



European Union Network for the Implementation and Enforcement of Environmental Law

TRONSFRONTIER SHIPMENT OF ELECTRONIC WASTE

IMPEL PROJECT REPORT



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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 ewaste 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 ewaste exports more effectively.



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.



<u>Workshop 1 – Faro, Portugal</u>

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).



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.



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 ewaste.
- 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.



Appendix 1

PROJECT TERMS OF REFERENCE

Export of European e-waste (WEEE)

1. Scope

1.1 Background

Current information suggests that with increased turnover of electrical goods by consumers, few 'bring back' schemes are yet to ensure compliance with the WEEE Directive. With relatively high costs of recovery and recycling in member states compared to export for 'recycling' or insufficient capacity for recovery and recycling in some member state countries it is believed that compliance with the WSR is poor and illegal shipments of e-waste is occurring on a large scale. This results in poor recovery rates, illegal disposal and potential health and environmental problems in countries of destination in the Far East and Africa. Failure to effectively and consistently regulate exports of WEEE across Europe will result in continuing gaps and loopholes in the European regulatory network that will be exploited by unscrupulous operators. This will result in continued illegal e-waste exports and complaints from destination countries. It may also lead to impacts on legitimate waste trade with those countries. 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 it.

1.2. Link to MAWP and IMPEL's role and scope

This project will require IMPEL TFS members to work together to develop a strategic threat assessment on European e-waste exports which will enable a fuller understanding of the trade to be achieved. A better understanding of the European e-waste export trade will provide the opportunity to develop a Europe wide control



strategy which will identify the most effective interventions each member state can employ to disrupt illegal trade. This approach should bring about more effective regulation of e-waste exports with a corresponding reduction in complaints from countries of destination and a more environmentally responsible approach to dealing with e-waste in Europe (in line with the requirements of the WEEE Directive). The project also offers the opportunity for some collaborative inspection and enforcement work to test the effectiveness of the control strategy and make adjustments to it as required.

The project is related to the following themes of the IMPEL-TFS multi annual program:

- Theme 1 Threat Assessment
- Theme 2 Communication
- Theme 3 Use of national resources
- Theme 4 Productive collaboration with enforcement partners across Europe

Link to IMPEL's Multi Annual Programme:

I/5 Integrate Waste Shipment Regulation enforcement into daily practice by improved national planning, exchange of best practices, and development of inspection manuals.

I/7 Provide tools and strengthen cross-border co-operation and collaboration among different authorities and organisations involved in waste shipment e.g. police and customs, non-OEDC countries, Basel Convention, other regional networks.

I/8 Provide MSs with tools in order to facilitate the setting of risk based priorities.



II/7 Improve better collaboration with countries of final destination of European waste, e.g. non OECD-countries in order to verify waste processing.

VII/1 Carry out programmes aiming at international enforcement collaboration e.g. transboundary movements of waste in general or specifically focussed on certain destinations or waste streams.

VII/2 Facilitate enforcement follow up and sanctions strategies.

1.3. Objective (s)

To deliver an up to date threat assessment that identifies how effectively the WEEE Directive is being implemented in Member States and the risks e-waste exports pose to the EU.

To understand the scope and scale of the e-waste export trade in Europe, who is involved and what happens to shipments leaving Europe and what the problems are that occur in the countries of destination.

To develop and provide to IMPEL TFS members a control and intervention strategy that effectively manages e-waste exports to enable consistent compliance with the WEEE Directive and WSR across Europe.

To implement the control and intervention strategy across Europe in a coordinated manner to reduce gaps and loopholes that can result in illegal shipments leaving Europe.

To test the effectiveness of the control strategy through a programme of waste facility audits, port inspections in Europe and through communication with competent authorities in countries of destination of e-waste exports.



1.4. Problem Definition

Collate information from member state contacts and IMPEL TFS colleagues to develop threat assessment.

Provide a current Threat Assessment of European e-waste exports.

