

The background of the cover is a photograph of a coastal industrial site. In the foreground, there is a rocky, dark shoreline. The middle ground shows a body of water reflecting the sky. In the background, there is a large industrial facility with several tall smokestacks, one of which is emitting a plume of white smoke. The sky is blue with some clouds. The image is framed by two large green diagonal bars: one in the top left and one in the bottom right.

# Newsletter

No. 2  
December 2020



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# WELCOME TO THE 2<sup>ND</sup> STRIKE PROJECT NEWSLETTER!

Stronger Training and Increased Knowledge for Better Enforcement against Waste and Mercury - **STRIKE** project aims to further enhance operational activities and capacities of authorities involved in addressing illegal trade & management of problematic waste streams (e.g. e-waste, end-of-life vehicles, batteries & waste mercury), as well as illegal production & trade of mercury-added products (MAPs).

Our newsletters are available at: <https://www.strikeproject.org/blog>

## AREAS OF WORK



### **Enhanced knowledge and risk analysis of waste related crime and mercury-added products**

To enhance knowledge and understanding of illegal trade and management of problematic waste streams (including in particular e-waste, ELVS, batteries and other mercury waste), and illegal production and trade of mercury-added products, in support of an improved risk analysis and possible harmonisation of national annual plans and enforcement strategies.



### **New tools and methodologies**

To develop practical tools and advanced methodologies in support of practitioners across the compliance and enforcement chain, in their fight against waste and product trade crimes, including waste mercury and mercury-added products. Technical information generated during the project will be used to indicate product types and waste streams vulnerable for fraud and direct future compliance and enforcement activities.



### **Capacity building and skills acquisition**

To enhance capacities and skills of practitioners and stakeholders in selected countries in Europe, as well as CEE/Balkans region Africa in the detection, investigation and prosecution of waste-crime cases and illegal trade in mercury-added products. This activity includes two main components: 1) the update and development of tailored-made tools and materials on waste and mercury-related crimes and 2) capacity building activities for practitioners, delivered both face-to-face (multidisciplinary training sessions) and online (webinars).

Learn more at: <https://www.strikeproject.org/>

## STRIKE PARTNERS

The University of Limerick is the lead institution of the project consortium which is composed of four organizations ranging from UN Organizations to different research institutions and universities.



*Click on the icons to discover more about each organization!*

In addition to the project team, there are five Associate Partners that will support the project's activities, in particular: the [German Customs Authority](#); [District of Lower Bavaria](#); [Basel Convention Regional Centre](#) (Slovakia); [African Institute](#) (South Africa) and the [Waste Management Department of the Ministry of Environment and Physical Planning of Macedonia](#).

You can find more information about project partners here: <https://www.strikeproject.org/partners>

## COMMUNICATION

Follow us Twitter: [@STRIKE\\_EU](#)

Follow our account to be up to date with project news, trainings, activities ...and share our contents!





## STRIKE UPDATES

The research activities of the STRIKE project started before the summer with the development and dissemination of a joint questionnaire to support the [Strategic Risk Analysis](#), the [Training Needs Assessment](#) and the [Guidelines on the preparation of annual plans and enforcement strategies](#).



Capacity building and skills acquisition

### Training Needs Assessment

As part of the capacity building and skills acquisition activities, the project carried out a [Training Needs Assessment \(TNA\)](#) to identify the current gaps and specific training needs of the actors involved in the enforcement chain, including police, customs, national environmental inspectorates, judges and prosecutors and any other relevant stakeholder.

The questionnaire was targeted at authorities involved in the compliance and enforcement of illegal trade and management of waste and mercury (including environmental inspectorates, police authorities, customs authorities, prosecutors, judges, national governments and international organisations). It was divided in 4 sections: [Section I](#): Illegal Trade and Management; [Section II](#): Intelligence Led Enforcement; [Section III](#): Annual Plans and Enforcement Strategies; and [Section IV](#): Training Needs Assessment.

