**TRONSFRONTIER SHIPMENT OF ELECTRONIC WASTE**

**IMPEL PROJECT REPORT**

## Contents



The following papers produced by the Environment Agency supplement this report and can be read as stand alone papers from the Impel Basecamp service.

***Conducting a Threat Assessment into the illegal export of waste***

***A guide to the National Intelligence Model (NIM)***

***Environment Agency methodology for detecting & preventing illegal waste shipments***

***Transfrontier Shipment of Waste: Inspection and sampling procedures***

## Executive Summary

The legitimate, safe disposal of electronic waste (e-waste) has been a problem for many countries for a number of years with catastrophic consequences to the health and well being of human beings and significant degradation to the environment particularly in the developing nations.

A plethora of International Laws and Regulations have so far failed to regulate the global market in which unscrupulous operators are able to profit from disposing of e-waste cheaply and illegally abroad instead of taking the environmentally responsible but more expensive option of full recycling to remove and neutralise toxic materials.

A report commissioned by the Interpol Pollution Crime Working Group and published in May 2009 presented the findings on their phased project to identify and demonstrate linkages between organized crime and the disposal of e-waste. It was limited to participants from Belgium, the Netherlands, France, USA, Canada, Sweden Australia, Benin, the UK and UNEP.

The conclusions and actions resulting from the report indicated that there was a significant amount of work left to do in order to provide a pragmatic sustainable solution to the international e-waste problem.

Removing e-waste from the regulated waste industry for exportation to non-OECD countries avoids surcharges providing an opportunity for the indigenous and international criminal fraternity to get involved. Weak, geographically limited regulation makes it difficult to control potential e-waste exports and to determine what proportion of waste is being disposed of improperly.

In the EU a lucrative market exists in exporting waste illegally. This is due to the substantial financial benefits that can be achieved. Waste is easy and cheap to source while shipping costs to non OECD countries and the perceived risk of being prosecuted is low.

To effectively regulate European exports of e-waste it is important that member states understand the scale and processes involved in exports of this type and develop the most effective interventions that can be employed to prevent them.

This project has sought to help participating member states better understand their own contribution to this problem and how they might tackle the problem of illegal e-waste exports more effectively.

The project has found that a coordinated approach is required from member states to tackle the problem.

An intelligence led approach is fundamental to tackling the illegal e-waste export market at a European and international level.

The European picture remains unclear Who? Why? What? When? Where? How? Are questions that should be posed – but can't be answered when it comes to the illegal export of waste.

There is a great deal of work to undertake at a tactical and strategic level. However the progress made through this project has provided a platform for competent authorities to move forward and tackle the e-waste export issues in their countries effectively and efficiently.

We all need to get smarter

&

We all need to share our information

## Background

The electronics industry is the world’s largest and fastest growing manufacturing industry.

The disposal of these high-tech electronics is problematic. Each year millions of tons of high-tech electronics become obsolete in Europe. The vast majority of e-waste from such products is shipped to developing nations illegally and end up in landfill, incinerators and ill-equipped recycling facilities.

The wide-scale use of electrical and electronic equipment has become commonplace. The market is expected to continue to grow substantially, along with the number of countries that produce and/or use these goods. This will result not only in a growth in the numbers of new users but also a growing disposal burden as equipment is discarded or replaced because of technological development and obsolescence.

As a consequence a significant market has developed in second-hand, recyclable and waste equipment. Unless this is properly regulated, it may contribute to significant environmental pollution and contamination in destination countries impacting on health, the environment and the local economy.

In the 1980’s the market grew rapidly in the export of e-waste from developed nations to developing and eastern bloc countries. This caused concern about potential environmental damage – and prompted the development of the Basel Convention.

Around 50 million tonnes of old PCs are thrown away worldwide each year. This creates enormous recycling and disposal problems and has led to what has been described as a ‘toxic time bomb’.

This project has sought to help participating member states better understand their own contribution to this problem and how they might tackle the problem of illegal e-waste exports more effectively.

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## Workshop activity

The project centres around member states attending four workshops designed to build capacity and share best practice to tackle the issue of illegal export of waste from their countries.

The workshops were undertaken in Portugal, Belgium, Sweden and England between 2008 and 2010 with 18 participating competent authorities.

Contributions were made from the WEEE recycling industry, Greenpeace and Customs authorities in Europe and Asia.

