in the illegal trade or management of e-waste (respondents from Afghanistan, Germany and the United Kingdom).



Trends and Risks: e-waste





Trends and Risks: Plastic



Routes:

- Ban on plastic import in China > to neighboring countries in Asia and other non-OECD countries, reported countries include Malaysia, Vietnam, Thailand, Indonesia, India, Pakistan and Hong Kong.
 - More restrictions in these countries.
 - Since the refusal of the waste in other Asia countries, authorities see an increase of export of plastic to countries such as Poland, Turkey and Albania. There is an expected increase of exports to Turkey in 2021 (as OECD country).
- Bulgaria and Romania reported as entry points for waste transports to Eastern Europe.



Trends and Risks: Plastic



Modus Operandi

False declarations

- Export of contaminated plastic declared as clean and/or recyclable plastic waste.
- Low quality plastics or other low quality mixtures declared as plastics for recovery are exported without notification.
- Plastic is declared as product /secondary raw material / “end-of-waste” to avoid being declared as scrap and inspected.

Other reported methods

- Contaminated and mixed plastic is placed behind clean plastic in containers to avoid detection.
- Export to or from companies without licenses.

Illegal management

- Plastic is reported in cases of illegal burning of waste.
- There were an increase of illegal recycling facilities since the ban of plastic imports in China, many were shut down by authorities.



Trends and Risks: Plastic





Trends and Risks: ELVs and Tires



Routes:

1. Most reported destinations are countries in Africa: Nigeria, Ghana, Congo and the Gambia.
2. Secondly countries in Eastern Europe: Bulgaria, Czech Republic, Poland and Moldova.
 - Also Baltic countries were reported as export destination.
 - After reported import restrictions of tires in India, tires from the UK are likely to be increasingly exported to Pakistan and Turkey.
 - Reported transit countries: Germany, the Netherlands, Belgium (from Austria, Ireland, United Kingdom).

Modus operandi

- The main modus operandi to export ELV's is declared as second hand cars for reuse.
- Secondly waste tires or spare parts can be declared as products.



Trends and Risks: ELVs and Tires





Trends and Risks per waste type: bio-medical waste



Increase in illegal (bio) medical waste imports or exports or management following the Covid-19 outbreak:

- 11% yes, 18% no response, 72% no
- Questionnaire conducted mid -2020
- Only 1 route: from Italy to Czech Republic

Cases:

- The illegal export of 21 containers from the United Kingdom to Sri Lanka containing, amongst others, hospital waste,
- The illegal export of 70 containers from Italy to Tunisia of hazardous waste, including hospital waste

Operation RETROVIRUS:

- 84 infractions were reported with regard to irregularities in the management, transport and disposal of medical waste mainly related to the Covid pandemic.
- EUROPOL reported the increase in medical waste due to COVID-19 has created opportunities for Organised Crime Groups to traffic and illegally dispose of the medical waste.



Trends and Risks per waste type



Metal risks and trends:

Routes:

- Exports from Moldova to Turkey reported
- Decrease in export of metals to Gambia, increase in Suriname

Modus Operandi

- Scrap metal is declared as end of waste (secondary raw material)
- Exported without notification

Construction and demolition waste:

Routes:

- Export to countries in Eastern Europe
- Shipments between Ireland & Northern Ireland
- Shipments to Estonia reported

OCGs

- Two respondents reported involvement of OCGs

Household/municipal waste:

Routes

- Reported shipments from Germany, Austria and Italy to Czech Republic

Modus operandi

- Mixed with soil intended for landfilling
- Incorrect classification: declared as plastics or waste paper

OCGs

- 3 respondents reported involvement OCGs (Belgium, Germany, Italy, UK).



Trends and Risks per waste type: mercury



Questions on Mercury and Mercury added Products.

- 14 respondents to the questionnaire reported illegal trade of mercury and MAPs such as, lamps, LCD TVs, old switches, and some manometers, thermometers and old laboratory chemicals.

Specific examples of illegal trade:

- Honduras reported illegal trade of mercury for ASM.
- Ireland reported a case of illegal storage of elemental mercury at a waste facility that was not authorized to receive or store this waste.
- There have been cases where fluorescent lamps containing mercury have been detected in exports.
- Moldova reported illegal import of mercury.
- Mercury used in illegal synthetic drug production in Netherlands.

- Difficulty with mercury is that there is also legal use of mercury (e.g. dentists, universities), which makes it more difficult to control.
- For some waste types it is difficult to identify if there is mercury in it, such as e-waste.



Trends and Risks per waste type: mercury



Routes

- To Africa: to Nigeria (unspecified), mercury trafficking to Ivory coast from Mali and Burkina Faso & Mercury waste from Germany via the Netherlands to Africa for lightening equipment.
- To South America for artisanal and small scale gold mining (from Spain and the Netherlands).

Modus Operandi

- Hidden in bins of washing powder (weight didn't correspond).
- Declared for mercury as amalgam.
- Smuggling in used beverage bottles.
- Reported whatsapp groups to connect traders in Europe and South America.

OCGs

- 1 respondent from Moldova reported involvement of OCGs.



Overview of risk indicators



1. Anomalies in customs declarations, photos, consignment notes and Annex VII documents:
 - e.g. countries that ban the import, suspicious itineraries, countries without processing capabilities).
2. Certain types of waste (e.g. industrial sludge from oil and gas can contain mercury).
3. Weight of containers and shipments (e.g. paper waste container is between 25 and 30 tonnes, if there is less it can be mixed with plastic).
4. Suspicious firms/red flagged companies (that have been involved in non-compliance before).
5. Transports from suspicious waste sites (e.g. UK has a system with red, amber and green listed waste sites).



Recommendations for intelligence led inspections and investigations



Recommendations on how to improve intelligence-led inspections or investigations

1. Strengthening of national and international cooperation (national between different authorities, international)
2. Training / capacity building (more training, repeatedly, mercury related)
3. Stronger information sharing (national and international)
4. Centralized international database (on the European level)
5. Better tools and technologies (e.g. GPS tracking of waste, better laboratories)
6. Awareness raising



Thank you for you attention!

Any Questions?