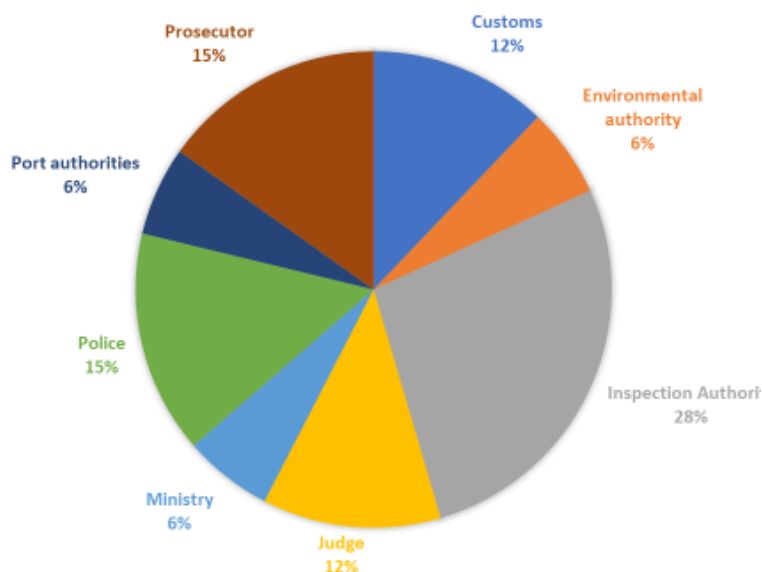
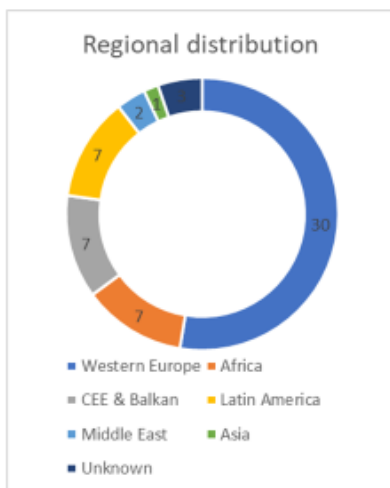
Partners, associate partners and H-LAB members were invited to complete the survey and helped us disseminating the questionnaire among their networks. In total, [57 questionnaires](#) from national authorities in [39 countries](#) were collected from July until the end of August 2020.