## Workshop 1 – Faro, Portugal

The IMPEL Trans Frontier Shipment E-Waste project commenced with a workshop in Faro, Portugal on 20 and 21 November 2008.

This project involved 18 participating countries of which 16 attended the first workshop.

In addition to project participants there were 5 representatives from industry present of whom 3 gave presentations on the industry perspective of the current e-waste recycling industry. In addition, there were presentations from a representative of the Secretariat of the Basel Convention and a representative of the United Nations University StEP programme.

Feedback from participants on the current position in their countries indicated that 12 had identified problems with E-waste entering the illegal export market, 2 did not know at the time of questioning and 4 stated they did not believe they had a problem.

Representatives from the industry sector indicated that they believed there was a problem with unregulated operators and buyers visiting Europe from destination countries exporting e-waste illegally. However, there were differing opinions over the security of e-waste compliance schemes being operated in member states. The representative from the WEEE Recycling Forum for Europe stated he was confident that once e-waste entered compliance schemes it would be legally recycled but other industry representatives doubting that this was always the case and that leakage into illegal waste export markets was possible.

Also on Day 1 was a presentation from Greenpeace which included a recent film of a visit to Ghana during the summer of 2008 which graphically illustrated the negative impacts of the illegal e-waste export market and how metals recovery from e-waste takes place in totally uncontrolled conditions risking the health of those involved and causing adverse environmental impacts.

It was clear from Day 2 which was the part of the workshop for competent authorities only that all project participants want to regulate e-waste exports more effectively. The barriers to doing so were explored, with the main ones identified as inadequate resources, lack of understanding of the e-waste recycling industry in their own countries, a need for improved information and greater awareness amongst the enforcement community about the problems of e-waste and what constitutes an illegal shipment.

At the end of Day 2 it was agreed that a number of actions needed to be undertaken by participating countries. These included sharing practices that have helped identify and detect illegal shipments in countries such as the Netherlands and the UK; developing our information sharing systems building on the discussions held between IMPEL TFS and RILO at the IMPEL TFS Annual conference in Sofia in April this year; and using these tools to develop an intervention and control strategy that complements and builds on port and frontier inspections to facilitate the greater control and closure of illegal sites where illegal e-waste shipments are accumulated prior to export.

In addition to these, it was felt it was important to share findings with the legitimate recycling sector as part of the problem may be insecure e-waste recycling schemes allowing e-waste to escape into the illegal waste export market.

The project participants also agreed that it was important that the project's findings were shared with other projects looking at similar problems including that of the Secretariat of the Basel Convention, the INTERPOL e-waste project, the StEP initiative and other IMPEL TFS and IMPEL projects.

The competent authorities that were represented worked together to identify how the illegal e-waste export market may be regulated more effectively.

The results of these discussions are listed below:

Working Group Session Outputs

Main issues and barriers to more effective enforcement and regulation of e-waste exports and resource requirements

**Group 1 - Issues**

- Vague definitions of waste - more guidance needed
- Subjective judgements often made
- Issues around how individual Member States want to inspect and regulate

**Resources**

- WEEE Register (required by WEEE Directive)
- Customs data which requires further analysis and interpretation and agreement to access

**Ideal Enforcement strategy**

- Require better cooperation from Customs
- Better trained and aware Customs officers
- Each country needs to develop its threat assessment in agreement with Customs so priorities for intervention/detection are agreed and shared

- Persuade Customs they have an interest in exports as well as imports

- Analyse what and where is the most effective place to intervene

**Group 2 - Issues**

- Biggest issue is leakage from the WEEE system

- Poor WEEE reporting systems

- Gaps in knowledge between those groups working on WEEE and TFS

- Resources

- Customs data

- Retailers and legal operators

- Shipping agents and lines

- Destination countries

**Ideal Enforcement Strategy**

- Educate own organisation and other enforcement agencies

- Develop practical enforcement tools

- Inform higher levels in our own organisations and in government of the problems associated with illegal E waste exports

- Develop a more proactive long term strategy as opposed to being reactive

- **Other Improvements**

- More information sharing

- Greater mutual support

- More leadership from European Commission

- More Non government Organisations involvement

- Greater use of press and other media

- Greater use of IMPEL website

The above outputs all suggested that competent authorities engaged in the enforcement of the Waste Shipment Regulation needed a better understanding of the illegal e-waste exports market. For this to happen each should conduct a threat assessment (the methodology for this is described later in this report).