Develop a comprehensive picture of the process of e-waste exports from Europe.

Develop and agreeing a control strategy to prevent non compliance with WSR for ewaste exports from Europe at a joint meeting of participating countries/IMPEL TFS contacts.

Gain agreement on implementation of control strategy amongst IMPEL colleagues. Inspection and enforcement activities to test effectiveness of control strategy by participating IMPEL colleagues.

Produce final report providing results, conclusions, lessons learned and recommendations for the future.



1.5. Product(s)

Threat assessment – IMPEL TFS members/Environment Agency lead.

Control strategy – IMPEL TFS members and other relevant regulatory bodies and key stakeholders in WEEE export trade

Audit and inspection programme - regulators

Project Report – TFS Steering Group

2. Structure of the project

2.1. Participants

National Contact Points of IMPEL TFS and/or waste-inspectors of competent authorities in Europe.

The following MS indicated their interest at the IMPEL-TFS conference in Paris (March 2007): Portugal, Sweden, North-Ireland, Croatia, United Kingdom, and Netherlands.

All other Member States are invited to participate within this project. Environment Agency (England and Wales) Enforcement Project Team

2.2. Project team

IMPEL TFS secretariat, Environment Agency, VROM Inspectorate



2.3. Management

John Burns & Chris Smith, Environment Agency, England and Wales

2.4. Reporting arrangements

Report to IMPEL TFS Steering Committee and IMPEL Plenary

2.5 Dissemination of results/main target groups

IMPEL NCPs, regulators, government policy makers, EC correspondents group, local authorities, Electrical goods manufacturers and companies involved in shipping waste exports out of Europe.



3. Resources required

3.1 Project costs

163,000 Euros

3.2. Fin. from Com.

2008: two meetings, ±20 participants, 2 nights hotel and flights: 42.000€ 2009: one meeting, ±20 participants, 2 nights hotel and flights: 21.000€

3.3. Fin. from MS (and any other)

Venue for two (possibly three meetings) plus support for threat assessment, criminal analysis and development of control strategy and coordination of actions identified in control strategy plus production of end of project report

3.4. Human from Com. TBC



4. Quality review mechanisms

Internal Environment Agency Project Board and IMPEL TFS Steering Group, IMPEL Plenary for final report presentation.



5. Legal base

5.1. Directive/Regulation/Decision

European Waste Shipment Regulation 1013/2006 and 801/2007 WEEE Directive 2002/96

5.2. Article and description

Article 50 WSR

Enforcement in Member States

Member States shall lay down the rules on penalties applicable for infringement of the provisions of this Regulation and shall take all measures necessary to ensure that they are implemented. The penalties provided for must be effective, proportionate and dissuasive. Member States shall notify the 12.7.2006 EN Official Journal of the European Union L 190/29 Commission of their national legislation relating to prevention and detection of illegal shipments and penalties for such shipments.

Member States shall, by way of measures for the enforcement of this Regulation, provide, inter alia, for inspections of establishments and undertakings in accordance with Article 13 of Directive 2006/12/EC, and for spot checks on shipments of waste or on the related recovery or disposal.

5.3 Link to the 6th EAP

More effective implementation and enforcement of community legislation is one of the priorities of the 6th EAP.



6. Project planning

6.1. Approval

ToR to be submitted to IMPEL plenary in November 2007

6.2. Final contributions

100,000 Euros from EA and 63,000 Euros from IMPEL

6.3. Start

Jan 2008

6.4 Milestones

November 2007 IMPEL Plenary for project approval,

May 2008 Initial introduction to project and request for participation at IMPEL TFS Conference

September 2008 revised Threat Assessment produced,

December 2008 Intervention strategy developed,

January through to June 2009 interventions and tactical actions implemented by participating countries,



September 2009 results collated and interim report drafted,

December 2009 final report produced.

6.5 Product

Final report plus control strategy for WEEE exports from Europe.

6.6 Adoption

IMPEL plenary December 2009



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