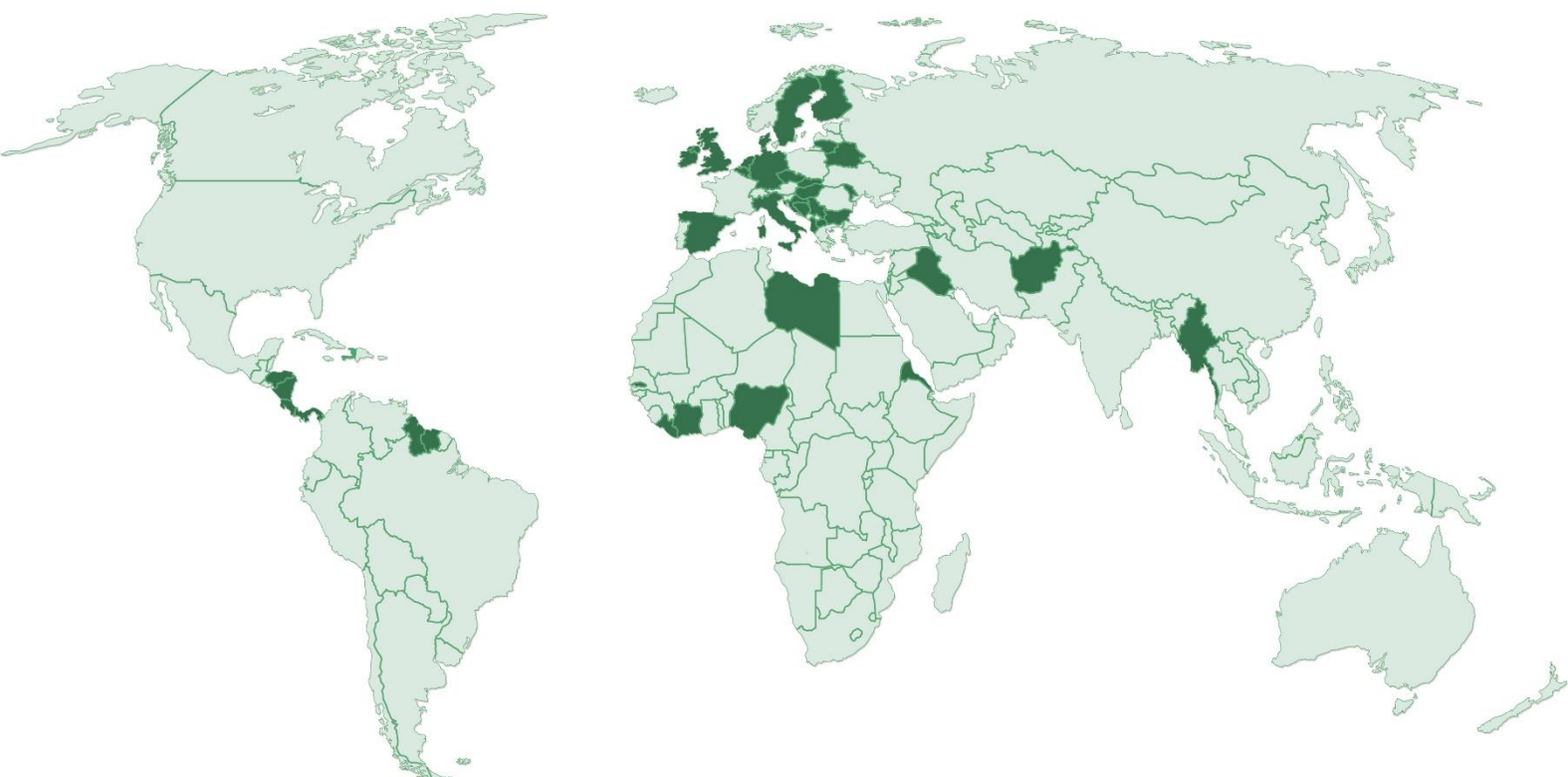
### Results questionnaires



- 57 Questionnaires received
- Respondents from 39 countries



Thanks to the wide STRIKE project network, the geographical coverage of the STRIKE data collection was not limited to the European Union, but reached countries in the Central and Eastern European region and Africa, as well as few countries in Latin America, Middle East and Asia, as highlighted in the map below.



A number of targeted online expert interviews are currently on-going to complement and validate the data collected through the questionnaires and to acquire additional in-depth information.

Some of the initial findings can be summarized as follow:

- ✓ There is a general deficiency in capacity building activities on waste and mercury crime issues. 61% of respondents have received a training on waste-related issues and the majority attended only few sessions and not on a regular basis.
- ✓ There is low awareness and knowledge about mercury waste and mercury-added products' challenges. Dedicated set of materials and tools for law enforcement and judicial authorities seem to be lacking. Also, only very few authorities have received training on these issues (11% of respondents).
- ✓ There is a general lack of knowledge on the existing tools and materials already available and on the existing regional and international platforms to find and share information on those issues.
- ✓ It seems generally difficult to keep and build-up knowledge withing the different agencies. Training-of-trainers materials to support authorities sharing the knowledge acquired is currently missing.
- ✓ Cooperation among agencies both at national and international levels remains challenging, and not all authorities seem aware of the existing international networks.
- ✓ As regards useful training topics: All areas and topics covered by the survey (legislation, detection and inspection, investigation, prosecution and sentencing and international cooperation) are of interest for the respondents.

In response to these needs, the STRIKE project will build up and expand the training materials developed in the framework of the [DOTCOM](#) and [WasteForce](#) projects. In 2021, it will organise four multi-disciplinary training courses covering all steps in the enforcement chain (including inspection and detection, investigation, prosecution and sentencing) and enhancing national and international cooperation, and will hold awareness raising webinar sessions to reach a wider audience of practitioners.