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## Workshop 2 - Brussels

On 27 April 2009 a workshop was held at the IMPEL offices in Brussels to discuss the practicability and enforceability of the WEEE Recast Proposal (proposed revision of the WEEE Directive). There were 15 participants at the workshop from 10 member countries and the European Commission was present as an observer. The full report for this workshop can be found on the IMPEL website under the following report title IMPEL Project "Practicability and Enforceability of the WEEE Directive Recast Proposal". The workshop sought to gain agreement from the group on their main problems in effectively enforcing the WEEE Directive, which could result in illegal export of e-waste from member states.

The input from people involved in practical enforcement of WEEE Directive and Waste Shipment Regulation identified how e-waste can be lost from the existing regulatory regime due to shortfalls in the WEEE Directive and end up in the illegal e-waste export market as a consequence.

## Workshop 3 – Östersund  Sweden

The third workshop was held at the IMPEL TFS Conference in Östersund in Sweden, 2009

This workshop provided an opportunity to demonstrate how the Environment Agency for England and Wales had developed an approach for tackling illegal waste exports. Their control strategy seeks to implement a number of interventions and is capable of transfer to other project participants. The aims of this second workshop included:

- Advising regulators on how they can better understand e-waste export trade
- Explaining how to develop a control strategy
- Sharing progress amongst participants.
- Agreeing future actions.

**Feedback from participants suggested that:**

Good practice is being developed but it is recognised that not all participants have access to the resources to develop and implement good practices.

Not all participants are at the same level of understanding to enable a coordinated and consistent application of the legislation.

It is recognised that one approach or model does not suit all and does not work in all circumstances.

It is recognised that more collaborative work is needed to support less capable participants in developing their enforcement approach and that should be reflected in future projects and action plans.

There are a range of international projects associated with/dealing with e-waste issues either running or planned. To avoid duplication of effort international coordination is required.

## Workshop 4 – London England

Participating member states were invited to undertake an intelligence gathering and dissemination workshop in February 2010.

The event commenced with a theory biased approach to undertaking intelligence gathering, explaining the principals behind and the advantages of intelligence gathering, collating and dissemination.

Attendees were briefed on a number of sites where the Environment Agency had reasonable grounds to suspect that illegal waste shipments were originating from, but had intelligence gaps which needed to be filled prior to any shipments occurring from these sites from being held and inspected.

A practical exercise followed where attendees accompanied by Environment Agency Field Intelligence Officers were taken onto waste sites to gather intelligence. This was biased on the previous briefing and involved working in small teams.

The following day each team debriefed the other attendees on the intelligence that had been gathered. This was collated and recorded by the Environment Agency on their system and used to help target future shipments for inspection

The workshop helped to demonstrate practically intelligence gathering and how through intelligence capture and dissemination the holistic picture can be gained to ensure a effective and efficient response.

It was acknowledged by the participants that an intelligence led approach is key to tackling the illegal e-waste export market at a European and international level.

## Project Conclusions

The export of waste is a global crime that requires an international and co-ordinated response. E-waste exports are a persistent problem, despite the implementation of international conventions.

Much of the evidence regarding export mechanisms and how the sector operates is anecdotal. But volumes of e-waste are estimated to be in the region of millions of tonnes, creating a significant and highly profitable illegal industry.

E-waste recycling, reuse and disposal in the developing world is undertaken under unhealthy and sometimes dangerous conditions. Plastics are burned in the open air in order to retrieve valuable commodities such as copper. Waste gets dumped on the ground or into rivers, and this has the potential to cause pollution of water supplies and soils.

The nature of criminal activity makes it very secretive but from ongoing investigations it would appear to be a vast lucrative industry. The criminal activity involves theft, fraud, drugs, smuggling, conspiracy, firearms and money laundering.

The Environment Agency has found examples of e-waste being collected from multiple sites in the UK (often for free or with a small charge made to the local authority for the removal of the waste) under the pretence of re-use or recycling, before it is exported illegally. The waste is apparently acquired for recycling or re-use. Local authorities are often keen to dispose of e-waste in this way because they can make a claim against their recycling targets. It is alleged, however that this e-waste is often exported and sold for disposal in non OECD countries.

The usual method of illegal export of European e-waste is through mislabelling of containers.

E-waste exports usually pass through more than one international port.