**More information on Capacity Building and Skills Acquisition will be available in the next Newsletter!**



### Strategic Risk Analysis

**Enhanced knowledge and risk analysis of waste related crime and mercury-added products**

The information so far collected allowed to shed light to a variety of important issues, such as illegal trade routes; most frequent types of waste illegally traded; quantities of such waste; trends and risks per waste type; most common *modus operandi*; and organised crime involvement.

Interesting elements for an assessment of intelligence-led inspections and investigations was also possible, thanks to the data collected.

Among the main findings, waste was reported to be mostly illegally exported from Europe (West, Central/East, North and South) and mostly illegally imported to West Africa, Central/East Europe, West Europe and Southeast Asia.

The most reported types of waste illegally traded were e-waste, End-of-Life Vehicles (ELVs) and plastics. In addition, the following waste types were relatively often reported: metal scrap, mercury, oils (derivatives), paper waste, tyres and spare vehicle parts, construction and demolition waste, mixed household waste, treated wood and used lead acid batteries. In consideration of the current COVID-19 pandemic, specific questions were posed regards biomedical waste

Looking at the main trends in the criminal *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 ones include missing notification or incorrect notification. Inappropriate treatment or a lack or a permit/license are the most common violations in the illegal disposal and management of waste.

Last but not least, one-fifth (21%) of the respondents reported that there was involvement of organised crime groups in the illegal trade and management of waste, as defined by the UN Convention against Transnational Organised Crime.

***The Strategic Risk Analysis Report will be finalised soon, stay tuned!***

### Guidelines on the preparation of annual plans and enforcement strategies

The STRIKE team is currently involved in the preparation of a set of Guidelines for national authorities, to provide inputs and support in the preparation of enforcement strategies and annual plans in the fight against waste crime. This activity particularly aims to advance the practical know-how of the different actors of the enforcement chain, for the preparation of national enforcement strategies and annual plans regarding illegal management and trade of problematic waste streams (e-waste, ELVs, batteries and other waste mercury).

Out of the 57 surveys collected within STRIKE, 19 respondents provided information on the development of annual plans or enforcement agencies at national level; while looking at the international level, 21 respondents shared relevant data.

In addition, the STRIKE team is currently conducting interviews with representatives of both national and international bodies such as Europol and IMPEL, among others, to understand the current practices and main needs in this particular field. In fact, the main challenge in this area is working towards a harmonization of the existing practices, as well as a better communication and information flow among the different authorities and national, regional and international level.

**The main findings of this activity will be presented in the next Newsletter...  
MAKE SURE YOU DO NOT MISS IT!**



### New tools and methodologies

The development of practical tools and advanced methodologies to support practitioners across the compliance and enforcement chain is in progress. With assistance of our HLAB member Sipke Havinga (Dutch Inspectorate for human environment and transport) mercury added products (MAPs) and wastes contaminated with mercury have been collected, photographed and analysed with different analytical mobile equipment. Some of these materials can be detected by visual inspection, as shown in the pictures 1 and 2 below.

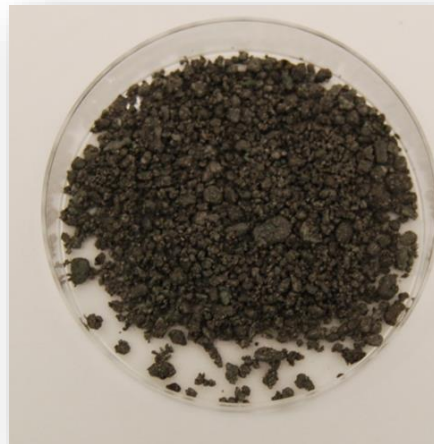


**Pic.1 - Metallic mercury in thermometers**

Mercury can be detected in the headspace (air) above broken thermometers in concentrations up to 3,4 ppm (parts per million).

**Pic. 2 - Dental amalgam**

The material is coarse grained and heavy. Volatile mercury is detectable in the headspace of the material. In theory dental amalgam consist of 50% mercury in weight. In this practical sample the concentration is estimated to be around 3000 ppm.



Other mercury bearing wastes look alike (see picture 3 and 4).

Materials can be recognised based on origin and with the use of mobile field equipment.



**Pic. 3 - Fly ash**

Volatile mercury is detectable in the headspace in concentration levels of 37 ppb (parts per billion). Estimates for the concentration levels of the material itself are around 60 ppm in this particular case.

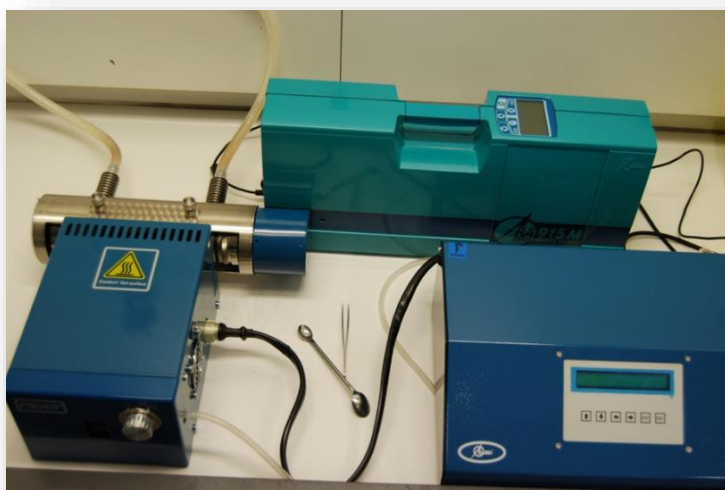


**Pic. 4 - Pyrolysis residue with a concentration of around 1-6 ppm (parts per million)**

In the headspace concentrations of 2,5 ppm were measured.



Mercury concentrations in the materials and in the air are determined with different mobile equipment (see picture 5). The end product of this activity within the STRIKE project will be an overview of mercury added products and mercury containing wastes and indications how these materials can be recognised in the field during inspections, combined with a safety guideline.



**Pic. 5 – At the back a RA-915M Mercury Analyzer (Lumex) coupled with a with pyrolyzer PYRO-915+ in the front**

The combination allows direct mercury determination (no pre-treatment procedures required) in complex organic samples at the level of few ppb (parts per billion).

**More information on practical tools and methodologies will be shared with the next Newsletter, keep following us!**

## Synergies with OPFA WASTE and AMBITUS projects:

### ISF-P ENVIRONMENTAL CRIME PROJECTS JOINING EFFORTS

On Friday 30 October 2020 the OPFA WASTE, STRiKE and Ambitus projects, awarded in the context of the Internal Security Fund – Police 2018 call for proposals, joined a multi-lateral round table to align activities and share environmental crime survey results. The meeting, bringing together the three projects for the first time, took place in the context of the first [OPFA WASTE Operational Workshop for updating investigative methodologies](#). Synergies between different initiatives is aimed at ensuring positive spill overs.

An overall alignment of results emerged between the surveys, although each project targeted slightly different topics and stakeholders. The need for improved police cooperation at transnational level, specialized training on modern technologies and enhanced specialization of judicial authorities in the environmental crime sector were flagged. Also, the necessity to enhance financial and patrimonial investigations' competences for greater effectiveness in tackling organized crime in international waste trade sector was mentioned as a critical point.



*Teams from OPFA WASTE, STRiKE and Ambitus projects during the meeting*

## Meet our H-LAB Members



Starting from this Newsletter, the STRIKE Project will be happy to introduce to you individual High-Level Advisory Board (H-LAB) Members who are supporting our work with their knowledge and expertise.

### Sipke Havinga - Inspectorate for Human Environment And Transport ILT, The Netherlands



Sipke Havinga, as co-ordinating inspector, has almost 30 years of experience at the Dutch Inspectorate for Human Environment and Transport (ILT). After his Bachelor in Agricultural-Environment studies, he has been involved in several different environmental aspects related to the work of ILT, in particular the implementation and enforcement of new environmental legislation and procedures of inspections and transports. Since 2015, Mr. Havinga assists the team that executes the classification of international shipment of waste (TFS) and conducted an investigation on mercury-containing waste in the Netherlands which allowed him to acquire additional knowledge of most processes in which mercury waste can be expected. Mr. Havinga considers the STRiKE project as an opportunity to foster international cooperation in this particular field.