The criminals involved are often based outside of the main OECD countries and will visit to secure quantities of e-waste. They will then use small time operators in the country of origin to organise collection and shipment.

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## Forward look

To research and investigate these issues effectively, there needs to be further and closer co-operation at a European and global level to investigate the links between organised crime and the illegal export of e-waste, providing sustainable solutions for intelligence, enforcement and prevention.

In terms of intelligence gathering at a European level the most significant gap is the understanding of the involvement of serious and organised crime in the global distribution of e-waste. There is not sufficient information on a European or global level to make definitive judgements. But given the financial incentives and the sheer volume of e-waste, the environment appears prime for organised crime to be involved.

There is a clear necessity to bring together the intelligence on an European and global scale, looking across these sources of information for strategic and tactical intelligence will help support intelligence led policing and advance our collective knowledge about crime, organised crime and associated risks. Such partnerships will prove beneficial in tackling illegal e-waste exports

## Recommendations

*Intelligence*

The current intelligence gaps and requirements are;

- IMPEL member states to work with collaborative partners, such as the Interpol Global E-waste Crime Group (IGECG), NGO's, in identifying perpetrators of e-waste.
- Member States to initiate or develop source intelligence within the waste and export industry, such as engagement with the shipping lines at a European level
- Undertake unannounced site visits to those sites known to export to ascertain, sources and volume of materials to be exported.
- Promote & encourage use of an organisational memory to capture intelligence regarding the illegal export of e-waste.

*Enforcement*

Enforcement activities that may help to control the export e-waste in line with TFS regulations;

- Utilise the appropriate Enforcement actions against individuals and organisations committing TFS offences.
- Identify what exporting sites have non compliance issues and share that information with partner agencies/stakeholders with a view to stopping a potential illegal export.

*Prevention*

- To continue to make unannounced site visits on those involved in the export of what is described as used electricals or other common descriptive's used to described electrical items to ensure compliance is been met and minimising the risk of illegal e-waste exports.

- Actively engage with those shipping lines and agents actively involved in the export of used electricals to ensure that they are satisfied that what is being exported is not waste and they are fulfilling their Duty of Care.

- Be able to legally advise those in the shipping sector where issues arise regarding sites that are suspected of exporting e-waste illegally or are in the process of being investigated/prosecuted.

- Publicise success of prevention or enforcement within the correct industry sector, to act as a deterrent and send out a clear and direct message that TFS offences will be dealt with accordingly.

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# Appendix 1

## Distribution list

| | |
|---|---|
| Alan Harper | Alan.G.Harper@SEPA.org.uk |
| Allison Townley | allison.townley@doeni.gov.uk |
| Anna Dobrócsyová | dobrocsyova.anna@enviro.gov.sk |
| Bart Palmans | bart.palmans@lne.vlaanderen.be) |
| | bart.palmans@lne.vlaanderen.be |
| Bjorn Bjornstad | bjorn.bjornstad@sft.no |
| Carl Huijbregts | Carl.Huijbregts@minvrom.nl |
| Catherine van Nieuwenhove | cvi@ibgebim.be |
| Chris Smith | christopher.smith@environment-agency.gov.uk |
| Florica Corobea | floricorobea@gnm.ro |
| | floricorobea@gnm.ro |
| Huib van Westen | huib.vanwesten@minvrom.nl |
| John Burns | john.burns@environment-agency.gov.uk |
| Jon Engstrom | Jon.engstrom@naturvardsverket.se |
| Jozsef Kelemen | kelemenjo@mail.kvvm.hu |
| Klaus Willke | klaus.willke@bsu.hamburg.de |
| Madalina Lobda | madalina.lobda@anpm.ro |
| Magda Gosk | m.gosk@gios.gov.pl |
| Martin Zemek | zemek@cizp.cz |
| Mirela Perovic | mirela.perovic@mzopu.hr |
| Patrick McCartney | patrick.mccartney@dublincity.ie |
| Pedro Santana | psantana@igaot.pt |
| Petyadim | petyadim@moew.government.bg |
| Rene Rajasalu | rene.rajasalu@kki.ee |
| Thor Henriksen | thor.henriksen@sft.no |
| Ulrich Smeddinck | ulrich.smeddinck@uba.de |
| Viktoria Belokonska | v.belokonska@moew.government.bg |
| Walter Pirstinger | walter.pirstinger@lebensministerium.at |